

### COMPRESSOR DEFINITION

Designation	<b>NE U6187Z</b>
Nominal Voltage/Frequency	<b>115-127 V 60 Hz</b>
Engineering Number	<b>268IE71</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115-127 / 60	[ V / Hz ]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - Hight starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	14.2	[kgf/cm <sup>2</sup> ] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm <sup>2</sup> ] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/3	[hp]
2 Displacement	9.99	[cm <sup>3</sup> ] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	10.7	[kg] (23.59 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-70-31	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MST16ADK-3265	
6 Start winding resistance	6.83	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.15	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	39.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	5.88	[A] - Measured according to UL 984
11 Approval boards certification	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @127V60Hz			ARIHBP Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
3936	992	1153	519	6.10	30.89	7.58	1.91	2.22

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @127V60Hz		ARI18 Fan			(Condensing temperature 35°C (+95°F) )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+5)	1925	485	564	308	5.24	12.10	6.20	1.56	1.82
-10	(+14)	2279	574	668	331	5.30	14.23	6.98	1.76	2.04
-5	(+23)	3007	758	881	366	5.45	18.96	8.21	2.07	2.40
0	(+32)	3916	987	1148	405	5.64	24.97	9.63	2.43	2.82
+5	(+41)	4816	1214	1411	438	5.84	30.96	10.99	2.77	3.22
+10	(+50)	5512	1389	1615	458	5.99	35.60	12.03	3.03	3.52

TEST CONDITIONS: @127V60Hz		ARI18 Fan			(Condensing temperature 45°C (+113°F) )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+5)	1699	428	498	323	5.28	11.67	5.22	1.32	1.53
-10	(+14)	2001	504	586	350	5.34	13.79	5.80	1.46	1.70
-5	(+23)	2671	673	783	391	5.50	18.53	6.81	1.72	2.00
0	(+32)	3517	886	1031	437	5.69	24.59	7.99	2.01	2.34
+5	(+41)	4346	1095	1274	479	5.89	30.64	9.07	2.29	2.66
+10	(+50)	4967	1252	1455	507	6.03	35.37	9.80	2.47	2.87

TEST CONDITIONS: @127V60Hz		ARI18 Fan			(Condensing temperature 55°C (+131°F) )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+5)	1464	369	429	338	5.32	11.11	4.27	1.08	1.25
-10	(+14)	1710	431	501	368	5.42	13.22	4.74	1.19	1.39
-5	(+23)	2319	584	680	414	5.60	17.99	5.61	1.41	1.64
0	(+32)	3097	780	908	464	5.83	24.09	6.63	1.67	1.94
+5	(+41)	3853	971	1129	512	6.04	30.20	7.52	1.90	2.20
+10	(+50)	4393	1107	1287	547	6.20	35.02	8.03	2.02	2.35

### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.1 +0.10/+0.00	[mm]	(0.319" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		