

COMPRESSORS LINE

Asia Pacific Catalog



embraco
Nidec

S U M M A R Y

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01

ABOUT NIDEC GLOBAL APPLIANCE



A global partner for home and commercial appliances industries

With over 15,000 employees across 9 countries, Nidec Global Appliance manufactures and commercializes products for home and commercial applications, including refrigeration solutions, motors for washing machines, dryers and dishwashers, as well as components for heating, ventilation and air-conditioning systems (HVAC). The division is part of Nidec Corporation, a global leader in motors and components for a wide variety of industries, with headquarters in Japan.

The business division manufactures and commercializes **Embraco's cooling systems and compressors for a variety of refrigeration equipment.**



Your **global partner** in refrigeration since 1971



Home Appliances

Products for residential freezers, refrigerators and mini-fridges.

Commercial Appliances

Compressors and cooling solutions for commercial applications, such as bottle coolers, chest freezers, reach-ins, ice machines, medical refrigerators etc.

Aftermarket

Parts distribution, replacement and retail focused on retail owners, installers and contractors.

Since 1971, EMBRACO provides cooling solutions for home and commercial applications attending customers' most challenging demands. The portfolio brand has been counting on a broad, efficient and competitive portfolio for food service, food retail, merchandisers and special applications. A pioneer in fostering the early development of variable speed and the use of natural refrigerants in cooling solutions, Embraco continues to deliver innovation that exceeds the market's most challenging demands, anticipating trends.



DIGITAL **TOOLS**



embraco
toolboxapp



Available in all countries and in more than 10 languages, the Embraco Toolbox App has 7 functionalities which help refrigeration professionals on their daily routine. Download the App now for Android or 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 cooling system at Embraco's official portfolio platform. Access: products.embraco.com

Access: products.embraco.com



REFRIGERATION CLUB

Exclusive content for refrigeration professionals in a global channel. Stay up to date and join us at: www.refrigerationclub.com

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02 OUR PRODUCTS

Compressor families and their main applications:

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



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 COMPRESSORS



VEM: Refrigerators and Freezers, Wine cooler, Beverage coolers, Chest freezer, Medical cooler. Up to 1/4 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

03

NOMENCLATURE

BRAZIL LINE

EM

F

EMIS70HHR

COMPRESSOR FAMILY
EM

PRODUCT GENERATION

- Standard Efficiency
- I - 1ª Generation
- T - 2ª Generation
- U - 3ª Generation
- Y - 4ª Generation
- Z - 5ª Generation
- X - 6ª 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 1ª generation (LBP)
- S** - Efficiency improved 2ª generation (LBP)
- H** - Standard efficiency (L/M/HBP)
- D** - Standard efficiency (HBP)
- B** - Standard efficiency (M/HBP)
- L** - Efficiency improved 2ª generation (LBP)

ELECTRICAL COMPONENT

P - PTC + cap. func. (optional)	LST
R Relay	
C - PTC + cap. func. (mandatory)	
<hr/>	
X - Relay + cap. part. (mandatory)	HST

FFUS130HAX

COMPRESSOR FAMILY
F

ELECTRICAL SYSTEM

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

PRODUCT GENERATION

- Standard efficiency
- I - Improved efficiency
1st generation
- U - Improved efficiency
2nd 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 - L/MBP
- B - L/M/HBP

STARTING TORQUE

- K - LST (Low starting torque)
- X - HST (High starting torque)

CHINA LINE

EM

EMIS70HHR

COMPRESSOR FAMILY

EM

PRODUCT GENERATION

- Standard Efficiency
- I - 1ª Generation
- T - 2ª Generation
- U - 3ª Generation
- Y - 4ª Generation
- Z - 5ª Generation
- X - 6ª Generation

MECHANICAL KIT

- S - Standard mechanical kit
- Not standard

COMPRESSOR CAPACITY

Em Btu/h – 60Hz – ASHRAE
Checkpoint divided by 10

REFRIGERANT CODE

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

EFFICIENCY LEVEL

- N - Standard efficiency (LBP)
- J - Intermediate efficiency (LBP)
- E - Efficiency improved 1ª generation (LBP)
- S - Efficiency improved 2ª generation (LBP)
- H - Standard efficiency (L/M/HBP)
- D - Standard efficiency (HBP)
- B - Standard efficiency (M/HBP)
- L - Efficiency improved 2ª generation (LBP)

ELECTRICAL COMPONENT

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

EUROPE LINE

NE / NT / NJ

NTU6224ZV

COMPRESSOR FAMILY

NE / NT / NJ

PRODUCT GENERATION

- - 1^a Generation
- K - 2^a Generation
- U - 3^a Generation
- X - 4^a Generation
- D - Next 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
- E R22/R422D
- GK R404A
- Y R600a

IPR VALVE - AVAILABLE FOR SOME MODELS

Available for some models

VARIABLE

SPEED

LINE

VEG / VEM

VEGT8HB

TECHNOLOGY

VARIABLE
SPEED
COMPRESSORS

COMPRESSOR FAMILY

VEG

PRODUCT GENERATION

- Y - 1^a Generation
- T - 2^a Generation
- Z - 3^a Generation
- X - 4^a Generation
- C - 5^a Generation
- D - 6^a Generation

DISPLACEMENT

cm³

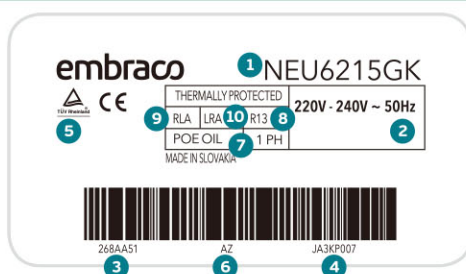
REFRIGERANT CODE

- H - R134a
- C - R600a
- U - R290
- L - 1234yf

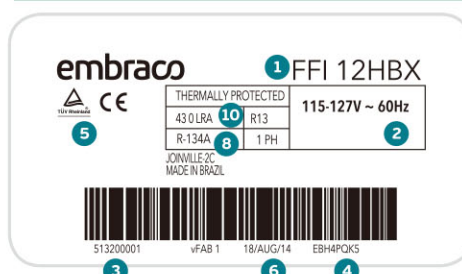
EVAPORATION RANGE

- B - Extended evaporation range until 23 F (L/MBP)
- [] - Standard evaporation range

NE / NT / NJ / VNE



EM / EG / F / VEM / VEG



LEGENDA

- | | |
|-----------------------------|--|
| 1 Compressor model | 6 Production Date |
| 2 Voltage | 7 Oil Type and Quantity |
| 3 SKU code (BOM) | 8 Refrigerant Code |
| 4 Series number | 9 Annual Consumption (nominal current, when applicable) |
| 5 Institute approval | 10 Locked Rotor current (LRA, when applicable) |

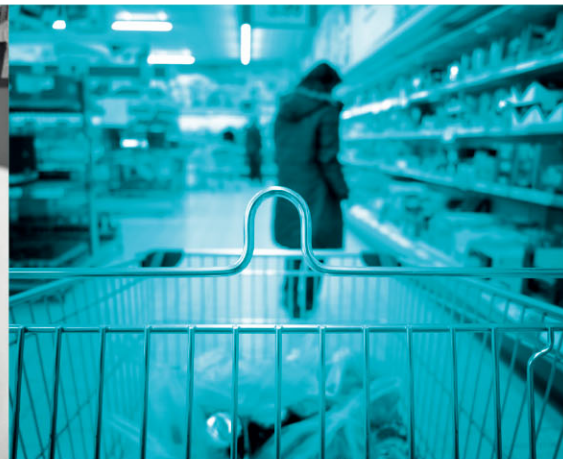
04 APPLICATION GUIDE

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



SUPERMARKARKETS



PROFESSIONAL KITCHENS

HOUSEHOLD REFRIGERATION

MERCHANDISERS

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)	R-134a (Refrigerant)	R290 (Refrigerant)
200 TO 290	EMIG60HER	EM2X3113U
300 TO 360	EGAS80HLR / FFUS80HAK	EM2X3117U
380 TO 420	EGAS100HLR / FFUS100HAK	EM2X3121U
430 TO 500	FFU130HAX / FFUS130HAX	EM2X3125U
500 TO 600	FFU160HAX	EMX3134U

GLASS DOOR UPRIGHT FREEZER



SYSTEM	CHARACTERISTICS
EVAPORATION TEMPERATURE	-30 °C
INTERNAL CABINET TEMPERATURE	-18 °C
AMBIENT TEMPERATURE	35 °C
RELATIVE HUMIDITY	40-75 %
APPLICATION	LBP / HST

COMPRESSOR 50Hz		
Size (Liters)	R290 (Refrigerant)	R404A (Refrigerant)
200 TO 290	NEU2140U	NEU2140GK
300 TO 400	EHU2155U	NEU2155GK
400 TO 500	NEU2168U	NEU2168GK
500 TO 600	NEU2178U	NEU2178GK

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 (Meters)	R-134a (Refrigerant)	R404A (Refrigerant)
1,5	NT6217Z	NEU6215GK
2,25	-	NT6222GK / NT6220GK

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

COMPRESSOR 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

COMPRESSOR 50Hz	
Size (Liters)	R-134a (Refrigerant)
1	EM160HER
2	FFUS100HAK
3	FFUS130HAX / FFU130HAK

UPRIGHT GLASS DOOR BOTTLE COOLER



SYSTEM	CHARACTERISTICS
EVAPORATION TEMPERATURE	-10 °C
INTERNAL CABINET TEMPERATURE	5 °C
AMBIENT TEMPERATURE	40,5 °C
RELATIVE HUMIDITY	40-75 %
APPLICATION	MBP / LST

COMPRESSOR 50Hz		
Size (Liters)	R-134a (Refrigerant)	R-290
100	EM160HER	EM2X3113U
300	FFUS70HAK	EM2X3117U
400	FFUS100HAK	EM2X3121U
500 TO 600	FFUS130HAX	EM2X3125U
1000	FFU160HAX	EMX3134U

VENDING MACHINES



SYSTEM	CHARACTERISTICS
EVAPORATION TEMPERATURE	-15 °C
INTERNAL CABINET TEMPERATURE	-4 °C
AMBIENT TEMPERATURE	32 °C
RELATIVE HUMIDITY	40-75 %
APPLICATION	L / MBP / LST

COMPRESSOR 50Hz		
Size (Liters)	R-134a (Refrigerant)	R-290
200	EM160HER	EM2X3113U
300	FFUS70HAK	EM2X3117U
400 TO 500	FFI10HBK	EM2X3121U
500 TO 600	FFI12HBK	EM2X3125U

SUPERMARKETS

REACH INS WITH DOORS



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

COMPRESSOR 50Hz		
Size (Liters)	R-134a (Refrigerant)	R290
350 TO 500	-	EM2X3125U
500 TO 700	NEU6212GK	EHU6214U
700 TO 900	NEU6215GK	NEU6217U
900 TO 1000	NT6222GK	NT6222U

FROZEN FOOD ISLANDS



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

COMPRESSOR 50Hz			
Length (m)	R404A (Refrigerant)	R290 (Refrigerant)	VCC R290
1.5m	NEU2155GK	EHU2155U	FMFT411U
1.8m	NEU2168GK	EHU2155U	FMFT413U
2.1m	NEU2168GK	NEU2168U	FMFT413U
2.5m	NEU2178GK	NEU2178U	FMFT413U

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

COMPRESSOR 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

COMPRESSOR 50Hz			
Size (Liters)	R-134a (Refrigerant)	R404A (Refrigerant)	R290 (Refrigerant)
<120	FFUS100HAK	-	EM2X3113U
120 - 175	FFI12HBX	-	EM2X3117U
175 - 275	FFU160HAX	-	EM2X3121U
275 - 350	NEU2140Z	NEU2140GK	-
350 - 500	-	NEU2155GK / NEK2168GK	-
500 - 700	-	NEU2178GK / NT2178GK	-

REACH IN FREEZER AND REFRIGERATOR



SYSTEM	CHARACTERISTICS
EVAPORATION TEMPERATURE	-30 °C
INTERNAL CABINET TEMPERATURE	-18 °C
AMBIENT TEMPERATURE	32 °C
RELATIVE HUMIDITY	40-70 %
APPLICATION	LBP

COMPRESSOR 50Hz			
Size (Liters)	R-134a (Refrigerant)	R404A (Refrigerant)	R290 (Refrigerant)
<350	FFUS100HAK		EM2X3121U
350 - 550	FFI12HBX		EM2X3125U
500 - 650	FFU160HAX		EMX3134U
650 - 900		NEU2140GK	EMX3140U
900 - 1200		NEU2155GK / NEU2168GK	EHU2155U / NEU2168U
1200 - 1500		NEU2178GK	NEU2178U
		NT2180GK	NT2180U
		NT2212GK	NT2210U

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

COMPRESSOR 50Hz			
Size (Liters)	R-134a (Refrigerant)	R404A (Refrigerant)	R290
<350	FFU70HAK	-	EM2X3113U
350 - 550	FFUS80HAK	-	EM2X3117U
500 - 650	FFUS100HAK	-	EM2X3121U
650 - 900	FFI12HBX	-	EM2X3125U
900 - 1200	FFU160HAX	-	EMX3134U
1200 - 1500	NEU6215Z / NEK6214Z / NT6217Z	NEU6215GK	EMX3140U

FAST FREEZER

SYSTEM	CHARACTERISTICS
EVAPORATION TEMPERATURE	-30 °C
INTERNAL CABINET TEMPERATURE	-18 °C
AMBIENT TEMPERATURE	32 °C
RELATIVE HUMIDITY	40-70 %
APPLICATION	LBP

COMPRESSOR 60Hz	
Size (Liters)	R404A
10	NEU2178GK & NT2178GK
15	NT2180GK
20	NT2192GK & NJ2192GK
25	NJ2212GK & NJ2212GS

HOUSEHOLD APPLICATIONS

HOUSEHOLD REFRIGERATOR 1 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

HOUSEHOLD REFRIGERATOR 1 DOOR		
COMPRESSOR 50Hz		
Size (Liters)	R-134a (Refrigerant)	R600A (Refrigerant)
50-100	EMIS30HHR	-
101-200	EMI45HER	EMU40CLP
201-300	EMI60HER	EMU60CLP
301-350	EMI70HER/EMIS70HHR	EMYe70CLP

HOUSEHOLD REFRIGERATOR 2 DOORS



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

HOUSEHOLD REFRIGERATOR 2 DOORS		
COMPRESSOR 50Hz		
Size (Liters)	R-134a (Refrigerant)	R600A (Refrigerant)
250 - 310	EMI60HER	EMU60CLP
311 - 370	EMI70HER/EMI70HHR	EMYe70CLP
371 - 510	EGAS80HLR	EGAS80CLP / EM2U80CLP
511 - 580	FFUS100HAK / EGAS100HLR	EGAS100CLP

05

TECHNICAL INFORMATION

MOTOR TORQUE

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

APPLICATIONS

		EVAPORATION TEMPERATURE °C	APPLICATIONS
<i>LBP</i>	LOW BACK PRESSURE	Between -35 and -10	household Refrigerators, frozen food islands, ice cream freezers
<i>MBP</i>	MEDIUM BACK PRESSURE	Between -15 and 0	Displays cases, reach in coolers, bottle coolers
<i>HBP</i>	HIGH BACK PRESSURE	Between 0 and 15	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 °C	AMBIENT TEMPERATURE °C / °F
<i>ASHRAE</i>	LBP	-23.3 / 10	54.4 / 130	32.2 / 90	22.2	32.2 / 90
	M/HBP	7.2 / 45	54.4 / 130	35 / 95	8.3	35 / 95
<i>ARI</i>	LBP	-23.3 / -9.94	48.9 / 120.02	4.4 / 39.92	0	35 / 95
	MBP	-6.7 / 19.94	48.9 / 120.02	4.4 / 39.92	0	35 / 95
	HBP	7.2 / 44.96	54.4 / 129.92	18.3 / 64.94	8.3	35 / 95

COOLING TYPE

<i>STATIC</i>	Compressor approved for static cooling not requiring a fan motor on the condenser side.
<i>FAN</i>	Compressor approved for fan cooling requiring forced cooling with a fan motor on the condenser side.
<i>STATIC/FAN (S/F)</i>	Compressor approved for static and fan cooling which may or may not apply a fan motor on the condenser side.

BLENDERS APPROVED BY EMBRACO REPLACING R12

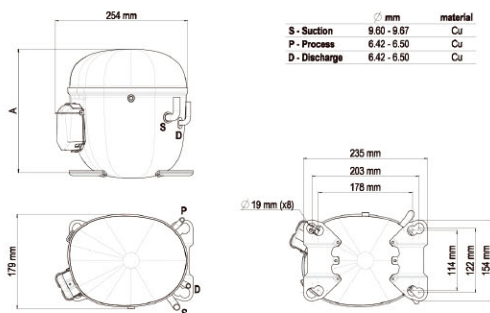
REFRIGERANTES	
ASHRAE	Nome comercial
R-401a	SUVA® MP39
R-401b	SUVA® MP66
R-409b	FORANE® FX56
R-413a	ISCEON 49

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.

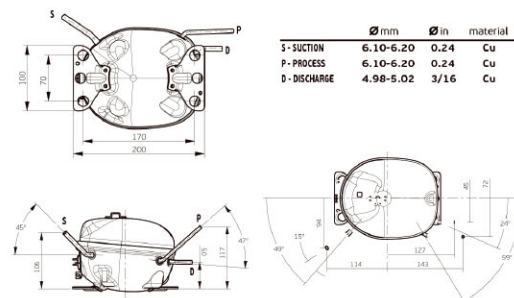
UNITS CONVERSION TABLE			
	1 BTU	1 W	1 kcal/h
1 BTU	-	0,293	0,252
1 W	3,412	-	0,86
1 kcal/h	3,966	1,162	-

EXTERNAL VIEWS

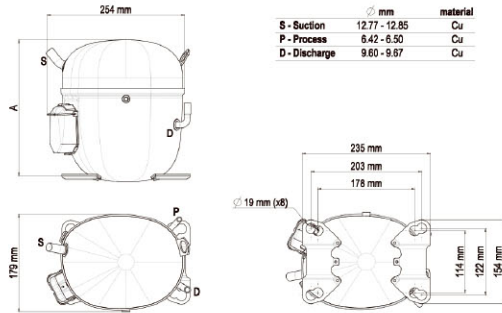
DWG17 - NT SERIES



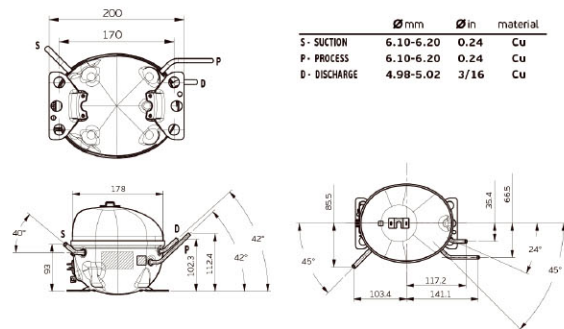
DWG22 - VES SERIES



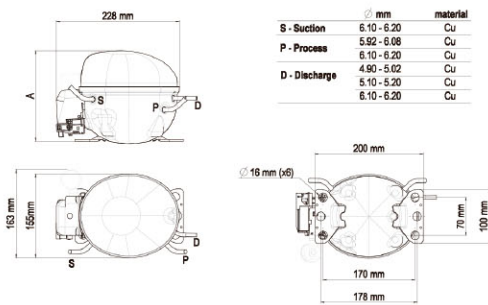
DWG19 - NTU SERIES



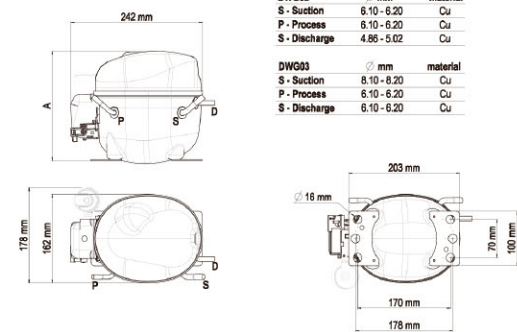
DWG23 - VEM SERIES



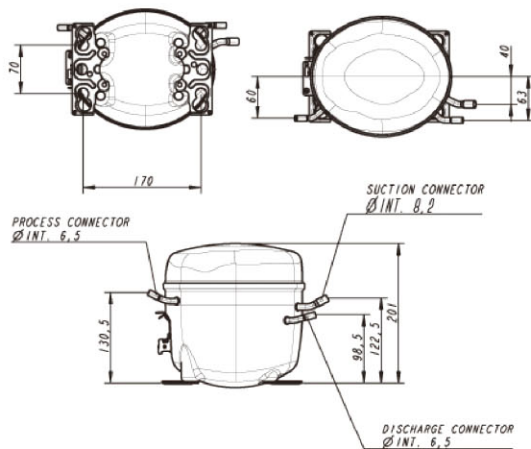
DWG01 - EM Series European Base Plate



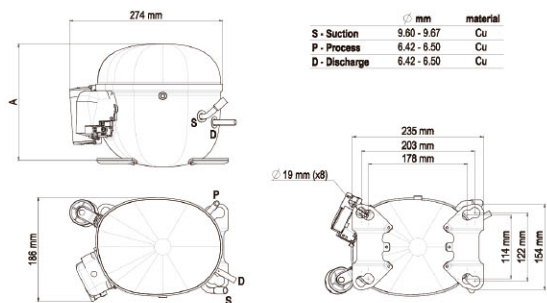
DWG02/03 - NB / NE SERIES European Base Plate



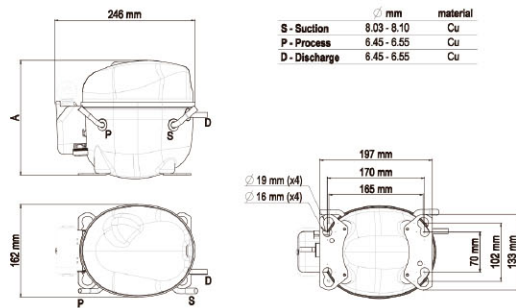
DWG09 - EG / F / VEG SERIES



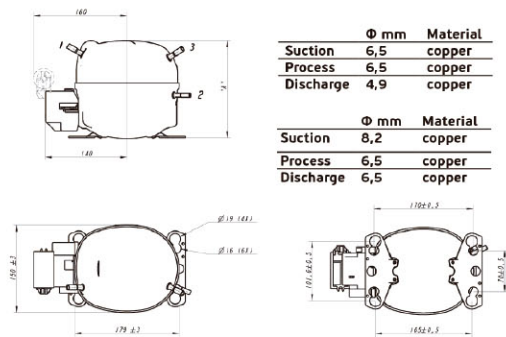
DWG15 - NT SERIES



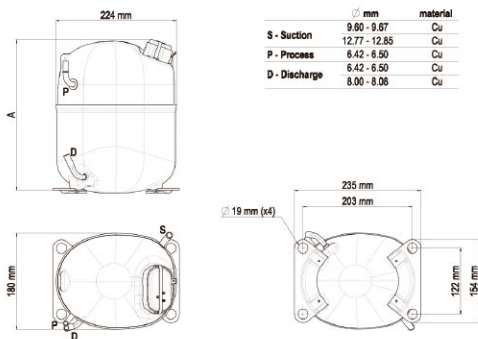
DWG04 - NE / VNE SERIES Universal Base Plate



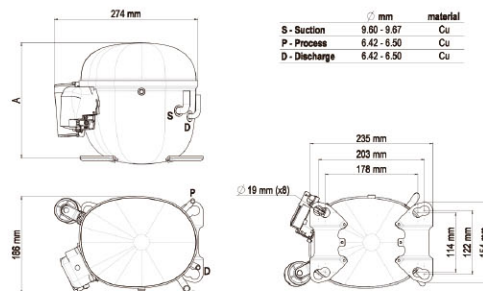
DWG10 - EM SERIES Universal Base Plate



DWG14 - NJ SERIES



DWG16 - NT SERIES



COMPRESSOR PACKAGING

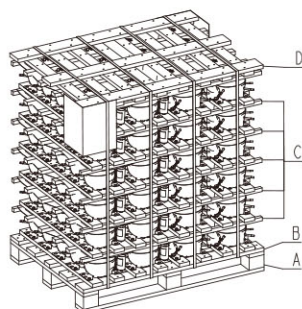
MULTIPLE PACKAGING

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

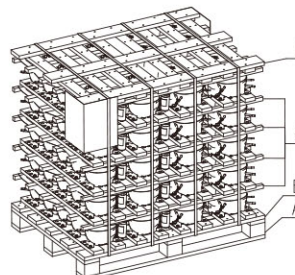
Pallet packages composition

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

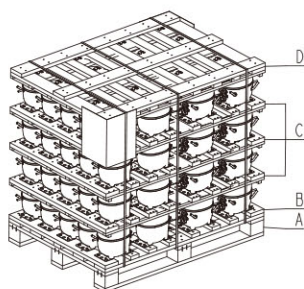
"EM" (120 compressors)



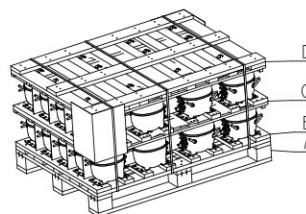
"EM" (100/88 compressors)



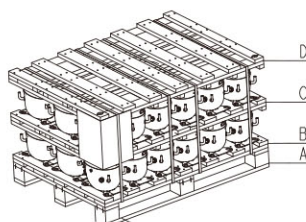
"NE" (80/74 compressors)



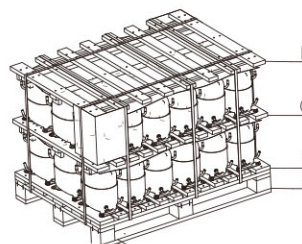
"NE" (40/37/28 compressors)



"NT" (36/24 compressors)



"NJ" (36/28 compressors)



Characteristics of multiple wooden packaging

SERIES	QUANTITY PER PALLET	CODE	PACKAGING TYPE	REFERENCE	ELECTRICAL COMPONENTS
EM	120	S	6 layers of 20 compressors	Figure 8.1.1.a	NOT ASSEMBLED
EM	100	V/G	5 layers of 20 compressors	Figure 8.1.1.b	ASSEMBLED
EM	100	R	5 layers of 20 compressors	Figure 8.1.1.b	NOT ASSEMBLED
EM	88	W	2 layers of 14 compressors; 3 layers of 20 compressors	Figure 8.1.1.b	ASSEMBLED
NE	80	M	4 layers of 20 compressors	Figure 8.1.1.c	NOT ASSEMBLED
NE	74	O	1 layer of 14 compressors; 3 layers of 20 compressors	Figure 8.1.1.c	ASSEMBLED
NE	40	N	2 layers of 20 compressors	Figure 8.1.1.d	NOT ASSEMBLED
NE	37	Q	1 layer of 17 compressors; 1 layer of 20 compressors	Figure 8.1.1.d	ASSEMBLED
NE	28	H	2 layers of 14 compressors	Figure 8.1.1.d	ASSEMBLED
NT	36	C	2 layers of 18 compressors	Figure 8.1.1.e	NOT ASSEMBLED
NT	24	Z	2 layers of 12 compressors	Figure 8.1.1.e	ASSEMBLED
NJ	36	C	2 layers of 18 compressors	Figure 8.1.1.f	NOT ASSEMBLED
NJ	28	Y	2 layers of 14 compressors	Figure 8.1.1.f	ASSEMBLED

SINGLE PACKAGING

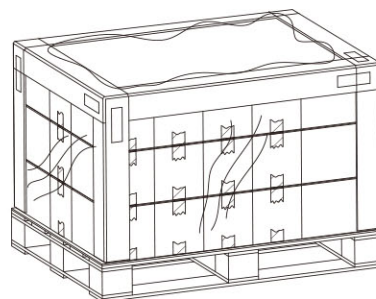
This type of package consists of a carton box and an internal separator to prevent any compressor movement. The electrical components and accessories are included in the package (assembled or attached).

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
EM	70	A	5 layers of 14 compressors	ASSEMBLED	
EM	56	J	4 layers of 14 compressors	ASSEMBLED	
NE	56	A	4 layers of 14 compressors	NOT ASSEMBLED / ASSEMBLED	
NE	56	J	4 layers of 14 compressors	ASSEMBLED	
NE	44	F	4 layers of 11 compressors	NOT ASSEMBLED / ASSEMBLED	CSR electrical box included
NT	44	A	4 layers of 11 compressors	NOT ASSEMBLED / ASSEMBLED	
NT	44	F	4 layers of 11 compressors	NOT ASSEMBLED / ASSEMBLED	CSR electrical box included
NJ	33	A	3 layers of 11 compressors	NOT ASSEMBLED	
NJ	33	F	3 layers of 11 compressors	ASSEMBLED	CSR electrical box included

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)

COMPRESSOR IDENTIFICATION MARKS

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

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

Compressor identification label for multiple packaging

<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">BAR CODE</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">MATERIAL</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">MODEL</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">VOLTAGE 1 FREQUENCY 1</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">REFRIGERANT</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">VOLTAGE 1 FREQUENCY 1</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">BASE QUANTITY</div> </div> <div style="border: 1px solid black; padding: 2px; width: 60%; height: 40px; margin-top: 5px;">BAR CODE</div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">BAR CODE QUANTITY</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">BAR CODE CUSTOMER IC</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">PACKAGING SERIAL NUMBER</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">CUSTOMER INTERNAL CODE</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px; width: 60%;">MATERIAL 1</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">BAR CODE 2</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">MODEL 3</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">VOLTAGE 1 FREQUENCY 1 4</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">REFRIGERANT 5</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">VOLTAGE 1 FREQUENCY 1</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">BASE QUANTITY 6</div> </div> <div style="border: 1px solid black; padding: 2px; width: 60%; height: 40px; margin-top: 5px;">BAR CODE 8</div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 20%;">BAR CODE QUANTITY</div> <div style="border: 1px solid black; padding: 2px; width: 20%;">BAR CODE CUSTOMER IC</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 60%;">CUSTOMER INTERNAL CODE</div> <div style="border: 1px solid black; padding: 2px; width: 40%;">PACKAGING SERIAL NUMBER 7</div> </div>
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Compressor identification label for single packaging

<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">MODEL</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">MADE IN SLOVAKIA</div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">VOLTAGE/FREQUENCY</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">REFRIGERANT</div> </div> <div style="text-align: center; margin-bottom: 5px;"> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">MATERIAL</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">SEQUENTIAL NUMBER</div> </div> <div style="margin-bottom: 5px;">CUST. CODE:</div> <div style="text-align: center;"> </div>	<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">MODEL 3</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">MADE IN SLOVAKIA</div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">VOLTAGE/FREQUENCY 4</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">REFRIGERANT 5</div> </div> <div style="text-align: center; margin-bottom: 5px;"> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 40%;">MATERIAL 1</div> <div style="border: 1px solid black; padding: 2px; width: 60%;">SEQUENTIAL NUMBER 7</div> </div> <div style="margin-bottom: 5px;">CUST. CODE:</div> <div style="text-align: center;"> </div>
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COMPRESSORS CATALOGUE

100 V 50/60 Hz

embraco
Nidec

100 V 50/60 Hz R134a LBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	-30
EMU45HEP	BR	R134a	3,77	100 V / 50-60 Hz	LBP	LST	RSIR	9,2	ASHRAELBP32	50 Hz		48	65
EMU45HEP	BR	R134a	3,77	100 V / 50-60 Hz	LBP	LST	RSIR	8,5	ASHRAELBP32	60 Hz		64	89
EMI60HEP	BR	R134a	4,99	100 V / 50-60 Hz	LBP	LST	RSIR	12,5	ASHRAELBP32	50 Hz		55	86
EMI60HEP	BR	R134a	4,99	100 V / 50-60 Hz	LBP	LST	RSIR	12	ASHRAELBP32	60 Hz		78	113
FGS70HAS	BR	R134a	6,36	100 V / 50-60 Hz	LBP	LST	RSCR	15	ASHRAELBP32	50 Hz		67	109
FGS70HAS	BR	R134a	6,36	100 V / 50-60 Hz	LBP	LST	RSCR	13,8	ASHRAELBP32	60 Hz		85	130
FGS100HAS	BR	R134a	9,04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	30,9	ASHRAELBP32	50 Hz			
FGS100HAS	BR	R134a	9,04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	28,3	ASHRAELBP32	60 Hz			
FGS125HAS	BR	R134a	11,14	100 V / 50-60 Hz	L/MBP	LST	CSCR	34,5	ASHRAELBP32	50 Hz			
FGS125HAS	BR	R134a	11,14	100 V / 50-60 Hz	L/MBP	LST	CSCR	31,38	ASHRAELBP32	60 Hz		159	247
NE2130Z	SK	R134a	12,11	100 V / 50-60 Hz	LBP	HST	CSIR	32	ASHRAELBP32	50 Hz			
NE2130Z	SK	R134a	12,11	100 V / 50-60 Hz	LBP	HST	CSIR	32	ASHRAELBP32	60 Hz			

100 V 50/60 Hz R134a M/HBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	-10
EM20LHR	BR	R134a	2,27	100V/50-60Hz	HBP	LST	RSIR	13	ASHRAEHBP46	50 Hz			
EM20LHR	BR	R134a	2,27	100V/50-60Hz	HBP	LST	RSIR	12,1	ASHRAEHBP46	60 Hz			
EMT6170Z	CN	R134a	7,69	100V/50-60Hz	HBP	HST	CSCR	10,4	ASHRAEHBP46	50 Hz		304	389
EMT6170Z	CN	R134a	7,69	100V/50-60Hz	HBP	HST	CSCR	10,4	ASHRAEHBP46	60 Hz			
NEK6170Z	SK	R134a	8,39	100V/50-60Hz	HBP	HST	CSIR	16,5	ASHRAEHBP46	50 Hz			
NEK6170Z	SK	R134a	8,39	100V/50-60Hz	HBP	HST	CSIR	16,5	ASHRAEHBP46	60 Hz			

100 V 50/60 Hz R404A LBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	-30
NEK2125GK	SK	R404A	6,2	100 V / 50-60 Hz	LBP	HST	CSIR	32	ASHRAELBP32	50 Hz			233
NEK2125GK	SK	R404A	6,2	100 V / 50-60 Hz	LBP	HST	CSIR	32	ASHRAELBP32	60 Hz			282
NEK2134GK	SK	R404A	8,77	100 V / 50-60 Hz	LBP	HST	CSIR	34	ASHRAELBP32	50 Hz			313
NEK2134GK	SK	R404A	8,77	100 V / 50-60 Hz	LBP	HST	CSIR	34	ASHRAELBP32	60 Hz			372
NEK2150GK	SK	R404A	12,11	100 V / 50-60 Hz	LBP	HST	CSCR	44	ASHRAELBP32	50 Hz			422
NEK2150GK	SK	R404A	12,11	100 V / 50-60 Hz	LBP	HST	CSCR	44	ASHRAELBP32	60 Hz			505
NT2178GK	SK	R404A	17,39	100 V / 50-60 Hz	LBP	HST	CSCR	25	ASHRAELBP32	50 Hz			550
NT2178GK	SK	R404A	17,39	100 V / 50-60 Hz	LBP	HST	CSCR	25	ASHRAELBP32	60 Hz			646

100 V 50/60 Hz R404A M/HBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	-10
NEK6210GK	SK	R404A	8,77	100V/50-60Hz	MBP	HST	CSIR	38	ASHRAEHBP46	50 Hz	434	548	686
NEK6210GK	SK	R404A	8,77	100V/50-60Hz	MBP	HST	CSIR	38	ASHRAEHBP46	60 Hz	534	665	823

100 V 50/60 Hz R600a LBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	-30
EMRS32CLC	CN	R600a	5,96	100 V / 50-60 Hz	LBP	LST	RSCR	7,7	ASHRAELBP32	50 Hz		48	67
EMRS32CLC	CN	R600a	5,96	100 V / 50-60 Hz	LBP	LST	RSCR	7,7	ASHRAELBP32	60 Hz		49	80
EMT45CLP	CN	R600a	5,96	100 V / 50-60 Hz	LBP	LST	RSIR	8,3	ASHRAELBP32	50 Hz		45	63
EMT45CLP	CN	R600a	5,96	100 V / 50-60 Hz	LBP	LST	RSIR	7,7	ASHRAELBP32	60 Hz		55	82
EMYS45CLP	CN	R600a	5,96	100 V / 50-60 Hz	LBP	LST	RSCR	7,6	ASHRAELBP32	50 Hz		43	62
EMYS45CLP	CN	R600a	5,96	100 V / 50-60 Hz	LBP	LST	RSCR	7,6	ASHRAELBP32	60 Hz		52	77
EMYS46CLC	CN	R600a	7,96	100 V / 50-60 Hz	LBP	LST	RSCR	9,1	ASHRAELBP32	50 Hz		60	92
EMYS46CLC	CN	R600a	7,96	100 V / 50-60 Hz	LBP	LST	RSCR	9,1	ASHRAELBP32	60 Hz		74	105
EMB46CLC	CN	R600a	8,23	100 V / 50-60 Hz	LBP	LST	RSCR	8,7	ASHRAELBP32	50 Hz		56	79
EMB46CLC	CN	R600a	8,23	100 V / 50-60 Hz	LBP	LST	RSCR	8,7	ASHRAELBP32	60 Hz		81	111
EMB55CLC	CN	R600a	9,04	100 V / 50-60 Hz	LBP	LST	RSCR	16	ASHRAELBP32	50 Hz		77	108
EMB55CLC	CN	R600a	9,04	100 V / 50-60 Hz	LBP	LST	RSCR	14,3	ASHRAELBP32	60 Hz		92	95
EGX80CLC	BR	R600a	11,14	100 V / 50-60 Hz	LBP	LST	RSCR	5,1	ASHRAELBP32	50 Hz		100	135
EGX80CLC	BR	R600a	11,14	100 V / 50-60 Hz	LBP	LST	RSCR	14,3	ASHRAELBP32	60 Hz	14,33	123	168

100 V 50/60 Hz R600a M/HBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	-10
EMT30CDP	BR	R600a	4,5	100V/50-60Hz	HBP	LST	RSIR	8,25	ASHRAEHBP46	50 Hz	83	107	135

100 V 50/60 Hz R1234yf LBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	-30
FGS80LAS	BR	R1234yf	7,15	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	21	ASHRAELBP32	50 Hz			144
FGS80LAS	BR	R1234yf	7,15	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	19,7	ASHRAELBP32	60 Hz			174
FGS100LAS	BR	R1234yf	9,04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	30,9	ASHRAELBP32	50 Hz			
FGS100LAS	BR	R1234yf	9,04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	28,3	ASHRAELBP32	60 Hz			
FGS125LAS	BR	R1234yf	11,14	100 V / 50-60 Hz	L/MBP	LST	CSCR	34,5	ASHRAELBP32	50 Hz			
FGS125LAS	BR	R1234yf	11,14	100 V / 50-60 Hz	L/MBP	LST	CSCR	31,38	ASHRAELBP32	60 Hz			

100 V 50/60 Hz R1234yf M/HBP

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	-10
EMT6170L	CN	R1234yf	7,96	100V/50-60Hz	HBP	HST	CSCR	18,2	ASHRAEHBP46	50 Hz			
EMT6170L	CN	R1234yf	7,96	100V/50-60Hz	HBP	HST	CSCR	18,2	ASHRAEHBP46	60 Hz			

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-25 (Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	5		(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	104	1.26	127	169	217		160	ESTER / ISO10	Capillary Tube	SM00
92	128	1.34	150	191	243		160	ESTER / ISO10	Capillary Tube	SM00
117	133	1.17	159	207	266		200	ESTER / ISO22	Capillary Tube	SM00
120	168	1.32	199	254	319		200	ESTER / ISO22	Capillary Tube	SM00
153	177	1.49	215	281	357		350	ESTER / ISO10	Capillary Tube	SM34
158	207	1.53	249	325	416		350	ESTER / ISO10	Capillary Tube	SM34
184	261	1.41					280	ESTER / ISO22	Capillary Tube	SM08
	316	1.52					280	ESTER / ISO22	Capillary Tube	SM08
	315	1.28					280	ESTER / ISO22	Capillary Tube	SM08
	340	1.44	447	577	739	941	280	ESTER / ISO22	Capillary Tube	SM08
	284	1.59	376	483	606	744	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	332	1.59	440	565	709	871	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-5	0	5	(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	195	239	262	278	291	348	160	ESTER / ISO22	Capillary Tube	SM03
156	234	284	311	277	343	412	160	ESTER / ISO22	Capillary Tube	SM03
192	594	125	797	2.66			180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
484			975	2.55			180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
	427	552	724	820	2.17	942	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	510	649	844	957	2.35	1104	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-25 (Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	5		(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	336	1.15	393	491	602		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
307	400	1.26	465	578	704		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
367	450	1.2	525	656	805		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
411	537	1.26	624	778	952		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
489	607	1.29	709	888	1090		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
554	713	1.35	828	1029	1259		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
654	819	1.31	967	1229	1527		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
740	971	1.33	1151	1476	1852		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-5	0	5	(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	1034	1243	1358	2.04	1475		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
848	1222	1463	1595	2.13	1731		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
1009										

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-25 (Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	5		(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	101	1.71	120	154	195		150	ALQUILB / ISO5	Capillary Tube	SM01
91	124	1.71	147	186	232		150	ALQUILB / ISO5	Capillary Tube	SM01
112	98	1.45	119	155	196		150	ALQUILB / ISO5	Capillary Tube	SM05
88	120	1.53	140	175	220		150	ALQUILB / ISO5	Capillary Tube	SM05
110	97	1.59	116	151	192		150	ALQUILB / ISO5	Capillary Tube	SM01
86	117	1.68	140	180	227		150	ALQUILB / ISO5	Capillary Tube	SM01
106	138	1.64	162	205	255		150	ALQUILB / ISO5	Capillary Tube	SM01
126	157	1.64	186	240	304		150	ALQUILB / ISO5	Capillary Tube	SM01
142	123	1.53	146	186	227		150	ALQUILB / ISO5	Capillary Tube	SM01
109	161	1.74	190	243	305		150	ALQUILB / ISO5	Capillary Tube	SM01
147	163	1.7	194	250	314		150	ALQUILB / ISO5	Capillary Tube	SM01
147	190	1.74	239	273			150	ALQUILB / ISO5	Capillary Tube	SM01
161	195	1.77	234	302	385		280	ALQUILB / ISO5	Capillary Tube	SM34
179	249	1.82	268	345	438		280	ALQUILB / ISO5	Capillary Tube	SM34
221										

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-5	0	5	(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	196	239	256	2.53	284		180	MINERAL / ISO10	Capillary Tube	SM05
157										

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-25 (Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	5		(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	217	1.4	259	333	420	521	280	ESTER / ISO22	Capillary Tube	SM08
196	258	1.48	306	390	490	609	280	ESTER / ISO22	Capillary Tube	SM08
235	283	1.42					280	ESTER / ISO22	Capillary Tube	SM08
	337	1.52					280	ESTER / ISO22	Capillary Tube	SM08
							280	ESTER / ISO22	Capillary Tube	SM08
							280	ESTER / ISO22	Capillary Tube	SM08

	Cooling Capacity (°C)						Lubricant	Type/Viscosity	Expansion Device	Wiring Diagram
	-5	0	5	(Evaporating 7.2°C / Condensing 54.4°C Capacity (W)	10	15				
	630	767	841	2.72			180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
512	730	892	978	2.59			180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
588										

COMPRESSORS CATALOGUE

115V 60 Hz

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115V 60 Hz R134a LBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	
EMIS20HHR	BR	R134a	2,27	115-127 V 60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	11,62	ASHRAELBP32	60 Hz		15	
EMIE40HER	BR	R134a	3,4	115-127 V 60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	11,5	ASHRAELBP32	60 Hz			
EM45HHR	BR	R134a	3,77	115-127 V 60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	17	ASHRAELBP32	60 Hz		48	
EM45HNR	BR	R134a	3,77	115-127 V 60 Hz 1 ~	LBP	LST	RSIR/CSIR	17	ASHRAELBP32	60 Hz		47	
EM65HNR	BR	R134a	5,54	115-127 V 60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	26	ASHRAELBP32	60 Hz		47	
EMIS70HHR	BR	R134a	5,96	115-127 V 60 Hz 1 ~	L/M/HBP	LST	RSIR	28,2	ASHRAELBP32	60 Hz		96	
FFU80HAK	BR	R134a	6,76	115-127 V 60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	28	ASHRAELBP32	60 Hz			
FFI8,5HAK	BR	R134a	7,15	115-127 V 60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	27,5	ASHRAELBP32	60 Hz		106	
NEK2116Z	SK	R134a	7,4	115 V 60 Hz 1 ~	LBP	HST	CSIR	22	ARI540	60 Hz		59	
FF8,5HAK	BR	R134a	7,95	115-127 V 60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	34,5	ASHRAELBP32	60 Hz		106	
FFI10HAK	BR	R134a	9,04	115-127 V 60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	32,5	ASHRAELBP32	60 Hz			
FFU130HAX	BR	R134a	10,61	115-127 V 60 Hz 1 ~	L/MBP	LST/HST	CSIR	40,3	ASHRAELBP32	60 Hz			
FFI12HAX	BR	R134a	11,14	115-127 V 60 Hz 1 ~	L/M/HBP	HST	CSIR	43	ASHRAELBP32	60 Hz		159	
FFU160HAX	BR	R134a	12,92	115-127 V 60 Hz 1 ~	MBP	LST/HST	CSIR	44,5	ASHRAELBP32	60 Hz			

115V 60 Hz R134a M/HBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	
EMIS30HHR	BR	R134a	3	115-127 V 60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	16	ASHRAELBP32	60 Hz	106	142	
NEU6187Z	SK	R134a	9,99	115-127 V 60 Hz 1 ~	HBP	HST	CSCR	39	ASHRAELBP46	60 Hz			
NEU6210Z	SK	R134a	12,11	115-127 V 60 Hz 1 ~	HBP	HST	CSCR	40	ASHRAELBP46	60 Hz			
NT6217Z	SK	R134a	20,44	115 V 60 Hz 1 ~	HBP	HST	CSIR	45	ASHRAELBP46	60 Hz			
NJ6220Z	SK	R134a	26,11	115 V 60 Hz 1 ~	HBP	HST	CSIR	72	ASHRAELBP46	60 Hz			

115V 60 Hz R290 LBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	
EM2U3111U	BR	R290	3	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	8,8	ASHRAELBP32	60 Hz			
EM150UER	BR	R290	3	115-127 V 60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	12,7	ASHRAELBP32	60 Hz			
EM2X3113U	CN	R290	3,67	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	12,4	ASHRAELBP32	60 Hz		86	
EMX3113U	CN	R290	3,68	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	17,5	ASHRAELBP32	60 Hz			
EM170UER	BR	R290	4,08	115-127 V 60 Hz 1 ~	L/MBP	LST	CSIR	19,6	ASHRAELBP32	60 Hz			
EMX3117U	CN	R290	4,5	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	22,8	ASHRAELBP32	60 Hz			
EM2X3117U	CN	R290	4,5	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	15,3	ASHRAELBP32	60 Hz		142	
EM190JEX	BR	R290	4,99	115-127 V 60 Hz 1 ~	L/MBP	LST	CSIR	23	ASHRAELBP32	60 Hz			
EM2X3121U	CN	R290	5,54	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	15,6	ASHRAELBP32	60 Hz			
EM2X3125U	CN	R290	6,09	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	15,6	ASHRAELBP32	60 Hz			
FFU130UAX	BR	R290	6,76	115-127 V 60 Hz 1 ~	L/MBP	HST	CSIR	41,5	ASHRAELBP32	60 Hz		236	
FFU160UAX	BR	R290	7,95	115-127 V 60 Hz 1 ~	L/MBP	HST	CSIR	41,5	ASHRAELBP32	60 Hz			
EMC3134U	CN	R290	7,95	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	22,4	ASHRAELBP32	60 Hz			
EM2X3134U	BR	R290	7,96	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	24,8	ASHRAELBP32	60 Hz		273	
EMC3140U	CN	R290	9,04	115-127 V 60 Hz 1 ~	L/MBP	LST	RSCR	26,5	ASHRAELBP32	60 Hz			
NEU2140U	SK	R290	9,99	115-127 V 60 Hz 1 ~	LBP	HST	CSIR	30	ARI4	60 Hz		220	
NEU2155U	SK	R290	13,54	115-127 V 60 Hz 1 ~	LBP	HST	CSCR	40	ARI4	60 Hz		285	
NEK2150U	SK	R290	13,54	115 V 60 Hz 1 ~	LBP	HST	CSCR	41,5	ARI540	60 Hz			
NEU2168U	SK	R290	16,8	115-127 V 60 Hz 1 ~	LBP	HST	CSCR	49	ASHRAELBP32	60 Hz			
NT2160UV	SK	R290	17,39	115 V 60 Hz 1 ~	LBP	HST	CSCR	54,5	ASHRAELBP32	60 Hz			
NEU2178U	SK	R290	18,7	115-127 V 60 Hz 1 ~	LBP	HST	CSCR	51	ASHRAELBP32	60 Hz			
NT2180UV	SK	R290	22,37	115 V 60 Hz 1 ~	LBP	HST	CSCR	30	ARI540	60 Hz			
NT2210UV	SK	R290	27,8	115 V 60 Hz 1 ~	LBP	HST	CSCR	67	ARI4	60 Hz		533	

115V 60 Hz R290 M/HBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	
NEK6152U	SK	R290	5,44	115 V 60 Hz 1 ~	MBP	HST	CSIR	25	ARI4	60 Hz	221	279	
NEU6181U	SK	R290	7,28	115-127 V 60 Hz 1 ~	MBP	HST	CSIR	30	ASHRAELBP46	60 Hz	393	499	
NEK6210U	SK	R290	8,77	115 V 60 Hz 1 ~	MBP	HST	CSIR	37	ARI4	60 Hz	363	458	
NEK6213U	SK	R290	12,11	115 V 60 Hz 1 ~	MBP	HST	CSIR	44	ASHRAELBP46	60 Hz	660	807	
NEU6214U	SK	R290	12,11	115-127 V 60 Hz 1 ~	MBP	HST	CSCR	42	ASHRAELBP46	60 Hz	710	888	
NEU6217U	SK	R290	14,28	115-127 V 60 Hz 1 ~	MBP	HST	CSCR	45	ASHRAELBP46	60 Hz	824	1023	
NTX6222UV	SK	R290	20,44	115-127 V 60 Hz 1 ~	MBP	HST	CSCR	60	ASHRAELBP46	60 Hz	1048	1321	
NT6220UV	SK	R290	17,39	115 V 60 Hz 1 ~	MBP	HST	CSCR	54,5	ARI4	60 Hz	620	794	
NT6222UV	SK	R290	20,44	115 V 60 Hz 1 ~	MBP	HST	CSCR	54,5	ARI4	60 Hz	669	913	

115V 60 Hz R404A LBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	
NEK2134GK	SK	R404A	8,77	115 V 60 Hz 1 ~	LBP	HST	CSIR	37,5	ASHRAELBP32	60 Hz			
NEU2140GK	SK	R404A	8,77	115-127 V 60 Hz 1 ~	LBP	HST	CSCR	30	ASHRAELBP32	60 Hz			
NEK2150GK	SK	R404A	12,11	115 V 60 Hz 1 ~	LBP	HST	CSIR	44	ASHRAELBP32	60 Hz			
NEU2155GK	SK	R404A	12,11	115-127 V 60 Hz 1 ~	LBP	HST	CSCR	40	ASHRAELBP32	60 Hz			
NT2168GKV	SK	R404A	14,5	115 V 60 Hz 1 ~	LBP	HST	CSIR	54,5	ASHRAELBP32	60 Hz			
NT2178GKV	SK	R404A	17,39	115 V 60 Hz 1 ~	LBP	HST	CSCR	66	ASHRAELBP32	60 Hz	351	502	
NT2180GK	SK	R404A	20,44	115-127 V 60 Hz 1 ~	LBP	HST	CSCR	57	ASHRAELBP32	60 Hz			
NT2192GK	SK	R404A	22,37	115 V 60 Hz 1 ~	LBP	HST	CSIR	56	ASHRAELBP32	60 Hz			
NT2192GKV	SK	R404A	22,37	115 V 60 Hz 1 ~	LBP	HST	CSCR	56	ARI540	60 Hz			
NJ2192GK	SK	R404A	26,11	115 V 60 Hz 1 ~	LBP	HST	CSCR	98	ASHRAELBP32	60 Hz			

115V 60 Hz R404A M/HBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15	
NEU6181GK	SK	R404A	6,2	115-127 V 60 Hz 1 ~	MBP	HST	CSCR	31	ARI4	60 Hz	307	361	
NEK6181GK	SK	R404A	7,28	115 V 60 Hz 1 ~	MBP	HST	CSIR	26,5	ASHRAELBP46	60 Hz	460	562	
NEK6210GK	SK	R404A	8,77	115 V 60 Hz 1 ~	MBP	HST	CSCR	38	ASHRAELBP46	60 Hz	573	683	
NEU6212GK	SK	R404A	8,77	115-127 V 60 Hz 1 ~	MBP	HST	CSIR	39	ASHRAELBP46	60 Hz	558	700	
NEU6214GK	SK	R404A	9,99	115-127 V 60 Hz 1 ~	MBP	HST	CSIR	42	ARI4	60 Hz	479	585	
NEU6215GK	SK	R404A	12,11	115-127 V 60 Hz 1 ~	MBP	HST	CSCR	47	ASHRAELBP46	60 Hz			
NT6217GKV	SK	R404A	12,55	115 V 60 Hz 1 ~	MBP	HST	CSIR	50	ARI4	60 Hz	512	623	
NT6220GKV	SK	R404A	14,5	115 V 60 Hz 1 ~	MBP	HST	CSIR	54,5	ASHRAELBP46	60 Hz	767	999	
NT6222GKV	SK	R404A	17,39	115 V 60 Hz 1 ~	MBP	HST	CSIR	70	ARI4	60 Hz	792	1017	
NT6224GKV	SK	R404A	20,44	115 V 60 Hz 1 ~	MBP	HST	CSCR	77	ASHRAELBP46	60 Hz	1180	1490	
NT6226GKV	SK	R404A	22,37	115 V 60 Hz 1 ~	MBP	HST	CSCR	77	ASHRAELBP46	60 Hz			

115V 60 Hz R600a LBP													
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35	
EMU40CLP	BR	R600a	5,96	115-127 V 60 Hz 1 ~	LBP	LST	RSIR	7,33	ASHRAELBP32	60 Hz		57	
EMYE70CLP	BR	R600a	5,96	115-127 V 60 Hz 1 ~	LBP	LST	RSIR	14,5	ASHRAELBP32	60 Hz		107	
EMU60CLP	BR	R600a	5,96	115-127 V 60 Hz 1 ~	LBP	LST	RSIR	12	ASHRAELBP32	60 Hz		83	
EGAS80CLP	BR	R600a	9,04	115-127 V 60 Hz 1 ~	LBP	LST	RSIR	18	ASHRAELBP32	60 Hz		122	

-30	-25	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	-20	-15	-10	-5	Oil Charge				
31	49	56	0.9	71	98	130	168	160	ESTER / ISO22	Capillary Tube	SM01/SM02	
75	105	117	1.33	141	183	234	293	180	ESTER / ISO10	Capillary Tube	SM01/SM02	
80	114	123	1.15	152	197	249	310	160	ESTER / ISO22	Capillary Tube	SM07	
75	109	123	1.17	149	195	246		200	ESTER / ISO22	Capillary Tube	SM01/SM02	
75	109	123	1.17	149	195	246		160	ESTER / ISO22	Capillary Tube	SM01/SM02	
137	186	203	1.34	246	319	406	510	160	ESTER / ISO10	Capillary Tube	SM01/SM02	
156	215	239	1.51	288	377	481	600	280	ESTER / ISO10	Capillary Tube	SM08	
158	221	243	1.42	296	386	493	620	280	ESTER / ISO22	Capillary Tube	SM03	
86	127	171	0.92	180	247	328		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
146	198	217	1.1	262	341	438	552	280	ESTER / ISO22	Capillary Tube	SM03/SM04	
187	268	301	1.45	362	471	598	749	280	ESTER / ISO22	Capillary Tube	SM03	
228	326	367	1.41	448	593	764	961	280	ESTER / ISO10	Capillary Tube or Expansion Valve	SM08	
220	306	340	1.16	416	416	718	914	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08	
303	404	445	1.37	526	673	850	1059	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08	

-10	-5	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	10	15	Oil Charge						
185	251	313	385	419	2.48	467		160	ESTER / ISO22	Capillary Tube	SM07	
	724	905	1116	1227	2.47	1356		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	865	1077	1322	1452	2.51	1599		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	1194	1493	1836	2020	2.16	2220		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
	1726	2206	2734	3004	2.42	3308		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18	

-30	-25	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	-20	-15	-10	-5	Oil Charge				
119	154	167	1.66	193	238	290	352	150	ESTER / ISO22	Capillary Tube	SM06	
103	138	153	1.38	181	232	290	355	170	ALQUILB / ISO32	Capillary Tube	SM01/SM02	
120	129	175	1.48	203	255	315	384	150	ESTER / ISO22	Capillary Tube	SM28	
		195	1.62					150	ESTER / ISO22	Capillary Tube	SM05	
142	190	210	1.34	248	317	396	485	160	ALQUILB / ISO32	Capillary Tube	SM01/SM02	
		249	1.67					150	ESTER / ISO22	Capillary Tube	SM05	
183	236	258	1.72	299	372	455	546	150	ESTER / ISO22	Capillary Tube	SM28	
200	250	269	1.34	305	372	456	564	160	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM01	
237	306	332	1.74	381	466	566	684	150	ESTER / ISO22	Capillary Tube	SM05	
259	332	361	1.7	416	512	623	751	150	ESTER / ISO22	Capillary Tube	SM05	
288	361	390	1.23	454	568	704		280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08	
376	470	507	1.58	580	709	863	1044	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08	
347	448	487	1.78	562	693	841	1010	150	ESTER / ISO22	Capillary Tube	SM32	
	454	494	1.71		702		1012	150	ESTER / ISO22	Capillary Tube	SM05	
	427	464	1.76	536	661	805	967	150	ESTER / ISO22	Capillary Tube	SM32	
283	364	449	1.14	463	579	714		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
373	484	599	1.14	616	772	949		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
353	455	556	1.13	576	715	873		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
678	872	949	1.52	1099	1359	1652		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
590	759	828	1.34	961	1197	1467		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	
551	703	849	1.23	880	1082	1308		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
535	691	744	0.94	876	1089	1330		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
686	880	954	0.99	1113	1387	1702	2056	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	

-10	-5	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	10	15	Oil Charge						
346	422	507	602	445	1.5	706		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
626	773	940	1127	1224	2.73	1334		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
570	698	843	1004	1093	1.97	1182		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
984	1193	1432	1702	1846	2.14	2002		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1094	1328	1589	1879	2027	2.71	2197		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1258	1528	1832	2172	2351	2.56	2547		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1656	2503	2513	3035	3323	2.84	3620		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
996	1224	1479	1762	1936	2.17	2071		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1182	1478	1799	2147	2340	2.18	2521		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	

-30	-25	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	-20	-15	-10	-5	Oil Charge				
402	525	573	1.32	667	828	1007		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
388	516	569	1.46	670	848	1052		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
508	660	720	1.23	838	1042	1273		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
541	712	781	1.45	913	1144	1404		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
524	702	777	1.23	911	1149	1413		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
692	921	1004	1.21	1190	1497	1844		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
780	1053	1165	1.38	1372	1736	2146		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	
877	1135	1235	1.2	1418	1726	2061		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	
541	710	765	0.82	917	1160	1438		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
886	1203	1333	1.32	1579	2020	2536		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17	

-10	-5	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	10	15	Oil Charge						
445	558	701	872	979	1.85	1074		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
679	815	973	1156	1260	2.04	1365		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
825	1000	1209	1450	1584	2.11	1725		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
871	1071	1299	1557	1697	2.2	1842		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
724	870	1099	1379	1550	1.8	1710		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	1494	1792	2123	2302	2.14	2486		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	764	937	1142	1381	1.035	1.27	1656		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	1269	1576	1919	2298	2.507	2.18	2711		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	1277	1571	1900	2264	2.466	1.94	2663		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	1859	2287	2774	3320	3.617	2.3	3925		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	2075	2529	3042	3615	3.925	2.15	4247		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

-30	-25	Cooling Capacity (°C)				Lubricant				Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C Capacity (W)	Efficiency (W/W)	-20	-15	-10	-5	Oil Charge				
78	105	117	1.3	139	180	227		180	ALQUILB / ISO5	Capillary Tube	SM00	
142	185	205	1.46	239	305	285		180	ALQUILB / ISO5	Capillary Tube	SM07	
116	154	164	1.41	200	255	321		180	ALQUILB / ISO5	Capillary Tube	SM07	
172	226	245	1.51	288	362	450		280	ALQUILB / ISO5	Capillary Tube	SM09	

COMPRESSORS CATALOGUE

220V 50 Hz

embraco
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220V 50 Hz R134a LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
EMIS30HHR	BR	R134a	3	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR	9	ASHRAELBP32	50 Hz		27
EMIE40HER	BR	R134a	3,4	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	8,6	ASHRAELBP32	50 Hz		39
EM45HHR	BR	R134a	3,77	220 V 50 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	9,5	ASHRAELBP32	50 Hz		48
EM45HNR	BR	R134a	3,77	220 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	9	ASHRAELBP32	50 Hz		41
EM155HER	BR	R134a	4,6	220-240 V 50 Hz 1 ~	LBP	LST	RSIR/CSIR	10,4	ASHRAELBP32	50 Hz		57
EMT55HLC	CN	R134a	5,19	220-240 V 50 Hz 1 ~	LBP	LST	RSCR	4	ASHRAELBP32	50 Hz		69
EMYS60HEP	BR	R134a	5,19	220-240 V 50 Hz 1 ~	LBP	LST	RSIR/RSCR	5,8	ASHRAELBP32	50 Hz		66
EM65HNR	BR	R134a	5,54	220 V 50 Hz 1 ~	L/MBP	LST	RSIR/CSIR	12,5	ASHRAELBP32	50 Hz		
EMU70HLC	BR	R134a	5,96	220 V 50 Hz 1 ~	LBP	LST	RSCR	7,65	ASHRAELBP32	50 Hz		64
EGAS80HLR	BR	R134a	6,36	220-240 V 50-60 Hz 1 ~	LBP	LST	RSIR/CSIR	14,5	ASHRAELBP32	50 Hz		77
FF17,5HAK	BR	R134a	6,76	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	14	ASHRAELBP32	50 Hz		88
FFUS80HAK	BR	R134a	6,76	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	14,5	ASHRAELBP32	50 Hz		
FF7,5HBK	BR	R134a	6,92	220 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	16,7	ASHRAELBP32	50 Hz		70
NEK2116Z	SK	R134a	7,37	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	10	ARI540	50 Hz		
FF18,5HAK	BR	R134a	7,15	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	16	ASHRAELBP32	50 Hz		93
EGAS90HLR	BR	R134a	7,15	220-240 V 50-60 Hz 1 ~	LBP	LST	RSIR/CSIR	14,3	ASHRAELBP32	50 Hz		95
EGAS100HLR	BR	R134a	7,95	220-240 V 50-60 Hz 1 ~	LBP	LST	RSIR/CSIR	17,55	ASHRAELBP32	50 Hz		106
EGZS100HLC	BR	R134a	7,95	220-240 V 50-60 Hz 1 ~	LBP	LST	RSCR	8,85	ASHRAELBP32	50 Hz		115
FF8,5HBK	BR	R134a	7,95	220-240 V 50 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	18,2	ASHRAELBP32	50 Hz		82
FF8,5HBK	BR	R134a	7,95	220-240 V 50 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	18,2	ASHRAELBP32	50 Hz		103
FFUS100HAK	BR	R134a	7,95	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	17,55	ASHRAELBP32	50 Hz		
EMY75HLC	CN	R134a	8,35	200-230 V / 50 Hz	LBP	LST	RSCR	7,8	ASHRAELBP32	50 Hz		97
NEK1118Z	SK	R134a	8,39	220-240 V 50 Hz 1 ~	LBP	LST	RSIR/RSCR	6,9	ASHRAELBP32	50 Hz		
FF110HAX	BR	R134a	9,04	220-230 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	17,5	ASHRAELBP32	50 Hz		105
NE2121Z	SK	R134a	9,26	200-220 V 50 Hz / 230 V 60 Hz 1 ~	LBP	HST	CSIR	12,6	ASHRAELBP32	50 Hz		
NE2121Z	SK	R134a	9,26	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	12,6	ASHRAELBP32	50 Hz		
EGU110HLC	BR	R134a	9,5	220-240 V 50 Hz 1 ~	LBP	LST	RSCR	9,4	ASHRAELBP32	50 Hz		121
EGU130HLR	BR	R134a	10,61	220-240 V 50 Hz 1 ~	LBP	LST	CSIR	17,45	ASHRAELBP32	50 Hz		141
FFU130HAX	BR	R134a	10,61	220-240 V 50 Hz 1 ~	L/MBP	LST/HST	CSIR	17,5	ASHRAELBP32	50 Hz		
EMY3130Z	CN	R134a	11,14	220-240 V 50 Hz 1 ~	L/MBP	LST	CSIR	16,04	ASHRAELBP32	50 Hz		154
NE2130Z	SK	R134a	12,11	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	32	ASHRAELBP32	50 Hz		
FFU160HAX	BR	R134a	12,92	220-240 V 50 Hz 1 ~	L/MBP	LST/HST	CSIR	17,7	ASHRAELBP32	50 Hz		
NE2134Z	SK	R134a	14,28	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	17	ASHRAELBP32	50 Hz		
NEK2140Z	SK	R404A	16,8	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	17	ASHRAELBP32	50 Hz		

220V 50 Hz R134a M/HBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
EM20HHR	BR	R134a	2,27	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	6,5	ASHRAEHP32	50 Hz	58	79
EM30HHR	BR	R134a	3	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	8,5	ASHRAEHP46	50 Hz	96	127
EMIS30HHR	BR	R134a	3	220 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR	8,8	ASHRAEHP32	50 Hz	95	126
EM55HHR	BR	R134a	4,6	220-240 V 50-60 Hz 1 ~	HBP	LST	RSIR	9,31	ASHRAEHP32	50 Hz		
EM65HHR	BR	R134a	5,54	220 V 50-60 Hz 1 ~	M/HBP	LST	RSIR/CSIR	14,3	ASHRAEHP32	50 Hz		
FF7,5HBK	BR	R134a	6,92	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	15,8	ASHRAEHP32	50 Hz	201	264
NEK6160Z	SK	R134a	7,28	220-240 V 50 Hz 1 ~	HBP	HST	CSIR	11,5	ASHRAEHP46	50 Hz		258
NEK6170Z	SK	R134a	8,39	220-240 V 50 Hz 1 ~	HBP	HST	CSIR	16,5	ASHRAEHP46	50 Hz		
EMTE6187Z	CN	R134a	9,5	220-240 V 50 Hz 1 ~	HBP	HST	CSIR	16,5	ASHRAEHP46	50 Hz		356
NEU6187Z	SK	R134a	9,99	200-240 V 50 Hz / 230 V 60 Hz 1 ~	HBP	HST	CSIR	13	ASHRAEHP46	50 Hz		380
FF112HBK	BR	R134a	11,14	220-240 V 50 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	20	ASHRAEHP32	50 Hz	381	496
NEU6210Z	SK	R134a	12,11	220-240 V 50 Hz 1 ~	HBP	HST	CSCR	18,5	ASHRAEHP46	50 Hz		
NEU6212Z	SK	R134a	14,28	220-240 V 50 Hz 1 ~	HBP	HST	CSIR	20	ASHRAEHP46	50 Hz		
NEU6214Z	SK	R134a	16,8	220-240 V 50 Hz 1 ~	HBP	HST	CSIR	22	ASHRAEHP46	50 Hz		
NT6217Z	SK	R134a	20,44	220-240 V 50 Hz 1 ~	HBP	HST	CSCR	25	ASHRAEHP46	50 Hz		
NT6220Z	SK	R134a	22,37	200-240 V 50 Hz / 230 V 60 Hz 1 ~	HBP	HST	CSIR	29,5	ASHRAEHP46	50 Hz		
NJ6226Z	SK	R134a	34,38	220-240 V 50 Hz 1 ~	HBP	HST	CSCR	31	ASHRAEHP46	50 Hz		

Cooling Capacity (°C) (Evaporating -23,3°C / Condensing 54,4°C)							Lubrificant			Type/Viscosity	Expansion Device	Wiring Diagram
-30	-25	Capacity (W)		Efficiency (W/W)	-20	-15	-10	-5	Oil Charge			
46	68	79	0,93	95	126	163	207	160	ESTER / ISO22	Capillary Tube	SM07	
60	85	95	1,18	116	152	194	242	180	ESTER / ISO10	Capillary Tube	SM01/SM02	
79	113	126	1,23	152	197	249	309	160	ESTER / ISO22	Capillary Tube	SM02	
64	87	97	0,97	115	150	197	257	200	ESTER / ISO22	Capillary Tube	SM01/SM02	
82	113	125	1,23	150	196	252		160	ESTER / ISO22	Capillary Tube	SM01/SM02	
102	138	152	1,41	180	232	294		180	ESTER / ISO22	Capillary Tube	SM05	
95	134	144	1,35	182	238	305		160	ESTER / ISO10	Capillary Tube	SM00	
108	138	152	1,15	180	235	301	379	160	ESTER / ISO22	Capillary Tube	SM01/SM02	
99	145	165	1,4	202	270	347		180	ESTER / ISO10	Capillary Tube	SM01	
123	175	195	1,53	235	306	390		230	ESTER / ISO10	Capillary Tube	SM03/SM04	
129	179	190	1,29	238	306	383	470	280	ESTER / ISO22	Capillary Tube	SM03	
134	181	185	1,29	239	310	395	496	230	ESTER / ISO10	Capillary Tube	SM08	
106	149	149	1	202	266	341	431	280	ESTER / ISO22	Capillary Tube	SM08	
	127	171	0,91	180	247	328	422	340	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
136	188	205	1,35	249	322	407	508	280	ESTER / ISO22	Capillary Tube	SM03	
143	197	218	1,5	260	335	424		230	ESTER / ISO10	Capillary Tube	SM03/SM04	
162	225	250	1,52	298	383	483		230	ESTER / ISO10	Capillary Tube	SM04	
165	225	250	1,74	298	385	489		280	ESTER / ISO10	Capillary Tube	SM34	
119	168	194	1,11	230	306	398	506	280	ESTER / ISO22	Capillary Tube	SM08	
145	198	217	1,11	262	341	438	552	280	ESTER / ISO22	Capillary Tube	SM08	
167	225	249	1,45	296	382	484	608	350	ESTER / ISO10	Capillary Tube	SM08	
143	193	213	1,5	251	322	408		150	ESTER / ISO7	Capillary Tube	SM01	
	205	227	1,42	271	349	439	541	350	ESTER / ISO22	Capillary Tube	SM13	
153	218	249	1,3	300	398	509	634	280	ESTER / ISO22	Capillary Tube	SM03	
	229	254	1,28	304	394	499	618	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	227	251	1,23	302	392	498	618	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
181	249	274	1,59	329	426	545		230	ESTER / ISO10	Capillary Tube	SM34	
210	288	313	1,5	378	489	626		230	ESTER / ISO10	Capillary Tube	SM09	
201	278	309	1,38	368	475	604	761	280	ESTER / ISO10	Capillary Tube or Expansion Valve	SM08	
196	278	320	1,5	387	513	644	771	210	ESTER / ISO22	Capillary Tube	SM07	
	314	346	1,33	411	526	662	817	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
266	355	390	1,45	458	581	732	914	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08	
	329	364	1,24	433	559	707	880	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	447	495	1,18	593	770	981	1227	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	

Cooling Capacity (°C)						Lubrificant			Type/Viscosity	Expansion Device	Wiring Diagram
-10	-5	0	5	7,2°C / Condensing 54,4°C Capacity (W)	Efficiency (W/W)	10	15	Oil Charge			
104	135	170	212	246	2,51	260	315	160	ESTER / ISO22	Capillary Tube	SM02
164	206	256	312	343	2,45	377	450	160	ESTER / ISO22	Capillary Tube	SM07
163	207	259	319	363	2,6	390	471	160	ESTER / ISO22	Capillary Tube	SM01/SM02
	326	399	485	529	2,68	584	694	160	ESTER / ISO22	Capillary Tube	SM01/SM02
304	388	484	592	645	2,39	711	842	160	ESTER / ISO22	Capillary Tube	SM07
340	429	534	657	719	2,23	798	959	280	ESTER / ISO22	Capillary Tube	SM08
329	419	527	653	721	2,44	799		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	513	644	795	875	2,35	967		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
453	567	702	860	943	2,52	1045		210	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
485	613	764	938	1030	2,5	1134		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
631	790	968	1167	1316	2,61	1390	1635	280	ESTER / ISO22	Capillary Tube	SM08
	734	918	1132	1246	2,57	1376		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	850	1051	1304	1432	2,31	1577		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	992	1228	1496	1638	2,16	1797		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	1121	1385	1698	1866	2,43	2057		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	1212	1498	1843	2032	2,37	2249		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	1751	2209	2711	2983	2,41	3258		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM17

220V 50 Hz R290 LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
EM2U3111U	BR	R290	3	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSCR	5,8	ASHRAELBP32	50 Hz		
EM150JER	BR	R290	3	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	8,7	ASHRAELBP32	50 Hz		67
EM2X3113U	CN	R290	3,67	220-240 V 50 Hz 1 ~	L/MBP	LST	RSCR	12,4	ASHRAELBP32	50 Hz		
EM170JER	BR	R290	4,08	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	9,4	ASHRAELBP32	50 Hz		
EM2X3117U	CN	R290	4,5	220-240 V 50 Hz 1 ~	L/MBP	LST	RSCR	15,3	ASHRAELBP32	50 Hz		
EM2X1121U	CN	R290	5,54	220-240 V 50 Hz 1 ~	LBP	LST	RSCR	8,4	ASHRAELBP32	50 Hz		137
EM2X3121U	CN	R290	5,54	220-240 V 50 Hz 1 ~	L/MBP	LST	RSCR	15,6	ASHRAELBP32	50 Hz		
EM2X3121U	BR	R290	5,54	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSCR	7,8	ASHRAELBP32	50 Hz		156
EMT2121U	CN	R290	5,56	220-240 V 50 Hz 1 ~	LLBP	LST	CSIR	7,7	ASHRAELBP32	50 Hz		147
EMT2125U	CN	R290	5,96	220-240 V 50 Hz 1 ~	LBP	LST	CSIR	8,5	ASHRAELBP32	50 Hz		159
EMTS2125U	CN	R290	5,96	220-240 V 50 Hz 1 ~	LBP	LST	CSIR	8,5	ASHRAELBP32	50 Hz		169
EM2X1125U	CN	R290	6,09	220-240 V 50 Hz 1 ~	LBP	LST	RSCR	8,4	ASHRAELBP32	50 Hz		158
EM2X3125U	CN	R290	6,09	220-240 V 50 Hz 1 ~	L/MBP	LST	RSCR	15,6	ASHRAELBP32	50 Hz		
EM2X3125U	BR	R290	6,09	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSCR	7,8	ASHRAELBP32	50 Hz		
FFU130JAX	BR	R290	6,76	220-240 V 50-60 Hz 1 ~	L/MBP	HST	CSIR	19	ASHRAELBP32	50 Hz		182
EMX3134U	CN	R290	7,95	220-240 V 50 Hz 1 ~	L/MBP	LST	RSCR	10,5	ASHRAELBP32	50 Hz		235
EMX3140U	CN	R290	9,5	220-240 V 50 Hz 1 ~	L/MBP	LST	RSIR	12,5	ASHRAELBP32	50 Hz		270
EMTE2134U	CN	R290	9,5	220-240 V 50 Hz 1 ~	LLBP	HST	CSIR	14,9	ASHRAELBP32	50 Hz	175	234
EHU2155U	CN	R290	12,21	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	18,8	ASHRAELBP32	50 Hz	267	348
EHX2155U	CN	R290	12,21	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	18,4	ASHRAELBP32	50 Hz	263	350
NEU2155U	SK	R290	13,54	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	40	ASHRAELBP32	50 Hz		
NT2180U	SK	R290	22,37	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	35	ASHRAELBP32	50 Hz		
NTX2211U	SK	R290	27,8	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	33	ASHRAELBP32	50 Hz	597	797

220V 50 Hz R290 M/HBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
EMX6144U	SK	R290	4,53	220-240 V 50-60 Hz 1 ~	MBP	HST	CSIR	9	ASHRAEHBP46	50 Hz	221	274
EMX6152U	SK	R290	5,19	220-240 V 50-60 Hz 1 ~	MBP	HST	CSIR	11	ASHRAEHBP46	50 Hz	235	294
EMX6165U	SK	R290	6,09	220-240 V 50-60 Hz 1 ~	MBP	HST	CSIR	11	ASHRAEHBP46	50 Hz	285	354
EMX6181U	SK	R290	6,92	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	13	ASHRAEHBP46	50 Hz	346	423
EMTE6181U	CN	R290	7,55	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	16,5	ASHRAEHBP46	50 Hz	386	
EMX6210U	SK	R290	9,04	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	16	ASHRAEHBP46	50 Hz	446	553
EHU6212U	CN	R290	10,61	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	18,8	ASHRAEHBP46	50 Hz	548	672
EHU6214U	CN	R290	12,21	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	22	ASHRAEHBP46	50 Hz	623	757
NEU6220U	SK	R290	16,8	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	22	ASHRAEHBP46	50 Hz	817	1016
NTX6233U	SK	R290	27,8	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	40	ASHRAEHBP46	50 Hz	1346	1667

220V 50 Hz R404A LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
EMT2117GK	BR	R404A	4,5	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	-	ASHRAELBP32	50 Hz	81	124
EMT2121GK	BR	R404A	5,19	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	8,5	ASHRAELBP32	50 Hz	131	174
EMT2125GK	BR	R404A	5,96	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	9,8	ASHRAELBP32	50 Hz	142	194
EMT2130GK	BR	R404A	6,76	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	12,4	ASHRAELBP32	50 Hz	154	209
NEK2134GK	SK	R404A	8,77	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	37,5	ASHRAELBP32	50 Hz		
NEU2140GK	SK	R404A	8,77	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	13,5	ASHRAELBP32	50 Hz		
NEU2140GK	SK	R404A	8,77	200-230 V 50 Hz / 208-230 V 60 Hz 1 ~	LBP	HST	CSIR	30	ASHRAELBP32	50 Hz		
NEK2150GK	SK	R404A	12,11	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	44	ASHRAELBP32	50 Hz		
NEU2155GK	SK	R404A	12,11	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	18	ASHRAELBP32	50 Hz		
NEU2168GK	SK	R404A	14,28	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	22	ASHRAELBP32	50 Hz		
NT2168GKV	SK	R404A	14,5	200-240 V / 50 Hz 230 V / 60 Hz	LBP	HST	CSIR	54,5	ASHRAELBP32	50 Hz		
NEU2178GK	SK	R404A	16,8	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	21	ASHRAELBP32	50 Hz		
NT2178GK	SK	R404A	17,39	200-240 V / 50 Hz 230 V / 60 Hz	LBP	HST	CSCR	25	ASHRAELBP32	50 Hz	282	409
NT2180GKV	SK	R404A	20,44	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	40	ASHRAELBP32	50 Hz		
NT2192GK	SK	R404A	22,37	220-240 V 50 Hz 1 ~	LBP	HST	CSIR	35	ASHRAELBP32	50 Hz		
NT2210GK	SK	R404A	26,21	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	33	EN12900	50 Hz		
NT2212GK	SK	R404A	27,8	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	45	ASHRAELBP32	50 Hz		
NJ2212GK	SK	R404A	34,38	220-240 V 50 Hz 1 ~	LBP	HST	CSCR	36	ASHRAELBP32	50 Hz		
EH_2140GK	CN	R404A							UNDER DEVELOPMENT			
EH_2140GK	CN	R404A							UNDER DEVELOPMENT			
EH_2150GK	CN	R404A							UNDER DEVELOPMENT			
EH_2150GK	CN	R404A							UNDER DEVELOPMENT			

220V 50 Hz R404A M/HBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
EMT6144GK	BR	R404A	3,97	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	7,7	ASHRAEHBP46	50 Hz	228	286
EMT6165GK	BR	R404A	5,19	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	10,4	ASHRAEHBP46	50 Hz	287	361
EMT6152GK	BR	R404A	4,5	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	8,5	ASHRAEHBP46	50 Hz	255	321
NEK6165GK	SK	R404A	6,2	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	12,4	ASHRAEHBP46	50 Hz	366	433
NEK6181GK	SK	R404A	7,28	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	26,5	ASHRAEHBP46	50 Hz	384	463
NEU6210GK	SK	R404A	7,28	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	16	ASHRAEHBP46	50 Hz		
NEU6212GK	SK	R404A	8,77	220-240 V 50 Hz 1 ~	MBP	HST	CSIR	19	ASHRAEHBP46	50 Hz	466	595
NEU6214GK	SK	R404A	9,99	200-230 V 50 Hz / 208-230 V 60 Hz 1 ~	MBP	HST	CSCR	26	ASHRAEHBP46	50 Hz	552	690
NEU6215GK	SK	R404A	12,11	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	22	ASHRAEHBP46	50 Hz	664	830
NEK6217GK	SK	R404A	14,28	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	21,5	ASHRAEHBP46	50 Hz	733	910
NT6220GK	SK	R404A	14,5	200-240 V 50 Hz / 230 V 60 Hz 1 ~	MBP	HST	CSIR	31	ASHRAEHBP46	50 Hz	669	838
NT6222GK	SK	R404A	17,39	200-220 V 50 Hz / 230 V 60 Hz 1 ~	MBP	HST	CSIR	30	ASHRAEHBP46	50 Hz	758	992
NT6224GK	SK	R404A	20,44	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	29	ASHRAEHBP46	50 Hz	952	1217
NTU6234GKV	SK	R404A	23,74	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	37,5	EN12900	50 Hz		
NJ9232GK	SK	R404A	26,11	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	43	ASHRAEHBP46	50 Hz		
NTU6238GKV	SK	R404A	26,2	220-240 V 50 Hz 1 ~	MBP	HST	CSR	37,5	EN12900	50 Hz		
NTU6240GKV	SK	R404A	27,8	220-240 V 50 Hz 1 ~	MBP	HST	CSCR	37,5	ARI4	50 Hz		
NJ9238GK	SK	R404A	32,67	230 V 50 Hz 1 ~	MBP	HST	CSCR	43	ASHRAEHBP46	50 Hz	1411	1827

-30	-25	Cooling Capacity (°C)				-20	-15	-10	-5	Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C)		Efficiency (W/W)						Oil Charge				
100	131	140	1.51	166	207	255	311	150	ESTER / ISO22	Capillary Tube	SM06			
92	119	129	1.3	147	178	212	248	170	ALQUILB / ISO32	Capillary Tube	SM01/SM02			
87	121	136	1.43	161	207	260	320	150	ESTER / ISO22	Capillary Tube	SM28			
128	163	176	1.18	203	250	304	368	160	ALQUILB / ISO32	Capillary Tube	SM01/SM02			
128	170	187	1.49	220	278	346	422	150	ESTER / ISO22	Capillary Tube	SM28			
182	235	257	1.72	289	371	457	572	150	ESTER / ISO10	Capillary Tube	SM05			
202	256	286	1.72	317	387	471	572	150	ESTER / ISO22	Capillary Tube	SM05			
209	264	288	1.72	326	397	480	579	150	ESTER / ISO22	Capillary Tube	SM05			
188	234	254	1.42	289	357	441	541	180	ESTER / ISO22	Capillary Tube	SM05			
205	257	280	1.45	319	392	480	580	180	ESTER / ISO22	Capillary Tube	SM05			
218	276	300	1.56	344	423	513	613	180	ESTER / ISO22	Capillary Tube	SM05			
206	266	291	1.79	339	422	515	615	150	ESTER / ISO10	Capillary Tube	SM05			
227	290	317	1.78	364	450	549	662	150	ESTER / ISO22	Capillary Tube	SM05			
229	289	304	1.67	360	443	539	647	150	ESTER / ISO22	Capillary Tube	SM05			
225	287	319	1.49	367	465	578	708	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08			
291	369	403	1.57	466	582	715	862	150	ESTER / ISO22	Capillary Tube	SM32			
331	425	469	1.44	547	691	850	1018	150	ESTER / ISO22	Capillary Tube	SM07			
309	392	437	1.44	491	608	745	905	210	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05			
444	558	603	1.52	691	845	1022	1272	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07			
449	568	608	1.63	705	862	1039	1299	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07			
473	603	655	1.61	757	933	1131	1381	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
660	859	939	1.47	1092	1360	1661	2011	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20			
1033	1308	1317	1.54	1623	1980	2380	2880	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26			

-10	-5	Cooling Capacity (°C)				10	15	Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
		0		5				7.2°C / Condensing 54.4°C	Efficiency (W/W)			
337	410	495	590	639	2.68	696	855	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
366	449	545	653	712	2.79	773	942	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
437	535	646	771	837	2.72	910	1100	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
517	629	757	900	975	2.9	1059	1281	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
583	705	834	963	1025	2.75	1105	1335	210	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05	
678	822	985	1167	1266	2.68	1367	1659	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
809	971	1152	1358	1457	2.6	1589	1929	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07	
920	1102	1302	1534	1651	2.56	1795	2175	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07	
1243	1500	1790	2117	2291	2.6	2481	3001	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
2045	2481	2978	3538	3803	2.78	4163	5055	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	

-30	-25	Cooling Capacity (°C)				-20	-15	-10	-5	Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
		(Evaporating -23.3°C / Condensing 54.4°C)		Efficiency (W/W)						Oil Charge				
171	224	244	1.35	286	358	443	543	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07			
224	284	300	1.4	356	441	541	661	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07			
254	325	351	1.4	408	505	618	758	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07			
273	350	390	1.34	439	543	664	814	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07			
327	427	467	1.31	544	680	833	1013	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
341	446	489	1.37	569	711	870	1060	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
395	522	573	1.36	671	840	1032	1252	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
436	562	613	1.21	713	889	1091	1331	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
460	601	657	1.32	766	955	1168	1427	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
523	682	745	1.29	867	1078	1314	1604	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
435	585	646	1.29	763	969	1202	1472	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20			
643	831	905	1.4	1050	1300	1583	1943	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13			
560	734	800	1.15	934	1160	1412	1742	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20			
646	855	940	1.26	1100	1378	1689	2079	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20			
726	960	1054	1.3	1233	1546	1899	2349	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21			
640	839	667	1.03	1069	1331	1624	2004	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21			
965	1265	1384	1.39	1617	2022	2483	3043	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21			
1040	1403	1547	1.33	1814	2272	2780	3400	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17			
UNDER DEVELOPMENT														
UNDER DEVELOPMENT														
UNDER DEVELOPMENT														
UNDER DEVELOPMENT														

-10	-5	Cooling Capacity (°C)				10	15	Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
		0		5				7.2°C / Condensing 54.4°C	Efficiency (W/W)			
354	433	524	629	679	2.39	746	915	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07	
448	550	667	801	877	2.23	951	1161	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07	
396	483	582	695	758	2.3	824	1004	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07	
519	625	751	895	975	2.09	1059	1281	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
565	690	836	1006	1100	2.14	1199	1459	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
600	741	903	1083	1180	2.31	1283	1563	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
743	912	1101	1309	1423	2.24	1537	1867	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
854	1029	1244	1486	1618	2.27	1753	2123	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1020	1235	1475	1740	1862	1.92	2029	2449	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1118	1358	1629	1932	2097	2.09	2266	2746	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1050	1307	1607	1952	2139	2.24	2340	2840	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1262	1570	1914	2295	2505	2.1	2713	3293	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1532	1896	2311	2774	3022	2.37	3287	4007	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1655	2022	2425	2847	3083	2.01	3270	4000	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1945	2462	3052	3716	4080	2.6	4453	5413	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18	
1827	2234	2692	3187	3483	2.01	3706	4506	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
2324	2901	3595	4395	4742	2.01	4742	5742	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
2324	2901	3559	4296	4702	2.18	5114	6114	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM17	

COMPRESSORS CATALOGUE

220V 60 Hz

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220V 60 Hz R134a LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
EMIS20HHR	BR	R134a	2,27	220 V 60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	9,1	ASHRAELBP32	60 Hz		20
EMIS30HHR	BR	R134a	3	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR	9	ASHRAELBP32	60 Hz		36
EMIE40HER	BR	R134a	3,4	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	8,6	ASHRAELBP32	60 Hz		50
EM45HNR	BR	R134a	3,77	220 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	9	ASHRAELBP32	60 Hz		50
EMYE70HEP	BR	R134a	5,96	220-240 V 50-60 Hz 1 ~	LBP	LST	RSIR	6,5	ASHRAELBP32	60 Hz		99
EGAS80HLR	BR	R134a	6,36	220-240 V 50-60 Hz 1 ~	LBP	LST	RSIR/CSIR	14,5	ASHRAELBP32	60 Hz		95
FF175HAK	BR	R134a	6,76	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	14	ASHRAELBP32	60 Hz		104
FFUS80HAK	BR	R134a	6,76	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	14,5	ASHRAELBP32	60 Hz		108
FF75HBK	BR	R134a	6,92	220 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	16,7	ASHRAELBP32	60 Hz		79
FF185HAK	BR	R134a	7,15	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	16	ASHRAELBP32	60 Hz		105
FFUS100HAK	BR	R134a	7,95	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	17,55	ASHRAELBP32	60 Hz		138
EGAS100HLR	BR	R134a	7,95	220-240 V 50-60 Hz 1 ~	LBP	LST	RSIR/CSIR	17,55	ASHRAELBP32	60 Hz		130
EGZ5100HLC	BR	R134a	7,95	220-240 V 50-60 Hz 1 ~	LBP	LST	RSCR	8,85	ASHRAELBP32	60 Hz		130
FF110HAK	BR	R134a	9,04	220-230 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	17,5	ASHRAELBP32	60 Hz		147
NE2121X	SK	R134a	9,26	200-220 V 50 Hz / 230 V 60 Hz 1 ~	LBP	HST	CSIR	12,6	ASHRAELBP32	60 Hz		147
FFC110HBX	BR	R134a	9,5	220 V 60 Hz 1 ~	L/M/HBP	HST	CSIR	19,6	ASHRAELBP32	60 Hz		136
FFU130HAX	BR	R134a	10,61	220 V 60 Hz 1 ~	L/MBP	LST/HST	CSIR	18,3	ASHRAELBP32	60 Hz		
FF112HBX	BR	R134a	11,14	220 V 60 Hz 1 ~	L/M/HBP	HST	CSIR	26,5	ASHRAELBP32	60 Hz		156
FFU160HAX	BR	R134a	12,92	220 V 60 Hz 1 ~	L/MBP	LST/HST	CSIR	19	ASHRAELBP32	60 Hz		
NT2140Z	SK	R134a	20,44	208-230 V 60 Hz 1 ~	LBP	HST	CSIR	24,5	ASHRAELBP32	60 Hz		223

220V 60 Hz R134a M/HBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
EM20HHR	BR	R134a	2,27	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	6,5	ASHRAELBP32	60 Hz	73	97
EMIS30HHR	BR	R134a	3	220 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR	8,8	ASHRAELBP32	60 Hz	115	150
EM30HHR	BR	R134a	3	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	8	ASHRAELBP32	60 Hz	117	153
EM55HHR	BR	R134a	4,6	220-240 V 50-60 Hz 1 ~	HBP	LST	RSIR	9,31	ASHRAELBP32	60 Hz		
EM65HHR	BR	R134a	5,54	220 V 50-60 Hz 1 ~	M/HBP	LST	RSIR/CSIR	14,3	ASHRAELBP32	60 Hz		
FF75HBK	BR	R134a	6,92	220-240 V 50-60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	15,8	ASHRAELBP32	60 Hz	234	308
FF85HBK	BR	R134a	7,95	220 V 60 Hz 1 ~	L/M/HBP	LST	RSIR/CSIR	18,5	ASHRAELBP32	60 Hz	261	340
NEU6187Z	SK	R134a	9,99	200-240 V 50 Hz / 230 V 60 Hz 1 ~	HBP	HST	CSIR	13	ASHRAELBP32	60 Hz		443
NT6215Z	SK	R134a	17,39	208-230 V 60 Hz 1 ~	HBP	HST	CSIR	44	ASHRAELBP32	60 Hz		
NTU6224ZV	SK	R134a	27,8	208-230 V 60 Hz 1 ~	HBP	HST	CSCR	30	ARI18	60 Hz		

220V 60 Hz R290 LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
EMIS0UER	BR	R290	3	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	8,7	ASHRAELBP32	60 Hz		75
EMI70UER	BR	R290	4,08	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSIR/CSIR	9,4	ASHRAELBP32	60 Hz		106
EMI90UEX	BR	R290	4,99	220 V 60 Hz 1 ~	L/MBP	HST	CSIR	12	ASHRAELBP32	60 Hz		
EM2X1121U	BR	R290	5,54	220 V 60 Hz 1 ~	LBP	LST	RSCR	17,23	ASHRAELBP32	60 Hz		167
EM2X3121U	BR	R290	5,54	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSCR	7,8	ASHRAELBP32	60 Hz		179
EM2X3125U	BR	R290	6,09	220-240 V 50-60 Hz 1 ~	L/MBP	LST	RSCR	7,8	ASHRAELBP32	60 Hz		210
EM2X1125U	BR	R290	6,09	220 V 60 Hz 1 ~	LBP	LST	RSCR	8,2	ASHRAELBP32	60 Hz		197
FFU130UAX	BR	R290	6,76	220-240 V 50-60 Hz 1 ~	L/MBP	HST	CSIR	19	ASHRAELBP32	60 Hz		230
FFU160UAX	BR	R290	7,95	220 V 60 Hz 1 ~	L/MBP	HST	CSIR	25,6	ASHRAELBP32	60 Hz		
EM2X3134U	BR	R290	7,96	220 V 60 Hz 1 ~	L/MBP	LST	RSCR	24,8	ASHRAELBP32	60 Hz		274
NEU2168U	SK	R290	16,8	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	30	ASHRAELBP32	60 Hz		
NEU2178U	SK	R290	18,7	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	29	ASHRAELBP32	60 Hz		
NT2160U	SK	R290	17,39	208-230 V 60 Hz 1 ~	LBP	HST	CSIR	28	ASHRAELBP32	60 Hz		
NT2170U	SK	R290	20,44	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	55	ASHRAELBP32	60 Hz		505
NT2180U	SK	R290	22,37	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	30	ARI540	60 Hz		
NT2210U	SK	R290	27,8	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	67	ARI4	60 Hz		521

220V 60 Hz R290 M/HBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
EMX6144U	SK	R290	4,53	220-240 V 50-60 Hz 1 ~	MBP	HST	CSIR	9	ASHRAELBP32	60 Hz	275	338
EMX6152U	SK	R290	5,19	220-240 V 50-60 Hz 1 ~	MBP	HST	CSIR	11	ASHRAELBP32	60 Hz	287	355
EMX6165U	SK	R290	6,09	220-240 V 50-60 Hz 1 ~	MBP	HST	CSIR	11	ASHRAELBP32	60 Hz	346	424
NEU6214U	SK	R290	12,11	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	42	ASHRAELBP32	60 Hz	664	830
NEU6217U	SK	R290	14,28	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	29	ASHRAELBP32	60 Hz	835	1034
NTX6225UV	SK	R290	22,37	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	35	ASHRAELBP32	60 Hz	1178	1497
NT6224UV	SK	R290	22,37	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	33,7	ARI4	60 Hz	838	1073

220V 60 Hz R404A LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
NEK2134GK	SK	R404A	8,77	208-230 V 60 Hz 1 ~	LBP	HST	CSIR	37,5	ASHRAELBP32	60 Hz		
NEU2140GK	SK	R404A	8,77	200-230 V 50 Hz / 208-230 V 60 Hz 1 ~	LBP	HST	CSIR	30	ASHRAELBP32	60 Hz	205	289
NEK2150GK	SK	R404A	12,11	208-230 V 60 Hz 1 ~	LBP	HST	CSIR	44	ASHRAELBP32	60 Hz		
NEU2155GK	SK	R404A	12,11	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	23	ASHRAELBP32	60 Hz		
NEK2168GK	SK	R404A	14,28	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	27	ASHRAELBP32	60 Hz		
NEU2168GK	SK	R404A	14,28	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	29	ASHRAELBP32	60 Hz		
NT2168GKV	SK	R404A	14,5	208-230 V 60 Hz 1 ~	LBP	HST	CSIR	54,5	ARI540	60 Hz		
NEU2178GK	SK	R404A	16,8	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	29	ASHRAELBP32	60 Hz		
NT2178GKV	SK	R404A	17,39	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	66	ASHRAELBP32	60 Hz		
NT2178GK	SK	R404A	17,39	200-240 V / 50 Hz 230 V / 60 Hz	LBP	HST	CSCR	25	ASHRAELBP32	60 Hz	361	513
NT2180GKV	SK	R404A	20,44	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	40	ASHRAELBP32	60 Hz		
NT2192GK	SK	R404A	22,37	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	40	ASHRAELBP32	60 Hz		
NJ2192GJ	SK	R404A	26,11	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	44	ASHRAELBP32	60 Hz		
NT2212GK	SK	R404A	27,8	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	45	ASHRAELBP32	60 Hz		
NT2212GJ	SK	R404A	27,8	200V/50-60Hz 3~	LBP	HST	3PHASE	36	ASHRAELBP32	60 Hz	523	767
NJ2212GJ	SK	R404A	34,38	208-230 V 60 Hz 1 ~	LBP	HST	CSCR	54	ASHRAELBP32	60 Hz		

220V 60 Hz R404A M/HBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
NEK6144GK	SK	R404A	4,51	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	26,5	ASHRAELBP32	60 Hz	273	340
NEK6181GK	SK	R404A	7,28	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	26,5	ASHRAELBP32	60 Hz	495	564
NEK6210GK	SK	R404A	8,77	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	23	ASHRAELBP32	60 Hz	522	644
NEK6213GK	SK	R404A	12,11	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	51	ASHRAELBP32	60 Hz	701	877
NT6220GK	SK	R404A	14,5	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	31	ASHRAELBP32	60 Hz	806	1021
NT6222GKV	SK	R404A	17,39	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	33,7	ASHRAELBP32	60 Hz	993	1245
NT6222GK	SK	R404A	17,39	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	33,7	ASHRAELBP32	60 Hz	993	1245
NT6222GK	SK	R404A	17,39	200-220 V 50 Hz / 230 V 60 Hz 1 ~	MBP	HST	CSIR	30	ASHRAELBP32	60 Hz	1029	1272
NTU6232GKV	SK	R404A	20,44	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	36	ASHRAELBP32	60 Hz		
NTU6224GKV	SK	R404A	20,44	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	36	ASHRAELBP32	60 Hz	1176	1492
NJ9226GK	SK	R404A	21,71	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	34	ASHRAELBP32	60 Hz	1035	1394
NT6226GKV	SK	R404A	22,37	208-230 V 60 Hz 1 ~	MBP	HST	CSIR	77	ASHRAELBP32	60 Hz	1301	1603
NTU6234GKV	SK	R404A	23,74	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	36	ASHRAELBP32	60 Hz		
NTU6238GKV	SK	R404A	26,21	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	36	ASHRAELBP32	60 Hz		
NTU6240GKV	SK	R404A	27,8	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	40	ASHRAELBP32	60 Hz		
NJ9238GK	SK	R404A	32,67	208-230 V 60 Hz 1 ~	MBP	HST	CSCR	60	ASHRAELBP32	60 Hz		

220V 60 Hz R404A LBP												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
EMI30CNP	BR	R600a	4,99	220 V 50-60 Hz 1 ~	L/MBP	LST	RSIR	3,5	ASHRAELBP32	60 Hz		36
EMU40CLP	BR	R600a	5,96	220 V 50-60 Hz 1 ~	LBP	LST	RSIR	7,33	ASHRAELBP32	60 Hz		61
EMU60CLP	BR	R600a	5,96	220 V 50-60 Hz 1 ~	LBP	LST	RSIR	7,45	ASHRAELBP32	60 Hz		81
EMYE70CLP	BR	R600a	5,96	220 V 50-60 Hz 1 ~	LBP	LST	RSIR	7,76	ASHRAELBP32	60 Hz		116
EMI40CNP	BR	R600a	6,36	220 V 50-60 Hz 1 ~	L/MBP	LST	RSIR	4,5	ASHRAELBP32	60 Hz		58
EGAS80CLP	BR	R600a	9,04	220 V 50-60 Hz 1 ~	LBP	LST	RSIR	7,25	ASHRAELBP32	60 Hz		125

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-30	-25	(Evaporating -23.3°C / Condensing 54.4°C)		-20	-15	-10	-5	Oil Charge				
		Capacity (W)	Efficiency (W/W)									
34	52	58	0.85	73	100	132	170	160	ESTER / ISO22	Capillary Tube	SM01/SM02	
59	85	100	1.14	115	150	191	241	160	ESTER / ISO22	Capillary Tube	SM07	
75	105	117	1.32	141	183	234	293	180	ESTER / ISO10	Capillary Tube	SM01/SM02	
74	106	123	1.15	145	191	243	300	200	ESTER / ISO22	Capillary Tube	SM01/SM02	
140	183	200	1.52	233	295	372		180	ESTER / ISO10	Capillary Tube	SM01	
151	215	240	1.61	289	377	482		230	ESTER / ISO10	Capillary Tube	SM03/SM04	
146	202	224	1.38	273	360	462	579	280	ESTER / ISO22	Capillary Tube	SM03	
154	212	236	1.47	282	367	468	587	230	ESTER / ISO10	Capillary Tube	SM08	
121	172	202	1.16	234	308	395	497	280	ESTER / ISO22	Capillary Tube	SM08	
157	219	241	1.37	294	384	491	618	280	ESTER / ISO22	Capillary Tube	SM03	
196	267	295	1.52	353	456	578	723	350	ESTER / ISO10	Capillary Tube	SM08	
200	277	310	1.61	366	470	593		230	ESTER / ISO10	Capillary Tube	SM04	
200	277	308	1.76	366	470	593		280	ESTER / ISO10	Capillary Tube	SM34	
187	268	301	1.45	362	471	598	749	280	ESTER / ISO22	Capillary Tube	SM03	
199	268	296	1.27	356	460	583		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
208	296	328	1.44	403	531	681	857	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08	
228	326	367	1.38	448	593	764	961	280	ESTER / ISO10	Capillary Tube or Expansion Valve	SM08	
222	31	345	1.18	420	555	715	901	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08	
316	432	478	1.49	567	724	907	1121	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08	
348	511	576	1.27	712	949	1222		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-10	-5	0	5	7.2°C / Condensing 54.4°C	10	15	Oil Charge					
		Capacity (W)	Efficiency (W/W)									
126	160	201	2.51	292	2.48	310	380	160	ESTER / ISO22	Capillary Tube	SM02	
191	241	300	3.70	434	2.68	451	546	160	ESTER / ISO22	Capillary Tube	SM01/SM02	
196	246	306	3.76	404	2.53	458	554	160	ESTER / ISO22	Capillary Tube	SM07	
	377	471	5.79	630	2.6	701	837	160	ESTER / ISO22	Capillary Tube	SM01/SM02	
381	473	581	7.05	766	2.49	845	1001	160	ESTER / ISO22	Capillary Tube	SM07	
395	497	616	7.52	829	2.23	909	1086	280	ESTER / ISO22	Capillary Tube	SM08	
435	550	686	8.45	915	2.5	1029		280	ESTER / ISO22	Capillary Tube	SM08	
571	723	899	10.99	1204	2.36	1324		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
	1142	1411	17.17	1881	2.26	2060		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
	1859	2306	28.07	3045	2.45	3337		650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-30	-25	(Evaporating -23.3°C / Condensing 54.4°C)		-20	-15	-10	-5	Oil Charge				
		Capacity (W)	Efficiency (W/W)									
103	138	153	1.33	181	231	290	355	170	ALQUILB / ISO32	Capillary Tube	SM01/SM02	
142	190	210	1.3	248	317	396	485	160	ALQUILB / ISO32	Capillary Tube	SM01/SM02	
197	251	275	1.33	322	405	501	606	160	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM01/SM02	
225	291	317	1.74	366	451	545		150	ESTER / ISO10	Capillary Tube	SM06	
242	310	329	1.68	385	470	568	682	150	ESTER / ISO22	Capillary Tube	SM05	
274	340	368	1.67	413	500	607	740	150	ESTER / ISO22	Capillary Tube	SM05	
258	329	357	1.72	413	509	621		150	ESTER / ISO10	Capillary Tube	SM06	
295	367	399	1.55	451	552	675	824	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08	
362	455	492	1.51	564	692	839	1009	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08	
356	454	491	1.69	567	699	849	1021	150	ESTER / ISO22	Capillary Tube	SM06	
569	728	792	1.55	914	1128	1369		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
754	966	1050	1.52	1214	1497	1815		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
590	759	828	1.34	961	1197	1467		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
657	847	921	1.31	1077	1345	1652	1999	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	
535	695	749	0.98	886	1108	1360		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
680	869	943	1	1101	1371	1680	2027	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-10	-5	0	5	7.2°C / Condensing 54.4°C	10	15	Oil Charge					
		Capacity (W)	Efficiency (W/W)									
414	502	601	7.12	767	2.63	836		150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
439	537	650	7.77	841	2.81	920		150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
520	634	766	9.16	987	2.62	1083		150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29	
1020	1066	1280	15.18	1631	2.44	1781		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1268	1537	1839	21.75	2354	2.64	2546		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1869	2295	2775	33.10	3596	2.85	3898		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1348	1670	2088	25.79	1739	1.7	3143		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-30	-25	(Evaporating -23.3°C / Condensing 54.4°C)		-20	-15	-10	-5	Oil Charge				
		Capacity (W)	Efficiency (W/W)									
380	497	544	1.3	635	794	974		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
395	522	568	1.36	670	840	1031		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
494	649	712	1.26	834	1047	1287		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
528	700	768	1.43	902	1136	1400		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
567	745	817	1.35	957	1200	1476		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
644	842	921	1.42	1074	1338	1637		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
314	437	477	1.02	586	761	963		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
744	967	1054	1.39	1225	1515	1840		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
699	935	1032	1.3	1213	1532	1893		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
700	922	1006	1.28	1179	1471	1799		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
778	1045	1152	1.32	1349	1693	2079		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
864	1144	1254	1.42	1465	1828	2232		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	
885	1257	1403	1.27	1686	2173	2718		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17	
1172	1540	1684	1.43	1960	2433	2958		650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21	
1063	1412	1571	1.31	1813	2267	2773		650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20	
1150	1589	1774	1.3	2115	2728	3427		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17	

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-10	-5	0	5	(Evaporating 7.2°C / Condensing 54.4°C)	10	15	Oil Charge					
		Capacity (W)	Efficiency (W/W)									
420	513	622	7.50	821	2.13	897		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
673	817	992	11.95	1307	2.12	1422		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
793	972	1178	14.15	1545	2.11	1680		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1083	1318	1582	18.76	2036	1.84	2199		350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13	
1269	1307	1607	19.52	2139	2.24	2340		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1550	1902	2292	27.14	2943	2.02	3163		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1550	1902	2292	27.14	2943	2.02	3163		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1566	1913	2311	27.61	3010	2.14	3263		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
				3982	2.8			650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27	
1859	2256	2713	32.28	3512	2.25	3804		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
1813	2292	2831	34.29	3755	2.24	4087		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18	
1963	2385	2869	34.19	3721	1.79	4035		450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26	
				4574	2.67			650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27	
				4877	2.49			650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27	
				5292	2.54			650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27	
1998	2479	3030	36.50	2768	1.41	4340		750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17	

		Cooling Capacity (°C)						Lubricant		Type/Viscosity	Expansion Device	Wiring Diagram
-30	-25	(Evaporating -23.3°C / Condensing 54.4°C)		-20	-15	-10	-5	Oil Charge				
		Capacity (W)	Efficiency (W/W)									
55	76	94	1.11	102	133	170	213	160	MINERAL / ISO32	Capillary Tube	SM32	
84	111	120	1.41	144	184	233		180	ALQUILB / ISO5	Capillary Tube	SM00	
113	151	166	1.44	197	253	320		180	ALQUILB / ISO5	Capillary Tube	SM07	
114	189	198	1.49	279	320	400		180	ALQUILB / ISO5	Capillary Tube	SM07	
80	108	120	1.16	143	185	236	295	160	MINERAL / ISO32	Capillary Tube	SM32	
172	225	242	1.59	287	360	447		280	ALQUILB / ISO5	Capillary Tube	SM09	

COMPRESSORS CATALOGUE TRI-PHASE

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TRI-PHASE												
Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-40	-35
NT2168GS	SK	R404A	14,5	200V/50-60Hz 3~	LBP	HST	3PHASE	28,5	ASHRAELBP32	50 Hz	219	313
NT2168GS	SK	R404A	14,5	200V/50-60Hz 3~	LBP	HST	3PHASE	28,5	ASHRAELBP32	60 Hz		
NT2192GS	SK	R404A	22,37	200V/50-60Hz 3~	LBP	HST	3PHASE	28,5	ASHRAELBP32	50 Hz	364	526
NT2192GS	SK	R404A	22,37	200V/50-60Hz 3~	LBP	HST	3PHASE	28,5	ASHRAELBP32	60 Hz		
NT2212GS	SK	R404A	27,8	200V/50-60Hz 3~	LBP	HST	3PHASE	36	ASHRAELBP32	50 Hz	479	668
NT2212GS	SK	R404A	27,8	200V/50-60Hz 3~	LBP	HST	3PHASE	36	ASHRAELBP32	60 Hz	523	767
NJ2212GS	SK	R404A	34,4	380-420V 50Hz / 440-480V 60Hz 3 ~	LBP	HST	3PHASE	20,6	ASHRAELBP32	60 Hz	294	637
NJ2212GS	SK	R404A	34,4	380-420V 50Hz / 440-480V 60Hz 3 ~	LBP	HST	3PHASE	20,6	ASHRAELBP32	50 Hz		
NJX2215US	SK	R290	38	400V 50Hz / 440V 60Hz	LBP	HST	3PHASE	21	ASHRAELBP32	50 Hz	686	945
NJX2215US	SK	R290	38	400V 50Hz / 440V 60Hz	LBP	HST	3PHASE	21	ASHRAELBP32	60 Hz	842	1116
NJX2219GS	SK	R404A	38	400V 50Hz / 440V 60Hz	LBP	HST	3PHASE	22	ASHRAELBP32	50 Hz	870	1176
NJX2219GS	SK	R404A	38	400V 50Hz / 440V 60Hz	LBP	HST	3PHASE	22	ASHRAELBP32	60 Hz	1007	1373

Model	Origin	Refrigerant	Displacement	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	-20	-15
NTU6232GSV	SK	R404A	20,44	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	36	ASHRAEHBP46	60 Hz		
NTU6234GSV	SK	R404A	23,74	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	36	ASHRAEHBP46	60 Hz		
NJ9232GS	SK	R404A	26,11	380 420 V 50 Hz / 440 480 V 60 Hz 3~	MBP	HST	3PHASE	13	ASHRAEHBP46	60 Hz	1323	1756
NJ9232GS	SK	R404A	26,11	380 420 V 50 Hz / 440 480 V 60 Hz 3~	MBP	HST	3PHASE	13	ASHRAEHBP46	50 Hz	1131	1501
NTU6238GSV	SK	R404A	26,21	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	36	ASHRAEHBP46	60 Hz		
NTU6240GSV	SK	R404A	27,8	200-230 V 60 Hz 3 ~	MBP	HST	3PHASE	40	ASHRAEHBP46	60 Hz		
NJ9238GS	SK	R404A	32,67	380 420 V 50 Hz / 440 480 V 60 Hz 3~	MBP	HST	3PHASE	22	ASHRAEHBP46	60 Hz		
NJ9238GS	SK	R404A	32,67	380 420 V 50 Hz / 440 480 V 60 Hz 3~	MBP	HST	3PHASE	22	ASHRAEHBP46	50 Hz		
NJ6226ZX	SK	R134a	34,38	380 420 V 50 Hz / 440 480 V 60 Hz 3~	HBP	HST	3PHASE	13	ASHRAEHBP46	60 Hz		
NJ6226ZX	SK	R134a	34,38	380 420 V 50 Hz / 440 480 V 60 Hz 3~	HBP	HST	3PHASE	13	ASHRAEHBP46	50 Hz		
NJX6244US	SK	R290	38	400V 50Hz / 440V 60Hz	MBP	HST	3PHASE	22	ASHRAEHBP46	50 Hz	1831	2216
NJX6244US	SK	R290	38	400V 50Hz / 440V 60Hz	MBP	HST	3PHASE	22	ASHRAEHBP46	60 Hz	2129	2656
NJX6250GS	SK	R404A	38	400V 50Hz / 440V 60Hz	MBP	HST	3PHASE	22	ASHRAEHBP46	50 Hz	1751	2238
NJX6250GS	SK	R404A	38	400V 50Hz / 440V 60Hz	MBP	HST	3PHASE	22	ASHRAEHBP46	60 Hz	1987	2631

(Evaporating -23,3°C / Condensing 54,4°C)								Lubrificant		Expansion Device
-30	-25	Capacity (W)	Efficiency (W/W)	-20	-15	-10	-5	Oil Charge	Type/Viscosity	
438	595			783	1001	1249		650	ESTER / ISO22	Capillary Tube or Expansion Valve
486	707	792	1,32	955	1229	1532		650	ESTER / ISO22	Capillary Tube or Expansion Valve
724	960			1233	1542	1889		650	ESTER / ISO22	Capillary Tube or Expansion Valve
838	1121	1236	1,37	1456	1842	2279		650	ESTER / ISO22	Capillary Tube or Expansion Valve
910	1206	1325	1,31	1556	1959	2417		650	ESTER / ISO22	Capillary Tube or Expansion Valve
1063	1412	1571	1,31	1813	2267	2773		650	ESTER / ISO22	Capillary Tube or Expansion Valve
1043	1513	1653	1,29	2047	2644	3304		750	ESTER / ISO22	Capillary Tube or Expansion Valve
951	1321	1477	1,32	1752	2243	2796		750	ESTER / ISO22	Capillary Tube or Expansion Valve
1258	1626	1769	1,55	2049	2526	3057		750	ESTER / ISO22	Capillary Tube or Expansion Valve
1459	1871	2026	1,52	2353	2903	3523		750	ESTER / ISO22	Capillary Tube or Expansion Valve
1553	2002	2164	1,47	2522	3112	3774		750	ESTER / ISO22	Capillary Tube or Expansion Valve
1827	2368	2611	1,45	2997	3714	4518		750	ESTER / ISO22	Capillary Tube or Expansion Valve

(Evaporating 7,2°C / Condensing 54,4°C)								Lubrificant		Expansion Device
-10	-5	0	5	Capacity (W)	Efficiency (W/W)	10	15	Oil Charge	Type/Viscosity	
				3982	2,8			650	ESTER / ISO22	Capillary Tube or Expansion Valve
				4574	2,67			650	ESTER / ISO22	Capillary Tube or Expansion Valve
2275	2881	3571	4348	4775	2,55	5211		750	ESTER / ISO22	Capillary Tube or Expansion Valve
1945	2462	3052	3716	4080	2,54	4453		750	ESTER / ISO22	Capillary Tube or Expansion Valve
				4877	2,49			650	ESTER / ISO22	Capillary Tube or Expansion Valve
				5292	2,54			650	ESTER / ISO22	Capillary Tube or Expansion Valve
2833	3536	4337	5236	5730	2,59	6233		750	ESTER / ISO22	Capillary Tube or Expansion Valve
2421	3022	3707	4475	4897	2,59	5326		750	ESTER / ISO22	Capillary Tube or Expansion Valve
	2069	2610	3204	3526	2,55	3851		750	ESTER / ISO22	Capillary Tube or Expansion Valve
	1768	2231	2739	3014	2,55	3291		750	ESTER / ISO22	Capillary Tube or Expansion Valve
2710	3313	4025	4845	5218	2,73	5775		750	ESTER / ISO22	Capillary Tube or Expansion Valve
3267	3962	4740	5603	5976	2,51			750	ESTER / ISO22	Capillary Tube or Expansion Valve
2839	3792	4609	5527	6016	2,37	6546		750	ESTER / ISO22	Capillary Tube or Expansion Valve
3378	4433	5353	6371	6971	2,16	7486		750	ESTER / ISO22	Capillary Tube or Expansion Valve

11

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 allows the compressor run in different RPM, delivering the cooling capacity needed according to the thermal load.

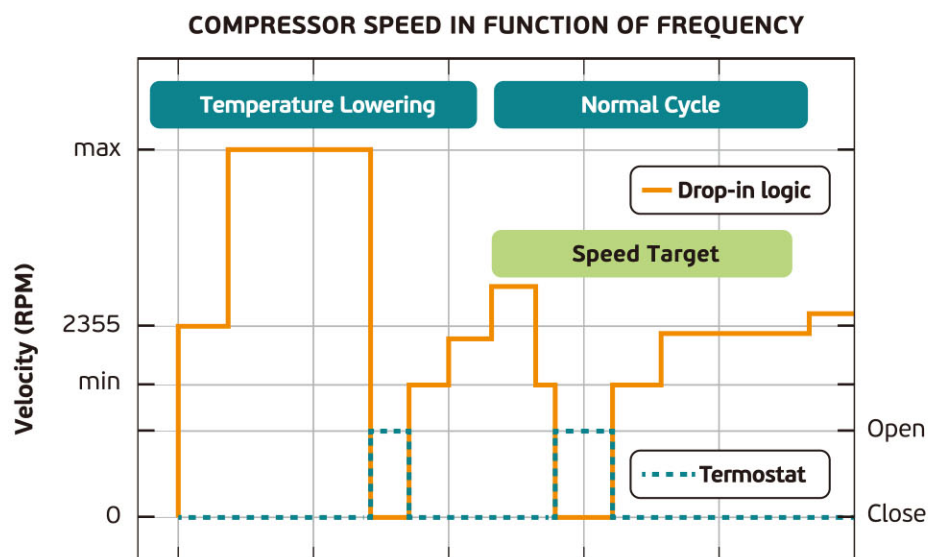
CONTROL MODES

DROP-IN

The Drop-In mode is a CF05D inverter control mode, where single thermostat contact is used to set the compressor running conditions. Drop-In mode allows the application to any refrigeration system with a simple ON/OFF thermostat, without the need of a rotation control signal through serial or frequency communication. The compressor speed will be adjusted automatically by the inverter, in accordance to the thermal load variation.

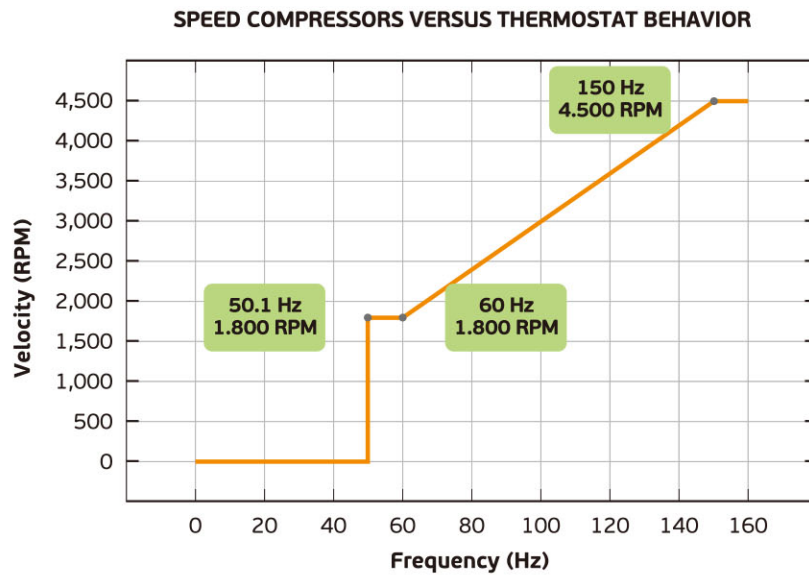
SMART DROP-IN

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 main 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.



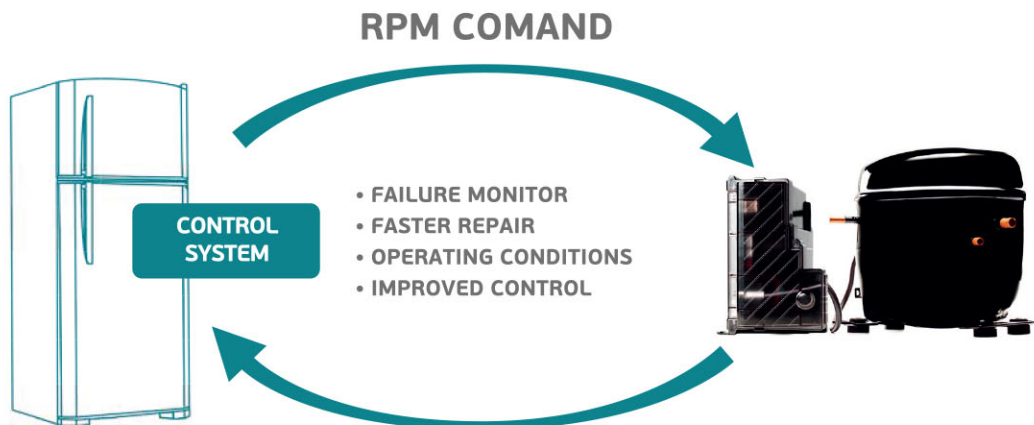
FREQUENCY

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.



Variable Speed Compressors 115-127V 50/60Hz			R600a				HP	APPLICATION	TORQUE	MOTOR TYPE	EXPANSION DEVICE	LUBRICANT		WEIGHT KG	TEST CONDITION	INVERTER	
MODEL	REFRIGERANT	VOLTAGE / FREQUENCY	COOLING CAPACITY		EFFICIENCY							OIL CHARGE	TYPE / VISCOSITY				
			RPM	BTU/h	W	BTU	W/W										
FMXA6C	R600a	230 V 43-134 Hz 3-	2000	222	65	6.1	1.79	1/10	L/MBP	LST	BPM	Capillary Tube	175	ALQULB / ISO5	4.9	ASHRAELBP32	CF02C05
			3000	333	98	6.14	1.8										
			4000	413	121	5.8	1.7										
FMXY9C	R600a	230 V 43-134 Hz 3-	2000	334	98	5.83	1.71	1/7	L/MBP	LST	BPM	Capillary Tube	175	ALQULB / ISO5	4.8	ASHRAELBP32	CF02C05
			3000	495	145	5.97	1.75										
			4000	614	180	5.63	1.65										
FMXA9C	R600a	230 V 43-134 Hz 3-	2000	334	98	6.14	1.8	1/7	L/MBP	LST	BPM	Capillary Tube	175	ALQULB / ISO5	4.8	ASHRAELBP32	CF02C05
			3000	495	145	6.07	1.78										
			4000	614	180	5.8	1.7										
FMXC9C	R600a	230 V 43-134 Hz 3-	2000	342	100	6.37	1.87	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQULB / ISO5	4.8	ASHRAELBP32	CF02C05
			3000	514	151	6.35	1.86										
			4000	632	185	5.97	1.75										
VESD11C	R600a	230 V 40-150 Hz 3 -	2000	467	137	6.75	1.98	1/5	LBP	LST	BPM	Capillary Tube or Expansion Valve	180	ALQULB / ISO5	6.75	ASHRAELBP32	VCC3 1156 XXXX
			3000	707	207	6.53	1.91										
			4500	942	276	6.06	1.78										

Variable Speed Compressors 115-127V 50/60Hz			R134a				HP	APPLICATION	TORQUE	MOTOR TYPE	EXPANSION DEVICE	LUBRICANT		WEIGHT KG	TEST CONDITION	INVERTER	
MODEL	REFRIGERANT	VOLTAGE / FREQUENCY	COOLING CAPACITY		EFFICIENCY							OIL CHARGE	TYPE / VISCOSITY				
			RPM	BTU/h	W	BTU	W/W										
VEMY4H	R134a	230 V 53-150 Hz 3 -	2000	256	78	5.67	1.66	1/10	LBP	LST	BPM	Capillary Tube	220	ESTER / ISO10	7.5	ASHRAELBP32	VCC31156000X
			3000	396	116	5.4	1.58										
			4500	580	170	5.28	1.55										
VEMY6H	R134a	230 V 53-150 Hz 3 -	1600	337	99	5.62	1.65	1/10	L/M/HBP	LST	BPM	Capillary tube	220	ESTER / ISO10	7.5	ASHRAELBP32	VCC3C0115600X
			3000	600	176	5.73	1.68										
			4500	782	229	5.46	1.6										
VEMY6H	R134a	230 V 53-150 Hz 3 -	2000	387	113	5.63	1.65	1/10	LBP	LST	BPM	Capillary Tube	220	ESTER / ISO10	7.59	ASHRAELBP32	VCC31156000X
			3000	600	176	5.7	1.67										
			4500	790	233	5.5	1.61										
VEGT8HB	R134a	230 V 53-150 Hz 3 -	1800	468	137	5.87	1.72	1/4	L/MBP	LST	BPM	Capillary tube	430	ESTER / ISO10	10.77	ASHRAELBP32	VCCMP1156000X
			3000	875	256	6.01	1.76										
			4500	1161	340	5.61	1.64										
VEGT11HB	R134a	230 V 60-150 Hz 3 -	1800	653	191	5.7	1.67	1/2	L/MBP	LST	BPM	Capillary tube	430	ESTER / ISO22	10	ASHRAELBP32	VCCMP1156000X
			2500	907	266	5.68	1.66										
			3000	1100	322	5.67	1.66										
FMFT415Z	R134a		3600	1289	378	5.55	1.63										
			4500	1463	429	5.24	1.54										
			UNDER DEVELOPMENT														

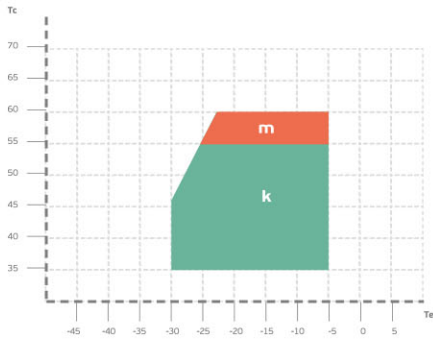
Variable Speed Compressors 115-127V 50/60Hz			R290				HP	APPLICATION	TORQUE	MOTOR TYPE	EXPANSION DEVICE	LUBRICANT		WEIGHT KG	TEST CONDITION	INVERTER	
MODEL	REFRIGERANT	VOLTAGE / FREQUENCY	COOLING CAPACITY		EFFICIENCY							OIL CHARGE	TYPE / VISCOSITY				
			RPM	BTU/h	W	BTU	W/W										
FMFT406U	R290	230 V 46-150 Hz 3-	1800	647	190	6.19	1.81	1/2	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO22	10.28	ASHRAELBP32	VCC3 1156 S000X
			2500	846	248	6.1	1.79										
			3000	1110	325	6.27	1.84										
			3600	1321	387	6.18	1.81										
			4500	1738	509	6.07	1.78										
VEGT8U	R290	230 V 60-150 Hz 3 -	2000	930	273	6.02	1.76	1/2	L/MBP	LST	BPM	Capillary Tube or Expansion Valve	450	ESTER / ISO22	10.28	ASHRAELBP32	VCCMP28XXXXXXX
			3000	1454	426	6.17	1.81										
			4500	2209	647	5.94	1.74										
FMFT408U	R290	230V / 60-150Hz	1800	853	250	6.18	1.81	1	LMBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.28	ASHRAELBP32	CF05D01 X XX XX
			2400	1141	334	6.23	1.83										
			3000	1475	432	6.22	1.82										
			3600	1738	509	6.11	1.79										
			4500	2077	609	5.97	1.75										
FMFT411U	R290	230V / 60-150Hz	1800	1191	349	6.08	1.78	3/4	LMBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.87	ASHRAELBP32	CF10B01 N.0.1 X / CF10C01 M.0.1 X
			2400	1592	466	6.31	1.85										
			3000	2024	593	6.28	1.84										
			3600	2335	684	6.14	1.8										
			4500	2959	867	5.99	1.76										
FMFD413UE	R290	230V / 53-167Hz	1600	1128	331	6.67	1.95	1	LMBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO10	10.87	ASHRAELBP32	CF10B01 N.0.1 X
			2400	1672	490	6.79	1.99										
			3000	2059	603	6.75	1.98										
			3600	2444	716	6.55	1.92										
			5000	3270	958	6.2	1.82										
FMFT413U	R290	230 V 60-150 Hz 3 -	1800	1376	403	6.02	1.76	1/2	LBP	LST	BPM	Capillary Tube	430	ESTER / ISO22	10.87	ASHRAELBP32	CF10C01 M.0.1 X / VCHP2456XXXXXX / CF10B01 N.0.1 X
			2500	1812	531	6.08	1.78										
			3000	2328	682	6.15	1.8										
			3600	2652	777	6.01	1.76										
			4500	3407	998	5.94	1.74										
FMFT415U	R290	230V / 53-167Hz	1600	1390	407	5.93	1.74	1 1/4	LMBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.87	ASHRAELBP32	CF10B01 N.0.1 X
			2400	2092	613	6.06	1.78										
			3000	2641	774	6.02	1.76										
			3600	3044	892	5.92	1.73										
			5000	4276	1253	5.75	1.68										

Variable Speed Compressors 115-127V 50/60Hz			R1234yf				HP	APPLICATION	TORQUE	MOTOR TYPE	EXPANSION DEVICE	LUBRICANT		WEIGHT KG	TEST CONDITION	INVERTER	
MODEL	REFRIGERANT	VOLTAGE / FREQUENCY	COOLING CAPACITY		EFFICIENCY							OIL CHARGE	TYPE / VISCOSITY				
			RPM	BTU/h	W	BTU	W/W										
VEGYEL	R1234yf	230 V 53-150 Hz 3 -	2000	470	138	5.96	1.75	1/5	L/MBP	LST	BPM	Capillary Tube	430	ESTER / ISO22	11.31	ASHRAELBP32	VCC31156000X
			3000	739	217	5.76	1.69										
			4500	1114	326	5.39	1.58										
VEGD6L	R1234yf	230 V 47-120HZ 3-	2000	482	141	6.47	1.9	1/5	L/M/HBP	HST	BPM	Capillary Tube or Expansion Valve	350	ESTER / ISO10	10.75	ASHRAELBP32	VCC3C0115600X
			4500	2209	647	5.79	1.7										
FMFT411L	R1234yf		UNDER DEVELOPMENT														
FMFT415L	R1234yf		UNDER DEVELOPMENT														

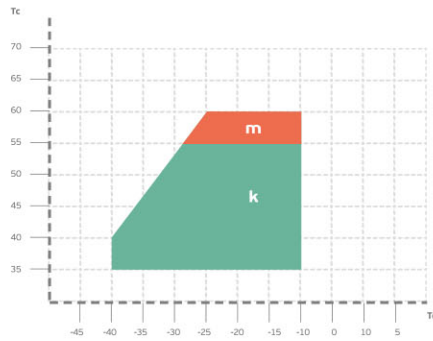
OPERATING ENVELOPE

EMC, EMX, NE, NT, NJ, VNE

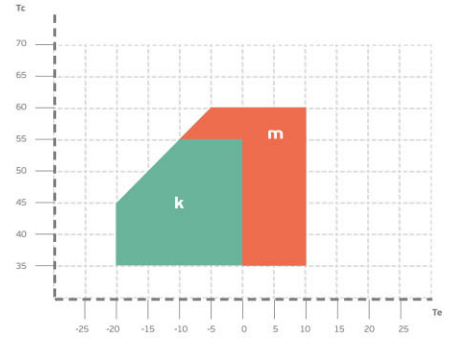
LBP
R134a - R600a



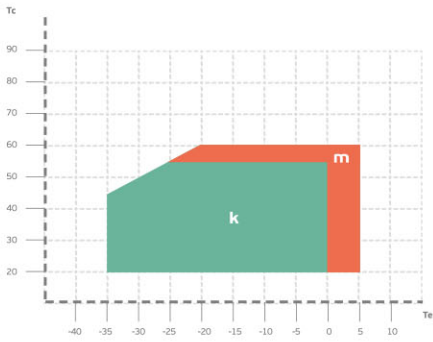
LBP
R404A/R507/R452A - R290



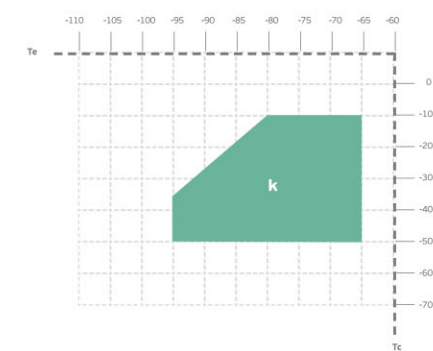
MBP
R404A/R507/R452A - R290



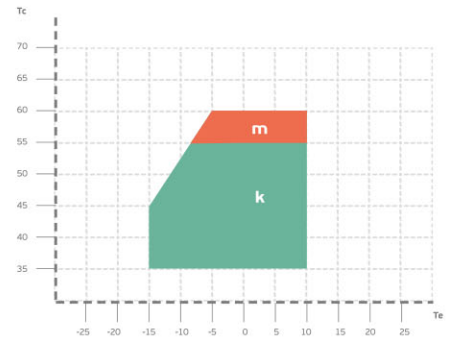
L/MBP
R290



ULBP
R508B/R170 - second stage of cascade



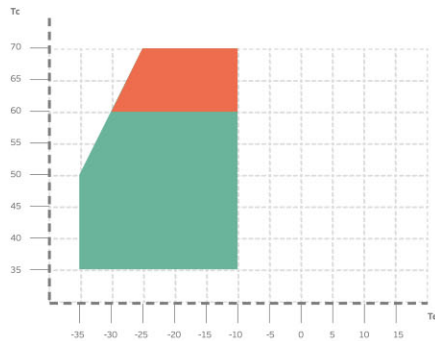
HBP
R134a - R600a



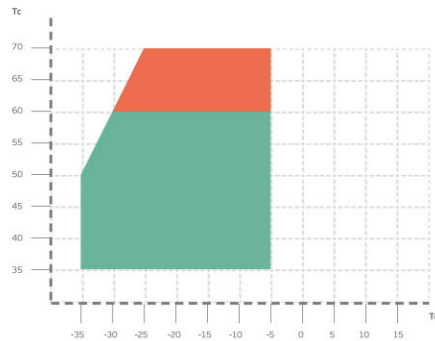
EM, EG, F, VEM, VEG, VES

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

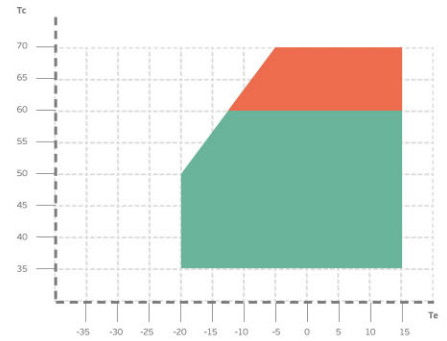
LBP
R290 - R134a - R600a



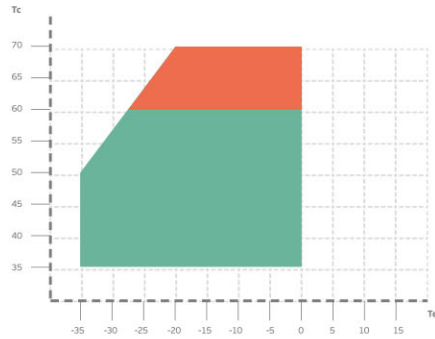
L-MBP (STANDARD)
R290 - R134a



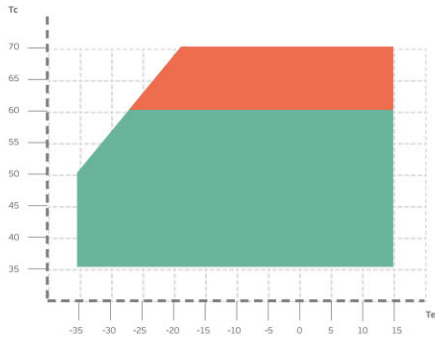
M-HBP
R134a



L-MBP EXTENDED RANGE FFUS, EM2, EM3
R290 - R134a - R600a



L-M-HBP
R134a



■ Operation Condition
■ Transient Condition

Tc Condensing Temperature
k Ambient 32°C and return gas 20°C
Te Evaporating Temperature
m Ambient 32°C and return gas 20°C (for transitory period)

NOTE: usage of compressors outside the intended working range cannot make use of the warranty, or should be consulted with Technical support.

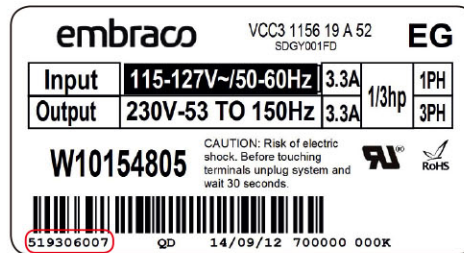
VOLTAGE:

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.



CONTROL SIGNAL:

Check which control signal is used in the original inverter. You can find it on the inverter label below and check the available list on pages 08 to 15 which control signal.



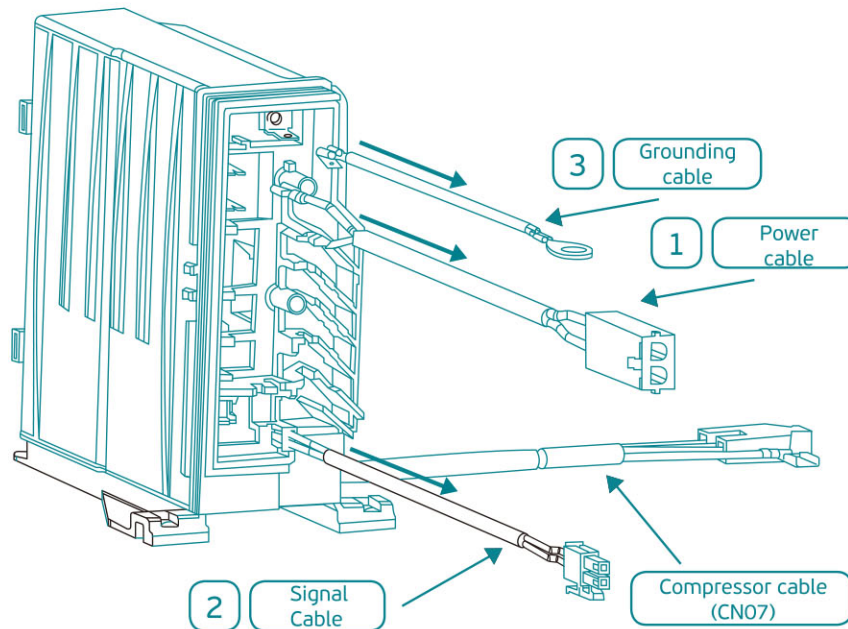
The inverter must be replaced by another one with the same voltage range

APPLICATION	TORQUE	MOTOR TYPE	EXPANSION DEVICE	LUBRICANT		WEIGHT	TEST CONDITION	INVERTER
				OIL CHARGE	TYPE / VISCOSITY	KG		
LBP	HST	BPM	Capillary Tube or Expansion Valve	500	ESTER / ISO22	11,6	ASHRAELBP32	VCCH-P2456XXXX
LBP	HST	BPM	Capillary Tube or Expansion Valve	500	ESTER / ISO22	11,6	ASHRAELBP32	VCCH-P2456XXXX

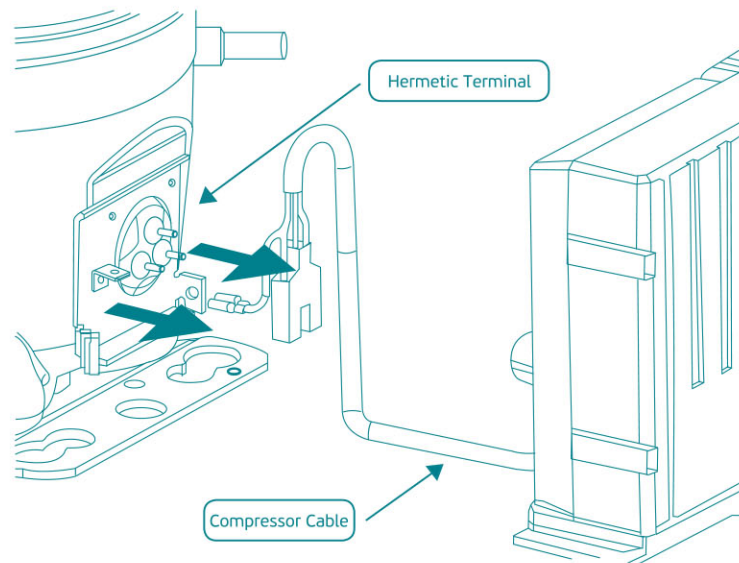
01 REPLACING A FAILED INVERTER

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);



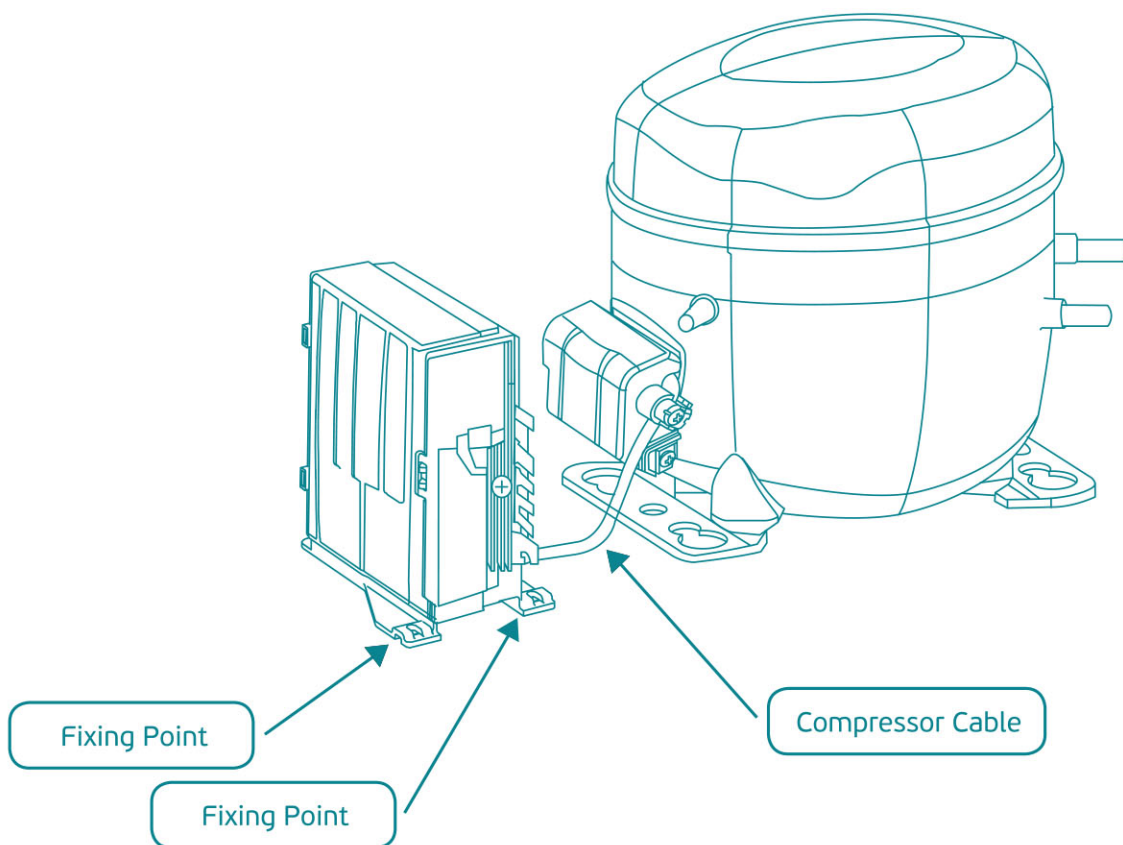
3. Disconnect the Inverter from the compressor;



4. Unscrew and remove the inverter from the system;

02 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.

REFERENCE TABLE TO REPLACE THE INVERTER

Inversor Code	Signal Control	Inversor Code	Signal Control
519306128	Drop-in	519306165	Drop-in
519306129	Frequency	519306166	Drop-in
519306130	Drop-in	519306169	Frequency
519306131	Drop-in	519306170	Drop-in
519306132	Drop-in	519306171	Drop-in
519306133	Frequency	519306172	Frequency
519306133	Frequency	519306173	Frequency
519306134	Frequency	519306174	Drop-in
519306135	Drop-in/ Frequency	519306175	Drop-in
519306136	Drop-in	519306176	Drop-in
519306137	Frequency	519306177	Drop-in
519306138	Frequency	519306178	Drop-in
519306139	Frequency	519306179	Drop-in
519306139	Frequency	519306180	Frequency
519306140	Frequency	519306182	Frequency
519306141	Drop-in	519306185	Drop-in
519306141	Drop-in	519306186	Drop-in
519306146	Frequency	519306187	Frequency
519306147	Drop-in	519306188	Drop-in
519306148	Frequency	519306189	Frequency
519306149	Frequency	519306190	Drop-in
519306150	Drop-in	519306191	Frequency
519306151	Drop-in	519306192	Frequency
519306152	Frequency	519306194	Frequency
519306153	Frequency	519306195	Frequency
519306155	Serial	519306196	Frequency
519306157	Frequency	519306197	Serial
519306158	Frequency	519306199	Frequency
519306159	Frequency	519306200	Frequency
519306160	Drop-in	519306201	Frequency
519306161	Frequency	519306202	Drop-in
519306164	Frequency	519306203	Drop-in

Inversor Code	Signal Control	Inversor Code	Signal Control
519306070	Frequency	519306100	Frequency
519306071	Drop-in	519306101	Frequency
519306072	Drop-in	519306102	Frequency
519306073	Drop-in	519306103	Drop-in
519306074	Frequency	519306104	Frequency
519306075	Drop-in	519306105	Frequency
519306076	Frequency	519306106	Drop-in
519306077	Frequency	519306107	Drop-in
519306079	Frequency	519306108	Frequency
519306080	Drop-in	519306108	Frequency
519306081	Frequency	519306109	Frequency
519306082	Drop-in	519306110	Frequency
519306083	Drop-in	519306111	Frequency
519306084	Frequency	519306112	Frequency
519306085	Drop-in	519306113	Frequency
519306086	Frequency	519306115	Drop-in
519306087	Frequency	519306116	Drop-in
519306088	Drop-in	519306117	Frequency
519306089	Drop-in	519306118	Frequency
519306090	Drop-in	519306118	Frequency
519306091	Frequency	519306119	Frequency
519306091	Frequency	519306119	Frequency
519306092	Frequency	519306120	Frequency
519306092	Frequency	519306120	Frequency
519306093	Frequency	519306121	Frequency
519306094	Drop-in	519306122	Frequency
519306095	Frequency	519306123	Frequency
519306096	Frequency	519306123	Frequency
519306097	Frequency	519306124	Drop-in
519306097	Frequency	519306125	Drop-in
519306098	Frequency	519306126	Drop-in
519306099	Drop-in	519306127	Frequency

Inversor Code	Signal Control	Inversor Code	Signal Control
519306128	Drop-in	519306165	Drop-in
519306129	Frequency	519306166	Drop-in
519306130	Drop-in	519306169	Frequency
519306131	Drop-in	519306170	Drop-in
519306132	Drop-in	519306171	Drop-in
519306133	Frequency	519306172	Frequency
519306133	Frequency	519306173	Frequency
519306134	Frequency	519306174	Drop-in
519306135	Drop-in/ Frequency	519306175	Drop-in
519306136	Drop-in	519306176	Drop-in
519306137	Frequency	519306177	Drop-in
519306138	Frequency	519306178	Drop-in
519306139	Frequency	519306179	Drop-in
519306139	Frequency	519306180	Frequency
519306140	Frequency	519306182	Frequency
519306141	Drop-in	519306185	Drop-in
519306141	Drop-in	519306186	Drop-in
519306146	Frequency	519306187	Frequency
519306147	Drop-in	519306188	Drop-in
519306148	Frequency	519306189	Frequency
519306149	Frequency	519306190	Drop-in
519306150	Drop-in	519306191	Frequency
519306151	Drop-in	519306192	Frequency
519306152	Frequency	519306194	Frequency
519306153	Frequency	519306195	Frequency
519306155	Serial	519306196	Frequency
519306157	Frequency	519306197	Serial
519306158	Frequency	519306199	Frequency
519306159	Frequency	519306200	Frequency
519306160	Drop-in	519306201	Frequency
519306161	Frequency	519306202	Drop-in
519306164	Frequency	519306203	Drop-in

Inversor Code	Signal Control	Inversor Code	Signal Control
519306204	Drop-in	519306240	Frequency
519306205	Drop-in	519306240	Frequency
519306206	Drop-in	519306243	Frequency
519306207	Frequency	519306244	Drop-in
519306211	Frequency	519306245	Frequency
519306212	Drop-in	519306246	Drop-in
519306213	Frequency	519306247	Frequency
519306214	Drop-in	519306248	Frequency
519306216	Drop-in	519306249	Frequency
519306217	Frequency	519306250	Serial
519306218	Frequency	519306251	Frequency
519306219	AC Protocol	519306252	Frequency
519306220	AC Protocol	519306253	Frequency
519306221	Drop-in	519306254	Frequency
519306222	Frequency	519306255	Drop-in
519306223	Frequency	519306256	Drop-in
519306224	Drop-in	519306259	Frequency
519306225	Drop-in	519306262	Frequency
519306226	Drop-in	519306264	Frequency
519306227	Frequency	519306265	Frequency
519306227	Frequency	519306266	Frequency
519306228	Frequency	519306272	Frequency
519306229	Frequency	519306273	Frequency
519306230	Frequency	519306274	Frequency
519306231	Drop-in	519306275	Frequency
519306233	Frequency	519306276	Frequency
519306234	Frequency	519306277	Drop-in
519306235	Frequency		
519306236	Frequency		
519306237	Drop-in		
519306238	Serial		
519306239	Serial		

12

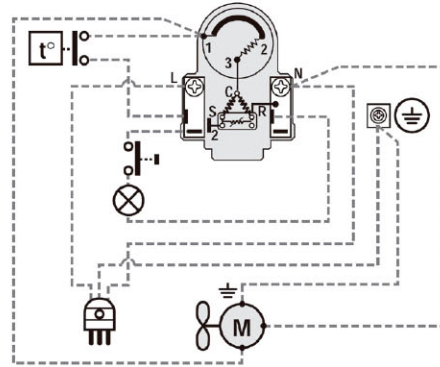
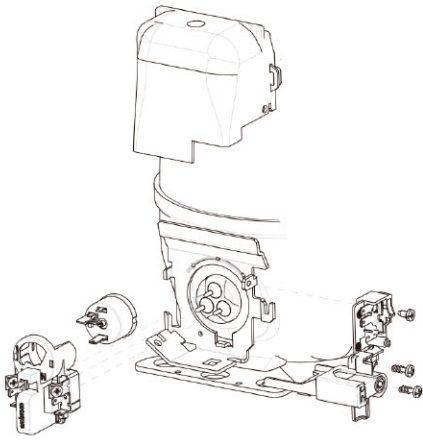
ELECTRICAL CONFIGURATIONS

WIRING DIAGRAMS KEY

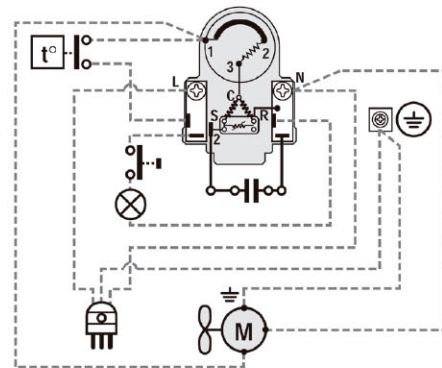
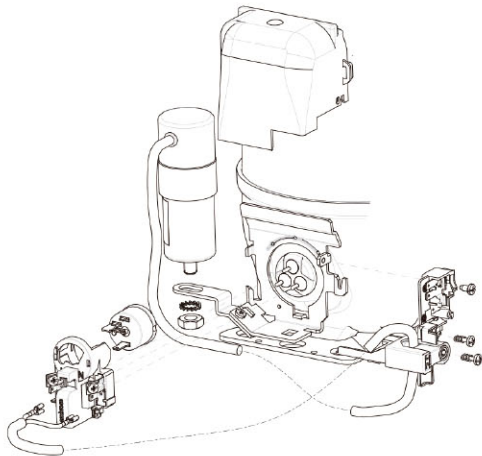
	OVERLOAD PROTECTOR		PTC START DEVICE*
	OVERLOAD PROTECTOR		INTEGRATED PTC DEVICE
	CURRENT START RELAY		CURRENT START RELAY WITH CAPACITOR CONNECTIONS
	3CR CURRENT START RELAY		3ARR3 START RELAY (VOLTAGE).
	RUN CAPACITOR		RUN CAPACITOR (MANDATORY - NOT SUPPLIED)
	OPTIONAL RUN CAPACITOR		START CAPACITOR
	FAN		PUSH BUTTON
	LAMP		SINGLE PHASE MOTOR
	3-PHASE MOTOR		THERMOSTAT
	LOW-HIGH PRESSURE SWITCH		PILOT CIRCUIT 24 OR 220 V
	EARTH CONNECTION		COMMON (INTERNAL OVERLOAD PROTECTOR)
	3-PHASE SUPPLY		START
	SINGLE PHASE SUPPLY		BROWN CABLE
	COMMON		BLACK CABLE
	RUN		RED CABLE
	TERMINAL BLOCK		CONNECTIONS TO BE MADE BY THE CUSTOMER (NOT SUPPLIED)
	WHITE CABLE		
	BLUE CABLE		
	YELLOW-GREEN CABLE		
	CONNECTIONS SUPPLIED		

WIRING DIAGRAMS

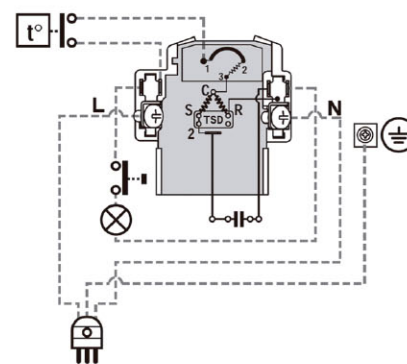
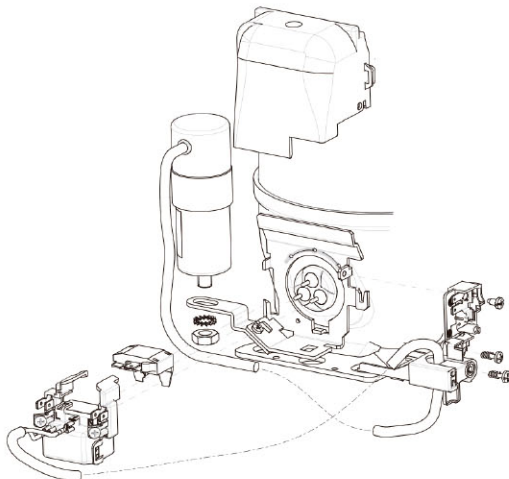
SM00 - EMT/NE SERIES RSIR PTC European Version



SM01 - EMT/NE SERIES RSCR PTC European Version

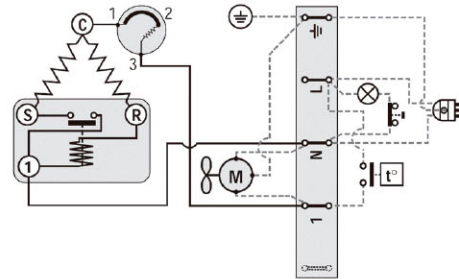
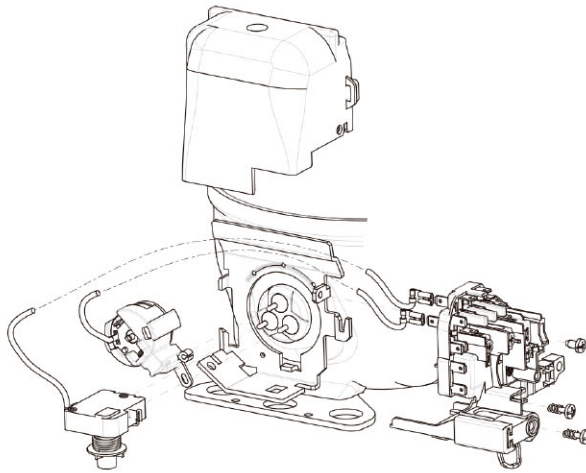


SM02 - EMT/NE SERIES RSCR TSD European Version

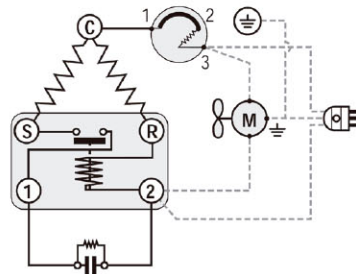
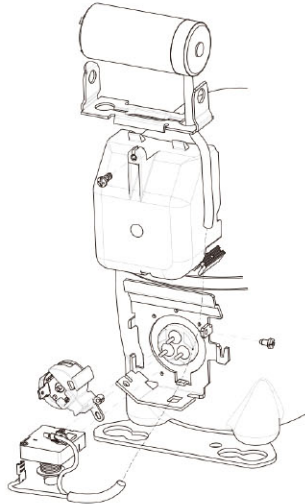


WIRING DIAGRAMS

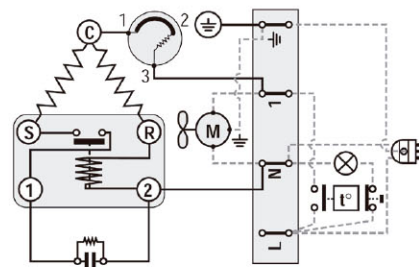
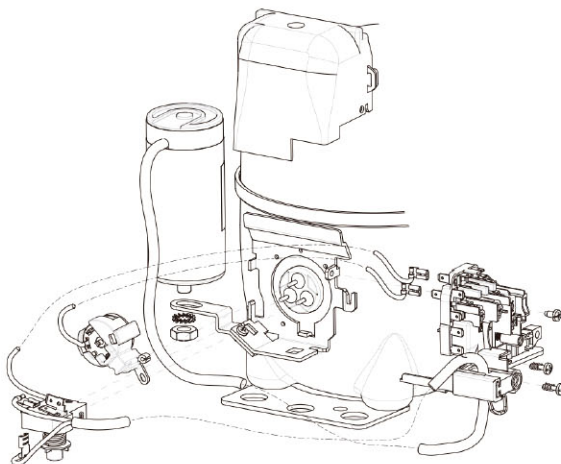
SM03 - EMT/NE SERIES RSIR Terminal Board & Start Device



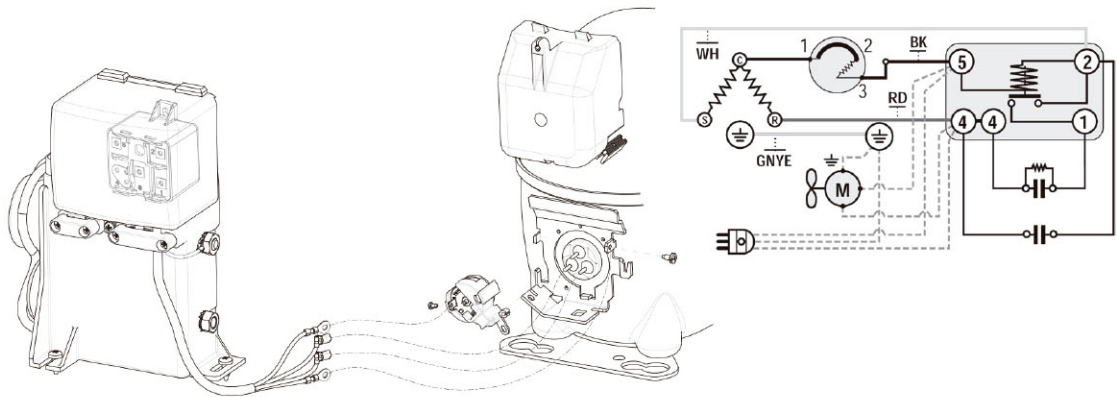
SM04 - EMT/NE SERIES CSIR American Version



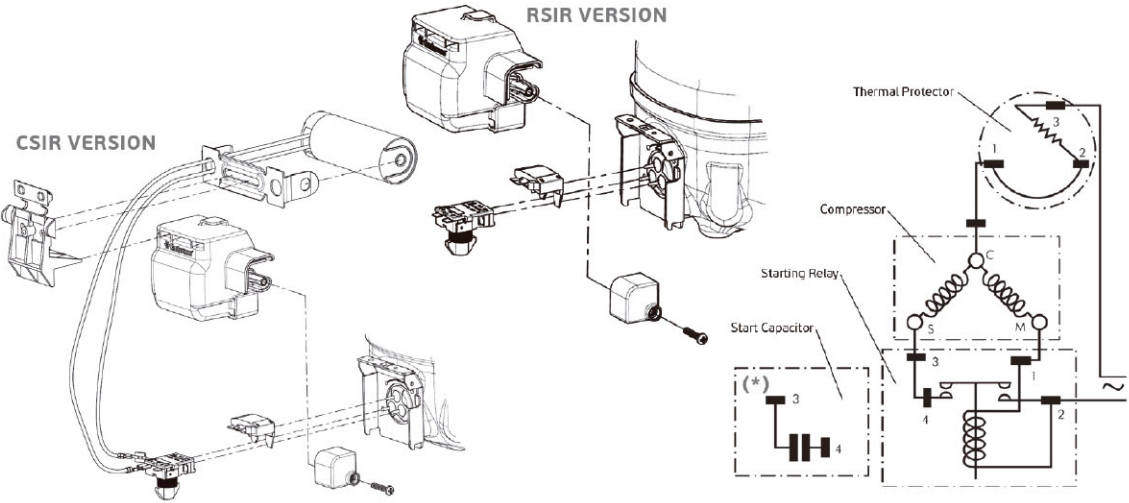
SM05 - EMT/NE SERIES CSIR Terminal Board & Start Device



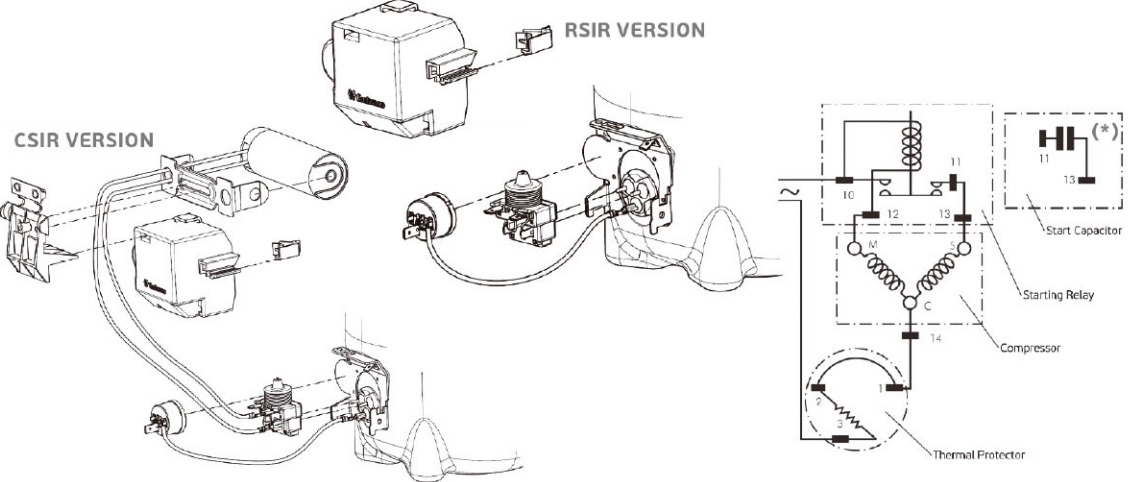
SM06 - NE SERIES CSR Box



SM07 - EM/EMI



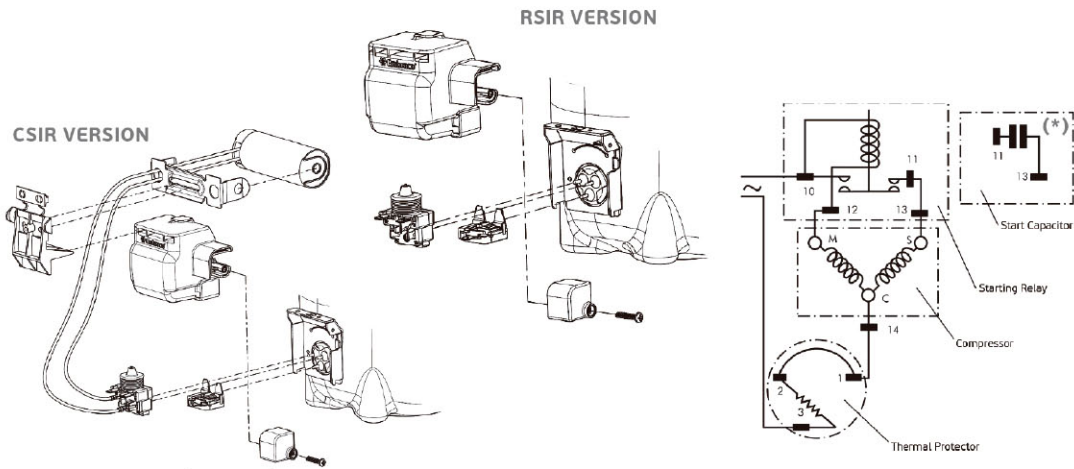
SM08 - F COMPRESSORS



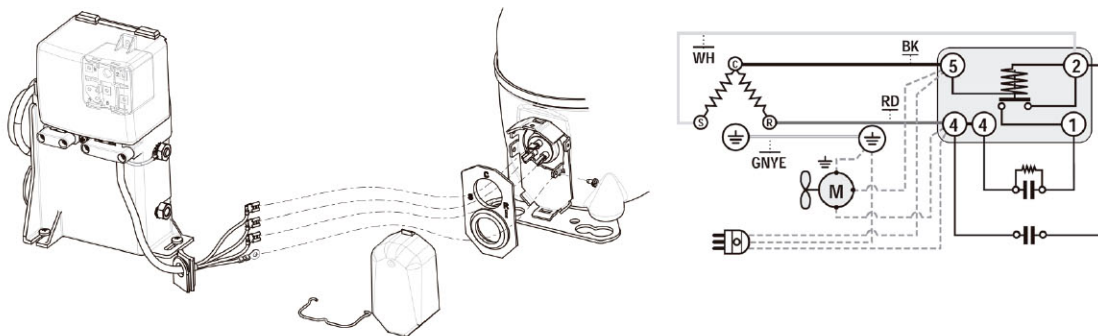
(*) Valid only for CSIR version

WIRING DIAGRAMS

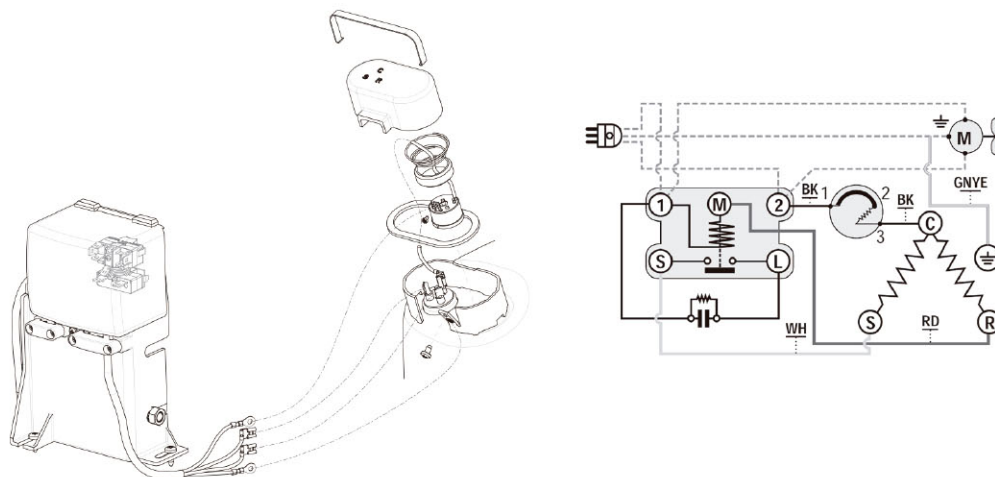
SM09 - EG



SM10 - NE CSR Box

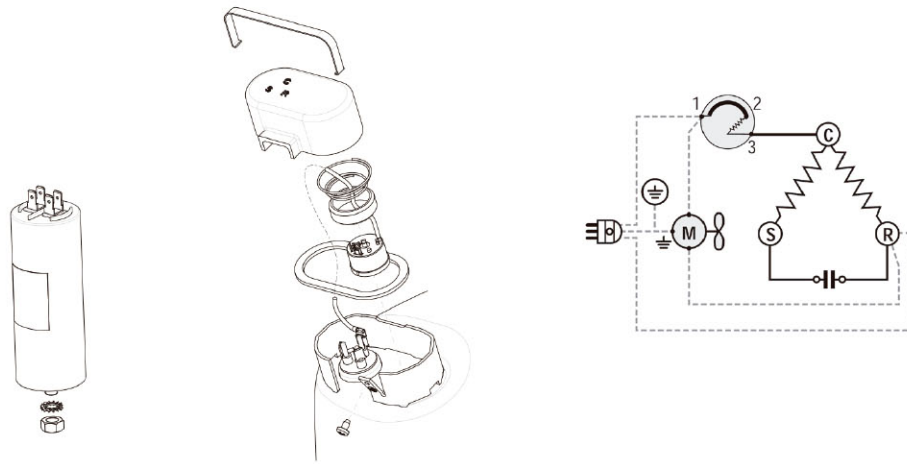


SM14 - NJ CSIR Box

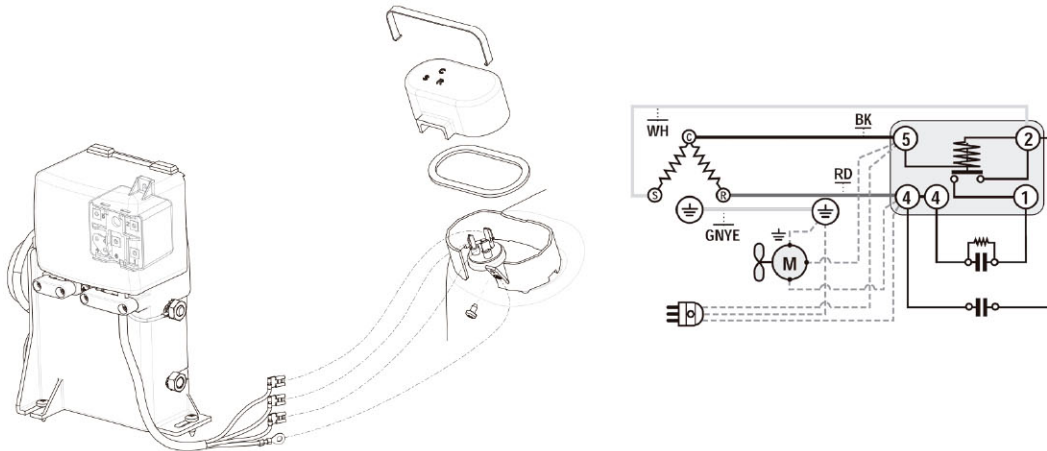


(* Valid only for CSIR version)

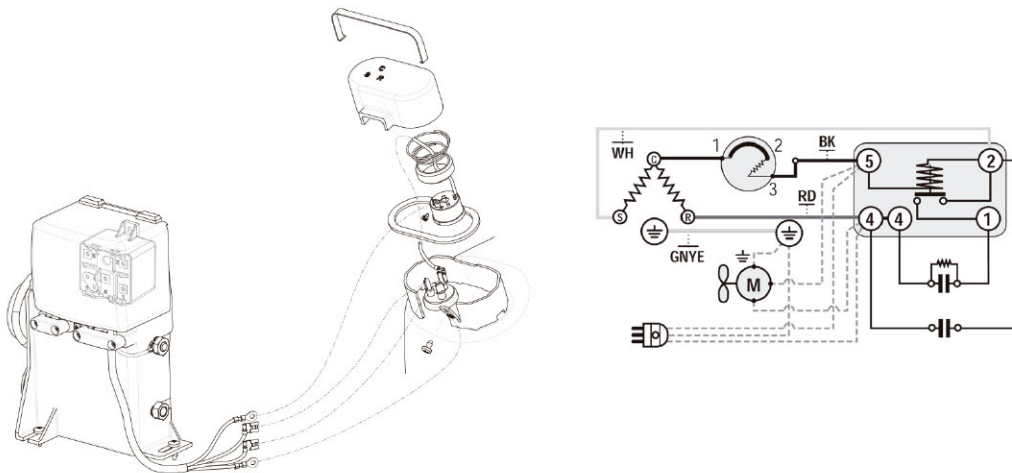
SM15 - NJ PSC



SM16 - NJ SERIES CSR Box (Internal Overload Protector)

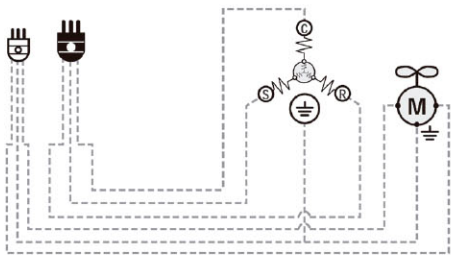
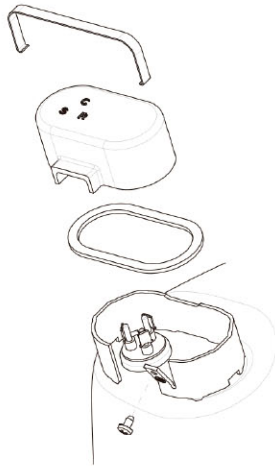


SM17 - NJ CSR Box (External Overload Protector)

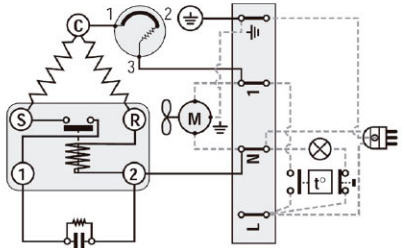
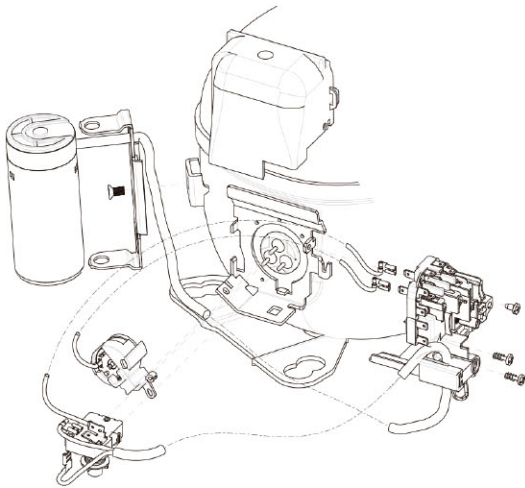


WIRING DIAGRAMS

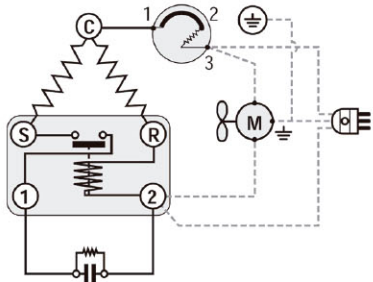
SM18 - NJ SERIES 3-Phase (Internal Overload Protector)



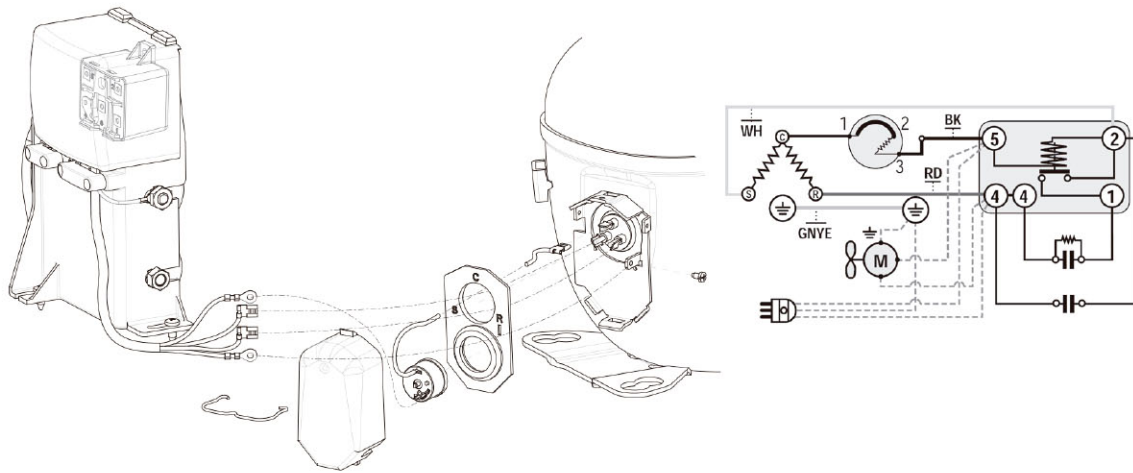
SM19 - NT SERIES CSIR Terminal Board



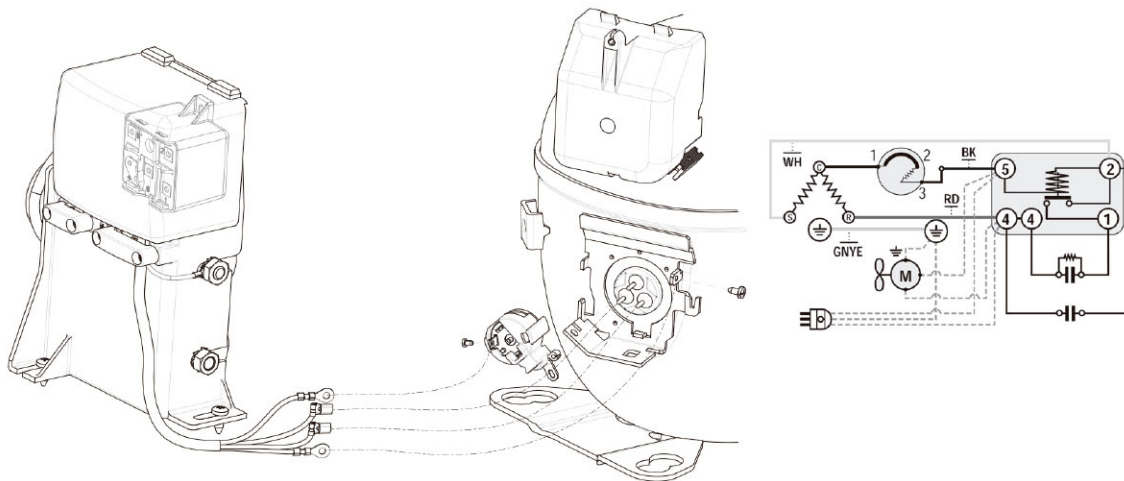
SM20 - NT SERIES CSIR - American Version



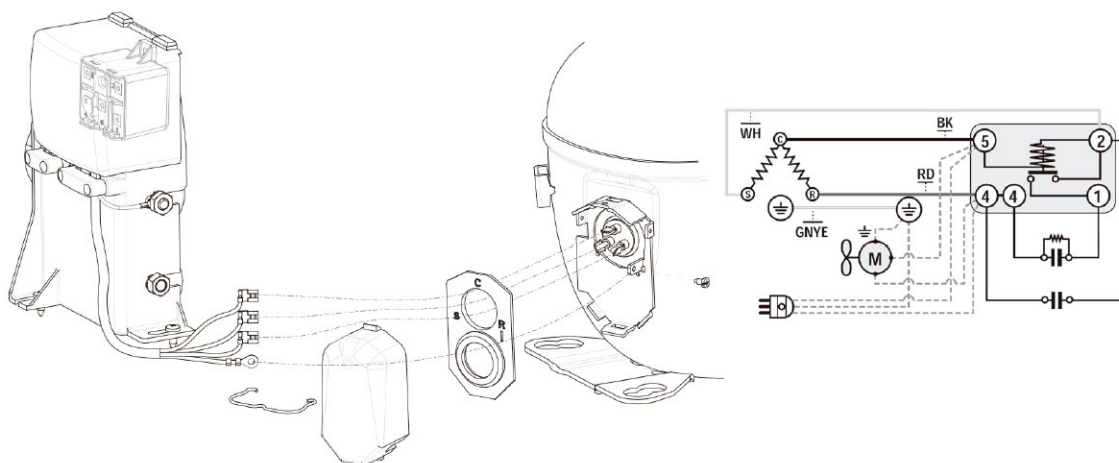
SM21 - NT SERIES CSR Box



SM23 - NT SERIES CSR Box

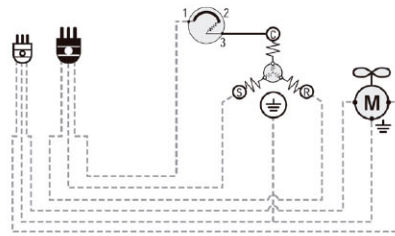
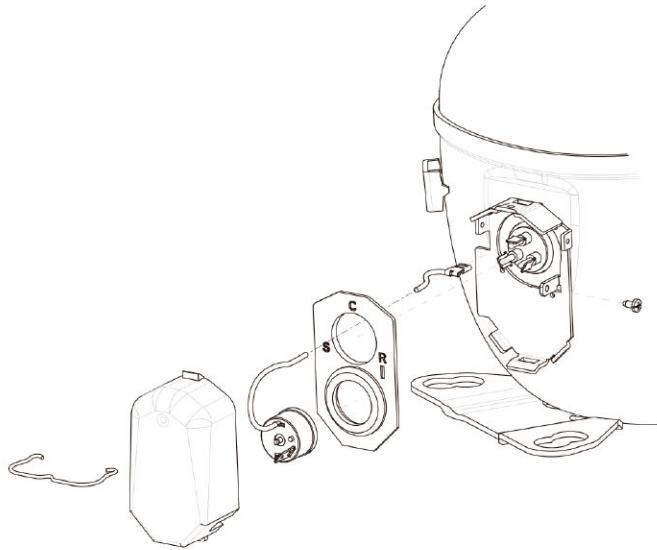


SM26 - NT SERIES CSR Box (Internal Overload Protector)

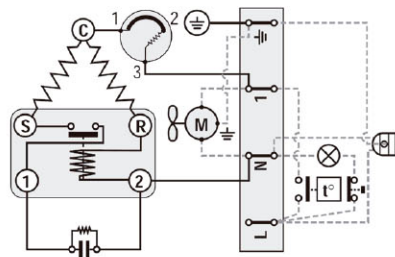
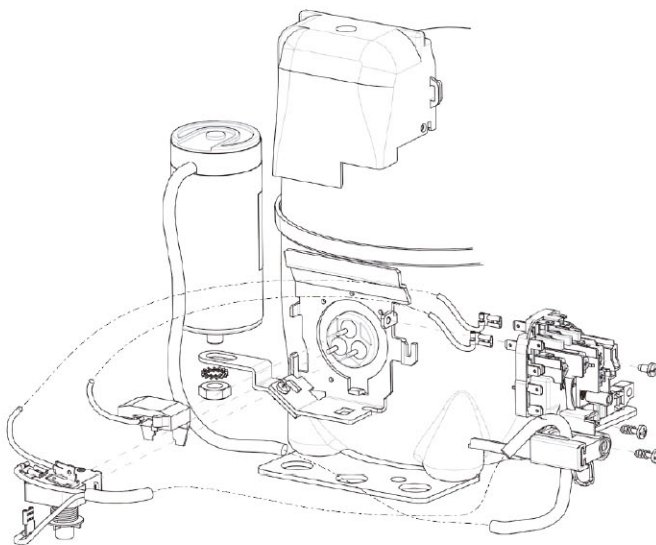


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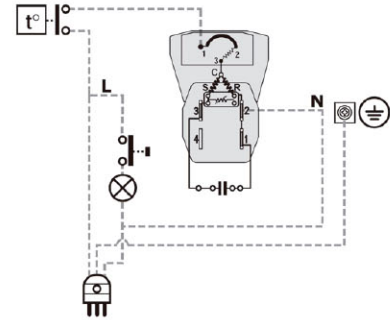
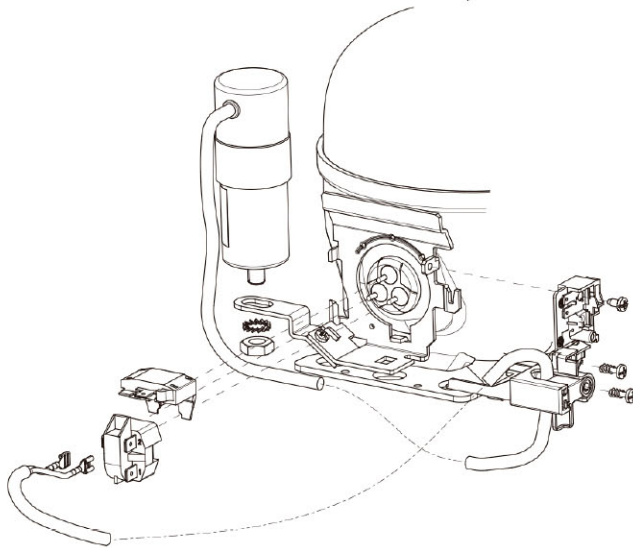
SM27 - NT SERIES 3-Phase (Internal + External Overload Protector)



SM29 - EMX SERIES CSIR TERMINAL BOARD & START DEVICE & 4TM

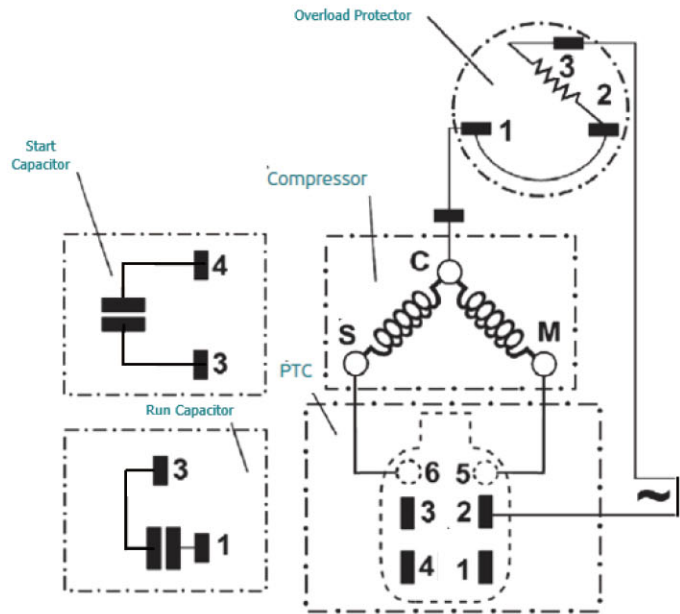
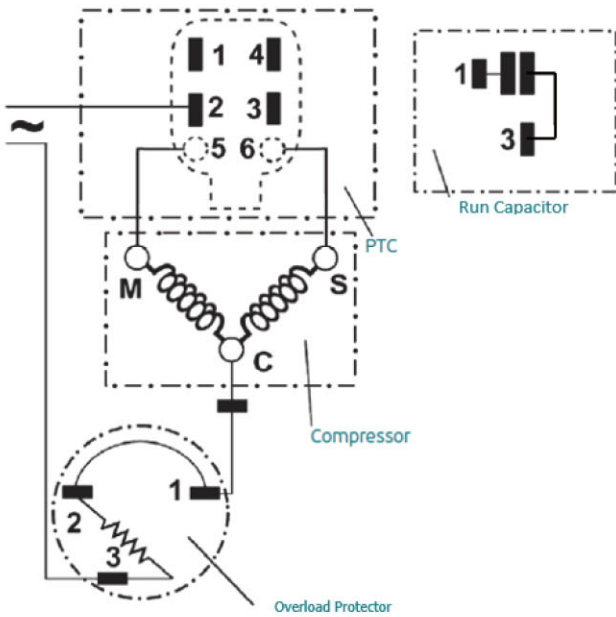


SM32 - EM RSCR PTC & 4TM



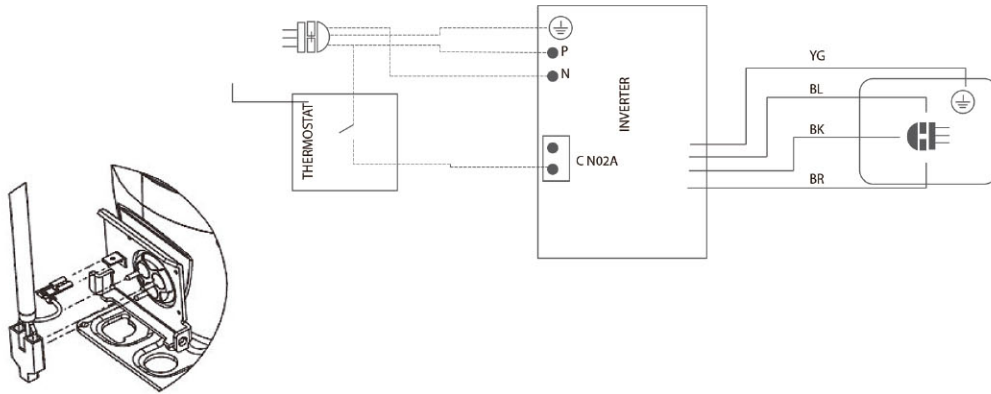
SM34 - EG,F RSCR

SM33 - EM CSCR

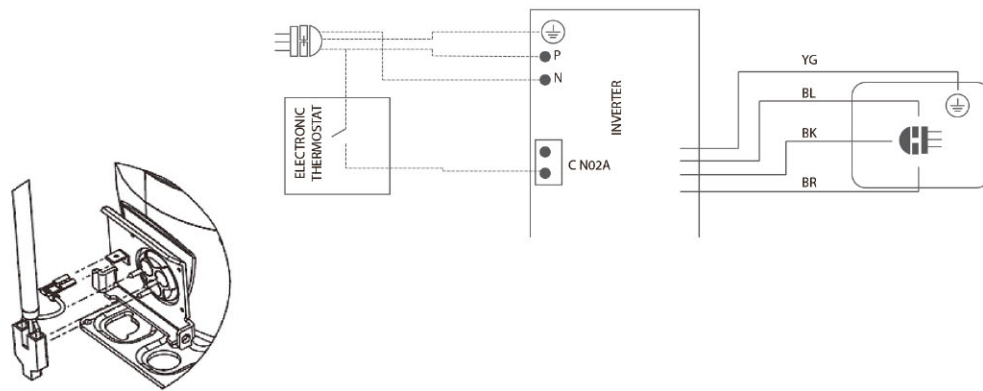


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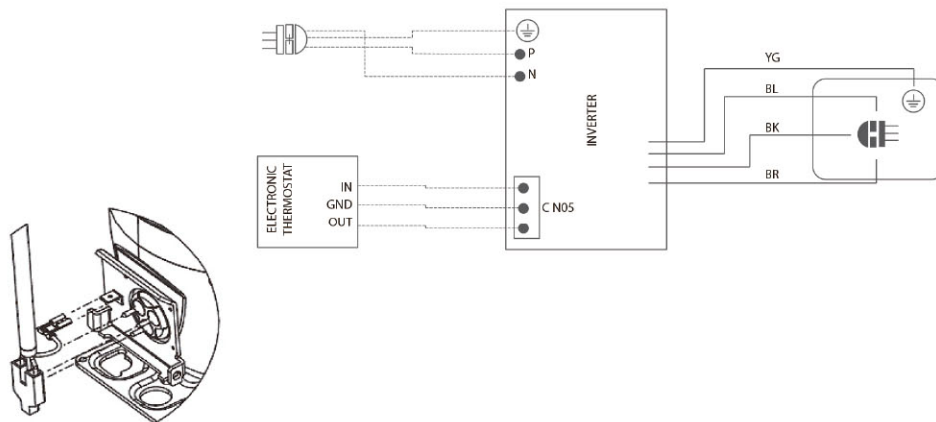
CON01 - VEMY6 / VEG (Drop-in)



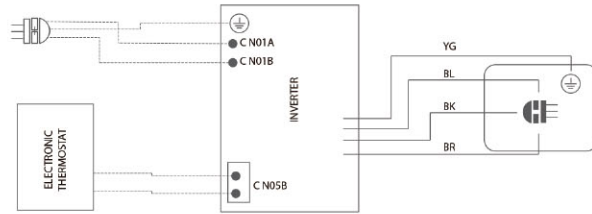
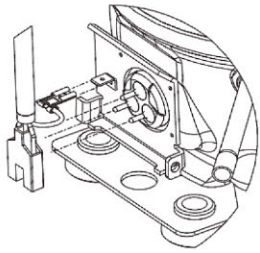
CON02 - VEM / VEG (Frequency)



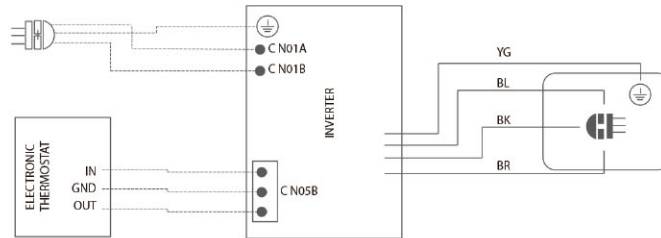
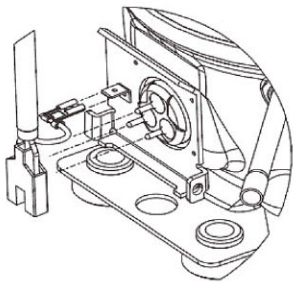
CON03 - VEMY6 / VEG (Serial)



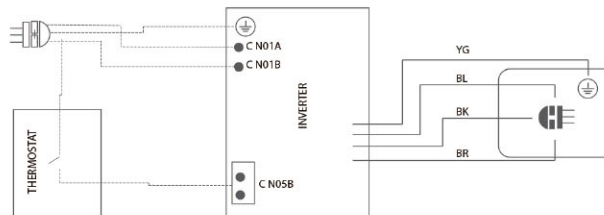
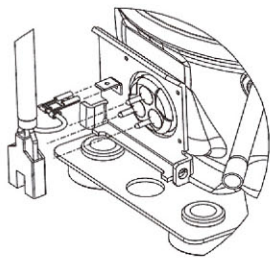
CON04 - VEM (Frequency)



CON05 - VEM (Serial)



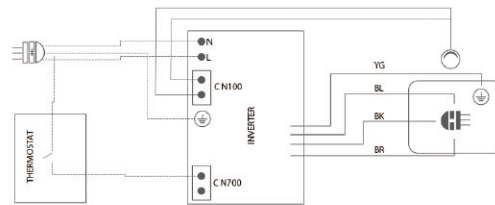
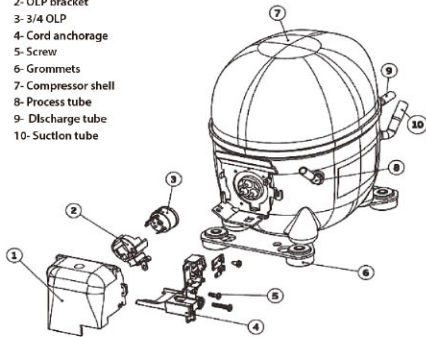
CON06 - VEM (Drop-in)



WIRING DIAGRAMS

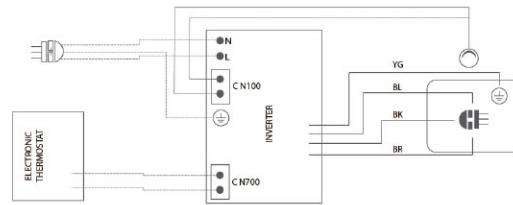
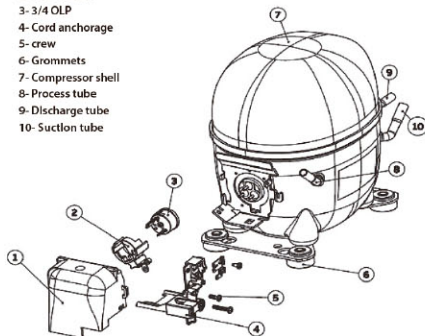
CON07 - VNE (Drop-in)

- 1- Fence cover
- 2- OLP bracket
- 3- 3/4 OLP
- 4- Cord anchorage
- 5- Screw
- 6- Grommets
- 7- Compressor shell
- 8- Process tube
- 9- Discharge tube
- 10- Suction tube



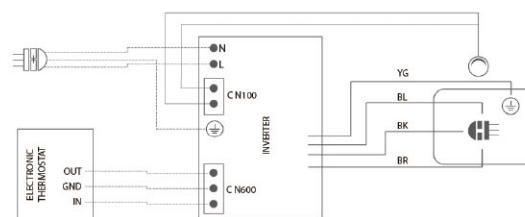
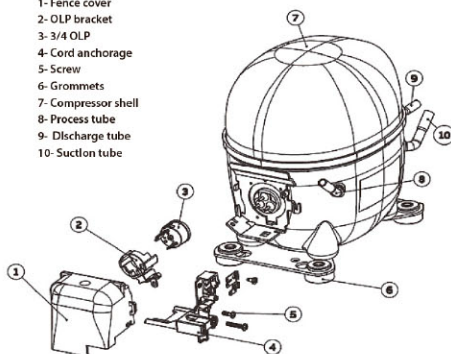
CON08 - VNE (Frequency)

- 1- Fence cover
- 2- OLP bracket
- 3- 3/4 OLP
- 4- Cord anchorage
- 5- screw
- 6- Grommets
- 7- Compressor shell
- 8- Process tube
- 9- Discharge tube
- 10- Suction tube

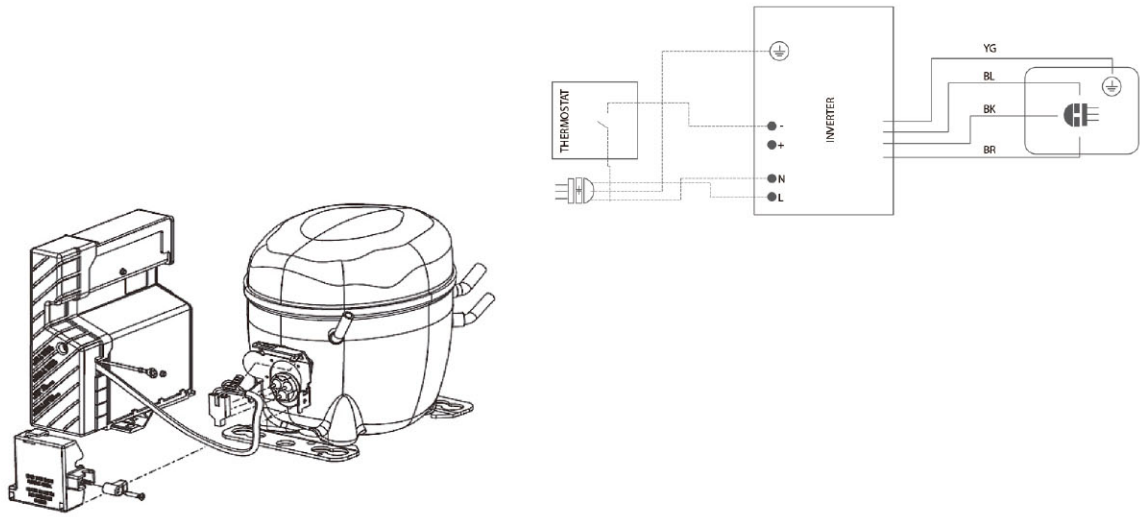


CON09 - VNE (Serial)

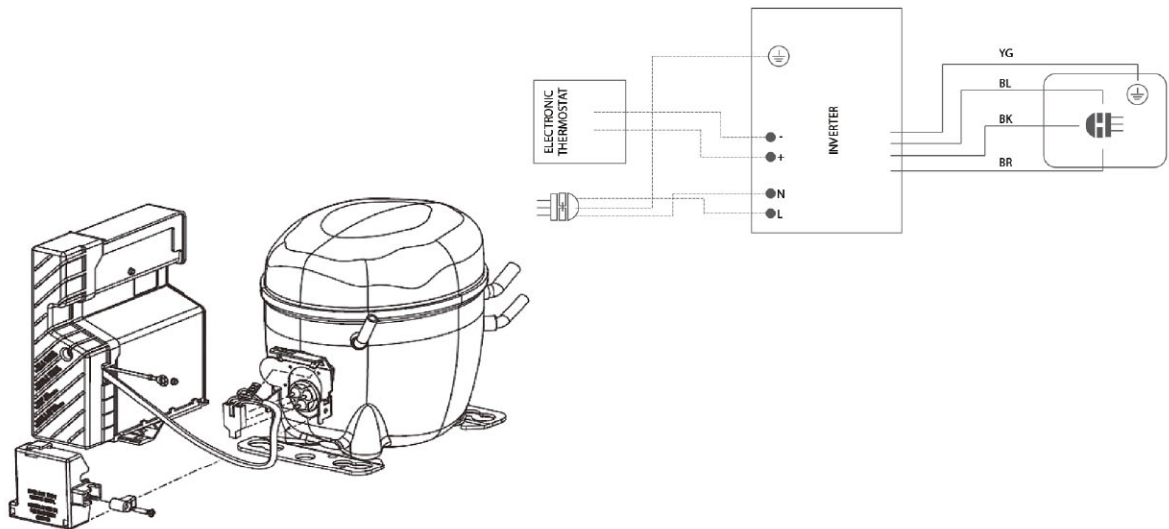
- 1- Fence cover
- 2- OLP bracket
- 3- 3/4 OLP
- 4- Cord anchorage
- 5- Screw
- 6- Grommets
- 7- Compressor shell
- 8- Process tube
- 9- Discharge tube
- 10- Suction tube



CON10 - VEG (Drop-in)



CON11 - VEG (Frequency)



13

RECOMMENDATIONS

1 - 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 (μF) 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.



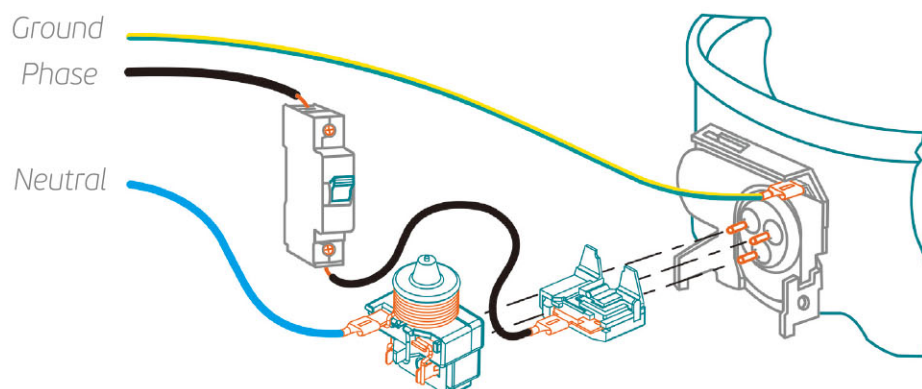
The incorrect removal of these accessories may damage the hermetic terminal on the compressor which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable refrigerant utilization, since associated with an ignition source, 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.

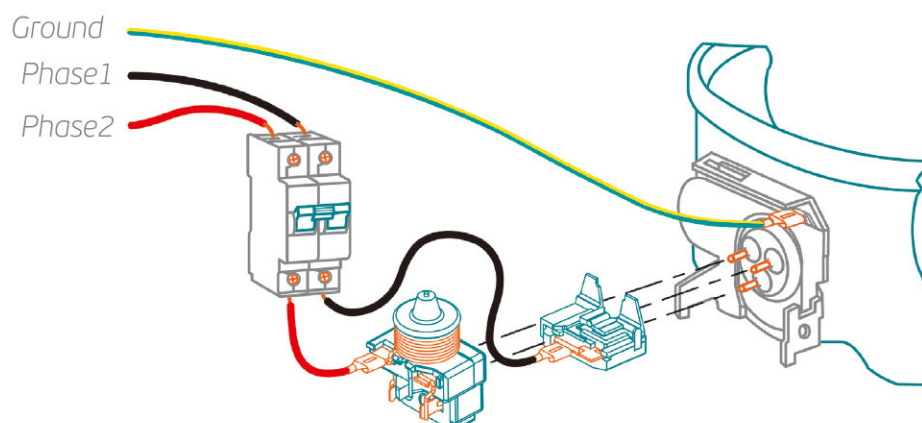


The use of incorrect electrical components, (overload protector, starting device) can cause a short circuit in the region the hermetic terminal of the compressor, which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable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

1 - 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 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.



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

2 - 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 1.1.



The application of a compressor with a wrong voltage 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 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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