

COMPRESSORS LINE

Asia Pacific Catalogue



embraco
Nidec

refrigerationclub.com



S U M M A R Y

01	ABOUT NIDEC GLOBAL APPLIANCE _____	P. 03
02	OUR PRODUCTS _____	P. 05
03	NOMENCLATURE _____	P. 06
04	APPLICATION GUIDE _____	P. 10
05	TECHNICAL INFORMATION _____	P. 18
06	COMPRESSORS CATALOGUE 100 V 50/60 HZ _____	P. 27
07	COMPRESSORS CATALOGUE 115 V/60 HZ _____	P. 35
08	COMPRESSORS CATALOGUE 220 V/50 HZ _____	P. 43
09	COMPRESSORS CATALOGUE 220 V/60 HZ _____	P. 57
10	COMPRESSORS CATALOGUE TRI-PHASE _____	P. 63
11	VARIABLE SPEED COMPRESSORS _____	P. 66
12	ELECTRICAL CONFIGURATIONS _____	P. 77
13	RECOMMENDATIONS _____	P. 92

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

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 ½ HP.



EG: Household replacement and light commercial applications, horizontal freezers, reach ins, vending machines. Up to ½+ HP.



F: Light commercial applications, horizontal freezers, reach ins, vending machines. Up to ½ HP.



EH: Professional kitchens, bottle coolers, under counters, professional reach ins. ½ HP to ¾ HP.



NE: Frozen food islands, professional kitchen upright coolers and freezers, display cases, ultra low temperature freezers. ½ 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. ¾ to 1 ½ HP.

VARIABLE SPEED COMPRESSORS



VEM: Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to ¾ HP.



VNE: Reach Ins, medical and general professional kitchens. ½ to 1 HP.



VEG: Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to ½+ HP.



VES: Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to ½+ HP.



FMX: Refrigerators and freezers, wine cooler, beverage coolers, chest freezer, medical cooler. Up to ¾ HP.



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

03

NOMENCLATURE

BRAZIL 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

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) | | |

- | | | |
|---|--|-----|
| X - Relay + cap. part. (mandatory) | | HST |
|---|--|-----|

F

FFUS130HAX

COMPRESSOR FAMILY
F/EG

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)

BRAZIL VARIABLE SPEED LINE

VEGT8HB

TECNOLOGY
VARIABLE
SPEED
COMPRESSORS

PRODUCT FAMILY
VEG/VEM/FMX

PRODUCT GENERATION
Y - 1st Generation
T - 2nd Generation
Z - 3rd Generation
X - 4th Generation
C - 5th Generation
D - 6th Generation

DISPLACEMENT
cm³

REFRIGERANT CODE
H - R134a
C - R600a
U - R290
L - R1234yf

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

FMFT413U

VARIABLE SPEED

F FAMILY

EFFICIENCY LEVEL
T - Standard efficiency
D - Top efficiency

APPLICATION AND TORQUE

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

DISPLACEMENT
cm³

REFRIGERANT CODE
U - R290
Z - R134a
L - R1234yf
GK - R404A

VESA7U

VARIABLE SPEED FAMILY
VES/VEM/FMX

PRODUCT GENERATION
Y - 1st Generation
T - 2nd Generation
Z - 3rd Generation
X - 4th Generation
A - 5th Generation
C - 6th Generation
D - 7th Efficiency
F - 8th Generation

DISPLACEMENT
cm³

REFRIGERANT CODE
U - R290
Z - R134a
L - R1234yf
C - R600a

EMY 3130Z

COMPRESSOR FAMILY
EM/EH

PRODUCT GENERATION
□ - 1st Generation
T - 2nd Generation
Y - 3rd Generation
X - 4th Generation
C - 5th Generation
D - Next Generation

EFFICIENCY LEVEL
T - Standard
E - Extended

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

VEM / VEH

VEMT406U

VARIABLE SPEED

F FAMILY

EFFICIENCY LEVEL
T - Standard efficiency
D - Top efficiency

APPLICATION AND TORQUE
1 - LBP / LST
2 - LBP / HST
3 - L-MBP / LST
4 - L-MBP / HST
5 - M-HBP / LST
6 - M-HBP / HST

DISPLACEMENT
cm³

REFRIGERANT CODE
U - R290
Z - R134a
L - R1234yf
GK - R404A

EUROPE LINE

EM / NE / NT / NJ

NTU6224ZV

COMPRESSOR FAMILY
NE / NT / NJ

PRODUCT GENERATION
□ - 1ª Generation
K - 2ª Generation
U - 3ª Generation
X - 4ª 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

EUROPE VARIABLE SPEED LINE

VNEU217U

TECHNOLOGY
VARIABLE SPEED COMPRESSORS

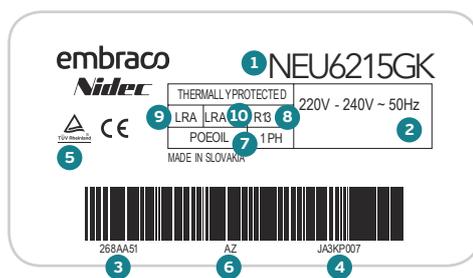
COMPRESSOR FAMILY
VNE

PRODUCT GENERATION
K - 1ª Generation
U - 2ª Generation

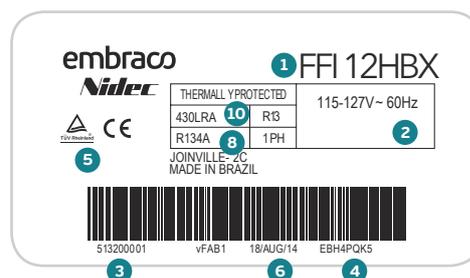
DISPLACEMENT
cm³

REFRIGERANT CODE
U - R290
Z - R134a
GK - R404A

NE / NT / NJ



EM / EG / F / VEM / VEG / VNE



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



SUPERMARKETS



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	EMI60HER	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	EMI60HER
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	FF110HBK	EM2X3121U
500 TO 600	FF112HBK	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
1500		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 3 phase electrical motor for systems with equalized or not equalized pressures at start up.

APPLICATIONS

		EVAPORATION TEMPERATURE °C	APPLICATIONS
<i>LBP</i>	LOW BACK PRESSURE	From -45/-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 K	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
<i>EN12900</i>	LBP	-35	40	20	40	35
	MBP	-10	45	20	45	35
	HBP	5	50	20	50	35

COOLING TYPE

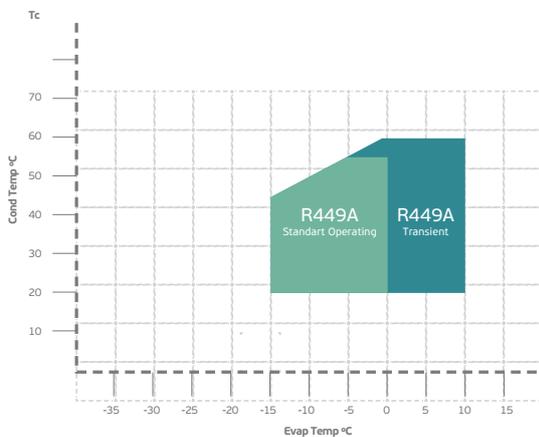
<i>STATIC</i>	Compressor approved for static cooling not requiring a fan motor on the condenser side.
<i>FAN</i>	Compressor approved for fan cooling requiring forced cooling with a fan motor on the condenser side.
<i>STATIC/FAN (S/F)</i>	Compressor approved for static and fan cooling which may or may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

BLEND APPROVED BY EMBRACO REPLACING R12

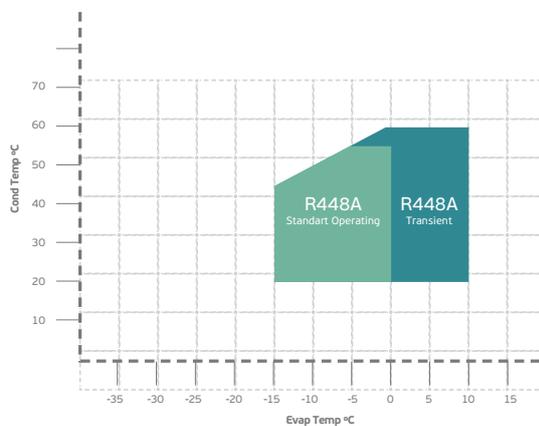
REFRIGERANTS	
ASHRAE	Nome comercial
R-401a	SUVA® MP39
R-401b	SUVA® MP66
R-409b	FORANE® FX56
R-413a	ISCEON 49

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

MBP (R449A) - Standard Operating Envelope



MBP (R448A) - Standard Operating Envelope

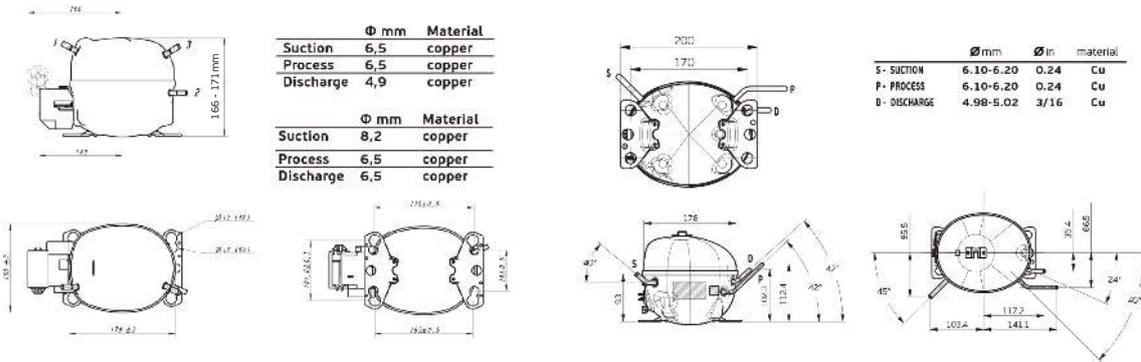


UNITS CONVERSION TABLE

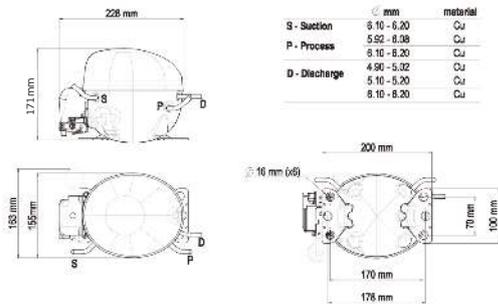
	BTU	W	kcal/h
1 BTU	-	0,293	0,252
1 W	3,412	-	0,86
1 kcal/h	3,966	1,162	-

EXTERNAL VIEWS

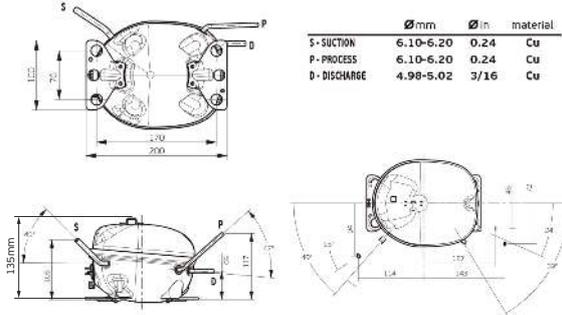
DWG 1 - EM / VEM SERIES UNIVERSAL BASE PLATE



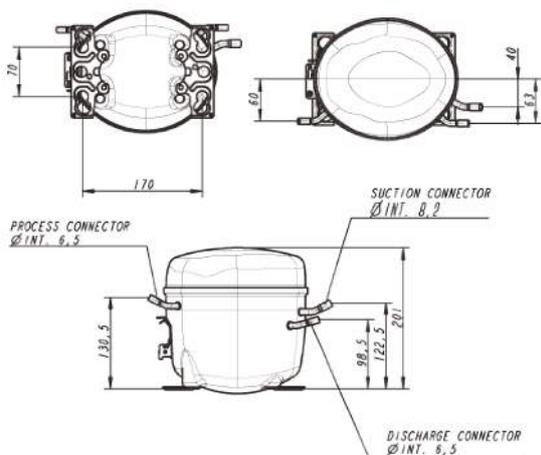
DWG 2 - EM SERIES EUROPEAN BASE PLATE



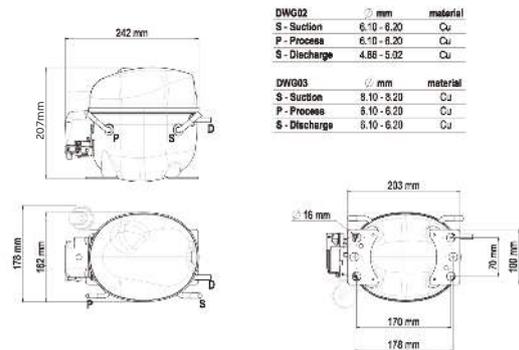
DWG 3 - VES SERIES



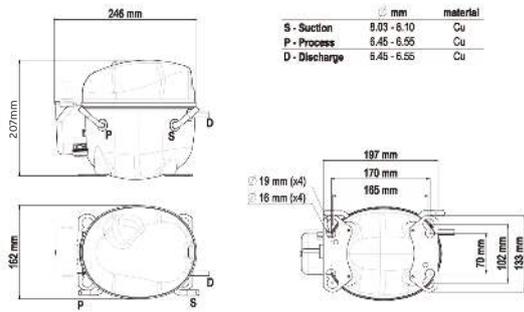
DWG 4 - EG / F / VEG SERIES UNIVERSAL BASE PLATE



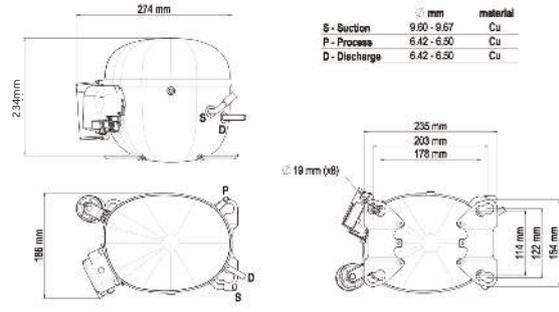
DWG 5 - NB / NE SERIES EUROPEAN BASE PLATE



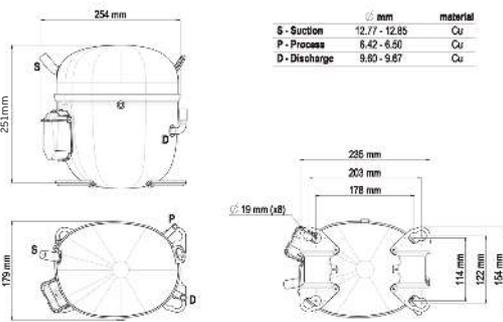
DWG 6 - NE / VNE SERIES UNIVERSAL BASE PLATE



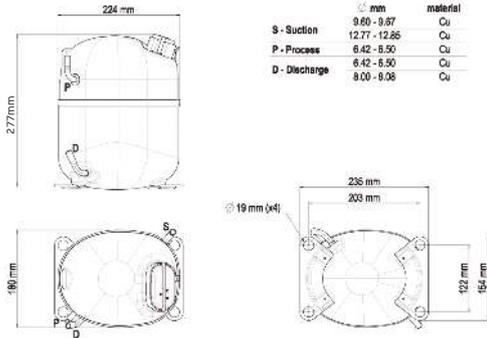
DWG 7 - NT SERIES UNIVERSAL BASE PLATE



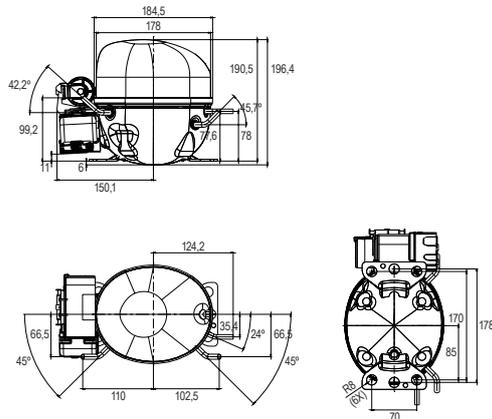
DWG 8 - NTU SERIES UNIVERSAL BASE PLATE



DWG 9 - NJ SERIES UNIVERSAL BASE PLATE



DWG 10 - EH SERIES



If you want to buy only the board, contact technical support.

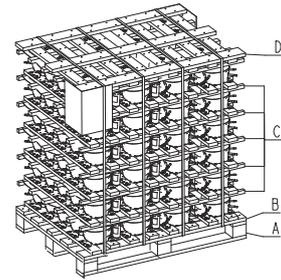
COMPRESSOR PACKAGING

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



Characteristics of multiple wooden packaging

COMPRESSOR	QUANTITY PER PALLET (ASSEMBLED ELECTRICALS)*	QUANTITY PER CONTAINER (ASSEMBLED ELECTRICALS)*	QUANTITY PER CONTAINER (UNASSEMBLED ELECTRICALS)*	QUANTITY PER PALLET (UNASSEMBLED ELECTRICALS)*
EM	100	2500	2800	120
EG / F	72	1920	2016	80
EH	80	1760	2080	80
NE	72	1800	1800	80
NT**	36	1232	1512	44
NJ**	33	1512	1386	36
VES	120	2880	2880	120
FMX	120	2400	2880	120
VEM	100	2200	2800	100
VEG/FMF	72	1920	2016	80
VNE	72	1800	1800	80

*The data presented in this table is nominal and might be impacted by fill rate

**Consult the limit of weight for these models

SINGLE PACKAGING

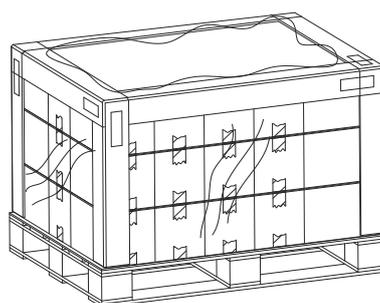
This type of package consists of a carton box and an internal separator to prevent any compressor movement. The electrical components and accessories are included in the package (assembled or attached).

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

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">BAR CODE</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">MATERIAL</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">MODEL</td> <td style="border: 1px solid black; padding: 2px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> </table> </td> </tr> <tr> <td rowspan="4" style="border: 1px solid black; padding: 20px; text-align: center; vertical-align: middle;">BAR CODE</td> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">BASE QUANTITY</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">BAR CODE QUANTITY</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">BAR CODE CUSTOMER IC</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">CUSTOMER INTERNAL CODE</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">PACKAGING SERIAL NUMBER</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">CUSTOMER INTERNAL CODE</td> </tr> </table>	BAR CODE	MATERIAL	MODEL	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> </table>	VOLTAGE FREQUENCY	REFRIGERANT	VOLTAGE FREQUENCY	REFRIGERANT	BAR CODE	BASE QUANTITY	BAR CODE QUANTITY	BAR CODE CUSTOMER IC	CUSTOMER INTERNAL CODE	PACKAGING SERIAL NUMBER	CUSTOMER INTERNAL CODE	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">MATERIAL</td> <td style="border: 1px solid black; padding: 2px;">BAR CODE</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">MODEL</td> <td style="border: 1px solid black; padding: 2px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> </table> </td> </tr> <tr> <td rowspan="4" style="border: 1px solid black; padding: 20px; text-align: center; vertical-align: middle;">BAR CODE</td> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">BASE QUANTITY</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">BAR CODE QUANTITY</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">BAR CODE CUSTOMER IC</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px; text-align: center;">CUSTOMER INTERNAL CODE</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">CUSTOMER INTERNAL CODE</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">PACKAGING SERIAL NUMBER</td> </tr> </table>	MATERIAL	BAR CODE	MODEL	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">VOLTAGE FREQUENCY </td> <td style="border: 1px solid black; padding: 2px; font-size: 8px;">REFRIGERANT</td> </tr> </table>	VOLTAGE FREQUENCY	REFRIGERANT	VOLTAGE FREQUENCY	REFRIGERANT	BAR CODE	BASE QUANTITY	BAR CODE QUANTITY	BAR CODE CUSTOMER IC	CUSTOMER INTERNAL CODE	CUSTOMER INTERNAL CODE	PACKAGING SERIAL NUMBER
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Compressor identification label for single packaging

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COMPRESSORS CATALOGUE

100 V 50/60 Hz

embraco
Nidec

100V 50/60 Hz | R134a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMU45HEP	BR	3.77	100 V / 50-60 Hz	LBP	LST	RSIR	9.20	ASHRAELBP32	50 Hz		48	65	92
EMU45HEP	BR	3.77	100 V / 50-60 Hz	LBP	LST	RSIR	8.50	ASHRAELBP32	60 Hz		64	89	117
EM160HEP	BR	4.99	100 V / 50-60 Hz	LBP	LST	RSIR	12.50	ASHRAELBP32	50 Hz		55	86	120
EM160HEP	BR	4.99	100 V / 50-60 Hz	LBP	LST	RSIR	12.00	ASHRAELBP32	60 Hz		78	113	153
FGS70HAS	BR	6.36	100 V / 50-60 Hz	LBP	LST	RSCR	15.00	ASHRAELBP32	50 Hz		67	109	158
FGS70HAS	BR	6.36	100 V / 50-60 Hz	LBP	LST	RSCR	13.80	ASHRAELBP32	60 Hz		85	130	184
FGS80HAS	BR	7.15	100 V / 50-60 Hz	LBP	LST	RSCR	21.00	ASHRAELBP32	50 Hz		-	-	-
FGS80HAS	BR	7.15	100 V / 50-60 Hz	LBP	LST	RSCR	19.70	ASHRAELBP32	60 Hz		-	-	-
FGS100HAS	BR	9.04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	30.90	ASHRAELBP32	50 Hz		-	-	-
FGS100HAS	BR	9.04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	28.30	ASHRAELBP32	60 Hz		-	-	-
EH3125Z/L	CN	9.04	100 V / 50-60 Hz	L/MBP	LST	RSIR	UD*	ASHRAELBP32	50 Hz		UD*	UD*	UD*
EH3125Z/L	CN	9.04	100 V / 50-60 Hz	L/MBP	LST	RSIR	UD*	ASHRAELBP32	60Hz		UD*	UD*	UD*
FGS125HAS	BR	11.14	100 V / 50-60 Hz	L/MBP	LST	CSCR	34.50	ASHRAELBP32	50 Hz		-	-	-
FGS125HAS	BR	11.14	100 V / 50-60 Hz	L/MBP	LST	CSCR	31.38	ASHRAELBP32	60 Hz		159	247	340
NE2130Z	SK	12.11	100 V / 50-60 Hz	LBP	HST	CSIR	32.00	ASHRAELBP32	50 Hz		147	208	284
NE2130Z	SK	12.11	100 V / 50-60 Hz	LBP	HST	CSIR	32.00	ASHRAELBP32	60 Hz		172	243	332
NEU3130Z / L	SK	12.11	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU3130Z / L	SK	12.11	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU3140Z / L	SK	16.80	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU3140Z / L	SK	16.80	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU3145Z / L	SK	18.70	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU3145Z / L	SK	18.70	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*

100V 50/60 Hz | R1234yf | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMT1110L	BR	3.77	100 V / 50-60 Hz	LBP	LST	RSIR	9.20	ASHRAELBP32	50 Hz		53	75	101
EMT1110L	BR	3.77	100 V / 50-60 Hz	LBP	LST	RSIR	8.50	ASHRAELBP32	60 Hz		63	93	126
FGS80LAS	BR	7.15	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	21.00	ASHRAELBP32	50 Hz		104	149	203
FGS80LAS	BR	7.15	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	19.70	ASHRAELBP32	60 Hz		124	177	241
FGS100LAS	BR	9.04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	30.90	ASHRAELBP32	50 Hz		-	-	-
FGS100LAS	BR	9.04	100 V / 50-60 Hz	L/MBP	LST	RSCR/CSCR	28.30	ASHRAELBP32	60 Hz		-	-	-
EH3125Z/L	CN	9.04	100 V / 50-60 Hz	L/MBP	LST	RSIR	UD*	ASHRAELBP32	50 Hz		UD*	UD*	UD*
EH3125Z/L	CN	9.04	100 V / 50-60 Hz	L/MBP	LST	RSIR	UD*	ASHRAELBP32	60 Hz		UD*	UD*	UD*
FGS125LAS	BR	11.14	100 V / 50-60 Hz	L/MBP	LST	CSCR	34,5	ASHRAELBP32	50 Hz		-	-	-
FGS125LAS	BR	11.14	100 V / 50-60 Hz	L/MBP	LST	CSCR	31.38	ASHRAELBP32	60 Hz		-	-	-
NEU3130Z / L	SK	12.11	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU3130Z / L	SK	12.11	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU3140Z / L	SK	16.80	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU3140Z / L	SK	16.80	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU3145Z / L	SK	18.70	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU3145Z / L	SK	18.70	100 V / 50-60 Hz	L/MBP	LST	CSCR	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*

NA*: Product is implemented but this technical data is not available.
 UD*: Product is under development so this technical data is still not available.

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EMU45HEP	127	169	217		104	1.26	160	ESTER / ISO10	Capillary Tube	SM00	
EMU45HEP	150	191	243		128	1.34	160	ESTER / ISO10	Capillary Tube	SM00	
EMI60HEP	159	207	265		133	1.17	200	ESTER / ISO22	Capillary Tube	SM00	
EMI60HEP	199	253	319		168	1.32	200	ESTER / ISO22	Capillary Tube	SM00	
FGS70HA	214	281	357		174	1.49	280	ESTER / ISO10	Capillary Tube	SM34	
FGS70HA	249	325	415		203	1.53	350	ESTER / ISO10	Capillary Tube	SM34	
FGS80HAS	-	-	-		210	1.42	280	ESTER / ISO22	Capillary Tube	SM34	
FGS80HAS	-	-	-		244	1.47	280	ESTER / ISO22	Capillary Tube	SM34	
FGS100HAS	-	-	-		261	1.41	280	ESTER / ISO22	Capillary Tube	SM34	
FGS100HAS	-	-	-		316	1.52	280	ESTER / ISO22	Capillary Tube	NA*	
EH3125Z/L	UD*	UD*	UD*		274*	1.40*	UD*	UD*	Capillary Tube	UD*	
EH3125Z/L	UD*	UD*	UD*		319*	1.56*	UD*	UD*	Capillary Tube	SM08	
FGS125HAS	-	-	-		315	1.28	280	ESTER / ISO22	Capillary Tube	SM34	
FGS125HAS	447	557	739		368	1.44	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05	
NE2130Z	376	483	606		323	1.20	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05	
NE2130Z	440	565	708		367	1.19	350	ESTER / ISO22	Capillary Tube	NA*	
NEU3130Z / L	UD*	UD*	UD*		353	1.42	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3130Z / L	UD*	UD*	UD*		416	1.48	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3140Z / L	UD*	UD*	UD*		477	1.36	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3140Z / L	UD*	UD*	UD*		552	1.44	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3145Z / L	UD*	UD*	UD*		489	1.32	350	ESTER / ISO22	Capillary Tube or Expansion Valve	UD*	
NEU3145Z / L	UD*	UD*	UD*		556	1.38	350	ESTER / ISO22	Capillary Tube or Expansion Valve	UD*	

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EMT1110L	132	170	214		113	1.31	160	ISO10	Capillary Tube	NA*	
EMT1110L	164	209	261		141	1.42	160	ISO10	Capillary Tube	NA*	
FGS80LAS	268	345	435	540	231	1.48	280	ESTER / ISO22	Capillary Tube	SM08	
FGS80LAS	315	405	511	636	268	1.52	280	ESTER / ISO22	Capillary Tube	SM08	
FGS100LAS	-	-	-	-	283	1.42	280	ESTER / ISO22	Capillary Tube	SM08	
FGS100LAS	-	-	-	-	337	1.52	280	ESTER / ISO22	Capillary Tube	SM08	
EH3125Z/L	UD*	UD*	UD*	UD*	293	1.40	UD*	UD*	Capillary Tube	UD*	
EH3125Z/L	UD*	UD*	UD*	UD*	342	1.56	UD*	UD*	Capillary Tube	UD*	
FGS125LAS	-	-	-	-	352	1.37	280	ESTER / ISO22	Capillary Tube	SM08	
FGS125LAS	-	-	-	-	406	1.47	280	ESTER / ISO22	Capillary Tube	SM08	
NEU3130Z / L	UD*	UD*	UD*	UD*	353	1.42	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3130Z / L	UD*	UD*	UD*	UD*	416	1.48	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3140Z / L	UD*	UD*	UD*	UD*	477	1.36	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3140Z / L	UD*	UD*	UD*	UD*	552	1.44	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3145Z / L	UD*	UD*	UD*	UD*	489	1.32	350	ESTER / ISO22	Capillary Tube	UD*	
NEU3145Z / L	UD*	UD*	UD*	UD*	556	1.38	350	ESTER / ISO22	Capillary Tube	UD*	

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.

100V 50/60 Hz | R404A | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
NEK2125GK	SK	6.20	100 V / 50-60 Hz	LBP	HST	CSCR	32.00	ASHRAELBP32	50 Hz	124	173	235	310
NEK2125GK	SK	6.20	100 V / 50-60 Hz	LBP	HST	CSCR	32.00	ASHRAELBP32	60 Hz	154	211	284	371
NEK2134GK	SK	8.77	100 V / 50-60 Hz	LBP	HST	CSCR	34.00	ASHRAELBP32	50 Hz	170	235	317	357
NEK2134GK	SK	8.77	100 V / 50-60 Hz	LBP	HST	CSCR	34.00	ASHRAELBP32	60 Hz	200	276	372	488
NEK2150GK	SK	12.11	100 V / 50-60 Hz	LBP	HST	CSCR	44.00	ASHRAELBP32	50 Hz			422	554
NEK2150GK	SK	12.11	100 V / 50-60 Hz	LBP	HST	CSCR	44.00	ASHRAELBP32	60 Hz			505	654
NEU2155GK	SK	12.11	100 V / 50-60 Hz	LBP	HST/LST	CSCR	NA*	ASHRAELBP32	50 Hz	240	331	448	592
NEU2155GK	SK	12.11	100 V / 50-60 Hz	LBP	HST/LST	CSCR	NA*	ASHRAELBP32	60 Hz	280	391	532	700
NT2178GK	SK	17.39	100 V / 50-60 Hz	LBP	HST	CSCR	25.00	ASHRAELBP32	50 Hz	337	467	646	873
NT2178GK	SK	17.39	100 V / 50-60 Hz	LBP	HST	CSCR	25.00	ASHRAELBP32	60 Hz	400	557	757	1000

100V 50/60 Hz | R600a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMT30CDP	BR	4.50	100 V / 50-60 Hz	L/M/HBP	LST	RSIR	8.25	ASHRAELBP32	50 Hz		34	47	63
EMT30CDP	BR	4.50	100 V / 50-60 Hz	L/M/HBP	LST	RSIR	7.65	ASHRAELBP32	60 Hz				
EMRS32CLC	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	6.03	ASHRAELBP32	50 Hz		48	68	91
EMRS32CLC	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	6.96	ASHRAELBP32	60 Hz		49	80	112
EMT45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSIR	8.30	ASHRAELBP32	50 Hz		45	63	88
EMT45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSIR	7.70	ASHRAELBP32	60 Hz		54	82	110
EMYS45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	NA*	ASHRAELBP32	50 Hz		43	62	86
EMYS45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	NA*	ASHRAELBP32	60 Hz		53	77	106
EMYS46CLC	CN	7.96	100 V / 50-60 Hz	LBP	LST	RSCR	NA*	ASHRAELBP32	50 Hz		60	92	126
EMYS46CLC	CN	7.96	100 V / 50-60 Hz	LBP	LST	RSCR	NA*	ASHRAELBP32	60 Hz		74	105	142
EMB46CLC	CN	7.96	100 V / 50-60 Hz	LBP	LST	RSCR	NA*	ASHRAELBP32	50 Hz		56	79	109
EMB46CLC	CN	7.96	100 V / 50-60 Hz	LBP	LST	RSCR	NA*	ASHRAELBP32	60 Hz		81	111	147
EMB55CLC	CN	9.04	100 V / 50-60 Hz	LBP	LST	RSCR	16.00	ASHRAELBP32	50 Hz		77	108	147
EMB55CLC	CN	9.04	100 V / 50-60 Hz	LBP	LST	RSCR	14.30	ASHRAELBP32	60 Hz		92	95	162
EGX80CLC	BR	11.14	100 V / 50-60 Hz	LBP	LST	RSCR	15.87	ASHRAELBP32	50 Hz		100	135	179
EGX80CLC	BR	11.14	100 V / 50-60 Hz	LBP	LST	RSCR	14.30	ASHRAELBP32	60 Hz		123	168	221
EMX3118Y	SK	12.21	100 V / 50-60 Hz	L/MBP	LST	RSCR	15.00	ASHRAELBP32	50 Hz		-	-	-
EMX3118Y	SK	12.21	100 V / 50-60 Hz	L/MBP	LST	RSCR	NA*	ASHRAELBP32	60 Hz		132	171	224
EMT30CDP	BR	4.50	100 V / 50-60 Hz	L/M/HBP	LST	RSIR	8.25	CEFOMAFHBP	50 Hz	68	88	111	138
EMT30CDP	BR	4.50	100 V / 50-60 Hz	L/M/HBP	LST	RSIR	7.65	CEFOMAFHBP	60 Hz	83	105	132	164
EMRS32CLC	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	7.70	ASHRAELBP32	50 Hz		48	67	91
EMRS32CLC	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	7.70	ASHRAELBP32	60 Hz		49	80	112
EMT45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSIR	8.30	ASHRAELBP32	50 Hz		45	63	88
EMT45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSIR	7.70	ASHRAELBP32	60 Hz		55	82	110
EMYS45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	7.60	ASHRAELBP32	50 Hz		43	62	86
EMYS45CLP	CN	5.96	100 V / 50-60 Hz	LBP	LST	RSCR	7.60	ASHRAELBP32	60 Hz		52	77	106
EMYS46CLC	CN	7.96	100 V / 50-60 Hz	LBP	LST	RSCR	9.10	ASHRAELBP32	50 Hz		60	92	126
EMYS46CLC	CN	7.96	100 V / 50-60 Hz	LBP	LST	RSCR	9.10	ASHRAELBP32	60 Hz		74	105	142
EMB46CLC	CN	8.23	100 V / 50-60 Hz	LBP	LST	RSCR	8.70	ASHRAELBP32	50 Hz		56	79	109
EMB46CLC	CN	8.23	100 V / 50-60 Hz	LBP	LST	RSCR	8.70	ASHRAELBP32	60 Hz		81	111	147
EMB55CLC	CN	9.04	100 V / 50-60 Hz	LBP	LST	RSCR	16.00	ASHRAELBP32	50 Hz		77	108	147
EMB55CLC	CN	9.04	100 V / 50-60 Hz	LBP	LST	RSCR	14.30	ASHRAELBP32	60 Hz		92	95	161
EGX80CLC	BR	11.14	100 V / 50-60 Hz	LBP	LST	RSCR	5.10	ASHRAELBP32	50 Hz		100	135	179
EGX80CLC	BR	11.14	100 V / 50-60 Hz	LBP	LST	RSCR	14.30	ASHRAELBP32	60 Hz	14.33	123	168	221

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	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEK2125GK	398	498	612		338	1.24	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEK2125GK	474	591	724		405	1.36	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEK2134GK	531	663	812		452	1.28	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEK2134GK	623	777	946		533	1.33	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEK2150GK	709	888	1090		607	1.29	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK2150GK	828	1029	1259		713	1.35	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU2155GK	762	958	1181		647	1.38	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEU2155GK	897	1122	1376		766	1.42	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NT2178GK	966	1229	1527		812	1.30	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
	NT2178GK	1150	1476	1851		1002	1.38	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMT30CDP	85	112	143	179	74	1.25	180	MINERAL / ISO10	Capillary Tube	SM05
	EMT30CDP					94	1.42	180	MINERAL / ISO10	Capillary Tube	SM05
	EMRS32CLC	120	155	195		99	1.65	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMRS32CLC	147	186	232		115	1.71	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMT45CLP	119	155	196		102	1.38	150	ALQUILB / ISO5	Capillary Tube	SM05
	EMT45CLP	139	175	220		121	1.51	150	ALQUILB / ISO5	Capillary Tube	SM05
	EMYS45CLP	116	151	192		99	1.57	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMYS45CLP	140	180	227		114	1.65	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMYS46CLC	162	205	255		139	1.57	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMYS46CLC	186	240	304		160	1.60	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB46CLC	146	186	227		140	1.67	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB46CLC	190	243	305		160	1.70	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB55CLC	194	250	314		159	1.66	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB55CLC	238	273	341		180	1.72	150	ALQUILB / ISO5	Capillary Tube	SM01
	EGX80CLC	234	302	385		195	1.77	280	ALQUILB / ISO5	Capillary Tube	SM34
	EGX80CLC	285	361	454		249	1.82	280	ALQUILB / ISO5	Capillary Tube	SM34
	EMX3118Y	-	-	-		208	1.67	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMX3118Y	290	370	463	570	237	1.68	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMT30CDP	169	205	245	289	273	2.65	180	MINERAL / ISO10	Capillary Tube	SM05
	EMT30CDP	201	244	294	351	332	2.83	180	MINERAL / ISO10	Capillary Tube	SM05
	EMRS32CLC	120	154	195		101	1.71	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMRS32CLC	147	186	232		124	1.71	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMT45CLP	119	155	196		98	1.45	150	ALQUILB / ISO5	Capillary Tube	SM05
	EMT45CLP	140	175	220		120	1.53	150	ALQUILB / ISO5	Capillary Tube	SM05
	EMYS45CLP	116	151	192		97	1.59	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMYS45CLP	140	180	227		117	1.68	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMYS46CLC	162	205	255		138	1.64	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMYS46CLC	186	240	304		157	1.64	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB46CLC	146	186	227		123	1.53	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB46CLC	190	243	305		161	1.74	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB55CLC	194	250	314		163	1.70	150	ALQUILB / ISO5	Capillary Tube	SM01
	EMB55CLC	239	273			190	1.74	150	ALQUILB / ISO5	Capillary Tube	SM01
	EGX80CLC	234	302	385		195	1.77	280	ALQUILB / ISO5	Capillary Tube	SM34
	EGX80CLC	268	345	438		249	1.82	280	ALQUILB / ISO5	Capillary Tube	SM34

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



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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EM20HHR	BR	2.27	100V/50-60Hz	M/HBP	LST	RSIR-CSIR	13.00	ASHRAEHBP32	60 Hz		-	-	-
EMT45HBP	CN	4.15	100V/50-60Hz	M/HBP	LST	RSIR	14.00	ASHRAEHBP46	50 Hz			246	301
EMT45HBP	CN	4.15	100V/50-60Hz	M/HBP	LST	RSIR	14.00	ASHRAEHBP46	60 Hz			287	362
EMT6170Z	CN	7.96	100V/50-60Hz	HBP	HST	CSCR	-	ASHRAEHBP46	50 Hz		304	389	483
EMT6170Z	CN	7.96	100V/50-60Hz	HBP	HST	CSCR	-	ASHRAEHBP46	60 Hz		-	-	-
NEK6170Z	SK	8.39	100V/50-60Hz	HBP	HST	CSIR	16.50	ASHRAEHBP46	50 Hz			348	427
NEK6170Z	SK	8.39	100V/50-60Hz	HBP	HST	CSIR	16.50	ASHRAEHBP46	60 Hz			422	510

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EM20LHR	BR	2.27	100V/50-60Hz	HBP	LST	RSIR	13.00	ASHRAEHBP46	50 Hz				156
EM20LHR	BR	2.27	100V/50-60Hz	HBP	LST	RSIR	12.10	ASHRAEHBP46	60 Hz				192
EMT6170L	CN	7.96	100V/50-60Hz	HBP	HST	CSCR	16.50	ASHRAEHBP46	50 Hz		322	411	512
EMT6170L	CN	7.96	100V/50-60Hz	HBP	HST	CSCR	16.50	ASHRAEHBP46	60 Hz		363	465	588

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NEK6210GK	SK	8.77	100V/50-60Hz	MBP	HST	CSIR	38.00	ASHRAEHBP46	50 Hz	434	548	686	848
NEK6210GK	SK	8.77	100V/50-60Hz	MBP	HST	CSIR	38.00	ASHRAEHBP46	60 Hz	534	665	823	1009

100V 50/60Hz | R600a | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EMT45CDP	BR	6.78	100V/50-60Hz	HBP	LST	RSIR	15.40	CEFOMAFHBP	50 Hz				236
EMT45CDP	BR	6.78	100V/50-60Hz	HBP	LST	RSIR	14.30	CEFOMAFHBP	60 Hz		-	-	-

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EM20HHR	-	-	-		297	2.73	160	ESTER / ISO22	Capillary Tube	SM03
	EMT45HBP	372	460	565	686	450	2.80	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
	EMT45HBP	451	555	674	807	530	2.70	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
	EMT6170Z	594	725	882		838	2.69	180	ESTER / ISO22	Capillary Tube or Expansion Valve	NA*
	EMT6170Z	-	-	-		975	2.55	180	ESTER / ISO22	Capillary Tube or Expansion Valve	NA*
	NEK6170Z	552	724	942		820	2.17	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6170Z	649	844	1104		957	2.35	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EM20LHR	195	239	291	348	262	2.78	160	ESTER / ISO22	Capillary Tube	SM03
	EM20LHR	234	284	343	412	311	2.77	160	ESTER / ISO22	Capillary Tube	SM03
	EMT6170L	630	767	927		838	2.69	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33
	EMT6170L	730	892	1074		975	2.55	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM33

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEK6210GK	1033	1242	1475		1349	1.98	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6210GK	1222	1463	1731		1583	2.07	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMT45CDP	308	372	428	477	419	2.59	180	MINERAL / ISO10	Capillary Tube	SM05
	EMT45CDP	-	-	-		493	2.70	180	MINERAL / ISO10	Capillary Tube	SM05

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

COMPRESSORS CATALOGUE

115V 60 Hz

embraco
Nidec

115V 60 Hz | R134a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMIS20HHR	BR	2.27	115-127 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	11.62	ASHRAELBP32	60 Hz		15	31	49
EMIE40HER	BR	3.40	115-127 V 60 Hz	L/MBP	LST	RSIR/CSIR	11.50	ASHRAELBP32	60 Hz			75	105
EM45HHR	BR	3.77	115-127 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	17.00	ASHRAELBP32	60 Hz		48	80	114
EM45HNR	BR	3.77	115-127 V 60 Hz	LBP	LST	RSIR/CSIR	17.00	ASHRAELBP32	60 Hz		47	75	109
EM65HNR	BR	5.54	115-127 V 60 Hz	L/MBP	LST	RSIR/CSIR	26.00	ASHRAELBP32	60 Hz		47	75	109
EMIS70HHR	BR	5.96	115-127 V 60 Hz	L/M/HBP	LST	RSIR	28.20	ASHRAELBP32	60 Hz		96	137	186
FFU80HAK	BR	6.76	115-127 V 60 Hz	L/MBP	LST	RSIR/CSIR	28.00	ASHRAELBP32	60 Hz			156	215
FFI8,5HAK	BR	7.15	115-127 V 60 Hz	L/MBP	LST	RSIR/CSIR	27.50	ASHRAELBP32	60 Hz		106	158	221
NEK2116Z	SK	7.40	115-127 V 60 Hz	LBP	HST	CSIR	22.00	ARI540	60 Hz		59	86	127
FF8,5HBK	BR	7.95	115-127 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	34.50	ASHRAELBP32	60 Hz		106	146	198
FFI10HAK	BR	9.04	115-127 V 60 Hz	L/MBP	LST	RSIR/CSIR	32.50	ASHRAELBP32	60 Hz			187	268
FFU130HAX	BR	10.61	115-127 V 60 Hz	L/MBP	LST/HST	CSIR	40.30	ASHRAELBP32	60 Hz			228	326
FFI12HBX	BR	11.14	115-127 V 60 Hz	L/M/HBP	HST	CSIR	43.00	ASHRAELBP32	60 Hz		159	220	306
FFU160HAX	BR	12.92	115-127 V 60 Hz	MBP	LST/HST	CSIR	44.50	ASHRAELBP32	60 Hz			303	404

115V 60 Hz | R404A | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
NEK2134GK	SK	8.77	115-127 V 60 Hz	LBP	HST	CSIR	37.50	ASHRAELBP32	60 Hz			402	525
NEU2140GK	SK	8.77	115-127 V 60 Hz	LBP	HST	CSCR	30.00	ASHRAELBP32	60 Hz			388	516
NEK2150GK	SK	12.11	115-127 V 60 Hz	LBP	HST	CSIR	44.00	ASHRAELBP32	60 Hz			508	660
NEU2155GK	SK	12.11	115-127 V 60 Hz	LBP	HST	CSCR	40.00	ASHRAELBP32	60 Hz			541	712
NT2168GKV	SK	14.50	115-127 V 60 Hz	LBP	HST	CSIR	54.50	ASHRAELBP32	60 Hz			524	702
NT2178GKV	SK	17.39	115-127 V 60 Hz	LBP	HST	CSCR	66.00	ASHRAELBP32	60 Hz	351	502	692	921
NT2180GK	SK	20.44	115-127 V 60 Hz	LBP	HST	CSCR	57.00	ASHRAELBP32	60 Hz			780	1053
NT2192GK	SK	22.37	115-127 V 60 Hz	LBP	HST	CSIR	56.00	ASHRAELBP32	60 Hz			877	1135
NT2192GKV	SK	22.37	115-127 V 60 Hz	LBP	HST	CSCR	56.00	ARI540	60 Hz			541	710
NJ2192GK	SK	26.11	115-127 V 60 Hz	LBP	HST	CSCR	98.00	ASHRAELBP32	60 Hz			886	1203

115V 60 Hz | R600a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMU40CLP	BR	5.96	115-127 V 60 Hz	LBP	LST	RSIR	7.33	ASHRAELBP32	60 Hz		57	78	105
EMU60CLP	BR	5.96	115-127 V 60 Hz	LBP	LST	RSIR	12.00	ASHRAELBP32	60 Hz		83	116	154
EMYE70CLP	BR	5.96	115-127 V 60 Hz	LBP	LST	RSIR	14.50	ASHRAELBP32	50 Hz		107	142	185
EGAS80CLP	BR	9.04	115-127 V 60 Hz	LBP	LST	RSIR	18.00	ASHRAELBP32	60 Hz		122	172	226

115V 60 Hz | R134a | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EMIS30HHR	BR	3.00	115-127 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	16.00	ASHRAEHBP32	60 Hz	106	142	185	251
NEU6187Z	SK	9.99	115-127 V 60 Hz	HBP	HST	CSCR	39.00	ASHRAEHBP46	60 Hz				724
NEU6210Z	SK	12.11	115-127 V 60 Hz	HBP	HST	CSCR	40.00	ASHRAEHBP46	60 Hz				865
NT6217Z	SK	20.44	115-127 V 60 Hz	HBP	HST	CSIR	45.00	ASHRAEHBP46	60 Hz				1194
NJ6220Z	SK	26.11	115-127 V 60 Hz	HBP	HST	CSIR	72.00	ASHRAEHBP46	60 Hz				1726

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.

Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMIS20HHR	71	98	130	168	56	0.90	160		
EMIE40HER	141	183	234	293	117	1.33	180	ESTER / ISO10	Capillary Tube	SM01/SM02
EM45HHR	152	197	249	310	123	1.15	160	ESTER / ISO22	Capillary Tube	SM07
EM45HNR	149	195	246		123	1.17	200	ESTER / ISO22	Capillary Tube	SM01/SM02
EM65HNR	149	195	246		123	1.17	160	ESTER / ISO22	Capillary Tube	SM01/SM02
EMIS70HHR	246	319	406	510	203	1.34	160	ESTER / ISO10	Capillary Tube	SM01/SM02
FFU80HAK	288	377	481	600	239	1.51	280	ESTER / ISO10	Capillary Tube	SM08
FFI8,5HAK	296	386	493	620	243	1.42	280	ESTER / ISO22	Capillary Tube	SM03
NEK2116Z	180	247	328		171	0.92	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
FF8,5HBK	262	341	438	552	217	1.10	280	ESTER / ISO22	Capillary Tube	SM03/SM04
FFI10HAK	362	471	598	749	301	1.45	280	ESTER / ISO22	Capillary Tube	SM03
FFU130HAX	448	593	764	961	367	1.41	280	ESTER / ISO10	Capillary Tube or Expansion Valve	SM08
FFI12HBX	416	416	718	914	340	1.16	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08
FFU160HAX	526	673	850	1059	445	1.37	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08

Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEK2134GK	667	828	1007		573	1.32	350		
NEU2140GK	670	848	1052		569	1.46	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEK2150GK	838	1042	1273		720	1.23	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU2155GK	913	1144	1404		781	1.45	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT2168GKV	911	1149	1413		777	1.23	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2178GKV	1190	1497	1844		1004	1.21	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2180GK	1372	1736	2146		1165	1.38	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NT2192GK	1418	1726	2061		1235	1.20	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NT2192GKV	917	1160	1438		765	0.82	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NJ2192GK	1579	2020	2536		1333	1.32	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17

Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMU40CLP	139	180	227		117	1.30	180		
EMU60CLP	200	255	321		164	1.41	180	ALQUILB / ISO5	Capillary Tube	SM07
EMYE70CLP	239	305	285		205	1.46	180	ALQUILB / ISO5	Capillary Tube	SM07
EGAS80CLP	288	362	450		245	1.51	280	ALQUILB / ISO5	Capillary Tube	SM09

Model	Cooling Capacity (°C)				Check Point (Evaporating 7.2°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMIS30HHR	313	385	467		419	2.48	160		
NEU6187Z	905	1116	1356		1227	2.47	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6210Z	1077	1322	1599		1452	2.51	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT6217Z	1493	1836	2220		2020	2.16	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NJ6220Z	2206	2734	3308		3004	2.42	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.



115V 60 Hz | R290 | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EM2U3111U	BR	3.00	115-127 V 60 Hz	L/MBP	LST	RSCR	8.80	ASHRAELBP32	60 Hz			119	154
EM150UER	BR	3.00	115-127 V 60 Hz	L/MBP	LST	RSIR/CSIR	12.70	ASHRAELBP32	60 Hz			103	138
EM2X3113U	CN	3.67	115-127 V 60 Hz	L/MBP	LST	RSCR	12.40	ASHRAELBP32	60 Hz		86	120	129
EMX3113U	CN	3.68	115-127 V 60 Hz	L/MBP	LST	RSCR	17.50	ASHRAELBP32	60 Hz	286	408		716
EM2U3115U	BR	3.97	115-127 V 60 Hz	L/MBP	LST	RSCR	11.94	ASHRAELBP32	60 Hz		133	176	222
EM170UER	BR	4.08	115-127 V 60 Hz	L/MBP	LST	CSIR	19.60	ASHRAELBP32	60 Hz			142	190
EM2X3117U	CN	4.50	115-127 V 60 Hz	L/MBP	LST	RSCR	15.30	ASHRAELBP32	60 Hz		142	183	236
EMX3117U	CN	4.50	115-127 V 60 Hz	L/MBP	LST	RSCR	22.80	ASHRAELBP32	60 Hz		479		856
EM190UEX	BR	4.99	115-127 V 60 Hz	L/MBP	LST	CSIR	23.00	ASHRAELBP32	60 Hz			200	250
EM2X3121U	CN	5.54	115-127 V 60 Hz	L/MBP	LST	RSCR	15.60	ASHRAELBP32	60 Hz			237	306
EM2X3125U	CN	6.09	115-127 V 60 Hz	L/MBP	LST	RSCR	15.60	ASHRAELBP32	60 Hz			259	332
FFU130UAX	BR	6.76	115-127 V 60 Hz	L/MBP	HST	CSIR	41.50	ASHRAELBP32	60 Hz		236	288	361
FFU160UAX	BR	7.95	115-127 V 60 Hz	L/MBP	HST	CSIR	41.50	ASHRAELBP32	60 Hz			376	470
EMC3134U	CN	7.95	115-127 V 60 Hz	L/MBP	LST	RSCR	22.40	ASHRAELBP32	60 Hz			347	448
EM2X3134U	BR	7.96	115-127 V 60 Hz	L/MBP	LST	RSCR	24.80	ASHRAELBP32	60 Hz		273		454
EMC3140U	CN	9.04	115-127 V 60 Hz	L/MBP	LST	RSCR	26.50	ASHRAELBP32	60 Hz		-	-	-
NEK2134U	SK	9.99	115-127 V 60 Hz	LBP	HST	CSIR	28.00	ARILBP	60 Hz	155	205	268	344
NEU2140U	SK	9.99	115-127 V 60 Hz	LBP	HST	CSIR	30.00	ARI4	60 Hz		220	283	364
EMC3145U	SK	11.14	115-127 V 60 Hz	L/MBP	LST	RSCR	10.20	ASHRAELBP32	60 Hz		367	480	616
EHX2155U	CN	12.21	115-127 V 60 Hz	LBP	HST	CSIR	18.80	ASHRAELBP32	60Hz	306	409	526	659
NEK2150U	SK	13.54	115-127 V 60 Hz	LBP	HST	CSCR	41.50	ASHRAELBP32	60 Hz	210	274	358	461
NEK2150U	SK	13.54	115-127 V 60 Hz	LBP	HST	CSIR	41.50	ASHRAELBP32	60 Hz	207	272	354	454
NEU2155U	SK	13.54	115-127 V 60 Hz	LBP	HST	CSCR	40.00	ARI4	60 Hz		285	373	484
NEX4160UA	SK	14.40	115-127 V 60 Hz	L/MBP	HST	CSCR	46.00	ARILBP	60 Hz	246	325	429	557
NEX4170UA	SK	16.80	115-127 V 60 Hz	L/MBP	HST	CSCR	26.00	ARILBP	60 Hz	274	361	479	625
NEU2168U	SK	16.80	115-127 V 60 Hz	LBP	HST	CSCR	49.00	ASHRAELBP32	60 Hz			678	872
NT2160UV	SK	17.39	115-127 V 60 Hz	LBP	HST	CSCR	54.50	ASHRAELBP32	60 Hz			590	759
NEX4180UA	SK	18.70	115-127 V 60 Hz	L/MBP	HST	CSCR	53.00	ARILBP	60 Hz	324	434	571	734
NEU2178U	SK	18.70	115-127 V 60 Hz	LBP	HST	CSCR	51.00	ASHRAELBP32	60 Hz			551	703
NT2180UV	SK	22.37	115-127 V 60 Hz	LBP	HST	CSCR	30.00	ARI540	60 Hz			535	691
NT2210UV	SK	27.80	115-127 V 60 Hz	LBP	HST	CSCR	67.00	ARI4	60 Hz		533	686	880

115-127V 60 Hz | R404A | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NEU6181GK	SK	6.20	115-127 V 60 Hz	MBP	HST	CSCR	31.00	ARIMBP	60 Hz	307	361	445	558
NEK6181GK	SK	7.28	115-127 V 60 Hz	MBP	HST	CSIR	26.50	ASHRAEHBP46	60 Hz	460	562	679	815
NEK6210GK	SK	8.77	115-127 V 60 Hz	MBP	HST	CSCR	38.00	ASHRAEHBP46	60 Hz	573	683	825	1000
NEU6212GK	SK	8.77	115-127 V 60 Hz	MBP	HST	CSIR	39.00	ASHRAEHBP46	60 Hz	558	700	871	1071
NEU6214GK	SK	9.99	115-127 V 60 Hz	MBP	HST	CSIR	42.00	ARIMBP	60 Hz	479	585	724	870
NEU6215GK	SK	12.11	115-127 V 60 Hz	MBP	HST	CSCR	47.00	ASHRAEHBP46	60 Hz				1494
NT6217GKV	SK	12.55	115-127 V 60 Hz	MBP	HST	CSIR	50.00	ARIMBP	60 Hz	512	623	764	937
NT6220GKV	SK	14.50	115-127 V 60 Hz	MBP	HST	CSIR	54.50	ASHRAEHBP46	60 Hz	767	999	1269	1576
NT6222GKV	SK	17.39	115-127 V 60 Hz	MBP	HST	CSIR	70.00	ARIMBP	60 Hz	792	1017	1277	1571
NT6224GKV	SK	20.44	115-127 V 60 Hz	MBP	HST	CSCR	77.00	ASHRAEHBP46	60 Hz	1180	1490	1859	2287
NT6226GKV	SK	22.37	115-127 V 60 Hz	MBP	HST	CSCR	77.00	ASHRAEHBP46	60 Hz			2075	2529
NTX6220GKV	SK	12.55	115-127 V 60 Hz	M/HBP	HST	CSCR	54.50	ARIMBP	60 Hz	545	711	904	1124
NTX6222GKV	SK	15.10	115-127 V 60 Hz	M/HBP	HST	CSCR	69.00	ARIMBP	60 Hz	646	843	1080	1357

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Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
					(Evaporating -23.3°C / Condensing 54.4°C)					
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EM2U3111U	193	238	290	352	167	1.66	150	ESTER / ISO22	Capillary Tube	SM06
EMI50UER	181	232	290	355	153	1.38	170	ALQUILB / ISO32	Capillary Tube	SM01/SM02
EM2X3113U	203	255	315	384	175	1.48	150	ESTER / ISO22	Capillary Tube	SM28
EMX3113U		1126		1661	195	1.62	150	ESTER / ISO22	Capillary Tube	SM05
EM2U3115U	275	336	408	492	242	1.65	150	ESTER / ISO22	Capillary Tube	SM06
EMI70UER	248	317	396	485	210	1.34	160	ALQUILB / ISO32	Capillary Tube	SM01/SM02
EM2X3117U	299	372	455	546	258	1.72	150	ESTER / ISO22	Capillary Tube	SM28
EMX3117U		1352		2012	249	1.67	150	ESTER / ISO22	Capillary Tube	SM05
EMI90UEX	305	372	456	564	269	1.34	160	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM01
EM2X3121U	381	466	566	684	332	1.74	150	ESTER / ISO22	Capillary Tube	SM05
EM2X3125U	416	512	623	751	361	1.70	150	ESTER / ISO22	Capillary Tube	SM05
FFU130UAX	454	568	704		390	1.23	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08
FFU160UAX	580	709	863	1044	507	1.58	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08
EMC3134U	562	693	841	1010	487	1.78	150	ESTER / ISO22	Capillary Tube	SM32
EM2X3134U		702		1012	494	1.71	150	ESTER / ISO22	Capillary Tube	SM05
EMC3140U	-	-	-	-	583	1.72	150	ESTER / ISO22	Capillary Tube	SM32
NEK2134U	433	535	650		539	1.39	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
NEU2140U	463	579	714		449	1.14	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
EMC3145U	776	959	1166		685	1.75	200	ESTER / ISO22	Capillary Tube	SM32
EHX2155U	814	992	1198		714	1.64	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
NEK2150U	583	724	884		709	1.38	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEK2150U	572	707	860		687	1.25	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEU2155U	616	772	949		599	1.14	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEX4160UA	710	887	1089		666	1.36	350	ESTER / ISO22	Capillary Tube or Expansion Valve	-
NEX4170UA	801	1005	1239	1502	791	1.31	350	ESTER / ISO22	Capillary Tube or Expansion Valve	-
NEU2168U	1099	1359	1652		949	1.52	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT2160UV	961	1197	1467		828	1.34	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NEX4180UA	924	1139	1382	1650	891	1.31	350	ESTER / ISO22	Capillary Tube or Expansion Valve	-
NEU2178U	880	1082	1308		849	1.23	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT2180UV	876	1089	1330		744	0.94	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2210UV	1113	1387	1702	2056	954	0.99	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21

Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
					(Evaporating 7.2°C / Condensing 54.4°C)					
	0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
NEU6181GK	701	872	1074		1237	2.33	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEK6181GK	973	1156	1365		1260	2.04	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEK6210GK	1209	1450	1725		1584	2.11	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6212GK	1299	1557	1842		1697	2.20	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6214GK	1099	1379	1710		1914	2.11	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6215GK	1792	2123	2486		2302	2.14	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT6217GKV	1142	1381	1656		2163	2.20	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NT6220GKV	1919	2298	2711		2507	2.18	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NT6222GKV	1900	2264	2663		3040	2.13	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NT6224GKV	2774	3320	3925		3617	2.30	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NT6226GKV	3042	3615	4247		3925	2.15	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NTX6220GKV	1370	1644	1944		-	-		ESTER / ISO22	Capillary Tube or Expansion Valve	
NTX6222GKV	1673	2030	2426		3040	2.13		ESTER / ISO22	Capillary Tube or Expansion Valve	

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



115V 60Hz | R290 | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NEK6152U	SK	5.44	115-127 V 60 Hz	MBP	HST	CSIR	25.00	ARIMBP	60 Hz	221	279	346	422
NEU6181U	SK	7.28	115-127 V 60 Hz	MBP	HST	CSIR	30.00	ASHRAEHBP46	60 Hz	393	499	626	773
NEK6210U	SK	8.77	115-127 V 60 Hz	MBP	HST	CSIR	37.00	ARIMBP	60 Hz	363	458	570	698
NEK6213U	SK	12.11	115-127 V 60 Hz	MBP	HST	CSIR	44.00	ASHRAEHBP46	60 Hz	660	807	984	1193
NEU6214U	SK	12.11	115-127 V 60 Hz	MBP	HST	CSCR	42.00	ASHRAEHBP46	60 Hz	710	888	1094	1328
NEU6214U	SK	12.11	115-127 V 60 Hz	MBP	HST	CSIR	42.00	ASHRAEHBP46	60 Hz	708	882	1084	1313
NEX4160UA	SK	14.40	115-127 V 60 Hz	L/MBP	HST	CSCR	46.00	ARIMBP	60 Hz	696	871	1070	1294
NEU6217U	SK	14.28	115-127 V 60 Hz	MBP	HST	CSIR	29.00	ASHRAEHBP46	60 Hz	818	1019	1252	1518
NEU6217U	SK	14.28	115-127 V 60 Hz	MBP	HST	CSCR	45.00	ASHRAEHBP46	60 Hz	824	1023	1258	1528
NT6217UV	SK	14.50	115-127 V 60 Hz	MBP	HST	CSIR	44.00	ARIMBP	60 Hz	495	626	793	995
NT6217UV	SK	14.50	115-127 V 60 Hz	MBP	HST	CSCR	44.00	ARIMBP	60 Hz	498	624	801	1030
NEX4170UA	SK	16.80	115-127 V 60 Hz	L/MBP	HST	CSCR	49.50	ARIMBP	60 Hz	820	1022	1251	1508
NEX6221UA	SK	16.80	115-127 V 60 Hz	M/HBP	HST	CSCR	49.50	ARIMBP	60 Hz	831	992	1211	1488
NT6220UV	SK	17.39	115-127 V 60 Hz	MBP	HST	CSCR	54.50	ARIMBP	60 Hz	620	794	996	1224
NEX4180UA	SK	18.70	115-127 V 60 Hz	L/MBP	HST	CSCR	53.00	ARIMBP	60 Hz	924	1140	1382	1650
NT6222UV	SK	20.44	115-127 V 60 Hz	MBP	HST	CSCR	54.50	ARIMBP	60 Hz	669	913	1182	1478
NTX6222UV	SK	20.44	115-127 V 60 Hz	M/HBP	HST	CSCR	60.00	ASHRAEHBP46	60 Hz	1048	1321	1656	2503

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

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEK6152U	507	602	706		862	2.44	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6181U	940	1127	1334		1224	2.73	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6210U	843	1004	1182		1369	2.48	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6213U	1432	1702	2002		1846	2.14	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6214U	1589	1879	2197		2027	2.71	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6214U	1571	1857	2170		1989	2.46	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEX4160UA	1541				-	-	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NEU6217U	1817	2148	2512		2264	2.24	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	NEU6217U	1832	2172	2547		2351	2.56	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NT6217UV	1234	1512	1829		2103	2.53	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6217UV	1314	1656	2056		2178	2.81	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NEX4170UA	1791				-	-	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NEX6221UA	1823				2814	2.63	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NT6220UV	1479	1762	2071		2594	2.80	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NEX4180UA	1945				-	-	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NT6222UV	1799	2147	2521		3024	2.73	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NTX6222UV	2513	3035	3620		3323	2.84	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.

COMPRESSORS CATALOGUE

220V 50 Hz

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200-220V 50 Hz / 230V 60 Hz 1 – | R134a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMIS30HHR	BR	3.00	200-220 V 50 Hz / 230 V 60 Hz	L/M/HBP	LST	RSIR	9.00	ASHRAELBP32	50 Hz		27	46	68
EMIS30HHR	BR	3.00	200-220 V 50 Hz / 230 V 60 Hz	L/M/HBP	LST	RSIR	9.00	ASHRAELBP32	60 Hz		36	59	85
EMIE40HER	BR	3.40	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	8.60	ASHRAELBP32	50 Hz		39	60	85
EMIE40HER	BR	3.40	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	8.60	ASHRAELBP32	60 Hz		50	75	105
EM45HNR	BR	3.77	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	9.00	ASHRAELBP32	50 Hz		41	64	87
EM45HNR	BR	3.77	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	9.00	ASHRAELBP32	60 Hz		50	74	106
EMYE70HEP	BR	5.96	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	6.50	ASHRAELBP32	60 Hz		99	140	183
EGAS80HLR	BR	6.36	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR/CSIR	14.50	ASHRAELBP32	50 Hz		77	123	175
EGAS80HLR	BR	6.36	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR/CSIR	14.50	ASHRAELBP32	60 Hz		95	151	215
FF7,5HBK	BR	6.92	200-220 V 50 Hz / 230 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	16.70	ASHRAELBP32	50 Hz		70	106	149
FF7,5HBK	BR	6.92	200-220 V 50 Hz / 230 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	16.70	ASHRAELBP32	60 Hz		79	121	172
FFI7,5HAK	BR	6.76	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	14.00	ASHRAELBP32	60 Hz		104	146	202
FFI7,5HAK	BR	6.76	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	14.00	ASHRAELBP32	50 Hz		88	129	179
FFUS80HAK	BR	6.76	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	14.50	ASHRAELBP32	50 Hz			134	181
FFUS80HAK	BR	6.76	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	14.50	ASHRAELBP32	60 Hz		108	154	212
FFI8,5HAK	BR	7.15	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	16.00	ASHRAELBP32	50 Hz		93	136	188
FFI8,5HAK	BR	7.15	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	16.00	ASHRAELBP32	60 Hz		105	157	219
EGAS90HLR	BR	7.15	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR/CSIR	14.30	ASHRAELBP32	50 Hz		95	143	197
EGAS100HLR	BR	7.95	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR/CSIR	17.55	ASHRAELBP32	50 Hz		106	162	225
EGAS100HLR	BR	7.95	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR/CSIR	17.55	ASHRAELBP32	60 Hz		130	200	277
EGZS100HLC	BR	7.95	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSCR	8.85	ASHRAELBP32	50 Hz		115	165	225
EGZS100HLC	BR	7.95	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSCR	8.85	ASHRAELBP32	60 Hz		130	200	277
FFUS100HAK	BR	7.95	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	17.55	ASHRAELBP32	50 Hz			167	225
FFUS100HAK	BR	7.95	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	17.55	ASHRAELBP32	60 Hz		138	196	267
FFI10HAK	BR	9.04	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	17.50	ASHRAELBP32	50 Hz		105	153	218
FFI10HAK	BR	9.04	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	17.50	ASHRAELBP32	60 Hz			187	268
NE2121Z	SK	9.26	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSIR	12.60	ASHRAELBP32	50 Hz				229
NE2121Z	SK	9.26	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSIR	12.60	ASHRAELBP32	60 Hz		147	199	268

200-220V 50 Hz / 230V 60 Hz 1 – | R404A | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
NEU2140GK	SK	8.77	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSIR	30.00	ASHRAELBP32	50 Hz			395	522
NEU2140GK	SK	8.77	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSIR	30.00	ASHRAELBP32	60 Hz	205	289	395	522
NT2168GKV	SK	14.50	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSIR	54.50	ASHRAELBP32	50 Hz			435	585
NT2178GK	SK	17.39	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSCR	25.00	ASHRAELBP32	50 Hz	282	409	560	734
NT2178GK	SK	17.39	200-220 V 50 Hz / 230 V 60 Hz	LBP	HST	CSCR	25.00	ASHRAELBP32	60 Hz	361	513	700	922

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	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMIS30HHR	95	126	163	207	79	0.93	160	ESTER / ISO22	Capillary Tube	SM07
	EMIS30HHR	115	150	191	241	100	1.14	160	ESTER / ISO22	Capillary Tube	SM07
	EMIE40HER	116	152	194	242	95	1.18	180	ESTER / ISO10	Capillary Tube	SM01/SM02
	EMIE40HER	141	183	234	293	117	1.32	180	ESTER / ISO10	Capillary Tube	SM01/SM02
	EM45HNR	115	150	197	257	97	0.97	200	ESTER / ISO22	Capillary Tube	SM01/SM02
	EM45HNR	145	191	243	300	123	1.15	200	ESTER / ISO22	Capillary Tube	SM01/SM02
	EMYE70HEP	233	295	372		200	1.52	180	ESTER / ISO10	Capillary Tube	SM01
	EGAS80HLR	235	306	390		195	1.53	230	ESTER / ISO10	Capillary Tube	SM03/SM04
	EGAS80HLR	289	377	482		240	1.61	230	ESTER / ISO10	Capillary Tube	SM03/SM04
	FF7,5HBK	202	266	341	431	149	1.00	280	ESTER / ISO22	Capillary Tube	SM08
	FF7,5HBK	234	308	395	497	202	1.16	280	ESTER / ISO22	Capillary Tube	SM08
	FFI7,5HAK	273	360	462	579	224	1.38	280	ESTER / ISO22	Capillary Tube	SM03
	FFI7,5HAK	238	306	383	470	190	1.29	280	ESTER / ISO22	Capillary Tube	SM03
	FFUS80HAK	239	310	395	496	185	1.29	230	ESTER / ISO10	Capillary Tube	SM08
	FFUS80HAK	282	367	468	587	236	1.47	230	ESTER / ISO10	Capillary Tube	SM08
	FFI8,5HAK	249	322	407	508	205	1.35	280	ESTER / ISO22	Capillary Tube	SM03
	FFI8,5HAK	294	384	491	618	241	1.37	280	ESTER / ISO22	Capillary Tube	SM03
	EGAS90HLR	260	335	424		218	1.50	230	ESTER / ISO10	Capillary Tube	SM03/SM04
	EGAS100HLR	298	383	483		250	1.52	230	ESTER / ISO10	Capillary Tube	SM04
	EGAS100HLR	366	470	593		310	1.61	230	ESTER / ISO10	Capillary Tube	SM04
	EGZS100HLC	298	385	489		250	1.74	280	ESTER / ISO10	Capillary Tube	SM34
	EGZS100HLC	366	470	593		308	1.76	280	ESTER / ISO10	Capillary Tube	SM34
	FFUS100HAK	296	382	484	608	249	1.45	350	ESTER / ISO10	Capillary Tube	SM08
	FFUS100HAK	353	456	578	723	295	1.52	350	ESTER / ISO10	Capillary Tube	SM08
	FFI10HAK	300	398	509	634	249	1.30	280	ESTER / ISO22	Capillary Tube	SM03
	FFI10HAK	362	471	598	749	301	1.45	280	ESTER / ISO22	Capillary Tube	SM03
	NE2121Z	304	394	499	618	254	1.28	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NE2121Z	356	460	583		296	1.27	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEU2140GK	671	840	1032		573	1.36	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU2140GK	670	840	1031		568	1.36	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NT2168GKV	763	969	1202		646	1.29	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
	NT2178GK	934	1160	1412		800	1.15	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
	NT2178GK	1179	1471	1799		1006	1.28	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20

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

200-220V 50 Hz / 230V 60 Hz 1 ~ | R290 | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EM2U3111U	BR	3.00	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	5.80	ASHRAELBP32	50 Hz			100	131
EMI50UER	BR	3.00	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	8.70	ASHRAELBP32	50 Hz		67	92	119
EMI50UER	BR	3.00	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	8.70	ASHRAELBP32	60 Hz		75	103	138
EM2U3115U	BR	3.97	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	-	ASHRAELBP32	50 Hz		109	145	184
EM2U3115U	BR	3.97	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	-	ASHRAELBP32	60 Hz		133	173	220
EMI70UER	BR	4.08	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	9.40	ASHRAELBP32	50 Hz			128	163
EMI70UER	BR	4.08	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR/CSIR	9.40	ASHRAELBP32	60 Hz		106	142	190
EM2X3121U	BR	5.54	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	7.80	ASHRAELBP32	50 Hz		156	209	264
EM2X3121U	BR	5.54	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	7.80	ASHRAELBP32	60 Hz		179	242	310
EM2X3125U	BR	6.09	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	7.80	ASHRAELBP32	50 Hz			229	289
EM2X3125U	BR	6.09	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSCR	7.80	ASHRAELBP32	60 Hz		210	274	340
FFU130UAX	BR	6.76	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	HST	CSIR	19.00	ASHRAELBP32	50 Hz		182	225	287
FFU130UAX	BR	6.76	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	HST	CSIR	19.00	ASHRAELBP32	60 Hz		230	295	367

200-220V 50 Hz / 230V 60 Hz 1 ~ | R600a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMI30CNP	BR	4.99	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR	3.70	ASHRAELBP32	50 Hz		27	42	62
EMI30CNP	BR	4.99	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR	3.50	ASHRAELBP32	60 Hz		36	55	76
EMI40CNP	BR	6.36	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR	4.50	ASHRAELBP32	50 Hz		48	67	90
EMI40CNP	BR	6.36	200-220 V 50 Hz / 230 V 60 Hz	L/MBP	LST	RSIR	4.50	ASHRAELBP32	60 Hz		58	80	108
EMU40CLP	BR	5.96	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	7.33	ASHRAELBP32	50 Hz		46	67	92
EMU40CLP	BR	5.96	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	7.33	ASHRAELBP32	60 Hz		61	84	111
EMYE70CLP	BR	5.96	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	8.20	ASHRAELBP32	50 Hz		95	101	171
EMYE70CLP	BR	5.96	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	7.76	ASHRAELBP32	60 Hz		116	114	189
EGAS80CLP	BR	9.04	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	7.90	ASHRAELBP32	50 Hz		93	128	170
EGAS80CLP	BR	9.04	200-220 V 50 Hz / 230 V 60 Hz	LBP	LST	RSIR	7.25	ASHRAELBP32	60 Hz		125	172	225

220-240V 50-60 Hz 1 ~ | R134a | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EM20HHR	BR	2.27	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR/CSIR	6.50	ASHRAEHBP32	50 Hz	58	79	104	135
EM20HHR	BR	2.27	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR/CSIR	6.50	ASHRAEHBP32	60 Hz	73	97	126	160
EM30HHR	BR	3.00	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR/CSIR	8.50	ASHRAEHBP46	50 Hz	96	127	164	206
EM30HHR	BR	3.00	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR/CSIR	8.00	ASHRAEHBP46	60 Hz	117	153	196	246
EMIS30HHR	BR	3.00	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR	8.80	ASHRAEHBP32	50 Hz	95	126	163	207
EMIS30HHR	BR	3.00	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR	8.80	ASHRAEHBP32	60 Hz	115	150	191	241
EM55HHR	BR	4.60	220-240 V 50-60 Hz	HBP	LST	RSIR	9.31	ASHRAEHBP32	50 Hz				326
EM55HHR	BR	4.60	220-240 V 50-60 Hz	HBP	LST	RSIR	9.31	ASHRAEHBP32	60 Hz				377
EM65HHR	BR	5.54	220-240 V 50-60 Hz	M/HBP	LST	RSIR/CSIR	14.30	ASHRAEHBP32	50 Hz			304	388
EM65HHR	BR	5.54	220-240 V 50-60 Hz	M/HBP	LST	RSIR/CSIR	14.30	ASHRAEHBP32	60 Hz			381	473
FF7,5HBK	BR	6.92	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR/CSIR	15.80	ASHRAEHBP32	50 Hz	201	264	340	429
FF7,5HBK	BR	6.92	220-240 V 50-60 Hz	L/M/HBP	LST	RSIR/CSIR	15.80	ASHRAEHBP32	60 Hz	234	308	395	497
NEU6187Z	SK	9.99	220-240 V 50-60 Hz	HBP	HST	CSIR	13.00	ASHRAEHBP46	50 Hz		380	485	613
NEU6187Z	SK	9.99	220-240 V 50-60 Hz	HBP	HST	CSIR	13.00	ASHRAEHBP46	60 Hz		443	571	723
NT6220Z	SK	22.37	220-240 V 50-60 Hz	HBP	HST	CSIR	29.50	ASHRAEHBP46	50 Hz				1212

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Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
					(Evaporating -23.3°C / Condensing 54.4°C)					
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EM2U3111U	166	207	255	311	140	1.51	150	ESTER / ISO22	Capillary Tube	SM06
EM150UER	147	178	212	248	129	1.30	170	ALQUILB / ISO32	Capillary Tube	SM01/SM02
EM150UER	181	231	290	355	153	1.33	170	ALQUILB / ISO32	Capillary Tube	SM01/SM02
EM2U3115U	229	282	343	414	201	1.62	150	ESTER / ISO22	Capillary Tube	SM06
EM2U3115U	274	337	409	492	239	1.68	150	ESTER / ISO22	Capillary Tube	SM06
EM170UER	203	250	304	368	176	1.18	160	ALQUILB / ISO32	Capillary Tube	SM01/SM02
EM170UER	248	317	396	485	210	1.30	160	ALQUILB / ISO32	Capillary Tube	SM01/SM02
EM2X3121U	326	397	480	579	288	1.72	150	ESTER / ISO22	Capillary Tube	SM05
EM2X3121U	385	470	568	682	329	1.68	150	ESTER / ISO22	Capillary Tube	SM05
EM2X3125U	360	443	539	647	304	1.67	150	ESTER / ISO22	Capillary Tube	SM05
EM2X3125U	413	500	607	740	368	1.67	150	ESTER / ISO22	Capillary Tube	SM05
FFU130UAX	367	465	578	708	319	1.49	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08
FFU130UAX	451	552	675	824	399	1.55	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08

Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
					(Evaporating -23.3°C / Condensing 54.4°C)					
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EMI30CNP	86	114	147	184	76	1.04	160	MINERAL / ISO32	Capillary Tube	SM32
EMI30CNP	102	133	170	213	94	1.11	160	MINERAL / ISO32	Capillary Tube	SM32
EMI40CNP	118	152	194	244	100	1.13	160	MINERAL / ISO32	Capillary Tube	SM32
EMI40CNP	143	185	236	295	120	1.16	160	MINERAL / ISO32	Capillary Tube	SM32
EMU40CLP	122	158	200		101	1.17	180	ALQUILB / ISO5	Capillary Tube	SM00
EMU40CLP	144	184	233		120	1.41	180	ALQUILB / ISO5	Capillary Tube	SM00
EMYE70CLP	250	285			182	1.32	180	ALQUILB / ISO5	Capillary Tube	SM07
EMYE70CLP	279	320			198	1.49	180	ALQUILB / ISO5	Capillary Tube	SM07
EGAS80CLP	224	289	370		190	1.44	280	ALQUILB / ISO5	Capillary Tube	SM09
EGAS80CLP	287	360	447		242	1.59	280	ALQUILB / ISO5	Capillary Tube	SM09

Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
					(Evaporating 7.2°C / Condensing 54.4°C)					
	0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EM20HHR	170	212	260	315	246	2.51	160	ESTER / ISO22	Capillary Tube	SM02
EM20HHR	201	251	310	380	292	2.48	160	ESTER / ISO22	Capillary Tube	SM02
EM30HHR	256	312	377	450	343	2.45	160	ESTER / ISO22	Capillary Tube	SM07
EM30HHR	306	376	458	554	404	2.53	160	ESTER / ISO22	Capillary Tube	SM07
EMIS30HHR	259	319	390	471	363	2.60	160	ESTER / ISO22	Capillary Tube	SM01/SM02
EMIS30HHR	300	370	451	546	434	2.68	160	ESTER / ISO22	Capillary Tube	SM01/SM02
EM55HHR	399	485	584	694	529	2.68	160	ESTER / ISO22	Capillary Tube	SM01/SM02
EM55HHR	471	579	701	837	630	2.60	160	ESTER / ISO22	Capillary Tube	SM01/SM02
EM65HHR	484	592	711	842	645	2.39	160	ESTER / ISO22	Capillary Tube	SM07
EM65HHR	581	705	845	1001	766	2.49	160	ESTER / ISO22	Capillary Tube	SM07
FF7,5HBK	534	657	798	959	719	2.23	280	ESTER / ISO22	Capillary Tube	SM08
FF7,5HBK	616	752	909	1086	829	2.23	280	ESTER / ISO22	Capillary Tube	SM08
NEU6187Z	764	938	1134		1030	2.50	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6187Z	899	1099	1324		1204	2.36	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT6220Z	1498	1843	2249		2032	2.37	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.

220-240V 50-60 Hz 1 ~ | R404A | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NT6220GK	SK	14.50	220-240 V 50-60 Hz	MBP	HST	CSIR	31.00	ASHRAEHBP46	50 Hz	669	838	1050	1307
NT6222GK	SK	17.39	220-240 V 50-60 Hz	MBP	HST	CSIR	30.00	ASHRAEHBP46	60 Hz	1029	1272	1566	1913
NT6222GK	SK	17.39	220-240 V 50-60 Hz	MBP	HST	CSIR	30.00	ASHRAEHBP46	50 Hz	758	992	1262	1570

220-240V 50-60 Hz 1 ~ | R290 | M/HBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EMX6144U	SK	4.53	220-240 V 50-60 Hz	M/HBP	HST	CSIR	9.00	ASHRAEHBP46	50 Hz	227	278	340	411
EMX6144U	SK	4.53	220-240 V 50-60 Hz	MBP	HST	CSIR	9.00	ASHRAEHBP46	60 Hz	275	338	414	502
EMX6152U	SK	5.19	220-240 V 50-60 Hz	MBP	HST	CSIR	11.00	ASHRAEHBP46	50 Hz	235	294	366	449
EMX6152U	SK	5.19	220-240 V 50-60 Hz	MBP	HST	CSIR	11.00	ASHRAEHBP46	60 Hz	287	355	439	537
EMX6165U	SK	6.09	220-240 V 50-60 Hz	MBP	HST	CSIR	11.00	ASHRAEHBP46	50 Hz	285	354	437	535
EMX6165U	SK	6.09	220-240 V 50-60 Hz	MBP	HST	CSIR	11.00	ASHRAEHBP46	60 Hz	346	424	520	634
EMX6181U	SK	6.92	220-240 V 50-60 Hz	M/HBP	HST	CSIR	13.00	ASHRAEHBP46	50 Hz	346	423	517	629
EMX6181U	SK	6.92	220-240 V 50-60 Hz	M/HBP	HST	CSIR	13.00	ASHRAEHBP46	60 Hz	406	493	602	732

220-240V 50 Hz | R134a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EM45HHR	BR	3.77	220-240 V 50 Hz	L/M/HBP	LST	RSIR/CSIR	9.50	ASHRAELBP32	50 Hz		48	79	113
EM55HER	BR	4.60	220-240 V 50 Hz	LBP	LST	RSIR/CSIR	10.40	ASHRAELBP32	50 Hz		57	82	113
EMT55HLC	CN	5.19	220-240 V 50 Hz	LBP	LST	RSCR	4.00	ASHRAELBP32	50 Hz		69	102	138
EMY560HEP	BR	5.19	220-240 V 50 Hz	LBP	LST	RSIR/RSCR	5.80	ASHRAELBP32	50 Hz		66	95	134
EM65HNR	BR	5.54	220-240 V 50 Hz	L/MBP	LST	RSIR/CSIR	12.50	ASHRAELBP32	50 Hz			108	138
EMU70HLC	BR	5.96	220-240 V 50 Hz	LBP	LST	RSCR	7.65	ASHRAELBP32	50 Hz		64	99	145
NEK2116Z	SK	7.37	220-240 V 50 Hz	LBP	HST	CSIR	10.00	ARI540	50 Hz				127
FF8,5HBK	BR	7.95	220-240 V 50 Hz	L/M/HBP	LST	RSIR/CSIR	18.20	ASHRAELBP32	50 Hz		82	119	168
FF8,5HBK	BR	7.95	220-240 V 50 Hz	L/M/HBP	LST	RSIR/CSIR	18.20	ASHRAELBP32	50 Hz		103	145	198
EMY75HLC	CN	8.35	220-240 V 50 Hz	LBP	LST	RSCR	7.80	ASHRAELBP32	50 Hz		97	143	193
NEK1118Z	SK	8.39	220-240 V 50 Hz	LBP	LST	RSIR/RSCR	6.90	ASHRAELBP32	50 Hz				205
NE2121Z	SK	9.26	220-240 V 50 Hz	LBP	HST	CSIR	12.60	ASHRAELBP32	50 Hz				227
EGU110HLC	BR	9.50	220-240 V 50 Hz	LBP	LST	RSCR	9.40	ASHRAELBP32	50 Hz		121	181	249
EGU130HLR	BR	10.61	220-240 V 50 Hz	LBP	LST	CSIR	17.45	ASHRAELBP32	50 Hz		141	210	288
FFU130HAX	BR	10.61	220-240 V 50 Hz	L/MBP	LST/HST	CSIR	17.50	ASHRAELBP32	50 Hz			201	278
EMY3130Z	CN	11.14	220-240 V 50 Hz	L/MBP	LST	CSIR	16.04	ASHRAELBP32	50 Hz		154	196	278
NE2130Z	SK	12.11	220-240 V 50 Hz	LBP	HST	CSIR	32.00	ASHRAELBP32	50 Hz				314
FFU160HAX	BR	12.92	220-240 V 50 Hz	L/MBP	LST/HST	CSIR	17.70	ASHRAELBP32	50 Hz			266	355
NE2134Z	SK	14.28	220-240 V 50 Hz	LBP	HST	CSIR	17.00	ASHRAELBP32	50 Hz				329
NEK2140Z	SK	16.80	220-240 V 50 Hz	LBP	HST	CSIR	17.00	ASHRAELBP32	50 Hz				447

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	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NT6220GK	1607	1952	2340		2139	2.24	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6222GK	2311	2761	3263		3010	2.14	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6222GK	1914	2295	2713		2505	2.10	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMX6144U	493	585	688		641	2.82	150	ESTER / ISO22	Capillary Tube or Expansion Valve	SM29
	EMX6144U	601	712	836		767	2.63	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	EMX6152U	545	653	773		712	2.79	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	EMX6152U	650	777	920		841	2.81	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	EMX6165U	646	771	910		837	2.72	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	EMX6165U	766	916	1083		987	2.62	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	EMX6181U	757	900	1058		975	2.90	150	ESTER / ISO22	Capillary Tube or Expansion Valve	SM29
	EMX6181U	885	1059	1255		1154	2.84	150	ESTER / ISO22	Capillary Tube or Expansion Valve	SM29

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EM45HHR	152	197	249	309	126	1.23	160	ESTER / ISO22	Capillary Tube	SM02
	EMI55HER	150	196	252		125	1.23	160	ESTER / ISO22	Capillary Tube	SM01/SM02
	EMT55HLC	180	232	294		152	1.41	180	ESTER / ISO22	Capillary Tube	SM05
	EMYS60HEP	182	238	305		144	1.35	160	ESTER / ISO10	Capillary Tube	SM00
	EM65HNR	180	235	301	379	152	1.15	160	ESTER / ISO22	Capillary Tube	SM01/SM02
	EMU70HLC	202	270	347		165	1.40	180	ESTER / ISO10	Capillary Tube	SM01
	NEK2116Z	180	247	328	422	171	0.91	340	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	FF8,5HBK	230	306	398	506	194	1.11	280	ESTER / ISO22	Capillary Tube	SM08
	FF8,5HBK	262	341	438	552	217	1.11	280	ESTER / ISO22	Capillary Tube	SM08
	EMY75HLC	251	322	408		213	1.50	150	ESTER / ISO7	Capillary Tube	SM01
	NEK1118Z	271	349	439	541	227	1.42	350	ESTER / ISO22	Capillary Tube	SM13
	NE2121Z	302	392	498	618	251	1.23	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	EGU110HLC	329	426	545		274	1.59	230	ESTER / ISO10	Capillary Tube	SM34
	EGU130HLR	378	489	626		313	1.50	230	ESTER / ISO10	Capillary Tube	SM09
	FFU130HAX	368	475	604	761	309	1.38	280	ESTER / ISO10	Capillary Tube or Expansion Valve	SM08
	EMY3130Z	387	513	644	771	320	1.50	210	ESTER / ISO22	Capillary Tube	SM07
	NE2130Z	411	526	662	817	346	1.33	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	FFU160HAX	458	581	732	914	390	1.45	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08
	NE2134Z	433	559	707	880	364	1.24	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK2140Z	593	770	981	1227	495	1.18	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13

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220-240V 50 Hz | R404A | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMT2117GK	BR	4.50	220-240 V 50 Hz	LBP	HST	CSIR	-	ASHRAELBP32	50 Hz	81	124	171	224
EMT2121GK	BR	5.19	220-240 V 50 Hz	LBP	HST	CSIR	8.50	ASHRAELBP32	50 Hz	131	174	224	284
EMT2125GK	BR	5.96	220-240 V 50 Hz	LBP	HST	CSIR	9.80	ASHRAELBP32	50 Hz	142	194	254	325
EMT2130GK	BR	6.76	220-240 V 50 Hz	LBP	HST	CSIR	12.40	ASHRAELBP32	50 Hz	154	209	273	350
NEK2134GK	SK	8.77	220-240 V 50 Hz	LBP	HST	CSIR	37.50	ASHRAELBP32	50 Hz			327	427
NEU2140GK	SK	8.77	220-240 V 50 Hz	LBP	HST	CSIR	13.50	ASHRAELBP32	50 Hz			341	446
EHU2140GK	CN	9.10	220-240 V 50 Hz	LBP	HST	CSIR	19.53	ASHRAELBP32	50 Hz	192	270	360	466
NEK2150GK	SK	12.11	220-240 V 50 Hz	LBP	HST	CSIR	44.00	ASHRAELBP32	50 Hz			436	562
EHU2150GK	CN	11.20	220-240 V 50 Hz	LBP	HST	CSCR	19.43	ASHRAELBP32	50 Hz	239	328	436	565
NEU2155GK	SK	12.11	220-240 V 50 Hz	LBP	HST	CSIR	18.00	ASHRAELBP32	50 Hz			460	601
EHU2160GK	CN	12.70	220-240 V 50 Hz	LBP	HST	CSCR	22.70	ASHRAELBP32	50 Hz	-	-	-	-
NEU2168GKA	SK	13.50	220-240 V 50 Hz	LBP	HST	CSIR	-	ASHRAELBP32	50 Hz	-	-	-	-
NEU2168GK	SK	14.28	220-240 V 50 Hz	LBP	HST	CSIR	22.00	ASHRAELBP32	50 Hz			523	682
NEU2178GKA	SK	15.70	220-240 V 50 Hz	LBP	HST	CSR NTC	-	ASHRAELBP32	50 Hz	-	-	-	-
NEU2178GK	SK	16.80	220-240 V 50 Hz	LBP	HST	CSCR	21.00	ASHRAELBP32	50 Hz			643	831
NT2180GKV	SK	20.44	220-240 V 50 Hz	LBP	HST	CSCR	40.00	ASHRAELBP32	50 Hz			646	855
NEU2183GKA	SK	16.80	220-240 V 50 Hz	LBP	HST	CSR NTC	-	ASHRAELBP32	50 Hz	-	-	-	-
NT2192GK	SK	22.37	220-240 V 50 Hz	LBP	HST	CSIR	35.00	ASHRAELBP32	50 Hz			726	960
NT2210GK	SK	26.21	220-240 V 50 Hz	LBP	HST	CSCR	33.00	EN12900	50 Hz			640	839
NT2212GK	SK	27.80	220-240 V 50 Hz	LBP	HST	CSCR	45.00	ASHRAELBP32	50 Hz			965	1265
NJ2212GK	SK	34.38	220-240 V 50 Hz	LBP	HST	CSCR	36.00	ASHRAELBP32	50 Hz			1040	1403
NJX2219GK	SK	38.00	220-240 V 50 Hz	LBP	HST	CSCR	38.00	ASHRAELBP32	50 Hz	824	1094	1444	1877

220-240V 50 Hz | R600a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMX20CLC	BR	5.96	220-240 V 50 Hz	LBP	LST	RSCR	1.95	ASHRAELBP32	50 Hz		29	42	57
EMX32CLC	CN	5.96	220-240 V 50 Hz	LBP	LST	RSCR	2.68	ASHRAELBP32	50 Hz		46	67	91
EMRS46CLP	CN	8.23	220-240 V 50 Hz	LBP	LST	RSCR	5.73	ASHRAELBP32	50 Hz		66	92	122

220-240V 50 Hz | R290 | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EM2X3113U	CN	3.67	220-240 V 50 Hz	L/MBP	LST	RSCR	12.40	ASHRAELBP32	50 Hz			87	121
EMC3117U	SK	3.97	220-240 V 50 Hz	L/MBP	LST	RSCR	4.80	ASHRAELBP32	50 Hz		116	145	182
EM2X3117U	CN	4.50	220-240 V 50 Hz	L/MBP	LST	RSCR	15.30	ASHRAELBP32	50 Hz			128	170
EMY3117U	CN	4.50	220-240 V 50 Hz	L/MBP	LST	RSIR	6.80	ASHRAELBP32	50 Hz			145	190
EMC3119U	SK	4.53	220-240 V 50 Hz	L/MBP	LST	RSCR	6.83	ASHRAELBP32	50 Hz		126	164	210
EMC3121U	SK	5.54	220-240 V 50 Hz	L/MBP	LST	RSCR	6.60	ASHRAELBP32	50 Hz		143	192	249
EM2X1121U	CN	5.54	220-240 V 50 Hz	LBP	LST	RSCR	8.40	ASHRAELBP32	50 Hz		137	182	235
EM2X3121U	CN	5.54	220-240 V 50 Hz	L/MBP	LST	RSCR	15.60	ASHRAELBP32	50 Hz			202	256
EMT2121U	CN	5.56	220-240 V 50 Hz	LLBP	LST	CSIR	7.70	ASHRAELBP32	50 Hz		147	188	234
EMT2125U	CN	5.96	220-240 V 50 Hz	LBP	LST	CSIR	8.50	ASHRAELBP32	50 Hz		159	205	257
EMTS2125U	CN	5.96	220-240 V 50 Hz	LBP	LST	CSIR	8.50	ASHRAELBP32	50 Hz		169	218	276
EMC3125U	SK	6.09	220-240 V 50 Hz	L/MBP	LST	RSCR	6.60	ASHRAELBP32	50 Hz		171	218	278
EM2X1125U	CN	6.09	220-240 V 50 Hz	LBP	LST	RSCR	8.40	ASHRAELBP32	50 Hz		158	206	266

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	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMT2117GK	286	358	443		244	1.35	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	EMT2121GK	356	441	541		300	1.40	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	EMT2125GK	408	505	618		351	1.40	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	EMT2130GK	439	543	664		390	1.34	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	NEK2134GK	544	680	833		467	1.31	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU2140GK	569	711	870		489	1.37	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	EHU2140GK	591	737	907		502	1.46	270	ESTER / ISO22	Capillary Tube or Expansion Valve	-
	NEK2150GK	713	889	1091		613	1.21	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	EHU2150GK	719	900	1112		621	1.56	270	ESTER / ISO22	Capillary Tube or Expansion Valve	-
	NEU2155GK	766	955	1168		657	1.32	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	EHU2160GK	-	-	-		704	1.52	270	ESTER / ISO22	Capillary Tube or Expansion Valve	-
	NEU2168GKA	-	-	-		734	1.32	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU2168GK	867	1078	1314		745	1.29	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU2178GKA	-	-	-		881	1.47	350	ESTER / ISO22	Capillary Tube or Expansion Valve	-
	NEU2178GK	1050	1300	1583		905	1.40	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NT2180GKV	1100	1378	1689		940	1.26	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
	NEU2183GKA	-	-	-		958	1.51	350	ESTER / ISO22	Capillary Tube or Expansion Valve	-
	NT2192GK	1233	1546	1899		1054	1.30	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
	NT2210GK	1069	1331	1624		667	1.03	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
	NT2212GK	1617	2022	2483		1384	1.39	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
	NJ2212GK	1814	2272	2780		1547	1.33	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17
	NJX2219GK	2390	2985	3661		2069	1.42	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMX20CLC	75	97	122		64	1.62	180	ALQUILB / ISO5	Capillary Tube	-
	EMX32CLC	119	152	191		102	1.78	180	ALQUILB / ISO5	Capillary Tube	SM01
	EMRS46CLP	159	204	261		135	1.66	150	ALQUILB / ISO5	Capillary Tube	SM01

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating -23.3°C / Condensing 54.4°C)					
		-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EM2X3113U	161	207	260	320	136	1.43	150	ESTER / ISO22	Capillary Tube	SM28
	EMC3117U	228	282	345	416	197	1.83	150	ESTER / ISO10	Capillary Tube	SM32
	EM2X3117U	220	278	346	422	187	1.49	150	ESTER / ISO22	Capillary Tube	SM28
	EMY3117U	240	298	365		204	1.53	150	ESTER / ISO22	Capillary Tube	SM28
	EMC3119U	266	332	406	489	236	1.83	150	ESTER / ISO10	Capillary Tube	SM32
	EMC3121U	313	385	465	553	271	1.88	150	ESTER / ISO10	Capillary Tube	SM32
	EM2X1121U	289	371	457		257	1.72	150	ESTER / ISO10	Capillary Tube	SM05
	EM2X3121U	317	387	471	572	286	1.72	150	ESTER / ISO22	Capillary Tube	SM05
	EMT2121U	289	357	441		254	1.42	180	ESTER / ISO22	Capillary Tube	SM05
	EMT2125U	319	392	480		280	1.45	180	ESTER / ISO22	Capillary Tube	SM05
	EMTS2125U	344	423	513		300	1.56	180	ESTER / ISO22	Capillary Tube	SM05
	EMC3125U	350	435	533	643	305	1.88	150	ESTER / ISO10	Capillary Tube	SM32
	EM2X1125U	339	422	515		291	1.79	150	ESTER / ISO10	Capillary Tube	SM05

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.



220-240V 50 Hz | R290 | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EM2X3125U	CN	6.09	220-240 V 50 Hz	L/MBP	LST	RSCR	15.60	ASHRAELBP32	50 Hz			227	290
EMC3130U	SK	6.92	220-240 V 50 Hz	L/MBP	LST	RSCR	6.60	ASHRAELBP32	50 Hz		187	242	311
EMC3134U	SK	7.95	220-240 V 50 Hz	L/MBP	LST	RSCR	10.30	ASHRAELBP32	50 Hz		250	309	385
EMX3134U	CN	7.95	220-240 V 50 Hz	L/MBP	LST	RSCR	10.50	ASHRAELBP32	50 Hz		235	291	369
EMY3134U	CN	7.95	220-240 V 50 Hz	L/MBP	LST	RSCR	10.50	ASHRAELBP32	50 Hz	-	-	-	-
EMC3140U	SK	9.04	220-240 V 50 Hz	L/MBP	LST	RSCR	10.30	ASHRAELBP32	50 Hz		264	337	427
EMX3140U	CN	9.50	220-240 V 50 Hz	L/MBP	LST	RSIR	12.50	ASHRAELBP32	50 Hz		270	331	425
EMTE2134U	CN	9.50	220-240 V 50 Hz	LLBP	HST	CSIR	14.90	ASHRAELBP32	50 Hz	175	234	309	392
NEK2134U	SK	9.99	220-240 V 50 Hz	LBP	HST	CSIR	28.00	ASHRAELBP32	50 Hz	219	265	331	416
NEU2140U	SK	9.99	220-240 V 50 Hz	LBP	HST	CSIR	30.00	ASHRAELBP32	50 Hz	213	276	356	451
EMC3145U	SK	11.14	220-240 V 50 Hz	L/MBP	LST	RSCR	10.20	ASHRAELBP32	50 Hz		324	409	517
EMC1150U	SK	12.21	220-240 V 50 Hz	LBP	LST	RSCR	10.50	ASHRAELBP32	50 Hz		357	458	577
EHU2155U	CN	12.21	220-240 V 50 Hz	LBP	HST	CSIR	18.80	ASHRAELBP32	50 Hz	267	348	444	558
EHX2155U	CN	12.21	220-240 V 50 Hz	LBP	HST	CSIR	18.40	ASHRAELBP32	50 Hz	263	350	449	568
NEK2150U	SK	13.54	220-240 V 50 Hz	LBP	HST	CSIR	19.50	ASHRAELBP32	50 Hz	251	323	419	538
NEU2155U	SK	13.54	220-240 V 50 Hz	LBP	HST	CSCR	40.00	ASHRAELBP32	50 Hz			473	603
NEK2160U	SK	16.80	220-240 V 50 Hz	LBP	HST	CSCR	18.00	ASHRAELBP32	50 Hz	312	406	527	674
NEU2168U	SK	16.80	220-240 V 50 Hz	LBP	HST	CSCR	49.00	ASHRAELBP32	50 Hz	333	437	569	728
NEU2170UA	SK	16.80	220-240 V 50 Hz	LBP	HST	CSR NTC	23.50	ASHRAELBP32	50 Hz	320	439	584	752
NEU2178U	SK	18.70	220-240 V 50 Hz	LBP	HST	CSCR	21.00	ASHRAELBP32	50 Hz	395	509	654	830
NEX2180UB	SK	18.70	220-240 V 50 Hz	LBP	HST	CSR NTC	22.50	ASHRAELBP32	50 Hz	380	509	666	851
NT2170U	SK	20.44	220-240 V 50 Hz	LBP	HST	CSIR	30.00	ASHRAELBP32	50 Hz	321	435	578	749
NEX2190UA	SK	21.00	220-240 V 50 Hz	LBP	HST	CSCR	24.50	ASHRAELBP32	50 Hz	422	569	748	959
NT2180U	SK	22.37	220-240 V 50 Hz	LBP	HST	CSCR	35.00	ASHRAELBP32	50 Hz			660	859
NT2210U	SK	27.80	220-240 V 50 Hz	LBP	HST	CSCR	33.00	ASHRAELBP32	50 Hz	475	632	833	1078
NTX2211U	SK	27.80	220-240 V 50 Hz	LBP	HST	CSCR	33.00	ASHRAELBP32	50 Hz	597	797	1033	1308
NTX2213U	SK	33.40	220-240 V 50 Hz	LBP	HST	CSCR	34.00	ASHRAELBP32	50 Hz	681	907	1172	1475
NJX2215U	SK	37.88	220-240 V 50 Hz	LBP	HST	CSCR	34.00	ASHRAELBP32	50 Hz	655	900	1200	1553

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NEK6160Z	SK	7.28	220-240 V 50 Hz	HBP	HST	CSIR	11.50	ASHRAEHBP46	50 Hz		258	329	419
NEK6170Z	SK	8.39	220-240 V 50 Hz	HBP	HST	CSIR	16.50	ASHRAEHBP46	50 Hz				513
EMTE6187Z	CN	9.50	220-240 V 50 Hz	HBP	HST	CSIR	16.50	ASHRAEHBP46	50 Hz		356	453	567
EMY6187Z	SK	9.88	220-240 V 50 Hz	M/HBP	HST	CSIR	13.50	ASHRAEHBP46	50 Hz			507	634
FFI12HBK	BR	11.14	220-240 V 50 Hz	L/M/HBP	LST	RSIR/CSIR	20.00	ASHRAEHBP32	50 Hz	381	496	631	790
NEU6210Z	SK	12.11	220-240 V 50 Hz	HBP	HST	CSCR	18.50	ASHRAEHBP46	50 Hz				734
NEU6212Z	SK	14.28	220-240 V 50 Hz	HBP	HST	CSIR	20.00	ASHRAEHBP46	50 Hz				850
NEU6214Z	SK	16.80	220-240 V 50 Hz	HBP	HST	CSIR	22.00	ASHRAEHBP46	50 Hz				992
NT6217Z	SK	20.44	220-240 V 50 Hz	HBP	HST	CSCR	25.00	ASHRAEHBP46	50 Hz				1121
NJ6226Z	SK	34.38	220-240 V 50 Hz	HBP	HST	CSCR	31.00	ASHRAEHBP46	50 Hz				1751

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.

Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EM2X3125U	364	450	549	662	317	1.78	150	ESTER / ISO22	Capillary Tube	SM05
EMC3130U	394	491	601	725	349	1.84	150	ESTER / ISO10	Capillary Tube	SM32
EMC3134U	478	587	713	855	417	1.85	150	ESTER / ISO10	Capillary Tube	SM32
EMX3134U	466	582	715	862	403	1.57	150	ESTER / ISO22	Capillary Tube	SM32
EMY3134U	-	-	-		394	1.64	150	ESTER / ISO22	Capillary Tube	-
EMC3140U	535	661	805	966	459	1.77	150	ESTER / ISO22	Capillary Tube	SM32
EMX3140U	547	691	850	1018	469	1.44	150	ESTER / ISO22	Capillary Tube	SM07
EMTE2134U	491	608	745		437	1.44	210	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
NEK2134U	521	646	790		449	1.36	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
NEU2140U	563	691	835		485	1.49	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
EMC3145U	646	797	969	1164	559	1.75	200	ESTER / ISO22	Capillary Tube	SM32
EMC1150U	714	869	1043		616	1.65	200	ESTER / ISO22	Capillary Tube	SM32
EHU2155U	691	845	1022		603	1.52	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
EHX2155U	705	862	1039		608	1.63	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
NEK2150U	681	847	1034		582	1.31	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEU2155U	757	933	1131		655	1.61	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEK2160U	848	1047	1273		729	1.44	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEU2168U	914	1128	1369		788	1.53	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEU2170UA	943	1160	1400		820	1.54	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEU2178U	1035	1270	1536		905	1.52	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NEX2180UB	1063	1302	1569		929	1.59	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NT2170U	949	1178	1436		816	1.31	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
NEX2190UA	1202	1478	1786		1032	1.59	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
NT2180U	1092	1360	1661		939	1.47	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2210U	1366	1696	2069		1186	1.41	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
NTX2211U	1623	1980	2380		1317	1.54	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NTX2213U	1817	2198	2617		1583	1.50	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NJX2215U	1960	2421	2937		1619	1.49	750	ESTER / ISO22	Capillary Tube or Expansion Valve	DWG14

Model	Cooling Capacity (°C)				Check Point (Evaporating 7.2°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
NEK6160Z	527	653	799		721	2.44	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEK6170Z	644	795	967		875	2.35	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
EMTE6187Z	702	860	1045		943	2.52	210	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
EMY6187Z	780	947	1134		1024	2.53	150	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
FFI12HBK	968	1167	1390	1635	1316	2.61	280	ESTER / ISO22	Capillary Tube	SM08
NEU6210Z	918	1132	1376		1246	2.57	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6212Z	1061	1304	1577		1432	2.31	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU6214Z	1228	1496	1797		1638	2.16	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT6217Z	1385	1698	2057		1866	2.43	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NJ6226Z	2209	2711	3258		2983	2.41	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM17

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.



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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EMT6152GK	BR	4.50	220-240 V 50 Hz	MBP	HST	CSIR	8.50	ASHRAEHBP46	50 Hz	255	321	396	483
EMT6165GK	BR	5.19	220-240 V 50 Hz	MBP	HST	CSIR	10.40	ASHRAEHBP46	50 Hz	287	361	448	550
NEK6165GK	SK	6.20	220-240 V 50 Hz	MBP	HST	CSIR	12.40	ASHRAEHBP46	50 Hz	366	433	519	625
NEK6181GK	SK	7.28	220-240 V 50 Hz	MBP	HST	CSIR	26.50	ASHRAEHBP46	50 Hz	384	463	565	690
NEU6210GK	SK	7.28	220-240 V 50 Hz	MBP	HST	CSIR	16.00	ASHRAEHBP46	50 Hz			600	741
NEU6212GK	SK	8.77	220-240 V 50 Hz	MBP	HST	CSIR	19.00	ASHRAEHBP46	50 Hz	466	595	743	912
NEU6215GK	SK	12.11	220-240 V 50 Hz	MBP	HST	CSCR	22.00	ASHRAEHBP46	50 Hz	664	830	1020	1235
NEK6217GK	SK	14.28	220-240 V 50 Hz	MBP	HST	CSCR	21.50	ASHRAEHBP46	50 Hz	733	910	1118	1358
NT6224GK	SK	20.44	220-240 V 50 Hz	MBP	HST	CSCR	29.00	ASHRAEHBP46	50 Hz	952	1217	1532	1896
NTU6234GKV	SK	23.74	220-240 V 50 Hz	MBP	HST	CSCR	37.50	EN12900MBP	50 Hz			1655	2022
NJ9232GK	SK	26.11	220-240 V 50 Hz	MBP	HST	CSCR	43.00	ASHRAEHBP46	50 Hz			1945	2462
NTU6238GKV	SK	26.20	220-240 V 50 Hz	MBP	HST	CSR	37.50	EN12900MBP	50 Hz			1827	2234
NTU6240GKV	SK	27.80	220-240 V 50 Hz	MBP	HST	CSCR	37.50	ARIMBP	50 Hz				2538
NJ9238GK	SK	32.67	220-240 V 50 Hz	MBP	HST	CSCR	43.00	ASHRAEHBP46	50 Hz	1411	1827	2324	2901
NJX6250GK	SK	38.00	220-240 V 50 Hz	M/HBP	HST	CSCR	65.00	ASHRAEHBP46	50 Hz				

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
EMY6181U	SK	6.92	220-240 V 50 Hz	M/HBP	HST	CSIR	13.00	ASHRAEHBP46	50 Hz	336	415	509	619
EMX6181U	SK	6.92	220-240 V 50 Hz	MBP	HST	CSIR	13.00	ASHRAEHBP46	50 Hz	346	423	517	629
NEU6181U	SK	7.28	220-240 V 50 Hz	MBP	HST	CSIR	13.00	ASHRAEHBP46	50 Hz	340	420	518	634
EMTE6181U	CN	7.55	220-240 V 50 Hz	MBP	HST	CSIR	16.50	ASHRAEHBP46	50 Hz	386		583	705
NEK6210U	SK	8.77	220-240 V 50 Hz	MBP	HST	CSIR	16.10	ASHRAEHBP46	50 Hz	400	495	611	747
NEU6210U	SK	8.77	220-240 V 50 Hz	MBP	HST	CSIR	20.00	ASHRAEHBP46	50 Hz	394	493	616	761
EMY6210U	SK	9.00	220-240 V 50 Hz	MBP	HST	CSIR	13.50	ASHRAEHBP46	50 Hz	432	530	649	787
EMX6210U	SK	9.04	220-240 V 50 Hz	MBP	HST	CSIR	16.00	ASHRAEHBP46	50 Hz	446	553	678	822
NEU6212U	SK	9.99	220-240 V 50 Hz	MBP	HST	CSIR	20.50	ASHRAEHBP46	50 Hz	477	597	739	903
NEU6212U	SK	9.99	220-240 V 50 Hz	MBP	HST	CSCR	20.50	ASHRAEHBP46	50 Hz	478	598	741	909
EHU6212U	CN	10.61	220-240 V 50 Hz	MBP	HST	CSIR	18.80	ASHRAEHBP46	50 Hz	548	672	809	971
NEU6214U	SK	12.11	220-240 V 50 Hz	MBP	HST	CSCR	18.00	ASHRAEHBP46	50 Hz	568	708	872	1060
EHU6214U	CN	12.21	220-240 V 50 Hz	MBP	HST	CSIR	22.00	ASHRAEHBP46	50 Hz	623	757	920	1102
NEU6217U	SK	14.28	220-240 V 50 Hz	MBP	HST	CSIR	29.00	ASHRAEHBP46	50 Hz	661	818	1003	1216
NEX6217UA	SK	14.30	220-240 V 50 Hz	M/HBP	HST	CSIR	21.50	ASHRAEHBP46	50 Hz	688	842	1030	1251
NEX6217UA	SK	14.30	220-240 V 50 Hz	M/HBP	HST	CSR NTC	21.50	ASHRAEHBP46	50 Hz	695	862	1061	1291
NT6217U	SK	14.50	220-240 V 50 Hz	MBP	HST	CSIR	25.00	ASHRAEHBP46	50 Hz	547	692	873	1089
NEU6220U	SK	16.80	220-240 V 50 Hz	MBP	HST	CSCR	22.00	ASHRAEHBP46	50 Hz	817	1016	1243	1500
NT6220U	SK	17.39	220-240 V 50 Hz	MBP	HST	CSIR	29.00	ASHRAEHBP46	50 Hz	675	880	1119	1391
NT6220U	SK	17.39	220-240 V 50 Hz	MBP	HST	CSCR	29.00	ASHRAEHBP46	50 Hz	729	930	1165	1437
NEX6222UA	SK	18.70	220-240 V 50 Hz	M/HBP	HST	CSCR	24.00	ASHRAEHBP46	50 Hz	930	1136	1388	1683
NT6222U	SK	20.44	220-240 V 50 Hz	MBP	HST	CSCR	29.00	ASHRAEHBP46	50 Hz	792	1028	1310	1639
NEX6225UA	SK	21.00	220-240 V 50 Hz	M/HBP	HST	CSCR	28.00	EN12900MBP	50 Hz	1042	1286	1574	1906
NT6224U	SK	22.37	220-240 V 50 Hz	MBP	HST	CSCR	30.00	ASHRAEHBP46	50 Hz	900	1130	1419	1764
NT6230U	SK	27.80	220-240 V 50 Hz	MBP	HST	CSCR	39.00	ASHRAEHBP46	50 Hz	1191	1510	1883	2311
NTX6233U	SK	27.80	220-240 V 50 Hz	M/HBP	HST	CSCR	40.00	ASHRAEHBP46	50 Hz	1346	1667	2045	2481
NTX6238U	SK	33.40	220-240 V 50 Hz	M/HBP	HST	CSCR	40.00	ASHRAEHBP46	50 Hz	1539	1929	2380	2891

NA*: Product is implemented but this technical data is not available.
 UD*: Product is under development so this technical data is still not available.

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMT6152GK	582	695	824		758	2.30	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	EMT6165GK	667	801	951		877	2.23	180	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	NEK6165GK	751	895	1059		975	2.09	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6181GK	836	1006	1199		1100	2.14	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6210GK	903	1083	1283		1180	2.31	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6212GK	1101	1309	1537		1423	2.24	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6215GK	1475	1740	2029		1862	1.92	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6217GK	1629	1932	2266		2097	2.09	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NT6224GK	2311	2774	3287		3022	2.37	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NTU6234GKV	2425	2847	3270		3835	2.80	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NJ9232GK	3052	3716	4453		4080	2.60	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
	NTU6238GKV	2692	3187	3706		4213	2.70	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NTU6240GKV	3095	3814	4742		5333	2.58	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NJ9238GK	3559	4296	5114		4702	2.18	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM17
	NJX6250GK	8345	10451	12888	15658	5842	2.29	750	ESTER / ISO22	Capillary Tube or Expansion Valve	DWG14

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	EMY6181U	745	886	1042		960	2.67	150	ESTER / ISO22	Capillary Tube or Expansion Valve	SM29
	EMX6181U	757	900	1059		975	2.90	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	NEU6181U	770	923	1096		1000	2.70	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	EMTE6181U	834	963			1025	2.75	210	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	NEK6210U	905	1083	1281		1169	2.55	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	NEU6210U	930	1121	1336		1231	2.66	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	EMY6210U	946	1124	1322		1240	2.41	150	ESTER / ISO22	Capillary Tube or Expansion Valve	SM29
	EMX6210U	985	1167	1367		1266	2.68	150	ESTER / ISO10	Capillary Tube or Expansion Valve	SM29
	NEU6212U	1090	1300	1532		1397	2.79	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	NEU6212U	1100	1314	1554		1387	2.60	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	EHU6212U	1152	1358	1589		1457	2.60	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	NEU6214U	1272	1509	1770		1645	2.47	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM06
	EHU6214U	1302	1534	1796		1651	2.56	270	ESTER / ISO22	Capillary Tube or Expansion Valve	SM07
	NEU6217U	1457	1726	2023		1903	2.35	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	NEX6217UA	1506	1796	2119		1944	2.56	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM05
	NEX6217UA	1554	1849	2176		1984	2.89	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NT6217U	1341	1629	1952		1786	2.58	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
	NEU6220U	1790	2117	2481		2291	2.60	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NT6220U	1696	2035	2407		2202	2.45	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
	NT6220U	1745	2091	2476		2250	2.79	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
	NEX6222UA	2023	2407	2836		2617	2.82	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NT6222U	2011	2428	2888		2635	2.77	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
	NEX6225UA	2280	2698	3159		2916	2.63	350	ESTER / ISO22	Capillary Tube or Expansion Valve	
	NT6224U	2162	2609	3102		2843	2.73	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
	NT6230U	2793	3328	3918		3621	2.63	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM19
	NTX6233U	2978	3538	4163		3803	2.78	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NTX6238U	3463	4097	4791		4416	2.60	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.



COMPRESSORS CATALOGUE

220V 60 Hz

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208-230V 60 Hz | R134a | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMIS20HHR	BR	2.27	208-230 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	9.10	ASHRAELBP32	60 Hz		20	34	52
FFC110HBX	BR	9.50	208-230 V 60 Hz	L/M/HBP	HST	CSIR	19.60	ASHRAELBP32	60 Hz		136	208	296
FFU130HAX	BR	10.61	208-230 V 60 Hz	L/MBP	LST/HST	CSIR	18.30	ASHRAELBP32	60 Hz			228	326
FFI12HBX	BR	11.14	208-230 V 60 Hz	L/M/HBP	HST	CSIR	26.50	ASHRAELBP32	60 Hz		156	222	31
FFU160HAX	BR	12.92	208-230 V 60 Hz	L/MBP	LST/HST	CSIR	19.00	ASHRAELBP32	60 Hz			316	432
NT2140Z	SK	20.44	208-230 V 60 Hz	LBP	HST	CSIR	24.50	ASHRAELBP32	60 Hz		223	348	511

208-230V 60 Hz | R404A | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EHU2140GK	CN	9.10	208-230 V 60 Hz	LBP	HST	CSIR	21.20	ASHRAELBP32	60Hz	228	317	425	554
EHU2150GK	CN	11.20	208-230 V 60 Hz	LBP	HST	CSCR	23.00	ASHRAELBP32	60Hz	289	400	532	687
NEK2150GK	SK	12.11	208-230 V 60 Hz	LBP	HST	CSIR	44.00	ASHRAELBP32	60 Hz			494	649
NEU2155GK	SK	12.11	208-230 V 60 Hz	LBP	HST	CSCR	23.00	ASHRAELBP32	60 Hz			528	700
NEK2168GK	SK	14.28	208-230 V 60 Hz	LBP	HST	CSCR	27.00	ASHRAELBP32	60 Hz			567	745
NEU2168GK	SK	14.28	208-230 V 60 Hz	LBP	HST	CSCR	29.00	ASHRAELBP32	60 Hz			644	842
NT2168GKV	SK	14.50	208-230 V 60 Hz	LBP	HST	CSIR	54.50	ARI540	60 Hz			314	437
NEU2178GK	SK	16.80	208-230 V 60 Hz	LBP	HST	CSCR	29.00	ASHRAELBP32	60 Hz			744	967
NT2178GKV	SK	17.39	208-230 V 60 Hz	LBP	HST	CSCR	66.00	ASHRAELBP32	60 Hz			699	935
NT2180GKV	SK	20.44	208-230 V 60 Hz	LBP	HST	CSCR	40.00	ASHRAELBP32	60 Hz			778	1045
NT2192GK	SK	22.37	208-230 V 60 Hz	LBP	HST	CSCR	40.00	ASHRAELBP32	60 Hz			864	1144
NJ2192GJ	SK	26.11	208-230 V 60 Hz	LBP	HST	CSCR	44.00	ASHRAELBP32	60 Hz			885	1257
NT2212GK	SK	27.80	208-230 V 60 Hz	LBP	HST	CSCR	45.00	ASHRAELBP32	60 Hz			1172	1540
NJ2212GJ	SK	34.38	208-230 V 60 Hz	LBP	HST	CSCR	54.00	ASHRAELBP32	60 Hz			1150	1589

208-230V 60 Hz | R290 | LBP

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-40	-35	-30	-25
EMI90UEX	BR	4.99	208-230 V 60 Hz	L/MBP	HST	CSIR	12.00	ASHRAELBP32	60 Hz			197	251
EM2X1121U	BR	5.54	208-230 V 60 Hz	LBP	LST	RSCR	17.23	ASHRAELBP32	60 Hz		167	225	291
EM2X1125U	BR	6.09	208-230 V 60 Hz	LBP	LST	RSCR	8.20	ASHRAELBP32	60 Hz		197	258	329
FFU160UAX	BR	7.95	208-230 V 60 Hz	L/MBP	HST	CSIR	25.60	ASHRAELBP32	60 Hz			362	455
EM2X3134U	BR	7.96	208-230 V 60 Hz	L/MBP	LST	RSCR	24.80	ASHRAELBP32	60 Hz		274	356	454
NEU2168U	SK	16.80	208-230 V 60 Hz	LBP	HST	CSCR	30.00	ASHRAELBP32	60 Hz			569	728
NEU2178U	SK	18.70	208-230 V 60 Hz	LBP	HST	CSCR	29.00	ASHRAELBP32	60 Hz			754	966
NT2160U	SK	17.39	208-230 V 60 Hz	LBP	HST	CSIR	28.00	ASHRAELBP32	60 Hz			590	759
NT2170UV	SK	20.44	208-230 V 60 Hz	LBP	HST	CSCR	55.00	ASHRAELBP32	60 Hz		505	657	847
NT2180UV	SK	22.37	208-230 V 60 Hz	LBP	HST	CSCR	30.00	ARI540	60 Hz			535	695
NT2210UV	SK	27.80	208-230 V 60 Hz	LBP	HST	CSCR	67.00	ARI4	60 Hz		521	680	869

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
FF8,5HBK	BR	7.95	208-230 V 60 Hz	L/M/HBP	LST	RSIR/CSIR	18.50	ASHRAELBP32	60 Hz	261	340	435	550
NT6215Z	SK	17.39	208-230 V 60 Hz	HBP	HST	CSIR	44.00	ASHRAEHBP46	60 Hz				1142
NTU6224ZV	SK	27.80	208-230 V 60 Hz	HBP	HST	CSCR	30.00	ARIHBP	60 Hz				1859

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Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EMIS20HHR	73	100	132	170	58	0.85	160	ESTER / ISO22	Capillary Tube	SM01/SM02
FFC110HBX	403	531	681	857	328	1.44	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08
FFU130HAX	448	593	764	961	367	1.38	280	ESTER / ISO10	Capillary Tube or Expansion Valve	SM08
FFI12HBX	420	555	715	901	345	1.18	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08
FFU160HAX	567	724	907	1121	478	1.49	280	ESTER / ISO22	Capillary Tube or Expansion Valve	SM08
NT2140Z	712	949	1222		576	1.27	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20

Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EHU2140GK	707	885	1091		607	1.56	270	ESTER / ISO22	Capillary Tube or Expansion Valve	-
EHU2150GK	870	1083	1331		740	1.56	270	ESTER / ISO22	Capillary Tube or Expansion Valve	-
NEK2150GK	834	1047	1287		712	1.26	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU2155GK	902	1136	1400		768	1.43	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEK2168GK	957	1200	1476		817	1.35	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU2168GK	1074	1338	1637		921	1.42	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT2168GKV	586	761	963		477	1.02	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NEU2178GK	1225	1515	1840		1054	1.39	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT2178GKV	1213	1532	1893		1032	1.30	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2180GKV	1349	1693	2079		1152	1.32	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2192GK	1465	1828	2232		1254	1.42	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NJ2192GJ	1686	2173	2718		1403	1.27	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17
NT2212GK	1960	2433	2958		1684	1.43	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NJ2212GJ	2115	2728	3427		1774	1.30	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17

Model	Cooling Capacity (°C)				Check Point (Evaporating -23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-5	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
EMI90UEX	322	405	501	606	275	1.33	160	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM01/SM02
EM2X1121U	366	451	545		317	1.74	150	ESTER / ISO10	Capillary Tube	SM06
EM2X1125U	413	509	621		357	1.72	150	ESTER / ISO10	Capillary Tube	SM06
FFU160UAX	564	692	839	1009	492	1.51	280	ALQUILB / ISO32	Capillary Tube or Expansion Valve	SM08
EM2X3134U	567	699	849	1021	491	1.69	150	ESTER / ISO22	Capillary Tube	SM06
NEU2168U	914	1128	1369		792	1.55	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NEU2178U	1214	1497	1815		1050	1.52	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
NT2160U	961	1197	1467		828	1.34	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2170UV	1077	1345	1652	1999	921	1.31	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NT2180UV	886	1108	1360		749	0.98	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2210UV	1101	1371	1680	2027	943	1.00	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21

Model	Cooling Capacity (°C)				Check Point (Evaporating 7.2°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
FF8,5HBK	686	845	1029		915	2.50	280	ESTER / ISO22	Capillary Tube	SM08
NT6215Z	1411	1717	2060		1881	2.26	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
NTU6224ZV	2306	2807	3337		3045	2.45	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

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

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NEK6181GK	SK	7.28	208-230 V 60 Hz	MBP	HST	CSIR	26.50	ASHRAEHBP46	60 Hz	495	564	673	817
NEK6210GK	SK	8.77	208-230 V 60 Hz	MBP	HST	CSIR	23.00	ASHRAEHBP46	60 Hz	522	644	793	972
NEK6213GK	SK	12.11	208-230 V 60 Hz	MBP	HST	CSIR	51.00	ASHRAEHBP46	60 Hz	701	877	1083	1318
NTX6220GKV	SK	12.55	208-230 V 60 Hz	M/HBP	HST	CSCR	30.00	ARIMBP	60 Hz	615	786	982	1204
NT6220GK	SK	14.50	208-230 V 60 Hz	MBP	HST	CSIR	31.00	ASHRAEHBP46	60 Hz	806	1021	1269	1307
NT6222GKV	SK	17.39	208-230 V 60 Hz	MBP	HST	CSIR	33.70	ASHRAEHBP46	60 Hz	993	1245	1550	1902
NT6222GK	SK	17.39	208-230 V 60 Hz	MBP	HST	CSIR	33.70	ASHRAEHBP46	60 Hz	993	1245	1550	1902
NT6224GKV	SK	20.44	208-230 V 60 Hz	MBP	HST	CSCR	36.00	ASHRAEHBP46	60 Hz	1176	1492	1859	2256
NJ9226GK	SK	21.71	208-230 V 60 Hz	MBP	HST	CSCR	34.00	ASHRAEHBP46	60 Hz	1035	1394	1813	2292
NT6226GKV	SK	22.37	208-230 V 60 Hz	MBP	HST	CSIR	77.00	ASHRAEHBP46	60 Hz	1301	1603	1963	2385
NJ9238GK	SK	32.67	208-230 V 60 Hz	MBP	HST	CSCR	60.00	ASHRAEHBP46	60 Hz			1998	2479

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

Model	Origin	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
										-20	-15	-10	-5
NEU6214U	SK	12.11	208-230 V 60 Hz	MBP	HST	CSCR	42.00	ASHRAEHBP46	60 Hz	664	830	1020	1066
NEU6217U	SK	14.28	208-230 V 60 Hz	MBP	HST	CSCR	29.00	ASHRAEHBP46	60 Hz	835	1034	1268	1537
NTX6225UV	SK	22.37	208-230 V 60 Hz	M/HBP	HST	CSCR	35.00	ASHRAEHBP46	60 Hz	1178	1497	1869	2295
NT6224UV	SK	22.37	208-230 V 60 Hz	MBP	HST	CSCR	33.70	ARIMBP	60 Hz	838	1073	1348	1670

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEK6181GK	992	1195	1422		1307	2.12	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6210GK	1178	1415	1680		1545	2.11	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEK6213GK	1582	1876	2199		2036	1.84	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NTX6220GKV	1451	1723	2021		-	-		ESTER / ISO22	Capillary Tube or Expansion Valve	
	NT6220GK	1607	1952	2340		2139	2.24	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6222GKV	2292	2714	3163		2943	2.02	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6222GK	2292	2714	3163		2943	2.02	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6224GKV	2713	3228	3804		3512	2.25	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NJ9226GK	2831	3429	4087		3755	2.24	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
	NT6226GKV	2869	3419	4035		3721	1.79	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NJ9238GK	3030	3650	4340		2768	1.41	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM16/SM17

	Model	Cooling Capacity (°C)				Check Point		Lubricant		Expansion Device	Wiring Diagram
						(Evaporating 7.2°C / Condensing 54.4°C)					
		0	5	10	15	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
	NEU6214U	1280	1518	1781		1631	2.44	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NEU6217U	1839	2175	2546		2354	2.64	350	ESTER / ISO22	Capillary Tube or Expansion Valve	SM13
	NTX6225LUV	2775	3310	3898		3596	2.85	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26
	NT6224LUV	2088	2579	3143		3535	2.89	450	ESTER / ISO22	Capillary Tube or Expansion Valve	SM26

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

COMPRESSORS CATALOGUE TRI-PHASE

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Tri Phase | LBP

Model	Origin	Refrigerant	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
											-40	-35	-30	-25
NEU2130Z / L	SK	R-134a/R1234yf	12.11	200V 50-60Hz 3~	L/MBP	LST	3 PHASE	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU2130Z / L	SK	R-134a/R1234yf	12.11	200V 50-60Hz 3~	L/MBP	LST	3 PHASE	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU2140Z / L	SK	R-134a/R1234yf	16.80	200V 50-60Hz 3~	L/MBP	LST	3 PHASE	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU2140Z / L	SK	R-134a/R1234yf	16.80	200V 50-60Hz 3~	L/MBP	LST	3 PHASE	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU2145Z / L	SK	R-134a/R1234yf	18.70	200V 50-60Hz 3~	L/MBP	LST	3 PHASE	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU2145Z / L	SK	R-134a/R1234yf	18.70	200V 50-60Hz 3~	L/MBP	LST	3 PHASE	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NEU2183GS	SK	R404A/R448A	16.80	200V 50-60Hz 3~	LBP	HST/LST	3 PHASE	UD*	ASHRAELBP32	50 Hz	UD*	UD*	UD*	UD*
NEU2183GS	SK	R404A/R448A	16.80	200V 50-60Hz 3~	LBP	HST/LST	3 PHASE	UD*	ASHRAELBP32	60 Hz	UD*	UD*	UD*	UD*
NJ2212GS	SK	R404A	34.40	"380-420V 50Hz / 440-480V 60Hz 3 ~"	LBP	HST	3 PHASE	20.6	ASHRAELBP32	50 Hz	398	643	951	1321
NJ2212GS	SK	R404A	34.40	"380-420V 50Hz / 440-480V 60Hz 3 ~"	LBP	HST	3 PHASE	20.6	ASHRAELBP32	60 Hz	294	637	1043	1513
NJX2215US	SK	R290	38.00	"400V 50Hz / 440V 60Hz"	LBP	HST	3 PHASE	21.0	ASHRAELBP32	50 Hz	686	945	1258	1626
NJX2215US	SK	R290	38.00	"400V 50Hz / 440V 60Hz"	LBP	HST	3 PHASE	21.0	ASHRAELBP32	60 Hz	842	1116	1459	1871
NJX2219GS	SK	R404A	38.00	"400V 50Hz / 440V 60Hz"	LBP	HST	3 PHASE	22.0	ASHRAELBP32	50 Hz	870	1176	1553	2002
NJX2219GS	SK	R404A	38.00	"400V 50Hz / 440V 60Hz"	LBP	HST	3 PHASE	22.0	ASHRAELBP32	60 Hz	1007	1373	1827	2368
NT2168GS	SK	R404A	14.50	200V 50-60Hz 3~	LBP	HST	3 PHASE	28.5	ASHRAELBP32	50 Hz	219	313	438	595
NT2168GS	SK	R404A	14.50	200V 50-60Hz 3~	LBP	HST	3 PHASE	28.5	ASHRAELBP32	60 Hz	223	314	486	707
NT2192GS	SK	R404A	22.37	200V 50-60Hz 3~	LBP	HST	3 PHASE	28.5	ASHRAELBP32	50 Hz	364	526	724	960
NT2192GS	SK	R404A	22.37	200V 50-60Hz 3~	LBP	HST	3 PHASE	28.5	ASHRAELBP32	60 Hz	364	526	838	1121
NT2212GS	SK	R404A	27.80	200V 50-60Hz 3~	LBP	HST	3 PHASE	36.0	ASHRAELBP32	50 Hz	479	668	910	1206
NT2212GS	SK	R404A	27.80	200V 50-60Hz 3~	LBP	HST	3 PHASE	36.0	ASHRAELBP32	60 Hz	523	767	1063	1412

Tri Phase | M-HBP

Model	Origin	Refrigerant	Displacement cm ³	Voltage	Envelope	Torque	Motor	LRA A	Test Condition	Frequency	Cooling Capacity (°C)			
											-40	-35	-30	-25
NJ6226ZX	SK	R134a	34.38	"380-420V 50Hz / 440-480V 60Hz 3 ~"	HBP	HST	3 PHASE	13.0	ASHRAEHBP46	50 Hz		977	1351	1772
NJ6226ZX	SK	R134a	34.38	"380-420V 50Hz / 440-480V 60Hz 3 ~"	HBP	HST	3 PHASE	13.0	ASHRAEHBP46	60 Hz		1143	1581	2069
NJ9232GS	SK	R404A	26.11	"380-420V 50Hz / 440-480V 60Hz 3 ~"	MBP	HST	3 PHASE	13.0	ASHRAEHBP46	50 Hz	1131	1501	1945	2462
NJ9232GS	SK	R404A	26.11	"380-420V 50Hz / 440-480V 60Hz 3 ~"	MBP	HST	3 PHASE	13.0	ASHRAEHBP46	60 Hz	1323	1756	2275	2881
NJ9238GS	SK	R404A	32.67	"380-420V 50Hz / 440-480V 60Hz 3 ~"	MBP	HST	3 PHASE	22.0	ASHRAEHBP46	50 Hz	1470	1894	2421	3022
NJ9238GS	SK	R404A	32.67	"380-420V 50Hz / 440-480V 60Hz 3 ~"	MBP	HST	3 PHASE	22.0	ASHRAEHBP46	60 Hz	1720	2228	2833	3536
NJX6232ZX	SK	R134a / R513A	38.00	"380-420V 50Hz / 440-480V 60Hz 3 ~"	HBP	HST	3PHASE	20.0	ASHRAEHBP46	50 Hz		1402	1779	2247
NJX6232ZX	SK	R134a / R513A	38.00	"380-420V 50Hz / 440-480V 60Hz 3 ~"	HBP	HST	3PHASE	20.0	ASHRAEHBP46	60 Hz		1632	2105	2663
NJX6244US	SK	R290	38.00	"400V 50Hz / 440V 60Hz"	MBP	HST	3 PHASE	22.0	ASHRAEHBP46	50 Hz	1831	2216	2710	3313
NJX6244US	SK	R290	38.00	"400V 50Hz / 440V 60Hz"	MBP	HST	3 PHASE	22.0	ASHRAEHBP46	60 Hz	2129	2656	3267	3962
NJX6250GS	SK	R404A / R452A / R449A	38.00	"400V 50Hz / 440V 60Hz"	MBP	HST	3PHASE	22.0	ASHRAEHBP46	50 Hz	1751	2238	2839	3792
NJX6250GS	SK	R404A / R452A / R449A	38.00	"400V 50Hz / 440V 60Hz"	MBP	HST	3PHASE	22.0	ASHRAEHBP46	60 Hz	1987	2631	3378	4433
NTU6232GSV	SK	R404A	20.44	200V 50-60Hz 3~	MBP	HST	3 PHASE	36.0	ARI4	60 Hz	926	1201	1505	1847
NTU6234GSV	SK	R404A	23.74	200V 50-60Hz 3~	MBP	HST	3 PHASE	36.0	ARI4	60 Hz	1104	1417	1768	2157
NTU6238GSV	SK	R404A	26.21	200V 50-60Hz 3~	MBP	HST	3 PHASE	36.0	ARI4	60 Hz	1257	1599	1980	2396
NTU6240GSV	SK	R404A	27.80	200V 50-60Hz 3~	MBP	HST	3 PHASE	40.0	ARI4	60 Hz	1327	1684	2081	2521

NA*: Product is implemented but this technical data is not available.
 UD*: Product is under development so this technical data is still not available.



Model	Cooling Capacity (°C)				Check Point (Evaporating 23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-55	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
NEU2130Z / L	UD*	UD*	UD*		355	1.33	350	ESTER / ISO22	Capillary Tube	NA*
NEU2130Z / L	UD*	UD*	UD*		412	1.39	350	ESTER / ISO22	Capillary Tube	NA*
NEU2140Z / L	UD*	UD*	UD*		430	1.30	350	ESTER / ISO22	Capillary Tube	NA*
NEU2140Z / L	UD*	UD*	UD*		489	1.26	350	ESTER / ISO22	Capillary Tube	NA*
NEU2145Z / L	UD*	UD*	UD*		448	1.31	350	ESTER / ISO22	Capillary Tube	NA*
NEU2145Z / L	UD*	UD*	UD*		482	1.28	350	ESTER / ISO22	Capillary Tube	NA*
NEU2183GS	UD*	UD*	UD*		758	1.49	350	ESTER / ISO22	Capillary Tube or Expansion Valve	NA*
NEU2183GS	UD*	UD*	UD*		983	1.53	350	ESTER / ISO22	Capillary Tube or Expansion Valve	NA*
NJ2212GS	1752	2243	2796		1477	1.32	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NJ2212GS	2047	2644	3304		1653	1.29	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM21
NJX2215US	2049	2526	3057		1769	1.55	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX2215US	2353	2903	3523		2026	1.52	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX2219GS	2522	3112	3774		2164	1.47	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX2219GS	2997	3714	4518		2611	1.45	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NT2168GS	783	1001	1249		786	1.37	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2168GS	955	1229	1532		792	1.32	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2192GS	1233	1542	1889		1220	1.29	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2192GS	1456	1842	2279		1236	1.37	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2212GS	1556	1959	2417		1325	1.31	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20
NT2212GS	1813	2267	2773		1571	1.31	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM20

Model	Cooling Capacity (°C)				Check Point (Evaporating 23.3°C / Condensing 54.4°C)		Lubricant		Expansion Device	Wiring Diagram
	-20	-15	-10	-55	Capacity (W)	Efficiency (W/W)	Oil Charge (mL)	Type / Viscosity		
NJ6226ZX	2233	2739	3291		3014	2.55	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJ6226ZX	2610	3204	3851		3526	2.55	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJ9232GS	3052	3716	4453		4080	2.54	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJ9232GS	3571	4348	5211		4775	2.55	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJ9238GS	3707	4475	5326		4897	2.59	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJ9238GS	4337	5236	6233		5730	2.59	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX6232ZX	2804	3452	4190		3757	2.59	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX6232ZX	3308	4038	4854		4444	2.43	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX6244US	4025	4845	5775		5218	2.73	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX6244US	4740	5603			5976	2.51	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX6250GS	4609	5527	6546		5914	2.26	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NJX6250GS	5353	6371	7486		6972	2.18	750	ESTER / ISO22	Capillary Tube or Expansion Valve	SM18
NTU6232GSV	2233				3982	2.8	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27
NTU6234GSV	2590				4574	2.67	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27
NTU6238GSV	2848				4877	2.49	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27
NTU6240GSV	3011				5292	2.54	650	ESTER / ISO22	Capillary Tube or Expansion Valve	SM27

NA*: Product is implemented but this technical data is not available.
UD*: Product is under development so this technical data is still not available.



VARIABLE SPEED COMPRESSORS

embraco
Nidec

06

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.

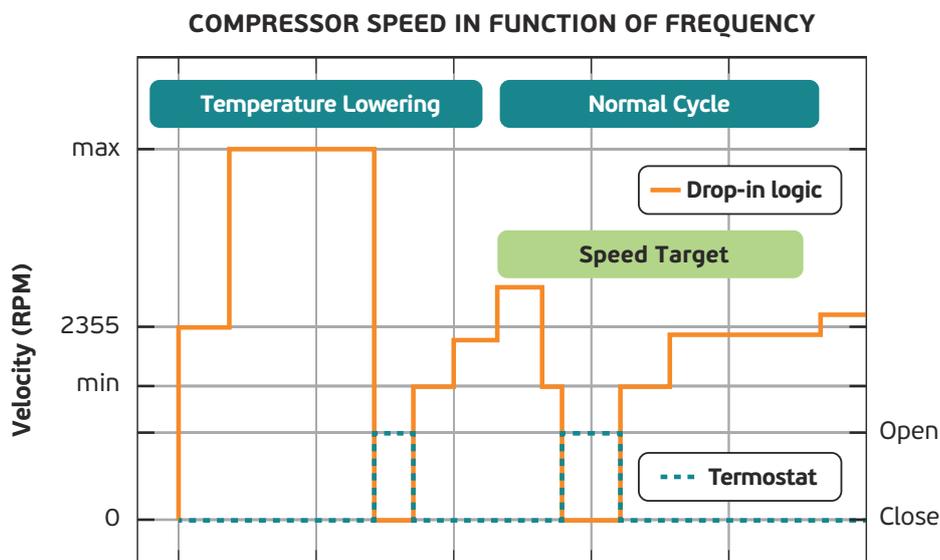
CONTROL MODES

DROP-IN

Drop-In can use all kinds of inverters, 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.

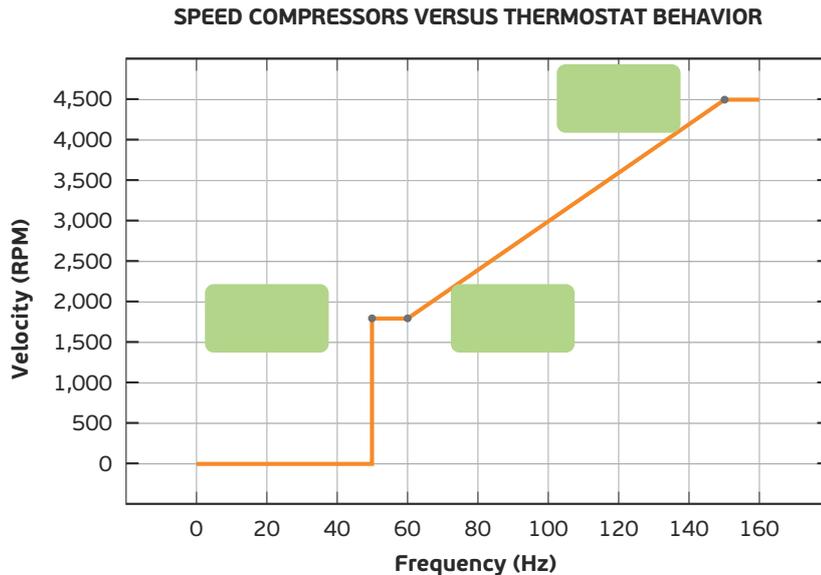
SMART DROP-IN

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 mains parts: Pull-down, Stability Routine, Heavy Duty Routine and Defrost Routine. The Stability, Heavy Duty and Defrost Routine begin to run in parallel after Pull-down is completed.



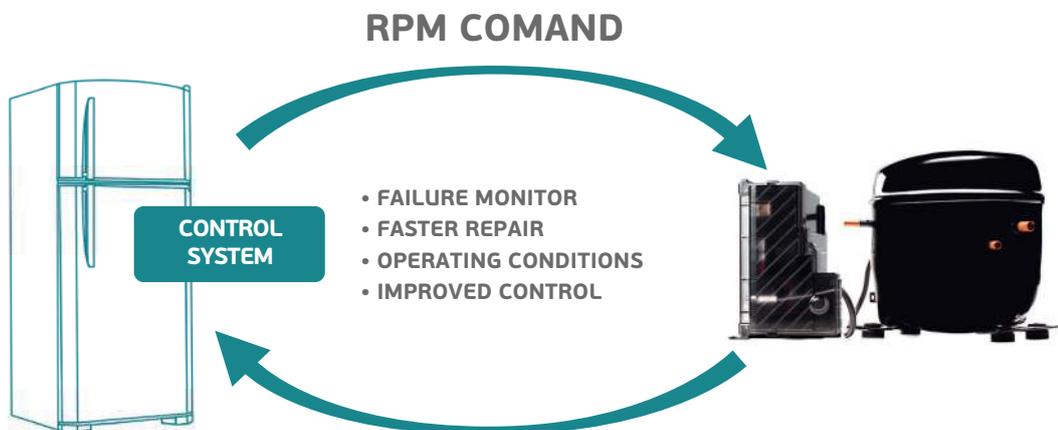
FREQUENCY

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														
Model	Refrigerant	Voltage / Frequency	Cooling Capacity			Hp	Application	Torque	Motor Type	Expansion Device	Lubricant		Weight Kg	Test Condition
			Rpm	W	W/W						Oil Charge (Ml)	Type / Viscosity		
VEMY4H	R134a	230 V 53-150 Hz 3 ~	2000	78	1.66	1/10	LBP	LST	BPM	Capillary Tube	220	ESTER / ISO10	7.5	ASHRAELBP32
			3000	116	1.58									
			4500	170	1.55									
VEMY6HH	R134a	230 V 53-150 Hz 3 ~	1600	99	1.65	1/10	L/M/HBP	LST	BPM	Capillary tube	220	ESTER / ISO10	7.5	ASHRAELBP32
			3000	176	1.68									
			4500	229	1.60									
VEMY6H	R134a	230 V 53-150 Hz 3 ~	2000	113	1.65	1/10	LBP	LST	BPM	Capillary Tube	220	ESTER / ISO10	7.6	ASHRAELBP32
			3000	176	1.67									
			4500	233	1.61									
VEMX6H	R1234yf	100V 50-60Hz 1~ 200V 50-60Hz 3~ 280 DVC	1500	87	1.59	1/10	L/MBP	LST	BPM	Capillary Tube	220	ESTER / ISO10	7.5	ASHRAELBP32
			3000	180	1.61									
			4500	275	1.63									
VEGT8HB	R134a	230 V 53-150 Hz 3 ~	1800	137	1.72	1/4	L/MBP	LST	BPM	Capillary tube	430	ESTER / ISO10	10.8	ASHRAELBP32
			3000	256	1.76									
			4500	340	1.64									
VEGT11HB	R134a	230 V 60-150 Hz 3 ~	1800	191	1.67	1/2	L/MBP	LST	BPM	Capillary tube	430	ESTER / ISO22	10.0	ASHRAELBP32
			2500	266	1.66									
			3000	322	1.66									
			3600	378	1.63									
			4500	429	1.54									
FMFT411Z	R134a	230 V 53-167Hz 3 ~	1600	180	1.82	3/4	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			5000	530	1.65									
FMFT415Z	R134a	230 V 53-150 Hz 3 ~	1600	UD*	UD*	1	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			5000	UD*	UD*									
VEMT404U	R290	230 V 53-167Hz 3 ~	1600	108	1.93	1/3+	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	220	ALQUILB / ISO22	7.2	ASHRAELBP32
			3000	242	1.90									
			4500	354	1.83									
VEMT406U	R290	230 V 53-167Hz 3 ~	1600 - 4500	157 - 434	1.76	1/2	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	UD	UD	UD	ASHRAELBP32
VEHT409U	R290	230 V 53-167Hz 3 ~	1600 - 4500	228 - 675	1.77	1/2+	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	UD	UD	UD	ASHRAELBP32
VEHT413U	R290	230 V 53-167Hz 3 ~	1600 - 4500	343 - 939	1.71	1	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	UD	UD	UD	ASHRAELBP32
FMFT406U	R290	230 V 46-150 Hz 3~	1800	190	1.81	1/2	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO22	10.3	ASHRAELBP32
			2500	248	1.79									
			3000	325	1.84									
			3600	387	1.81									
			4500	509	1.78									
VEGT8U	R290	230 V 60-150 Hz 3 ~	2000	273	1.76	1/2	L/MBP	LST	BPM	Capillary Tube	450	ESTER / ISO22	10.3	ASHRAELBP32
			3000	426	1.81									
			4500	647	1.74									
FMFT408U	R290	230V / 60-150Hz	1800	250	1.81	1/2	L/MBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.3	ASHRAELBP32
			2400	334	1.83									
			3000	432	1.82									
			3600	509	1.79									
			4500	609	1.75									

*Compressors tested at 100V.
Variable speed compressors for Japan market can be delivered with different electricals set up.
Nidec GA can deliver the set with 200V 50-60Hz ~3 phase input, 100V 50-60Hz single phase input or DC input, please, contact technical support for more information.



Variable Speed Compressors 115-127V 50/60Hz														
Model	Refrigerant	Voltage / Frequency	Cooling Capacity			Hp	Application	Torque	Motor Type	Expansion Device	Lubricant		Weight Kg	Test Condition
			Rpm	W	W/W						Oil Charge (ML)	Type / Viscosity		
FMFT411U	R290	230V / 60-150Hz	1800	349	1.78	3/4	L/MBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.9	ASHRAELBP32
			2400	466	1.85									
			3000	593	1.84									
			3600	684	1.80									
			4500	867	1.76									
FMFD413UE	R290	230V / 53-167Hz	1600	331	1.95	1	L/MBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			2400	490	1.99									
			3000	603	1.98									
			3600	716	1.92									
			5000	958	1.82									
FMFT213U	R290	230 V 60-150 Hz 3 ~	3000	693	1.87	1+	LBP	LST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.87	ASHRAELBP32
			4500	952	1.77									
FMFT413U	R290	230 V 60-150 Hz 3 ~	1800	403	1.76	1+	L/MBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.9	ASHRAELBP32
			2500	531	1.78									
			3000	682	1.80									
			3600	777	1.76									
			4500	998	1.74									
FMFT415U	R290	230V / 53-167Hz	1600	407	1.74	1 1/4	L/MBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.9	ASHRAELBP32
			2400	613	1.78									
			3000	774	1.76									
			3600	892	1.73									
			5000	1253	1.68									
VEGY6L*	R1234yf	230 V 53-150 Hz 3 ~	2000	138	1.75	1/5	L/MBP	LST	BPM	Capillary Tube	430	ESTER / ISO22	11.3	ASHRAELBP32
			3000	217	1.69									
			4500	326	1.58									
VEGD6L*	R1234yf	230 V 47-120HZ 3~	2000	141	1.90	1/5	L/M/HBP	HST	BPM	Capillary Tube or Expansion Valve	350	ESTER / ISO10	10.8	ASHRAELBP32
			4500	647	1.70									
VEMX6L	R1234yf	100V 50-60Hz 1~ 200V 50-60Hz 3~ 280 DVC	1500	UD*	UD*	1/10	L/MBP	LST	BPM	Capillary Tube	220	ESTER / ISO10	7.5	ASHRAELBP32*
			3000	UD*	UD*									
			4500	UD*	UD*									
FMFT411L	R1234yf	230 V 53-150 Hz 3 ~	1600	210	1.85	1/2	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			5000	610	1.65									
FMFT415L	R1234yf	230 V 53-150 Hz 3 ~	1600	280	1.83	1	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			5000	825	1.63									
FMXA6C	R600a	230 V 43-134 Hz 3~	2000	65	1.79	1/9	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	98	1.80									
			4000	121	1.70									
FMXY9C	R600a	230 V 43-134 Hz 3~	2000	98	1.71	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	145	1.75									
			4000	180	1.65									
FMXA9C	R600a	230 V 43-134 Hz 3~	2000	98	1.80	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	145	1.78									
			4000	180	1.70									
FMXC9C	R600a	230 V 43-134 Hz 3~	2000	100	1.87	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	151	1.86									
			4000	185	1.75									
VESD11C	R600a	230 V 40-150 Hz 3 ~	2000	137	1.98	1/5	LBP	LST	BPM	Capillary Tube	180	ALQUILB / ISO5	6.8	ASHRAELBP32
			3000	207	1.91									
			4500	276	1.78									

*Compressors tested at 100V.
Variable speed compressors for Japan market can be delivered with different electricals set up.
Nidec GA can deliver the set with 200V 50-60Hz ~3 phase input, 100V 50-60Hz single phase input or DC input, please, contact technical support for more information.

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

Model	Refrigerant	Voltage / Frequency	Cooling Capacity			HP	Application	Torque	Motor Type	Expansion Device	Lubricant		Weight Kg	Test Condition
			RPM	W	W / W						Oil Charge (mL)	Type / Viscosity		
VEMY6HH	R134a	230 V 53-150 Hz 3 ~	1600	99	1.65	1/10	L/M/HBP	LST	BPM	Capillary tube	220	ESTER / ISO10	7.5	ASHRAELBP32
			3000	176	1.68									
			4500	229	1.60									
VEGT8HB	R134a	230 V 53-150 Hz 3 ~	1800	137	1.72	1/4	L/MBP	LST	BPM	Capillary tube	430	ESTER / ISO10	10.8	ASHRAELBP32
			3000	256	1.76									
			4500	340	1.64									
VEGT11HB	R134a	230 V 60-150 Hz 3 ~	1800	191	1.67	1/2	L/MBP	LST	BPM	Capillary tube	430	ESTER / ISO22	10.0	ASHRAELBP32
			2500	266	1.66									
			3000	322	1.66									
			3600	378	1.63									
			4500	429	1.54									
FMFT411Z	R134a	230 V 53-167Hz 3 ~	1600	180	1.82	3/4	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			5000	530	1.65									
VEMT404U	R290	230 V 40-150 Hz 3 ~	2000	165	1.96	1/3+	LBP	LST	BPM	Capillary Tube or Expansion Valve	220	ALQUILB / ISO22	7.2	ASHRAELBP32
			3000	242	1.92									
			4500	354	1.83									
VESA5U	R290	230 V 53-133 Hz 3 ~	2000	156	1.59	1/5	LBP	LST	BPM	Capillary tube	200	ESTER / ISO10	5.8	ASHRAELBP32
			3000	244	1.69									
			4000	328	1.72									
FMFT406U	R290	230 V 46-150 Hz 3~	1800	190	1.81	1/2	L/MBP	HST	BPM	Capillary Tube or Expansion Valve	430	ESTER / ISO22	10.3	ASHRAELBP32
			2500	248	1.79									
			3000	325	1.84									
			3600	387	1.81									
			4500	509	1.78									
VESA7U	R290	230 V 53-133 Hz 3 ~	1600	182	1.62	1/3	L/MBP	LST	BPM	Capillary tube	198	ESTER / ISO22	6.5	ASHRAELBP32
			2000	233	1.69									
			3000	363	1.74									
			4000	482	1.73									
VEGT8U	R290	230 V 60-150 Hz 3 ~	2000	273	1.76	1/2	L/MBP	LST	BPM	Capillary Tube	450	ESTER / ISO22	10.3	ASHRAELBP32
			3000	426	1.81									
			4500	647	1.74									
FMFT408U	R290	230V / 60-150Hz	1800	250	1.81	1/2	L/MBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.3	ASHRAELBP32
			2400	334	1.83									
			3000	432	1.82									
			3600	509	1.79									
			4500	609	1.75									
FMFT411U	R290	230V / 60-150Hz	1800	349	1.78	3/4	L/MBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.9	ASHRAELBP32
			2400	466	1.85									
			3000	593	1.84									
			3600	684	1.80									
			4500	867	1.76									
FMFD413UE	R290	230V / 53-167Hz	1600	331	1.95	1	L/MBP	LST/HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO10	10.9	ASHRAELBP32
			2400	490	1.99									
			3000	603	1.98									
			3600	716	1.92									
			5000	958	1.82									
FMFT213U	R290	230 V 60-150 Hz 3 ~	3000	693	1.87	1+	LBP	LST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.87	ASHRAELBP32
			4500	952	1.77									

*Compressors tested at 100V.
 Variable speed compressors for Japan market can be delivered with different electricals set up.
 Nidec GA can deliver the set with 200V 50-60Hz ~3 phase input, 100V 50-60Hz single phase input or DC input, please, contact technical support for more information.

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

Model	Refrigerant	Voltage / Frequency	Cooling Capacity			HP	Application	Torque	Motor Type	Expansion Device	Lubricant		Weight Kg	Test Condition
			RPM	W	W / W						Oil Charge (mL)	Type / Viscosity		
FMFT413U	R290	230 V 60-150 Hz 3 ~	1800	403	1.76	1+	L/MBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.9	ASHRAELBP32
			2500	531	1.78									
			3000	682	1.80									
			3600	777	1.76									
			4500	998	1.74									
FMFT415U	R290	230V / 53-167Hz	1600	407	1.74	1 1/4	L/MBP	HST	BPM	Capillary tube or Expansion Valve	430	ESTER / ISO22	10.9	ASHRAELBP32
			2400	613	1.78									
			3000	774	1.76									
			3600	892	1.73									
			5000	1253	1.68									
VNEU217U	R290	100-300 V 33-75 Hz 3 ~	2000	535	1.47	1 1/4	LBP	HST	BPM	Capillary Tube or Expansion Valve	500	ESTER / ISO22	11.6	ASHRAELBP32
			3000	818	1.52									
			4500	1144	1.47									
FMXY4C	R600a	230 V 43-134 Hz 3~	2000	35	1.50	1/16	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	50	1.58									
			4000	71	1.57									
FMXA4C	R600a	230 V 43-134 Hz 3~	2000	36	1.65	1/16	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	54	1.64									
			4000	76	1.64									
FMXD4C	R600a	230 V 43-134 Hz 3~	2000	36	1.73	1/16	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	49	1.64									
			4000	72	1.66									
FMXY6C	R600a	230 V 43-134 Hz 3~	2000	65	1.64	1/9	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	97	1.64									
			4000	121	1.65									
FMXA6C	R600a	230 V 43-134 Hz 3~	2000	65	1.79	1/9	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	98	1.80									
			4000	121	1.70									
FMXC6C	R600a	230 V 43-134 Hz 3~	2000	65	1.82	1/9	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	98	1.78									
			4000	119	1.69									
FMXD6C	R600a	230 V 43-134 Hz 3~	2000	67	1.91	1/9	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	102	1.89									
			4000	126	1.79									
FMXY9C	R600a	230 V 43-134 Hz 3~	2000	98	1.71	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	145	1.75									
			4000	180	1.65									
FMXA9C	R600a	230 V 43-134 Hz 3~	2000	98	1.80	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	145	1.78									
			4000	180	1.70									
FMXC9C	R600a	230 V 43-134 Hz 3~	2000	100	1.87	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.8	ASHRAELBP32
			3000	151	1.86									
			4000	185	1.75									
FMXD9C	R600a	230 V 43-134 Hz 3~	2000	99	1.90	1/6	L/MBP	LST	BPM	Capillary Tube	175	ALQUILB / ISO5	4.9	ASHRAELBP32
			3000	152	1.89									
			4000	187	1.79									
VEMB11C	R600a	230 V 53-150 Hz 3 ~	2000	135	1.90	1/5	LBP	LST	BPM	Capillary Tube	450	ALQUILB / ISO5	7.6	ASHRAELBP32
			3000	204	1.89									
			4500	281	1.75									

*Compressors tested at 100V.
 Variable speed compressors for Japan market can be delivered with different electricals set up.
 Nidec GA can deliver the set with 200V 50-60Hz ~3 phase input, 100V 50-60Hz single phase input or DC input, please, contact technical support for more information.

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

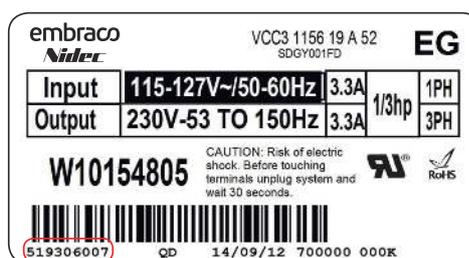
Model	Refrigerant	Voltage / Frequency	Cooling Capacity			HP	Application	Torque	Motor Type	Expansion Device	Lubricant		Weight Kg	Test Condition
			RPM	W	W / W						Oil Charge (mL)	Type / Viscosity		
VESC11C	R600a	230 V 40-150 Hz 3 ~	2000	137	1.93	1/5	LBP	LST	BPM	Capillary Tube	160	ALQUILB / ISO5	6.4	ASHRAELBP32
			3000	207	1.88									
			4500	276	1.76									
VESD11C	R600a	230 V 40-150 Hz 3 ~	2000	137	1.98	1/5	LBP	LST	BPM	Capillary Tube	180	ALQUILB / ISO5	6.8	ASHRAELBP32
			3000	207	1.91									
			4500	276	1.78									
VNEK206GK	R404A	300 V 33-75 Hz 3 ~	2000	226	1.26	1/3	LBP	HST	BPM	Capillary Tube or Expansion Valve	500	ESTER / ISO22	11.6	ASHRAELBP32
			2400	260	1.27									
			3000	327	1.25									
			3600	385	1.25									
VNEK212GK	R404A	300 V 33-75 Hz 3 ~	2000	245	1.11	1/2	LBP	HST	BPM	Capillary Tube or Expansion Valve	500	ESTER / ISO22	11.6	ASHRAELBP32
			2400	284	1.11									
			3000	344	1.09									
			3600	386	1.03									
VNEU213GK	R404A	100-300 V 33-75 Hz 3 ~	2000	539	1.40	3/4	LBP	HST	BPM	Capillary Tube or Expansion Valve	500	ESTER / ISO22	11.6	ASHRAELBP32
			3000	762	1.44									
			4500	1045	1.33									

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. Please contact the technical support to clarify the control type for each product SKU.



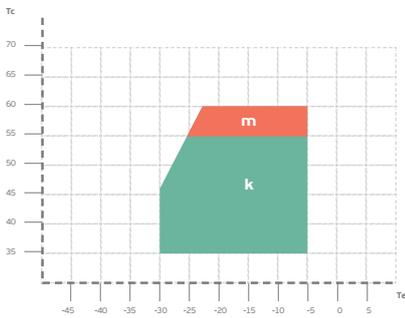
The inverter must be replaced by another one with the same voltage range

*Compressors tested at 100V.
Variable speed compressors for Japan market can be delivered with different electricals set up.
Nidec GA can deliver the set with 200V 50-60Hz ~3 phase input, 100V 50-60Hz single phase input or DC input, please, contact technical support for more information.

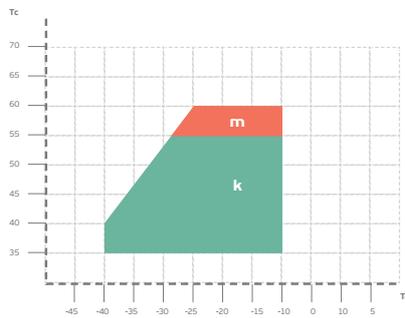
OPERATING ENVELOPE

EMC, EMX, NE, NT, NJ, VNE, EH

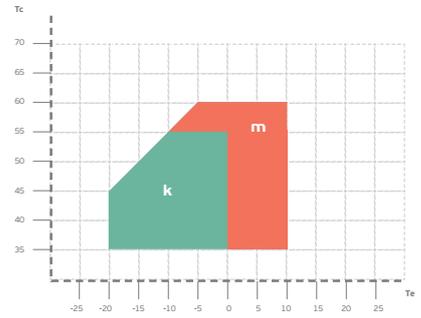
LBP
R134a - R600a



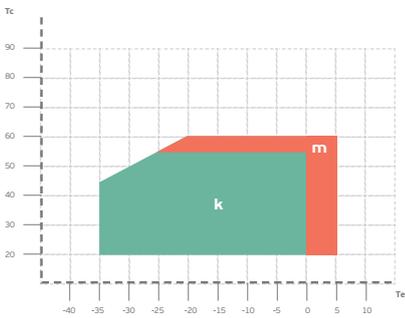
LBP
R404A/R507/R452A - R290



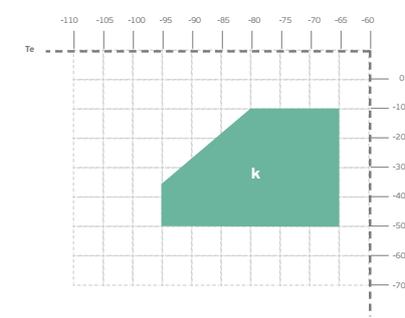
MBP
R404A/R507/R452A - R290



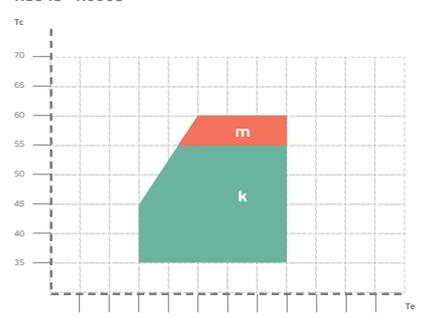
L/MBP
R290



ULBP
R508B/R170 - second stage of cascade



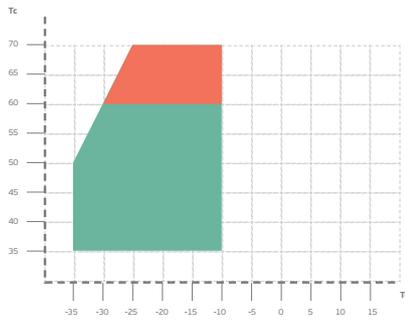
HBP
R134a - R600a



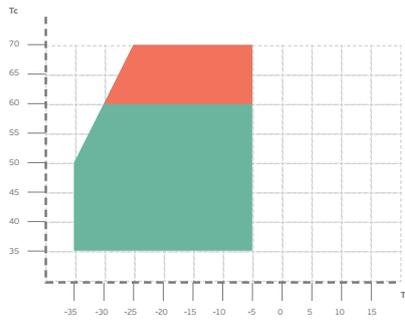
EM, EG, F, VEM, VEG, VES, FMF

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

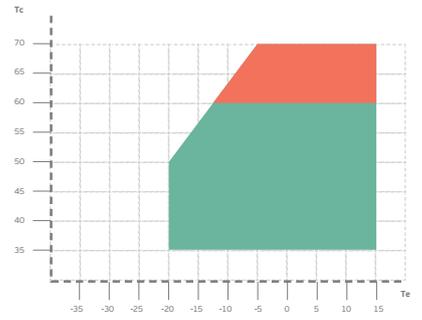
LBP
R290 - R134a - R600a



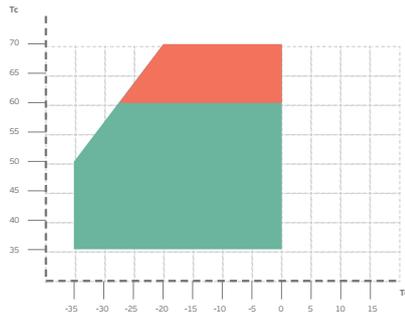
L-MBP (STANDARD)
R290 - R134a



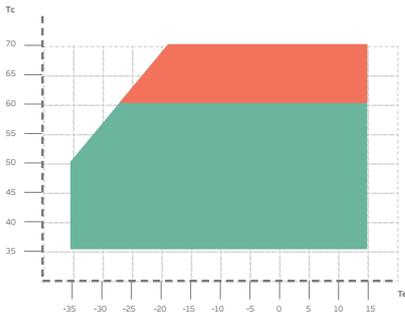
M-HBP
R134a



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



L-M-HBP
R134a



■ Operation Condition
■ Transient Condition

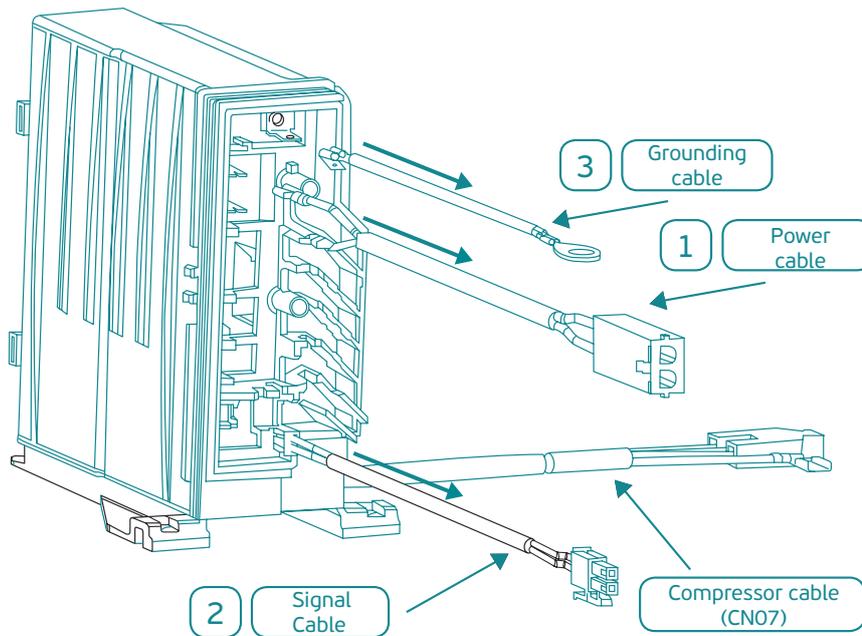
Tc Condensing Temperature
k Ambient 32°C and return gas 20°C
Te Evaporating Temperature
m Ambient 32°C and return gas 20°C (for transitory period)

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

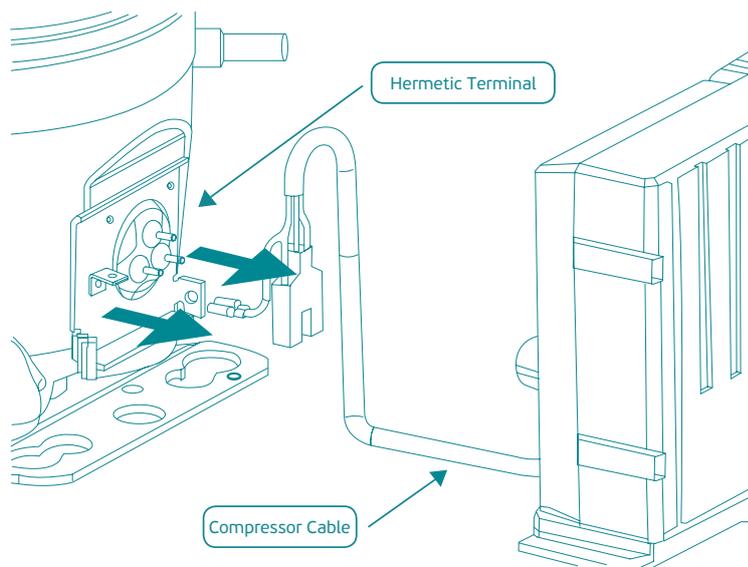
01 REPLACING A FAILED INVERTER

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);



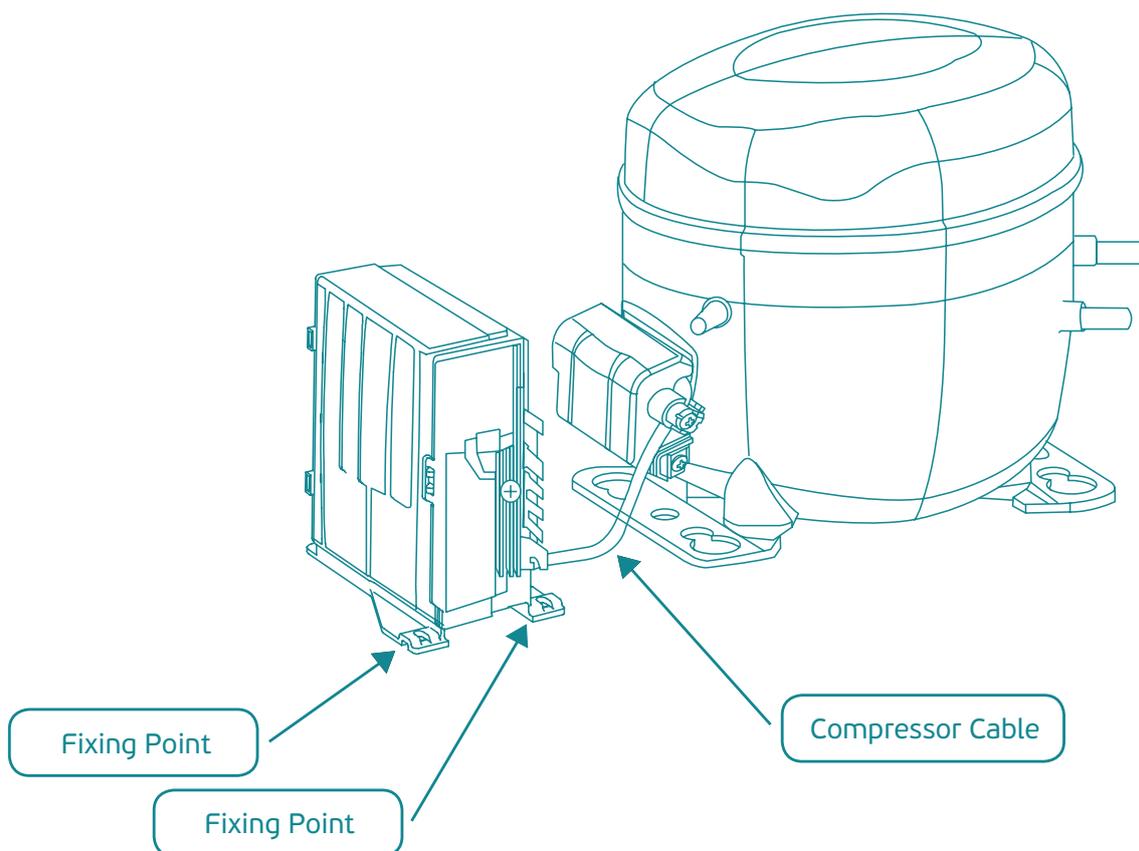
3. Disconnect the Inverter from the compressor;



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.

12

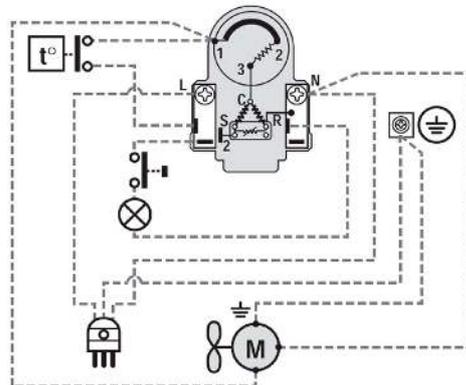
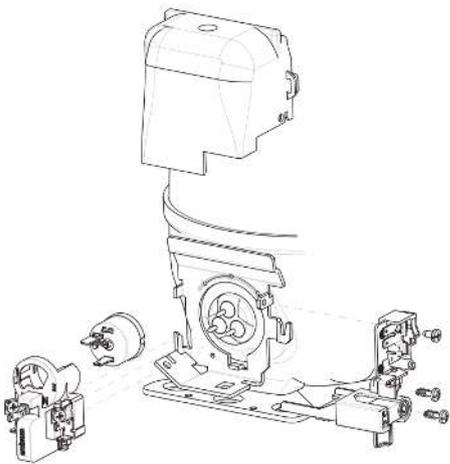
ELECTRICAL CONFIGURATIONS

WIRING DIAGRAMS KEY

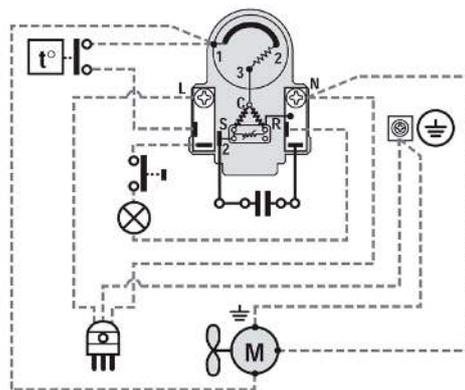
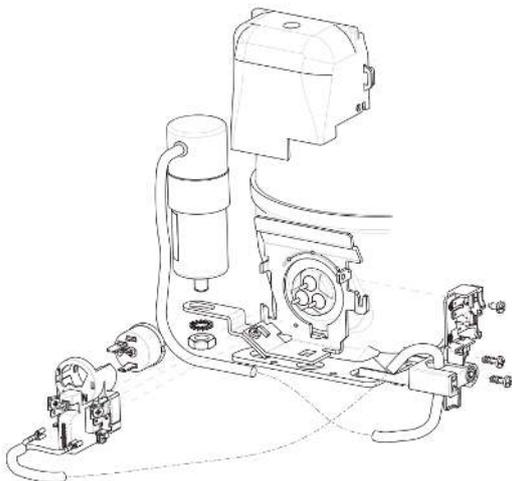
	OVERLOAD PROTECTOR		PTC START DEVICE*
	OVERLOAD PROTECTOR		INTEGRATED PTC DEVICE
	CURRENT START RELAY		CURRENT START RELAY WITH CAPACITOR CONNECTIONS
	3CR CURRENT START RELAY		3ARR3 START RELAY (VOLTAGE).
	RUN CAPACITOR		RUN CAPACITOR (MANDATORY - NOT SUPPLIED)
	OPTIONAL RUN CAPACITOR		START CAPACITOR
	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

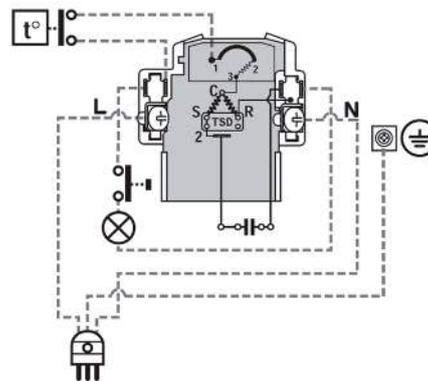
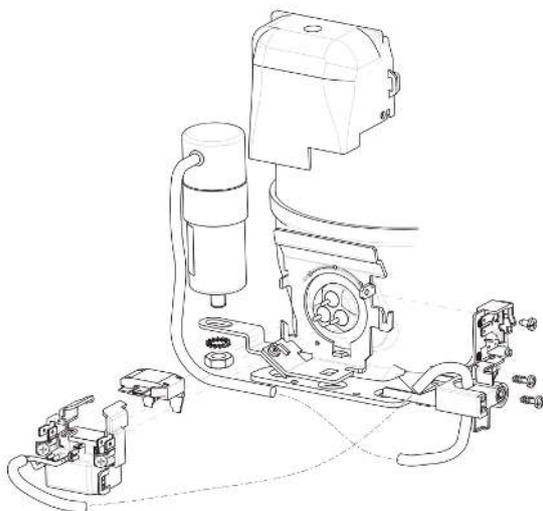
SM00 - EMT/NE SERIES RSIR PTC European Version



SM01 - EMT/NE SERIES RSCR PTC European Version

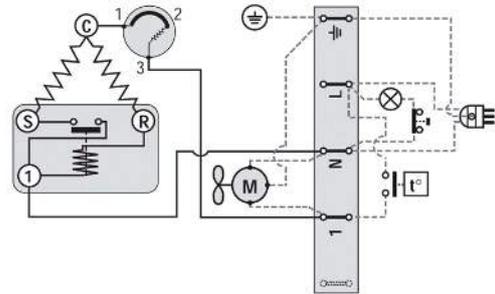
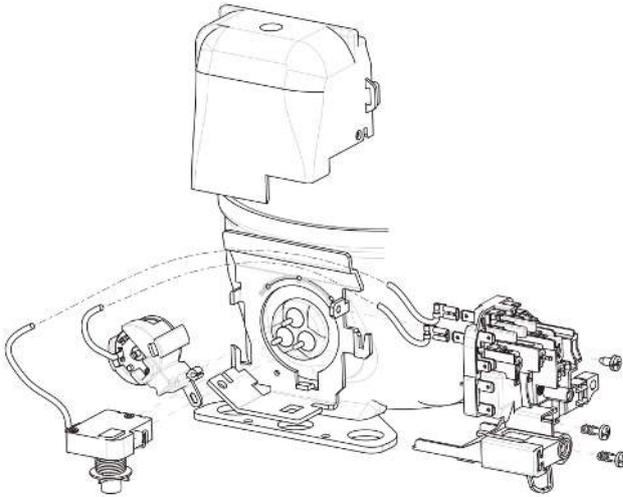


SM02 - EMT/NE SERIES RSCR TSD European Version

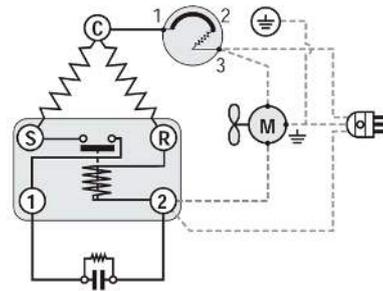
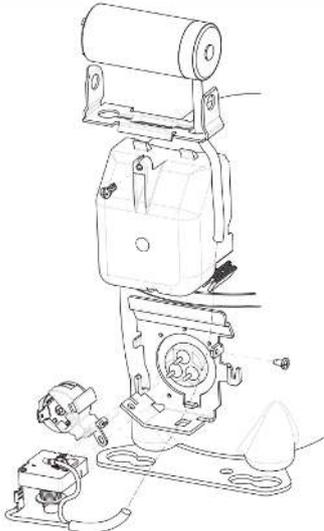


WIRING DIAGRAMS

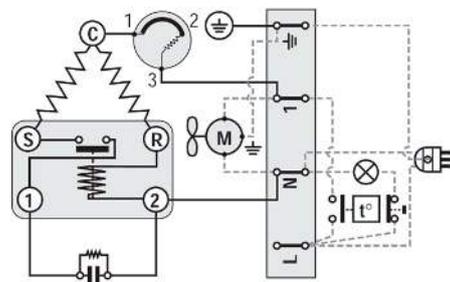
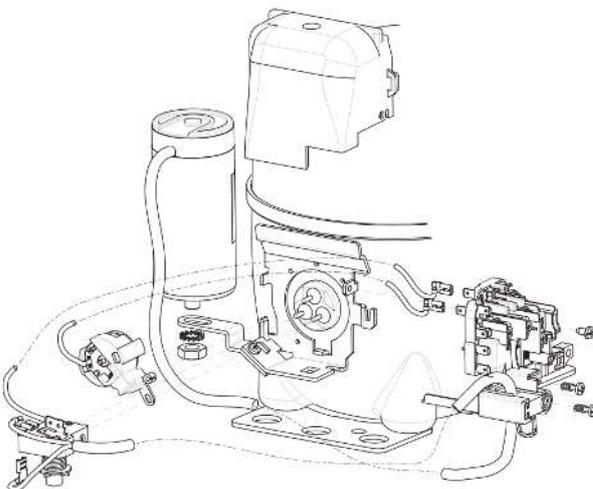
SM03 - EMT/NE SERIES RSIR Terminal Board & Start Device



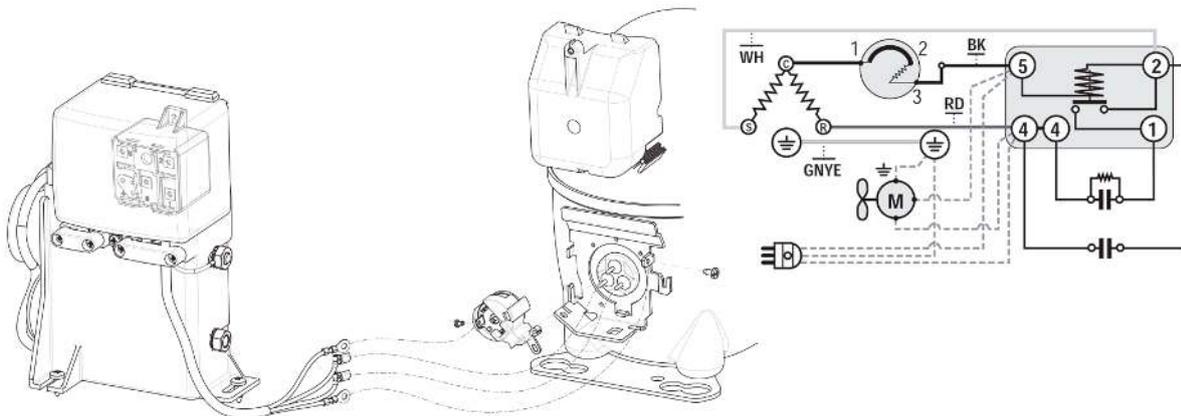
SM04 - EMT/NE SERIES CSIR American Version



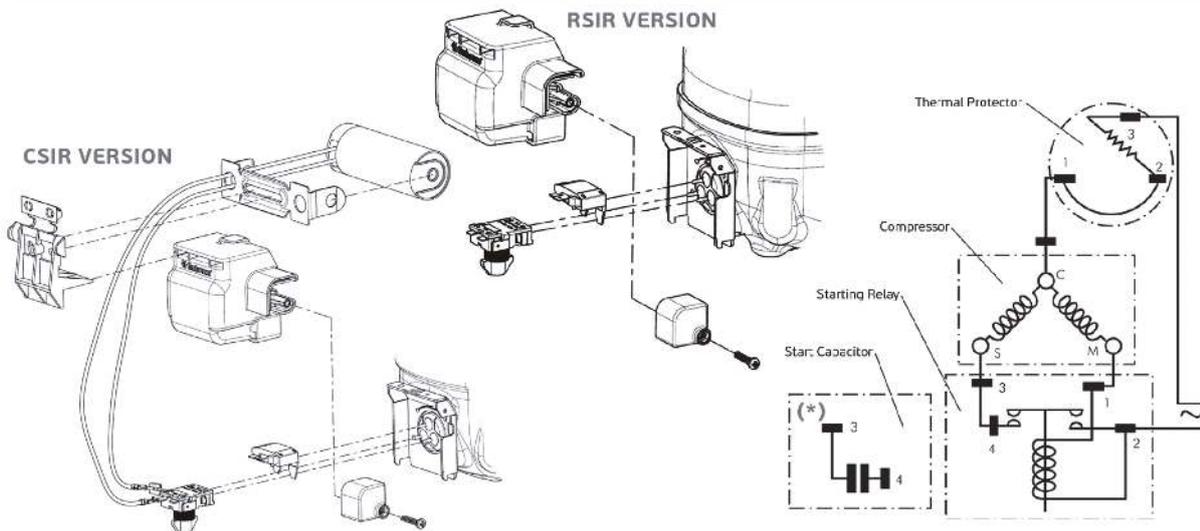
SM05 - EMT/NE SERIES CSIR Terminal Board & Start Device



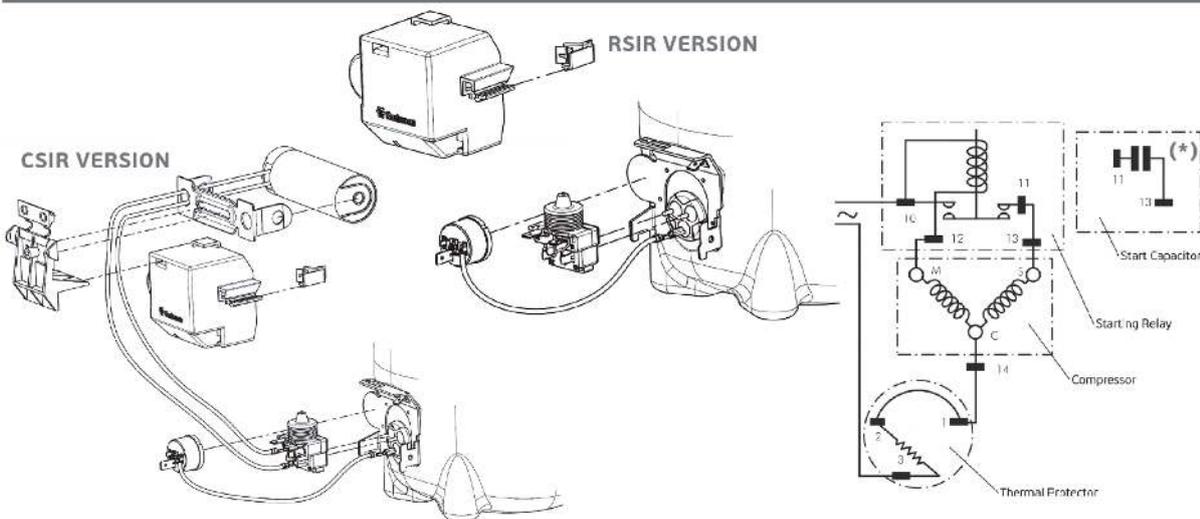
SM06 - NE SERIES CSR Box



SM07 - EM/EMI



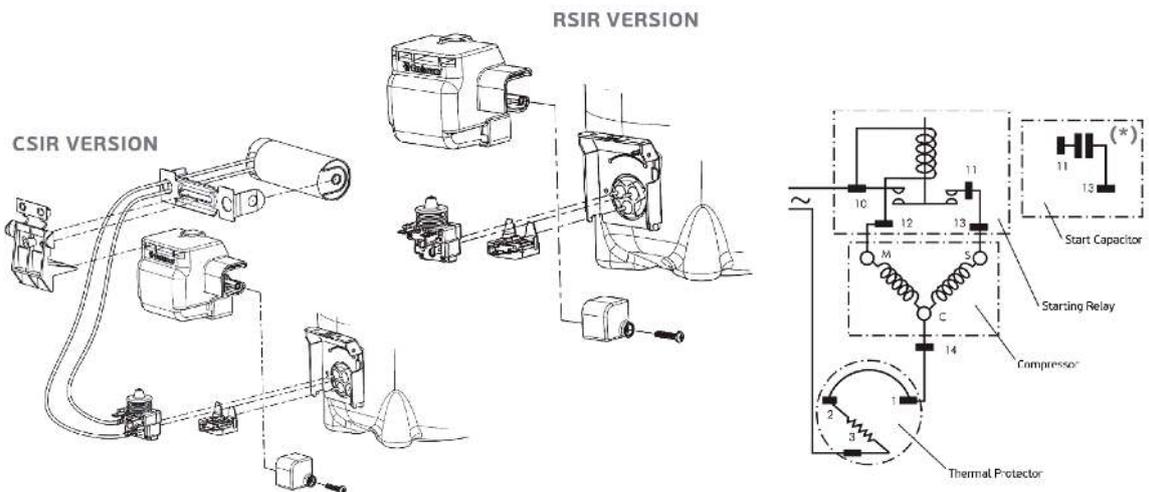
SM08 - F COMPRESSORS



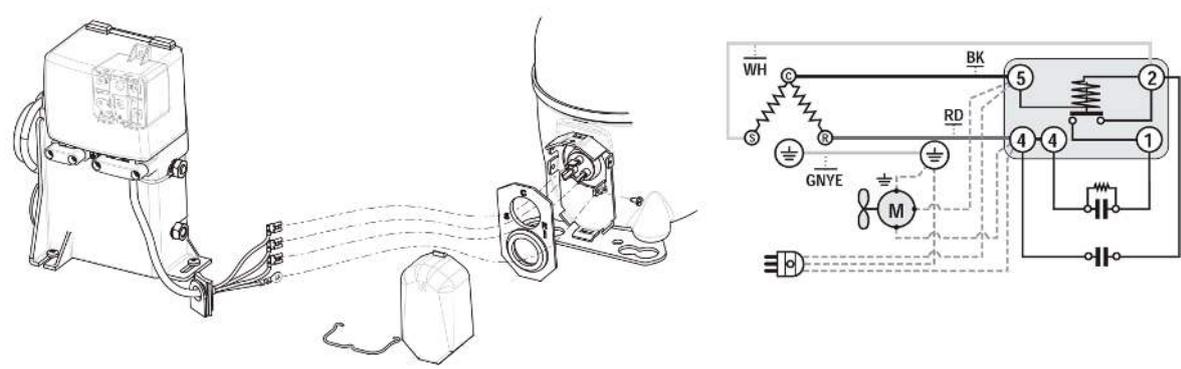
(* Valid only for CSIR version)

WIRING DIAGRAMS

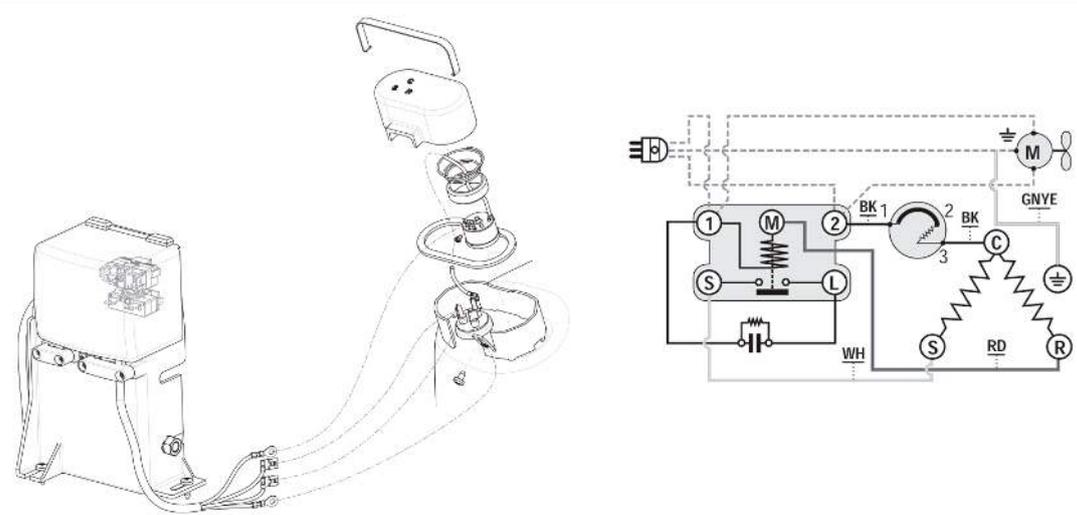
SM09 - EG



SM10 - NE CSR Box

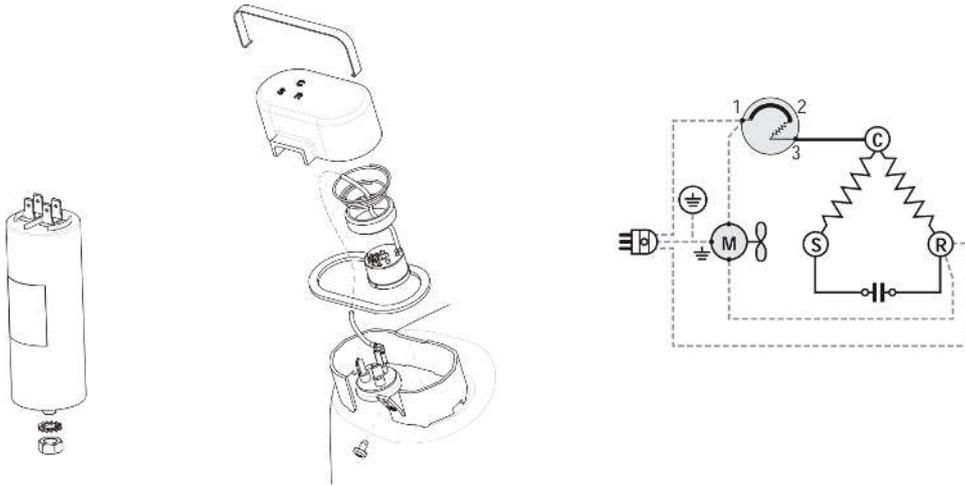


SM14 - NJ CSIR Box

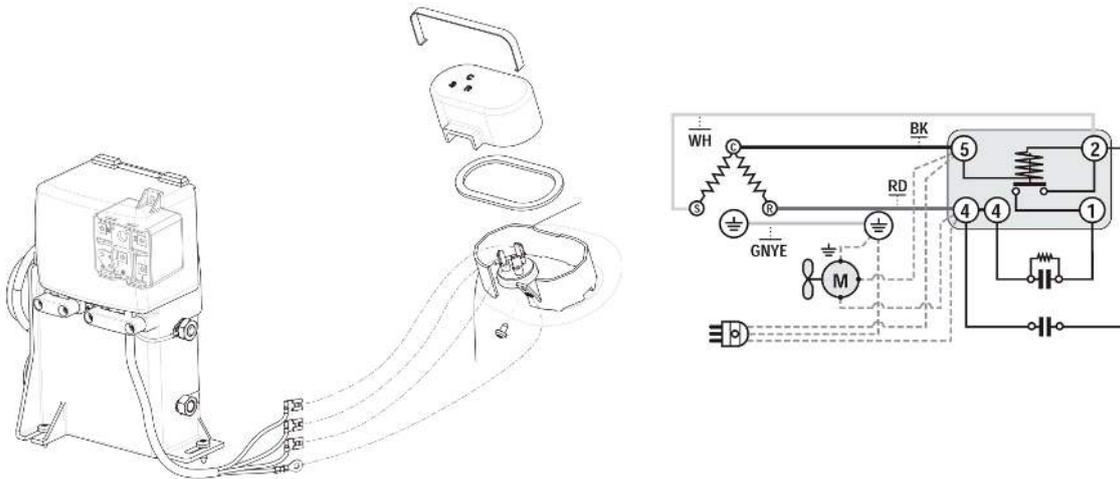


(*) Valid only for CSIR version

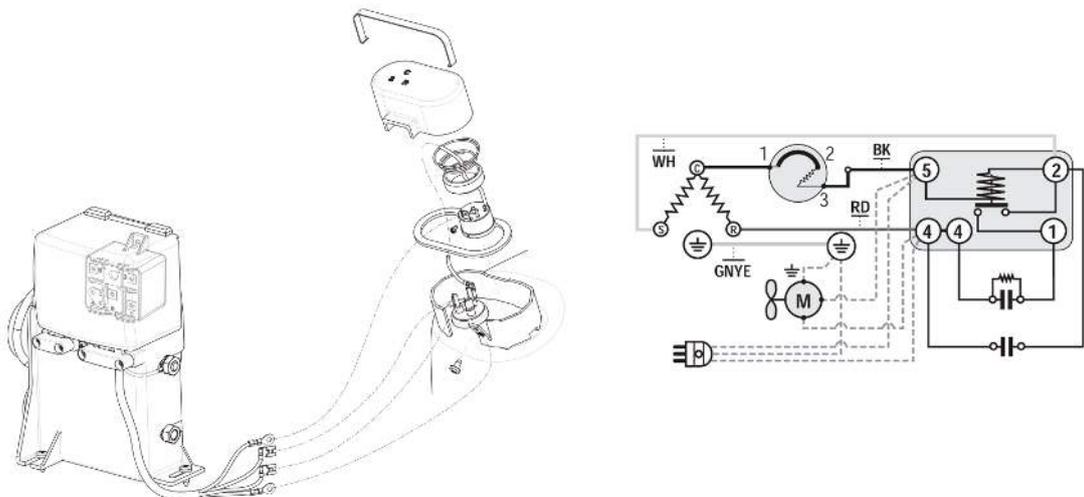
SM15 - NJ PSC



SM16 - NJ SERIES CSR Box (Internal Overload Protector)

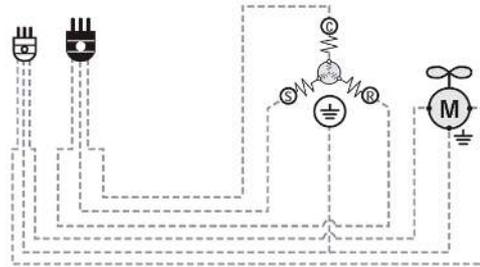
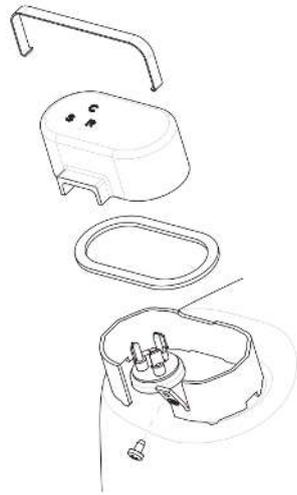


SM17 - NJ CSR Box (External Overload Protector)

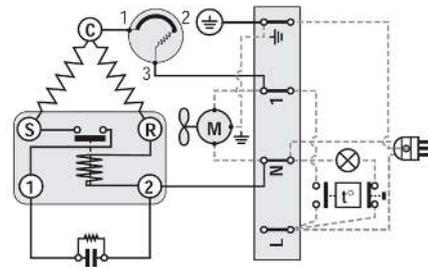
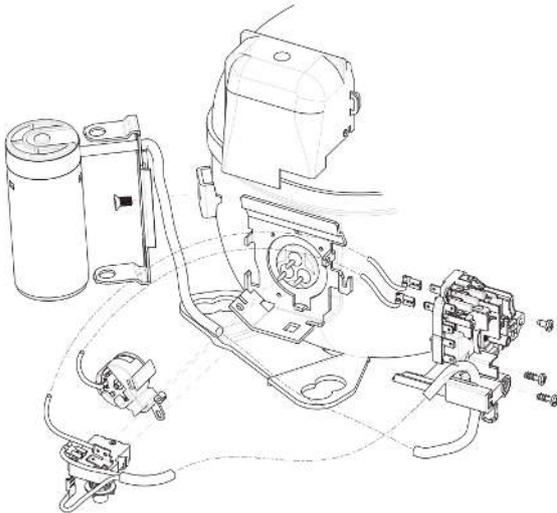


WIRING DIAGRAMS

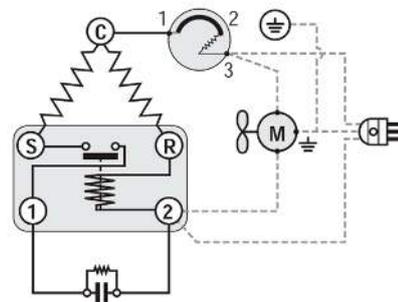
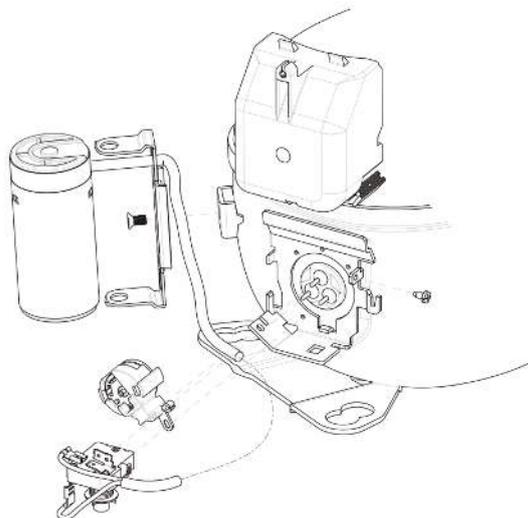
SM18 - NJ SERIES 3-Phase (Internal Overload Protector)



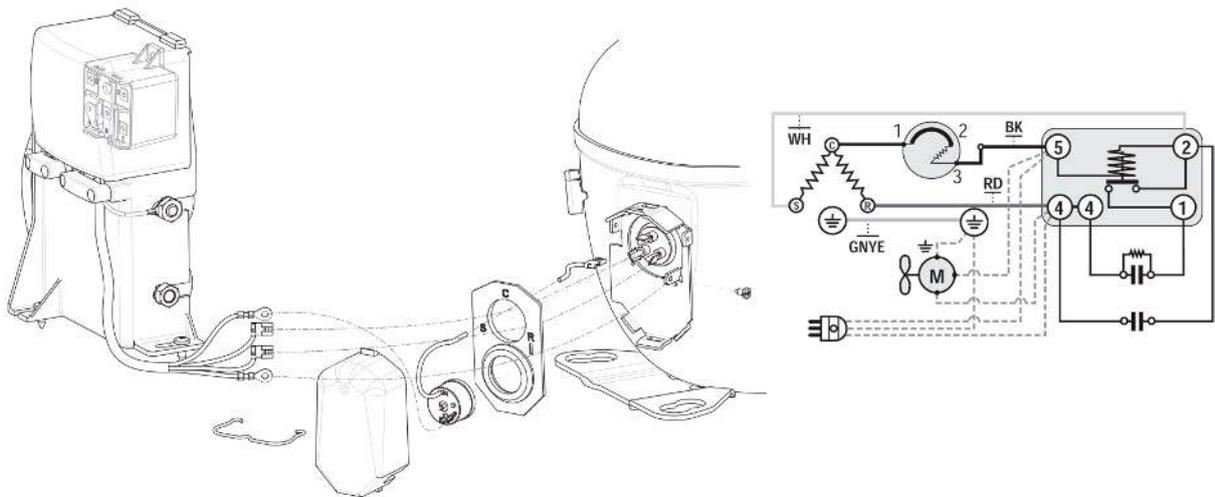
SM19 - NT SERIES CSIR Terminal Board



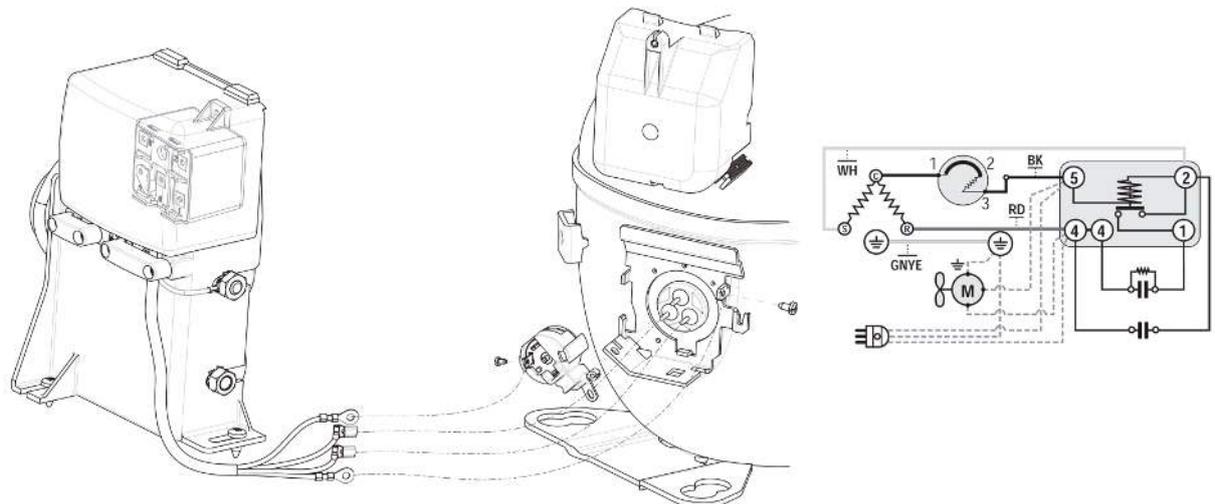
SM20 - NT SERIES CSIR – American Version



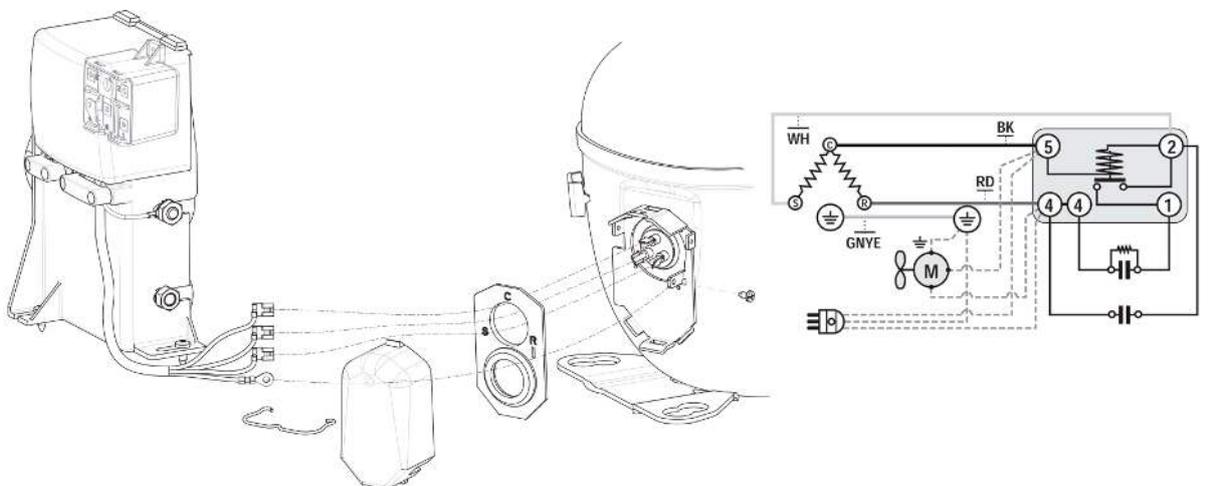
SM21 - NT SERIES CSR Box



SM23 - NT SERIES CSR Box

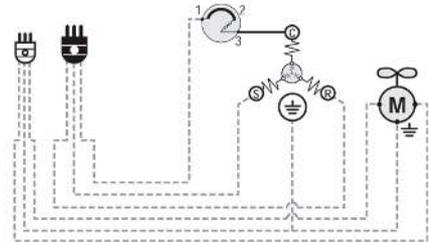
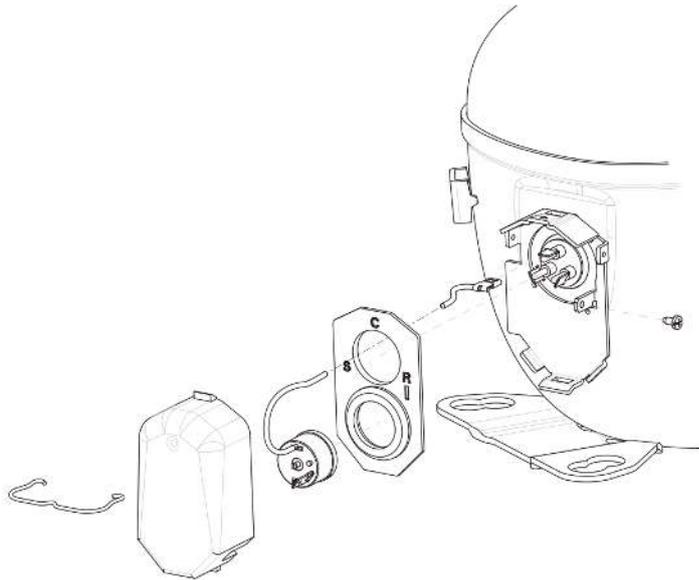


SM26 - NT SERIES CSR Box (Internal Overload Protector)

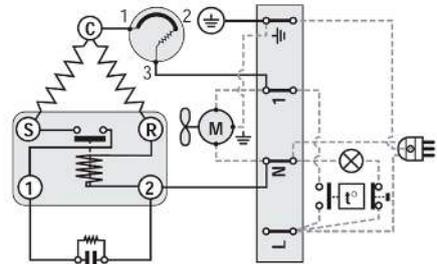
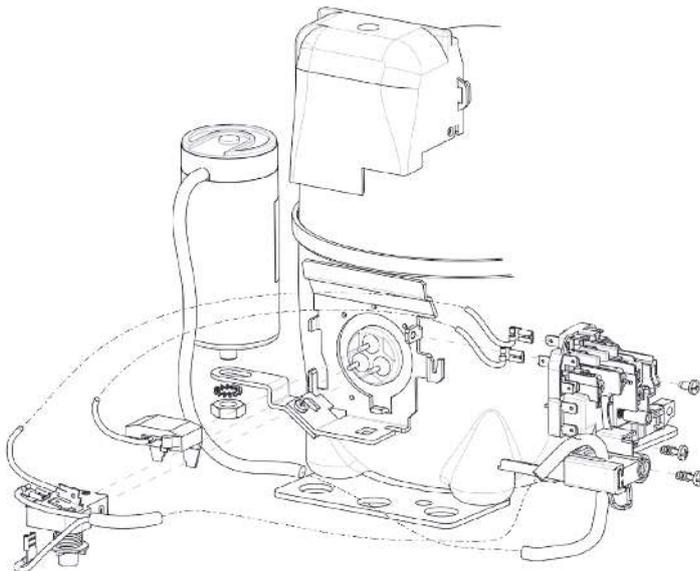


WIRING DIAGRAMS

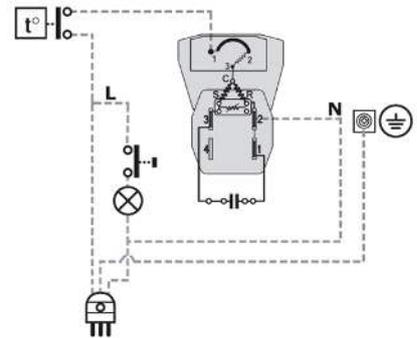
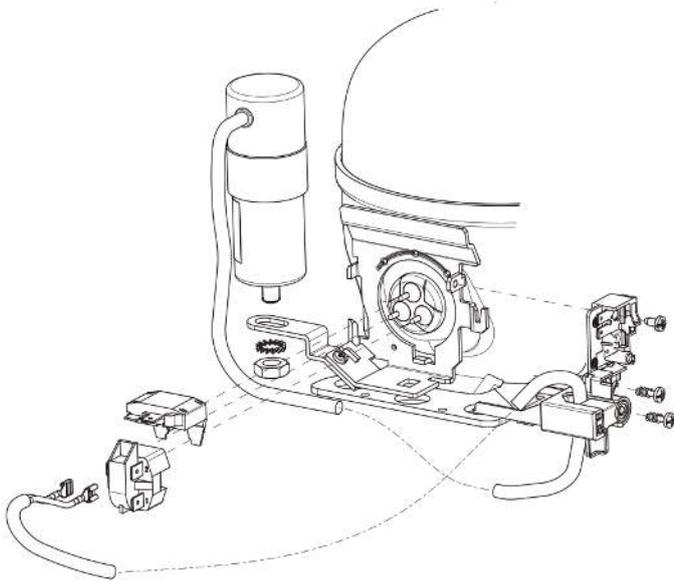
SM27 - NT SERIES 3-Phase (Internal + External Overload Protector)



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

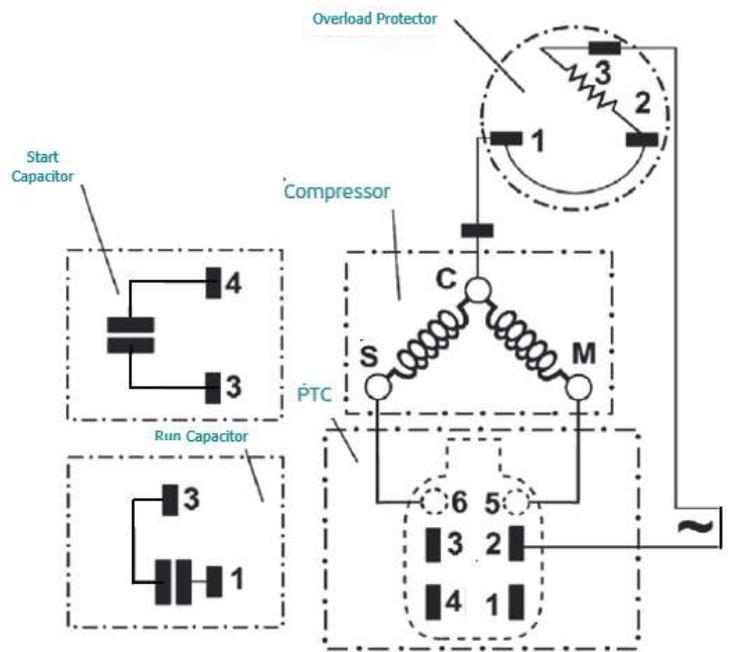
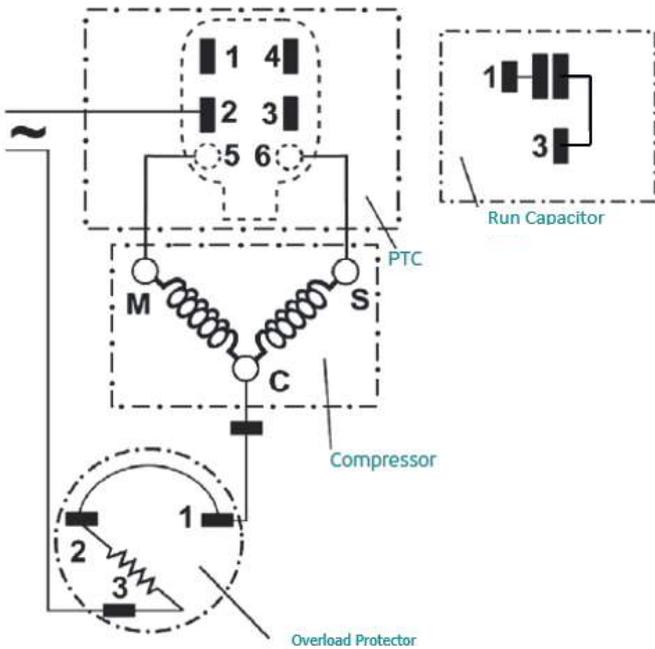


SM32 - EM RSCR PTC & 4TM

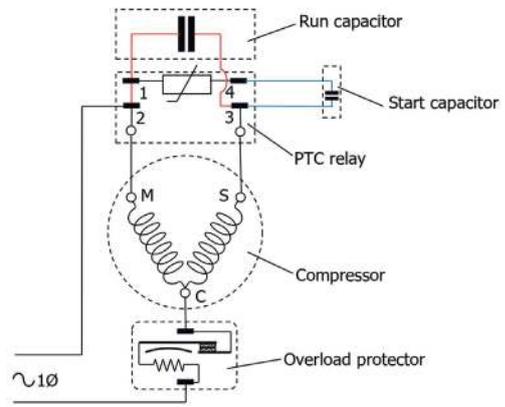
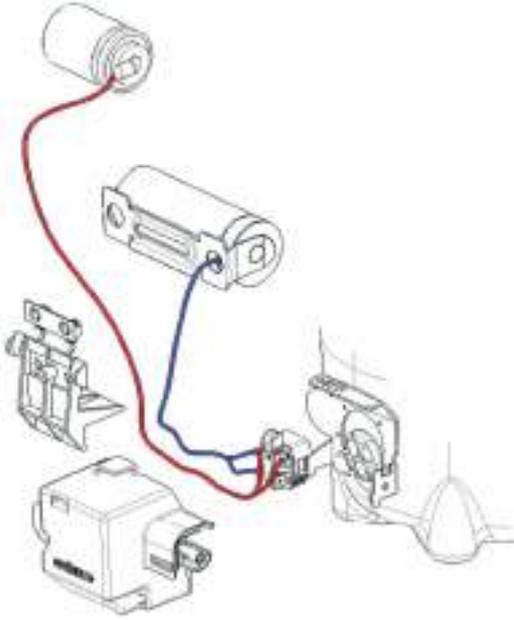


SM34 - EG,F RSCR

SM33 - EM CSCR

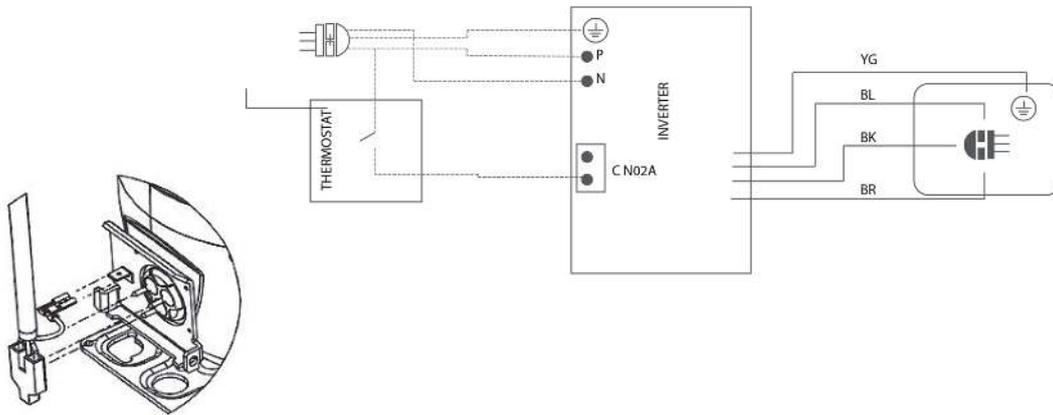


F - COMPRESSOR

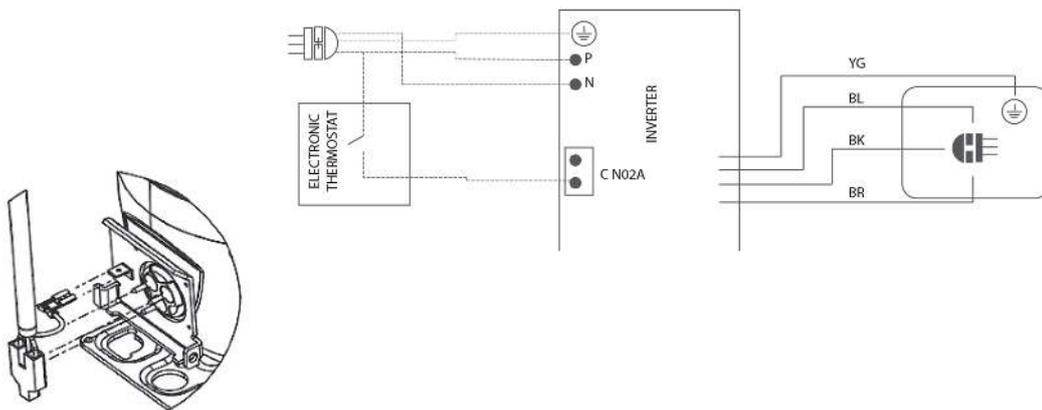


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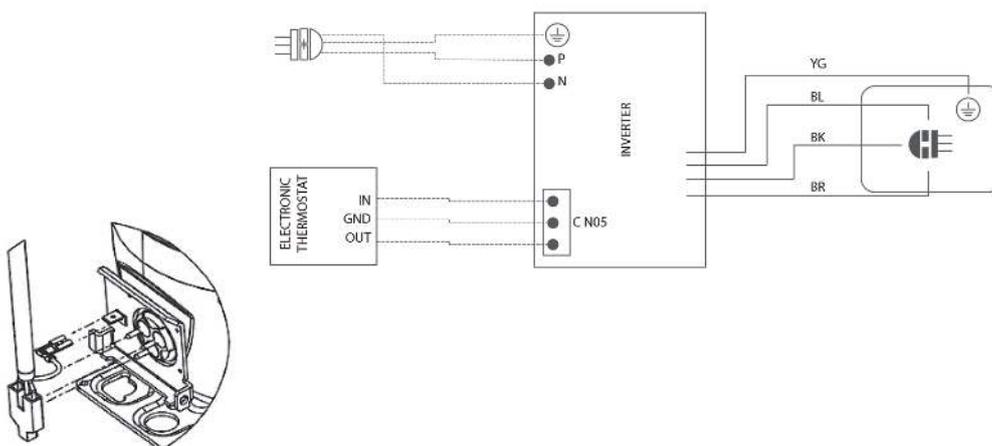
CON01 - VEMY6 / VEG (Drop-in)



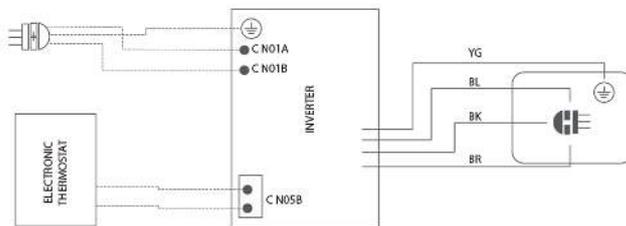
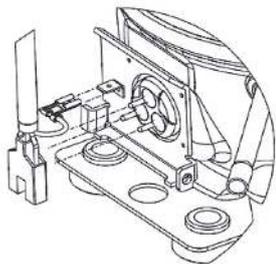
CON02 - VEM / VEG (Frequency)



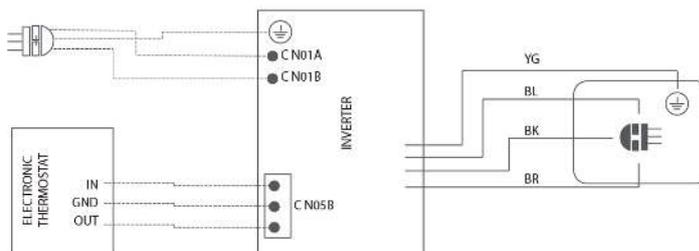
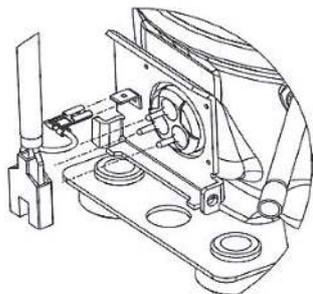
CON03 - VEMY6 / VEG (Serial)



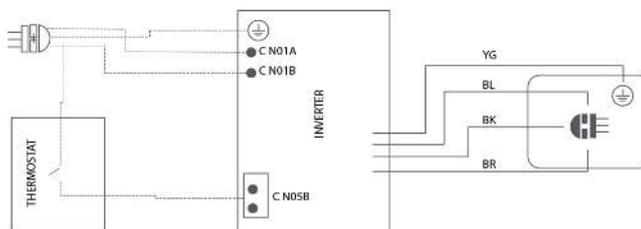
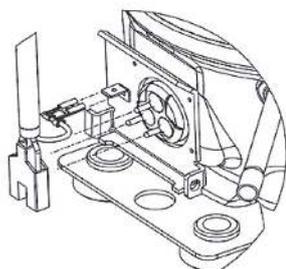
CON04 - VEM (Frequency)



CON05 - VEM (Serial)



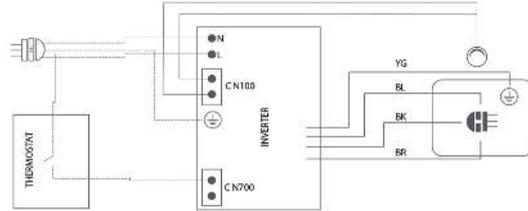
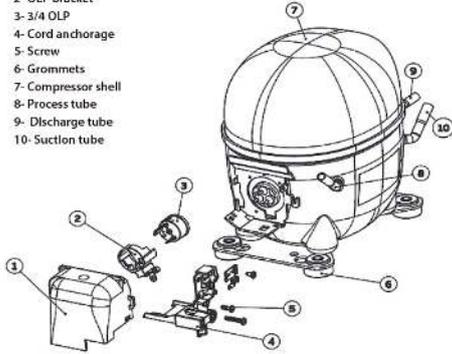
CON06 - VEM (Drop-in)



WIRING DIAGRAMS

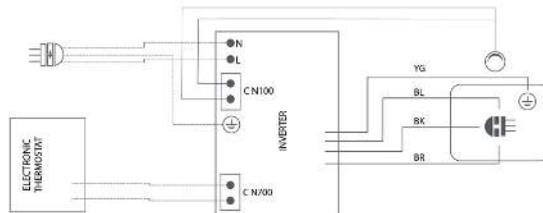
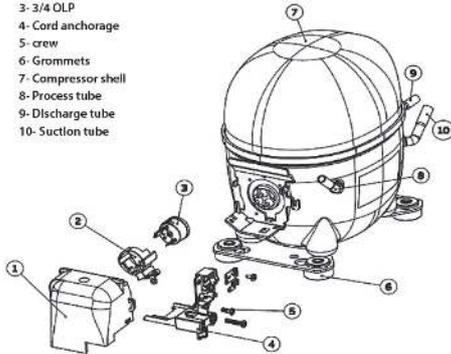
CON07 - VNE (Drop-in)

- 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



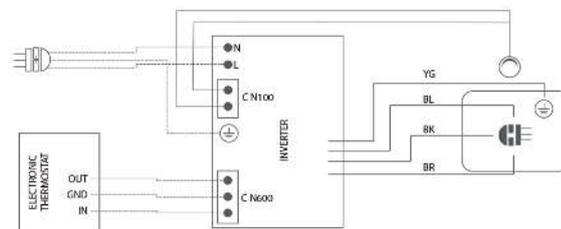
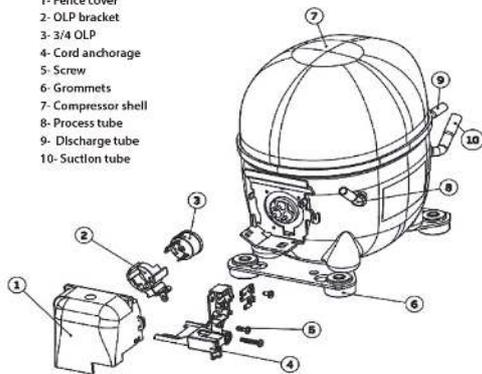
CON08 - VNE (Frequency)

- 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

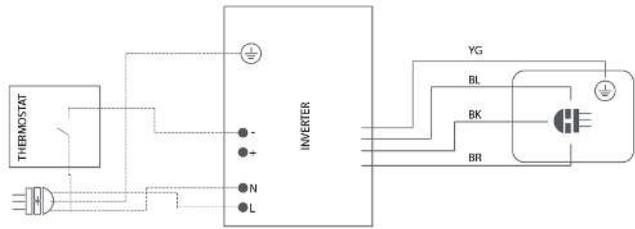
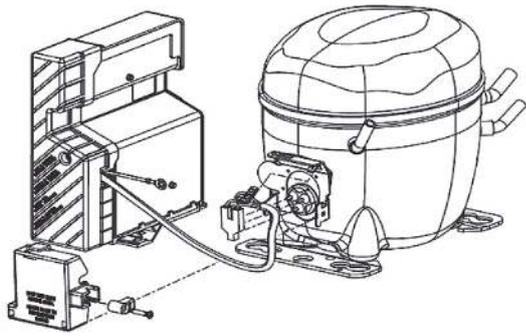


CON09 - VNE (Serial)

- 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/FMF (Drop-in)



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.



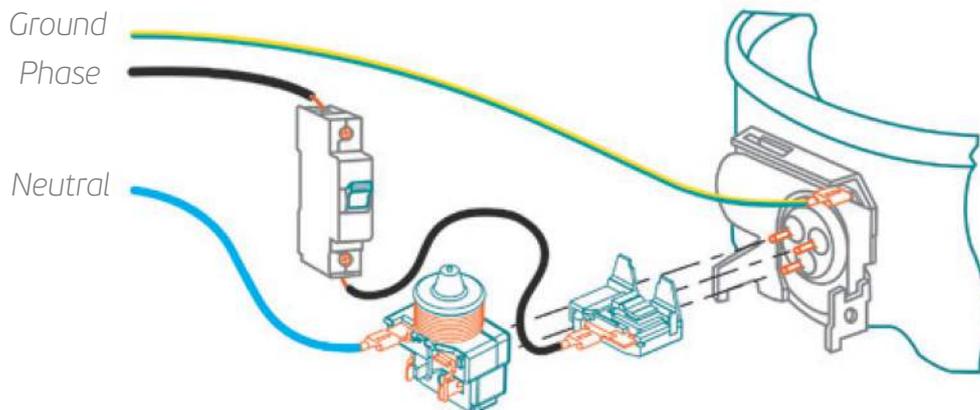
The incorrect removal of these accessories may damage the hermetic terminal on the compressor which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable refrigerant utilization, since associated with an ignition source,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

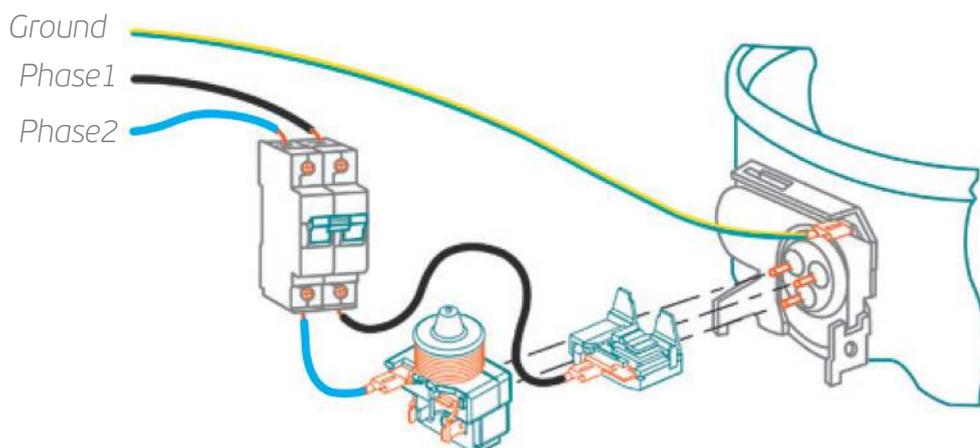


The use of incorrect electrical components, (overload protector, starting device) can cause a short circuit in the region the hermetic terminal of the compressor, which can lead to the hermetic pins to be dislodged, causing refrigerant leakage. This situation becomes more critical in the case of flammable 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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