

# Embraco Compressors Portfolio

## Asia Pacific



embraco

Nidec

think ahead

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# We are Nidec Global Appliance

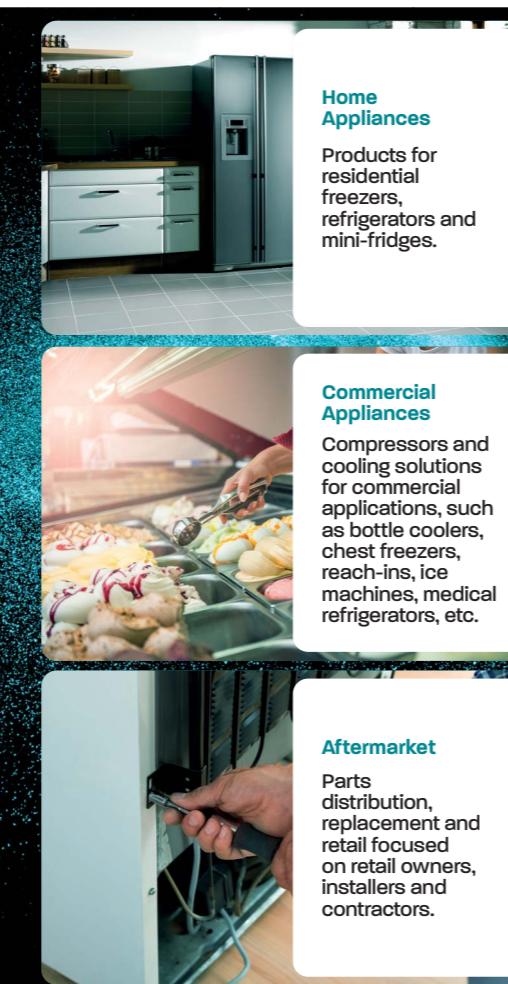
## A global partner for home and commercial refrigeration industries

**embraco**  
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Since 1971 Embraco has been responsible for shaping refrigeration market trends by bringing solutions beyond the compressor for the residential and commercial cold chain. A pioneer in fostering the development of variable speed and the use of natural refrigerants over the years, the brand delivers innovation driven by the Think Ahead positioning, which means focusing on the future's needs to transform the refrigeration segment and make its customers' lives easier. Embraco counts on a broad and competitive portfolio for food service, food retail, merchandisers, and medical applications, including complete, synchronized and integrated solutions, which combines efficiency and data intelligence.

Over 50 years  
raising the bar  
of refrigeration



## Digital Tools



**embraco**  
toolboxapp



Download on the  
App Store



GET IT ON  
Google Play

Available in all countries and in more than 10 languages, the Embraco Tool Box has 7 functionalities which help refrigeration professionals on their daily routine. **Download the App now for Android and iOS systems.**



### Find inside:

- Cross-reference
- Product catalogue
- Distributor locator
- Unit converter
- Refrigerant slider
- Refrigeration club
- Troubleshooting

**PSS**

### Product Software Selector

Choose the best solution for your business at Embraco's official portfolio platform. **Access: [products.embraco.com](http://products.embraco.com)**



**Embraco website in 11 languages**  
[www.embraco.com](http://www.embraco.com)

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**FIXED-SPEED COMPRESSOR**

**EM**  
Bottle coolers, ice cream freezers, household replacement, water coolers and vending machines. Up to 1/2 HP.



**EG**  
Household replacement and light commercial applications, horizontal freezers, reach ins, vending machines. Up to 1/3+ HP.



**EH**  
Professional kitchens, bottle coolers, under counters, professional reach ins, vending machines. 1/2 HP to 3/4 HP.



**F**  
Light commercial applications, horizontal freezers, reach ins, vending machines. Up to 1/2 HP.



**NE**  
Frozen food islands, professional kitchen upright coolers and freezers, display cases, ultra low temperature freezers. 1/2 to 1 HP.



**NJ**  
Air curtain reach ins, ice machines, cold rooms, blast chillers. 1 to 2 HP.



**NT**  
Professional kitchens upright coolers and freezers, air curtain reach ins, beer dispensers, ice machines, cold room, ultra low temperature freezers. 3/4 to 1 1/2 HP.

**VARIABLE-SPEED COMPRESSOR**

**VEM**  
Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to 1 HP.



**VNE**  
Reach Ins, medical and general professional kitchens. 1/2 to 1 HP.



**VEG**  
Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to 1/3+ HP.



**VES**  
Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to 1/3+ HP.



**FMX**  
Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to 1/4 HP.



**FMF**  
Upright reach ins, beer dispenser, frozen food islands, ultra low temperature freezers. Up to 1 HP.



**FMS**  
Bottle coolers, under counter, horizontal freezers, household refrigerators. Up to 1 HP.

**Nomenclature Brazil Line****EM**

**EM | S | 70 | H | H | R**

COMPRESSOR FAMILY  
**EM**

- PRODUCT GENERATION  
 - Standard Generation  
 I - 1st Generation  
 T - 2nd Generation  
 U - 3rd Generation  
 Y - 4th Generation  
 Z - 5th Generation  
 X - 6th Generation

## MECHANICAL KIT

- S - Standard mechanical kit  
 - Not standard

## COMPRESSOR CAPACITY

In Btu/h - 60Hz - ASHRAE  
 Checkpoint divided by 10

## REFRIGERANT CODE

- Blends  
 C - R600a  
 H - R134a  
 U - R290  
 L - R1234yf

## EFFICIENCY LEVEL

- N - Standard efficiency (LBP)  
 J - Intermediate efficiency (LBP)  
 E - Efficiency improved 1<sup>st</sup> generation (LBP)  
 S - Efficiency improved 2<sup>nd</sup> generation (LBP)  
 H - Standard efficiency (U/M/HBP)  
 D - Standard efficiency (HBP)  
 B - Standard efficiency (M/HBP)  
 L - Efficiency improved 2<sup>nd</sup> generation (LBP)

## ELECTRICAL COMPONENT

- |                                   |     |
|-----------------------------------|-----|
| P - PTC + run. cap. (optional)    | LST |
| R - Relay                         | HST |
| C - PTC + start. cap. (mandatory) |     |
- X - Relay + cap. part. (mandatory)

**F**

**F | F | U | S | 130 | H | A | X**

COMPRESSOR FAMILY  
**F/EG**

- ELECTRICAL SYSTEM  
 F - Relay/Overload protector  
 Start capacitor (optional)

- PRODUCT GENERATION  
 - Standard efficiency  
 I - Improved efficiency  
 1<sup>st</sup> generation  
 U - Improved efficiency  
 2<sup>nd</sup> generation (for commercial refrigeration)

## STANDARD PLATFORM

- COMPRESSOR CAPACITY  
 Approximate capacity in Btu/h - 60 Hz  
 ASHRAE - Checkpoint divided by 10 (for compressor FG, FFU and FFC)

- REFRIGERANT CODE  
 H - R134a  
 U - R290  
 L - R1234yf

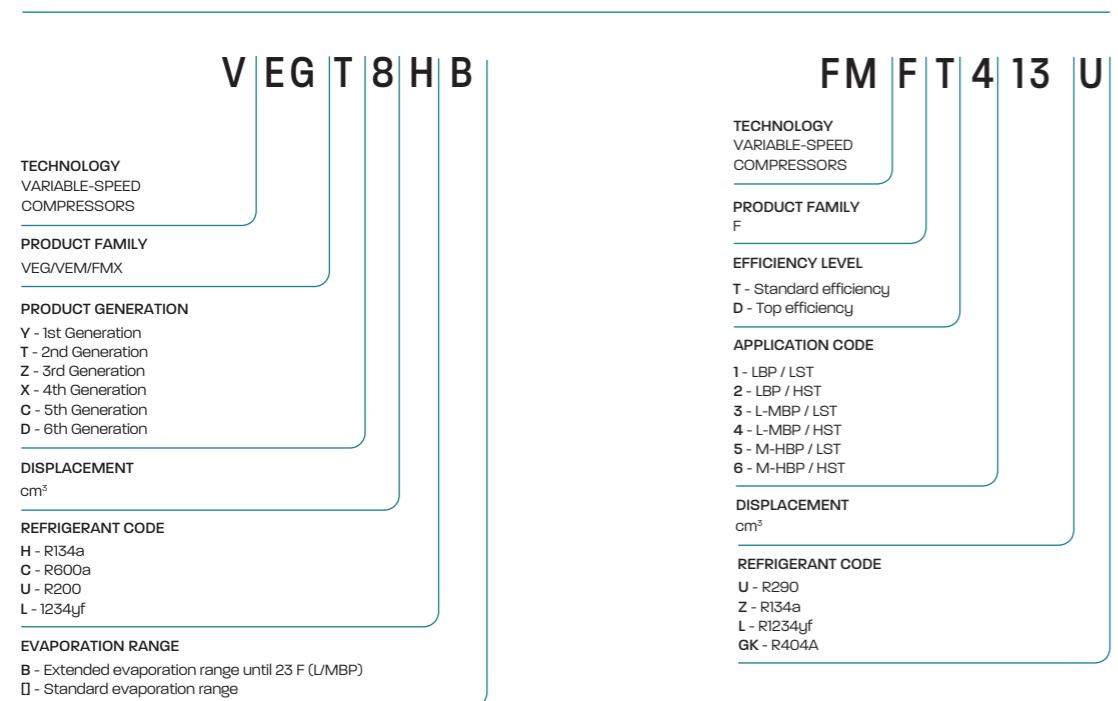
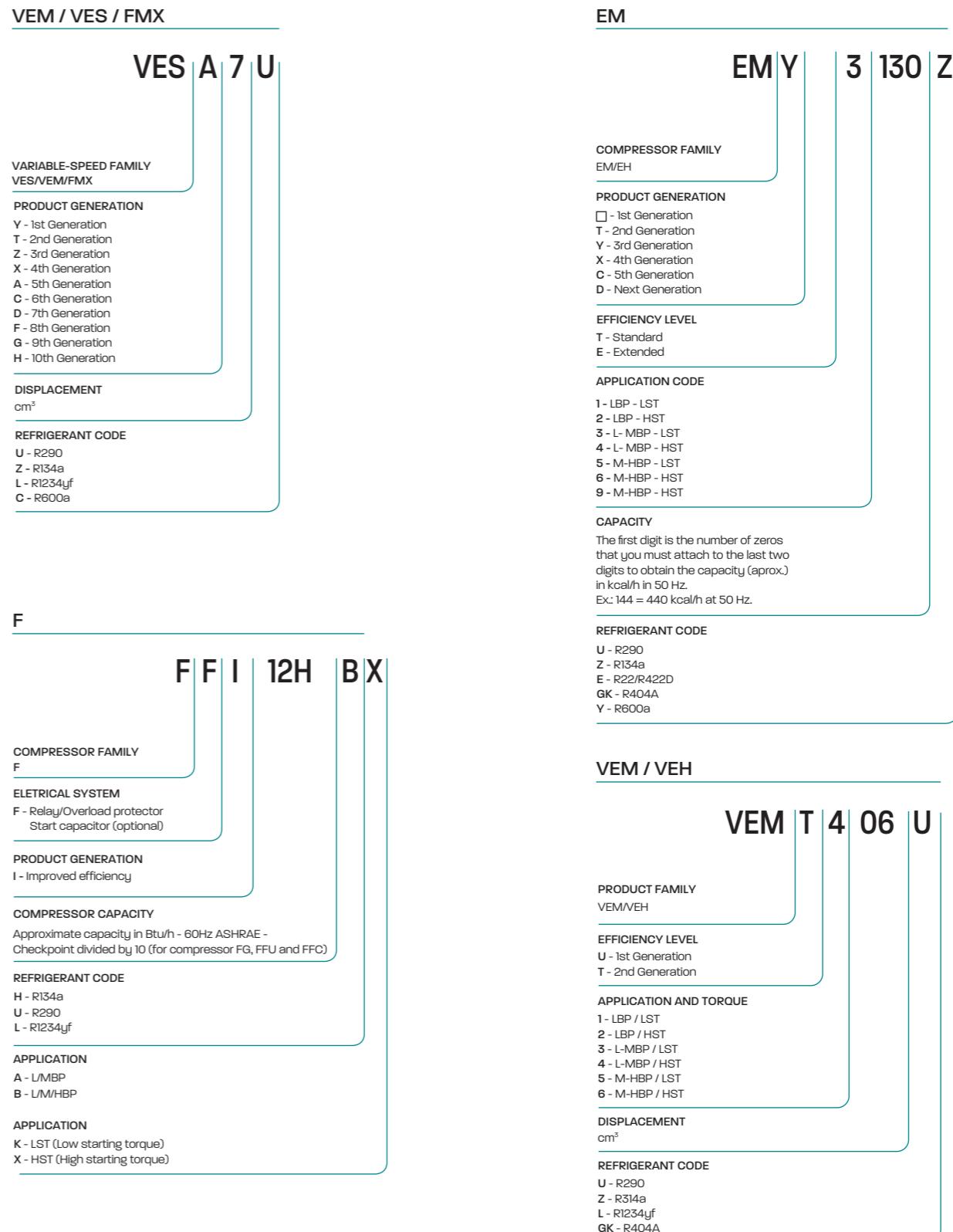
## APPLICATION

- A - U/M/BP  
 B - L/M/HBP

## STARTING TORQUE

- K - LST (Low starting torque)

- X - HST (High starting torque)

**Nomenclature Brazil Line****Nomenclature China Line**

**Nomenclature Europe Line**

EM / NE / NT / NJ

NT U 6 224 Z V A

COMPRESSOR FAMILY  
NE / NT / NJPRODUCT GENERATION  
□ - 1st Generation  
K - 2nd Generation  
U - 3rd Generation  
X - 4th Generation

APPLICATION CODE

1 - LBP - LST  
2 - LBP - HST  
3 - L-MBP - LST  
4 - L-MBP - HST  
5 - M-HBP - LST  
6 - M-HBP - HST  
9 - M-HBP - HST

CAPACITY

The first digit is the number of zeros  
that you must attach to the last two  
digits to obtain the capacity (aprox.)  
in kcal/h in 50 Hz.  
Ex: 144 = 440 kcal/h em 50 Hz.REFRIGERANT CODE  
U - R290  
Z - R134A  
GK - R404A

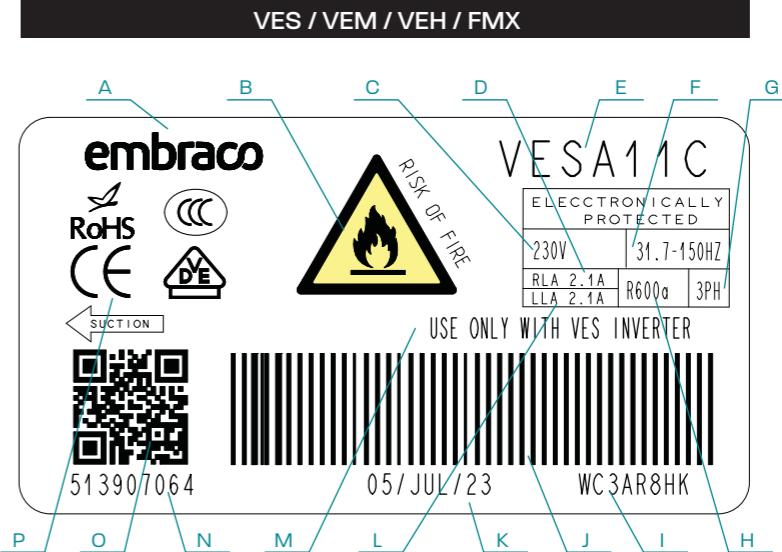
IPR VALVE - AVAILABLE FOR SOME MODELS

Available for some models

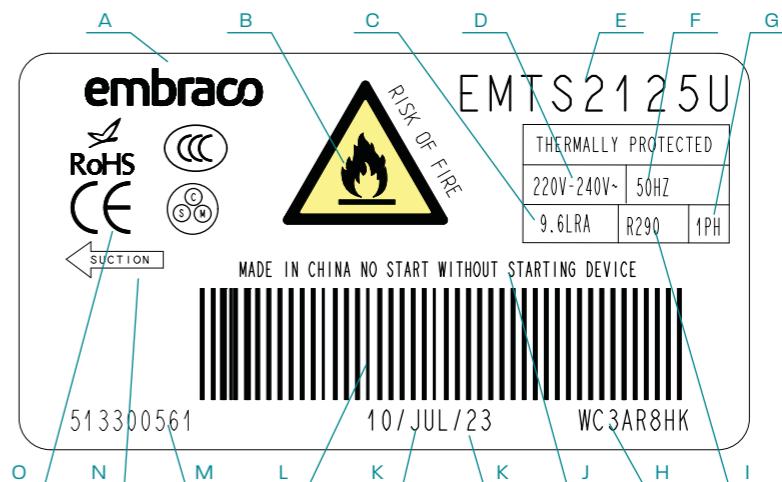
BASIC, A - FIRST VERSION

**Nomenclature  
Europe Variable-Speed Line**

V NE U 2 17 U

TECHNOLOGY  
VARIABLE-SPEED  
COMPRESSORSCOMPRESSOR FAMILY  
VNEPRODUCT GENERATION  
K - 1st Generation  
U - 2nd Generation  
X - 3rd GenerationAPPLICATION CODE  
2 - LBP - HST  
4 - L-MBP - HST  
6 - M-HBP - HSTDISPLACEMENT  
cm³REFRIGERANT CODE  
U - R290  
Z - R134A  
GK - R404A

A - Embraco LOGO  
B - Fire protection sign  
C - Voltage  
D - Maximum current  
E - Compressor model  
F - Frequency range  
G - Rotor type  
H - Refrigerante  
I - Compressor series number  
J - Bar code  
K - Production date  
L - Locked Rotor current (LRA, when applicable)  
M - Use warning  
N - SKU code  
O - Compressor QR code  
P - Institution approval and direction of suction tube

**EM / EH / NE**

A - Embraco LOGO  
B - Fire protection sign  
C - Locked Rotor current (LRA, when applicable)  
D - Frequency range  
E - Compressor model  
F - Frequency  
G - Rotor type  
H - Compressor series number  
I - Refrigerante  
J - Use warning  
K - Production date  
L - Bar code  
M - SKU code  
N - Direction of suction tube  
O - Institution approval and wiring mark

# Application Guide

## Merchandisers

Our products are classified into four main application groups in the light commercial refrigeration: merchandisers, supermarkets, professional kitchens and household refrigeration. Below you will find the portfolio for each application and relevant technical information.

### Merchandisers



### Supermarkets



### Professional Kitchens



### Household Refrigeration

Disclaimer: this chapter indicates the most used compressors for each application, in order to make your product selection process easier and faster. However it does not intend to assure that the specific compressor will fit any application in the same cluster worldwide, because there are several specific approval standards as well as different product designs.

### Glass Door Horizontal Freezers



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -30 °C          |
| Internal Cabinet Temperature | -18 °C          |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | LBP / LST       |

| COMPRESSORS 50Hz |                    |
|------------------|--------------------|
| Size (Liters)    | R290 (Refrigerant) |
| 300 to 360       | EM2X3117U          |
| 380 to 420       | EM2X3121U          |
| 430 to 500       | EM2X3125U          |
| 500 to 600       | EMX3134U           |

### Glass Door Upright Freezers



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -30 °C          |
| Internal Cabinet Temperature | -18 °C          |
| Ambient Temperature          | 35 °C           |
| Relative Humidity            | 40-75 %         |
| Application                  | LBP / HST       |

| COMPRESSORS 50Hz |                    |
|------------------|--------------------|
| Size (Liters)    | R290 (Refrigerant) |
| 300 to 400       | EHU2155U           |

# Merchandisers

## Meat Display Case



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -10 °C          |
| Internal Cabinet Temperature | 0 °C to 7 °C    |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | M/HBP           |

| COMPRESSORS 50Hz |                              |                     |
|------------------|------------------------------|---------------------|
| Size (Liters)    | R-134a (Refrigerant)         | R404A (Refrigerant) |
| 1                | FFI12HBX                     | -                   |
| 2                | FFU160HAX                    | NEU6215GK           |
| 3                | NEU6214Z / NT6215Z / NE6217Z | -                   |
| 4                | -                            | NT6222GK / NT6220GK |

## Bakery Display Case



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -10 °C to -5 °C |
| Internal Cabinet Temperature | 5 °C to 12 °C   |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | MBP / LST       |

| COMPRESSORS 50Hz |                        |  |
|------------------|------------------------|--|
| Size (Liters)    | R-134a (Refrigerant)   |  |
| 1                | EMI60HER               |  |
| 2                | FFUS100HAK             |  |
| 3                | FFUS130HAX / FFU130HAK |  |

# Merchandisers



## Upright Air Curtain Cooler

| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -10 °C          |
| Internal Cabinet Temperature | -5 °C           |
| Ambient Temperature          | 25 °C           |
| Relative Humidity            | 40-75 %         |
| Application                  | MBP / LST       |

| COMPRESSORS 50Hz |                      |                     |
|------------------|----------------------|---------------------|
| Size (Liters)    | R-134a (Refrigerant) | R404A (Refrigerant) |
| 1                | NT6217Z              | NEU6215GK           |
| 2                | -                    | NT6222GK / NT6220GK |

# Merchandisers

**Upright Glass Door Bottle Coolers**



**Vending Machines**



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# Supermarkets

**Reach in with Doors**



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -10 °C          |
| Internal Cabinet Temperature | 5 °C            |
| Ambient Temperature          | 40,5 °C         |
| Relative Humidity            | 40-75 %         |
| Application                  | MBP / LST       |

| COMPRESSORS 50Hz |                    |
|------------------|--------------------|
| Size (Liters)    | R290 (Refrigerant) |
| 300              | EM2X3117U          |
| 400              | EM2X3121U          |
| 500 to 600       | EM2X3125U          |
| 1000             | EMX3134U           |

| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -15 °C          |
| Internal Cabinet Temperature | -4 °C           |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-75 %         |
| Application                  | L / MBP / LST   |

| COMPRESSORS 50Hz |                    |
|------------------|--------------------|
| Size (Liters)    | R290 (Refrigerant) |
| 300              | EM2X3117U          |
| 400 to 500       | EM2X3121U          |
| 500 to 600       | EM2X3125U          |

**Frozen Food Island**



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -10 °C to -5 °C |
| Internal Cabinet Temperature | 0 °C to 10 °C   |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-75 %         |
| Application                  | MBP / LST       |

| COMPRESSORS 50Hz |           |
|------------------|-----------|
| Size (Liters)    | R290      |
| 350 to 500       | EM2X3125U |
| 500 to 700       | EHU6214U  |

| System                       | Characteristics  |
|------------------------------|------------------|
| Evaporation Temperature      | -30 °C           |
| Internal Cabinet Temperature | -20 °C to -15 °C |
| Ambient Temperature          | 32 °C            |
| Relative Humidity            | 40-70 %          |
| Application                  | LBP / LST        |

| Length (m) | R404A (Refrigerant) | R290 (Refrigerant) |
|------------|---------------------|--------------------|
| 1.5m       | NEU2155GK           | EHU2155U           |
| 1.8m       | NEU2168GK           | EHU2155U           |

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# Professional Kitchen

## Reach In Freezer and Refrigerator



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -15 to -5 °C    |
| Internal Cabinet Temperature | 0 to 10 °C      |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | MBP             |

| COMPRESSORS 50Hz |           |
|------------------|-----------|
| Size (Liters)    | R290      |
| 300 to 500       | EM2X3117U |
| 500              | EM2X3121U |

| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -30 °C          |
| Internal Cabinet Temperature | -18 °C          |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | LBP             |

| COMPRESSORS 50Hz |                    |
|------------------|--------------------|
| Size (Liters)    | R290 (Refrigerant) |
| 125 to 175       | EM2X3117U          |
| 175 to 275       | EM2X3121U          |

# Professional Kitchen

## Undercounter and Prep Table



| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -15 to -5 °C    |
| Internal Cabinet Temperature | 0 to 10 °C      |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | MBP             |

| COMPRESSORS 50Hz |                      |           |
|------------------|----------------------|-----------|
| Size (Liters)    | R-134a (Refrigerant) | R290      |
| ≤300             | FFU70HAK             | EM2X3113U |
| 300 - 500        | FFUS70HAK            | EM2X3117U |
| 500              | FFUS100HAK           | EM2X3121U |

| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -30 °C          |
| Internal Cabinet Temperature | -18 °C          |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Application                  | LBP             |

| COMPRESSORS 50Hz |                      |                       |                    |
|------------------|----------------------|-----------------------|--------------------|
| Size (Liters)    | R-134a (Refrigerant) | R404A (Refrigerant)   | R290 (Refrigerant) |
| ≤120             | FFUS100HAK           | -                     | EM2X3113U          |
| 120 - 175        | FFI12HBX             | -                     | EM2X3117U          |
| 175 - 275        | FFU160HAX            | -                     | EM2X3121U          |
| 275 - 350        | NEU2140Z             | NEU2155GK / NEK2168GK | -                  |
| 350 - 500        | -                    | NEU2178GK / NT2178GK  | -                  |
| 500 - 700        | -                    | EM2X3117U             | -                  |

# Household Applications

## Household Refrigerator 1 Door



## Household Refrigerator 2 Door

| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -30 °C          |
| Internal Cabinet Temperature | 5 °C            |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-70 %         |
| Freezer Temperature          | -18 °C          |
| Application                  | LBP / LST       |

| COMPRESSORS 50Hz |                      |                     |
|------------------|----------------------|---------------------|
| Size (Liters)    | R-134a (Refrigerant) | R600a (Refrigerant) |
| 50 - 100         | EMIS30HHR            | -                   |
| 101 - 200        | EMI45HER             | EMU40CLP            |
| 201 - 300        | EMI60HER             | EMU60CLP            |
| 301 - 350        | EMI70HER/EMIS70HHR   | EMYe70CLP           |

| System                       | Characteristics |
|------------------------------|-----------------|
| Evaporation Temperature      | -15 °C          |
| Internal Cabinet Temperature | -4 °C           |
| Ambient Temperature          | 32 °C           |
| Relative Humidity            | 40-75 %         |
| Application                  | L / MBP / LST   |

| COMPRESSORS 50Hz |                           |                         |
|------------------|---------------------------|-------------------------|
| Size (Liters)    | R-134a (Refrigerant)      | R600a (Refrigerant)     |
| 250 - 310        | EMI60HER                  | EMU60CLP                |
| 311 - 370        | EMI70HER/<br>EMI70HHR     | EMYe70CLP               |
| 371 - 510        | EGAS80HLR                 | EGAS80CLP/<br>EM2U80CLP |
| 511 - 580        | FFUS100HAK/<br>EGAS100HLR | EGAS100CLP              |

# Technical Information

## Applications

| Application                | Evaporating Temperature °C (°F)        | Applications   |
|----------------------------|--|--|
| LBP (Low Back Pressure)    | Between -45/-35 (-49/-31) and -10 (14) | Household refrigerators, frozen food islands, ice cream freezers |
| MPB (Medium Back Pressure) | Between -15 (5) and 0 (32)             | Displays cases, reach in coolers, bottle coolers                 |
| HBP (High Back Pressure)   | Between 0 (32) and 15 (59)             | Refrigerated wine houses, Water coolers, air dehumidifiers       |

## Test Conditions

| Test Conditions | Applications | Evaporation Temperature °C / °F | Condensing Temperature °C / °F | Gas Return Temperature °C / °F | Subcooling K/R | Ambient Temperature °C / °F |
|-----------------|--------------|---------------------------------|--------------------------------|--------------------------------|----------------|-----------------------------|
| ASHRAE          | LBP          | -23.3 / 10                      | 54.4 / 130                     | 32.2 / 90                      | 22.2 / 40      | 32.2 / 90                   |
|                 | M/HBP        | 7.2 / 45                        | 54.4 / 130                     | 35 / 95                        | 8.3 / 15       | 35 / 95                     |
| ARI             | LBP          | -23.3 / 10                      | 48.9 / 120                     | 4.4 / 40                       | 0              | 35 / 95                     |
|                 | MBP          | -6.7 / 20                       | 48.9 / 120                     | 4.4 / 40                       | 0              | 35 / 95                     |
|                 | HBP          | 7.2 / 45                        | 54.4 / 130                     | 18.3 / 65                      | 0              | 35 / 95                     |
| ENI2900         | LBP          | -35                             | 40                             | 20                             | 40 / 72        | 35                          |
|                 | MBP          | -10                             | 45                             | 20                             | 45 / 81        | 35                          |
|                 | HBP          | 5                               | 50                             | 20                             | 5 / 90         | 35                          |

## Cooling Type

|        |  |
|--------|--|
| Static | Compressor approved for static cooling not requiring a fan motor on the condenser side.              |
| Fan    | Compressor approved for fan cooling requiring forced cooling with a fan motor on the condenser side. |

## Motor Torque

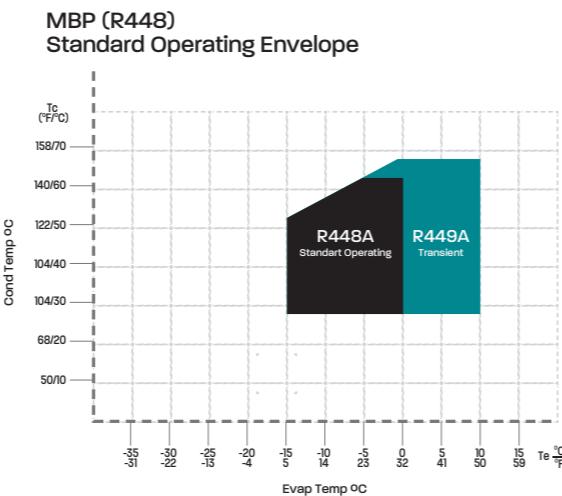
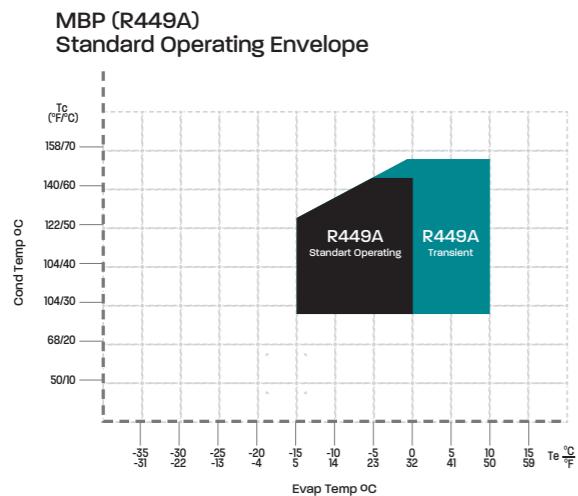
|     |   |
|-----|---|
| LST | LOW STARTING TORQUE<br>Compressor with RSIR-RSCR-PSC electrical motor for systems with capillary tube and with equalized pressures at start up. |
| HST | HIGH STARTING TORQUE<br>Compressor with CSIR-CSR or 3 phase electrical motor for systems with equalized or not equalized pressures at start up  |

## Blends Approved by Embraco Replacing R12

### REFRIGERANTS

| ASHRAE | Nome comercial |
|--------|----------------|
| R-401a | SUVA® MP39     |
| R-401b | SUVA® MP66     |
| R-409b | FORANE® FX56   |
| R-413a | ISCEON 49      |

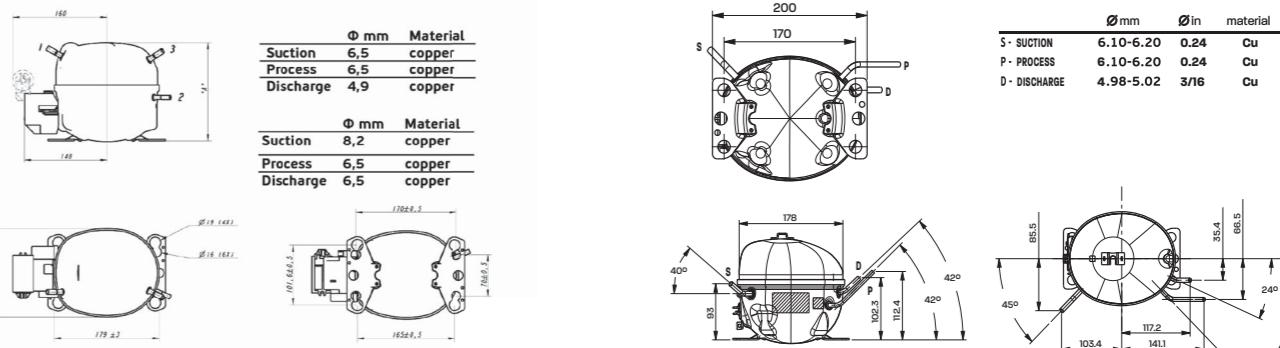
Embraco already approved R452A for NEU, NT, NJ compressor series as an alternative refrigerant for both LBP (low back pressure) and MBP (medium back pressure) applications maintaining the original R404A operating envelope. Embraco approves R449A and R448A as an alternative refrigerant for Embraco R404A compressor series NEU, NT, NJ only for MBP application with limited operating envelope as below.



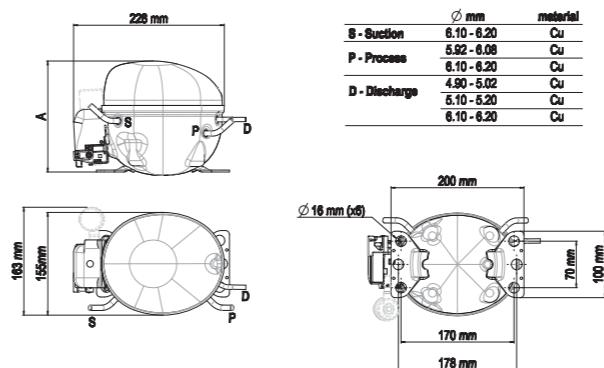
| UNITS CONVERSION TABLE |       |       |        |
|------------------------|-------|-------|--------|
|                        | BTU   | W     | kcal/h |
| 1 BTU                  | -     | 0,293 | 0,252  |
| 1 W                    | 3,412 | -     | 0,86   |
| 1 kcal/h               | 3,966 | 1,162 | -      |

## External Views

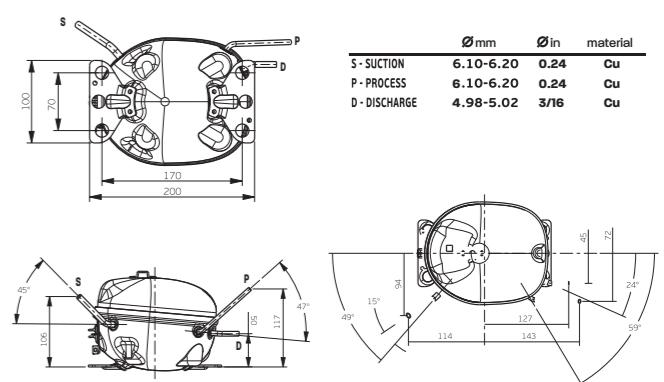
DWG 1 - EM / VEM SERIES UNIVERSAL BASE PLATE



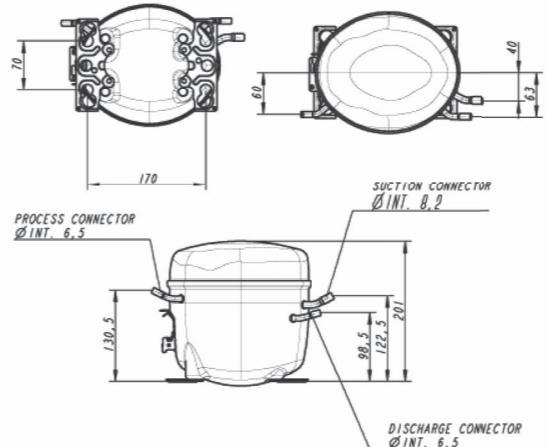
DWG 2 - EM SERIES EUROPEAN BASE PLATE



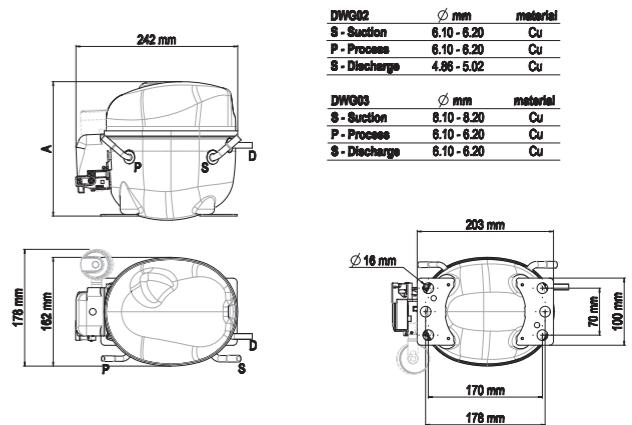
DWG 3 - VES SERIES



DWG 4 - EG / F / VEG SERIES UNIVERSAL BASE PLATE



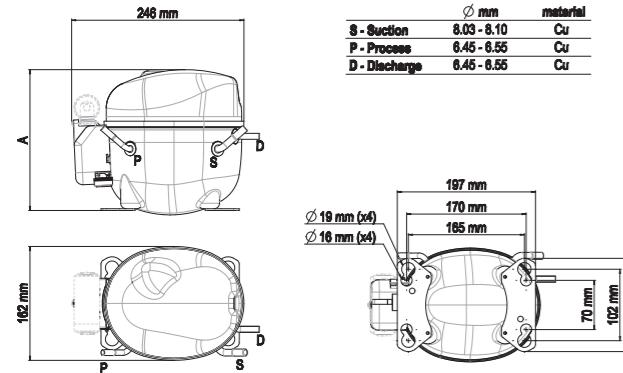
DWG 5 - NB / NE SERIES EUROPEAN BASE PLATE



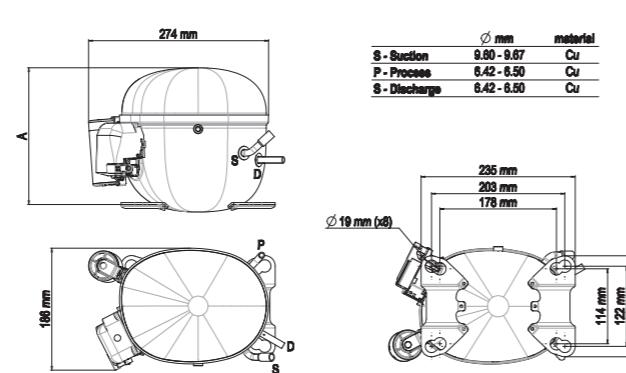
# Compressor Packaging

## External Views

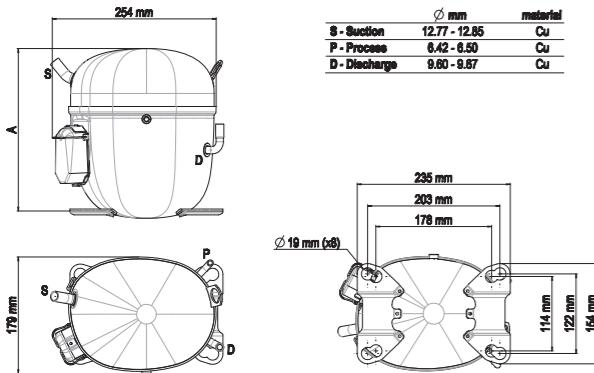
DWG 6 - NE / VNE SERIES UNIVERSAL BASE PLATE



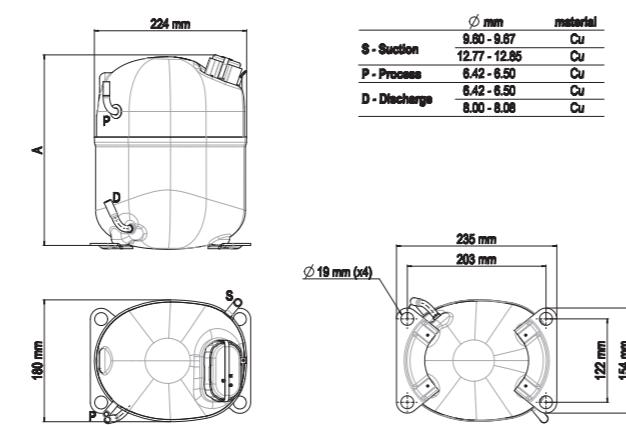
DWG 7 - NT SERIES UNIVERSAL BASE PLATE



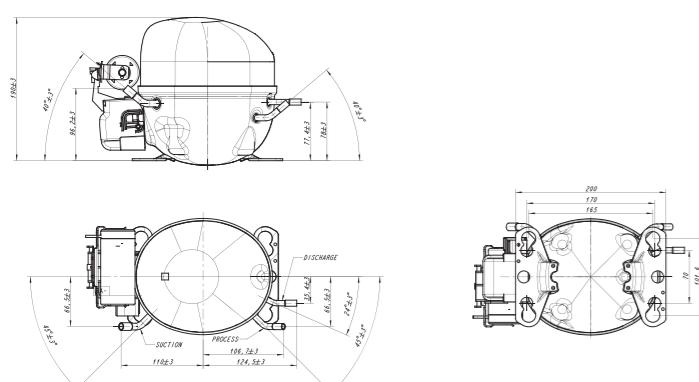
DWG 8 - NTU SERIES UNIVERSAL BASE PLATE



DWG 9 - NJ SERIES UNIVERSAL BASE PLATE



DWG 10 - EH SERIES

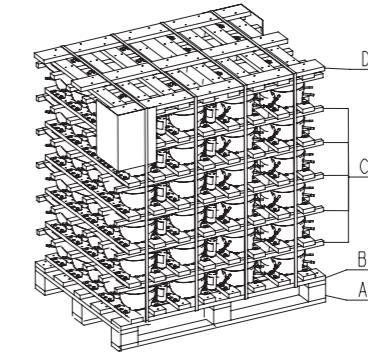


## Multiple Packaging

This type of package consists of a shipping skid of 835 mm x 1150 mm on which are positioned the elements composing the packaging of various compressor layers, as listed below, secured with straps to the shipping skid.

### Pallet packages composition

|   |                |   |
|---|----------------|---|
| A | SHIPPING SKID  | on which the base is positioned   |
| B | BASE           | on which the first layer of compressors is positioned                           |
| C | SEPARATOR SKID | are positioned between layers, in quantities according to the compressor series |
| D | TOP SKID       | upper element closing of the package  |



## Multiple wooden package

### Characteristics of multiple wooden packaging

| Compressor | Size of Pallets (CM) | QUANTITY PER PALLET<br>(ASSEMBLED ELECTRICALS) | QUANTITY PER CONTAINER<br>(ASSEMBLED ELECTRICALS) | QUANTITY PER PALLET<br>(UNASSEMBLED ELECTRICALS) | QUANTITY PER CONTAINER<br>(UNASSEMBLED ELECTRICALS) |
|------------|----------------------|--|---|--|---|
| EM (CN)    | 113*83*113           | 100  | 2800  | 100  | 250   |
| EH         | 113*83*113           | 80   | 2240  | 80   | 2000  |
| VES        | 113*83*113           | 96   | 2688  | 96   | 2400  |
| VES        | 113*97*113           | 120  | 2880  | 120  | 2640  |
| FMX        | 113*83*113           | 96   | 2668  | 96   | 2400  |
| FMX        | 113*97*113           | 120  | 2880  | 120  | 2640  |
| VEM        | 113*83*113           | 100  | 2500  | 100  | 2500  |
| NE         | 113*83*113           | 80   | 2250  | 80   | 2000  |

20'container can loading 28 pallets 113\*83\*113, or 24 pallets 113\*97\*113;  
The final loading pallets in one 20'container is different according to different compressor accessory BOM/imported country policy/weight/type of shipping

# Single Packaging

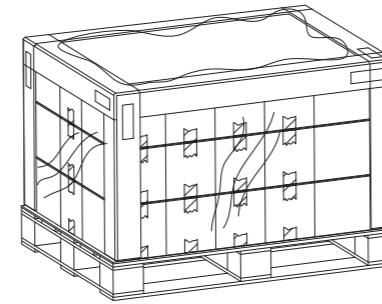
This type of package consists of a carton box and an internal separator to prevent any compressor movement. The electrical components and accessories are included in the package (assembled or attached).

Complete pallet package consists of a shipping skid of 830 mm x 1130 mm on which are placed carton boxes with compressors secured with corner strip and straps. Number of layers depends on compressor families.

**Carton box for single package**



**Single compressor pallet package**



## Characteristics of complete single package

| Series  | QUANTITY PER PALLET | CODE | PACKAGING TYPE             | ELECTRICAL COMPONENTS     | NOTE                        |
|---------|---------------------|------|----------------------------|---------------------------|-----------------------------|
| NE      | 56                  | A    | 4 layers of 14 compressors | Not assembled / Assembled |                             |
| NE      | 80                  | U    | 4 layers of 20 compressors | Assembled                 |                             |
| NE      | 80                  | U    | 4 layers of 20 compressors | Not assembled             | CSR electrical box included |
| VEM     | 80                  | S    | 4 layers of 20 compressors | Not assembled             | Without Screw/bushing       |
| EH      | 60                  | S    | 4 layers of 15 compressors | Assembled                 | Without Screw/bushing       |
| EM (CN) | 80                  | S    | 4 layers of 20 compressors | Assembled                 | Without Screw/bushing       |

Wooden packaging and pallets are created to comply with recycling regulations and are treated according to standard ISPM No. 15 - Regulation of wood packaging material in international trade. IPPC mark is presented on the wooden palets.

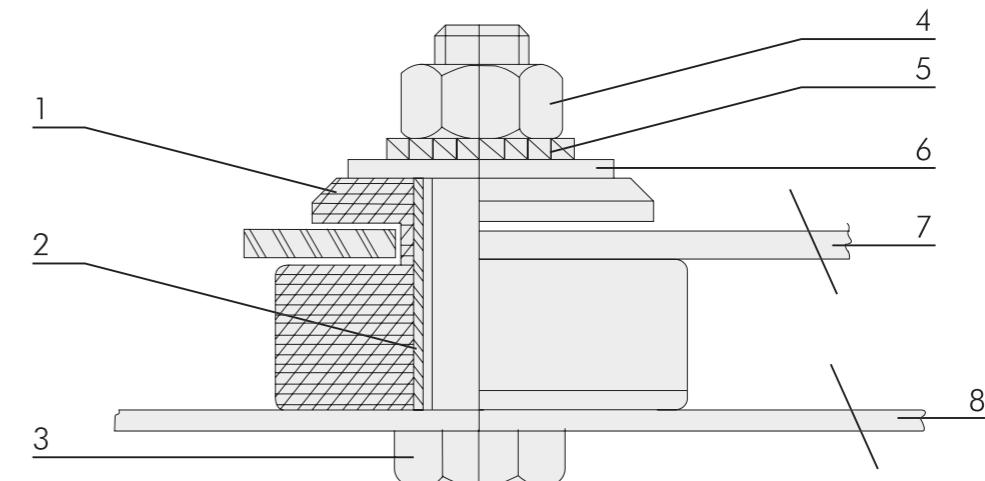
# Package for electrical components and accessories

Electrical components and accessories if not assembled on compressors are packed separately in carton boxes. A label is applied showing the following data:

## Components packing label

1. Components bill of material code (complete of electrical components and accessories)
2. Compressor model
3. Quantity
4. Customer name (optional)
5. List of electrical components and accessories shipped (code/description/quantity)

## Mouting accessories



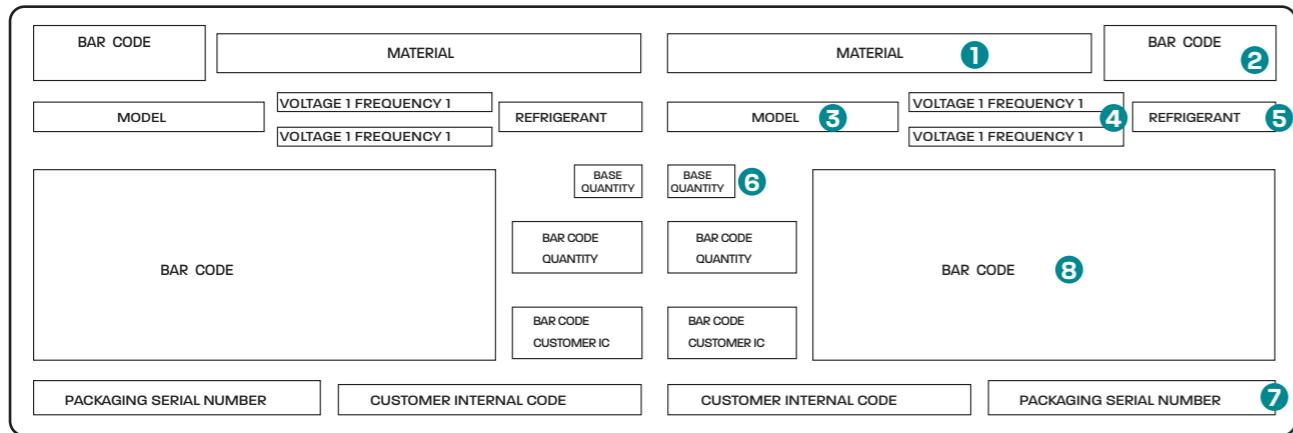
| NUMBER | COMPONENT              | SPECIFICATION |
|--------|------------------------|---------------|
| 1      | Rubber grommet         | H: 16.5±0.5   |
| 2      | Spacer (metal bushing) | H: 17.0±0.5   |
| 3      | Fixing bolt            | M6x30         |
| 4      | Hexagon nut            | M6            |
| 5      | Washer with ext.teeth  | Ø 6.4         |
| 6      | Flat washer            | Ø 6.4         |
| 7      | Compressor base plate  |               |
| 8      | Mounting base          |               |

# Compressor Identification Marks

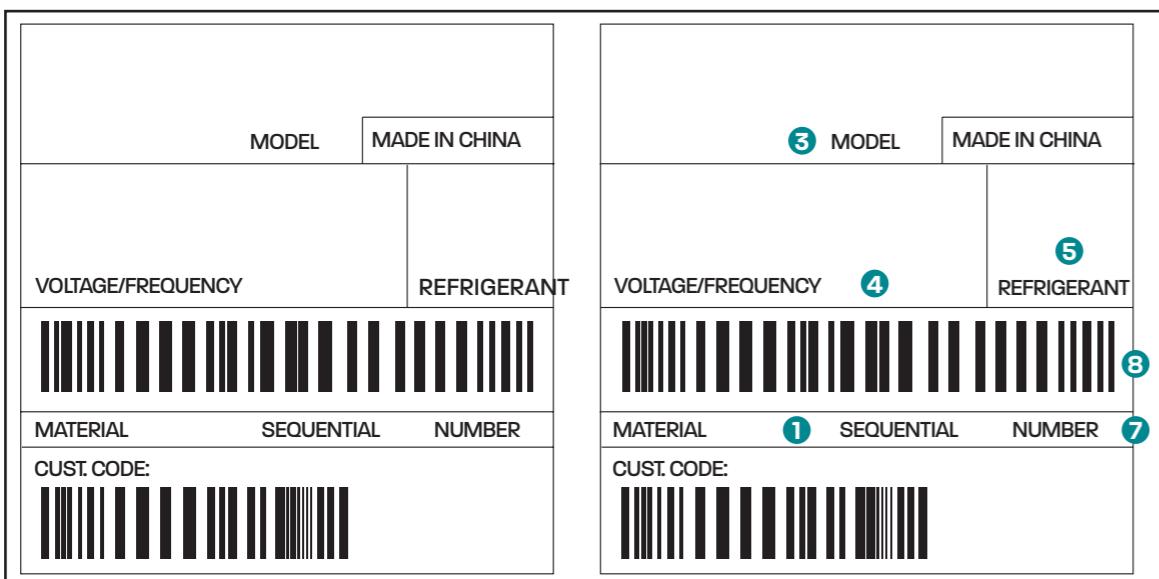
Labels are applied on two sides of each package and report the following data:

- |  |   |
|--|---|
| 1. Compressor bill of material                       | 5. Refrigerant                                    |
| 2. Bar code of compressor bill of material (Type 39) | 6. Package quantity (optional)                    |
| 3. Compressor model                                  | 7. Packaging serial number                        |
| 4. Voltage & frequency                               | 8. Bar code of packaging serial number (Type 128) |

Compressor Identificarion label for multiple packaging



Compressor Identificarion label for single packaging



## Technical Data

# Compressors 100V 50/60Hz

**R134a | 100V 50/60Hz | LBP**

| Model      | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|------------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EMU45HEP   | BR     | 3.77     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR      | 9.20  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMU45HEP   | BR     | 3.77     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR      | 8.50  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMI60HEP   | BR     | 4.99     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR      | 12.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMI60HEP   | BR     | 4.99     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR      | 12.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FGS70HA    | BR     | 6.36     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR      | 15.00 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FGS70HA    | BR     | 6.36     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR      | 13.80 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FGS80HAS   | BR     | 7.15     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR      | 21.00 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FGS80HAS   | BR     | 7.15     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR      | 19.70 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FGS100HAS  | BR     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSCR/CSCR | 30.90 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FGS100HAS  | BR     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSCR/CSCR | 28.30 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EH3125Z/L  | CN     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSIR      | UD*   | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EH3125Z/L  | CN     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSIR      | UD*   | ASHRAELBP32    | 60Hz  | Capillary Tube                    |
| FGS125HAS  | BR     | 11.14    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 34.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FGS125HAS  | BR     | 11.14    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 31.38 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NE2130Z    | SK     | 12.11    | 100 V / 50-60 Hz    | LBP      | HST    | CSIR      | 32.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NE2130Z    | SK     | 12.11    | 100 V / 50-60 Hz    | LBP      | HST    | CSIR      | 32.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEU3130Z/L | SK     | 12.11    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 39.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEU3130Z/L | SK     | 12.11    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 39.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEU3140Z/L | SK     | 16.80    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 46.00 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEU3140Z/L | SK     | 16.80    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 46.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |

| Model      | Cooling Capacity (°C) |     |     |     |     |      |     |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
|------------|-----------------------|-----|-----|-----|-----|------|-----|----|--------------|------------------|-----------------|----------------|----------------|----------------|
|            | -40                   | -35 | -30 | -25 | -20 | -15  | -10 | -5 |              |                  |                 |                |                |                |
| EMU45HEP   | 48                    | 65  | 92  | 127 | 169 | 217  |     |    | 104          | 1.26             | 160             | ESTER / ISO10  | UL/UKCA/CE     | SM00           |
| EMU45HEP   | 64                    | 89  | 117 | 150 | 191 | 243  |     |    | 128          | 1.34             | 160             | ESTER / ISO10  | UL/UKCA/CE     | SM00           |
| EMI60HEP   | 55                    | 86  | 120 | 159 | 207 | 265  |     |    | 133          | 1.17             | 200             | ESTER / ISO22  | UL/UKCA/CE     | SM00           |
| EMI60HEP   | 78                    | 113 | 153 | 199 | 253 | 319  |     |    | 168          | 1.32             | 200             | ESTER / ISO22  | UL/UKCA/CE     | SM00           |
| FGS70HA    | 67                    | 109 | 158 | 214 | 281 | 357  |     |    | 174          | 1.49             | 280             | ESTER / ISO10  | -              | SM34           |
| FGS70HA    | 85                    | 130 | 184 | 249 | 325 | 415  |     |    | 203          | 1.53             | 350             | ESTER / ISO10  | -              | SM34           |
| FGS80HAS   | -                     | -   | -   | -   | -   | -    |     |    | 210          | 1.42             | 280             | ESTER / ISO22  | -              | SM34           |
| FGS80HAS   | -                     | -   | -   | -   | -   | -    |     |    | 244          | 1.47             | 280             | ESTER / ISO22  | -              | SM08           |
| FGS100HAS  | -                     | -   | -   | -   | -   | -    |     |    | 261          | 1.41             | 280             | ESTER / ISO22  | -              | SM08           |
| FGS100HAS  | -                     | -   | -   | -   | -   | -    |     |    | 316          | 1.52             | 280             | ESTER / ISO22  | -              | NA*            |
| EH3125Z/L  | UD*                   | UD* | UD* | UD* | UD* | UD*  |     |    | 274*         | 1.40*            | UD*             | UD*            | -              | UD*            |
| EH3125Z/L  | UD*                   | UD* | UD* | UD* | UD* | UD*  |     |    | 319*         | 1.56*            | UD*             | UD*            | -              | SM08           |
| FGS125HAS  | -                     | -   | -   | -   | -   | -    |     |    | 315          | 1.28             | 280             | ESTER / ISO22  | -              | SM08           |
| FGS125HAS  | 159                   | 247 | 340 | 447 | 557 | 739  |     |    | 368          | 1.44             | 280             | ESTER / ISO22  | -              | SM05           |
| NE2130Z    | 147                   | 208 | 284 | 376 | 483 | 606  |     |    | 323          | 1.20             | 350             | ESTER / ISO22  | CE/UKCA        | SM05           |
| NE2130Z    | 172                   | 243 | 332 | 440 | 565 | 708  |     |    | 367          | 1.19             | 350             | ESTER / ISO22  | CE/UKCA        | NA*            |
| NEU3130Z/L | 167                   | 251 | 345 | 448 | 562 | 684  |     |    | 356          | 1.39             | 350             | ESTER / ISO22  | CE/UKCA        | UD*            |
| NEU3130Z/L | 194                   | 311 | 428 | 545 | 661 | 776  |     |    | 417          | 1.45             | 350             | ESTER / ISO22  | CE/UKCA        | UD*            |
| NEU3140Z/L | 226                   | 333 | 456 | 595 | 749 | 919  |     |    | 477          | 1.36             | 350             | ESTER / ISO22  | CE/UKCA        | UD*            |
| NEU3140Z/L | 261                   | 383 | 525 | 684 | 863 | 1061 |     |    | 552          | 1.44             | 350             | ESTER / ISO22  | CE/UKCA        | UD*            |

**R1234yf | 100V 50/60Hz | LBP**

| Model      | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device |
|------------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|------------------|
| EMT1110L   | BR     | 3.77     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR      | 9.20  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMT1110L   | BR     | 3.77     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR      | 8.50  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| FGS80LAS   | BR     | 7.15     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSCR/CSCR | 21.00 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| FGS80LAS   | BR     | 7.15     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSCR/CSCR | 19.70 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| FGS100LAS  | BR     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSCR/CSCR | 30.90 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| FGS100LAS  | BR     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSCR/CSCR | 28.30 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EH3125Z/L  | CN     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSIR      | UD*   | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EH3125Z/L  | CN     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | RSIR      | UD*   | ASHRAELBP32    | 60Hz  | Capillary Tube   |
| FGS125LAS  | BR     | 11.14    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 34,5  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| FGS125LAS  | BR     | 11.14    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 31.38 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| NEU3130Z/L | SK     | 12.11    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 39.50 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| NEU3130Z/L | SK     | 12.11    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 39.50 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| NEU3140Z/L | SK     | 16.80    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 46.00 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| NEU3140Z/L | SK     | 16.80    | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | 46.00 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EHU3125L   | CN     | 9.04     | 100 V / 50-60 Hz    | L/MBP    | LST    | CSCR      | UD*   | ASHRAELBP32    | 50 Hz | UD*              |

| Model | Cooling Capacity (°C) | | | | | | | | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| -40 | -35 | -30 | -25 |
<th

**R404A | 100V 50/60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque  | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|---------|-------|-------|----------------|-------|-----------------------------------|
| NEK2125GK | SK     | 6.20     | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 32.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2125GK | SK     | 6.20     | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 32.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK2134GK | SK     | 8.77     | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 34.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2134GK | SK     | 8.77     | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 34.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK2150GK | SK     | 12.11    | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 44.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2150GK | SK     | 12.11    | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 44.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2155GK | SK     | 12.11    | 100 V / 50-60 Hz    | LBP      | HST/LST | CSCR  | NA*   | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2155GK | SK     | 12.11    | 100 V / 50-60 Hz    | LBP      | HST/LST | CSCR  | NA*   | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2178GK  | SK     | 17.39    | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 25.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2178GK  | SK     | 17.39    | 100 V / 50-60 Hz    | LBP      | HST     | CSCR  | 25.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |      |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
|-----------|-----------------------|-----|-----|------|------|------|------|----|--------------|------------------|-----------------|-----------------|----------------|----------------|
|           | -40                   | -35 | -30 | -25  | -20  | -15  | -10  | -5 |              |                  |                 |                 |                |                |
| NEK2125GK | 124                   | 173 | 235 | 310  | 398  | 498  | 612  |    | 338          | 1.24             | 350             | ESTER / ISO22   | CE/VDE/UKCA    | SM06           |
| NEK2125GK | 154                   | 211 | 284 | 371  | 474  | 591  | 724  |    | 405          | 1.36             | 350             | ESTER / ISO22   | CE/VDE/UKCA    | SM06           |
| NEK2134GK | 170                   | 235 | 317 | 357  | 531  | 663  | 812  |    | 452          | 1.28             | 350             | ESTER / ISO22   | CE/UKCA        | SM06           |
| NEK2134GK | 200                   | 276 | 372 | 488  | 623  | 777  | 946  |    | 533          | 1.33             | 350             | ESTER / ISO22   | CE/UKCA        | SM06           |
| NEK2150GK |                       |     | 422 | 554  | 709  | 888  | 1090 |    | 607          | 1.29             | 350             | ESTER / ISO22   | CE/UKCA        | SM06           |
| NEK2150GK |                       |     | 505 | 654  | 828  | 1029 | 1259 |    | 713          | 1.35             | 350             | ESTER / ISO22   | CE/UKCA        | SM06           |
| NEU2155GK | 240                   | 331 | 448 | 592  | 762  | 958  | 1181 |    | 647          | 1.38             | 350             | ESTER / ISO22   | CE/UKCA        | SM06           |
| NEU2155GK | 280                   | 391 | 532 | 700  | 897  | 1122 | 1376 |    | 766          | 1.42             | 350             | ESTER / ISO22   | CE/UKCA        | SM06           |
| NT2178GK  | 337                   | 467 | 646 | 873  | 966  | 1229 | 1527 |    | 812          | 1.30             | 450             | ESTER / ISO22   | CE/UKCA        | SM20           |
| NT2178GK  | 400                   | 557 | 757 | 1000 | 1150 | 1476 | 1851 |    | 1002         | 1.38             | 450             | ESTER / ISO22   | CE/UKCA        | SM20           |

**R600a | 100V 50/60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|------------------|
| EMT30CDP  | BR     | 4.50     | 100 V / 50-60 Hz    | L/M/HBP  | LST    | RSIR  | 8.25  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMT30CDP  | BR     | 4.50     | 100 V / 50-60 Hz    | L/M/HBP  | LST    | RSIR  | 7.65  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMRS32CLC | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 6.03  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMRS32CLC | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 6.96  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMT45CLP  | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR  | 8.30  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMT45CLP  | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR  | 7.70  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMYS45CLP | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | NA*   | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMYS45CLP | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | NA*   | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMYS46CLC | CN     | 7.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | NA*   | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMYS46CLC | CN     | 7.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | NA*   | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMB46CLC  | CN     | 7.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | NA*   | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMB46CLC  | CN     | 7.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | NA*   | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMB55CLC  | CN     | 9.04     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 16.00 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMB55CLC  | CN     | 9.04     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 14.30 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EGX80CLC  | BR     | 11.14    | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 15.87 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EGX80CLC  | BR     | 11.14    | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 14.30 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMT30CDP  | BR     | 4.50     | 100 V / 50-60 Hz    | L/M/HBP  | LST    | RSIR  | 8.25  | CEFOMAFHBP     | 50 Hz | Capillary Tube   |
| EMT30CDP  | BR     | 4.50     | 100 V / 50-60 Hz    | L/M/HBP  | LST    | RSIR  | 7.65  | CEFOMAFHBP     | 60 Hz | Capillary Tube   |
| EMRS32CLC | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 7.70  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMRS32CLC | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 7.70  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMT45CLP  | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR  | 8.30  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMT45CLP  | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSIR  | 7.70  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMYS45CLP | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 7.60  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMYS45CLP | CN     | 5.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 7.60  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMYS46CLC | CN     | 7.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 9.10  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMYS46CLC | CN     | 7.96     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 9.10  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMB46CLC  | CN     | 8.23     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 8.70  | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMB46CLC  | CN     | 8.23     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 8.70  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMB55CLC  | CN     | 9.04     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 16.00 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMB55CLC  | CN     | 9.04     | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 14.30 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EGX80CLC  | BR     | 11.14    | 100 V / 50-60 Hz    | LBP      | LST    | RSCR  | 5.10  | ASHRAELBP32    | 50 Hz | Capillary Tube   |

| Model | Cooling Capacity (°C) |  |  |  |  |  |  |  | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
|-------|-----------------------|--|--|--|--|--|--|--|--------------|------------------|-----------------|-----------------|----------------|----------------|
|       | -40</                 |  |  |  |  |  |  |  |              |                  |                 |                 |                |                |

**R600a | 100V 50/60Hz | LBP**

| Model    | Origin | Displac. | Voltage / Frequency     | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device |
|----------|--------|----------|-------------------------|----------|--------|-------|-------|----------------|-------|------------------|
| EGX80CLC | BR     | 11,14    | 100 V / 50-60 Hz        | LBP      | LST    | RSCR  | 14,30 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMX3113Y | CN     | 9,04     | 100-127V 60Hz 100V 50Hz | L/MBP    | LST    | RSCR  | 15,30 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMX3118Y | BR     | 12,21    | 100 V / 50-60 Hz        | L/MBP    | LST    | RSCR  | 15,00 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMX3118Y | BR     | 12,21    | 100 V / 50-60 Hz        | L/MBP    | LST    | RSCR  | NA*   | ASHRAELBP32    | 60 Hz | Capillary Tube   |

| Model    | Cooling Capacity (°C) |     |     |     |     |     |     |     | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
|----------|-----------------------|-----|-----|-----|-----|-----|-----|-----|--------------|------------------|-----------------|----------------|----------------|----------------|
|          | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5  |              |                  |                 |                |                |                |
| EGX80CLC | 246                   | 301 | -   | -   | 268 | 345 | 438 |     | 249          | 1,82             | 280             | ALQUILB / ISO5 | -              | SM34           |
| EMX3113Y | 287                   | 362 | 246 | 301 | -   | -   | -   |     | 185          | 1,74             | 150             | ALQUILB / ISO5 | -              | SM01           |
| EMX3118Y | 389                   | 483 | 287 | 362 | -   | -   | -   |     | 208          | 1,67             | 150             | ALQUILB / ISO5 | VDE            | SM01           |
| EMX3118Y | 389                   | 483 | 389 | 483 | 290 | 370 | 463 | 570 | 237          | 1,68             | 150             | ALQUILB / ISO5 | VDE            | SM01           |

**R134a | 100V 50/60Hz | M/HBP**

| Model    | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|----------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EM20HHR  | BR     | 2.27     | 100V/50-60Hz        | M/HBP    | LST    | RSIR-CSIR | 13.00 | ASHRAEHBP32    | 60 Hz | Capillary Tube                    |
| EMT45HBP | CN     | 4.15     | 100V/50-60Hz        | M/HBP    | LST    | RSIR      | 14.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| EMT45HBP | CN     | 4.15     | 100V/50-60Hz        | M/HBP    | LST    | RSIR      | 14.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| EMT6170Z | CN     | 7.96     | 100V/50-60Hz        | HBP      | HST    | CSCR      | -     | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| EMT6170Z | CN     | 7.96     | 100V/50-60Hz        | HBP      | HST    | CSCR      | -     | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6170Z | SK     | 8.39     | 100V/50-60Hz        | HBP      | HST    | CSIR      | 16.50 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6170Z | SK     | 8.39     | 100V/50-60Hz        | HBP      | HST    | CSIR      | 16.50 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |

| Model    | Cooling Capacity (°C) |     |     |     |     |     |      |     | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
|----------|-----------------------|-----|-----|-----|-----|-----|------|-----|--------------|------------------|-----------------|----------------|----------------|----------------|
|          | -20                   | -15 | -10 | -5  | 0   | 5   | 10   | 15  |              |                  |                 |                |                |                |
| EM20HHR  | -                     | -   | -   | -   | -   | -   | -    | -   | 297          | 2.73             | 160             | ESTER / ISO22  | -              | SM03           |
| EMT45HBP |                       |     | 246 | 301 | 372 | 460 | 565  | 686 | 450          | 2.80             | 180             | ESTER / ISO22  | CE             | SM33           |
| EMT45HBP |                       |     | 287 | 362 | 451 | 555 | 674  | 807 | 530          | 2.70             | 180             | ESTER / ISO22  | CE             | SM33           |
| EMT6170Z |                       | 304 | 389 | 483 | 594 | 725 | 882  |     | 838          | 2.69             | 180             | ESTER / ISO22  | CE             | NA*            |
| EMT6170Z |                       | -   | -   | -   | -   | -   | -    | -   | 975          | 2.55             | 180             | ESTER / ISO22  | CE             | NA*            |
| NEK6170Z |                       |     | 348 | 427 | 552 | 724 | 942  |     | 820          | 2.17             | 350             | ESTER / ISO22  | CE/UKCA        | SM04           |
| NEK6170Z |                       |     | 422 | 510 | 649 | 844 | 1104 |     | 957          | 2.35             | 350             | ESTER / ISO22  | CE/UKCA        | SM04           |

**R1234a | 100V 50/60Hz | M/HBP**

| Model    | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| EM20LHR  | BR     | 2.27     | 100V/50-60Hz        | HBP      | LST    | RSIR  | 13.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube                    |
| EM20LHR  | BR     | 2.27     | 100V/50-60Hz        | HBP      | LST    | RSIR  | 12.10 | ASHRAEHBP46    | 60 Hz | Capillary Tube                    |
| EMT6170L | CN     | 7.96     | 100V/50-60Hz        | HBP      | HST    | CSCR  | 16.50 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| EMT6170L | CN     | 7.96     | 100V/50-60Hz        | HBP      | HST    | CSCR  | 16.50 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |

| Model    | Cooling Capacity (°C) |     |     |     |     |     |      |     | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
|----------|-----------------------|-----|-----|-----|-----|-----|------|-----|--------------|------------------|-----------------|----------------|----------------|----------------|
|          | -20                   | -15 | -10 | -5  | 0   | 5   | 10   | 15  |              |                  |                 |                |                |                |
| EM20LHR  |                       |     |     | 156 | 195 | 239 | 291  | 348 | 262          | 2.78             | 160             | ESTER / ISO22  | -              | SM03           |
| EM20LHR  |                       |     |     | 192 | 234 | 284 | 343  | 412 | 311          | 2.77             | 160             | ESTER / ISO22  | -              | SM03           |
| EMT6170L |                       | 322 | 411 | 512 | 630 | 767 | 927  |     | 838          | 2.69             | 180             | ESTER / ISO22  | CCC/CE/UKCA    | SM33           |
| EMT6170L |                       | 363 | 465 | 588 | 730 | 892 | 1074 |     | 975          | 2.55             | 180             | ESTER / ISO22  | CCC/CE/UKCA    | SM33           |

**R404A | 100V 50/60Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEK6210GK | SK     | 8.77     | 100V/50-60Hz        | MBP      | HST    | CSIR  | 38.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6210GK | SK     | 8.77     | 100V/50-60Hz        | MBP      | HST    | CSIR  | 38.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |

| Model | Cooling Capacity (°C) | | | | | | | | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |



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Technical Data

# Compressors 115V 60Hz



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**R134a | 115V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque  | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|---------|-----------|-------|----------------|-------|-----------------------------------|
| EMIS20HHR | BR     | 2.27     | 115-127 V 60 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 11.62 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMIE40HER | BR     | 3.40     | 115-127 V 60 Hz     | L/MBP    | LST     | RSIR/CSIR | 11.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM45HHR   | BR     | 3.77     | 115-127 V 60 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 17.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM45HNR   | BR     | 3.77     | 115-127 V 60 Hz     | LBP      | LST     | RSIR/CSIR | 17.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM65HNR   | BR     | 5.54     | 115-127 V 60 Hz     | L/MBP    | LST     | RSIR/CSIR | 26.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMIS70HHR | BR     | 5.96     | 115-127 V 60 Hz     | L/M/HBP  | LST     | RSIR      | 28.20 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFU80HAK  | BR     | 6.76     | 115-127 V 60 Hz     | L/MBP    | LST     | RSIR/CSIR | 28.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFI8,5HAK | BR     | 7.15     | 115-127 V 60 Hz     | L/MBP    | LST     | RSIR/CSIR | 27.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEK2116Z  | SK     | 7.40     | 115 V 60 Hz         | LBP      | HST     | CSIR      | 22.00 | ARI540         | 60 Hz | Capillary Tube or Expansion Valve |
| FF8,5HBK  | BR     | 7.95     | 115-127 V 60 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 34.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFI10HAK  | BR     | 9.04     | 115-127 V 60 Hz     | L/MBP    | LST     | RSIR/CSIR | 32.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFU130HAX | BR     | 10.61    | 115-127 V 60 Hz     | L/MBP    | LST/HST | CSIR      | 40.30 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFI12HBX  | BR     | 11.14    | 115-127 V 60 Hz     | L/M/HBP  | HST     | CSIR      | 43.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFU160HAX | BR     | 12.92    | 115-127 V 60 Hz     | MBP      | LST/HST | CSIR      | 44.50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |     |     |     |     |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications       | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|-----|-----|-----|------|--------------|------------------|-----------------|-----------------|----------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5   |              |                  |                 |                 |                      |                |
| EMIS20HHR |                       | 15  | 31  | 49  | 71  | 98  | 130 | 168  | 56           | 0.90             | 160             | ESTER / ISO22   | UL/UKCA/CE/TUV/ISI   | SM01/SM02      |
| EMIE40HER |                       |     | 75  | 105 | 141 | 183 | 234 | 293  | 117          | 1.33             | 180             | ESTER / ISO10   | UL/UKCA/CE/TUV       | SM01/SM02      |
| EM45HHR   |                       | 48  | 80  | 114 | 152 | 197 | 249 | 310  | 123          | 1.15             | 160             | ESTER / ISO22   | UL/UKCA/VDE/CE/TUV   | SM07           |
| EM45HNR   |                       | 47  | 75  | 109 | 149 | 195 | 246 |      | 123          | 1.17             | 200             | ESTER / ISO22   | UL/UKCA/CE/TUV       | SM01/SM02      |
| EM65HNR   |                       | 47  | 75  | 109 | 149 | 195 | 246 |      | 123          | 1.17             | 160             | ESTER / ISO22   | UL/UKCA/CE/TUV       | SM01/SM02      |
| EMIS70HHR |                       | 96  | 137 | 186 | 246 | 319 | 406 | 510  | 203          | 1.34             | 160             | ESTER / ISO10   | UL/UKCA/CE/TUV       | SM01/SM02      |
| FFU80HAK  |                       |     | 156 | 215 | 288 | 377 | 481 | 600  | 239          | 1.51             | 280             | ESTER / ISO10   | UL/UKCA/CE/TUV       | SM08           |
| FFI8,5HAK |                       | 106 | 158 | 221 | 296 | 386 | 493 | 620  | 243          | 1.42             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV/IRAM  | SM03           |
| NEK2116Z  |                       | 59  | 86  | 127 | 180 | 247 | 328 |      | 171          | 0.92             | 350             | ESTER / ISO22   | UL/UKCA/CE           | SM04           |
| FF8,5HBK  |                       | 106 | 146 | 198 | 262 | 341 | 438 | 552  | 217          | 1.10             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV/IMTRO | SM03/SM04      |
| FFI10HAK  |                       |     | 187 | 268 | 362 | 471 | 598 | 749  | 301          | 1.45             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV       | SM03           |
| FFU130HAX |                       |     | 228 | 326 | 448 | 593 | 764 | 961  | 367          | 1.41             | 280             | ESTER / ISO10   | UL/UKC/CE/TUV        | SM08           |
| FFI12HBX  |                       | 159 | 220 | 306 | 416 | 416 | 718 | 914  | 340          | 1.16             | 280             | ESTER / ISO22   | CCC/UL/UKCA/CE/TUV   | SM08           |
| FFU160HAX |                       |     | 303 | 404 | 526 | 673 | 850 | 1059 | 445          | 1.37             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV/IMTRO | SM08           |

**R404A | 115V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEK2134GK | SK     | 8.77     | 115 V 60 Hz         | LBP      | HST    | CSIR  | 37.50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2140GK | SK     | 8.77     | 115-127 V 60 Hz     | LBP      | HST    | CSCR  | 30.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK2150GK | SK     | 12.11    | 115 V 60 Hz         | LBP      | HST    | CSIR  | 44.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2155GK | SK     | 12.11    | 115-127 V 60 Hz     | LBP      | HST    | CSCR  | 40.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2168GKV | SK     | 14.50    | 115 V 60 Hz         | LBP      | HST    | CSIR  | 54.50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2178GKV | SK     | 17.39    | 115 V 60 Hz         | LBP      | HST    | CSCR  | 66.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2180GK  | SK     | 20.44    | 115 V 60 Hz         | LBP      | HST    | CSCR  | 57.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2192GK  | SK     | 22.37    | 115 V 60 Hz         | LBP      | HST    | CSIR  | 56.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NJ2192GK  | SK     | 26.11    | 115 V 60 Hz         | LBP      | HST    | CSCR  | 98.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |      |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
|-----------|-----------------------|-----|-----|------|------|------|------|----|--------------|------------------|-----------------|-----------------|----------------|----------------|
|           | -40                   | -35 | -30 | -25  | -20  | -15  | -10  | -5 |              |                  |                 |                 |                |                |
| NEK2134GK |                       |     | 402 | 525  | 667  | 828  | 1007 |    | 573          | 1.32             | 350             | ESTER / ISO22   | UL/VDE/CE/UKCA | SM04           |
| NEU2140GK |                       |     | 388 | 516  | 670  | 848  | 1052 |    | 569          | 1.46             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
| NEK2150GK |                       |     | 508 | 660  | 838  | 1042 | 1273 |    | 720          | 1.23             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM04           |
| NEU2155GK |                       |     | 541 | 712  | 913  | 1144 | 1404 |    | 781          | 1.45             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
| NT2168GKV |                       |     | 524 | 702  | 911  | 1149 | 1413 |    | 777          | 1.23             | 450             | ESTER / ISO22   | UL/CE/UKCA     | SM20           |
| NT2178GKV | 351                   | 502 | 692 | 921  | 1190 | 1497 | 1844 |    | 1004         | 1.21             | 450             | ESTER / ISO22   | UL/CE/UKCA     | SM20           |
| NT2180GK  |                       |     | 780 | 1053 | 1372 | 1736 | 2146 |    | 1165         | 1.38             | 450             | ESTER / ISO22   | UL/CE/UKCA     | SM21           |
| NT2192GK  |                       |     | 877 | 1135 | 1418 | 1726 | 2061 |    | 1235         | 1.20             | 450             | ESTER / ISO22   | CCC/UL/CE/UKCA | SM21           |
| NT2192GKV |                       |     | 541 | 710  | 917  | 1160 | 1438 |    | 765          | 0.82             | 450             | ESTER           |                |                |

**R290 | 115V 60Hz | LBP**

| Model       | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-------------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EM2U3111U   | BR     | 3,00     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 8,80  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMI50UER    | BR     | 3,00     | 115-127 V 60 Hz     | L/MBP    | LST    | RSIR/CSIR | 12,70 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3113U   | CN     | 3,67     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 12,40 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMX3113U    | CN     | 3,68     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 17,50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2U3115U   | BR     | 3,97     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 11,94 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMI70UER    | BR     | 4,08     | 115-127 V 60 Hz     | L/MBP    | LST    | CSIR      | 19,60 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3117U   | CN     | 4,50     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 15,30 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3117U 2 | CN     | 4,50     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 13,30 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMX3117U    | CN     | 4,50     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 22,80 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMI90UEX    | BR     | 4,99     | 115-127 V 60 Hz     | L/MBP    | LST    | CSIR      | 23,00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| EMY3131U    | CN     | UD*      | 100-127 V 60Hz      | L/MBP    | LST    | UD*       | UD*   | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3121U   | CN     | 5,54     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 15,60 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3125U   | CN     | 6,09     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 15,60 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFU130UAX   | BR     | 6,76     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR      | 41,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFU160UAX   | BR     | 7,95     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR      | 41,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| EMC3134U    | CN     | 7,95     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 22,40 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3134U   | BR     | 7,96     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 24,80 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMC3140U    | CN     | 9,04     | 115-127 V 60 Hz     | L/MBP    | LST    | RSCR      | 26,50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEK2134U    | SK     | 9,99     | 115 V 60 Hz         | LBP      | HST    | CSIR      | 28,00 | ARILBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2140U    | SK     | 9,99     | 115-127 V 60 Hz     | LBP      | HST    | CSIR      | 30,00 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |
| EHX2155U    | CN     | 12,21    | 115-127 V 60 Hz     | LBP      | HST    | CSIR      | 18,80 | ASHRAELBP32    | 60Hz  | Capillary Tube or Expansion Valve |
| NEK2150U    | SK     | 13,54    | 115 V 60 Hz         | LBP      | HST    | CSCR      | 41,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK2150U    | SK     | 13,54    | 115 V 60 Hz         | LBP      | HST    | CSIR      | 41,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2155U    | SK     | 13,54    | 115-127 V 60 Hz     | LBP      | HST    | CSCR      | 40,00 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |
| NEX4160UA   | CN/SK  | 14,28    | 115-127 V 60 Hz     | L/MBP    | HST    | CSCR      | 46,00 | ARILBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEX4170UA   | CN/SK  | 16,80    | 115-127 V 60 Hz     | L/MBP    | HST    | CSCR      | 49,50 | ARILBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2168U    | SK     | 16,80    | 115-127 V 60 Hz     | LBP      | HST    | CSCR      | 49,00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2160UV    | SK     | 17,39    | 115- V 60 Hz        | LBP      | HST    | CSCR      | 54,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEX4180UA   | CN/SK  | 18,70    | 115-127 V 60 Hz     | L/MBP    | HST    | CSCR      | 53,00 | ARILBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2178U    | SK     | 18,70    | 115-127 V 60 Hz     | LBP      | HST    | CSCR      | 51,00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2180UV    | SK     | 22,37    | 115 V 60 Hz         | LBP      | HST    | CSCR      | 30,00 | ARI540         | 60 Hz | Capillary Tube or Expansion Valve |
| NT2210UV    | SK     | 27,80    | 115- V 60 Hz        | LBP      | HST    | CSCR      | 67,00 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |
| EMX4134U    | BR     | 7,95     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR      | 30,50 | ASHRAELBP32    | 60 Hz |                                   |
| EMX4140U    | BR     | 9,50     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR      | 30,50 | ASHRAELBP32    | 60 Hz |                                   |
| EMX4134U    | CN     | 7,95     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR      | 30,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| EMX4140U    | CN     | 9,50     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR      | 30,50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model       |  | Cooling Capacity (°C) |     |     |     |     |      |      |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications        | Wiring Diagram            |                |      |
|-------------|--|-----------------------|-----|-----|-----|-----|------|------|------|--------------|------------------|-----------------|-----------------|-----------------------|---------------------------|----------------|------|
|             |  | -40                   | -35 | -30 | -25 | -20 | -15  | -10  | -5   |              |                  |                 |                 |                       |                           |                |      |
| EM2U3111U   |  |                       |     | 119 | 154 | 193 | 238  | 290  | 352  | 167          | 1,66             | 150             | ESTER / ISO22   | UL/UKCA/CE/TUV/ IMTRO | SM06                      |                |      |
| EMI50UER    |  |                       |     | 103 | 138 | 181 | 232  | 290  | 355  | 153          | 1,38             | 170             | ALQUILB / ISO32 | CCC/UL/UKCA/CE/ TUV   | SM01/SM02                 |                |      |
| EM2X3113U   |  |                       |     | 86  | 120 | 129 | 203  | 255  | 315  | 384          | 175              | 1,48            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA            | SM28           |      |
| EMX3113U    |  | 286                   | 408 |     | 716 |     | 1126 |      | 1661 | 195          | 1,62             | 150             | ESTER / ISO22   | CCC/UL/CE/UKCA        | SM05                      |                |      |
| EM2U3115U   |  |                       |     | 133 | 176 | 222 | 275  | 336  | 408  | 492          | 242              | 165             | 150             | ESTER / ISO22         | UL/UKCA/CE/TUV/ IMTRO     | SM06           |      |
| EMI70UER    |  |                       |     |     | 142 | 190 | 248  | 317  | 396  | 485          | 210              | 1,34            | 160             | ALQUILB / ISO32       | UL/UKCA/CE/TUV            | SM01/SM02      |      |
| EM2X3117U   |  |                       |     | 142 | 183 | 236 | 299  | 372  | 455  | 546          | 258              | 1,72            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA            | SM28           |      |
| EM2X3117U 2 |  | 82                    | 128 |     | 223 |     | 368  |      | 546  | 251          | 1,72             | 150             | ESTER / ISO22   | UL/CE                 | SM28                      |                |      |
| EMX3117U    |  |                       |     | 479 |     | 856 |      | 1352 |      | 2012         | 249              | 1,67            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA            | SM05           |      |
| EMI90UEX    |  |                       |     |     | 200 | 250 | 305  | 372  | 456  | 564          | 269              | 1,34            | 160             | ALQUILB / ISO32       | UL/UKCA/CE/TUV/ISI/ IMTRO | SM01           |      |
| EMY3131U    |  |                       |     |     |     |     |      |      |      |              |                  |                 | 150             | ESTER / ISO22         | CCC/UL                    | SM01           |      |
| EM2X3121U   |  |                       |     |     | 237 | 306 | 381  | 466  | 566  | 684          | 332              | 1,74            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA            | SM05           |      |
| EM2X3125U   |  |                       |     |     | 259 | 332 | 416  | 512  | 623  | 751          | 361              | 1,70            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA            | SM05           |      |
| FFU130UAX   |  |                       |     | 236 | 288 | 361 | 454  | 568  | 704  |              | 390              | 1,23            | 280             | ALQUILB / ISO32       | UL/UKCA/CE/TUV            | SM08           |      |
| FFU160UAX   |  |                       |     |     | 376 | 470 | 580  | 709  | 863  | 1044         | 507              | 1,58            | 280             | ALQUILB / ISO32       | UL/UKCA/CE/TUV/ IMTRO     | SM08           |      |
| EMC3134U    |  |                       |     |     | 347 | 448 | 562  | 693  | 841  | 1010         | 487              | 1,78            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA            | SM32           |      |
| EM2X3134U   |  |                       |     |     | 273 |     | 454  |      | 702  |              | 1012             | 494             | 1,71            | 150                   | ESTER / ISO22             | UL/UKCA/CE/TUV | SM05 |
| EMC3140U    |  |                       |     |     | -   | -   | -    | -    | -    | -            | 583              | 1,72            | 150             | ESTER / ISO22         | CCC/UL/CE/UKCA/BIS        | SM32           |      |
| NEK2134U    |  | 155                   | 205 | 268 | 344 | 433 | 535  | 650  |      |              | 539              | 1,39            | 350             | ESTER / ISO22         | UL/CE/UKCA                | SM04           |      |
| NEU2140U    |  |                       |     | 220 | 283 | 364 | 463  | 579  | 714  |              | 449              | 1,14            | 350</td         |                       |                           |                |      |

**R600a | 115V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|------------------|
| EMU40CLP  | BR     | 5.96     | 115-127 V 60 Hz     | LBP      | LST    | RSIR  | 7.33  | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMU60CLP  | BR     | 5.96     | 115-127 V 60 Hz     | LBP      | LST    | RSIR  | 12.00 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMYE70CLP | BR     | 5.96     | 115-127 V 60 Hz     | LBP      | LST    | RSIR  | 14.50 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EGAS80CLP | BR     | 9.04     | 115-127 V 60 Hz     | LBP      | LST    | RSIR  | 18.00 | ASHRAELBP32    | 60 Hz | Capillary Tube   |

| Model     | Cooling Capacity (°C) |     |     |     |     |     |     |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications    | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|-----|-----|-----|----|--------------|------------------|-----------------|-----------------|-------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5 |              |                  |                 |                 |                   |                |
| EMU40CLP  |                       | 57  | 78  | 105 | 139 | 180 | 227 |    | 117          | 1.30             | 180             | ALQUILB / ISO5  | UKCA/CE/TUV       | SM00           |
| EMU60CLP  |                       | 83  | 116 | 154 | 200 | 255 | 321 |    | 164          | 1.41             | 180             | ALQUILB / ISO5  | UKCA/CE/TUV IMTRO | SM07           |
| EMYE70CLP |                       | 107 | 142 | 185 | 239 | 305 | 285 |    | 205          | 1.46             | 180             | ALQUILB / ISO5  | UKCA/CE/TUV IMTRO | SM07           |
| EGAS80CLP |                       | 122 | 172 | 226 | 288 | 362 | 450 |    | 245          | 1.51             | 280             | ALQUILB / ISO5  | UKCA/CE/TUV       | SM09           |

**R134a | 115V 60Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EMIS30HHR | BR     | 3.00     | 115-127 V 60 Hz     | L/M/HBP  | LST    | RSIR/CSIR | 16.00 | ASHRAEHBP32    | 60 Hz | Capillary Tube                    |
| NEU6187Z  | SK     | 9.99     | 115-127 V 60 Hz     | HBP      | HST    | CSCR      | 39.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6210Z  | SK     | 12.11    | 115-127 V 60 Hz     | HBP      | HST    | CSCR      | 40.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6217Z   | SK     | 20.44    | 115 V 60 Hz         | HBP      | HST    | CSIR      | 45.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NJ6220Z   | SK     | 26.11    | 115 V 60 Hz         | HBP      | HST    | CSIR      | 72.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |      |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
|-----------|-----------------------|-----|-----|------|------|------|------|----|--------------|------------------|-----------------|-----------------|----------------|----------------|
|           | -20                   | -15 | -10 | -5   | 0    | 5    | 10   | 15 |              |                  |                 |                 |                |                |
| EMIS30HHR | 106                   | 142 | 185 | 251  | 313  | 385  | 467  |    | 419          | 2.48             | 160             | ESTER / ISO22   | UL/UKCA/CE/TUV | SM07           |
| NEU6187Z  |                       |     |     | 724  | 905  | 1116 | 1356 |    | 1227         | 2.47             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
| NEU6210Z  |                       |     |     | 865  | 1077 | 1322 | 1599 |    | 1452         | 2.51             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
| NT6217Z   |                       |     |     | 1194 | 1493 | 1836 | 2220 |    | 2020         | 2.16             | 450             | ESTER / ISO22   | CCC/UL/CE/UKCA | SM26           |
| NJ6220Z   |                       |     |     | 1726 | 2206 | 2734 | 3308 |    | 3004         | 2.42             | 750             | ESTER / ISO22   | CCC/UL/CE/UKCA | SM18           |

**R404A | 115V 60Hz | M/HBP**

| Model      | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|------------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEU6181GK  | SK     | 6.20     | 115-127 V 60 Hz     | MBP      | HST    | CSCR  | 31.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6181GK  | SK     | 7.28     | 115-127 V 60 Hz     | MBP      | HST    | CSIR  | 26.50 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6210GK  | SK     | 8.77     | 115 V 60 Hz         | MBP      | HST    | CSCR  | 38.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6212GK  | SK     | 8.77     | 115-127 V 60 Hz     | MBP      | HST    | CSIR  | 39.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6214GK  | SK     | 9.99     | 115-127 V 60 Hz     | MBP      | HST    | CSIR  | 42.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6215GK  | SK     | 12.11    | 115-127 V 60 Hz     | MBP      | HST    | CSCR  | 47.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6217GKV  | SK     | 12.55    | 115 V 60 Hz         | MBP      | HST    | CSIR  | 50.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NT6220GKV  | SK     | 14.50    | 115 V 60 Hz         | MBP      | HST    | CSIR  | 54.50 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6222GKV  | SK     | 17.39    | 115 V 60 Hz         | MBP      | HST    | CSIR  | 70.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NT6224GKV  | SK     | 20.44    | 115 V 60 Hz         | MBP      | HST    | CSCR  | 77.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6226GKV  | SK     | 22.37    | 115 V 60 Hz         | MBP      | HST    | CSCR  | 77.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NTX6220GKV | SK     | 12.55    | 115-127 V 60 Hz     | M/HBP    | HST    | CSCR  | 54.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NTX6222GKV | SK     | 15.10    | 115-127 V 60 Hz     | M/HBP    | HST    | CSCR  | 69.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |      |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
|-----------|-----------------------|-----|-----|------|------|------|------|----|--------------|------------------|-----------------|-----------------|----------------|----------------|
|           | -20                   | -15 | -10 | -5   | 0    | 5    | 10   | 15 |              |                  |                 |                 |                |                |
| NEU6181GK | 307                   | 361 | 445 | 558  | 701  | 872  | 1074 |    | 1237         | 2.33             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
| NEK6181GK | 460                   | 562 | 679 | 815  | 973  | 1156 | 1365 |    | 1260         | 2.04             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM04           |
| NEK6210GK | 573                   | 683 | 825 | 1000 | 1209 | 1450 | 1725 |    | 1584         | 2.11             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
| NEU6212GK | 558                   | 700 | 871 | 1071 | 1299 | 1557 | 1842 |    | 1697         | 2.20             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM04           |
| NEU6214GK | 479                   | 585 | 724 | 870  | 1099 | 1379 | 1710 |    | 1914         | 2.11             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM04           |
| NEU6215GK |                       |     |     | 1494 | 1792 | 2123 | 2486 |    | 2302         | 2.14             | 350             | ESTER / ISO22   | UL/CE/UKCA     | SM06           |
|           |                       |     |     |      |      |      |      |    |              |                  |                 |                 |                |                |

**R290 | 115V 60Hz | M/HBP**

| Model        | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|--------------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEK6152U     | SK     | 5.44     | 115 V 60 Hz         | MBP      | HST    | CSIR  | 25.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6181U     | SK     | 7.28     | 115-127 V 60 Hz     | MBP      | HST    | CSIR  | 30.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6210U     | SK     | 8.77     | 115 V 60 Hz         | MBP      | HST    | CSIR  | 37.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6213U     | SK     | 12.11    | 115 V 60 Hz         | MBP      | HST    | CSIR  | 44.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6214U     | SK     | 12.11    | 115-127 V 60 Hz     | MBP      | HST    | CSCR  | 42.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6214U     | SK     | 12.11    | 115-127 V 60 Hz     | MBP      | HST    | CSIR  | 42.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEX4160UA    | CN/SK  | 14.28    | 115-127 V 60 Hz     | L/MBP    | HST    | CSCR  | 46.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6217U     | SK     | 14.28    | 115-127 V 60 Hz     | MBP      | HST    | CSIR  | 29.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6217U     | SK     | 14.28    | 115-127 V 60 Hz     | MBP      | HST    | CSCR  | 45.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6217UV     | SK     | 14.50    | 115 V 60 Hz         | MBP      | HST    | CSIR  | 44.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NT6217UV     | SK     | 14.50    | 115 V 60 Hz         | MBP      | HST    | CSCR  | 44.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEX4170UA    | CN/SK  | 16.80    | 115-127 V 60 Hz     | L/MBP    | HST    | CSCR  | 49.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEX6221UA    | SK     | 16.80    | 115-127 V 60 Hz     | M/HBP    | HST    | CSCR  | 49.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NT6220UV     | SK     | 17.39    | 115 V 60 Hz         | MBP      | HST    | CSCR  | 54.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NEX4180UA    | CN/SK  | 18.70    | 115-127 V 60 Hz     | L/MBP    | HST    | CSCR  | 53.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NT6222UV     | SK     | 20.44    | 115 V 60 Hz         | MBP      | HST    | CSCR  | 54.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NTX6222UV    | SK     | 20.44    | 115-127 V 60 Hz     | M/HBP    | HST    | CSCR  | 60.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| EMX4134U UD* | CN     | 7.95     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR  | 30.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| EMX4140U UD* | CN     | 9.50     | 115-127 V 60 Hz     | L/MBP    | HST    | CSIR  | 30.50 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model        | Cooling Capacity (°C) |      |      |      |      |      |      |    |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
|--------------|-----------------------|------|------|------|------|------|------|----|------|--------------|------------------|-----------------|----------------|----------------|----------------|
|              | -20                   | -15  | -10  | -5   | 0    | 5    | 10   | 15 |      |              |                  |                 |                |                |                |
| NEK6152U     | 221                   | 279  | 346  | 422  | 507  | 602  | 706  |    | 862  | 2.44         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM04           |                |
| NEU6181U     | 393                   | 499  | 626  | 773  | 940  | 1127 | 1334 |    | 1224 | 2.73         | 350              | ESTER / ISO22   | CCC/UL/CE/UKCA | SM04           |                |
| NEK6210U     | 363                   | 458  | 570  | 698  | 843  | 1004 | 1182 |    | 1369 | 2.48         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM04           |                |
| NEK6213U     | 660                   | 807  | 984  | 1193 | 1432 | 1702 | 2002 |    | 1846 | 2.14         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM04           |                |
| NEU6214U     | 710                   | 888  | 1094 | 1328 | 1589 | 1879 | 2197 |    | 2027 | 2.71         | 350              | ESTER / ISO22   | CCC/UL/CE/UKCA | SM06           |                |
| NEU6214U     | 708                   | 882  | 1084 | 1313 | 1571 | 1857 | 2170 |    | 1989 | 2.46         | 350              | ESTER / ISO22   | CCC/UL/CE/UKCA | SM06           |                |
| NEX4160UA    | 696                   | 871  | 1070 | 1294 | 1541 |      |      |    | -    | -            | 350              | ESTER / ISO22   | CCC/CE/EAC/UL  | SM10           |                |
| NEU6217U     | 818                   | 1019 | 1252 | 1518 | 1817 | 2148 | 2512 |    | 2264 | 2.24         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM05           |                |
| NEU6217U     | 824                   | 1023 | 1258 | 1528 | 1832 | 2172 | 2547 |    | 2351 | 2.56         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM06           |                |
| NT6217UV     | 495                   | 626  | 793  | 995  | 1234 | 1512 | 1829 |    | 2103 | 2.53         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |
| NT6217UV     | 498                   | 624  | 801  | 1030 | 1314 | 1656 | 2056 |    | 2178 | 2.81         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |
| NEX4170UA    | 820                   | 1022 | 1251 | 1508 | 1791 |      |      |    | -    | -            | 350              | ESTER / ISO22   | CCC/CE/EAC/UL  | SM10           |                |
| NEX6221UA    | 831                   | 992  | 1211 | 1488 | 1823 |      |      |    | 2814 | 2.63         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM10           |                |
| NT6220UV     | 620                   | 794  | 996  | 1224 | 1479 | 1762 | 2071 |    | 2594 | 2.80         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |
| NEX4180UA    | 924                   | 1140 | 1382 | 1650 | 1945 |      |      |    | -    | -            | 350              | ESTER / ISO22   | CCC/CE/EAC/UL  | SM10           |                |
| NT6222UV     | 669                   | 913  | 1182 | 1478 | 1799 | 2147 | 2521 |    | 3024 | 2.73         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |
| NTX6222UV    | 1048                  | 1321 | 1656 | 2503 | 2513 | 3035 | 3620 |    | 3323 | 2.84         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |
| EMX4134U UD* |                       |      |      |      |      |      |      |    | 742  | 1.93         | 150              | ALQUILB /ISO22  | UL/UKCA/CE     | SM04           |                |
| EMX4140U UD* |                       |      |      |      |      |      |      |    | 874  | 1.76         | 150              | ALQUILB /ISO22  | UL/UKCA/CE     | SM04           |                |

Technical Data

# Compressors 200-220V 50Hz 230V 60Hz



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**R134a | 200-220V 50Hz / 230V 60Hz | LBP**

| Model      | Origin | Displac. | Voltage / Frequency         | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|------------|--------|----------|-----------------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EMIS30HHR  | BR     | 3.00     | 200-220V 50 Hz / 230V 60 Hz | L/M/HBP  | LST    | RSIR      | 9.00  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMIS30HHR  | BR     | 3.00     | 200-220V 50 Hz / 230V 60 Hz | L/M/HBP  | LST    | RSIR      | 9.00  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMIE40HER  | BR     | 3.40     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 8.60  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMIE40HER  | BR     | 3.40     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 8.60  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM45HNR    | BR     | 3.77     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 9.00  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM45HNR    | BR     | 3.77     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 9.00  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMYE70HEP  | BR     | 5.96     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSIR      | 6.50  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EGAS80HLR  | BR     | 6.36     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSIR/CSIR | 14.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EGAS80HLR  | BR     | 6.36     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSIR/CSIR | 14.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FF7,5HBK   | BR     | 6.92     | 200-220V 50 Hz / 230V 60 Hz | L/M/HBP  | LST    | RSIR/CSIR | 16.70 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FF7,5HBK   | BR     | 6.92     | 200-220V 50 Hz / 230V 60 Hz | L/M/HBP  | LST    | RSIR/CSIR | 16.70 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFI7,5HAK  | BR     | 6.76     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 14.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFI7,5HAK  | BR     | 6.76     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 14.00 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFUS80HAK  | BR     | 6.76     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 14.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFUS80HAK  | BR     | 6.76     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 14.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFI8,5HAK  | BR     | 7.15     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 16.00 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFI8,5HAK  | BR     | 7.15     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 16.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFI8,5HAK  | CN     | 7.23     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSCR      | 16.00 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFI8,5HAK  | CN     | 7.23     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSCR      | 16.00 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EGAS90HLR  | BR     | 7.15     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSIR/CSIR | 14.30 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EGAS100HLR | BR     | 7.95     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSIR/CSIR | 17.55 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EGAS100HLR | BR     | 7.95     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSIR/CSIR | 17.55 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EGZS100HLC | BR     | 7.95     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSCR      | 8.85  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EGZS100HLC | BR     | 7.95     | 200-220V 50 Hz / 230V 60 Hz | LBP      | LST    | RSCR      | 8.85  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFUS100HAK | BR     | 7.95     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 17.55 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFUS100HAK | BR     | 7.95     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 17.55 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFII0HAK   | BR     | 9.04     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 17.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFII0HAK   | BR     | 9.04     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 17.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFII0HAK   | CN     | 9.04     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 17.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFII0HAK   | CN     | 9.04     | 200-220V 50 Hz / 230V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 17.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NE2I2IZ    | SK     | 9.26     | 200-220V 50 Hz / 230V 60 Hz | LBP      | HST    | CSIR      | 12.60 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NE2I2IZ    | SK     | 9.26     | 200-220V 50 Hz / 230V 60 Hz | LBP      | HST    | CSIR      | 12.60 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model     |  | Cooling Capacity (°C) |     |     |     |     |     |     |     | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications             | Wiring Diagram |
|-----------|--|-----------------------|-----|-----|-----|-----|-----|-----|-----|--------------|------------------|-----------------|-----------------|----------------------------|----------------|
|           |  | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5  |              |                  |                 |                 |                            |                |
| EMIS30HHR |  | 27                    | 46  | 68  | 95  | 126 | 163 | 207 | 79  | 79           | 0.93             | 160             | ESTER / ISO22   | CCC/UL/UKCA/CE/TUV/IRAM    | SM07           |
| EMIS30HHR |  | 36                    | 59  | 85  | 115 | 150 | 191 | 241 | 100 | 100          | 1.14             | 160             | ESTER / ISO22   | CCC/UL/UKCA/CE/TUV/IRAM    | SM07           |
| EMIE40HER |  | 39                    | 60  | 85  | 116 | 152 | 194 | 242 | 95  | 95           | 1.18             | 180             | ESTER / ISO10   | UKCA/VDE/CE/TUV            | SM01/SM02      |
| EMIE40HER |  | 50                    | 75  | 105 | 141 | 183 | 234 | 293 | 117 | 117          | 1.32             | 180             | ESTER / ISO10   | UKCA/VDE/CE/TUV            | SM01/SM02      |
| EM45HNR   |  | 41                    | 64  | 87  | 115 | 150 | 197 | 257 | 97  | 97           | 0.97             | 200             | ESTER / ISO22   | UL/UKCA/CE/TUV/IRAM        | SM01/SM02      |
| EM45HNR   |  | 50                    | 74  | 106 | 145 | 191 | 243 | 300 | 123 | 123          | 1.15             | 200             | ESTER / ISO22   | UL/UKCA/CE/TUV/IRAM        | SM01/SM02      |
| EMYE70HEP |  | 99                    | 140 | 183 | 233 | 295 | 372 |     | 200 | 200          | 1.52             | 180             | ESTER / ISO10   | UKCA/VDE/CE/TUV/IRAM/IMTRO | SM01           |
| EGAS80HLR |  | 77                    | 123 | 175 | 235 | 306 | 390 |     | 195 | 195          | 1.53             | 230             | ESTER / ISO10   | UKCA/VDE/CE/TUV/IRAM       | SM03/SM04      |
| EGAS80HLR |  | 95                    | 151 | 215 | 289 | 377 | 482 |     | 240 | 240          | 1.61             | 230             | ESTER / ISO10   | UKCA/VDE/CE/TUV/IRAM       | SM03/SM04      |
| FF7,5HBK  |  | 70                    | 106 | 149 | 202 | 266 | 341 | 431 | 149 | 149          | 1.00             | 280             | ESTER / ISO22   | UKCA/CE/TUV/IMTRO          | SM08           |
| FF7,5HBK  |  | 79                    | 121 | 172 | 234 | 308 | 395 | 497 | 202 | 202          | 1.16             | 280             | ESTER / ISO22   | UKCA/CE/TUV/IMTRO          | SM08           |
| FFI7,5HAK |  | 104                   | 146 | 202 | 273 | 360 | 462 | 579 | 224 | 224          | 1.38             | 280             | ESTER / ISO22   | CCC/UKCA/VDE/CE/TUV/IRAM   | SM03           |
| FFI7,5HAK |  | 88                    | 129 | 179 | 238 | 306 | 383 | 470 | 190 | 190          | 1.29             | 280             | ESTER / ISO22   | CCC/UKCA/VDE/CE/TUV/IRAM   | SM03           |
| FFUS80HAK |  | 134                   | 181 | 239 | 310 | 395 | 496 | 185 | 185 | 185          | 1.29             | 230             | ESTER / ISO10   | UKCA/VDE/CE/TUV/IRAM/IMTRO | SM08           |
| FFUS80HAK |  | 108                   | 154 | 212 | 282 | 367 | 468 | 587 | 236 | 236          | 1.47             | 230             | ESTER / ISO10   | UKCA/VDE/CE/TUV/IRAM/IMTRO | SM08           |
| FFI8,5HAK |  | 93                    | 136 | 188 | 249 | 322 | 407 | 508 | 205 | 205          | 1.35             | 280             | ESTER / ISO22   | CCC/UL/UKCA/CE/TUV/IRAM    | SM03           |
| FFI8,5HAK |  | 105                   | 157 | 219 | 294 | 384 | 491 | 618 | 241 | 241          | 1.37             | 280             | ESTER / ISO22   | CCC/UL/UKCA/CE/TUV/IRAM    | SM03           |
| FFI8,5HAK |  | 93                    | 136 | 188 | 249 | 322 | 407 | 508 | 205 | 205          | 1.35             | 210             | ESTER / ISO22   | CE/KC                      | SM03           |
| FFI8,5HAK |  | 105                   | 157 | 219 | 294 | 384 | 491 | 618 | 241 | 241          | 1.37             | 210             | ESTER / ISO22   | CE/KC                      | SM03           |
| EGAS90HLR |  |                       |     |     |     |     |     |     |     |              |                  |                 |                 |                            |                |

**R404A | 200-220V 50Hz / 230V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency           | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|-------------------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEU2140GK | SK     | 8.77     | 200-230V 50Hz / 208-230V 60Hz | LBP      | HST    | CSIR  | 30.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2140GK | SK     | 8.77     | 200-230V 50Hz / 208-230V 60Hz | LBP      | HST    | CSIR  | 30.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2168GKV | SK     | 14.50    | 200-240V 50Hz / 230V 60Hz     | LBP      | HST    | CSIR  | 54.50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2178GK  | SK     | 17.39    | 200-240V 50Hz / 230V 60Hz     | LBP      | HST    | CSCR  | 25.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2178GK  | SK     | 17.39    | 200-240V 50Hz / 230V 60Hz     | LBP      | HST    | CSCR  | 25.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |     |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications          | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|------|------|------|----|--------------|------------------|-----------------|-----------------|-------------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20  | -15  | -10  | -5 |              |                  |                 |                 |                         |                |
| NEU2140GK |                       |     | 395 | 522 | 671  | 840  | 1032 |    | 573          | 1.36             | 350             | ESTER / ISO22   | KC/VDE/CE/UKCA          | SM05           |
| NEU2140GK | 205                   | 289 | 395 | 522 | 670  | 840  | 1031 |    | 568          | 1.36             | 350             | ESTER / ISO22   | KC/VDE/CE/UKCA          | SM13           |
| NT2168GKV |                       |     | 435 | 585 | 763  | 969  | 1202 |    | 646          | 1.29             | 450             | ESTER / ISO22   | IMO/CE/UKCA             | SM20           |
| NT2178GK  | 282                   | 409 | 560 | 734 | 934  | 1160 | 1412 |    | 800          | 1.15             | 450             | ESTER / ISO22   | IRAM/IMO/CCC/UL/CE/UKCA | SM20           |
| NT2178GK  | 361                   | 513 | 700 | 922 | 1179 | 1471 | 1799 |    | 1006         | 1.28             | 450             | ESTER / ISO22   | IRAM/IMO/CCC/UL/CE/UKCA | SM20           |

**R290 | 200-220V 50Hz / 230V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency           | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|-------------------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EM2U311IU | BR     | 3.00     | 200-220V 50 Hz / 230 V 60 Hz  | L/MBP    | LST    | RSCR      | 5.80  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMI50UER  | BR     | 3.00     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 8.70  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMI50UER  | BR     | 3.00     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 8.70  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2U3115U | BR     | 3.97     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSCR      | -     | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2U3115U | BR     | 3.97     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSCR      | -     | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EMI70UER  | BR     | 4.08     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 9.40  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMI70UER  | BR     | 4.08     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSIR/CSIR | 9.40  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3121U | BR     | 5.54     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSCR      | 7.80  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X3121U | BR     | 5.54     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSCR      | 7.80  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X3125U | BR     | 6.09     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSCR      | 7.80  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X3125U | BR     | 6.09     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSCR      | 7.80  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFU130UAX | BR     | 6.76     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | HST    | CSIR      | 19.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| FFU130UAX | BR     | 6.76     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | HST    | CSIR      | 19.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |     |     |     |     |     | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications                    | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|-----|-----|-----|-----|--------------|------------------|-----------------|-----------------|-----------------------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5  |              |                  |                 |                 |                                   |                |
| EM2U311IU |                       |     | 100 | 131 | 166 | 207 | 255 | 311 | 140          | 1.51             | 150             | ESTER / ISO22   | UKCA/CE/TUV/IRAM/IMTRO            | SM06           |
| EMI50UER  |                       | 67  | 92  | 119 | 147 | 178 | 212 | 248 | 129          | 1.30             | 170             | ALQUILB / ISO32 | CCC/UL/UKCA/CE/TUV/IMTRO          | SM01/SM02      |
| EMI50UER  |                       | 75  | 103 | 138 | 181 | 231 | 290 | 355 | 153          | 1.33             | 170             | ALQUILB / ISO32 | CCC/UL/UKCA/CE/TUV/IMTRO          | SM01/SM02      |
| EM2U3115U |                       | 109 | 145 | 184 | 229 | 282 | 343 | 414 | 201          | 1.62             | 150             | ESTER / ISO22   | CCC/UL/UKCA/VDE/CE/TUV/IRAM/IMTRO | SM06           |
| EM2U3115U |                       | 133 | 173 | 220 | 274 | 337 | 409 | 492 | 239          | 1.68             | 150             | ESTER / ISO22   | CCC/UL/UKCA/VDE/CE/TUV/IRAM/IMTRO | SM06           |
| EMI70UER  |                       |     | 128 | 163 | 203 | 250 | 304 | 368 | 176          | 1.18             | 160             | ALQUILB / ISO32 | CCC/UKCA/VDE/CE/TUV               | SM01/SM02      |
| EMI70UER  |                       | 106 | 142 | 190 | 248 | 317 | 396 | 485 | 210          | 1.30             | 160             | ALQUILB / ISO32 | CCC/UKCA/VDE/CE/TUV               | SM01/SM02      |
| EM2X3121U |                       | 156 | 209 | 264 | 326 | 397 | 480 | 579 | 288          | 1.72             | 150             | ESTER / ISO22   | UKCA/VDE/CE/TUV/IRAM/IMTRO/ISI    | SM05           |
| EM2X3121U |                       | 179 | 242 | 310 | 385 | 470 | 568 | 682 | 329          | 1.68             | 150             | ESTER / ISO22   | UKCA/VDE/CE/TUV/IRAM/IMTRO/ISI    | SM05           |
| EM2X3125U |                       |     | 229 | 289 | 360 | 443 | 539 | 647 | 304          | 1.67             | 150             | ESTER / ISO22   | UKCA/VDE/CE/TUV/IRAM/IMTRO/ISI    | SM05           |
| EM2X3125U |                       | 210 | 274 | 340 | 413 | 500 | 607 | 740 | 368          | 1.67             | 150             | ESTER / ISO22   | UKCA/VDE/CE/TUV/IRAM/IMTRO/ISI    | SM05           |
| FFU130UAX |                       | 182 | 225 | 287 | 367 | 465 | 578 | 708 | 319          | 1.49             | 280             | ALQUILB / ISO32 | CCC/UL/UKCA/VDE/CE/TUV            | SM08           |
| FFU130UAX |                       | 230 | 295 | 367 | 451 | 552 | 675 | 824 | 399          | 1.55             | 280             | ALQUILB / ISO32 | CCC/UL/UKCA/VDE/CE/TUV            | SM08           |

**R600a | 200-220V 50Hz / 230V 60Hz | LBP**

| Model    | Origin | Displac. | Voltage / Frequency           | Envelope | Torque | Motor | LRA  | Test Condition | Freq. | Expansion Device |
|----------|--------|----------|-------------------------------|----------|--------|-------|------|----------------|-------|------------------|
| EMI30CNP | BR     | 4.99     | 200-220V 50 Hz / 230 V 60 Hz  | L/MBP    | LST    | RSIR  | 3.70 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMI30CNP | BR     | 4.99     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSIR  | 3.50 | ASHRAELBP32    | 60 Hz | Capillary Tube   |
| EMI40CNP | BR     | 6.36     | 200-220 V 50 Hz / 230 V 60 Hz | L/MBP    | LST    | RSIR  | 4.50 | ASHRAELBP32</  |       |                  |

Technical Data

# Compressors 208-230V 60Hz

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**R134a | 208-230V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque  | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|---------|-----------|-------|----------------|-------|-----------------------------------|
| EMIS20HHR | BR     | 2.27     | 208-230 V 60 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 9.10  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFC110HBX | BR     | 9.50     | 208-230 V 60 Hz     | L/M/HBP  | HST     | CSIR      | 19.60 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFU130HAX | BR     | 10.61    | 208-230 V 60 Hz     | L/MBP    | LST/HST | CSIR      | 18.30 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFI12HBX  | BR     | 11.14    | 208-230 V 60 Hz     | L/M/HBP  | HST     | CSIR      | 26.50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFI12HBX  | CN     | 11.14    | 208-230 V 60 Hz     | L/M/HBP  | HST     | CSIR      | 26.50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| FFU160HAX | BR     | 12.92    | 208-230 V 60 Hz     | L/MBP    | LST/HST | CSIR      | 19.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2140Z   | SK     | 20.44    | 208-230 V 60 Hz     | LBP      | HST     | CSIR      | 24.50 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |     |     |     |      |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications           | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|-----|-----|------|------|--------------|------------------|-----------------|-----------------|--------------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20 | -15 | -10  | -5   |              |                  |                 |                 |                          |                |
| EMIS20HHR |                       | 20  | 34  | 52  | 73  | 100 | 132  | 170  | 58           | 0.85             | 160             | ESTER / ISO22   | UKCA/CE/TUV              | SM01/SM02      |
| FFC110HBX |                       | 136 | 208 | 296 | 403 | 531 | 681  | 857  | 328          | 1.44             | 280             | ESTER / ISO22   | KC/UL/UKCA/CE/TUV/ IMTRO | SM08           |
| FFU130HAX |                       |     | 228 | 326 | 448 | 593 | 764  | 961  | 367          | 1.38             | 280             | ESTER / ISO10   | UKCA/CE/TUV              | SM08           |
| FFI12HBX  |                       | 156 | 222 | 31  | 420 | 555 | 715  | 901  | 345          | 1.18             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV           | SM08           |
| FFI12HBX  |                       | 156 | 222 | 31  | 420 | 555 | 715  | 901  | 345          | 1.18             | 270             | ESTER / ISO22   | UL/UKCA/CE/TUV           | SM08           |
| FFU160HAX |                       |     | 316 | 432 | 567 | 724 | 907  | 1121 | 478          | 1.49             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV/ IMTRO    | SM08           |
| NT2140Z   |                       | 223 | 348 | 511 | 712 | 949 | 1222 |      | 576          | 1.27             | 450             | ESTER / ISO22   | KC/UL/CE/UKCA            | SM20           |

**R404A | 208-230V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| EHU2140GK | CN     | 9.10     | 208-230 V 60 Hz     | LBP      | HST    | CSIR  | 21.20 | ASHRAELBP32    | 60Hz  | Capillary Tube or Expansion Valve |
| EHU2150GK | CN     | 11.20    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 23.00 | ASHRAELBP32    | 60Hz  | Capillary Tube or Expansion Valve |
| NEK2150GK | SK     | 12.11    | 208-230 V 60 Hz     | LBP      | HST    | CSIR  | 44.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2155GK | SK     | 12.11    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 23.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK2168GK | SK     | 14.28    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 27.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2168GK | SK     | 14.28    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 29.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2168GKV | SK     | 14.50    | 208-230 V 60 Hz     | LBP      | HST    | CSIR  | 54.50 | ARI540         | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2178GK | SK     | 16.80    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 29.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2178GKV | SK     | 17.39    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 66.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2180GKV | SK     | 20.44    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 40.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2192GK  | SK     | 22.37    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 40.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NJ2192GJ  | SK     | 26.11    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 44.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2212GK  | SK     | 27.80    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 45.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NJ2212GJ  | SK     | 34.38    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 54.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |      |      |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications         | Wiring Diagram |
|-----------|-----------------------|-----|------|------|------|------|------|----|--------------|------------------|-----------------|-----------------|------------------------|----------------|
|           | -40                   | -35 | -30  | -25  | -20  | -15  | -10  | -5 |              |                  |                 |                 |                        |                |
| EHU2140GK | 228                   | 317 | 425  | 554  | 707  | 885  | 1091 |    | 607          | 1.56             | 270             | ESTER / ISO22   | CCC/CE/UKCA            | SM07           |
| EHU2150GK | 289                   | 400 | 532  | 687  | 870  | 1083 | 1331 |    | 740          | 1.56             | 270             | ESTER / ISO22   | CCC/CE/UKCA            | SM36           |
| NEK2150GK |                       |     | 494  | 649  | 834  | 1047 | 1287 |    | 712          | 1.26             | 350             | ESTER / ISO22   | KC/VDE/UL/CE/UKCA      | SM04           |
| NEU2155GK |                       |     | 528  | 700  | 902  | 1136 | 1400 |    | 768          | 1.43             | 350             | ESTER / ISO22   | KC/UL/CE/UKCA          | SM06           |
| NEK2168GK |                       |     | 567  | 745  | 957  | 1200 | 1476 |    | 817          | 1.35             | 350             | ESTER / ISO22   | KC/UL/CE/UKCA          | SM06           |
| NEU2168GK |                       |     | 644  | 842  | 1074 | 1338 | 1637 |    | 921          | 1.42             | 350             | ESTER / ISO22   | KC/VDE/UL/CE/UKCA      | SM06           |
| NT2168GKV |                       |     | 314  | 437  | 586  | 761  | 963  |    | 477          | 1.02             | 450             | ESTER / ISO22   | KC/UL/CE/UKCA          | SM20           |
| NEU2178GK |                       |     | 744  | 967  | 1225 | 1515 | 1840 |    | 1054         | 1.39             | 350             | ESTER / ISO22   | KC/CCC/UL/CE/UKCA      | SM06           |
| NT2178GKV |                       |     | 699  | 935  | 1213 | 1532 | 1893 |    | 1032         | 1.30             | 450             | ESTER / ISO22   | KC/UL/CE/UKCA          | SM20           |
| NT2180GKV |                       |     | 778  | 1045 | 1349 | 1693 | 2079 |    | 1152         | 1.32             | 450             | ESTER / ISO22   | KC/CCC/UL/CE/UKCA      | SM20           |
| NT2192GK  |                       |     | 864  | 1144 | 1465 | 1828 | 2232 |    | 1254         | 1.42             | 450             | ESTER / ISO22   | KC/UL/CE/UKCA          | SM21           |
| NJ2192GJ  |                       |     | 885  | 1257 | 1686 | 2173 | 2718 |    | 1403         | 1.27             | 750             | ESTER / ISO22   | KC/CCC/VDE/UL/CE/ UKCA | SM16/SM17      |
| NT2212GK  |                       |     | 1172 | 1540 | 1960 | 2433 | 2958 |    | 1684         | 1.43             | 650             | ESTER / ISO22   | KC/UL/CE/UKCA          | SM21           |
| NJ2212GJ  |                       |     | 1150 | 1589 | 2115 | 2728 | 3427 |    | 1774         | 1.30             | 750             | ESTER / ISO22   | KC/CCC/VDE/UL/CE/ UKCA | SM16/SM17      |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

**R290 | 208-230V 60Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| EMI90UEX  | BR     | 4.99     | 208-230 V 60 Hz     | L/MBP    | HST    | CSIR  | 12.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| EM2X1121U | BR     | 5.54     | 208-230 V 60 Hz     | LBP      | LST    | RSCR  | 17.23 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| EM2X1125U | BR     | 6.09     | 208-230 V 60 Hz     | LBP      | LST    | RSCR  | 8.20  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| FFU160UAX | BR     | 7.95     | 208-230 V 60 Hz     | L/MBP    | HST    | CSIR  | 25.60 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| EM2X3134U | BR     | 7.96     | 208-230 V 60 Hz     | L/MBP    | LST    | RSCR  | 24.80 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEU2168U  | SK     | 16.80    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 30.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU2178U  | CN/SK  | 18.70    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 29.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2160U   | SK     | 17.39    | 208-230 V 60 Hz     | LBP      | HST    | CSIR  | 28.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2170UV  | SK     | 20.44    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 55.00 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2180UV  | SK     | 22.37    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 30.00 | ARI540         | 60 Hz | Capillary Tube or Expansion Valve |
| NT2210UV  | SK     | 27.80    | 208-230 V 60 Hz     | LBP      | HST    | CSCR  | 67.00 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |     |      |      |      |      |  | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications                 | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|------|------|------|------|--|--------------|------------------|-----------------|-----------------|--------------------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20  | -15  | -10  | -5   |  |              |                  |                 |                 |                                |                |
| EMI90UEX  |                       |     | 197 | 251 | 322  | 405  | 501  | 606  |  | 275          | 1.33             | 160             | ALQUILB / ISO32 | UL/UKCA/CE/TUV                 | SM01/SM02      |
| EM2X1121U |                       | 167 | 225 | 291 | 366  | 451  | 545  |      |  | 317          | 1.74             | 150             | ESTER / ISO10   | UKCA/CE/TUV/IMTRO              | SM06           |
| EM2X1125U |                       | 197 | 258 | 329 | 413  | 509  | 621  |      |  | 357          | 1.72             | 150             | ESTER / ISO10   | UKCA/CE/TUV/IMTRO              | SM06           |
| FFU160UAX |                       |     | 362 | 455 | 564  | 692  | 839  | 1009 |  | 492          | 1.51             | 280             | ALQUILB / ISO32 | UL/UKCA/CE/TUV/ IRAM           | SM08           |
| EM2X3134U |                       | 274 | 356 | 454 | 567  | 699  | 849  | 1021 |  | 491          | 1.69             | 150             | ESTER / ISO22   | UKCA/CE/TUV                    | SM06           |
| NEU2168U  |                       |     | 569 | 728 | 914  | 1128 | 1369 |      |  | 792          | 1.55             | 350             | ESTER / ISO22   | -                              | SM06           |
| NEU2178U  | 431                   | 573 | 754 | 966 | 1214 | 1497 | 1815 |      |  | 1052         | 1.50             | 350             | ESTER / ISO22   | CE/UL - SK(KC/VDE/ UL/CE/UKCA) | SM10           |
| NT2160U   |                       |     | 590 | 759 | 961  | 1197 | 1467 |      |  | 828          | 1.34             | 450             | ESTER / ISO22   | KC/VDE/UL/CE/UKCA              | SM20           |
| NT2170UV  |                       | 505 | 657 | 847 | 1077 | 1345 | 1652 | 1999 |  | 921          | 1.31             | 450             | ESTER / ISO22   | VDE/UL/CE/UKCA                 | SM21           |
| NT2180UV  |                       |     | 535 | 695 | 886  | 1108 | 1360 |      |  | 749          | 0.98             | 450             | ESTER / ISO22   | KC/CCC/VDE/UL/CE/ UKCA         | SM20           |
| NT2210UV  |                       | 521 | 680 | 869 | 1101 | 1371 | 1680 | 2027 |  | 943          | 1.00             | 450             | ESTER / ISO22   | KC/UL/CE/UKCA                  | SM21           |

**R134a | 208-230V 60Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| FF8,5HBK  | BR     | 7.95     | 208-230 V 60 Hz     | L/M/HBP  | LST    | RSIR/CSIR | 18.50 | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NT6215Z   | SK     | 17.39    | 208-230 V 60 Hz     | HBP      | HST    | CSIR      | 44.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NTU6224ZV | SK     | 27.80    | 208-230 V 60 Hz     | HBP      | HST    | CSCR      | 30.00 | ARIHBP         | 60 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |      |      |      |      |    |  | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
|-----------|-----------------------|-----|-----|------|------|------|------|----|--|--------------|------------------|-----------------|-----------------|----------------|----------------|
|           | -20                   | -15 | -10 | -5   | 0    | 5    | 10   | 15 |  |              |                  |                 |                 |                |                |
| FF8,5HBK  | 261                   | 340 | 435 | 550  | 686  | 845  | 1029 |    |  | 915          | 2.50             | 280             | ESTER / ISO22   | UL/UKCA/CE/TUV | SM08           |
| NT6215Z   |                       |     |     | 1142 | 1411 | 1717 | 2060 |    |  | 1881         | 2.26             | 450             | ESTER / ISO22   | KC/UL/CE/UKCA  | SM26           |
| NTU6224ZV |                       |     |     | 1859 | 2306 | 2807 | 3337 |    |  | 3045         | 2.45             | 650             | ESTER / ISO22   | UL/CE/UKCA     | SM26           |

**R404A | 208-230V 60Hz | M/HBP**

| Model      | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|------------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEK6181GK  | SK     | 7.28     | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 26.50 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6210GK  | SK     | 8.77     | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 23.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEK6213GK  | SK     | 12.11    | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 51.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NTX6220GKV | SK     | 12.55    | 208-230 V 60 Hz     | M/HBP    | HST    | CSCR  | 30.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NT6220GK   | SK     | 14.50    | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 31.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6222GKV  | SK     | 17.39    | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 33.70 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6222GK   | SK     | 17.39    | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 33.70 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6224GKV  | SK     | 20.44    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 36.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NJ9226GK   | SK     | 21.71    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 34.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6226GKV  | SK     | 22.37    | 208-230 V 60 Hz     | MBP      | HST    | CSIR  | 77.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6226GKV  | CN/SK  | 22.37    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 43.00 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |
| NJ9238GK   | SK     | 32.67    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 60.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |

| Model | Cooling Capacity (°C) | | | | | | | | | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications | Wiring Diagram |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| -20 | -15 | -10 | -5 | 0 | 5 | 10 | 15 |


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**R290 | 208-230V 60Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NEU6214U  | SK     | 12.11    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 42.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NEU6217U  | SK     | 14.28    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 29.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NTX6225UV | SK     | 22.37    | 208-230 V 60 Hz     | M/HBP    | HST    | CSCR  | 35.00 | ASHRAEHBP46    | 60 Hz | Capillary Tube or Expansion Valve |
| NT6224UV  | SK     | 22.37    | 208-230 V 60 Hz     | MBP      | HST    | CSCR  | 33.70 | ARIMBP         | 60 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model     | Cooling Capacity (°C) |      |      |      |      |      |      |    |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications | Wiring Diagram |
|-----------|-----------------------|------|------|------|------|------|------|----|------|--------------|------------------|-----------------|----------------|----------------|----------------|
|           | -20                   | -15  | -10  | -5   | 0    | 5    | 10   | 15 |      |              |                  |                 |                |                |                |
| NEU6214U  | 664                   | 830  | 1020 | 1066 | 1280 | 1518 | 1781 |    | 1631 | 2.44         | 350              | ESTER / ISO22   | CCC/UL/CE/UKCA | SM06           |                |
| NEU6217U  | 835                   | 1034 | 1268 | 1537 | 1839 | 2175 | 2546 |    | 2354 | 2.64         | 350              | ESTER / ISO22   | UL/CE/UKCA     | SM06           |                |
| NTX6225UV | 1178                  | 1497 | 1869 | 2295 | 2775 | 3310 | 3898 |    | 3596 | 2.85         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |
| NT6224UV  | 838                   | 1073 | 1348 | 1670 | 2088 | 2579 | 3143 |    | 3535 | 2.89         | 450              | ESTER / ISO22   | UL/CE/UKCA     | SM26           |                |

Technical Data

# Compressors 220-240V 50Hz

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**R134a | 220-240V 50Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque  | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|---------|-----------|-------|----------------|-------|-----------------------------------|
| EM45HHR   | BR     | 3.77     | 220-240 V 50 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 9.50  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMI55HER  | BR     | 4.60     | 220-240 V 50 Hz     | LBP      | LST     | RSIR/CSIR | 10.40 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMT55HLC  | CN     | 5.19     | 220-240 V 50 Hz     | LBP      | LST     | RSCR      | 4.00  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMYS60HEP | BR     | 5.19     | 220-240 V 50 Hz     | LBP      | LST     | RSIR/RSCR | 5.80  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM65HNR   | BR     | 5.54     | 220-240 V 50 Hz     | L/MBP    | LST     | RSIR/CSIR | 12.50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMU70HLC  | BR     | 5.96     | 220-240 V 50 Hz     | LBP      | LST     | RSCR      | 7.65  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEK2116Z  | SK     | 7.37     | 220-240 V 50 Hz     | LBP      | HST     | CSIR      | 10.00 | ARI540         | 50 Hz | Capillary Tube or Expansion Valve |
| FF8,5HBK  | BR     | 7.95     | 220-240 V 50 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 18.20 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FF8,5HBK  | BR     | 7.95     | 220-240 V 50 Hz     | L/M/HBP  | LST     | RSIR/CSIR | 18.20 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMY75HLC  | CN     | 8.35     | 220-240 V 50 Hz     | LBP      | LST     | RSCR      | 7.80  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEK1118Z  | SK     | 8.39     | 220-240 V 50 Hz     | LBP      | LST     | RSIR/RSCR | 6.90  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NE2121Z   | SK     | 9.26     | 220-240 V 50 Hz     | LBP      | HST     | CSIR      | 12.60 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EGU110HLC | BR     | 9.50     | 220-240 V 50 Hz     | LBP      | LST     | RSCR      | 9.40  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EGU130HLR | BR     | 10.61    | 220-240 V 50 Hz     | LBP      | LST     | CSIR      | 17.45 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| FFU130HAX | BR     | 10.61    | 220-240 V 50 Hz     | L/MBP    | LST/HST | CSIR      | 17.50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMY3130Z  | CN     | 11.14    | 220-240 V 50 Hz     | L/MBP    | LST     | CSIR      | 16.04 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NE2130Z   | SK     | 12.11    | 220-240 V 50 Hz     | LBP      | HST     | CSIR      | 32.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| FFU160HAX | BR     | 12.92    | 220-240 V 50 Hz     | L/MBP    | LST/HST | CSIR      | 17.70 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NE2134Z   | SK     | 14.28    | 220-240 V 50 Hz     | LBP      | HST     | CSIR      | 17.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2140Z  | SK     | 16.80    | 220-240 V 50 Hz     | LBP      | HST     | CSIR      | 17.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMY3115Z  | BR     | 6.09     | 220-240 V 50 Hz     | L/MBP    | LST     | RSIR      | 6.80  | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model     | Cooling Capacity (°C) |     |     |     |     |     |     |     |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity           | Certifications           | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|-----|-----|-----|-----|------|--------------|------------------|-----------------|--------------------------|--------------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5  |      |              |                  |                 |                          |                          |                |
| EM45HHR   |                       | 48  | 79  | 113 | 152 | 197 | 249 | 309 | 126  | 1.23         | 160              | ESTER / ISO22   | UKCA/VDE/CE/TUV/IRAM/ISI | SM02                     |                |
| EMI55HER  |                       | 57  | 82  | 113 | 150 | 196 | 252 |     | 125  | 1.23         | 160              | ESTER / ISO22   | UKCA/CE/TUV              | SM01/SM02                |                |
| EMT55HLC  |                       | 69  | 102 | 138 | 180 | 232 | 294 |     | 152  | 1.41         | 180              | ESTER / ISO22   | CCC/VDE/CE/UKCA/BIS      | SM05                     |                |
| EMYS60HEP |                       | 66  | 95  | 134 | 182 | 238 | 305 |     | 144  | 1.35         | 160              | ESTER / ISO10   | UKCA/CE/IRAM             | SM00                     |                |
| EM65HNR   |                       |     | 108 | 138 | 180 | 235 | 301 | 379 | 152  | 1.15         | 160              | ESTER / ISO22   | -                        | SM01/SM02                |                |
| EMU70HLC  |                       | 64  | 99  | 145 | 202 | 270 | 347 |     | 165  | 1.40         | 180              | ESTER / ISO10   | -                        | SM01                     |                |
| NEK2116Z  |                       |     |     | 127 | 180 | 247 | 328 | 422 | 171  | 0.91         | 340              | ESTER / ISO22   | VDE/CE/UKCA              | SM05                     |                |
| FF8,5HBK  |                       | 82  | 119 | 168 | 230 | 306 | 398 | 506 | 194  | 1.11         | 280              | ESTER / ISO22   | CCC/UL/UKCA/CE/ISI       | SM08                     |                |
| FF8,5HBK  |                       | 103 | 145 | 198 | 262 | 341 | 438 | 552 | 217  | 1.11         | 280              | ESTER / ISO22   | CCC/UL/UKCA/CE/ISI       | SM08                     |                |
| EMY75HLC  |                       | 97  | 143 | 193 | 251 | 322 | 408 |     | 213  | 1.50         | 150              | ESTER / ISO7    | CCC/VDE/CE               | SM01                     |                |
| NEK1118Z  |                       |     |     | 205 | 271 | 349 | 439 | 541 | 227  | 1.42         | 350              | ESTER / ISO22   | IMO/CE/UKCA              | SM00                     |                |
| NE2121Z   |                       |     |     | 227 | 302 | 392 | 498 | 618 | 251  | 1.23         | 350              | ESTER / ISO22   | IMO/VDE/CE/UKCA          | SM05                     |                |
| EGU110HLC |                       | 121 | 181 | 249 | 329 | 426 | 545 |     | 274  | 1.59         | 230              | ESTER / ISO10   | UL/UKCA/CE               | SM34                     |                |
| EGU130HLR |                       | 141 | 210 | 288 | 378 | 489 | 626 |     | 313  | 1.50         | 230              | ESTER / ISO10   | CCC/UKCA/VDE/CE/IRAM     | SM09                     |                |
| FFU130HAX |                       |     | 201 | 278 | 368 | 475 | 604 | 761 | 309  | 1.38         | 280              | ESTER / ISO10   | CCC/UKCA/VDE/CE/IRAM     | SM08                     |                |
| EMY3130Z  |                       | 154 | 196 | 278 | 387 | 513 | 644 | 771 | 320  | 1.50         | 210              | ESTER / ISO22   | CCC/VDE/CE/EAC/UKCA      | SM07                     |                |
| NE2130Z   |                       |     |     |     | 314 | 411 | 526 | 662 | 817  | 346          | 1.33             | 350             | ESTER / ISO22            | IMO/CE/UKCA              | SM05           |
| FFU160HAX |                       |     |     | 266 | 355 | 458 | 581 | 732 | 914  | 390          | 1.45             | 280             | ESTER / ISO22            | CCC/UKCA/VDE/CE/IRAM/ISI | SM08           |
| NE2134Z   |                       |     |     |     | 329 | 433 | 559 | 707 | 880  | 364          | 1.24             | 350             | ESTER / ISO22            | IRAM/IMO/CE/UKCA         | SM05           |
| NEK2140Z  |                       |     |     |     | 447 | 593 | 770 | 981 | 1227 | 495          | 1.18             | 350             | ESTER / ISO22            | IRAM/CCC/IMO/CE/UKCA     | SM05           |
| EMY3115Z  |                       |     |     | 76  |     | 141 |     |     |      |              |                  |                 |                          | UKCA/VDE/CE              |                |

**R404A | 220-240V 50Hz | LBP**

| Model      | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor   | LRA   | Test Condition | Freq. | Expansion Device                  |
|------------|--------|----------|---------------------|----------|--------|---------|-------|----------------|-------|-----------------------------------|
| EMT2117GK  | BR     | 4.50     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | -     | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMT2121GK  | BR     | 5.19     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 8.50  | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMT2125GK  | BR     | 5.96     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 9.80  | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMT2130GK  | BR     | 6.76     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 12.40 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2134GK  | SK     | 8.77     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 37.50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2140GK  | SK     | 8.77     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 13.50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHU2140GK  | CN     | 9.10     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 19.53 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2150GK  | SK     | 12.11    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 44.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHU2150GK  | CN     | 11.20    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 19.43 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2155GK  | SK     | 12.11    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 18.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHU2160GK  | CN     | 12.70    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 22.70 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2168GKA | SK     | 13.50    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | -     | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2168GK  | SK     | 14.28    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 22.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2178GKA | SK     | 15.70    | 220-240 V 50 Hz     | LBP      | HST    | CSR NTC | -     | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2178GK  | CN/SK  | 16.80    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 21.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2180GKV  | SK     | 20.44    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 40.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2183GKA | CN/SK  | 16.80    | 220-240 V 50 Hz     | LBP      | HST    | CSR NTC | 22.50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2180GK   | CN/SK  | 22.37    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 35.00 | ENI2900        | 50 Hz | Capillary Tube or Expansion Valve |
| NT2192GK   | SK     | 22.37    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 35.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2192GK   | CN/SK  | 22.37    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 37.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2192GKA  | CN/SK  | 22.37    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 32.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2210GK   | SK     | 26.21    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 33.00 | ENI2900        | 50 Hz | Capillary Tube or Expansion Valve |
| NT2212GK   | CN/SK  | 27.80    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 45.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NJ2212GK   | SK     | 34.38    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 36.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NJX2219GK  | SK     | 38.00    | 230 V 50 Hz         | LBP      | HST    | CSCR    | 38.00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model      | Cooling Capacity (°C) |      |      |      |      |      |      |    |       | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity           | Certifications | Wiring Diagram |
|------------|-----------------------|------|------|------|------|------|------|----|-------|--------------|------------------|-----------------|--------------------------|----------------|----------------|
|            | -40                   | -35  | -30  | -25  | -20  | -15  | -10  | -5 |       |              |                  |                 |                          |                |                |
| EMT2117GK  | 81                    | 124  | 171  | 224  | 286  | 358  | 443  |    | 244   | 1.35         | 180              | ESTER / ISO22   | UKCA/VDE/CE              | SM07           |                |
| EMT2121GK  | 131                   | 174  | 224  | 284  | 356  | 441  | 541  |    | 300   | 1.40         | 180              | ESTER / ISO22   | UKCA/VDE/CE              | SM07           |                |
| EMT2125GK  | 142                   | 194  | 254  | 325  | 408  | 505  | 618  |    | 351   | 1.40         | 180              | ESTER / ISO22   | CCC/UKCA/VDE/CE/ISI      | SM07           |                |
| EMT2130GK  | 154                   | 209  | 273  | 350  | 439  | 543  | 664  |    | 390   | 1.34         | 180              | ESTER / ISO22   | CCC/UKCA/VDE/CE          | SM07           |                |
| NEK2134GK  |                       |      | 327  | 427  | 544  | 680  | 833  |    | 467   | 1.31         | 350              | ESTER / ISO22   | IRAM/CCC/IMQ/VDE/CE/UKCA | SM05           |                |
| NEU2140GK  |                       |      | 341  | 446  | 569  | 711  | 870  |    | 489   | 1.37         | 350              | ESTER / ISO22   | IRAM/CCC/VDE/CE/UKCA     | SM05           |                |
| EHU2140GK  | 192                   | 270  | 360  | 466  | 591  | 737  | 907  |    | 502   | 1.46         | 270              | ESTER / ISO22   | CCC/CE/UKCA/EAC          | -              |                |
| NEK2150GK  |                       |      | 436  | 562  | 713  | 889  | 1091 |    | 613   | 1.21         | 350              | ESTER / ISO22   | IRAM/IMQ/CCC/CE/UKCA     | SM05           |                |
| EHU2150GK  | 239                   | 328  | 436  | 565  | 719  | 900  | 1112 |    | 621   | 1.56         | 270              | ESTER / ISO22   | CCC/CE/UKCA              | -              |                |
| NEU2155GK  |                       |      | 460  | 601  | 766  | 955  | 1168 |    | 657   | 1.32         | 350              | ESTER / ISO22   | IRAM/CCC/VDE/CE/UKCA     | SM05           |                |
| EHU2160GK  | -                     | -    | -    | -    | -    | -    | -    |    | 704   | 1.52         | 270              | ESTER / ISO22   | CCC/CE/UKCA              | -              |                |
| NEU2168GKA | -                     | -    | -    | -    | -    | -    | -    |    | 734   | 1.32         | 350              | ESTER / ISO22   | IRAM/CCC/VDE/CE/UKCA     | SM35           |                |
| NEU2168GK  |                       |      | 523  | 682  | 867  | 1078 | 1314 |    | 745   | 1.29         | 350              | ESTER / ISO22   | IRAM/CCC/VDE/CE/UKCA     | SM05           |                |
| NEU2178GKA | -                     | -    | -    | -    | -    | -    | -    |    | 881   | 1.47         | 350              | ESTER / ISO22   | IRAM/CCC/VDE/CE/UKCA     | -              |                |
| NEU2178GK  | 360                   | 485  | 643  | 831  | 1050 | 1300 | 1583 |    | 914.2 | 1.42         | 350              | ESTER / ISO22   | CE/EAC/CCC/VDE           | SM06           |                |
| NT2180GKV  |                       |      | 646  | 855  | 1100 | 1378 | 1689 |    | 940   | 1.26         | 450              | ESTER / ISO22   | IRAM/VDE/CE/UKCA         | SM20           |                |
| NEU2183GKA | 340                   | 479  | 651  | 858  | 1099 | 1374 | 1163 |    | 958   | 1.51         | 350              | ESTER / ISO22   | CE/EAC/CCC/VDE           | SM35           |                |
| NT2180GK   | 249                   | 341  | 483  | 641  | 814  | 1008 | 1225 |    | 1054  | 1.30         | 450              | ESTER / ISO22   | IRAM/VDE/CE/UKCA         | SM21           |                |
| NT2192GK   |                       |      | 726  | 960  | 1233 | 1546 | 1899 |    | 1054  | 1.30         | 450              | ESTER / ISO22   | IRAM/CCC/IMQ/CE/UKCA     | SM21           |                |
| NT2192GK   | 376                   | 545  | 751  | 994  | 1277 | 1594 | 1952 |    | 1089  | 1.47         | 450              | ESTER / ISO22   | IRAM/CCC/IMQ/CE/UKCA     | SM21           |                |
| NT2192GKA  | 356                   | 514  | 716  | 961  | 1250 | 1583 | 1959 |    | 1089  | 1.41         | 450              | ESTER / ISO22   | IRAM/CCC/IMQ/CE/UKCA     | SM21           |                |
| NT2210GK   |                       |      | 640  | 839  | 1069 | 1331 | 1624 |    | 667   | 1.03         | 650              | ESTER / ISO22   | VDE/CE/UKCA              | SM21           |                |
| NT2212GK   | 524                   | 719  | 968  | 1262 | 1613 | 2027 | 2482 |    | 1373  | 1.37         | 650              | ESTER / ISO22   | CCC/VDE/CE/UKCA          | SM21           |                |
| NJ2212GK   |                       |      | 1040 | 1403 | 1814 | 2272 | 2780 |    | 1547  | 1.33         | 750              | ESTER / ISO22   | IRAM/CCC/IMQ/CE/UKCA     | SM16/SM17      |                |
| NJX2219GK  | 824                   | 1094 | 1444 | 1877 | 2390 | 2985 | 3661 |    | 2069  | 1.42         | 750              | ESTER / ISO22   | CCC/VDE/CE/UKCA          | SM16/SM17      |                |

**R290 | 220-240V 50Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor   | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|---------|-------|----------------|-------|-----------------------------------|
| EM2X3113U | CN     | 3,67     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 12,40 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X3117U | CN     | 4,50     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 15,30 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMY3117U  | CN     | 4,50     | 220-240 V 50 Hz     | L/MBP    | LST    | RSIR    | 6,80  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X1121U | CN     | 5,54     | 220-240 V 50 Hz     | LBP      | LST    | RSCR    | 8,40  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X3121U | CN     | 5,54     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 15,60 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMT2121U  | CN     | 5,56     | 220-240 V 50 Hz     | LLBP     | LST    | CSIR    | 7,70  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMT2125U  | CN     | 5,96     | 220-240 V 50 Hz     | LBP      | LST    | CSIR    | 8,50  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMTS2125U | CN     | 5,96     | 220-240 V 50 Hz     | LBP      | LST    | CSIR    | 8,50  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X1125U | CN     | 6,09     | 220-240 V 50 Hz     | LBP      | LST    | RSCR    | 8,40  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EM2X3125U | CN     | 6,09     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 15,60 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMT3134U  | CN     | 7,96     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 12,30 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMX3134U  | CN     | 7,95     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 10,50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMT3140U  | CN     | 9,50     | 220-240 V 50 Hz     | L/MBP    | LST    | RSCR    | 12,30 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMX3140U  | CN     | 9,50     | 220-240 V 50 Hz     | L/MBP    | LST    | RSIR    | 12,50 | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| EMTE2134U | CN     | 9,50     | 220-240 V 50 Hz     | LLBP     | HST    | CSIR    | 14,90 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2134U  | SK     | 9,99     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 28,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2140U  | SK     | 9,99     | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 30,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHU2155U  | CN     | 12,21    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 18,80 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHX2155U  | CN     | 12,21    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 18,40 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2150U  | SK     | 13,54    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 19,50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2155U  | SK     | 13,54    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 40,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK2160U  | SK     | 16,80    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 18,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2168U  | SK     | 16,80    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 49,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2170UA | CN/SK  | 16,80    | 220-240 V 50 Hz     | LBP      | HST    | CSR NTC | 23,50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2178U  | CN/SK  | 18,70    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 21,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEX2180UB | CN/SK  | 18,70    | 220-240 V 50 Hz     | LBP      | HST    | CSR NTC | 22,50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2170U   | SK     | 20,44    | 220-240 V 50 Hz     | LBP      | HST    | CSIR    | 30,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEX2190UA | CN/SK  | 21,00    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 24,50 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2180U   | SK     | 22,37    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 35,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2210U   | SK     | 27,80    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 33,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NTX2211U  | CN/SK  | 27,80    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 33,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NTX2213U  | SK     | 33,40    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 34,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NJX2215U  | SK     | 37,88    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 34,00 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHU2160U  | CN     | 14,16    | 220-240 V 50 Hz     | LBP      | LST    | CSCR    | 18,60 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EHU4160U  | CN     | 14,16    | 220-240 V 50 Hz     | LBP      | HST    | CSCR    | 18,60 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMY4134U  | CN     | 7,95     | 220-240 V 50 Hz     | L/MBP    | HST    | CSIR    | 13,5  | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| EMY4125U  | CN     | 6,09     | 220-240 V 50 Hz     | L/MBP    | HST    | CSIR    | 10,7  | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model     |     | Cooling Capacity (°C) |     |     |     |     |      |      |     | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity      | Certifications  | Wiring Diagram |
|-----------|-----|-----------------------|-----|-----|-----|-----|------|------|-----|--------------|------------------|-----------------|---------------------|-----------------|----------------|
|           |     | -40                   | -35 | -30 | -25 | -20 | -15  | -10  | -5  |              |                  |                 |                     |                 |                |
| EM2X3113U |     |                       | 87  | 121 | 161 | 207 | 260  | 320  |     | 136          | 1,43             | 150             | ESTER / ISO22       | CE/EAC/CCC/VDE  | SM28           |
| EM2X3117U |     |                       |     | 128 | 170 | 220 | 278  | 346  | 422 | 187          | 1,49             | 150             | ESTER / ISO22       | CE/EAC/CCC/VDE  | SM28           |
| EMY3117U  |     |                       |     | 145 | 190 | 240 | 298  | 365  |     | 204          | 1,53             | 150             | ESTER / ISO22       | CCC/CE/UKCA     | SM28           |
| EM2X1121U |     |                       | 137 | 182 | 235 | 289 | 371  | 457  |     | 257          | 1,72             | 150             | ESTER / ISO10       | CCC/VDE/CE      | SM05           |
| EM2X3121U |     |                       |     | 202 | 256 | 317 | 387  | 471  | 572 | 286          | 1,72             | 150             | ESTER / ISO22       | CE/EAC/CCC/VDE  | SM05           |
| EMT2121U  |     | 147                   | 188 | 234 | 289 | 357 | 441  |      |     | 254          | 1,42             | 180             | ESTER / ISO22       | CCC/VDE/CE/UKCA | SM05           |
| EMT2125U  |     | 159                   | 205 | 257 | 319 | 392 | 480  |      |     | 280          | 1,45             | 180             | ESTER / ISO22       | CCC/VDE/CE/UKCA | SM05           |
| EMTS2125U |     | 169                   | 218 | 276 | 344 | 423 | 513  |      |     | 300          | 1,56             | 180             | ESTER / ISO22       | CCC/CE/UKCA     | SM05           |
| EM2X1125U |     | 158                   | 206 | 266 | 339 | 422 | 515  |      |     | 291          | 1,79             | 150             | ESTER / ISO10       | CCC/VDE/CE/UKCA | SM05           |
| EM2X3125U |     |                       | 227 | 290 | 364 | 450 | 549  | 662  | 717 | 317          | 1,78             | 150             | ESTER / ISO22       | CE/EAC/CCC/VDE  | SM05           |
| EMT3134U  |     | 230                   |     | 358 |     | 570 |      | 823  | 400 | 1,55         | 150              | ESTER / ISO22   | CCC/CE              | SM05            |                |
| EMX3134U  |     | 235                   | 291 | 369 | 466 | 582 | 715  | 862  | 403 | 1,57         | 150              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM32            |                |
| EMT3140U  | 204 | 271                   |     | 436 |     | 654 |      | 979  | 475 | 1,55         | 150              | ESTER / ISO22   | CCC/CE              | SM05            |                |
| EMX3140U  |     | 270                   | 331 | 425 | 547 | 691 | 850  | 1018 | 469 | 1,44         | 150              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM07            |                |
| EMTE2134U | 175 | 234                   | 309 | 392 | 491 | 608 | 745  |      | 437 | 1,44         | 210              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05            |                |
| NEK2134U  | 219 | 265                   | 331 | 416 | 521 | 646 | 790  |      | 449 | 1,36         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05            |                |
| NEU2140U  | 213 | 276                   | 356 | 451 | 563 | 691 | 835  |      | 485 | 1,49         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05            |                |
| EHU2155U  | 267 | 348                   | 444 | 558 | 691 | 845 | 1022 |      | 603 | 1,52         | 270              | ESTER / ISO22   | CCC/VDE/CE/EAC/UKCA | SM07            |                |
| EHX2155U  | 263 | 350                   | 449 | 568 | 705 | 862 | 1039 |      | 608 | 1,63         | 270              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM07            |                |
| NEK2150U  | 251 | 32                    |     |     |     |     |      |      |     |              |                  |                 |                     |                 |                |

**R600a | 220-240V 50Hz | LBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA  | Test Condition | Freq. | Expansion Device |
|-----------|--------|----------|---------------------|----------|--------|-------|------|----------------|-------|------------------|
| EMX20CLC  | BR     | 5.96     | 220-240 V 50 Hz     | LBP      | LST    | RSCR  | 1.95 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMX32CLC  | CN     | 5.96     | 220-240 V 50 Hz     | LBP      | LST    | RSCR  | 2.68 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMRS46CLP | CN     | 8.23     | 220-240 V 50 Hz     | LBP      | LST    | RSCR  | 5.73 | ASHRAELBP32    | 50 Hz | Capillary Tube   |
| EMD32CLT  | CN     | 6.20     | 220-240 V 50 Hz     | LBP      | LST    | RSCR  | 2.87 | ASHRAELBP32    | 50 Hz | Capillary Tube   |

**R134a | 220-240V 50Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| NEK6160Z  | SK     | 7.28     | 220-240 V 50 Hz     | HBP      | HST    | CSIR      | 11.50 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6170Z  | SK     | 8.39     | 220-240 V 50 Hz     | HBP      | HST    | CSIR      | 16.50 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| EMTE6187Z | CN     | 9.50     | 220-240 V 50 Hz     | HBP      | HST    | CSIR      | 16.50 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| FFI12HBK  | BR     | 11.14    | 220-240 V 50 Hz     | L/M/HBP  | LST    | RSIR/CSIR | 20.00 | ASHRAEHBP32    | 50 Hz | Capillary Tube                    |
| FFI12HBK  | CN     | 11.14    | 220-240 V 50 Hz     | L/M/HBP  | HST    | RSIR/CSIR | 20.00 | ASHRAEHBP32    | 50 Hz | Capillary Tube                    |
| NEU6210Z  | SK     | 12.11    | 220-240 V 50 Hz     | HBP      | HST    | CSCR      | 18.50 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6212Z  | SK     | 14.28    | 220-240 V 50 Hz     | HBP      | HST    | CSIR      | 20.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6214Z  | SK     | 16.80    | 220-240 V 50 Hz     | HBP      | HST    | CSIR      | 22.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NT6217Z   | SK     | 20.44    | 220-240 V 50 Hz     | HBP      | HST    | CSCR      | 25.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |
| NJ6226Z   | SK     | 34.38    | 220-240 V 50 Hz     | HBP      | HST    | CSCR      | 31.00 | ASHRAEHBP46    | 50 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model     | Cooling Capacity (°C) |     |     |     |     |     |     |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications   | Wiring Diagram |
|-----------|-----------------------|-----|-----|-----|-----|-----|-----|----|--------------|------------------|-----------------|-----------------|------------------|----------------|
|           | -40                   | -35 | -30 | -25 | -20 | -15 | -10 | -5 |              |                  |                 |                 |                  |                |
| EMX20CLC  | 29                    | 42  | 57  | 75  | 97  | 122 |     |    | 64           | 1.62             | 180             | ALQUILB / ISO5  | UKCA/VDE/CE/IRAM | -              |
| EMX32CLC  | 46                    | 67  | 91  | 119 | 152 | 191 |     |    | 102          | 1.78             | 180             | ALQUILB / ISO5  | CCC/VDE/CE/UKCA  | SM01           |
| EMRS46CLP | 66                    | 92  | 122 | 159 | 204 | 261 |     |    | 135          | 1.66             | 150             | ALQUILB / ISO5  | CCC/CE           | SM01           |
| EMD32CLT  | 177                   |     | 350 |     | 615 |     | 970 |    | 97.9         | 1.96             | 150             | ALQUILB/ISO5    | CCC/VDE/CE/UKCA  | SM36           |

**R404A | 220-240V 50Hz | M/HBP**

| Model      | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|------------|--------|----------|---------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| EMT6152GK  | BR     | 4.50     | 220-240 V 50 Hz     | MBP      | HST    | CSIR  | 8.50  | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| EMT6165GK  | BR     | 5.19     | 220-240 V 50 Hz     | MBP      | HST    | CSIR  | 10.40 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6165GK  | SK     | 6.20     | 220-240 V 50 Hz     | MBP      | HST    | CSIR  | 12.40 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6181GK  | SK     | 7.28     | 220-240 V 50 Hz     | MBP      | HST    | CSIR  | 26.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6210GK  | SK     | 7.28     | 220-240 V 50 Hz     | MBP      | HST    | CSIR  | 16.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6212GK  | SK     | 8.77     | 220-240 V 50 Hz     | MBP      | HST    | CSIR  | 19.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6215GK  | SK     | 12.11    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 22.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6217GK  | SK     | 14.28    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 21.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6224GK   | SK     | 20.44    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 29.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NTU6234GKV | SK     | 23.74    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 37.50 | ENI2900MBP     | 50 Hz | Capillary Tube or Expansion Valve |
| NJ9232GK   | SK     | 26.11    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 43.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NTU6238GKV | SK     | 26.20    | 220-240 V 50 Hz     | MBP      | HST    | CSR   | 37.50 | ENI2900MBP     | 50 Hz | Capillary Tube or Expansion Valve |
| NTU6240GKV | SK     | 27.80    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 37.50 | ARIMBP         | 50 Hz | Capillary Tube or Expansion Valve |
| NJ9238GK   | SK     | 32.67    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 43.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJX6250GK  | SK     | 38.00    | 230 V 50 Hz         | M/HBP    | HST    | CSCR  | 65.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6226GK   | CN/SK  | 22.37    | 220-240 V 50 Hz     | MBP      | HST    | CSCR  | 38.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |

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| Model      | Cooling Capacity (°C) |      |      |      |      |       |       |       |  |  | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications       | Wiring Diagram |
|------------|-----------------------|------|------|------|------|-------|-------|-------|--|--|--------------|------------------|-----------------|----------------|----------------------|----------------|
|            | -20                   | -15  | -10  | -5   | 0    | 5     | 10    | 15    |  |  |              |                  |                 |                |                      |                |
| EMT6152GK  | 255                   | 321  | 396  | 483  | 582  | 695   | 824   |       |  |  | 758          | 2.30             | 180             | ESTER / ISO22  | UKCA/VDE/CE          | SM07           |
| EMT6165GK  | 287                   | 361  | 448  | 550  | 667  | 801   | 951   |       |  |  | 877          | 2.23             | 180             | ESTER / ISO22  | CCC/UKCA/VDE/CE/ISI  | SM07           |
| NEK6165GK  | 366                   | 433  | 519  | 625  | 751  | 895   | 1059  |       |  |  | 975          | 2.09             | 350             | ESTER / ISO22  | IMQ/CE/UKCA          | SM05           |
| NEK6181GK  | 384                   | 463  | 565  | 690  | 836  | 1006  | 1199  |       |  |  | 1100         | 2.14             | 350             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | SM05           |
| NEU6210GK  |                       |      | 600  | 741  | 903  | 1083  | 1283  |       |  |  | 1180         | 2.31             | 350             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | SM05           |
| NEU6212GK  | 466                   | 595  | 743  | 912  | 1101 | 1309  | 1537  |       |  |  | 1423         | 2.24             | 350             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | SM05           |
| NEU6215GK  | 664                   | 830  | 1020 | 1235 | 1475 | 1740  | 2029  |       |  |  | 1862         | 1.92             | 350             | ESTER / ISO22  | IRAM/CCC/VDE/CE/UKCA | SM06           |
| NEK6217GK  | 733                   | 910  | 1118 | 1358 | 1629 | 1932  | 2266  |       |  |  | 2097         | 2.09             | 350             | ESTER / ISO22  | CCC/IMQ/CE/UKCA      | SM06           |
| NT6224GK   | 952                   | 1217 | 1532 | 1896 | 2311 | 2774  | 3287  |       |  |  | 3022         | 2.37             | 450             | ESTER / ISO22  | VDE/CE/UKCA          | SM26           |
| NTU6234GKV |                       |      | 1655 | 2022 | 2425 | 2847  | 3270  |       |  |  | 3835         | 2.80             | 650             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | SM26           |
| NJ9232GK   |                       |      | 1945 | 2462 | 3052 | 3716  | 4453  |       |  |  | 4080         | 2.60             | 750             | ESTER / ISO22  | IRAM/CCC/VDE/CE/UKCA | SM18           |
| NTU6238GKV |                       |      | 1827 | 2234 | 2692 | 3187  | 3706  |       |  |  | 4213         | 2.70             | 650             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | SM26           |
| NTU6240GKV |                       |      | 2538 | 3095 | 3814 | 4742  |       |       |  |  | 5333         | 2.58             | 650             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | SM26           |
| NJ9238GK   | 1411                  | 1827 | 2324 | 2901 | 3559 | 4296  | 5114  |       |  |  | 4702         | 2.18             | 750             | ESTER / ISO22  | IRAM/CCC/VDE/CE/UKCA | SM17           |
| NJX6250GK  |                       |      |      |      | 8345 | 10451 | 12888 | 15658 |  |  | 5842         | 2.29             | 750             | ESTER / ISO22  | CCC/VDE/CE/UKCA      | DWG14          |
| NT6226GK   | 1101                  | 1366 | 1684 | 2061 | 2500 | 2989  | 3542  |       |  |  | 3355         | 2.44             | 450             | ESTER / ISO22  | CE/UKCA/EAC/CCC/VDE  | SM26           |

**R290 | 220-240V 50Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency | Envelope | Torque | Motor   | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|---------------------|----------|--------|---------|-------|----------------|-------|-----------------------------------|
| NEU6181U  | SK     | 7.28     | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 13.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| EMTE6181U | CN     | 7.55     | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 16.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEK6210U  | SK     | 8.77     | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 16.10 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6210U  | SK     | 8.77     | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 20.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6212U  | SK     | 9.99     | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 20.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6212U  | SK     | 9.99     | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 20.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| EHU6212U  | CN     | 10.61    | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 18.80 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6214U  | SK     | 12.11    | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 18.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| EHU6214U  | CN     | 12.21    | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 22.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6217U  | SK     | 14.28    | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 29.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEX6217UA | CN/SK  | 14.30    | 220-240 V 50 Hz     | M/HBP    | HST    | CSIR    | 21.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEX6217UA | SK     | 14.30    | 220-240 V 50 Hz     | M/HBP    | HST    | CSR NTC | 21.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6217U   | SK     | 14.50    | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 25.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6220U  | SK     | 16.80    | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 22.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6220U   | SK     | 17.39    | 220-240 V 50 Hz     | MBP      | HST    | CSIR    | 29.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6220U   | SK     | 17.39    | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 29.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEX6222UA | SK     | 18.70    | 220-240 V 50 Hz     | M/HBP    | HST    | CSCR    | 24.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6222U   | SK     | 20.44    | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 29.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEX6225UA | CN/SK  | 21.00    | 220-240 V 50 Hz     | M/HBP    | HST    | CSCR    | 28.00 | EN12900MBP     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6224U   | SK     | 22.37    | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 30.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6230U   | SK     | 27.80    | 220-240 V 50 Hz     | MBP      | HST    | CSCR    | 39.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NTX6233U  | CN/SK  | 27.80    | 220-240 V 50 Hz     | M/HBP    | HST    | CSCR    | 40.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NTX6238U  | CN/SK  | 33.40    | 220-240 V 50 Hz     | M/HBP    | HST    | CSCR    | 40.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |

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UD\*: Product is under development so this technical data is still not available.

| Model     | Cooling Capacity (°C) |      |      |      |      |      |      |    |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity      | Certifications | Wiring Diagram |
|-----------|-----------------------|------|------|------|------|------|------|----|------|--------------|------------------|-----------------|---------------------|----------------|----------------|
|           | -20                   | -15  | -10  | -5   | 0    | 5    | 10   | 15 |      |              |                  |                 |                     |                |                |
| NEU6181U  | 340                   | 420  | 518  | 634  | 770  | 923  | 1096 |    | 1000 | 2.70         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05           |                |
| EMTE6181U | 386                   |      | 583  | 705  | 834  | 963  |      |    | 1025 | 2.75         | 210              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05           |                |
| NEK6210U  | 400                   | 495  | 611  | 747  | 905  | 1083 | 1281 |    | 1169 | 2.55         | 350              | ESTER / ISO22   | VDE/CE/UKCA         | SM05           |                |
| NEU6210U  | 394                   | 493  | 616  | 761  | 930  | 1121 | 1336 |    | 1231 | 2.66         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05           |                |
| NEU6212U  | 477                   | 597  | 739  | 903  | 1090 | 1300 | 1532 |    | 1397 | 2.79         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM06           |                |
| NEU6212U  | 478                   | 598  | 741  | 909  | 1100 | 1314 | 1554 |    | 1387 | 2.60         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM06           |                |
| EHU6212U  | 548                   | 672  | 809  | 971  | 1152 | 1358 | 1589 |    | 1457 | 2.60         | 270              | ESTER / ISO22   | CCC/VDE/CE/EAC/UKCA | SM07           |                |
| NEU6214U  | 568                   | 708  | 872  | 1060 | 1272 | 1509 | 1770 |    | 1645 | 2.47         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM06           |                |
| EHU6214U  | 623                   | 757  | 920  | 1102 | 1302 | 1534 | 1796 |    | 1651 | 2.56         | 270              | ESTER / ISO22   | CCC/VDE/CE/EAC/UKCA | SM07           |                |
| NEU6217U  | 661                   | 818  | 1003 | 1216 | 1457 | 1726 | 2023 |    | 1903 | 2.35         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05           |                |
| NEX6217UA | 688                   | 842  | 1030 | 1251 | 1506 | 1796 | 2119 |    | 1944 | 2.56         | 350              | ESTER / ISO22   | CE/EAC/CCC/VDE      | SM05           |                |
| NEX6217UA | 695                   | 862  | 1061 | 1291 | 1554 | 1849 | 2176 |    | 1984 | 2.89         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM05           |                |
| NT6217U   | 547                   | 692  | 873  | 1089 | 1341 | 1629 | 1952 |    | 1786 | 2.58         | 450              | ESTER / ISO22   | VDE/CE/UKCA         | SM19           |                |
| NEU6220U  | 817                   | 1016 | 1243 | 1500 | 1790 | 2117 | 2481 |    | 2291 | 2.60         | 350              | ESTER / ISO22   | VDE/CE/UKCA         | SM06           |                |
| NT6220U   | 675                   | 880  | 1119 | 1391 | 1696 | 2035 | 2407 |    | 2202 | 2.45         | 450              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM19           |                |
| NT6220U   | 729                   | 930  | 1165 | 1437 | 1745 | 2091 | 2476 |    | 2250 | 2.79         | 450              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM19           |                |
| NEX6222UA | 930                   | 1136 | 1388 | 1683 | 2023 | 2407 | 2836 |    | 2617 | 2.82         | 350              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM26           |                |
| NT6222U   | 792                   | 1028 | 1310 | 1639 | 2011 | 2428 | 2888 |    | 2635 | 2.77         | 450              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM19           |                |
| NEX6225UA | 1042                  | 1286 | 1574 | 1906 | 2280 | 2698 | 3159 |    | 2916 | 2.68         | 350              | ESTER / ISO22   | CE/EAC/CCC/VDE      | SM10           |                |
| NT6224U   | 900                   | 1130 | 1419 | 1764 | 2162 | 2609 | 3102 |    | 2843 | 2.73         | 450              | ESTER / ISO22   | CCC/VDE/CE/UKCA     | SM19           |                |
| NT6230U   | 1191                  | 1510 | 1883 | 2311 | 2793 | 3328 | 3918 |    | 3621 | 2.63         | 450              | ESTER / ISO22   | CCC/IMQ/CE/UKCA     | SM19           |                |
| NTX6233U  | 1347                  | 1665 | 2043 | 2483 | 2982 | 3540 | 4160 |    | 3774 | 2.77         | 450              | ESTER / ISO22   | VDE/CE/UKCA         | SM26           |                |
| NTX6238U  | 1546                  | 1929 | 2376 | 2886 | 3460 | 4098 | 4799 |    | 4416 | 2.60         | 450              | ESTER / ISO22   | VDE/CE/UKCA         | SM26           |                |

Technical Data

# Compressors 220-240V 50-60Hz



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**R134a | 220-240V 50-60Hz | M/HBP**

| Model     | Origin | Displac. | Voltage / Frequency                                    | Envelope | Torque | Motor     | LRA   | Test Condition | Freq. | Expansion Device                  |
|-----------|--------|----------|--|----------|--------|-----------|-------|----------------|-------|-----------------------------------|
| EM20HHR   | BR     | 2.27     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR/CSIR | 6.50  | ASHRAEHB32     | 50 Hz | Capillary Tube                    |
| EM20HHR   | BR     | 2.27     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR/CSIR | 6.50  | ASHRAEHB32     | 60 Hz | Capillary Tube                    |
| EM30HHR   | BR     | 3.00     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR/CSIR | 8.50  | ASHRAEHB46     | 50 Hz | Capillary Tube                    |
| EM30HHR   | BR     | 3.00     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR/CSIR | 8.00  | ASHRAEHB46     | 60 Hz | Capillary Tube                    |
| EMIS30HHR | BR     | 3.00     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR      | 8.80  | ASHRAEHB32     | 50 Hz | Capillary Tube                    |
| EMIS30HHR | BR     | 3.00     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR      | 8.80  | ASHRAEHB32     | 60 Hz | Capillary Tube                    |
| EM55HHR   | BR     | 4.60     | 220-240 V 50-60 Hz                                     | HBP      | LST    | RSIR      | 9.31  | ASHRAEHB32     | 50 Hz | Capillary Tube                    |
| EM55HHR   | BR     | 4.60     | 220-240 V 50-60 Hz                                     | HBP      | LST    | RSIR      | 9.31  | ASHRAEHB32     | 60 Hz | Capillary Tube                    |
| EM65HHR   | BR     | 5.54     | 220-240 V 50-60 Hz                                     | M/HBP    | LST    | RSIR/CSIR | 14.30 | ASHRAEHB32     | 50 Hz | Capillary Tube                    |
| EM65HHR   | BR     | 5.54     | 220-240 V 50-60 Hz                                     | M/HBP    | LST    | RSIR/CSIR | 14.30 | ASHRAEHB32     | 60 Hz | Capillary Tube                    |
| FF7,5HBK  | BR     | 6.92     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR/CSIR | 15.80 | ASHRAEHB32     | 50 Hz | Capillary Tube                    |
| FF7,5HBK  | BR     | 6.92     | 220-240 V 50-60 Hz                                     | L/M/HBP  | LST    | RSIR/CSIR | 15.80 | ASHRAEHB32     | 60 Hz | Capillary Tube                    |
| NEU6187Z  | SK     | 9.99     | 200-240V 50HZ/230V 60Hz or 200-230V 50Hz/208-230V 60Hz | HBP      | HST    | CSIR      | 13.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NEU6187Z  | SK     | 9.99     | 200-240V 50HZ/230V 60Hz or 200-230V 50Hz/208-230V 60Hz | HBP      | HST    | CSIR      | 13.00 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NT6220Z   | SK     | 22.37    | 200-240V 50HZ/230V 60Hz                                | HBP      | HST    | CSIR      | 29.50 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |

| Model     | Cooling Capacity (°C) |     |     |     |      |      |      |      |      |      | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications  | Wiring Diagram                    |      |
|-----------|-----------------------|-----|-----|-----|------|------|------|------|------|------|--------------|------------------|-----------------|----------------|---|-----------------------------------|------|
|           | -20                   | -15 | -10 | -5  | 0    | 5    | 10   | 15   |      |      |              |                  |                 |                |   |                                   |      |
| EM20HHR   | 58                    | 79  | 104 | 135 | 170  | 212  | 260  | 315  |      |      | 246          | 2.51             | 160             | ESTER / ISO22  | CCC/UKCA/VDE/CE/TUV/IRAM/ISI  | SM02                              |      |
| EM20HHR   | 73                    | 97  | 126 | 160 | 201  | 251  | 310  | 380  |      |      | 292          | 2.48             | 160             | ESTER / ISO22  | CCC/UKCA/VDE/CE/TUV/IRAM/ISI  | SM02                              |      |
| EM30HHR   | 96                    | 127 | 164 | 206 | 256  | 312  | 377  | 450  |      |      | 343          | 2.45             | 160             | ESTER / ISO22  | The model has different certifications depending on its electrical kit:<br>Kit 1 → CCC UL UKCA VDE CE TUV<br>Kit 2 → UKCA VDE CE      | SM07                              |      |
| EM30HHR   | 117                   | 153 | 196 | 246 | 306  | 376  | 458  | 554  |      |      | 404          | 2.53             | 160             | ESTER / ISO22  | The model has different certifications depending on its electrical kit:<br>Kit 1 → CCC UL UKCA VDE CE TUV<br>Kit 2 → UKCA VDE CE      | SM07                              |      |
| EMIS30HHR | 95                    | 126 | 163 | 207 | 259  | 319  | 390  | 471  |      |      | 363          | 2.60             | 160             | ESTER / ISO22  | CCC/UL/UKCA/CE/TUV/IRAM   | SM01/SM02                         |      |
| EMIS30HHR | 115                   | 150 | 191 | 241 | 300  | 370  | 451  | 546  |      |      | 434          | 2.68             | 160             | ESTER / ISO22  | CCC/UL/UKCA/CE/TUV/IRAM   | SM01/SM02                         |      |
| EM55HHR   |                       |     |     |     | 326  | 399  | 485  | 584  | 694  |      | 529          | 2.68             | 160             | ESTER / ISO22  | UL/UKCA/VDE/CE/TUV/ISI  | SM01/SM02                         |      |
| EM55HHR   |                       |     |     |     | 377  | 471  | 579  | 701  | 837  |      | 630          | 2.60             | 160             | ESTER / ISO22  | UL/UKCA/VDE/CE/TUV/ISI  | SM01/SM02                         |      |
| EM65HHR   |                       |     |     |     | 304  | 388  | 484  | 592  | 711  | 842  | 645          | 2.39             | 160             | ESTER / ISO22  | The model has different certifications depending on its electrical kit:<br>Kit 1 → UL UKCA VDE CE TUV IMTRO<br>Kit 2 → UL UKCA VDE CE | SM07                              |      |
| EM65HHR   |                       |     |     |     | 381  | 473  | 581  | 705  | 845  | 1001 | 766          | 2.49             | 160             | ESTER / ISO22  | The model has different certifications depending on its electrical kit:<br>Kit 1 → UL UKCA VDE CE TUV IMTRO<br>Kit 2 → UL UKCA VDE CE | SM07                              |      |
| FF7,5HBK  | 201                   | 264 | 340 | 429 | 534  | 657  | 798  | 959  | 719  |      | 719          | 2.23             | 280             | ESTER / ISO22  | UKCA/CE/TUV/IMTRO   | SM08                              |      |
| FF7,5HBK  | 234                   | 308 | 395 | 497 | 616  | 752  | 909  | 1086 | 829  |      | 829          | 2.23             | 280             | ESTER / ISO22  | UKCA/CE/TUV/IMTRO   | SM08                              |      |
| NEU6187Z  |                       |     |     |     | 380  | 485  | 613  | 764  | 938  | 1134 |              | 1030             | 2.50            | 350            | ESTER / ISO22   | VDE/CCC/CE/UKCA or VDE/UL/CE/UKCA | SM05 |
| NEU6187Z  |                       |     |     |     | 443  | 571  | 723  | 899  | 1099 | 1324 |              | 1204             | 2.36            | 350            | ESTER / ISO22   | VDE/CCC/CE/UKCA or VDE/UL/CE/UKCA | SM05 |
| NT6220Z   |                       |     |     |     | 1212 | 1498 | 1843 | 2249 |      |      | 2032         | 2.37             | 450             | ESTER / ISO22  | IMQ/CCC/CE/UKCA   | SM26                              |      |

**R404A | 220-240V 50-60Hz | M/HBP**

| Model    | Origin | Displac. | Voltage / Frequency     | Envelope | Torque | Motor | LRA   | Test Condition | Freq. | Expansion Device                  |
|----------|--------|----------|-------------------------|----------|--------|-------|-------|----------------|-------|-----------------------------------|
| NT6220GK | SK     | 14.50    | 200-240V 50HZ/230V 60Hz | MBP      | HST    | CSIR  | 31.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NT6222GK | SK     | 17.39    | 200-240V 50HZ/230V 60Hz | MBP      | HST    | CSIR  | 30.00 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NT6222GK | SK     | 17.39    | 200-240V 50HZ/230V 60Hz | MBP      | HST    | CSIR  | 30.00 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model    | Cooling Capacity (°C) |      |      |      |      |      |      |    |  |  | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/Viscosity | Certifications          | Wiring Diagram |
|----------|-----------------------|------|------|------|------|------|------|----|--|--|--------------|------------------|-----------------|----------------|-------------------------|----------------|
|          | -20                   | -15  | -10  | -5   | 0    | 5    | 10   | 15 |  |  |              |                  |                 |                |                         |                |
| NT6220GK | 669                   | 838  | 1050 | 1307 | 1607 | 1952 | 2340 |    |  |  | 2139         | 2.24             | 450             | ESTER / ISO22  | IMQ/IRAM/CE/UKCA        | SM26           |
| NT6222GK | 1029                  | 1272 | 1566 | 1913 | 2311 | 2761 | 3263 |    |  |  | 3010         | 2.14             | 450             | ESTER / ISO22  | IMQ/IRAM/UL/CCC/CE/UKCA | SM26           |
| NT6222GK | 758                   | 992  | 1262 | 1570 | 1914 | 2295 | 2713 |    |  |  | 2505         | 2.10             | 450             | ESTER / ISO22  | IMQ/IRAM/UL/CCC/CE/UKCA | SM26           |

Technical Data

# Compressors Tri Phase

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**Tri Phase | LBP**

| Model        | Origin | Refrig.            | Displac. | Voltage / Frequency                 | Envelope | Torque  | Motor   | LRA  | Test Condition | Freq. | Expansion Device                  |
|--------------|--------|--------------------|----------|-------------------------------------|----------|---------|---------|------|----------------|-------|-----------------------------------|
| NEU2130Z / L | SK     | R-134a/<br>R1234yf | 12.11    | 200V 50-60Hz 3~                     | L/MBP    | LST     | 3 PHASE | UD*  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEU2130Z / L | SK     | R-134a/<br>R1234yf | 12.11    | 200V 50-60Hz 3~                     | L/MBP    | LST     | 3 PHASE | UD*  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEU2140Z / L | SK     | R-134a/<br>R1234yf | 16.80    | 200V 50-60Hz 3~                     | L/MBP    | LST     | 3 PHASE | UD*  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEU2140Z / L | SK     | R-134a/<br>R1234yf | 16.80    | 200V 50-60Hz 3~                     | L/MBP    | LST     | 3 PHASE | UD*  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEU2145Z / L | SK     | R-134a/<br>R1234yf | 18.70    | 200V 50-60Hz 3~                     | L/MBP    | LST     | 3 PHASE | UD*  | ASHRAELBP32    | 50 Hz | Capillary Tube                    |
| NEU2145Z / L | SK     | R-134a/<br>R1234yf | 18.70    | 200V 50-60Hz 3~                     | L/MBP    | LST     | 3 PHASE | UD*  | ASHRAELBP32    | 60 Hz | Capillary Tube                    |
| NEU2183GS    | SK     | R404A/<br>R448A    | 16.80    | 200V 50-60Hz 3~                     | LBP      | HST/LST | 3 PHASE | UD*  | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NEU2183GS    | SK     | R404A/<br>R448A    | 16.80    | 200V 50-60Hz 3~                     | LBP      | HST/LST | 3 PHASE | UD*  | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NJ2212GS     | SK     | R404A              | 34.40    | 380-420V 50Hz /<br>440-480V 60Hz 3~ | LBP      | HST     | 3 PHASE | 20.6 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NJ2212GS     | SK     | R404A              | 34.40    | 380-420V 50Hz /<br>440-480V 60Hz 3~ | LBP      | HST     | 3 PHASE | 20.6 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NJX2215US    | SK     | R290               | 38.00    | 400V 50Hz /<br>440V 60Hz            | LBP      | HST     | 3 PHASE | 21.0 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NJX2215US    | SK     | R290               | 38.00    | 400V 50Hz /<br>440V 60Hz            | LBP      | HST     | 3 PHASE | 21.0 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NJX2219GS    | SK     | R404A              | 38.00    | 400V 50Hz /<br>440V 60Hz            | LBP      | HST     | 3 PHASE | 22.0 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NJX2219GS    | SK     | R404A              | 38.00    | 400V 50Hz /<br>440V 60Hz            | LBP      | HST     | 3 PHASE | 22.0 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2168GS     | SK     | R404A              | 14.50    | 200V 50-60Hz 3~                     | LBP      | HST     | 3 PHASE | 28.5 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2168GS     | SK     | R404A              | 14.50    | 200V 50-60Hz 3~                     | LBP      | HST     | 3 PHASE | 28.5 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2192GS     | SK     | R404A              | 22.37    | 200V 50-60Hz 3~                     | LBP      | HST     | 3 PHASE | 28.5 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2192GS     | SK     | R404A              | 22.37    | 200V 50-60Hz 3~                     | LBP      | HST     | 3 PHASE | 28.5 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |
| NT2212GS     | SK     | R404A              | 27.80    | 200V 50-60Hz 3~                     | LBP      | HST     | 3 PHASE | 36.0 | ASHRAELBP32    | 50 Hz | Capillary Tube or Expansion Valve |
| NT2212GS     | SK     | R404A              | 27.80    | 200V 50-60Hz 3~                     | LBP      | HST     | 3 PHASE | 36.0 | ASHRAELBP32    | 60 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model        | Cooling Capacity (°C) |      |      |      |      |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications                 | Wiring Diagram |
|--------------|-----------------------|------|------|------|------|------|------|----|--------------|------------------|-----------------|-----------------|--------------------------------|----------------|
|              | -40                   | -35  | -30  | -25  | -20  | -15  | -10  | -5 |              |                  |                 |                 |                                |                |
| NEU2130Z / L | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 355          | 1.33             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2130Z / L | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 412          | 1.39             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2140Z / L | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 430          | 1.30             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2140Z / L | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 489          | 1.26             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2145Z / L | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 448          | 1.31             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2145Z / L | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 482          | 1.28             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2183GS    | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 758          | 1.49             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NEU2183GS    | UD*                   | UD*  | UD*  | UD*  | UD*  | UD*  | UD*  |    | 983          | 1.53             | 350             | ESTER / ISO22   | UD*                            | NA*            |
| NJ2212GS     | 398                   | 643  | 951  | 1321 | 1752 | 2243 | 2796 |    | 1477         | 1.32             | 750             | ESTER / ISO22   | IRAM/KC/CCC/VDE/<br>UL/CE/UKCA | SM21           |
| NJ2212GS     | 294                   | 637  | 1043 | 1513 | 2047 | 2644 | 3304 |    | 1653         | 1.29             | 750             | ESTER / ISO22   | IRAM/KC/CCC/VDE/<br>UL/CE/UKCA | SM21           |
| NJX2215US    | 686                   | 945  | 1258 | 1626 | 2049 | 2526 | 3057 |    | 1769         | 1.55             | 750             | ESTER / ISO22   | VDE/UL/CE                      | SM18           |
| NJX2215US    | 842                   | 1116 | 1459 | 1871 | 2353 | 2903 | 3523 |    | 2026         | 1.52             | 750             | ESTER / ISO22   | VDE/UL/CE                      | SM18           |
| NJX2219GS    | 870                   | 1176 | 1553 | 2002 | 2522 | 3112 | 3774 |    | 2164         | 1.47             | 750             | ESTER / ISO22   | CCC/VDE/UL/CE/<br>UKCA         | SM18           |
| NJX2219GS    | 1007                  | 1373 | 1827 | 2368 | 2997 | 3714 | 4518 |    | 2611         | 1.45             | 750             | ESTER / ISO22   | CCC/VDE/UL/CE/<br>UKCA         | SM18           |
| NT2168GS     | 219                   | 313  | 438  | 595  | 783  | 1001 | 1249 |    | 786          | 1.37             | 650             | ESTER / ISO22   | CE/UKCA                        | SM20           |
| NT2168GS     | 223                   | 314  | 486  | 707  | 955  | 1229 | 1532 |    | 792          | 1.32             | 650             | ESTER / ISO22   | CE/UKCA                        | SM20           |
| NT2192GS     | 364                   | 526  | 724  | 960  | 1233 | 1542 | 1889 |    | 1220         | 1.29             | 650             | ESTER / ISO22   | CE/UKCA                        | SM20           |
| NT2192GS     | 364                   | 526  | 838  | 1121 | 1456 | 1842 | 2279 |    | 1236         | 1.37             | 650             | ESTER / ISO22   | CE/UKCA                        | SM20           |
| NT2212GS     | 479                   | 668  | 910  | 1206 | 1556 | 1959 | 2417 |    | 1325         | 1.31             | 650             | ESTER / ISO22   | CE/UKCA                        | SM20           |
| NT2212GS     | 523                   | 767  | 1063 | 1412 | 1813 | 2267 | 2773 |    | 1571         | 1.31             | 650             | ESTER / ISO22   | CE/UKCA                        | SM20           |

**Tri Phase | M-HBP**

| Model      | Origin | Refrig.               | Displac. | Voltage / Frequency              | Envelope | Torque | Motor   | LRA  | Test Condition | Freq. | Expansion Device                  |
|------------|--------|-----------------------|----------|----------------------------------|----------|--------|---------|------|----------------|-------|-----------------------------------|
| NJ6226ZX   | SK     | R134a                 | 34.38    | 380-420V 50Hz / 440-480V 60Hz 3~ | HBP      | HST    | 3 PHASE | 13.0 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJ6226ZX   | SK     | R134a                 | 34.38    | 380-420V 50Hz / 440-480V 60Hz 3~ | HBP      | HST    | 3 PHASE | 13.0 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NJ9232GS   | SK     | R404A                 | 26.11    | 380-420V 50Hz / 440-480V 60Hz 3~ | MBP      | HST    | 3 PHASE | 13.0 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJ9232GS   | SK     | R404A                 | 26.11    | 380-420V 50Hz / 440-480V 60Hz 3~ | MBP      | HST    | 3 PHASE | 13.0 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NJ9238GS   | SK     | R404A                 | 32.67    | 380-420V 50Hz / 440-480V 60Hz 3~ | MBP      | HST    | 3 PHASE | 22.0 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJ9238GS   | SK     | R404A                 | 32.67    | 380-420V 50Hz / 440-480V 60Hz 3~ | MBP      | HST    | 3 PHASE | 22.0 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NJX6232ZX  | SK     | R134a / R513A         | 38.00    | 380-420V 50Hz / 440-480V 60Hz 3~ | HBP      | HST    | 3PHASE  | 20.0 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJX6232ZX  | SK     | R134a / R513A         | 38.00    | 380-420V 50Hz / 440-480V 60Hz 3~ | HBP      | HST    | 3PHASE  | 20.0 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NJX6244US  | SK     | R290                  | 38.00    | 400V 50Hz / 440V 60Hz            | MBP      | HST    | 3 PHASE | 22.0 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJX6244US  | SK     | R290                  | 38.00    | 400V 50Hz / 440V 60Hz            | MBP      | HST    | 3 PHASE | 22.0 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NJX6250GS  | SK     | R404A / R452A / R449A | 38.00    | 400V 50Hz / 440V 60Hz            | MBP      | HST    | 3PHASE  | 22.0 | ASHRAEHB46     | 50 Hz | Capillary Tube or Expansion Valve |
| NJX6250GS  | SK     | R404A / R452A / R449A | 38.00    | 400V 50Hz / 440V 60Hz            | MBP      | HST    | 3PHASE  | 22.0 | ASHRAEHB46     | 60 Hz | Capillary Tube or Expansion Valve |
| NTU6232GSV | SK     | R404A                 | 20.44    | 200V 50-60Hz 3~                  | MBP      | HST    | 3 PHASE | 36.0 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |
| NTU6234GSV | SK     | R404A                 | 23.74    | 200V 50-60Hz 3~                  | MBP      | HST    | 3 PHASE | 36.0 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |
| NTU6238GSV | SK     | R404A                 | 26.21    | 200V 50-60Hz 3~                  | MBP      | HST    | 3 PHASE | 36.0 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |
| NTU6240GSV | SK     | R404A                 | 27.80    | 200V 50-60Hz 3~                  | MBP      | HST    | 3 PHASE | 40.0 | ARI4           | 60 Hz | Capillary Tube or Expansion Valve |

NA\*: Product is implemented but this technical data is not available.

UD\*: Product is under development so this technical data is still not available.

| Model      | Cooling Capacity (°C) |      |      |      |             |      |      |    | Capacity (W) | Efficiency (W/W) | Oil Charge (mL) | Type/ Viscosity | Certifications      | Wiring Diagram |
|------------|-----------------------|------|------|------|-------------|------|------|----|--------------|------------------|-----------------|-----------------|---------------------|----------------|
|            | -20                   | -15  | -10  | -5   | 0           | 5    | 10   | 15 |              |                  |                 |                 |                     |                |
| NJ6226ZX   |                       | 977  | 1351 | 1772 | 2232.844575 | 2739 | 3291 |    | 3014         | 2.55             | 750             | ESTER / ISO22   | IRAM/UL/CE/UKCA     | SM18           |
| NJ6226ZX   |                       | 1143 | 1581 | 2069 | 2610        | 3204 | 3851 |    | 3526         | 2.55             | 750             | ESTER / ISO22   | IRAM/UL/CE/UKCA     | SM18           |
| NJ9232GS   | 1131                  | 1501 | 1945 | 2462 | 3052        | 3716 | 4453 |    | 4080         | 2.54             | 750             | ESTER / ISO22   | KC/CCC/VDE/CE/ UKCA | SM18           |
| NJ9232GS   | 1323                  | 1756 | 2275 | 2881 | 3571        | 4348 | 5211 |    | 4775         | 2.55             | 750             | ESTER / ISO22   | KC/CCC/VDE/CE/ UKCA | SM18           |
| NJ9238GS   | 1470                  | 1894 | 2421 | 3022 | 3707        | 4475 | 5326 |    | 4897         | 2.59             | 750             | ESTER / ISO22   | IRAM/VDE/CE/ UKCA   | SM18           |
| NJ9238GS   | 1720                  | 2228 | 2833 | 3536 | 4337        | 5236 | 6233 |    | 5730         | 2.59             | 750             | ESTER / ISO22   | IRAM/VDE/CE/ UKCA   | SM18           |
| NJX6232ZX  |                       | 1402 | 1779 | 2247 | 2804        | 3452 | 4190 |    | 3757         | 2.59             | 750             | ESTER / ISO22   | VDE/CE/UKCA         | SM18           |
| NJX6232ZX  |                       | 1632 | 2105 | 2663 | 3308        | 4038 | 4854 |    | 4444         | 2.43             | 750             | ESTER / ISO22   | VDE/CE/UKCA         | SM18           |
| NJX6244US  | 1831                  | 2216 | 2710 | 3313 | 4025        | 4845 | 5775 |    | 5218         | 2.73             | 750             | ESTER / ISO22   | VDE/UL/CE           | SM18           |
| NJX6244US  | 2129                  | 2656 | 3267 | 3962 | 4740        | 5603 |      |    | 5976         | 2.51             | 750             | ESTER / ISO22   | VDE/UL/CE           | SM18           |
| NJX6250GS  | 1751                  | 2238 | 2839 | 3792 | 4609        | 5527 | 6546 |    | 5914         | 2.26             | 750             | ESTER / ISO22   | CCC/VDE/UL/CE/ UKCA | SM18           |
| NJX6250GS  | 1987                  | 2631 | 3378 | 4433 | 5353        | 6371 | 7486 |    | 6972         | 2.18             | 750             | ESTER / ISO22   | CCC/VDE/UL/CE/ UKCA | SM18           |
| NTU6232GSV | 926                   | 1201 | 1505 | 1847 | 2233        |      |      |    | 3982         | 2.8              | 650             | ESTER / ISO22   | KC/UL/CE/UKCA       | SM27           |
| NTU6234GSV | 1104                  | 1417 | 1768 | 2157 | 2590        |      |      |    | 4574         | 2.67             | 650             | ESTER / ISO22   | KC/UL/CE/UKCA       | SM27           |
| NTU6238GSV | 1257                  | 1599 | 1980 | 2396 | 2848        |      |      |    | 4877         | 2.49             | 650             | ESTER / ISO22   | KC/UL/CE/UKCA       | SM27           |
| NTU6240GSV | 1327                  | 1684 | 2081 | 2521 | 3011        |      |      |    | 5292         | 2.54             | 650             | ESTER / ISO22   | UL/CE/UKCA          | SM27           |

Technical Data

# Variable-Speed Compressors

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# Variable-Speed Compressors

Embraco variable-speed compressors are a solution for residential and commercial applications which demand fast cooling, low energy consumption, operate with a low starting voltage and with a wide operating range, low noise and vibration levels. The variable-speed compressor associated with an inverter allow the compressor to run in different RPM, delivering the cooling capacity needed according to the thermal load.

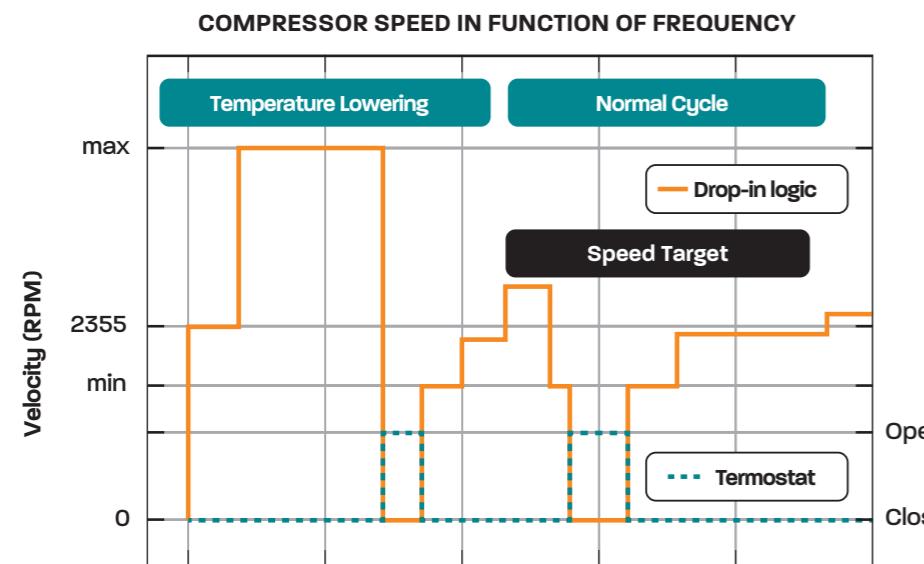
## Control Modes

### DROP-IN

Drop-In can be used with all kinds of controllers, where single thermostat contact is used to set the compressor running or not. Drop-In mode allows the use of Variable Speed Compressors in any refrigeration system without the need of a speed control signal through serial or frequency communication. The compressor speed will be adjusted automatically by the Inverter, in accordance with the change in thermal load.

### SMART DROP-IN

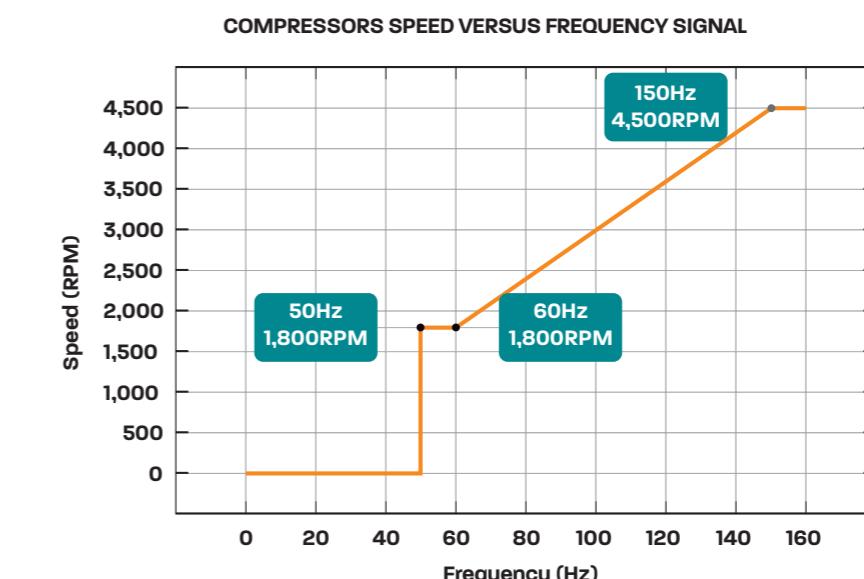
The Smart-Drop-In was designed with focus on cooling capacity, but always considering good system efficiency. This solution provides a customization tool that allows the routine to be parameterized and adjusted for each refrigeration system. The logic is divided in four mains parts: Pull-down, Stability Routine, Heavy Duty Routine and Defrost Routine. The Stability, Heavy Duty and Defrost Routine begin to run in parallel after Pull-down is completed.



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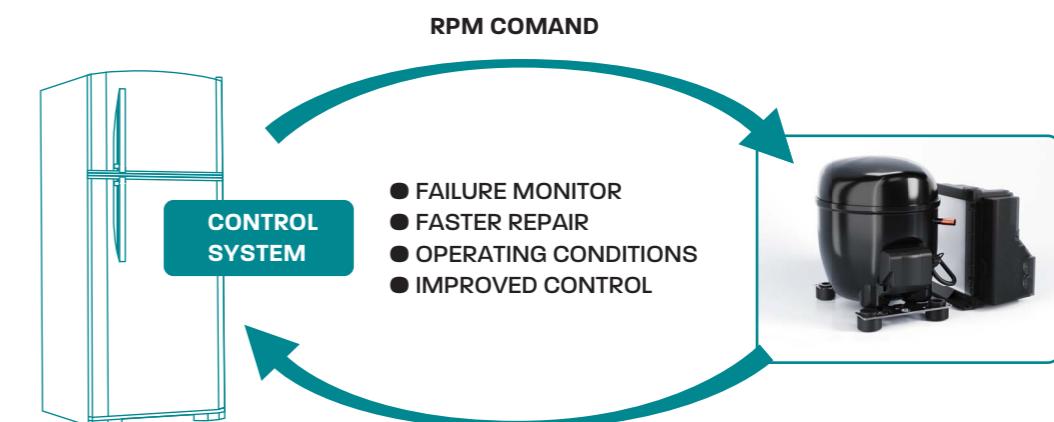
## FREQUENCY

In this communication mode, the compressor's speed is controlled by a frequency signal sent to the inverter, usually generated by an electronic controller. This frequency signal is a digital wave that varies between 53 and 150 Hz. The compressor is then driven by this signal sent to the inverter.



## SERIAL

This option is used associated with an electronic thermostat, in which the inverter uses a serial communication protocol, building a communication bridge between the inverter and the controller. Based on Embraco protocol it is possible to define the compressor speed and check other parameters such as compressor RPM and failure state. This response from the inverter can be used to help diagnose system failure and/or fix it in less time than usual.



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## Variable-Speed Compressors | 115-127V 50/60Hz

| Model    | Origin | Refrigerant | Voltage / Frequency                           | HP   | Application | Torque  | Motor Type |
|----------|--------|-------------|---|------|-------------|---------|------------|
| VEMY4H   | BR     | R134a       | 230 V 53-150 Hz 3~                            | 1/10 | LBP         | LST     | BPM        |
| VEMY6HH  | BR     | R134a       | 230 V 53-150 Hz 3~                            | 1/10 | L/M/HBP     | LST     | BPM        |
| VEMY6H   | BR     | R134a       | 230 V 53-150 Hz 3~                            | 1/10 | LBP         | LST     | BPM        |
| VEMX6H   | BR     | R1234yf     | 100V 50-60Hz 1~<br>200V 50-60Hz 3~<br>280 DVC | 1/10 | L/MBP       | LST     | BPM        |
| VEGT8HB  | BR     | R134a       | 230 V 53-150 Hz 3~                            | 1/4  | L/MBP       | LST     | BPM        |
| VEGT11HB | BR     | R134a       | 230 V 60-150 Hz 3~                            | 1/2  | L/MBP       | LST     | BPM        |
| FMFT411Z | BR     | R134a       | 230 V 53-167 Hz 3~                            | 3/4  | L/MBP       | HST     | BPM        |
| FMFT415Z | BR     | R134a       | 230 V 53-150 Hz 3~                            | 1    | L/MBP       | HST     | BPM        |
| VEMT403U | BR     | R290        | 230v 40-150Hz 3~                              | 1/3  | L/MBP       | LST/HST | BPM        |
| VEMT404U | BR     | R290        | 230 V 53-167 Hz 3~                            | 1/3+ | L/MBP       | HST     | BPM        |
| VEMT406U | CN     | R290        | 230 V 53-150 Hz 3~                            | 1/2  | L/MBP       | LST/HST | BPM        |
| VEHT409U | CN     | R290        | 230 V 53-150 Hz 3~                            | 1/2  | L/MBP       | LST/HST | BPM        |
| VEHU413U | CN     | R290        | 230 V 53-150 Hz 3~                            | 1    | L/MBP       | LST/HST | BPM        |

| Model    | Expansion Device                  | Cooling Capacity |     |      | Lubricant       |                  | Weight Kg | Test Condition | Certifications  |
|----------|-----------------------------------|------------------|-----|------|-----------------|------------------|-----------|----------------|---|
|          |                                   | RPM              | W   | W/W  | Oil Charge (ml) | Type / Viscosity |           |                |   |
| VEMY4H   | Capillary Tube                    | 2000             | 78  | 1,66 | 220             | ESTER / ISO10    | 7,5       | ASHRAELBP32    | UL/UKCA/CE  |
|          |                                   | 3000             | 116 | 1,58 |                 |                  |           |                |   |
|          |                                   | 4500             | 170 | 1,55 |                 |                  |           |                |   |
| VEMY6HH  | Capillary tube                    | 1600             | 99  | 1,65 | 220             | ESTER / ISO10    | 7,5       | ASHRAELBP32    | CCC/UL/UKCA/VDE/CE  |
|          |                                   | 3000             | 176 | 1,68 |                 |                  |           |                |   |
|          |                                   | 4500             | 229 | 1,60 |                 |                  |           |                |   |
| VEMY6H   | Capillary Tube                    | 2000             | 113 | 1,65 | 220             | ESTER / ISO10    | 7,6       | ASHRAELBP32    | UKCA/VDE/CE/IRAM  |
|          |                                   | 3000             | 176 | 1,67 |                 |                  |           |                |   |
|          |                                   | 4500             | 233 | 1,61 |                 |                  |           |                |   |
| VEMX6H   | Capillary Tube                    | 1500             | 87  | 1,59 | 220             | ESTER / ISO10    | 7,5       | ASHRAELBP32    | -   |
|          |                                   | 3000             | 180 | 1,61 |                 |                  |           |                |   |
|          |                                   | 4500             | 275 | 1,63 |                 |                  |           |                |   |
| VEGT8HB  | Capillary tube                    | 1800             | 137 | 1,72 | 430             | ESTER / ISO10    | 10,8      | ASHRAELBP32    | CCC/UKCA/VDE/CE   |
|          |                                   | 3000             | 256 | 1,76 |                 |                  |           |                |   |
|          |                                   | 4500             | 340 | 1,64 |                 |                  |           |                |   |
| VEGT11HB | Capillary tube                    | 1800             | 191 | 1,67 | 430             | ESTER / ISO22    | 10,0      | ASHRAELBP32    | UL/UKCA/CE  |
|          |                                   | 2500             | 266 | 1,66 |                 |                  |           |                |   |
|          |                                   | 3000             | 322 | 1,66 |                 |                  |           |                |   |
|          |                                   | 3600             | 378 | 1,63 |                 |                  |           |                |   |
|          |                                   | 4500             | 429 | 1,54 |                 |                  |           |                |   |
| FMFT411Z | Capillary Tube or Expansion Valve | 1600             | 180 | 1,82 | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | UL/UKCA/CE  |
|          |                                   | 5000             | 530 | 1,65 |                 |                  |           |                |   |
| FMFT415Z | Capillary Tube or Expansion Valve | 1600             | UD* | UD*  | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | -   |
|          |                                   | 5000             | UD* | UD*  |                 |                  |           |                |   |
| VEMT403U | Capillary Tube or Expansion Valve | 2000             | 157 | 2,15 | 220             | ALQUILB / ESTER  | 7,2       | ARIMBP w/ fan  | The model has different certifications depending on its electrical kit:<br>Kit 2 → CCC UKCA CE<br>Kit 3 → UKCA CE TUV   |
|          |                                   | 3000             | 238 | 2,18 |                 |                  |           |                |   |
|          |                                   | 4500             | 350 | 2,08 |                 |                  |           |                |   |
| VEMT404U | Capillary Tube or Expansion Valve | 1600             | 108 | 1,93 | 220             | ALQUILB / ISO22  | 7,2       | ASHRAELBP32    | The model has different certifications depending on its electrical kit:<br>Kit 1 and 3 → UL UKCA CE TUV<br>Kit 2 and 5 → UKCA CE TUV<br>Kit 4 and 6 → UKCA VDE CE |
|          |                                   | 3000             | 242 | 1,90 |                 |                  |           |                |   |
|          |                                   | 4500             | 354 | 1,83 |                 |                  |           |                |   |
| VEMT406U | Capillary Tube or Expansion Valve | 1600             | 151 | 1,54 | 210             | ALQUILB / ISO22  | 6,5       | ASHRAELBP32    | CCC/UL/CE/UKCA  |
|          |                                   | 2000             | 195 | 1,64 |                 |                  |           |                |   |
|          |                                   | 3000             | 303 | 1,72 |                 |                  |           |                |   |
|          |                                   | 3600             | 364 | 1,72 |                 |                  |           |                |   |
|          |                                   | 4500             | 439 | 1,66 |                 |                  |           |                |   |
| VEHT409U | Capillary Tube or Expansion Valve | 1600             | 239 | 1,76 | 250             | ALQUILB / ISO22  | 7,4       | ASHRAELBP32    | CCC/UL/VDE/CE/UKCA  |
|          |                                   | 2000             | 303 | 1,81 |                 |                  |           |                |   |
|          |                                   | 3000             | 464 | 1,84 |                 |                  |           |                |   |
|          |                                   | 3600             | 545 | 1,78 |                 |                  |           |                |   |
|          |                                   | 4500             | 668 | 1,73 |                 |                  |           |                |   |
| VEHU413U | Capillary Tube or Expansion Valve | 1600             | 345 | 1,63 | 250             | ALQUILB / ISO22  | 7,3       | ASHRAELBP32    | CCC/UL/VDE/CE/UKCA  |
|          |                                   | 2000             | 435 | 1,68 |                 |                  |           |                |   |
|          |                                   | 3000             | 658 | 1,72 |                 |                  |           |                |   |
|          |                                   | 3600             | 767 | 1,68 |                 |                  |           |                |   |
|          |                                   | 4500             | 937 | 1,62 |                 |                  |           |                |   |

\*Compressors tested at 100V

## Variable-Speed Compressors | 115-127V 50/60Hz

| Model     | Origin | Refrigerant | Voltage / Frequency                           | HP    | Application | Torque  | Motor Type |
|-----------|--------|-------------|---|-------|-------------|---------|------------|
| FMFT406U  | BR     | R290        | 230 V 46-150 Hz 3~                            | 1/2   | L/MBP       | HST     | BPM        |
| VEGT8U    | BR     | R290        | 230 V 60-150 Hz 3~                            | 1/2   | L/MBP       | LST     | BPM        |
| FMFT408U  | BR     | R290        | 230V / 60-150Hz                               | 1/2   | L/MBP       | HST     | BPM        |
| FMFT411U  | BR     | R290        | 230V / 60-150Hz                               | 3/4   | L/MBP       | LST/HST | BPM        |
| FMFD413UE | BR     | R290        | 230V / 53-167Hz                               | 1     | L/MBP       | LST/HST | BPM        |
| FMFT213U  | BR     | R290        | 230 V 60-150 Hz 3~                            | 1+    | LBP         | LST     | BPM        |
| FMFT413U  | BR     | R290        | 230 V 60-150 Hz 3~                            | 1+    | L/MBP       | HST     | BPM        |
| FMFT415U  | BR     | R290        | 230V / 53-167Hz                               | 1 1/4 | L/MBP       | HST     | BPM        |
| VEGY6L*   | BR     | R1234yf     | 230 V 53-150 Hz 3~                            | 1/5   | L/MBP       | LST     | BPM        |
| VEGD6L*   | BR     | R1234yf     | 230 V 47-120HZ 3~                             | 1/5   | L/M/HBP     | HST     | BPM        |
| VEMX6L    | BR     | R1234yf     | 100V 50-60Hz 1~<br>200V 50-60Hz 3~<br>280 DVC | 1/10  | L/MBP       | LST     | BPM        |
| FMFT411L  | BR     | R1234yf     | 230 V 53-150 Hz 3~                            | 1/2   | L/MBP       | HST     | BPM        |
| FMFT415L  | BR     | R1234yf     | 230 V 53-150 Hz 3~                            | 1     | L/MBP       | HST     | BPM        |
| FMXA6C    | CN     | R600a       | 230 V 43-134 Hz 3~                            | 1/9   | L/MBP       | LST     | BPM        |
| FMXY9C    | CN     | R600a       | 230 V 43-134 Hz 3~                            | 1/6   | L/MBP       | LST     | BPM        |
| FMXA9C    | CN     | R600a       | 230 V 43-134 Hz 3~                            | 1/6   | L/MBP       | LST     | BPM        |

\*Compressors tested at 100V



| Model     | Expansion Device                  | Cooling Capacity |      |      | Lubricant       |                  | Weight Kg | Test Condition | Certifications       |
|-----------|-----------------------------------|------------------|------|------|-----------------|------------------|-----------|----------------|----------------------|
|           |                                   | RPM              | W    | W/W  | Oil Charge (ml) | Type / Viscosity |           |                |                      |
| FMFT406U  | Capillary Tube or Expansion Valve | 1800             | 190  | 1,81 | 430             | ESTER / ISO22    | 10,3      | ASHRAELBP32    | UL/UKCA/CE/TUV/IMTRO |
|           |                                   | 2500             | 248  | 1,79 |                 |                  |           |                |                      |
|           |                                   | 3000             | 325  | 1,84 |                 |                  |           |                |                      |
|           |                                   | 3600             | 387  | 1,81 |                 |                  |           |                |                      |
|           |                                   | 4500             | 509  | 1,78 |                 |                  |           |                |                      |
| VEGT8U    | Capillary Tube                    | 2000             | 273  | 1,76 | 450             | ESTER / ISO22    | 10,3      | ASHRAELBP32    | UL/UKCA/CE           |
|           |                                   | 3000             | 426  | 1,81 |                 |                  |           |                |                      |
|           |                                   | 4500             | 647  | 1,74 |                 |                  |           |                |                      |
| FMFT408U  | Capillary tube or Expansion Valve | 1800             | 250  | 1,81 | 430             | ESTER / ISO22    | 10,3      | ASHRAELBP32    | UL/UKCA/VDE/CE       |
|           |                                   | 2400             | 334  | 1,83 |                 |                  |           |                |                      |
|           |                                   | 3000             | 432  | 1,82 |                 |                  |           |                |                      |
|           |                                   | 3600             | 509  | 1,79 |                 |                  |           |                |                      |
|           |                                   | 4500             | 609  | 1,75 |                 |                  |           |                |                      |
| FMFT411U  | Capillary tube or Expansion Valve | 1800             | 349  | 1,78 | 430             | ESTER / ISO22    | 10,9      | ASHRAELBP32    | CCC/UKCA/CE          |
|           |                                   | 2400             | 466  | 1,85 |                 |                  |           |                |                      |
|           |                                   | 3000             | 593  | 1,84 |                 |                  |           |                |                      |
|           |                                   | 3600             | 684  | 1,80 |                 |                  |           |                |                      |
|           |                                   | 4500             | 867  | 1,76 |                 |                  |           |                |                      |
| FMFD413UE | Capillary tube or Expansion Valve | 1600             | 331  | 1,95 | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | CCC/UL/UKCA/VDE/CE   |
|           |                                   | 2400             | 490  | 1,99 |                 |                  |           |                |                      |
|           |                                   | 3000             | 603  | 1,98 |                 |                  |           |                |                      |
|           |                                   | 3600             | 716  | 1,92 |                 |                  |           |                |                      |
|           |                                   | 5000             | 958  | 1,82 |                 |                  |           |                |                      |
| FMFT213U  | Capillary tube or Expansion Valve | 3000             | 693  | 1,87 | 430             | ESTER / ISO22    | 10,87     | ASHRAELBP32    | UL/UKCA/CE/TUV       |
|           |                                   | 4500             | 952  | 1,77 |                 |                  |           |                |                      |
| FMFT413U  | Capillary tube or Expansion Valve | 1800             | 403  | 1,76 | 430             | ESTER / ISO22    | 10,9      | ASHRAELBP32    | UKCA/VDE/CE          |
|           |                                   | 2500             | 531  | 1,78 |                 |                  |           |                |                      |
|           |                                   | 3000             | 682  | 1,80 |                 |                  |           |                |                      |
|           |                                   | 3600             | 777  | 1,76 |                 |                  |           |                |                      |
|           |                                   | 4500             | 998  | 1,74 |                 |                  |           |                |                      |
| FMFT415U  | Capillary tube or Expansion Valve | 1600             | 407  | 1,74 | 430             | ESTER / ISO22    | 10,9      | ASHRAELBP32    | CCC/UKCA/VDE/CE      |
|           |                                   | 2400             | 613  | 1,78 |                 |                  |           |                |                      |
|           |                                   | 3000             | 774  | 1,76 |                 |                  |           |                |                      |
|           |                                   | 3600             | 892  | 1,73 |                 |                  |           |                |                      |
|           |                                   | 5000             | 1253 | 1,68 |                 |                  |           |                |                      |
| VEGY6L*   | Capillary Tube                    | 2000             | 138  | 1,75 | 430             | ESTER / ISO22    | 11,3      | ASHRAELBP32    | -                    |
|           |                                   | 3000             | 217  | 1,69 |                 |                  |           |                |                      |
|           |                                   | 4500             | 326  | 1,58 |                 |                  |           |                |                      |
| VEGD6L*   | Capillary Tube or Expansion Valve | 2000             | 141  | 1,90 | 350             | ESTER / ISO10    | 10,8      | ASHRAELBP32    | -                    |
|           |                                   | 4500             | 647  | 1,70 |                 |                  |           |                |                      |
| VEMX6L    | Capillary Tube                    | 1500             | UD*  | UD*  | 220             | ESTER / ISO10    | 7,5       | ASHRAELBP32*   | -                    |
|           |                                   | 3000             | UD*  | UD*  |                 |                  |           |                |                      |
|           |                                   | 4500             | UD*  | UD*  |                 |                  |           |                |                      |
| FMFT411L  | Capillary Tube or Expansion Valve | 1600             | 210  | 1,85 | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | UL/UKCA/VDE/CE       |
|           |                                   | 5000             | 610  | 1,65 |                 |                  |           |                |                      |
| FMFT415L  | Capillary Tube or Expansion Valve | 1600             | 280  | 1,83 | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | -                    |
|           |                                   | 5000             | 825  | 1,63 |                 |                  |           |                |                      |
| F MXA6C   | Capillary Tube                    | 2000             | 65   | 1,79 | 175             | ALQUILB / ISO5   | 4,9       | ASHRAELBP32    | CCC/CE/VDE/UL/UKCA   |
|           |                                   | 3000             | 98   | 1,80 |                 |                  |           |                |                      |
|           |                                   |                  |      |      |                 |                  |           |                |                      |

**Variable-Speed Compressors | 115-127V 50/60Hz**

| Model   | Origin | Refrigerant | Voltage / Frequency | HP  | Application | Torque | Motor Type |
|---------|--------|-------------|---------------------|-----|-------------|--------|------------|
| FMXC9C  | CN     | R600a       | 230 V 43-134 Hz 3~  | 1/6 | L/MBP       | LST    | BPM        |
| VESD11C | CN     | R600a       | 230 V 40-150 Hz 3~  | 1/5 | LBP         | LST    | BPM        |
| VESD13C | CN     | R600a       | 230 V 43-150 Hz 3~  | 1/4 | LBP         | LST    | BPM        |

| Model   | Expansion Device | Cooling Capacity |     |      | Lubricant       |                  | Weight Kg | Test Condition | Certifications          |
|---------|------------------|------------------|-----|------|-----------------|------------------|-----------|----------------|-------------------------|
|         |                  | RPM              | W   | W/W  | Oil Charge (ml) | Type / Viscosity |           |                |                         |
| FMXC9C  | Capillary Tube   | 2000             | 100 | 1,87 | 175             | ALQUILB / ISO5   | 4,8       | ASHRAELBP32    | CCC/CE /UL/UKCA         |
|         |                  | 3000             | 151 | 1,86 |                 |                  |           |                |                         |
|         |                  | 4000             | 185 | 1,75 |                 |                  |           |                |                         |
| VESD11C | Capillary Tube   | 2000             | 137 | 1,98 | 180             | ALQUILB / ISO5   | 6,8       | ASHRAELBP32    | CCC/VDE/CE/UL/ UKCA/NOM |
|         |                  | 3000             | 207 | 1,91 |                 |                  |           |                |                         |
|         |                  | 4500             | 276 | 1,78 |                 |                  |           |                |                         |
| VESD13C | Capillary Tube   | 2000             | 158 | 1,93 | 190             | ALQUILB / ISO5   | 6,8       | ASHRAELBP32    | CE/CCC/ UL/VDE/UKCA     |
|         |                  | 3000             | 233 | 1,84 |                 |                  |           |                |                         |
|         |                  | 4500             | 299 | 1,65 |                 |                  |           |                |                         |

**Variable-Speed Compressors | 220-240V 50/60Hz**

| Model    | Origin | Refrigerant | Voltage / Frequency | HP   | Application | Torque | Motor Type |
|----------|--------|-------------|---------------------|------|-------------|--------|------------|
| VEMY6HH  | BR     | R134a       | 230 V 53-150 Hz 3~  | 1/10 | L/M/HBP     | LST    | BPM        |
| VEGT8HB  | BR     | R134a       | 230 V 53-150 Hz 3~  | 1/4  | L/MBP       | LST    | BPM        |
| VEGT11HB | BR     | R134a       | 230 V 60-150 Hz 3~  | 1/2  | L/MBP       | LST    | BPM        |
| FMFT411Z | BR     | R134a       | 230 V 53-167Hz 3~   | 3/4  | L/MBP       | HST    | BPM        |
| VEMT404U | CN     | R290        | 230 V 40-150 Hz 3~  | 1/3+ | LBP         | LST    | BPM        |
| VESA5U   | CN     | R290        | 230 V 53-133 Hz 3~  | 1/5  | LBP         | LST    | BPM        |
| FMFT406U | BR     | R290        | 230 V 46-150 Hz 3~  | 1/2  | L/MBP       | HST    | BPM        |
| VESA7U   | CN     | R290        | 230 V 53-133 Hz 3~  | 1/3  | L/MBP       | LST    | BPM        |
| VEGT8U   | BR     | R290        | 230 V 60-150 Hz 3~  | 1/2  | L/MBP       | LST    | BPM        |
| FMFT408U | BR     | R290        | 230V / 60-150Hz     | 1/2  | L/MBP       | HST    | BPM        |

| Model    | Expansion Device                  | Cooling Capacity |     |      | Lubricant       |                  | Weight Kg | Test Condition | Certifications        |
|----------|-----------------------------------|------------------|-----|------|-----------------|------------------|-----------|----------------|-----------------------|
|          |                                   | RPM              | W   | W/W  | Oil Charge (ml) | Type / Viscosity |           |                |                       |
| VEMY6HH  | Capillary tube                    | 1600             | 99  | 1,65 | 220             | ESTER / ISO10    | 7,5       | ASHRAELBP32    | CCC/UL/UKCA/ VDE/CE   |
|          |                                   | 3000             | 176 | 1,68 |                 |                  |           |                |                       |
|          |                                   | 4500             | 229 | 1,60 |                 |                  |           |                |                       |
| VEGT8HB  | Capillary tube                    | 1800             | 137 | 1,72 | 430             | ESTER / ISO10    | 10,8      | ASHRAELBP32    | CCC/UKCA/VDE/CE       |
|          |                                   | 3000             | 256 | 1,76 |                 |                  |           |                |                       |
|          |                                   | 4500             | 340 | 1,64 |                 |                  |           |                |                       |
| VEGT11HB | Capillary tube                    | 1800             | 191 | 1,67 | 430             | ESTER / ISO22    | 10,0      | ASHRAELBP32    | UL/UKCA/CE            |
|          |                                   | 2500             | 266 | 1,66 |                 |                  |           |                |                       |
|          |                                   | 3000             | 322 | 1,66 |                 |                  |           |                |                       |
|          |                                   | 3600             | 378 | 1,63 |                 |                  |           |                |                       |
|          |                                   | 4500             | 429 | 1,54 |                 |                  |           |                |                       |
| FMFT411Z | Capillary Tube or Expansion Valve | 1600             | 180 | 1,82 | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | UL/UKCA/CE            |
|          |                                   | 5000             | 530 | 1,65 |                 |                  |           |                |                       |
| VEMT404U | Capillary Tube or Expansion Valve | 2000             | 165 | 1,96 | 220             | ALQUILB / ISO22  | 7,2       | ASHRAELBP32    | -                     |
|          |                                   | 3000             | 242 | 1,92 |                 |                  |           |                |                       |
|          |                                   | 4500             | 354 | 1,83 |                 |                  |           |                |                       |
| VESA5U   | Capillary tube                    | 2000             | 156 | 1,59 | 200             | ESTER / ISO10    | 5,8       | ASHRAELBP32    | CE/CCC/VDE/UKCA       |
|          |                                   | 3000             | 244 | 1,69 |                 |                  |           |                |                       |
|          |                                   | 4000             | 328 | 1,72 |                 |                  |           |                |                       |
| FMFT406U | Capillary Tube or Expansion Valve | 1800             | 190 | 1,81 | 430             | ESTER / ISO22    | 10,3      | ASHRAELBP32    | UL/UKCA/CE/TUV/ IMTRO |
|          |                                   | 2500             | 248 | 1,79 |                 |                  |           |                |                       |
|          |                                   | 3000             | 325 | 1,84 |                 |                  |           |                |                       |
|          |                                   | 3600             | 387 | 1,81 |                 |                  |           |                |                       |
|          |                                   | 4500             | 509 | 1,78 |                 |                  |           |                |                       |
| VESA7U   | Capillary tube                    | 1600             | 182 | 1,62 | 198             | ESTER / ISO22    | 6,5       | ASHRAELBP32    | CCC/VDE/UL/CE/ UKCA   |
|          |                                   | 2000             | 233 | 1,69 |                 |                  |           |                |                       |
|          |                                   | 3000             | 363 | 1,74 |                 |                  |           |                |                       |
|          |                                   | 4000             | 482 | 1,73 |                 |                  |           |                |                       |
| VEGT8U   | Capillary Tube                    | 2000             | 273 | 1,76 | 450             | ESTER / ISO22    | 10,3      | ASHRAELBP32    | UL/UKCA/CE            |
|          |                                   | 3000             | 426 | 1,81 |                 |                  |           |                |                       |
|          |                                   | 4500             | 647 | 1,74 |                 |                  |           |                |                       |
| FMFT408U | Capillary tube or Expansion Valve | 1800             | 250 | 1,81 | 430             | ESTER / ISO22    | 10,3      | ASHRAELBP32    | UL/UKCA/VDE/CE        |
|          |                                   | 2400             | 334 | 1,83 |                 |                  |           |                |                       |
|          |                                   | 3000             | 432 | 1,82 |                 |                  |           |                |                       |
|          |                                   |                  |     |      |                 |                  |           |                |                       |

## Variable-Speed Compressors | 220-240V 50/60Hz

| Model     | Origin | Refrigerant | Voltage / Frequency   | HP   | Application | Torque  | Motor Type |
|-----------|--------|-------------|-----------------------|------|-------------|---------|------------|
| FMFT41IU  | BR     | R290        | 230V / 60-150Hz       | 3/4  | L/MBP       | LST/HST | BPM        |
| FMFD413UE | BR     | R290        | 230V / 53-167Hz       | 1    | L/MBP       | LST/HST | BPM        |
| FMFT213U  | BR     | R290        | 230 V 60-150 Hz 3~    | 1+   | LBP         | LST     | BPM        |
| FMFT413U  | BR     | R290        | 230 V 60-150 Hz 3~    | 1+   | L/MBP       | HST     | BPM        |
| FMFT415U  | BR     | R290        | 230V / 53-167Hz       | 11/4 | L/MBP       | HST     | BPM        |
| VNEU217U  | SK     | R290        | 100-300 V 33-75 Hz 3~ | 11/4 | LBP         | HST     | BPM        |
| FMXY4C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/16 | L/MBP       | LST     | BPM        |
| FMXA4C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/16 | L/MBP       | LST     | BPM        |
| FMDX4C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/16 | L/MBP       | LST     | BPM        |
| FMXY6C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/9  | L/MBP       | LST     | BPM        |
| FMXA6C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/9  | L/MBP       | LST     | BPM        |
| FMCX6C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/9  | L/MBP       | LST     | BPM        |
| FMDX6C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/9  | L/MBP       | LST     | BPM        |
| FMXY9C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/6  | L/MBP       | LST     | BPM        |
| FMXA9C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/6  | L/MBP       | LST     | BPM        |

\*Compressors tested at 100V

| Model     | Expansion Device                  | Cooling Capacity |      |      | Lubricant       |                  | Weight Kg | Test Condition | Certifications     |
|-----------|-----------------------------------|------------------|------|------|-----------------|------------------|-----------|----------------|--------------------|
|           |                                   | RPM              | W    | W/W  | Oil Charge (ml) | Type / Viscosity |           |                |                    |
| FMFT41IU  | Capillary tube or Expansion Valve | 1800             | 349  | 1,78 | 430             | ESTER / ISO22    | 10,9      | ASHRAELBP32    | CCC/UKCA/VDE/CE    |
|           |                                   | 2400             | 466  | 1,85 |                 |                  |           |                |                    |
|           |                                   | 3000             | 593  | 1,84 |                 |                  |           |                |                    |
|           |                                   | 3600             | 684  | 1,80 |                 |                  |           |                |                    |
|           |                                   | 4500             | 867  | 1,76 |                 |                  |           |                |                    |
| FMFD413UE | Capillary tube or Expansion Valve | 1600             | 331  | 1,95 | 430             | ESTER / ISO10    | 10,9      | ASHRAELBP32    | CCC/UL/UKCA/VDE/CE |
|           |                                   | 2400             | 490  | 1,99 |                 |                  |           |                |                    |
|           |                                   | 3000             | 603  | 1,98 |                 |                  |           |                |                    |
|           |                                   | 3600             | 716  | 1,92 |                 |                  |           |                |                    |
|           |                                   | 5000             | 958  | 1,82 |                 |                  |           |                |                    |
| FMFT213U  | Capillary tube or Expansion Valve | 3000             | 693  | 1,87 | 430             | ESTER / ISO22    | 10,87     | ASHRAELBP32    | UL/UKCA/CE/TUV     |
|           |                                   | 4500             | 952  | 1,77 |                 |                  |           |                |                    |
|           |                                   | 1800             | 403  | 1,76 |                 |                  |           |                |                    |
|           |                                   | 2500             | 531  | 1,78 |                 |                  |           |                |                    |
|           |                                   | 3000             | 682  | 1,80 |                 |                  |           |                |                    |
| FMFT415U  | Capillary tube or Expansion Valve | 3600             | 777  | 1,76 | 430             | ESTER / ISO22    | 10,9      | ASHRAELBP32    | UKCA/VDE/CE        |
|           |                                   | 4500             | 998  | 1,74 |                 |                  |           |                |                    |
|           |                                   | 1600             | 407  | 1,74 |                 |                  |           |                |                    |
|           |                                   | 2400             | 613  | 1,78 |                 |                  |           |                |                    |
|           |                                   | 3000             | 774  | 1,76 |                 |                  |           |                |                    |
| VNEU217U  | Capillary Tube or Expansion Valve | 3600             | 892  | 1,73 | 500             | ESTER / ISO22    | 10,9      | ASHRAELBP32    | CCC/UKCA/VDE/CE    |
|           |                                   | 5000             | 1253 | 1,68 |                 |                  |           |                |                    |
|           |                                   | 2000             | 535  | 1,47 |                 |                  |           |                |                    |
|           |                                   | 3000             | 818  | 1,52 |                 |                  |           |                |                    |
|           |                                   | 4500             | 1144 | 1,47 |                 |                  |           |                |                    |
| FMXY4C    | Capillary Tube                    | 2000             | 35   | 1,50 | 175             | ALQUILB / ISO5   | 4,8       | ASHRAELBP32    | CCC/VDE/CE         |
|           |                                   | 3000             | 50   | 1,58 |                 |                  |           |                |                    |
|           |                                   | 4000             | 71   | 1,57 |                 |                  |           |                |                    |
|           |                                   | 2000             | 36   | 1,65 |                 |                  |           |                |                    |
|           |                                   | 3000             | 54   | 1,64 |                 |                  |           |                |                    |
| FMDX4C    | Capillary Tube                    | 4000             | 76   | 1,64 | 175             | ALQUILB / ISO5   | 4,9       | ASHRAELBP32    | CCC/VDE/CE/UL/UKCA |
|           |                                   | 2000             | 36   | 1,73 |                 |                  |           |                |                    |
|           |                                   | 3000             | 49   | 1,64 |                 |                  |           |                |                    |
|           |                                   | 4000             | 72   | 1,66 |                 |                  |           |                |                    |
|           |                                   | 2000             | 65   | 1,64 |                 |                  |           |                |                    |
| FMXY6C    | Capillary Tube                    | 3000             | 97   | 1,64 | 175             | ALQUILB / ISO5   | 4,9       | ASHRAELBP32    | CCC/VDE/CE/UL/UKCA |
|           |                                   | 4000             | 121  | 1,65 |                 |                  |           |                |                    |
|           |                                   | 2000             | 65   | 1,79 |                 |                  |           |                |                    |
|           |                                   | 3000             | 98   | 1,80 |                 |                  |           |                |                    |
|           |                                   | 4000             | 121  | 1,70 |                 |                  |           |                |                    |
| FMDX6C    | Capillary Tube                    | 2000             | 65   | 1,82 | 175             | ALQUILB / ISO5   | 4,8       | ASHRAELBP32    | CCC/CE             |
|           |                                   | 3000             | 98   | 1,78 |                 |                  |           |                |                    |
|           |                                   | 4000             | 119  | 1,69 |                 |                  |           |                |                    |
|           |                                   | 2000             | 67   | 1,91 |                 |                  |           |                |                    |
|           |                                   | 3000             | 102  | 1,89 |                 |                  |           |                |                    |
| FMDX6C    | Capillary Tube                    | 4000             | 126  | 1,79 |                 |                  |           |                |                    |
|           |                                   | 2000             | 98   | 1,71 | 175             | ALQUILB / ISO5   | 4,8       | ASHRAELBP32    | CCC/CE/VDE/UL/UKCA |
|           |                                   | 3000             | 145  | 1,75 |                 |                  |           |                |                    |
|           |                                   | 4000             | 180  | 1,65 |                 |                  |           |                |                    |
|           |                                   | 2000             | 98   | 1,80 |                 |                  |           |                |                    |
| FMXY9C    | Capillary Tube                    | 3000             | 145  | 1,78 | 175             | ALQUILB / ISO5   | 4,8       | ASHRAELBP32    | CCC/CE/VDE/UL/UKCA |
|           |                                   | 4000             | 180  | 1,70 |                 |                  |           |                |                    |
|           |                                   | 2000             | 98   | 1,80 |                 |                  |           |                |                    |
|           |                                   | 3000             | 145  | 1,78 |                 |                  |           |                |                    |
|           |                                   |                  |      |      |                 |                  |           |                |                    |

## Variable-Speed Compressors | 220-240V 50/60Hz

| Model     | Origin | Refrigerant | Voltage / Frequency   | HP    | Application | Torque | Motor Type |
|-----------|--------|-------------|-----------------------|-------|-------------|--------|------------|
| FMXC9C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/6   | L/MBP       | LST    | BPM        |
| FMXD9C    | CN     | R600a       | 230 V 43-134 Hz 3~    | 1/6   | L/MBP       | LST    | BPM        |
| VEMB11C   | CN     | R600a       | 230 V 53-150 Hz 3~    | 1/5   | LBP         | LST    | BPM        |
| VESC11C   | CN     | R600a       | 230 V 40-150 Hz 3~    | 1/5   | LBP         | LST    | BPM        |
| VESD11C   | CN     | R600a       | 230 V 40-150 Hz 3~    | 1/5   | LBP         | LST    | BPM        |
| VNEK206GK | SK     | R404A       | 300 V 33-75 Hz 3~     | 1/3   | LBP         | HST    | BPM        |
| VNEK212GK | SK     | R404A       | 300 V 33-75 Hz 3~     | 1/2   | LBP         | HST    | BPM        |
| VNEU213GK | SK     | R404A       | 100-300 V 33-75 Hz 3~ | 3/4   | LBP         | HST    | BPM        |
| VNEX219U  | SK     | R290        | 208-240V 37-83 Hz     | 1 1/2 | LBP         | HST    | BPM        |
| VNEX419U  | SK     | R290        | 208-240V 37-83 Hz     | 1 1/2 | LMBP        | HST    | BPM        |
| VNEX621U  | SK     | R290        | 208-240V 37-83 Hz     | 1 1/2 | MBP         | HST    | BPM        |
| VNEX421U  | SK     | R290        | 300V 110-250Hz        | 1 1/2 | LMBP        | HST    | BPM        |
| VNEX619U  | SK     | R290        | 208-240V 37-83 Hz     | 1 1/2 | MBP         | HST    | BPM        |
| VNEX221U  | SK     | R290        | 208-240V 37-83 Hz     | 1 1/2 | LBP         | HST    | BPM        |

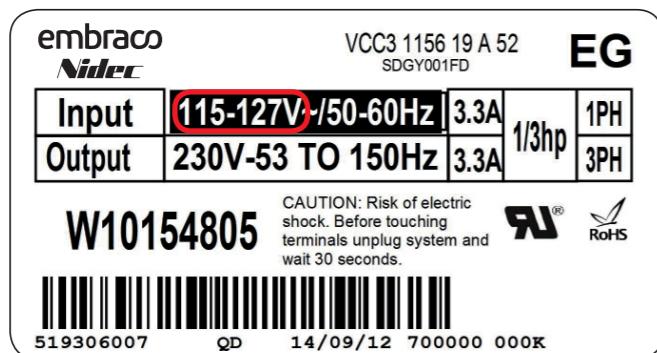
\*Compressors tested at 100V

| Model     | Expansion Device                  | Cooling Capacity |      |      | Lubricant       |                  | Weight Kg | Test Condition | Certifications         |
|-----------|-----------------------------------|------------------|------|------|-----------------|------------------|-----------|----------------|------------------------|
|           |                                   | RPM              | W    | W/W  | Oil Charge (ml) | Type / Viscosity |           |                |                        |
| FMXC9C    | Capillary Tube                    | 2000             | 100  | 1,87 | 175             | ALQUILB / ISO5   | 4,8       | ASHRAELBP32    | CCC/CE /UL/UKCA        |
|           |                                   | 3000             | 151  | 1,86 |                 |                  |           |                |                        |
|           |                                   | 4000             | 185  | 1,75 |                 |                  |           |                |                        |
| FMXD9C    | Capillary Tube                    | 2000             | 99   | 1,90 | 175             | ALQUILB / ISO5   | 4,9       | ASHRAELBP32    | CCC/CE/VDE/UKCA        |
|           |                                   | 3000             | 152  | 1,89 |                 |                  |           |                |                        |
|           |                                   | 4000             | 187  | 1,79 |                 |                  |           |                |                        |
| VEMB11C   | Capillary Tube                    | 2000             | 135  | 1,90 | 450             | ALQUILB / ISO5   | 7,6       | ASHRAELBP32    | -                      |
|           |                                   | 3000             | 204  | 1,89 |                 |                  |           |                |                        |
|           |                                   | 4500             | 281  | 1,75 |                 |                  |           |                |                        |
| VESC11C   | Capillary Tube                    | 2000             | 137  | 1,93 | 160             | ALQUILB / ISO5   | 6,4       | ASHRAELBP32    | CCC/VDE/CE             |
|           |                                   | 3000             | 207  | 1,88 |                 |                  |           |                |                        |
|           |                                   | 4500             | 276  | 1,76 |                 |                  |           |                |                        |
| VESD11C   | Capillary Tube                    | 2000             | 137  | 1,98 | 180             | ALQUILB / ISO5   | 6,8       | ASHRAELBP32    | CCC/VDE/CE/UL/UKCA/NOM |
|           |                                   | 3000             | 207  | 1,91 |                 |                  |           |                |                        |
|           |                                   | 4500             | 276  | 1,78 |                 |                  |           |                |                        |
| VNEK206GK | Capillary Tube or Expansion Valve | 2000             | 226  | 1,26 | 500             | ESTER / ISO22    | 11,6      | ASHRAELBP32    | CCC/VDE/CE/UKCA        |
|           |                                   | 2400             | 260  | 1,27 |                 |                  |           |                |                        |
|           |                                   | 3000             | 327  | 1,27 |                 |                  |           |                |                        |
|           |                                   | 3600             | 385  | 1,25 |                 |                  |           |                |                        |
|           |                                   | 4500             | 468  | 1,21 |                 |                  |           |                |                        |
| VNEK212GK | Capillary Tube or Expansion Valve | 2000             | 245  | 1,11 | 500             | ESTER / ISO22    | 11,6      | ASHRAELBP32    | KC/CCC/VDE/UL/CE/UKCA  |
|           |                                   | 2400             | 284  | 1,11 |                 |                  |           |                |                        |
|           |                                   | 3000             | 344  | 1,09 |                 |                  |           |                |                        |
|           |                                   | 3600             | 386  | 1,03 |                 |                  |           |                |                        |
|           |                                   | 4500             | 465  | 1,01 |                 |                  |           |                |                        |
| VNEU213GK | Capillary Tube or Expansion Valve | 2000             | 539  | 1,40 | 500             | ESTER / ISO22    | 11,6      | ASHRAELBP32    | KC/VDE/UL/CE/UKCA      |
|           |                                   | 3000             | 762  | 1,44 |                 |                  |           |                |                        |
|           |                                   | 4500             | 1045 | 1,33 |                 |                  |           |                |                        |
| VNEX219U  | Capillary Tube or Expansion Valve | 2200             | 705  | 1,84 | 400             | POE22/ ISO22     | 12        | ASHRAELBP32    | VDE/UL/CE/UKCA         |
|           |                                   | 3000             | 979  | 1,81 |                 |                  |           |                |                        |
|           |                                   | 5000             | 1522 | 1,64 |                 |                  |           |                |                        |
| VNEX419U  | Capillary Tube or Expansion Valve | 2200             | 705  | 1,84 | 400             | POE22/ ISO22     | 12        | ASHRAELBP32    | CCC/VDE/UL/CE/UKCA     |
|           |                                   | 3000             | 979  | 1,81 |                 |                  |           |                |                        |
|           |                                   | 5000             | 1522 | 1,64 |                 |                  |           |                |                        |
| VNEX621U  | Capillary Tube or Expansion Valve | 2200             | 2289 | 3,12 | 400             | POE22/ ISO22     | 12        | ASHRAELBP32    | CCC/VDE/UL/CE/UKCA     |
|           |                                   | 3000             | 3095 | 3,00 |                 |                  |           |                |                        |
|           |                                   | 5000             | 1791 | 2,52 |                 |                  |           |                |                        |
| VNEX421U  | Capillary Tube or Expansion Valve | 2200             | 775  | 1,74 | 400             | ESTER/ ISO22     | 11,3      | ASHRAELBP32    | CCC/VDE/UL/CE/UKCA     |
|           |                                   | 3000             | 1078 | 1,75 |                 |                  |           |                |                        |
|           |                                   | 5000             | 1297 | 1,72 |                 |                  |           |                |                        |
| VNEX619U  | Capillary Tube or Expansion Valve | 2200             | 1983 | 3,16 | 400             | POE22/ ISO22     | 12        | ASHRAELBP32    | VDE/UL/CE/UKCA         |
|           |                                   | 3000             | 2742 | 3,09 |                 |                  |           |                |                        |
|           |                                   | 5000             | 4145 | 2,61 |                 |                  |           |                |                        |
| VNEX221U  | Capillary Tube or Expansion Valve | 2200             | 775  | 1,74 | 400             | POE22/ ISO22     | 12        | ASHRAELBP32    | CE/UKCA                |
|           |                                   | 3000             | 1078 | 1,75 |                 |                  |           |                |                        |
|           |                                   | 5000             | 1599 | 1,60 |                 |                  |           |                |                        |

# Operation Envelope Per Family

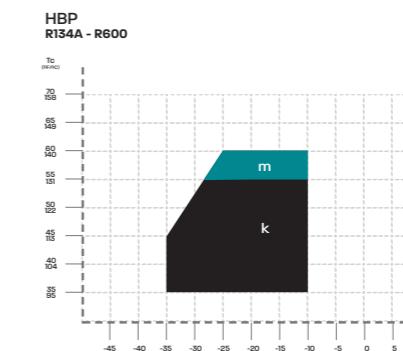
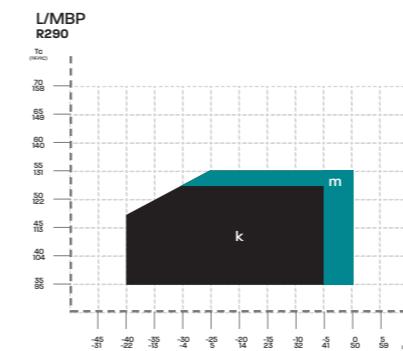
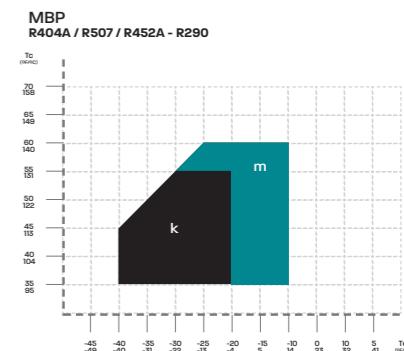
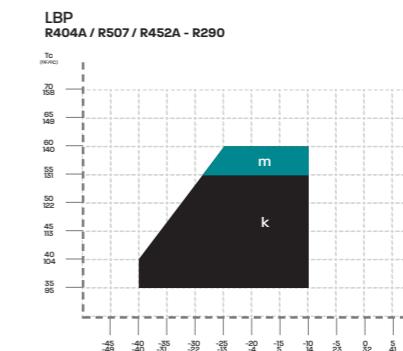
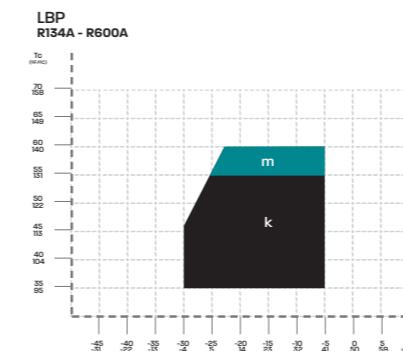
## Voltage

Check what is the inverter voltage specified on the label, as seen below: The inverter must be replaced by an equivalent one with the same voltage range.



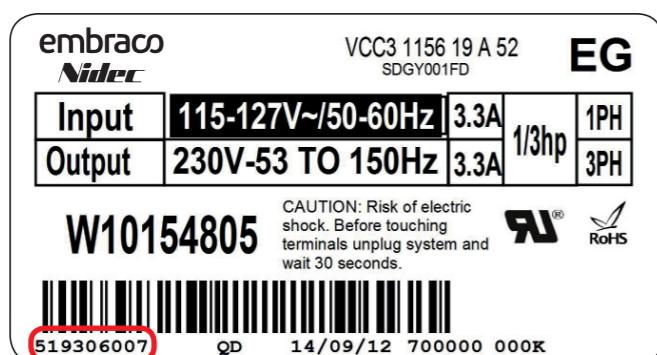
The inverter must be replaced by another one with the same voltage range

## EM, NE, EH



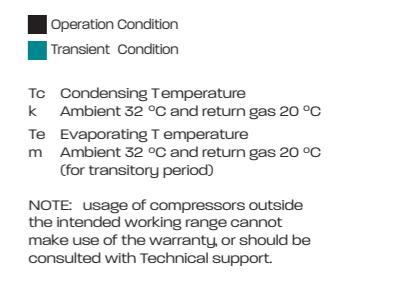
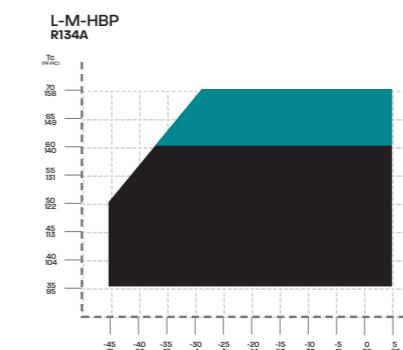
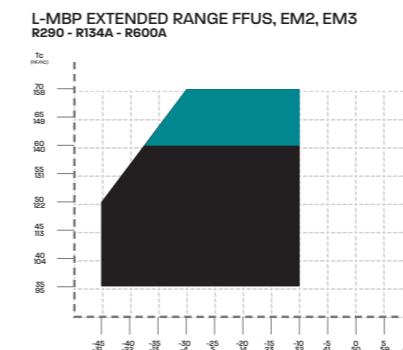
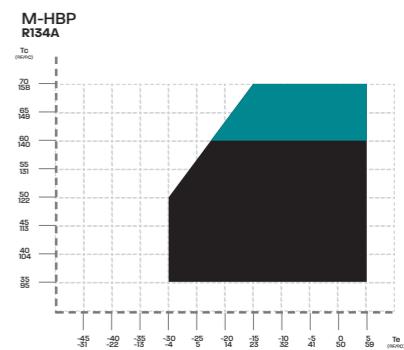
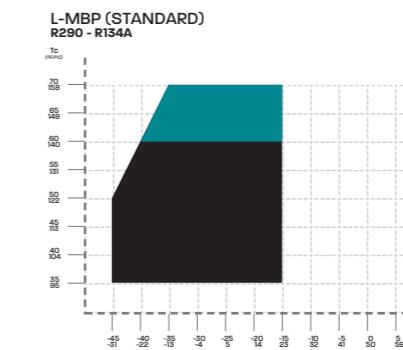
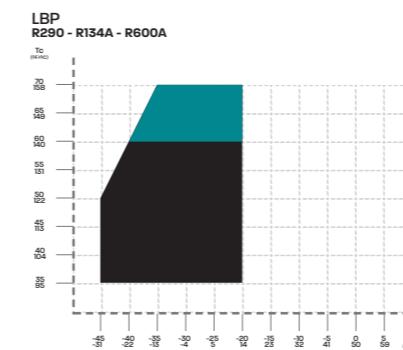
## Control Signal

Check which control signal is used in the original inverter. Please contact the technical support to clarify the control type for each product SKU.



## EM, VEM, VES, FMX

Ambient temperature: 42,7 °C - Return temperature: 32,2 °C



# Electrical Configurations

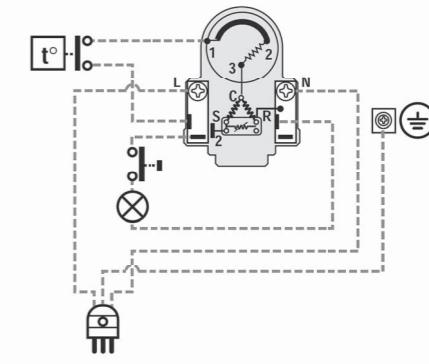
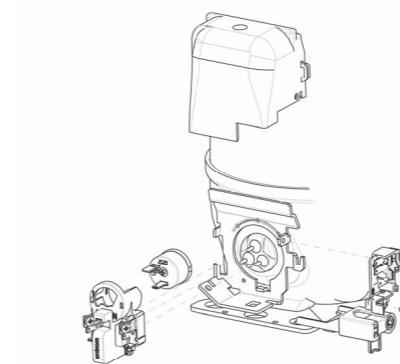
## Wiring Diagrams Key

|  |                          |
|--|--------------------------|
|  | OVERLOAD PROTECTOR       |
|  | OVERLOAD PROTECTOR       |
|  | CURRENT START RELAY      |
|  | 3CR CURRENT START RELAY  |
|  | RUN CAPACITOR            |
|  | OPTIONAL RUN CAPACITOR   |
|  | FAN                      |
|  | LAMP                     |
|  | 3-PHASE MOTOR            |
|  | LOW-HIGH PRESSURE SWITCH |
|  | EARTH CONNECTION         |
|  | 3-PHASE SUPPLY           |
|  | SINGLE PHASE SUPPLY      |
|  | COMMON                   |
|  | RUN                      |
|  | TERMINAL BLOCK           |
|  | WHITE CABLE              |
|  | BLUE CABLE               |
|  | YELLOW-GREEN CABLE       |
|  | CONNECTIONS SUPPLIED     |

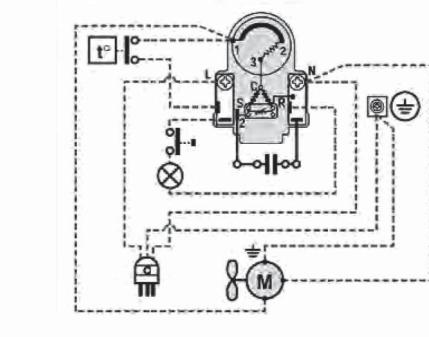
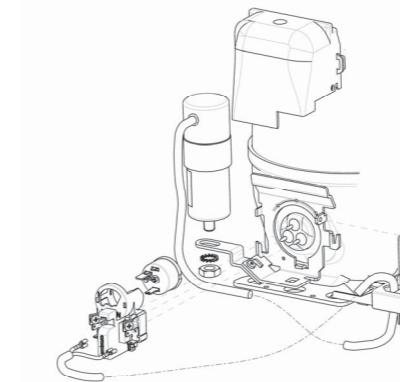
|  |   |
|--|---|
|  | PTC START DEVICE*                                     |
|  | INTEGRATED PTC DEVICE                                 |
|  | CURRENT START RELAY WITH CAPACITOR CONNECTIONS        |
|  | 3ARR3 START RELAY (VOLTAGE).                          |
|  | RUN CAPACITOR (MANDATORY - NOT SUPPLIED)              |
|  | START CAPACITOR                                       |
|  | PUSH BUTTON   |
|  | SINGLE PHASE MOTOR                                    |
|  | THERMOSTAT  |
|  | PILOT CIRCUIT 24 OR 220 V                             |
|  | COMMON (INTERNAL OVERLOAD PROTECTOR)                  |
|  | START   |
|  | BR  |
|  | BK  |
|  | RD  |
|  | CONNECTIONS TO BE MADE BY THE CUSTOMER (NOT SUPPLIED) |

## Wiring Diagrams

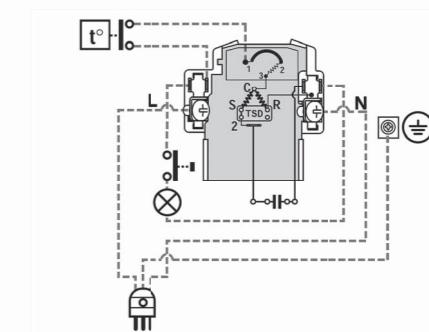
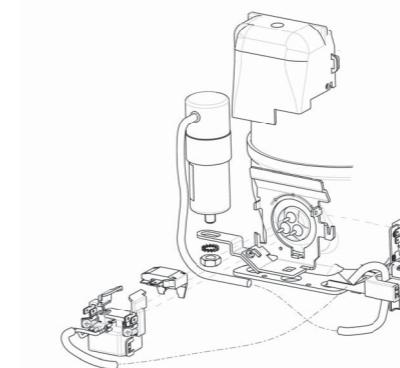
SM00 - EMT/NE SERIES RSIR PTC EUROPEAN VERSION



SM01 - EMT/NE SERIES RSCR PTC EUROPEAN VERSION



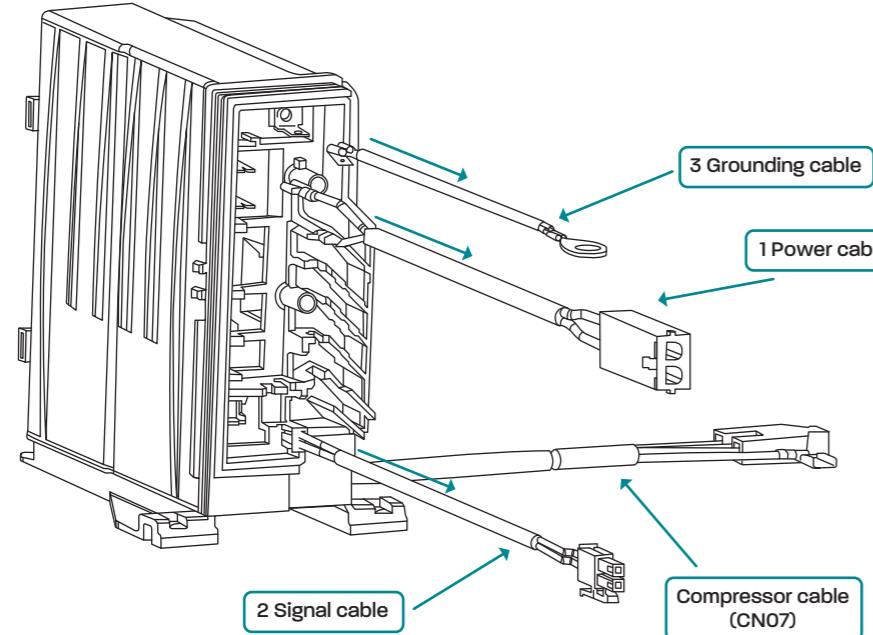
SM02 - EMT/NE SERIES RSCR TSD EUROPEAN VERSION



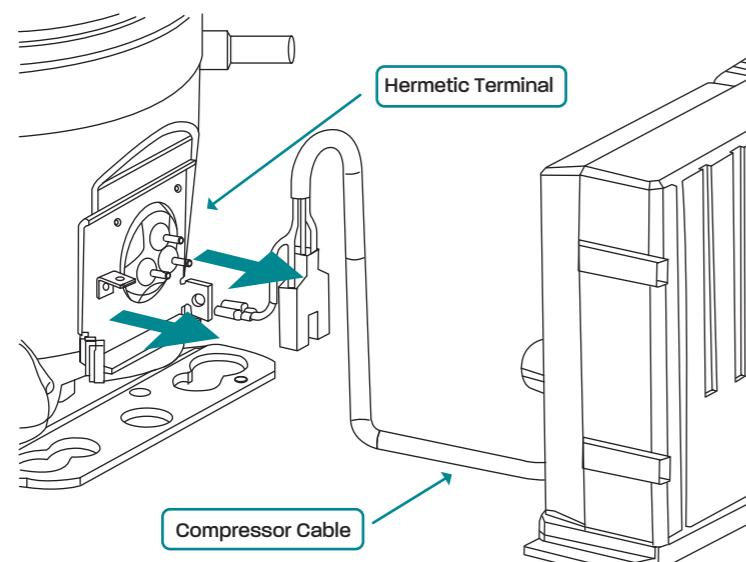
## Replacing a Failed Inverter

To replace the original inverter in the system, follow the steps:

1. Remove the Inverter plastic cover to have access to the electrical terminal;
2. Remove the power cable (1), the signal cable (2) and the grounding cable (3);



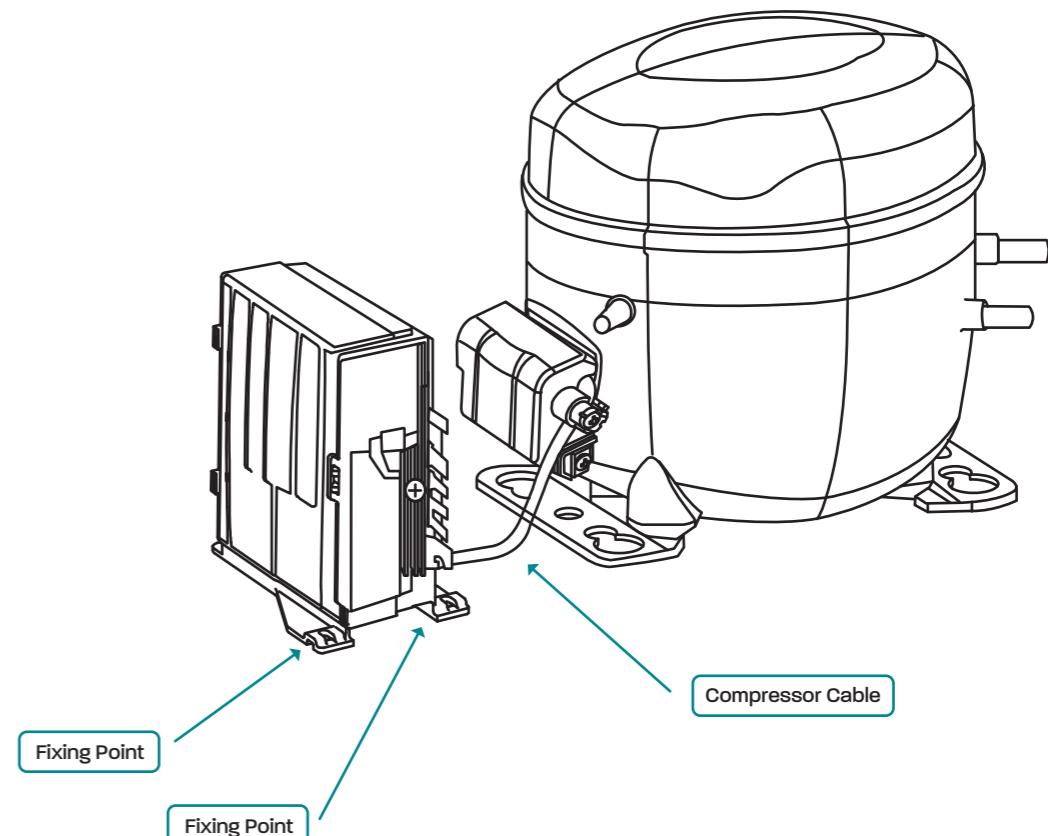
3. Disconnect the Inverter from the compressor;



4. Unscrew and remove the inverter from the system;

## Installing The New Inverter

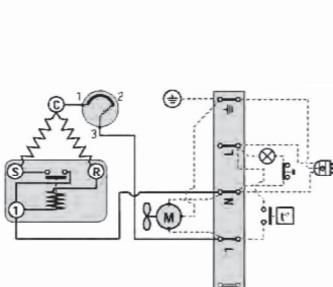
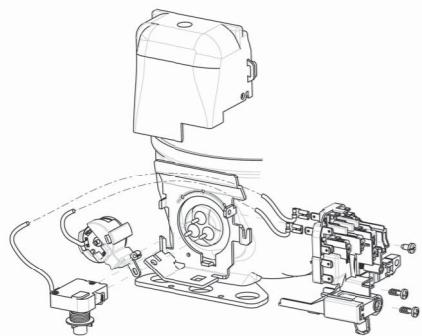
1. Select the new inverter following the instructions shown above;
2. Fixate the Inverter on the system using the fixation points;



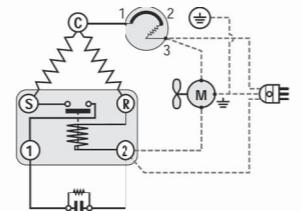
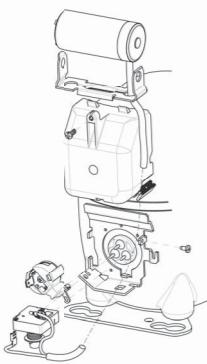
Obs.: If the original Inverter was mounted on the compressor, the new Inverter must be installed on the system to make sure that it doesn't move during the normal system usage.

## Wiring Diagrams

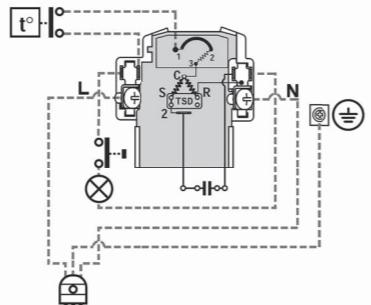
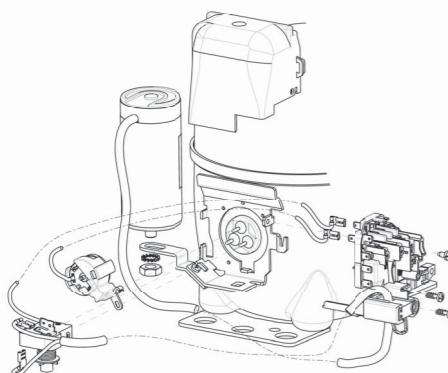
SM03 - EMT/NE SERIES RSIR TERMINAL BOARD &amp; START DEVICE



SM04 - EMT/NE SERIES CSIR AMERICAN VERSION

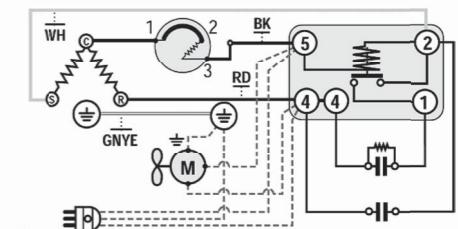
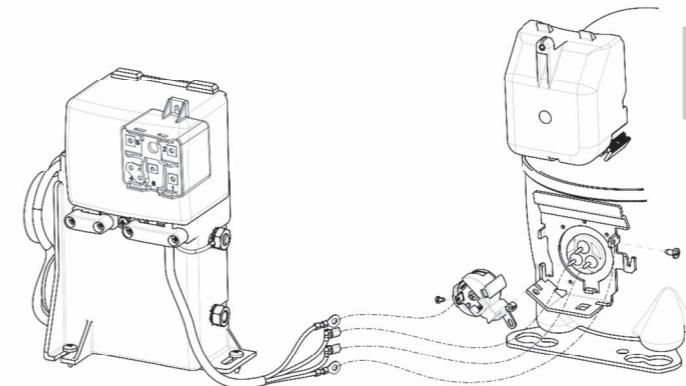


SM05 - EMT/NE SERIES CSIR TERMINAL BOARD &amp; START DEVICE

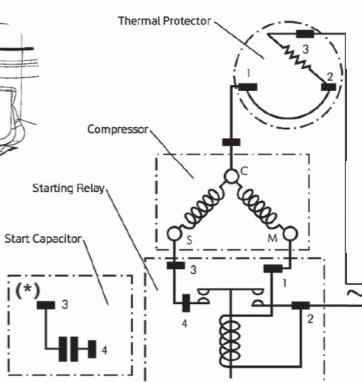
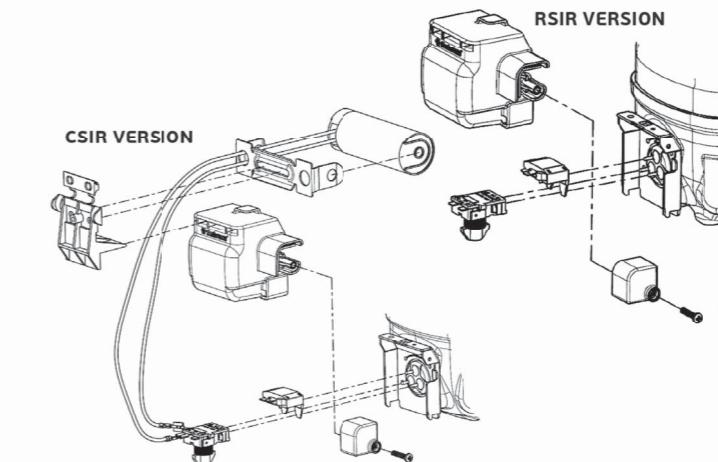


## Wiring Diagrams

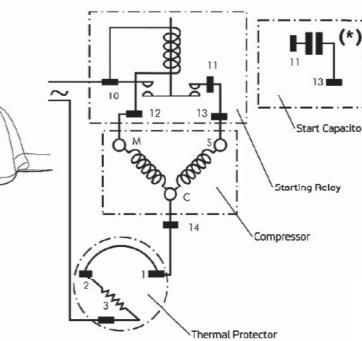
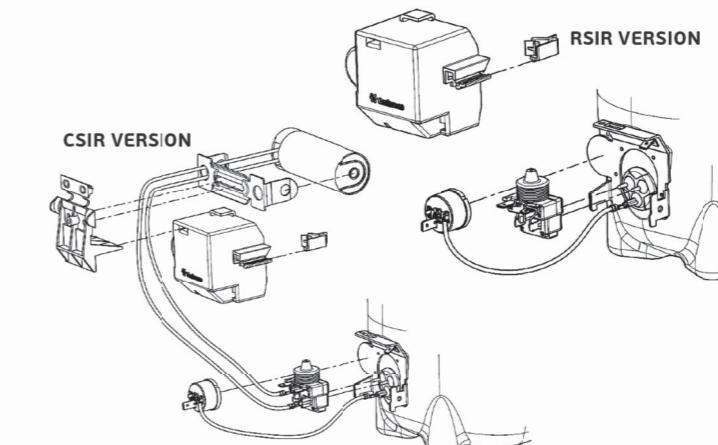
SM06 - NE SERIES CSR BOX



SM07 - EM/EMI

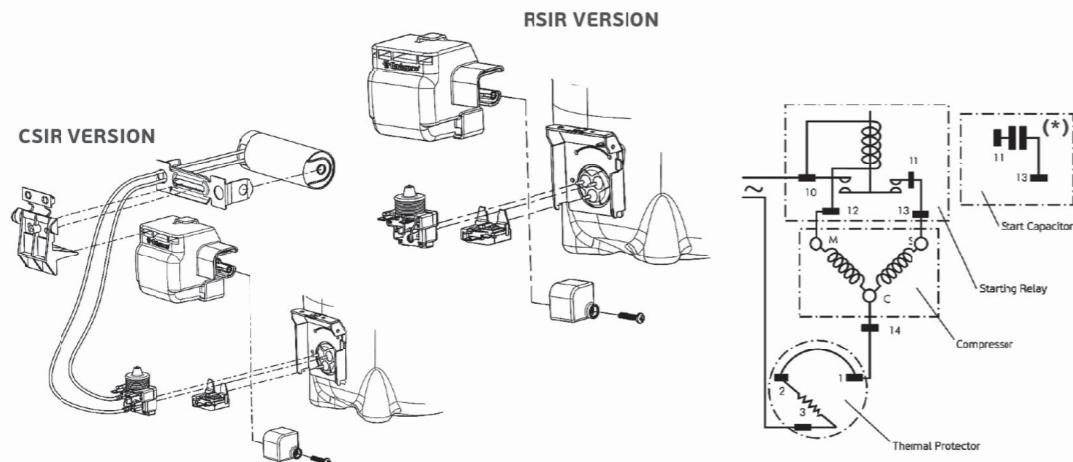


SM08 - F COMPRESSORS

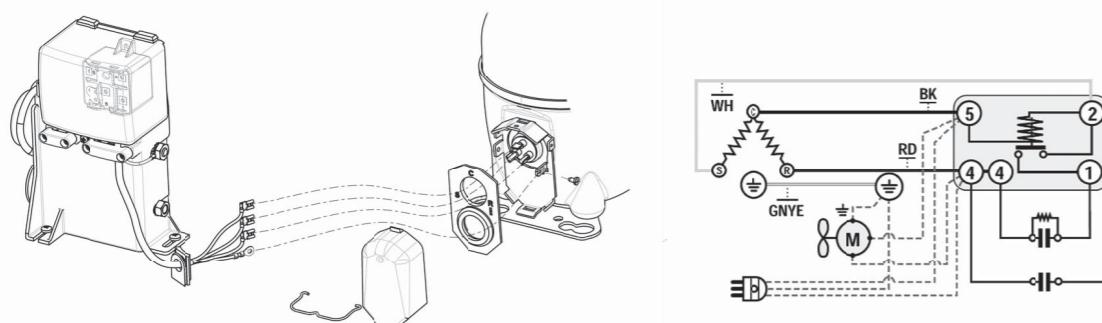


## Wiring Diagrams

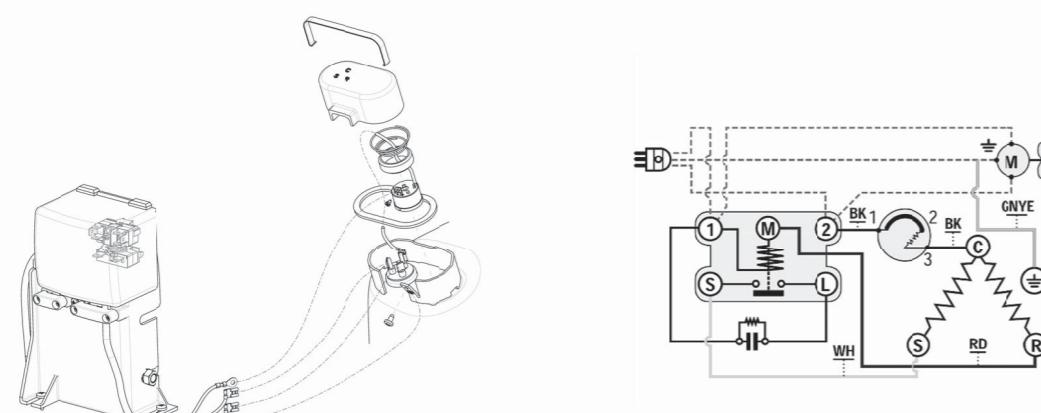
SM09 - EG



SM10 - NE CSR BOX



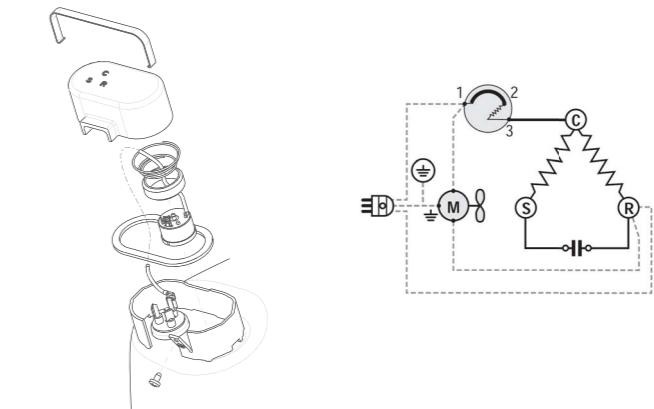
SM14 - NJ CSIR BOX



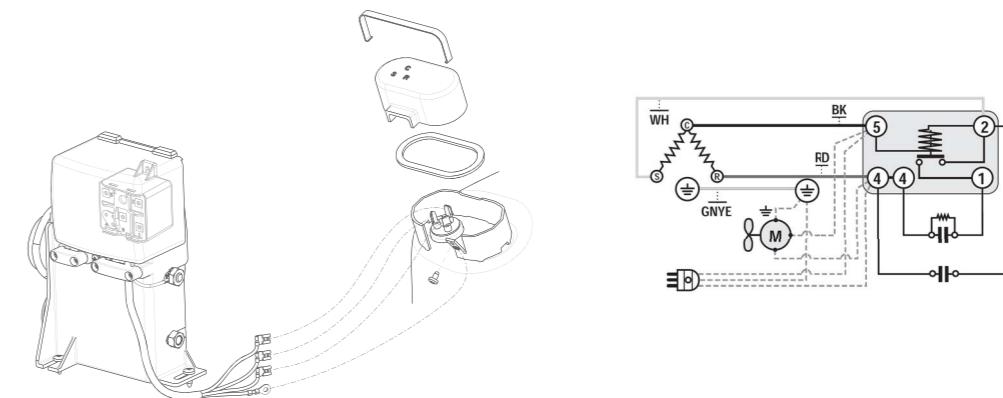
**embraco**  
**Nidec**

## Wiring Diagrams

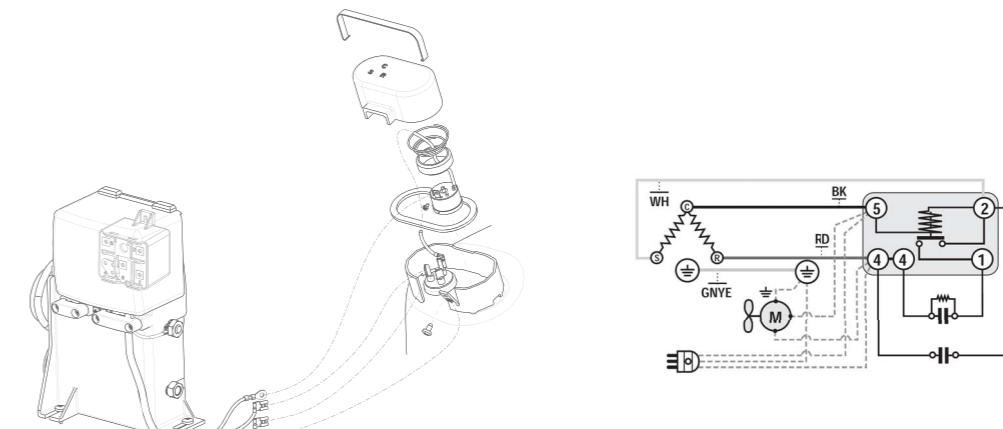
SM15 - NJ PSC



SM16 - NJ SERIES CSR BOX (INTERNAL OVERLOAD PROTECTOR)



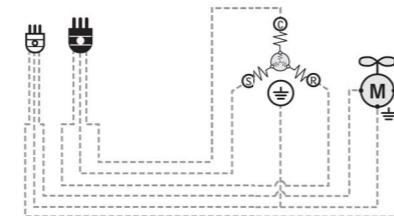
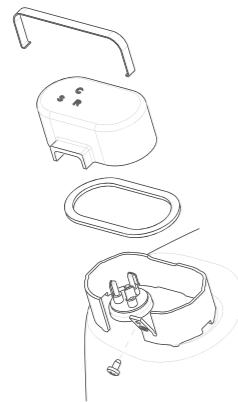
SM17 - NJ CSR BOX (EXTERNAL OVERLOAD PROTECTOR)



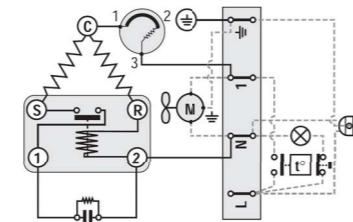
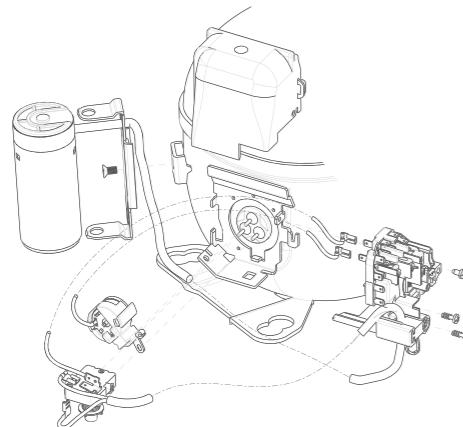
**embraco**  
**Nidec**

## Wiring Diagrams

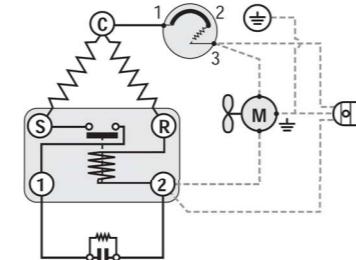
SM18 - NJ SERIES 3- PHASE (INTERNAL OVERLOAD PROTECTOR)



SM19 - NT SERIES CSIR TERMINAL BOARD

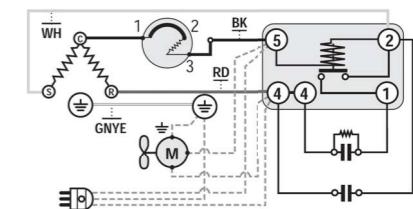
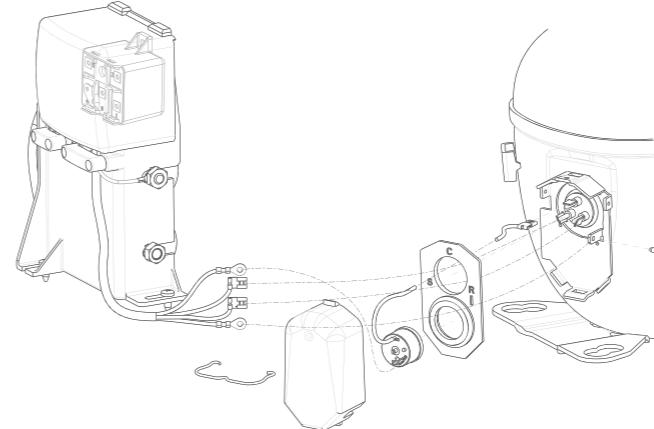


SM20 - NT SERIES CSIR AMERICAN VERSION

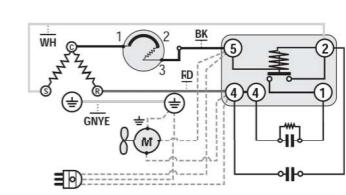
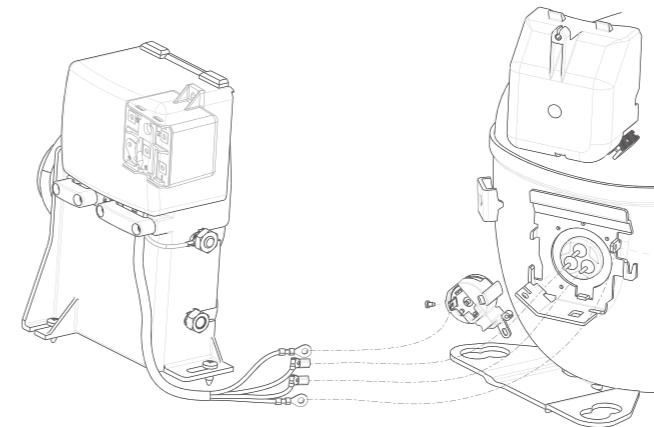


## Wiring Diagrams

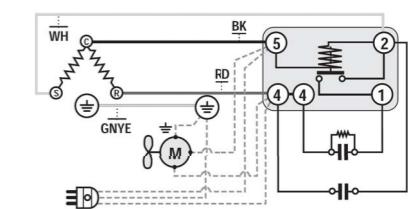
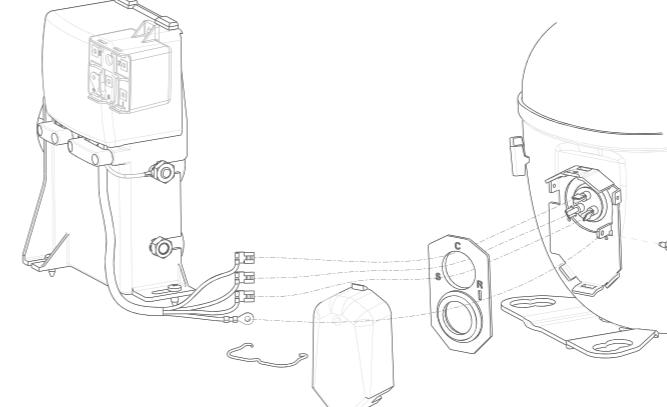
SM21 - NT SERIES CSR BOX



SM23 - NT SERIES CSR BOX

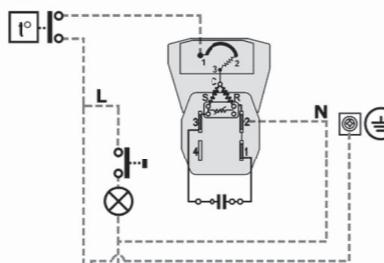
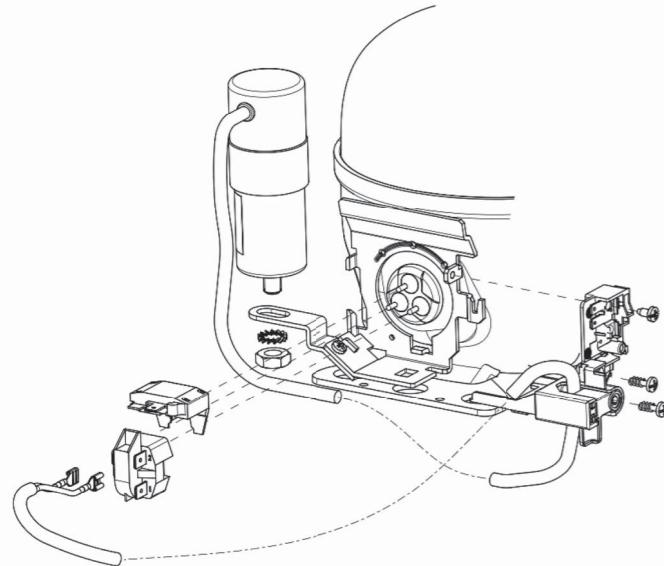


SM26 - NT SERIES CSR BOX (INTERNAL OVERLOAD PROTECTOR)

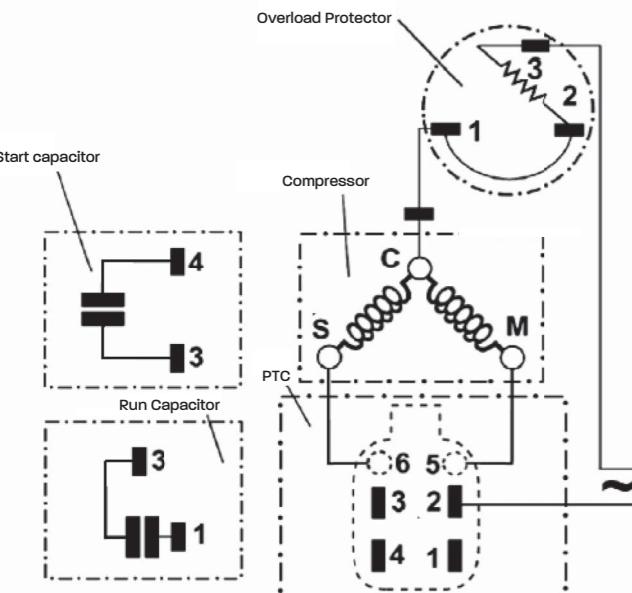


## Wiring Diagrams

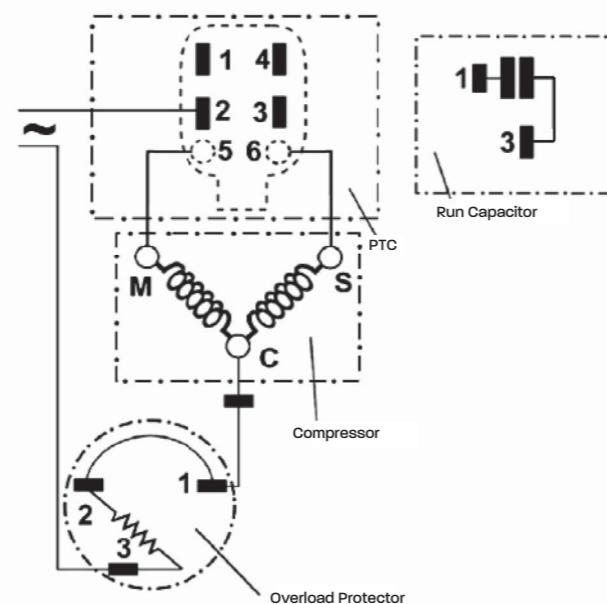
SM32 - EM RSCR PTC &amp; 4TM



SM33 - EM CSCR

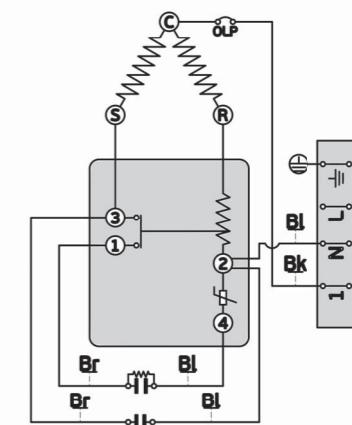
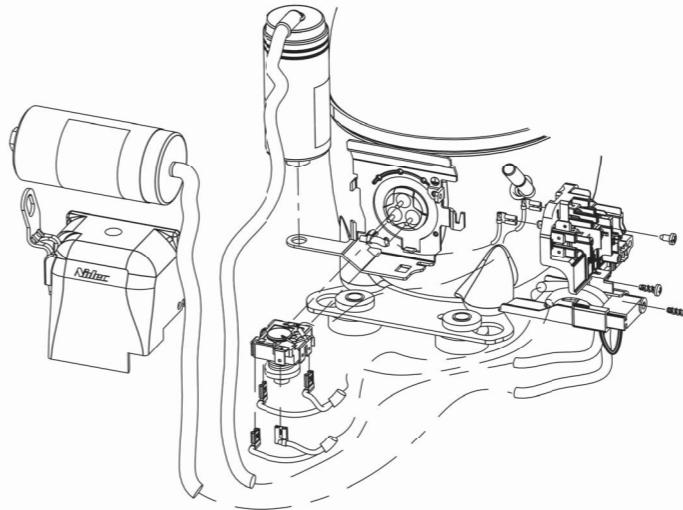


SM34 - EG, F RSCR

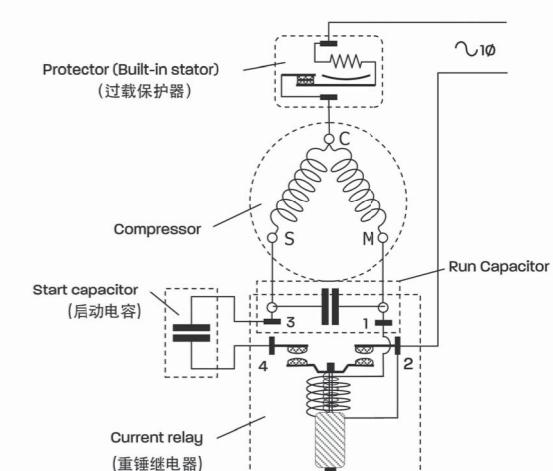
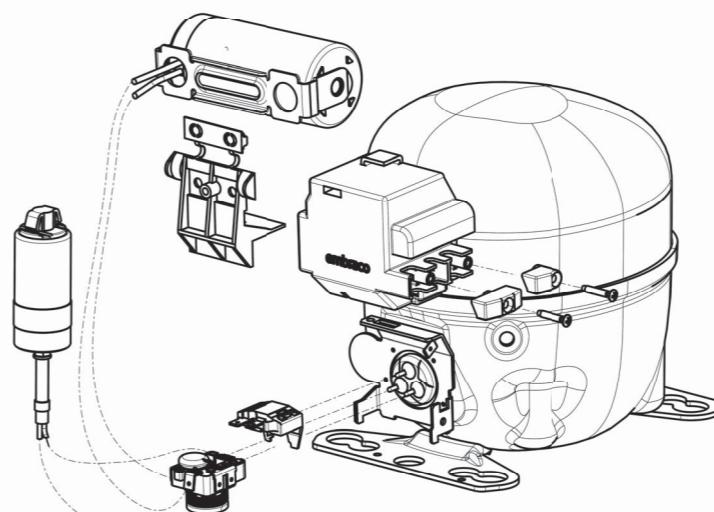


## Wiring Diagrams

SM35 - NEX

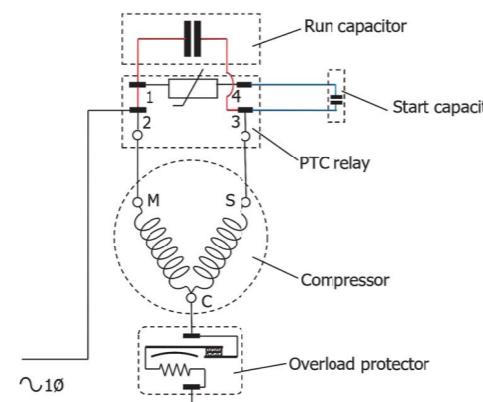
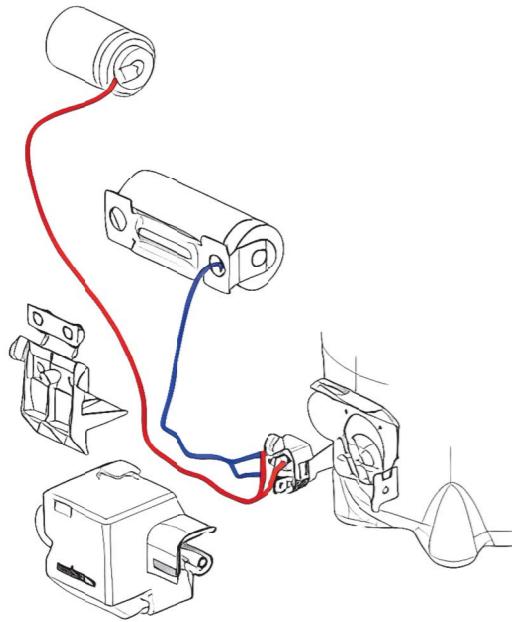


SM36 - EM



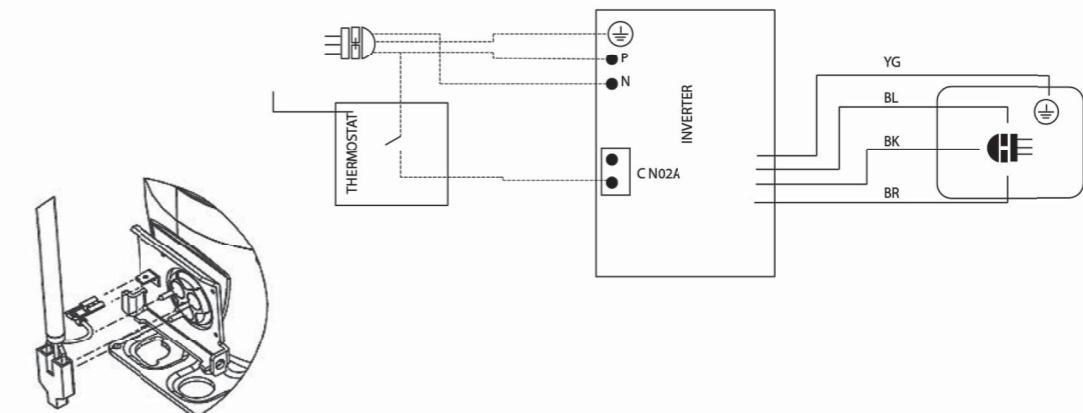
## Wiring Diagrams

F - COMPRESSOR

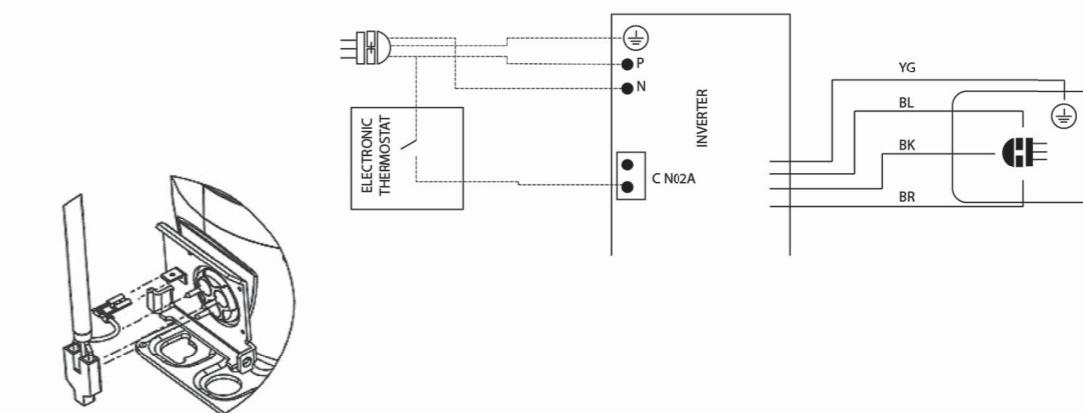


## Wiring Diagrams

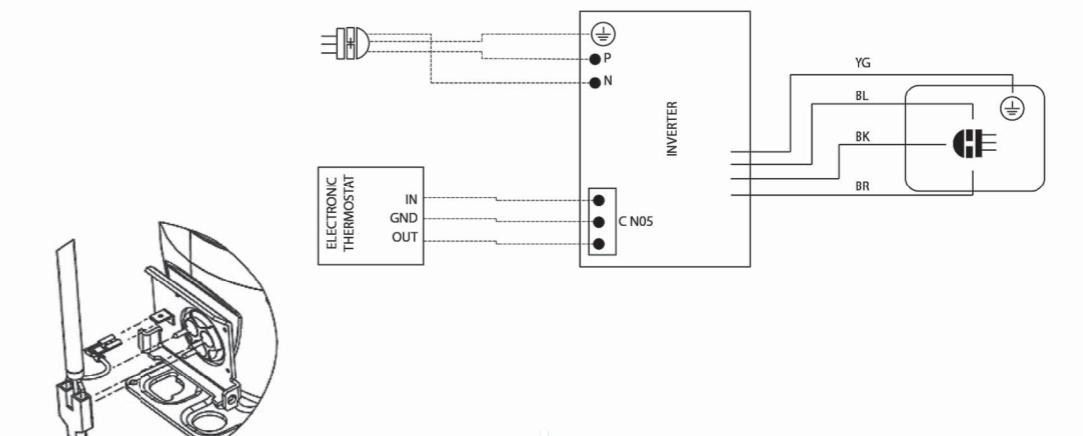
CON01 - VEMY6/VEG (Drop-in)



CON02 - VEM/VEG (Frequency)

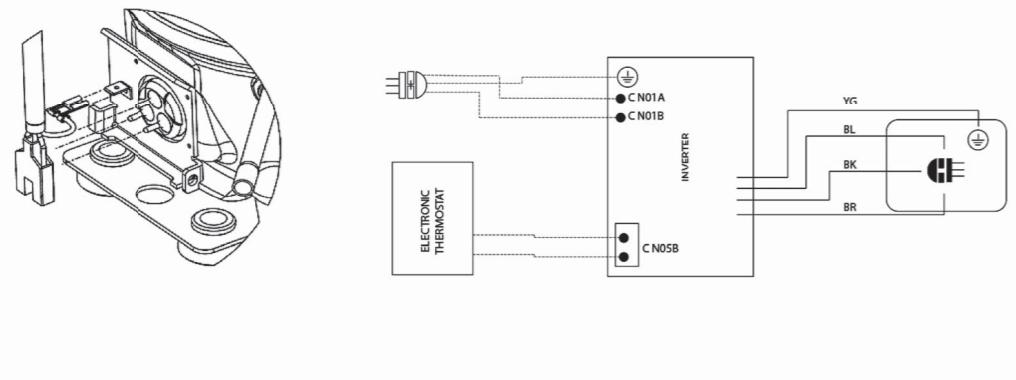


CON03 - VEMY6/VEG (Serial)

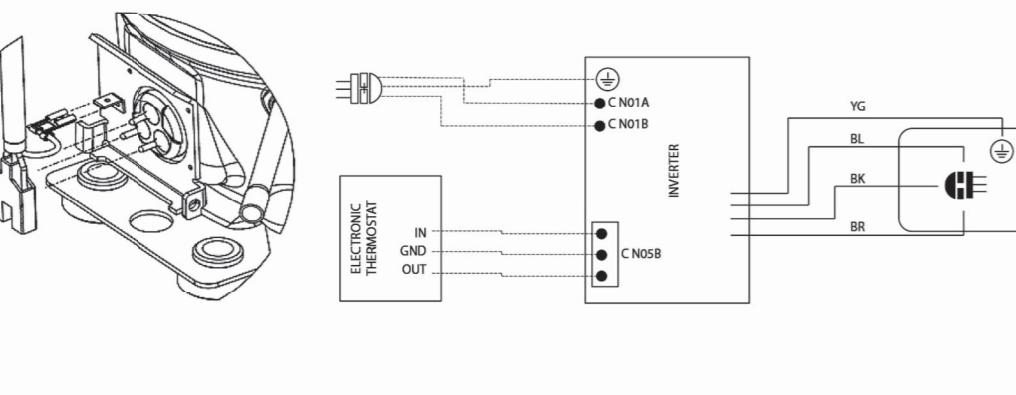


## Wiring Diagrams

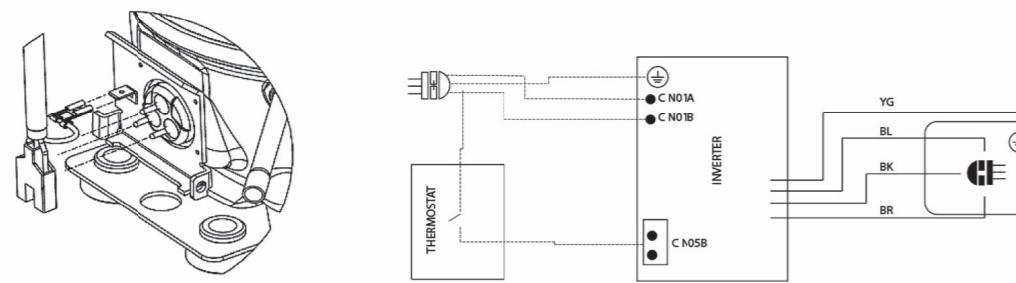
CON04 - VEM/VEH (Frequency)



CON05 - VEM/VEH (Serial)



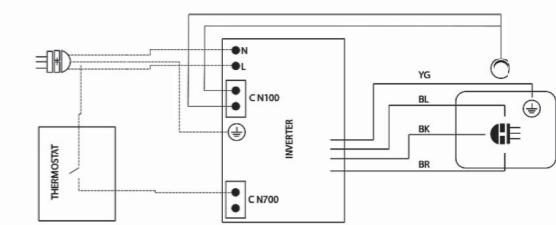
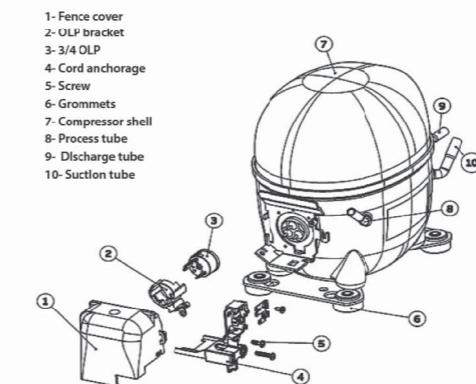
CON06 - VEM/VEH (Drop-in)



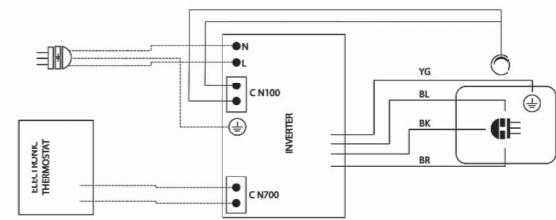
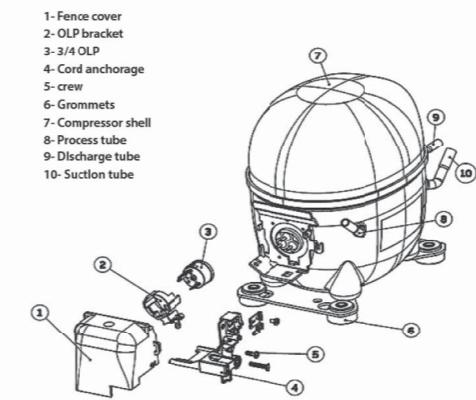
**embraco**  
**Nidec**

## Wiring Diagrams

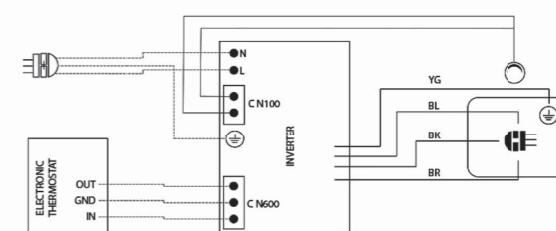
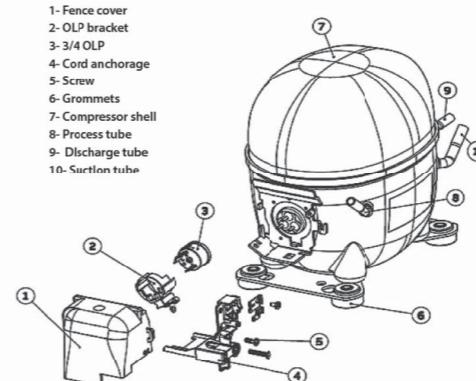
CON07 - VNE (Drop-in)



CON08 - VNE (Frequency)



CON09 - VNE (Serial)

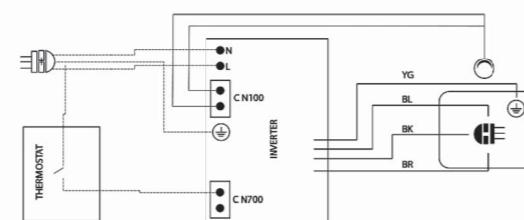
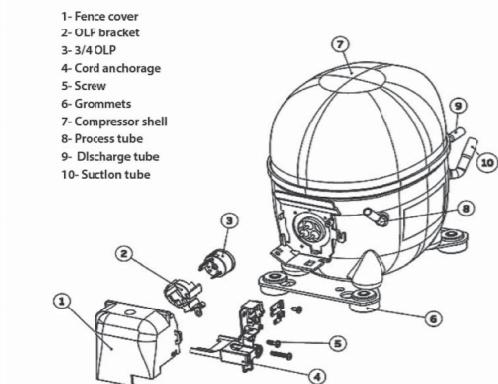


**embraco**  
**Nidec**

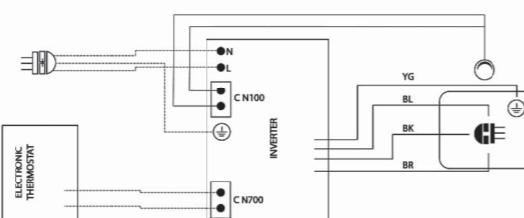
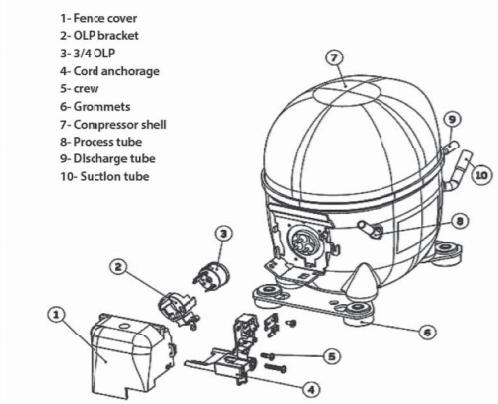
# Recommendations

## Wiring Diagrams

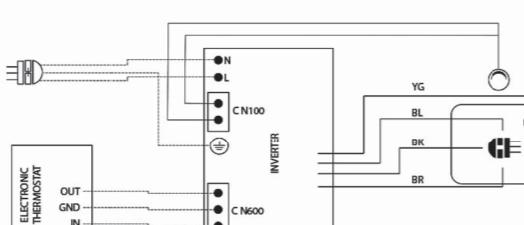
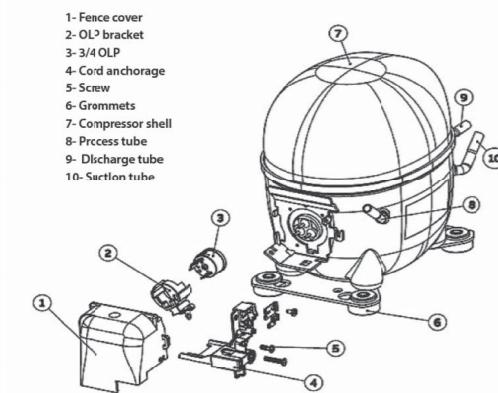
CON07 - VNE (Drop-in)



CON08 - VNE (Frequency)



CON09 - VNE (Serial)



## Electrical Accessories

Before removing the compressor plastic protection cover, check if the compressor is fully disconnected from the power source and if capacitors are applied.



Never operate on any electrical accessory with the compressor connected to the power grid. Working on an electrified compressor can cause severe damages to the technician's health, causing risks of electric shocks or getting burnt.



Start and/or run capacitors must be handled carefully, because, even when disconnected, they can cause electric shocks.

When you need to remove the capacitors, disconnect this components carefully paying attention to the exposed electric terminals. After disconnected, the capacitor must be discharged. Check if the capacitance ranges ( $\mu\text{F}$ ) printed on the label on the capacitors are in accordance with the compressor's technical data. The capacitor's voltage must be the same or higher than the specified value in the compressor's technical data. In case the capacitor or compressor's specification don't match, replace the capacitor.



The application of the wrong capacitor, not specified component, may cause overheating of these components. Overheating may cause fractures on the capacitor which can lead to the leakage of internal content burning the operator.

In the case of removing the electrical components from the compressor's hermetic terminal, first remove the overload protector and the start device (relay or PTC) applying longitudinal force on the terminal pins. Never apply transversal force on the pins of the hermetic terminal.



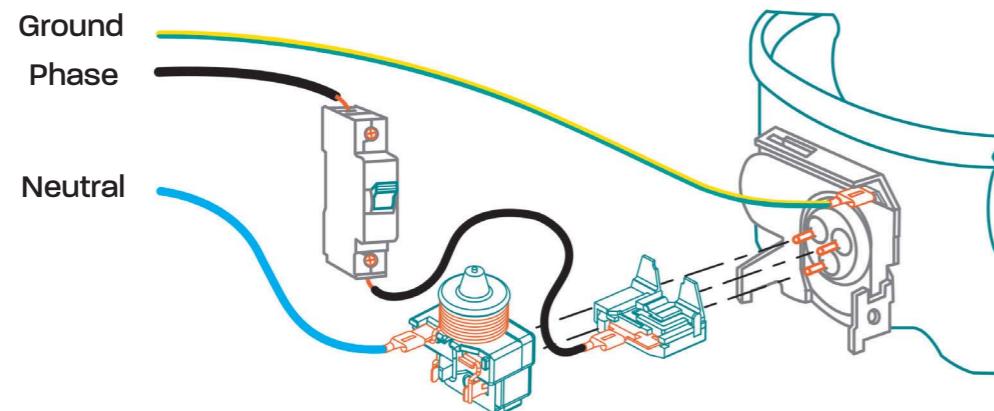
The incorrect removal of these accessories may damage the hermetic terminal on the compressor which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable refrigerant utilization, since associated with an ignition source, creating a risk of and exposed flame with serious risks to the technician's physical integrity.



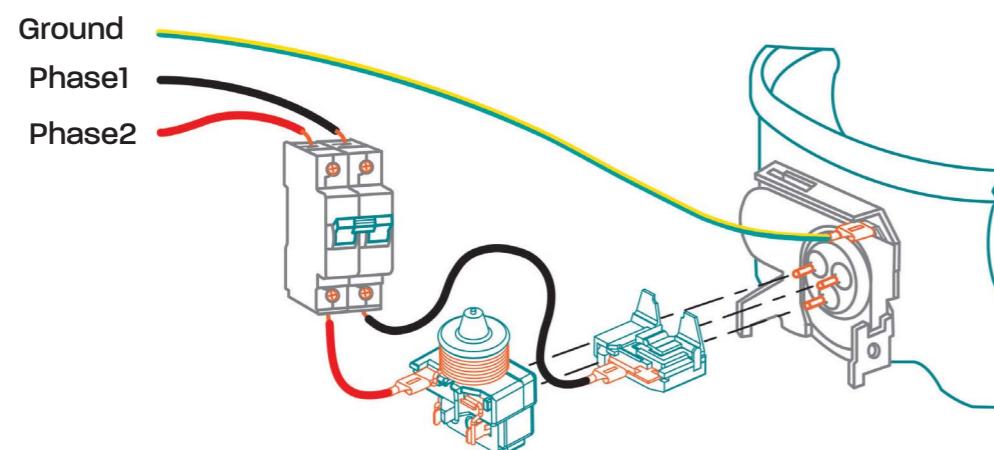
Cross check the code printed on the overload protector, relay or PTC with the compressor's technical data. In case they are different, replace these components for a compliant one. Universal accessories don't exist, you must always use components specified on the compressor's technical data.

The use of incorrect electrical components, (overload protector, starting device) can cause a short circuit in the region the hermetic terminal of the compressor, which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable refrigerant utilization, since associated with an ignition source, creating a risk of and exposed flame with serious risks to the technician's physical integrity.

## Electrical Installation



On single-phase installations, the phase wire must be protected by a circuit breaker and connected to the overload protector. The Neutral wire must be connected to the start device (Relay or PTC). The system must be grounded.



On two-phase installations, the use of a bipolar circuit breaker is mandatory, because in case of a short circuit, both phases will be protected. The system must be grounded.



When this bipolar starter isn't applied, the system is exposed to a short circuit in the region of the hermetic terminal of the compressor, which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable refrigerant utilization, since associated with an ignition source, creating a risk of an exposed flame with serious risks to the technician's physical integrity.

The usage of a not grounded system can generate severe risk of an electric shock on the technician.

## Compressor

If the compressor's replacement is necessary, be aware to these points below:

- I. Check if the compressor is disconnected from the power grid.



You must never handle any electrical accessory with the compressor connected to the power grid. This can prevent several health risks to the technicians, such as electric shocks or getting burnt.

- II. You must never remove the compressor without first removing all the refrigerant inside the system. You can use refrigerant recovery. In the case of replacing compressors with flammable refrigerants, such as R290 or R600a, make sure to remove the whole charge from the system.



The presence of flammable fluid residues can expose the technician to risks.

- III. You must always use a pipe cutter to disconnect the pipes from the compressor. Under no circumstances, use the flame torch to disconnect the compressor tubes.



The use of a torch to disconnect the compressor from the system operating with flammable refrigerant can cause fire and release of toxic vapors.

- IV. In case of compressor failure and / or internal contamination of the system, clean the refrigeration circuit with a suitable solvent, following the technical guidelines of the solvent manufacturer.



Failure to comply with the solvent manufacturer's technical guidelines may expose the technician to risk of fire or intoxication.

- V. Before turning the compressor on:  
- Check if the voltage specified on the compressor label in accordance with the power grid and system electrical installation, following item I.1.



The application of a compressor with a wrong voltage can cause a short circuit in the region of the hermetic terminal of the compressor, which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable refrigerant utilization, since associated with an ignition source, creating a risk of an exposed flame with serious risks to the technician's physical integrity.

- Check if the electrical protection plastic cover is properly inserted.



Failure to use or improperly fix the plastic cover on the electrical terminal may expose the technician to risk of electric shock and fire.

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