

# GENERAL CATALOGUE

Compressors & Condensing Units



for Commercial Refrigeration  
R134a · R404A · R507 · R600a · R290



**cubigel**<sup>®</sup>  
compressors  
by  
HUAYI  
COMPRESSOR  
BARCELONA







For every type of application

The most complete range of products



Sustainable Cooling

Natural Refrigerants



Low energy consumption

Worldwide presence



Mobile applications

# HUAYI COMPRESSOR BARCELONA

Leading manufacturer  
of compressors



## **Huayi Compressor Barcelona**

focuses on developing advanced compressor technologies to meet the commercial refrigeration market requirements worldwide.

# 50 years

of experience in designing,  
manufacturing and selling  
hermetic compressors  
and condensing units for the  
commercial refrigeration market



<b>1. General Information</b>	
The Company	9
The Product	11
Family of Compressors and Condensing Units	12
The Green Cooling Ranges	14
DC Compressors for mobile applications	16
Compressor ranges main characteristics	17
Identification Labels and Approvals	17
Compressor Nomenclature	18
Voltage	19
Applications	19
Safe Operating Area	20
Type of Electrical Motors	22
Compressor Product Summary	23
Condensing Unit	24
Features, Benefits and Customized Versions	24
Condensing Unit Designation	25
Condensing Unit Product Summary	25
How to Read the Catalogue	26
<b>2. Compressor Catalogue</b>	
R134a	29
R404A / R507	39
R290 / R600a	45
<b>3. Condensing Unit Catalogue</b>	
R134a	54
R404A / R507	55
R290	58
R134a – DC Compressor	59
<b>4. Technical Information</b>	
Compressor Dimensional Drawings	62
Condensing Units Layouts	64
Packaging	66
Fixings	72
Wiring Diagrams	74





# 1.

## General Information





Research and Development

Leadership



Reliability

Innovation



Cutting-edge technology

People



# The Company

Huayi Group has a global presence; headquarters in China and subsidiaries in Europe.

## Huayi Compressor Co., Ltd.

Huayi Compressor Co., Ltd. was founded in 1990, located in Jingdezhen, China, and is a worldwide leader of household compressor manufacturing. It specializes in the production of hermetic compressors with a complete range from 40W to 400W for refrigerators, water dispensers and dehumidifiers, among other household appliances.

The core value of the company is “Employee, Customer and Shareholder Satisfaction”.

## Huayi Compressor Barcelona, S.L.

Huayi Compressor Barcelona, S.L., subsidiary of Huayi Group, was founded in 1962 under the name of Unidad Hermética with the aim of producing hermetic compressors and cooling equipment. Today, the company belongs to Huayi Compressors Co. Ltd.

Oriented to develop quality product supported by European production, with more than 100 million compressors produced under the Cubigel Compressors® brand, the company mission has remained the same during its 51 years of experience developing compressors and satisfying the refrigeration market trends of Commercial Refrigeration.

The compressors are designed to optimize energy consumption to reduce the effects of Global Warming, which are the goals of innovative R&D, focused on developing a wide range of products apt for the market requirements.





# The Product

## Extended range of compressors

The most complete range of hermetic compressors for every commercial application under the Cubigel Compressor® brand. The offer includes more than 500 different models of compressors from ranges of 2.4 to 34cc, in most refrigerant gases, main voltages and types of applications.



## Condensing Units

High quality hermetic condensing units with a wide range of options for most Commercial Refrigeration applications being also able to work under tropical temperature conditions. The range of condensing unit models covers both standard and customized versions.



## The green cooling ranges

The advanced design of the Green Cooling ranges allows a remarkable efficiency improvement. These ranges comprise High Efficiency, Natural Refrigerants and the Variable Speed Compressors. This last one is crucial to reduce refrigeration energy consumption as the motor is electronically controlled.



## Compressors for mobile applications

The best DC power supply compressors for mobile applications that are used in recreational vehicles, such as boats, caravans, cars that are equipped with refrigerators and freezers; and also in trucks or other transportation vehicles equipped with air conditioners in the sleeping cabins.



# Family of Compressors and Condensing Units

## D range



**Features:**

Very compact design, Low weight, extra silent

**Range:**

2.40 to 4.03 cc

**Refrigerants:**

R134a, R600a

**Applications:**

Water Coolers, Can Coolers, Bottle Coolers, Small Refrigerators and Freezers

## L range

**Features:**

The highest efficient range with propane (R290) & isobutene (R600a)

**Range:**

4.00 to 10.97 cc

**Refrigerants:**

R134a, R404A, R600a, R290, R507

**Applications:**

Household Refrigerators, Bottle Coolers and Freezers, Can Coolers, Chest Freezers, Vending Machines, Ice Cream Freezers, Beer Dispensers, Ice Makers, Soft Drink Dispensers, Heat Pumps Systems



## P range

**Features:**

High Efficiency versions

The highest efficient range with propane (R290) & isobutene (R600a) range with propane (R290) & isobutene (R600a)

**Range:**

12.00 - 16.00 cc

**Refrigerants:**

R134a, R404A, R600a, R290, R507

**Applications:**

Household Refrigerators, Bottle Coolers and Freezers, Can Coolers, Chest Freezers, Vending Machines, Ice Cream Freezers, Beer Dispensers, Ice Makers, Soft Drink Dispensers



# X range



**Features:**

High reliability & efficiency. New design to work under heavy duty operation conditions

**Range:**

16.00 to 23.00 cc

**Refrigerants:**

R134a, R404A, R290, R407C, R507

**Applications:**

Large Freezers (vertical and chest), Blast Freezers, Ice Makers, Vending Machines, Display Cabinets, Display Islands, Soft Drink Dispensers

# S range



**Features:**

Top capacity range, Optimized design to reduce vibration

**Range:**

18.00 to 34.42 cc

**Refrigerants:**

R134a, R404A, R407C, R507

**Applications:**

Large Freezers (vertical and chest), Soft drinks dispensers, Blast Freezers, Air Dryers, Ice Makers, Air Conditioning, Vending Machines, Heat Pumps, Display, Cabinets and Islands

# CONDENSING UNITS



**Features:**

Complete range of Condensing Units from 2.4 to 34 cc

High reliability & top-quality components

Specific customized versions

Designed to work under 43° C tropical conditions

**Refrigerants:**

R134a, R404A, R290, R407C, R507

**Applications:**

Suitable for all applications



# The Green Cooling Ranges

The most extended range of compressors for sustainable refrigeration in terms of energy consumption reduction.

The advanced design of the Green Cooling Ranges allows efficiency improvement providing energy consumption

reductions up to 45% compared to standard versions; consequently, lower CO<sub>2</sub> emissions to the atmosphere.

The Green Cooling Ranges comprise High Efficiency, Natural Refrigerants and Variable Speed Compressors.

The Green Cooling range gets to improve the compressor COP between 20% and 30% in comparison with standard ranges.

## High Efficiency Ranges

The High Efficiency models reduce energy consumption of commercial refrigeration appliances between 10% and 30% with respect to standard ranges. Most High-Efficiency models are equipped with electric motors, designed with the "optional run capacitor" concept, that is, the compressor can work with or without a running capacitor (CSR/CSIR), offering the level of efficiency with the same compressor.



## Natural Refrigerants

Natural refrigerants like propane (R290) and isobutene (R600a) are being gradually introduced in commercial appliances, not only due to the replacement of H-CFC's and HFC's refrigerants which have high impact on environment, but also because it is more efficient in terms of performance and applications' energy consumption.

Refrigerant propane has no direct contribution to global warming and its energy consumption is between 10% to 15% lower than a similar application with R404A. The Cubigel Compressors® R290 compressors offer a higher cooling capacity and COP allowing energy-saving consumption with smaller displacement.

The major environmental benefits are obtained combining the use of the R290 with the design criteria of high efficiency ranges. These compressor models, in their more advanced version can save up to 50% of energy when compared with standard efficiency series of R404A thanks to its high-efficiency mechanics, its advanced motor winding design and the optional running capacitor concept.



### Variable Speed Compressors

The Variable Speed Compressor offers the lowest energy consumption by means of electronically self-adjusting the compressor's speed to the appliance's cooling needs, while improving COP up to 50%.

Using Smart Speed® software with communication capabilities, this compressor automatically achieves the best efficiency for the appliance while dynamically adapting the compressor's speed to the needed cooling capacity.

The major benefit can be obtained with a Variable Speed Compressor combined with the use of natural refrigerants, achieving a better performance with no contribution to global warming.

Variable Speed Compressors



**Features:**

- High Efficiency, Flexible Speed Drive
- Drop-in Configuration
- External Controlling
- 200-240 V / 50-60Hz

**Models:**

GLT99FSN, NPT12FSC, NLT60FSN

**Refrigerant:**

R290, R134a





## DC Compressors for mobile applications

The Cubigel Compressors mobile cooling solutions for transportation vehicles are designed to operate from a 12-42V DC power supply. These compressors are designed for mobile DC applications in boats, trucks, private cars, medical appliances in ambulances, truck cabin air conditioners, among others.

The GD30FDC model is the solution for users requiring comfort and reliability while traveling where a DC powered refrigerator is utilized.

The GLT80TDC is the answer to the needs of users requiring comfort and reliability while traveling, either on holidays, at work or in any other circumstance where a DC powered air conditioner is utilized.

The electronic driver from all Mobile Compressors include the Smart Speed® programming option, which is a plug-in system for automatically self-adapting compressor speed to the current thermal load.

The GD30FDC and GLT80TDC are designed to operate from a low voltage DC power supply to operate silently, efficiently and reliably even up to angles of tilt of 30° / 20° respectively, working with refrigerant R134a.

### DC Compressors Range



#### Features:

DC compressors for mobile applications, exceptionally silent  
GD30FDC VDE & UL approved  
Ready to work under heavy duty operating conditions  
12-42V DC / 24-42V DC / 48-56V DC / 100-240 V / 50-60Hz AC

#### Models:

GD30FDC, GLT80TDC.

#### Refrigerant:

R134a, R600A

# Compressor Ranges Main Characteristics

Compressor ranges - Main characteristics							
Range	Displacement (cm <sup>3</sup> )		Cooling capacity (W) [°F]				Weight (max) (kg)
			LBP		HMBP		
	min	max	min	max	min	max	
D	2.4	4	47	95	210	360	7
L	4.5	9.9	110	460	324	1410	11
P	10	16	190	775	1065	2080	13
X	16	23	400	1060	1655	3030	17
S	18	34	1215	1620	2475	5265	23

\*All refrigerants / Measured at ASHRAE rating condition 50 Hz

## Identification Labels and Approvals

The image shows a detailed identification label for a cubigel compressor. The label includes the following information:

- Model:** GL90TG
- Voltage:** 200-220 V-50 Hz and 220-230 V-60 Hz
- Approvals:** R134a, THERMALLY PROTECTED, and a square symbol with the number 2.
- Production Date:** 05101
- Bar Code:** 9720657468000148
- Refrigerant:** R134a
- Other text:** cubigel compressors, MADE IN SPAIN, and PH1.

Approvals

Directive compliance declarations

Flammable gases



# Compressor Nomenclature

model

**G L Y 6 0 R A a**

**G L Y 6 0 R A a**

Indicates refrigerant.

**G** = R134a                      **N** = R290  
**M** = R404A/R507              **H** = R600a

Indicates compressor range (overall design).

**D** = 2.4 - 4cm<sup>3</sup>                  **P** = 12 - 16cm<sup>3</sup>                  **S** = 18 - 34cm<sup>3</sup>  
**L** = 4.0 - 11cm<sup>3</sup>                  **X** = 16 - 23cm<sup>3</sup>

Indicates energy efficiency level. Not appearing in case of Standard efficiency.

**M** = Medium  
**Y** = High Efficiency - Run Capacitor Optional RSIR/RSCR or CSIR/CSR  
**T** = Top Efficiency - Run Capacitor RSCR or CSR

Indicates approximate compressor displacement under the following rule:

**D / L** ranges                      10 times the approx. displacement in cm<sup>3</sup>/rev (GL90TB -> approx 9 cm<sup>3</sup>/rev)  
**P / X / S** ranges                  The approx. displacement in cm<sup>3</sup>/rev (MX21TG -> approx 21 cm<sup>3</sup>/rev)

Indicates the starting torque, application type and compressor cooling:

<b>A</b> = LBP - LST - S	<b>G</b> = LBP - LST - S (RSCR only)	<b>T</b> = HMBP - HST - FAN
<b>B</b> = LBP - LST - OC	<b>L</b> = LBP - HST - Fan (Current Relay)	(CSR versions with Potential Relay)
<b>C</b> = LBP - LST - FAN	<b>M</b> = HMBP - LST/HST - S/FAN	<b>U</b> = AC - LST/HST - FAN
<b>D</b> = LBP - HST - S	<b>N</b> = MBP - LST/HST - S/FAN	<b>Y</b> = VHBP - HST - Fan
<b>E</b> = LBP - HST - OC	<b>P</b> = HMBP - LST - FAN	
<b>F</b> = LBP - HST - FAN	<b>R</b> = HMBP - HST - FAN	
	(CSR versions with Current Relay)	

Indicates the rated voltage:

<b>A</b> = 220-240V 50Hz	<b>G</b> = 200-220V 50Hz/220-230V 60Hz	<b>T</b> = 200-220V 50Hz
<b>B</b> = 220-240V 50Hz (old ranges)	<b>J</b> = 100V 50/60Hz	<b>U</b> = 208-230V 60Hz
<b>C</b> = 100V 50/60Hz (old ranges)	<b>M</b> = 115-127V 60Hz	<b>3</b> = 3 phase 400-440V 50/60Hz
<b>D</b> = 115V 60Hz	<b>L/N</b> = 200-220V 50Hz or 200-240V 50Hz	
<b>E</b> = 115V 60Hz (old ranges)	220-230V 60Hz (50°C)	
<b>F</b> = 208-230V 60Hz (old ranges)	<b>R</b> = 115-127V 60Hz (old ranges)	

Indicates a variant of the model that only affects the configuration of electrical components. Its meaning may vary from model to model. It does not appear on the compressor label but it is used for ordering, invoicing and Cubigel internal processes.

**Examples:**

1. In high-efficiency compressors ("Y" series, i.e.: GPY12LA or MLY80RD), the letters "a" or "b" may indicate the type of electrical connection corresponding to the electrical accessories supplied with the compressor.

2. In HMBP models of D range, R134a refrigerant (i.e.: GD30MB or GD40MB) it indicates the electrical accessories corresponding to the following situations:

- a** = no use of running capacitor
- b** = use of running capacitor
- c** = static cooling and with starting capacitor
- d** = fan cooling and with starting capacitor

- a** = static cooling and without starting capacitor
- b** = fan cooling and without starting capacitor

# Voltage

The standards consider the voltage variation of the network to be within +/- 6% of its rated value, nevertheless the Cubigel Compressors® motors' design is able to work within -15% of the lowest rating and +10% of the highest rating.

Compressor Voltage Versions		
Voltage version	Compressor rating	Voltage operative range
A or B	220-240 V 50 Hz	187-264 V 50 Hz
C or J	100 V 50/60 Hz	85-110 V 50/60 Hz
D or E	115 V 60 Hz	98-127 V 60 Hz
G or F L or N	200- 220/220-230 V 50/60 Hz	170-242/187-253 V 50/60 Hz
M or R	115-127V 60Hz	98-140V 60Hz
T	200-220V 50Hz	187-242V 50Hz
U	208-230V 60Hz	177-253V 60Hz
3	400/440 V 50/60 Hz 3ph	340-440/374-484 V 50/60 Hz

# Applications

Based on the characteristics of the system for which the compressor is intended, compressors are classified in different groups of application.

## Low Back Pressure (LBP) Compressors.

Evaporating temperature range: -35 to -10°C [-31°F to +14°F] (down to -40°C [-40°F] for refrigerant R404A).

Rating condition: -25°C [-13°F] (CECOMAF) or -23.3°C [-10°F] (ASHRAE).

## Medium Back Pressure (MBP) Compressors.

Evaporating temperature range: -25°C to 0°C [-10 °F to 32°F]

## High Medium Back Pressure (HMBP) Compressors.

Evaporating temperature range: -25 to +10 °C [-13°F to +50°F].

Rating condition: +5°C [+41°F] (CECOMAF) or +7.2°C [+45°F] (ASHRAE).

## High Back Pressure (HBP) Compressors.

Evaporating temperature range: -15°C to +10°C [+5°F to +50°F].

Rating condition: +5°C [+41°F] (CECOMAF) or +7.2°C [+45°F] (ASHRAE).

## Very High Back Pressure (VHBP) Compressors.

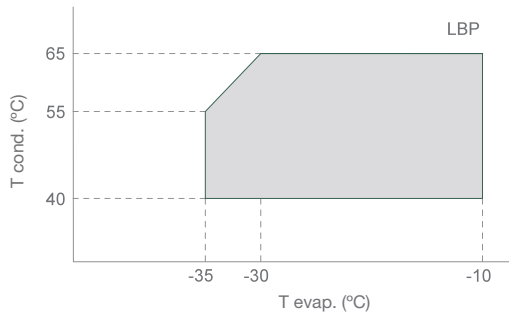
Evaporating temperature range 0°C to +25°C [+32 to +77°F] with condensing temperature up to +75°C [+167°F].

The rating condition is defined by an internal Cubigel Compressors® standard: Te = +10°C [+50°F].

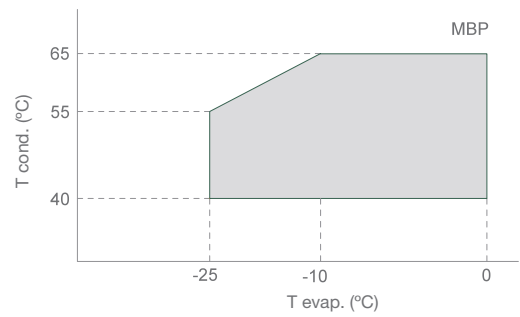
# SOA - Safe Operating Area

In order to grant the compressor reliability it is recommended that the point representing the operating conditions (suction and discharge pressures) falls within the shadowed area of the corresponding graph.

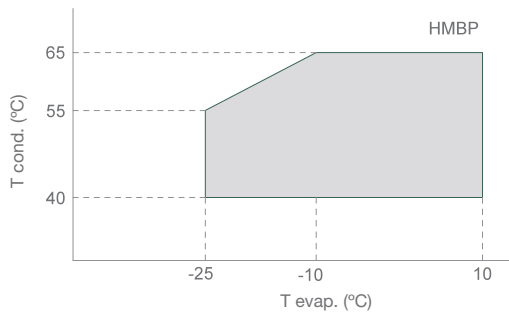
**SOA R134a LBP**



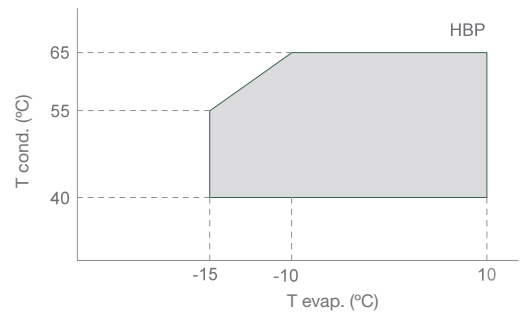
**SOA R134a MBP**



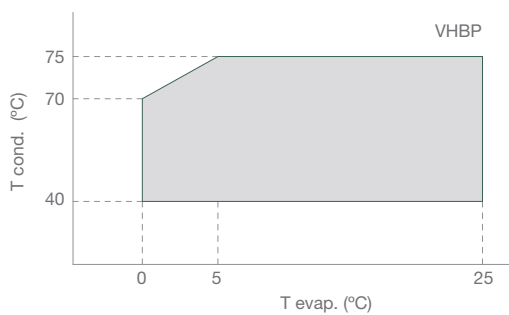
**SOA R134a HMBP**



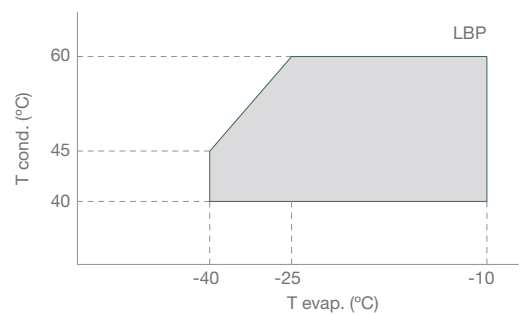
**SOA R134a HBP**



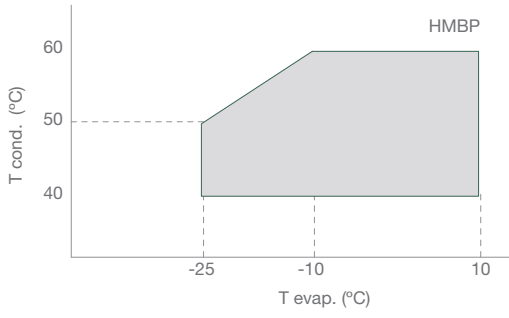
**SOA R134a VHBP**



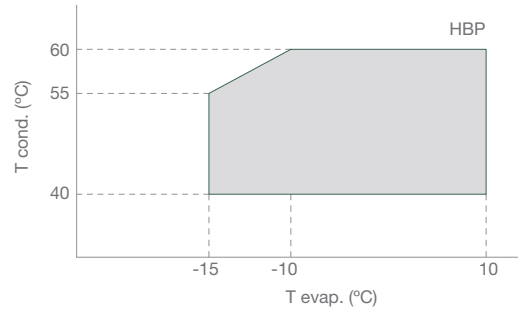
**SOA R404A LBP**



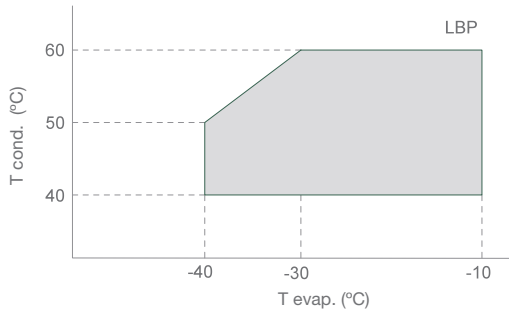
**SOA R404A HMBP**



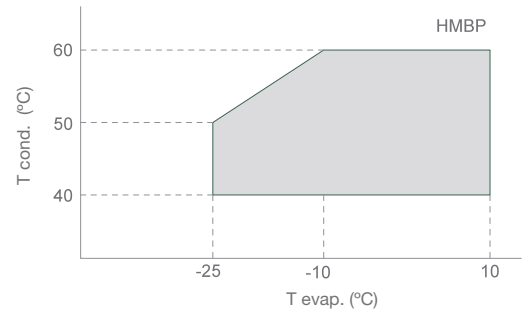
**SOA R404A HBP**



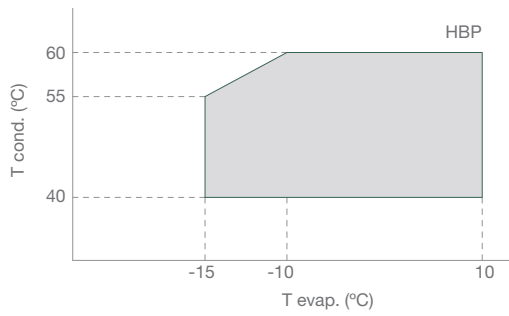
**SOA R290 LBP**



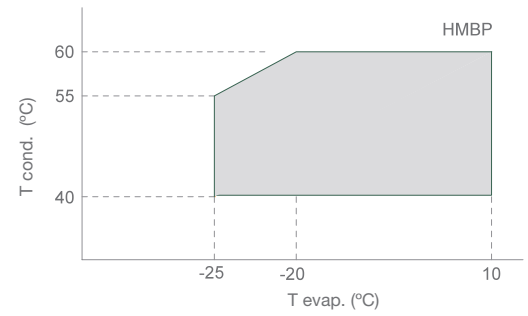
**SOA R290 HMBP**



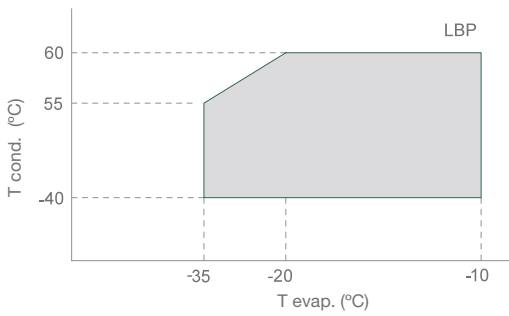
**SOA R290 HBP**



**SOA R600a HMBP**



**SOA R600a LBP**





# Types of Electrical Motors

## RSIR (Resistance Start-Induction Run)

LST motor. No capacitors. Auxiliary winding is disconnected after start up. Standard energy efficiency.

## CSIR (Capacitor Start-Induction Run)

HST motor. With starting capacitor. Auxiliary winding is disconnected after start up. Standard efficiency.

## RSCR (Resistance Start-Capacitor Run)

LST motor. With running capacitor. Auxiliary winding remains connected after start up. Used for high efficiency in small capacity compressors (particularly in household refrigeration)

## CSR (Capacitor Start and Run)

HST motor. Two capacitors (starting and running). Auxiliary winding remains connected after start up. Used for high efficiency in small compressors and for size reduced size motors in compressors with comparatively large displacements.

Single phase motor classification				
Capacitor type	HST With starting capacitor		LST Without starting capacitor	
	With Running capacitor	Motor type: <b>CSR</b>	Starting device: Current relay + NTC for L & P ranges  Potential relay for P, X & S ranges	Motor type: <b>RSCR</b>
Without Running capacitor	Motor type: <b>CSIR</b>	Starting device: Current Relay	Motor type: <b>RSIR</b>	Starting device: <b>Current Relay or PTC</b>

## Type of starting device

**Current relay** – (electromechanical). RSIR/CSIR motors and CSR low/medium-power motors with NTC (the NTC is connected in series with the starting capacitor and the main propose is to reduce the current peaks in the relay contacts)

**Potential relay** – (electromechanical). CSR high-power motors.

**PTC** – (Positive Temperature Coefficient), the resistance increases with the temperature. Device only with RSIR orRSCR motors in the D, L and P ranges.

**NTC** – (Negative Temperature Coefficient), the resistance decreases with the temperature. Used in some CSR in order to reduce dimensions and components.

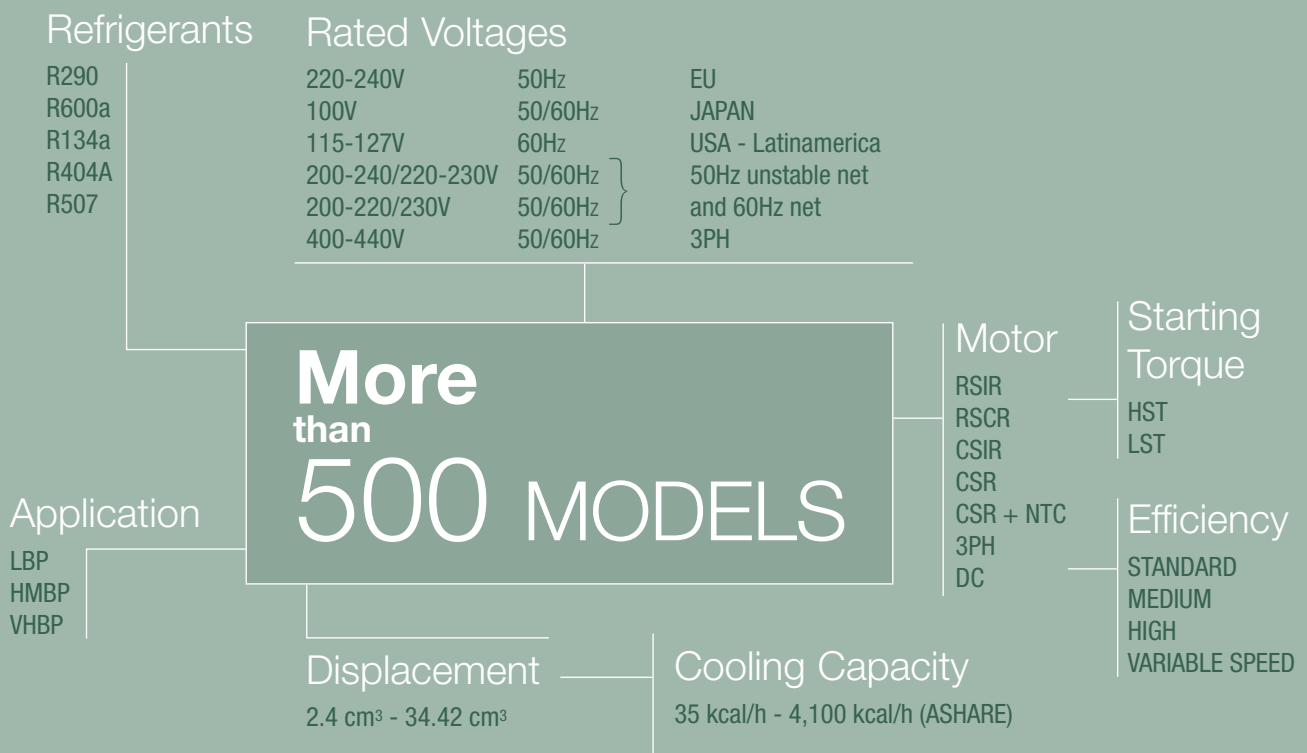
## Type of torque

**LST** – Low Starting Torque – Systems with capillary tube or balanced pressures at start up.

**HST** – High Starting Torque – Systems with expansion valve or capillary tube, with unbalanced pressures at start up.



# Compressors Product Summary



# Condensing Units

## Features, Benefits and Customized versions

Cubigel Compressors offers a complete range of Condensing Units either standard or customized version, along with a wide variety of components to assemble customized condensing units.

### Features and Benefits

- Complete range from 2.4 to 34 cc
- High reliability & top-quality components
- High Efficiency version available
- Specific customized range
- Designed to work under 43°C
- Suitable for all refrigerants & applications

### Condensing Units



### Main specific components

- Special power supply cable
- Special assembly supports (base plates)
- Dryer filters included (ceramic, molecular)
- Special pressure switches
- Non-assembled components
- Thermostat cables
- Special copper tubes (T connections)
- Sight glass
- Schrader valves
- Specific packaging
- Capillary tube
- Drain tray

### Main specific services

- Units UL approved on request
- Certified laboratory facilities at customer disposal
- Quick prototype building
- Quick quotation system

# Condensing Unit Versions

### Version "1"

Basic equipment to be directly connected by soldering to the tubes of the condenser. Applicable to systems with a capillary expansion device.

### Version "2"

Equipped with service valves in order to facilitate the connection and installation.

### Version "3"

Equipped with service valves and liquid receiver. Applicable to systems with expansion valve.

### Version "3P"

Version "3" additionally equipped with a hp/lp pressure switch.

### Version "4"

Version "1" additionally equipped with a Schrader valve on the refrigerant charging.

# Condensing Unit Designation

model  
**CMS34TB3M2F**

**C M S 3 4 T B 3 M 2 F**

**C** = Condensing Unit

**MS34TB** = Compressor model

**1-2-3-4** = Version

**M** = 38°C **N** = 43°C Max. Amb. Temp.

**2F (Optional)** = Two Fans - **P (Optional in v.3)** = hp/lp pressure switch

## Condensing Units Summary

### Refrigerants

R290  
R600a  
R134a  
R404A  
R507

### Rated Voltages

220-240V	50Hz	EU
100V	50/60Hz	JAPAN
115-127V	60Hz	USA - Latinamerica
200-240/220-230V	50/60Hz	50Hz unstable net and 60Hz net
200-220/230V	50/60Hz	3PH
400-440V	50/60Hz	

**More than 500**  
**STANDARD MODELS**

### Standard Versions

- 1
- 2
- 3
- 3P
- 4

### Application

LBP  
HMBP  
VHBP

### Displacement

2.4 cm<sup>3</sup> - 34.42 cm<sup>3</sup>

### Cooling Capacity

35 kcal/h - 4,100 kcal/h (ASHARE)

# How to read this Catalogue

## Compressors

	MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
										COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
										Cecomaf (W)			Ashrae					
										-25	-15	5	10	7.2	7.2			
		W	COP	kcal/h	COP													
	<b>R404A</b>	<b>HMBP   HBP</b>	<b>50 Hz</b>															
	ML40TB	4.05	1/6	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	133	214	<b>473</b>	<b>1.43</b>	558	<b>510</b>	<b>1.74</b>	10.0	Lc
	ML40TG	4.05	1/6	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	133	214	<b>473</b>	<b>1.43</b>	558	<b>510</b>	<b>1.74</b>	10.0	Lc
	ML45TB	4.50	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	151	238	<b>528</b>	<b>1.49</b>	624	<b>570</b>	<b>1.82</b>	10.1	Lc
	ML45TG	4.50	1/5	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	151	238	<b>528</b>	<b>1.49</b>	624	<b>570</b>	<b>1.82</b>	10.0	Lc
Indicates Green Cooling models	MLY60RAa	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	212	346	<b>766</b>	<b>1.77</b>	902	<b>825</b>	<b>2.15</b>	10.5	Lc
	MLY60RAb	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	212	346	<b>766</b>	<b>1.93</b>	902	<b>825</b>	<b>2.36</b>	10.5	Lc
	ML60TB	5.68	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	166	277	<b>647</b>	<b>1.53</b>	769	<b>700</b>	<b>1.85</b>	10.1	Lc
	ML60TG	5.68	1/4	HMBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	166	277	<b>647</b>	<b>1.53</b>	769	<b>700</b>	<b>1.85</b>	10.0	Lc
	MLY80RAa	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.86</b>	1250	<b>1140</b>	<b>2.27</b>	10.2	Ld
	MLY80RAb	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	282	463	<b>1055</b>	<b>2.02</b>	1250	<b>1140</b>	<b>2.46</b>	10.2	Ld
	ML80TB	7.57	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	227	385	<b>880</b>	<b>1.63</b>	1040	<b>950</b>	<b>1.99</b>	11.4	Ld
	ML80TG	7.57	3/8	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	227	385	<b>880</b>	<b>1.63</b>	1040	<b>950</b>	<b>1.99</b>	11.2	Ld
Indicates New models	MLY90RAa	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	317	512	<b>1132</b>	<b>1.75</b>	1334	<b>1220</b>	<b>2.13</b>	11.3	Ld
	MLY90RAb	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	317	511	<b>1136</b>	<b>1.92</b>	1340	<b>1225</b>	<b>2.34</b>	11.3	Ld
	ML90TB	8.86	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.63</b>	1250	<b>1140</b>	<b>1.98</b>	11.6	Ld
	ML90TG	8.86	3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.63</b>	1250	<b>1140</b>	<b>1.98</b>	12.7	Ld
	MP12RB	12.05	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	373	634	<b>1463</b>	<b>1.89</b>	1732	<b>1580</b>	<b>2.30</b>	13.5	Pd
	MP12TG	12.05	1/2	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	373	634	<b>1463</b>	<b>1.85</b>	1732	<b>1580</b>	<b>2.25</b>	13.5	Pd
	MPT12RA (**)	12.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	398	676	<b>1560</b>	<b>1.93</b>	1845	<b>1685</b>	<b>2.35</b>	12.6	Pd
	MP14RB	14.17	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	463	765	<b>1674</b>	<b>1.76</b>	1963	<b>1800</b>	<b>2.14</b>	13.5	Pd
	MPT14RA (**)	14.32	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	478	784	<b>1760</b>	<b>1.81</b>	2078	<b>1900</b>	<b>2.20</b>	13.5	Pd
	MX16TB	16.03	3/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	484	818	<b>1880</b>	<b>1.76</b>	2225	<b>2030</b>	<b>2.15</b>	16.2	Xc
	MX18TB	18.40	7/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	554	937	<b>2157</b>	<b>1.78</b>	2554	<b>2330</b>	<b>2.18</b>	16.0	Xd
	MX18TG	18.40	7/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	554	937	<b>2157</b>	<b>1.78</b>	2554	<b>2330</b>	<b>2.18</b>	17.0	Xd
	MX21TB	20.72	1	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	625	1052	<b>2425</b>	<b>1.77</b>	2873	<b>2620</b>	<b>2.15</b>	17.4	Xd
	MX21TG	20.72	1	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	625	1052	<b>2425</b>	<b>1.77</b>	2873	<b>2620</b>	<b>2.15</b>	17.6	Xd
	MS18T3	18.10	7/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	423	838	<b>2137</b>	<b>1.92</b>	2557	<b>2320</b>	<b>2.35</b>	20.0	Sc
	MS22TB	21.75	1	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	453	972	<b>2566</b>	<b>2.04</b>	3077	<b>2789</b>	<b>2.50</b>	20.5	Sc
	MS22T3	21.75	1	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	453	975	<b>2576</b>	<b>2.01</b>	3090	<b>2800</b>	<b>2.45</b>	20.0	Sc
	MS26TB	25.93	1 3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	675	1295	<b>3185</b>	<b>2.02</b>	3789	<b>3449</b>	<b>2.46</b>	23.0	Sd
	MS26TG	25.93	1 3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	675	1295	<b>3186</b>	<b>2.02</b>	3791	<b>3451</b>	<b>2.46</b>	23.0	Sd
	MS26T3	25.93	1 3/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	675	1295	<b>3186</b>	<b>2.01</b>	3791	<b>3451</b>	<b>2.45</b>	18.6	Sd
	MS34TB	34.42	1 5/8	HBP	F	220-240V 50Hz ~1	CSR	R	C-V	1012	1860	<b>4231</b>	<b>1.92</b>	4959	<b>4551</b>	<b>2.30</b>	22.7	Sd
	MS34T3	34.42	1 5/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	1007	1860	<b>4231</b>	<b>1.82</b>	4958	<b>4551</b>	<b>2.20</b>	22.8	Sd
	MS34TG	34.42	1 5/8	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	1012	1860	<b>4231</b>	<b>1.92</b>	4959	<b>4551</b>	<b>2.30</b>	22.7	Sd

# Condensing Units

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C										VERSION "3"				
								Cooling capacity CECOMAF & ASHRAE										DIMENSIONS W x L x H mm	SUCTION Inch	COMPRESSION Inch	WEIGHT Kg	DESIGN
								-25	-15	-5	5	7.2			10							
												W	W <sub>inp</sub>	A								
CGD30MB_N	3.08	1/10	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	71	119	191	285	309	168	1.02	341	255x300x200	1/4	1/4	8.7	4A	
CGD36MB_N	3.62	1/10	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	91	147	230	341	369	196	1.0	407	255x300x200	1/4	1/4	8.8	4A	
CGD40MB_N	4.06	1/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	97	156	243	357	385	215	1.0	423	255x300x200	1/4	1/4	9.6	4A	
CGL45PB_N	4.50	1/6	43	T	HMBP	220-240V 50Hz ~1	RSIR	C-V	108	183	286	416	448	238	1.0	491	320x425x220	3/8	1/4	14.5	3B	
CGL45TB_N	4.50	1/6	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	108	183	286	416	448	238	1.0	491	320x425x220	3/8	1/4	14.5	3B	
CGL45TG_N	4.50	1/6	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C-V	109	180	279	407	439	219	1.0	482	320x425x220	3/8	1/4	14.5	3B	
CGLY45RAa_N	4.56	1/6	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	140	208	312	452	490	235	1.0	535	320x425x235	3/8	1/4	16	3B	
CGLY45Rab_N	4.56	1/6	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	140	208	312	452	490	211	0.99	535	320x425x235	3/8	1/4	16	3B	
CGL60PB_N	5.68	1/5	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	130	232	361	520	558	271	1.0	609	320x425x235	3/8	1/4	17	3B	
CGL60TB_N	5.68	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	130	232	361	520	558	271	1.0	609	320x425x235	3/8	1/4	17	3B	
CGL60TG_N	5.68	1/5	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C-V	136	227	366	551	599	271	1.0	662	320x425x235	3/8	1/4	17	3B	
CGLY60RAa_N	5.98	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	137	251	396	573	616	264	1.0	673	340x425x235	3/8	1/4	17	3B	
CGLY60Rab_N	5.98	1/5	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	137	251	396	573	616	242	0.99	673	340x425x235	3/8	1/4	17	3A	
CGL80PB_N	7.57	1/5	43	T	HMBP	220-240V 50Hz ~1	RSIR	C-V	166	285	441	636	684	343	2.02	747	340x425x235	3/8	1/4	17	3B	
CGL80TB_N	7.57	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	166	285	441	636	684	343	2.02	747	340x425x235	3/8	1/4	17	3B	
CGL80TG_N	7.57	1/5	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C-V	178	300	473	699	755	333	2.02	831	340x425x235	3/8	1/4	17	3B	
CGLY80RAa_N	8.10	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	219	351	543	795	858	349	2.02	943	340x425x235	3/8	1/4	18.5	3B	
CGLY80Rab_N	8.10	1/5	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	219	351	543	795	858	324	1.0	943	320x425x235	3/8	1/4	18.5	3A	
CGL90PB_N	8.85	1/4	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	203	341	533	780	842	386	2.02	924	340x425x235	3/8	1/4	18.5	3B	
CGL90TB_N	8.85	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	203	341	533	780	842	386	2.02	924	340x425x235	3/8	1/4	18.5	3B	
CGL90TG_N	8.85	1/4	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C-V	193	335	529	775	836	382	1.99	917	340x425x235	3/8	1/4	18.5	3B	
CGLY90RAa_N	9.09	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	215	360	564	827	893	437	2.0	981	350x425x270	3/8	1/4	19.5	3B	
CGLY90Rab_N	9.09	1/4	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	215	360	564	827	893	397	2.02	981	350x425x270	3/8	1/4	19.5	3A	
CGP12PB_N	12.05	3/8	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	251	448	704	1019	1097	604	3.02	1199	350x425x270	3/8	1/4	20	3B	
CGP12TB_N	12.05	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	251	448	704	1019	1097	604	3.02	1199	350x425x270	3/8	1/4	20	3B	
CGP12TG_N	12.05	3/8	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C-V	251	412	671	1030	1123	539	2.99	1247	350x425x270	3/8	1/4	20	3B	
CGPY12RAa_N	12.10	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	314	504	768	1104	1188	571	3.02	1300	350x425x270	3/8	3/8	21.5	3B	
CGPY12Rab_N	12.10	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	314	504	768	1104	1188	523	1.99	1300	350x425x270	3/8	3/8	21.5	3A	
CGP14PB_N	14.17	3/8	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	292	498	778	1130	1217	668	4.01	1334	350x425x270	3/8	1/4	21.5	3B	
CGP14TB_N	14.17	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	292	498	778	1130	1217	668	4.01	1334	350x425x270	3/8	1/4	21.5	3B	
CGP14TG_M	14.17	3/8	38	-	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C-V	327	534	820	1184	1275	630	2.99	1395	350x425x270	3/8	1/4	21.5	3B	
CGPY14RAa_N	14.32	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	442	618	867	1190	1270	623	2.99	1378	365x510x300	3/8	3/8	23.5	2D	
CGPY14Rab_N	14.32	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	442	618	867	1190	1270	579	3.02	1378	365x510x300	3/8	3/8	23.5	2E	
CGPY16RAa_N	16.15	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C-V	390	644	964	1350	1444	659	2.99	1568	365x510x300	3/8	3/8	23.5	2D	
CGPY16Rab_N	16.15	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C-V	390	644	964	1350	1444	659	2.99	1568	365x510x300	3/8	3/8	23.5	2D	



# 2.

## Compressors Catalogue

# R134a

# R134a (\*) LBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
											-25				-23.3			
									-35	-30	W	COP	-10	kcal/h	COP			
GD24AA	2.44	1/20	LBP	S	220-240V 50Hz ~1	RSIR	P	C	12	22	<b>34</b>	<b>0.51</b>	85	<b>41</b>	<b>0.68</b>	5.3	Db	
GD30AA	3.08	1/12	LBP	S	220-240V 50Hz ~1	RSIR	P	C	23	36	<b>52</b>	<b>0.74</b>	117	<b>62</b>	<b>0.96</b>	5.6	Dc	
GD30AG	3.08	1/12	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	21	34	<b>49</b>	<b>0.6</b>	111	<b>58</b>	<b>0.79</b>	5.9	Dc	
GD36AA	3.62	1/12	LBP	S	220-240V 50Hz ~1	RSIR	P	C	28	43	<b>61</b>	<b>0.76</b>	136	<b>72</b>	<b>0.99</b>	5.7	Dc	
GD36AFa	3.62	1/12	LBP	S	200-220/230V 50/60Hz ~1	RSIR	P	C	26	40	<b>58</b>	<b>0.63</b>	128	<b>68</b>	<b>0.83</b>	5.9	Dc	
GD36AFb	3.62	1/12	LBP	S	200-220/230V 50/60Hz ~1	CSIR	R	C-V	26	40	<b>58</b>	<b>0.63</b>	128	<b>68</b>	<b>0.83</b>	5.9	Dc	
GD40AA	4.06	1/10	LBP	S	220-240V 50Hz ~1	RSIR	P	C	34	50	<b>70</b>	<b>0.77</b>	155	<b>82</b>	<b>1.00</b>	6.1	Dd	
GD40AF	4.06	1/10	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	31	47	<b>66</b>	<b>0.67</b>	147	<b>78</b>	<b>0.88</b>	6.8	Dd	
GLY45AAa	4.56	1/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	47	65	<b>89</b>	<b>1.01</b>	192	<b>104</b>	<b>1.30</b>	8.7	Lb	
GLY45AAb	4.56	1/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	48	66	<b>90</b>	<b>1.05</b>	193	<b>105</b>	<b>1.36</b>	8.7	Lb	
GL45AAa	4.56	1/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	37	57	<b>81</b>	<b>0.81</b>	184	<b>96</b>	<b>1.06</b>	7.9	Lb	
GL45AAb	4.56	1/8	LBP	S	220-240V 50Hz ~1	CSIR	R	C-V	37	57	<b>81</b>	<b>0.81</b>	184	<b>96</b>	<b>1.06</b>	7.9	Lb	
GL45ANa	4.56	1/8	LBP	S	200-240/220-230V 50/60Hz ~1	RSIR	P	C	36	56	<b>80</b>	<b>0.78</b>	184	<b>95</b>	<b>1.03</b>	8.4	Lb	
GLY60AAa	5.98	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	58	85	<b>119</b>	<b>1.03</b>	255	<b>139</b>	<b>1.34</b>	8.7	Lb	
GLY60AAb	5.98	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	58	86	<b>120</b>	<b>1.10</b>	256	<b>140</b>	<b>1.42</b>	8.7	Lb	
GL60AAa	5.98	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	50	75	<b>107</b>	<b>0.85</b>	239	<b>126</b>	<b>1.10</b>	8.4	Lb	
GL60AAb	5.98	1/6	LBP	S	220-240V 50Hz ~1	CSIR	R	C-V	50	75	<b>107</b>	<b>0.85</b>	239	<b>126</b>	<b>1.10</b>	8.4	Lb	
GL60ANa	5.98	1/6	LBP	S	200-240/220-230V 50/60Hz ~1	RSIR	P	C	57	82	<b>114</b>	<b>0.83</b>	244	<b>133</b>	<b>1.09</b>	9.1	Lc	
GL60ANb	5.98	1/6	LBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	57	82	<b>114</b>	<b>0.83</b>	244	<b>133</b>	<b>1.09</b>	9.1	Lc	
GL60ANc	5.98	1/6	LBP	S	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	57	82	<b>114</b>	<b>0.83</b>	244	<b>133</b>	<b>1.09</b>	9.1	Lc	
GLY80AAa	8.10	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	92	123	<b>164</b>	<b>1.07</b>	349	<b>191</b>	<b>1.37</b>	10.0	Lc	
GLY80AAb	8.10	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	93	124	<b>165</b>	<b>1.13</b>	351	<b>192</b>	<b>1.45</b>	10.0	Lc	
GL80AAa	8.10	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	68	102	<b>144</b>	<b>0.89</b>	326	<b>170</b>	<b>1.15</b>	9.0	Lc	
GL80AAb	8.10	1/5	LBP	S	220-240V 50Hz ~1	CSIR	R	C-V	68	102	<b>144</b>	<b>0.89</b>	326	<b>170</b>	<b>1.15</b>	9.0	Lc	
GL80ANa	8.10	1/5	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	75	107	<b>148</b>	<b>0.83</b>	331	<b>174</b>	<b>1.09</b>	9.8	Ld	
GL80ANb	8.10	1/5	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	75	107	<b>148</b>	<b>0.83</b>	331	<b>174</b>	<b>1.09</b>	9.8	Ld	
GL80ANc	8.10	1/5	LBP	S	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	75	107	<b>148</b>	<b>0.83</b>	331	<b>174</b>	<b>1.09</b>	9.8	Ld	
GLY90AAa	9.09	1/4	LBP	S	220-240V 50Hz ~1	RSIR	P	C	104	140	<b>186</b>	<b>1.07</b>	387	<b>216</b>	<b>1.37</b>	10.5	Ld	
GLY90AAb	9.09	1/4	LBP	S	220-240V 50Hz ~1	RSCR	P	C	103	140	<b>187</b>	<b>1.13</b>	388	<b>217</b>	<b>1.45</b>	10.5	Ld	
GL90AAa	9.09	1/4	LBP	S	220-240V 50Hz ~1	RSIR	P	C	82	119	<b>165</b>	<b>0.90</b>	351	<b>193</b>	<b>1.15</b>	9.4	Lc	
GL90AAb	9.09	1/4	LBP	S	220-240V 50Hz ~1	CSIR	R	C-V	82	119	<b>165</b>	<b>0.90</b>	351	<b>193</b>	<b>1.15</b>	9.4	Lc	
GL90ANa	9.09	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	85	118	<b>163</b>	<b>0.84</b>	366	<b>191</b>	<b>1.10</b>	10.4	Ld	
GL90ANb	9.09	1/4	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	85	118	<b>163</b>	<b>0.84</b>	366	<b>191</b>	<b>1.10</b>	10.4	Ld	
GL90ANc	9.09	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	85	118	<b>163</b>	<b>0.84</b>	366	<b>191</b>	<b>1.10</b>	10.4	Ld	
GL99AAa	9.95	1/4	LBP	S	220-240V 50Hz ~1	RSIR	P	C	83	125	<b>175</b>	<b>0.92</b>	377	<b>205</b>	<b>1.19</b>	9.6	Ld	
GL99AAb	9.95	1/4	LBP	S	220-240V 50Hz ~1	CSIR	R	C-V	83	125	<b>175</b>	<b>0.92</b>	377	<b>205</b>	<b>1.19</b>	9.6	Ld	
GPY12AAa	12.10	3/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	128	178	<b>241</b>	<b>0.96</b>	500	<b>280</b>	<b>1.23</b>	11.5	Pd	
GPY12AAb	12.10	3/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	128	178	<b>241</b>	<b>1.04</b>	500	<b>280</b>	<b>1.33</b>	11.5	Pd	
GPY12LAa	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	113	162	<b>225</b>	<b>1.00</b>	509	<b>265</b>	<b>1.30</b>	12.1	Pd	
GPY12LAb	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	113	162	<b>225</b>	<b>1.06</b>	509	<b>265</b>	<b>1.38</b>	12.1	Pd	
GP12CB	12.05	1/3	LBP	F	220-240V 50Hz ~1	RSIR	R	C	83	132	<b>190</b>	<b>0.88</b>	424	<b>225</b>	<b>1.14</b>	11.5	Pc	
GP12FB	12.05	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	83	132	<b>190</b>	<b>0.88</b>	424	<b>225</b>	<b>1.14</b>	11.5	Pc	
GP14CB	14.17	3/8	LBP	F	220-240V 50Hz ~1	RSIR	R	C	99	158	<b>228</b>	<b>0.90</b>	509	<b>270</b>	<b>1.16</b>	11.5	Pc	
GP14CG	14.17	3/8	LBP	F	200-220/220-230V 50/60Hz ~1	RSIR	R	C	99	158	<b>228</b>	<b>0.83</b>	509	<b>270</b>	<b>1.08</b>	11.5	Pc	

Green Cooling Models

(\*) Or HF01234yf / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B) R134a: W (C) x 1.02 = kcal/h (D)  
R134a: W (E) x 0.85 = kcal/h (F) R134a: W (G) x 0.97 = kcal/h (H)

W x 0.86 = kcal/h

This table continues in the following page



## R134a (\*) LBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25				-23.3					
									-35	-30	W	COP	-10	kcal/h	COP			
GP14FB	14.17	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	99	158	<b>228</b>	<b>0.90</b>	509	<b>270</b>	<b>1.16</b>	11.5	Pc	
GP14FC	14.17	3/8	LBP	F	100V 50/60Hz ~1	CSIR	R	C-V	99	158	<b>228</b>	<b>0.73</b>	509	<b>270</b>	<b>0.95</b>	12.9	Pd	
GPY16LAa	16.15	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	132	211	<b>305</b>	<b>1.01</b>	682	<b>360</b>	<b>1.31</b>	12.6	Pd	
GPY16Lab	16.15	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	132	211	<b>305</b>	<b>1.07</b>	682	<b>360</b>	<b>1.41</b>	12.6	Pd	
GP16CB	16.15	3/8	LBP	F	220-240V 50Hz ~1	RSIR	R	C	109	182	<b>266</b>	<b>0.89</b>	585	<b>315</b>	<b>1.14</b>	12.0	Pd	
GP16FB	16.15	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	109	182	<b>266</b>	<b>0.89</b>	585	<b>315</b>	<b>1.14</b>	12.0	Pd	
GP16FC	16.15	3/8	LBP	F	100V 50/60Hz ~1	CSIR	R	C-V	109	182	<b>266</b>	<b>0.78</b>	585	<b>315</b>	<b>1.02</b>	12.9	Pd	
GX21FB	20.72	2/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	151	243	<b>351</b>	<b>0.93</b>	778	<b>415</b>	<b>1.20</b>	15.5	Xc	

## R134a (\*) LBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25				-23.3					
									-35	-30	W	COP	-10	kcal/h	COP			
GD24ADa	2.44	1/20	LBP	S	115V 60Hz ~1	RSIR	P	C	14	26	<b>40</b>	<b>0.52</b>	100	<b>48</b>	<b>0.70</b>	5.1	Db	
GD24ADb	2.44	1/20	LBP	S	115V 60Hz ~1	CSIR	R	C-V	14	26	<b>40</b>	<b>0.52</b>	100	<b>48</b>	<b>0.70</b>	5.1	Db	
GD30AG	3.08	1/12	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	25	39	<b>57</b>	<b>0.67</b>	130	<b>68</b>	<b>0.88</b>	5.9	Dc	
GD36AD	3.62	1/12	LBP	S	115V 60Hz ~1	RSIR	P	C	30	47	<b>68</b>	<b>0.65</b>	150	<b>80</b>	<b>0.85</b>	6.7	Dc	
GD36AFa	3.62	1/12	LBP	S	200-220/230V 50/60Hz ~1	RSIR	P	C	30	47	<b>68</b>	<b>0.65</b>	150	<b>80</b>	<b>0.86</b>	5.9	Dc	
GD36AFb	3.62	1/12	LBP	S	200-220/230V 50/60Hz ~1	CSIR	R	C-V	30	47	<b>68</b>	<b>0.65</b>	150	<b>80</b>	<b>0.86</b>	5.9	Dc	
GD40AF	4.06	1/10	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	36	54	<b>77</b>	<b>0.70</b>	172	<b>91</b>	<b>0.91</b>	6.8	Dd	
GL45ADa	4.56	1/8	LBP	S	115V 60Hz ~1	RSIR	P	C	41	65	<b>95</b>	<b>0.80</b>	215	<b>112</b>	<b>1.05</b>	8.1	Lb	
GL45ADb	4.56	1/8	LBP	S	115V 60Hz ~1	CSIR	R	C-V	41	65	<b>95</b>	<b>0.80</b>	215	<b>112</b>	<b>1.05</b>	8.1	Lb	
GL45ANa	4.56	1/8	LBP	S	200-240/220-230V 50/60Hz ~1	RSIR	P	C	44	65	<b>93</b>	<b>0.83</b>	213	<b>110</b>	<b>1.09</b>	8.4	Lb	
GL60ADa	5.98	1/6	LBP	S	115V 60Hz ~1	RSIR	P	C	65	95	<b>132</b>	<b>0.85</b>	290	<b>155</b>	<b>1.10</b>	9.1	Lb	
GL60ADb	5.98	1/6	LBP	S	115V 60Hz ~1	CSIR	R	C-V	65	95	<b>132</b>	<b>0.85</b>	290	<b>155</b>	<b>1.10</b>	9.1	Lb	
GL60ANa	5.98	1/6	LBP	S	200-240/220-230V 50/60Hz ~1	RSIR	P	C	68	95	<b>131</b>	<b>0.88</b>	285	<b>153</b>	<b>1.15</b>	9.1	Lc	
GL60ANb	5.98	1/6	LBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	68	95	<b>131</b>	<b>0.88</b>	285	<b>153</b>	<b>1.15</b>	9.1	Lc	
GL60ANc	5.98	1/6	LBP	S	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	68	95	<b>131</b>	<b>0.88</b>	285	<b>153</b>	<b>1.15</b>	9.1	Lc	
GL80ADa	8.10	1/5	LBP	S	115V 60Hz ~1	RSIR	P	C	84	122	<b>171</b>	<b>0.87</b>	384	<b>201</b>	<b>1.13</b>	9.8	Lc	
GL80ADb	8.10	1/5	LBP	S	115V 60Hz ~1	CSIR	R	C-V	84	122	<b>171</b>	<b>0.87</b>	384	<b>201</b>	<b>1.13</b>	9.8	Lc	
GL80ANa	8.10	1/5	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	87	124	<b>172</b>	<b>0.92</b>	385	<b>202</b>	<b>1.19</b>	9.8	Ld	
GL80ANb	8.10	1/5	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	87	124	<b>172</b>	<b>0.92</b>	385	<b>202</b>	<b>1.19</b>	9.8	Ld	
GL80ANc	8.10	1/5	LBP	S	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	87	124	<b>172</b>	<b>0.92</b>	385	<b>202</b>	<b>1.19</b>	9.8	Ld	
GL90ADa	9.09	1/4	LBP	S	115V 60Hz ~1	RSIR	P	C	97	138	<b>191</b>	<b>0.88</b>	421	<b>224</b>	<b>1.14</b>	10.5	Ld	
GL90ADb	9.09	1/4	LBP	S	115V 60Hz ~1	CSIR	R	C-V	97	138	<b>191</b>	<b>0.88</b>	421	<b>224</b>	<b>1.14</b>	10.5	Ld	
GL90ANa	9.09	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	97	134	<b>185</b>	<b>0.93</b>	421	<b>218</b>	<b>1.20</b>	10.4	Ld	
GL90ANb	9.09	1/4	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	97	134	<b>185</b>	<b>0.93</b>	421	<b>218</b>	<b>1.20</b>	10.4	Ld	

Green Cooling Models

(\*) Or HF01234yf / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B)    R134a: W (C) x 1.02 = kcal/h (D)  
R134a: W (E) x 0.85 = kcal/h (F)    R134a: W (G) x 0.97 = kcal/h (H)





W x 0.86 = kcal/h

This table continues in the following page

## R134a (\*) LBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
									Cecomaf (W)				Ashrae				
									-35	-30	-25		-10	-23.3			
											W	COP		kcal/h	COP		
GL90ANc	9.09	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	97	134	<b>185</b>	<b>0.93</b>	421	<b>218</b>	<b>1.20</b>	10.4	Ld
GL99ADa	9.95	1/4	LBP	S	115V 60Hz ~1	RSIR	P	C	102	148	<b>205</b>	<b>0.89</b>	439	<b>240</b>	<b>1.15</b>	10.8	Ld
GL99ADb	9.95	1/4	LBP	S	115V 60Hz ~1	CSIR	R	C-V	102	148	<b>205</b>	<b>0.89</b>	439	<b>240</b>	<b>1.15</b>	10.8	Ld
GP14FE	14.17	3/8	LBP	F	115V 60Hz ~1	CSIR	R	C-V	116	185	<b>267</b>	<b>0.72</b>	596	<b>316</b>	<b>0.94</b>	12.9	Pd
GP14FC	14.17	3/8	LBP	F	100V 50/60Hz ~1	CSIR	R	C-V	116	185	<b>267</b>	<b>0.83</b>	596	<b>316</b>	<b>1.08</b>	12.9	Pd
GP14CG	14.17	3/8	LBP	F	200-220/220-230V 50/60Hz ~1	RSIR	R	C	113	181	<b>262</b>	<b>0.91</b>	589	<b>310</b>	<b>1.18</b>	11.5	Pc
GP16FE	16.15	3/8	LBP	F	115V 60Hz ~1	CSIR	R	C-V	125	209	<b>306</b>	<b>0.77</b>	672	<b>362</b>	<b>1.00</b>	12.9	Pd
GP16FC	16.15	3/8	LBP	F	100V 50/60Hz ~1	CSIR	R	C-V	125	209	<b>306</b>	<b>0.88</b>	672	<b>362</b>	<b>1.14</b>	12.9	Pd

## R134a (\*) HMBP | HBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
									Cecomaf (W)				Ashrae				
									-25	-15	5		10	7.2			
											W	COP		kcal/h	COP		
GD24MBc	2.44	1/14	HBP	S	220-240V 50Hz ~1	CSIR	R	C-V	36	64	<b>174</b>	<b>1.43</b>	212	<b>180</b>	<b>1.67</b>	5.1	Db
GD30MBa	3.08	1/10	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	49	88	<b>233</b>	<b>1.52</b>	282	<b>240</b>	<b>1.74</b>	5.8	Dc
GD30MBb	3.08	1/10	HMBP	F	220-240V 50Hz ~1	RSIR	P	C	49	88	<b>233</b>	<b>1.52</b>	282	<b>240</b>	<b>1.74</b>	5.8	Dc
GD30MBc	3.08	1/10	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	49	88	<b>233</b>	<b>1.52</b>	282	<b>240</b>	<b>1.74</b>	5.8	Dc
GD30MBd	3.08	1/10	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	49	88	<b>233</b>	<b>1.52</b>	282	<b>240</b>	<b>1.74</b>	5.8	Dc
GD36MBa	3.62	1/10	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	53	96	<b>261</b>	<b>1.52</b>	318	<b>270</b>	<b>1.74</b>	6.7	Dd
GD36MBb	3.62	1/10	HMBP	F	220-240V 50Hz ~1	RSIR	P	C	53	96	<b>261</b>	<b>1.52</b>	318	<b>270</b>	<b>1.74</b>	6.7	Dd
GD36MBc	3.62	1/10	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	53	96	<b>261</b>	<b>1.52</b>	318	<b>270</b>	<b>1.74</b>	6.7	Dd
GD36MBd	3.62	1/10	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	53	96	<b>261</b>	<b>1.52</b>	318	<b>270</b>	<b>1.74</b>	6.7	Dd
GD40MBa	4.06	1/8	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	64	117	<b>301</b>	<b>1.56</b>	363	<b>310</b>	<b>1.8</b>	6.7	Dd
GD40MBb	4.06	1/8	HMBP	F	220-240V 50Hz ~1	RSIR	P	C	64	117	<b>301</b>	<b>1.56</b>	363	<b>310</b>	<b>1.8</b>	6.7	Dd
GD40MBc	4.06	1/8	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	64	117	<b>301</b>	<b>1.56</b>	363	<b>310</b>	<b>1.8</b>	6.7	Dd
GD40MBd	4.06	1/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	64	117	<b>301</b>	<b>1.56</b>	363	<b>310</b>	<b>1.8</b>	6.7	Dd
 GLY45RAa	4.56	1/6	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	73	140	<b>374</b>	<b>1.96</b>	451	<b>385</b>	<b>2.25</b>	8.8	Lb
 GLY45RAb	4.56	1/6	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	73	140	<b>374</b>	<b>2.13</b>	451	<b>385</b>	<b>2.46</b>	8.8	Lb
GL45PB	4.50	1/6	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	76	134	<b>342</b>	<b>1.62</b>	413	<b>352</b>	<b>1.86</b>	8.4	Lb
GL45TB	4.50	1/6	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	76	134	<b>342</b>	<b>1.62</b>	413	<b>352</b>	<b>1.86</b>	8.0	Lb
GL45MG	4.50	1/6	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	71	133	<b>342</b>	<b>1.69</b>	412	<b>352</b>	<b>1.95</b>	8.8	Lb
GL45TG	4.50	1/6	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	76	134	<b>342</b>	<b>1.68</b>	413	<b>352</b>	<b>1.95</b>	8.8	Lb
 GLY60RAa	5.98	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	106	191	<b>486</b>	<b>2.06</b>	586	<b>500</b>	<b>2.36</b>	9.9	Lc
 GLY60RAb	5.98	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	106	191	<b>486</b>	<b>2.25</b>	586	<b>500</b>	<b>2.60</b>	9.9	Lc
GL60PB	5.68	1/5	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	95	170	<b>437</b>	<b>1.82</b>	528	<b>450</b>	<b>2.09</b>	9.5	Lc
GL60TB	5.68	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	95	170	<b>437</b>	<b>1.82</b>	528	<b>450</b>	<b>2.09</b>	8.6	Lb
GL60TG	5.68	1/5	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	95	170	<b>437</b>	<b>1.82</b>	528	<b>450</b>	<b>2.09</b>	9.9	Lc
GL60MG	5.68	1/5	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	85	155	<b>429</b>	<b>1.71</b>	526	<b>445</b>	<b>1.99</b>	9.9	Lb
GL60TC	5.68	1/5	HMBP	F	100V 50/60Hz ~1	CSIR	R	C-V	95	170	<b>437</b>	<b>1.73</b>	528	<b>450</b>	<b>2.01</b>	9.8	Lc

 Green Cooling Models

 New Models

(\*) Or HF01234yf / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B)

R134a: W (E) x 0.85 = kcal/h (F)










































R134a: W (C) x 1.02 = kcal/h (D)

R134a: W (G) x 0.97 = kcal/h (H)

W x 0.86 = kcal/h

This table continues in the following page

# R134a (\*) HMBP | HBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25	-15	5		10	7.2				
											W	COP		kcal/h	COP			
 GLY80RAa	8.10	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	159	275	<b>681</b>	<b>2.17</b>	819	<b>700</b>	<b>2.50</b>	10.4	Lc	
 GLY80RAb	8.10	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	159	275	<b>681</b>	<b>2.35</b>	819	<b>700</b>	<b>2.71</b>	10.4	Lc	
 GL80PB	7.57	1/5	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	111	212	<b>554</b>	<b>1.83</b>	668	<b>570</b>	<b>2.10</b>	9.5	Lc	
 GL80TB	7.57	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	111	212	<b>554</b>	<b>1.83</b>	668	<b>570</b>	<b>2.10</b>	9.2	Lc	
 GL80TG	7.57	1/5	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	111	212	<b>554</b>	<b>1.83</b>	668	<b>570</b>	<b>2.10</b>	10.1	Lc	
 GL80MG	7.57	1/5	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	136	220	<b>579</b>	<b>1.80</b>	709	<b>600</b>	<b>2.11</b>	10.1	Lc	
 GL80TC	7.57	1/5	HMBP	F	100V 50/60Hz ~1	CSIR	R	C-V	111	212	<b>554</b>	<b>1.87</b>	668	<b>570</b>	<b>2.21</b>	10.4	Lc	
 GLY90RAa	9.09	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	169	298	<b>748</b>	<b>2.06</b>	901	<b>770</b>	<b>2.37</b>	10.5	Lc	
 GLY90RAb	9.09	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	169	298	<b>748</b>	<b>2.27</b>	901	<b>770</b>	<b>2.61</b>	10.5	Lc	
 GL90PB	8.85	1/4	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	143	259	<b>661</b>	<b>1.91</b>	796	<b>680</b>	<b>2.20</b>	10.8	Ld	
 GL90TB	8.85	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	143	259	<b>661</b>	<b>1.91</b>	796	<b>680</b>	<b>2.20</b>	9.6	Lc	
 GL90TG	8.85	1/4	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	143	259	<b>661</b>	<b>1.81</b>	796	<b>680</b>	<b>2.08</b>	10.8	Ld	
 GL90MG	8.85	1/4	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	110	242	<b>665</b>	<b>1.81</b>	803	<b>685</b>	<b>2.10</b>	10.8	Ld	
 GL90TC	8.85	1/4	HMBP	F	100V 50/60Hz ~1	CSIR	R	C-V	143	259	<b>661</b>	<b>1.76</b>	796	<b>680</b>	<b>2.08</b>	10.9	Ld	
 GL11TB	10.97	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	190	330	<b>817</b>	<b>1.94</b>	985	<b>840</b>	<b>2.23</b>	10.3	Ld	
 GPY12RAa	12.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	228	401	<b>993</b>	<b>2.05</b>	1192	<b>1020</b>	<b>2.35</b>	12.6	Pd	
 GPY12RAb	12.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	228	401	<b>993</b>	<b>2.24</b>	1192	<b>1020</b>	<b>2.58</b>	12.6	Pd	
 GP12PB	12.05	3/8	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	169	338	<b>893</b>	<b>1.80</b>	1077	<b>920</b>	<b>2.06</b>	11.2	Pc	
 GP12TB	12.05	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	169	338	<b>893</b>	<b>1.80</b>	1077	<b>920</b>	<b>2.06</b>	10.1	Pc	
 GP12TG	12.05	3/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	169	338	<b>893</b>	<b>1.77</b>	1077	<b>920</b>	<b>2.02</b>	11.2	Pc	
 GPY14RAa	14.32	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	296	492	<b>1161</b>	<b>1.98</b>	1386	<b>1190</b>	<b>2.27</b>	12.6	Pd	
 GPY14RAb	14.32	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	296	492	<b>1161</b>	<b>2.18</b>	1386	<b>1190</b>	<b>2.50</b>	12.6	Pd	
 GPY16RAa	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	315	522	<b>1248</b>	<b>2.20</b>	1490	<b>1351</b>	<b>2.31</b>	12.8	Pd	
 GPY16RAb	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	315	522	<b>1248</b>	<b>2.38</b>	1490	<b>1351</b>	<b>2.50</b>	12.8	Pd	
 GP14PB	14.17	3/8	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	191	373	<b>999</b>	<b>1.77</b>	1209	<b>1030</b>	<b>2.03</b>	11.5	Pd	
 GP14TB	14.17	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	191	373	<b>999</b>	<b>1.77</b>	1209	<b>1030</b>	<b>2.03</b>	11.2	Pd	
 GP14TG	14.17	3/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	191	373	<b>999</b>	<b>1.77</b>	1209	<b>1030</b>	<b>2.03</b>	12.9	Pd	
 GP16TB	16.15	3/8	HBP	F	220-240V 50Hz ~1	CSIR	R	C-V	269	476	<b>1205</b>	<b>1.81</b>	1452	<b>1240</b>	<b>2.09</b>	13.1	Pd	
 GP16TG	16.15	3/8	HBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	269	476	<b>1205</b>	<b>1.82</b>	1452	<b>1240</b>	<b>2.09</b>	12.9	Pd	
 GPT16RG	16.15	1/2	HBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	305	539	<b>1364</b>	<b>2.08</b>	1644	<b>1404</b>	<b>2.39</b>	12.3	Pd	
 GX18TB	18.40	1/2	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	286	539	<b>1390</b>	<b>1.91</b>	1674	<b>1430</b>	<b>2.20</b>	15.0	Xc	
 GX18TG	18.40	1/2	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	286	539	<b>1390</b>	<b>1.91</b>	1674	<b>1430</b>	<b>2.20</b>	15.9	Xc	
 GX21TB	20.72	5/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	323	603	<b>1550</b>	<b>1.90</b>	1867	<b>1595</b>	<b>2.18</b>	17.0	Xd	
 GX23TB	23.20	5/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	368	678	<b>1730</b>	<b>1.89</b>	2083	<b>1780</b>	<b>2.18</b>	17.0	Xd	
 GX23TG	23.20	5/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	368	678	<b>1730</b>	<b>1.80</b>	2083	<b>1780</b>	<b>2.08</b>	17.0	Xd	
 GS26TB	25.93	3/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	265	703	<b>2071</b>	<b>2.09</b>	2515	<b>2140</b>	<b>2.42</b>	22.7	Sc	
 GS26TG	25.93	3/4	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	265	703	<b>2071</b>	<b>2.15</b>	2515	<b>2140</b>	<b>2.49</b>	22.7	Sc	
 GS26T3	25.93	3/4	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	265	703	<b>2071</b>	<b>2.21</b>	2515	<b>2140</b>	<b>2.55</b>	22.7	Sc	
 GS30TB	29.95	7/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	318	786	<b>2452</b>	<b>2.33</b>	3020	<b>2550</b>	<b>2.70</b>	22.7	Sd	
 GS30TG	29.95	7/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	318	786	<b>2452</b>	<b>2.33</b>	3020	<b>2550</b>	<b>2.70</b>	23.0	Sd	
 GS34TB	34.42	1	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	476	1068	<b>2852</b>	<b>2.28</b>	3422	<b>2931</b>	<b>2.62</b>	22.7	Sd	

 Green Cooling Models

 New Models

(\*) Or HF01234yf / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B)

R134a: W (E) x 0.85 = kcal/h (F)

R134a: W (C) x 1.02 = kcal/h (D)

R134a: W (G) x 0.97 = kcal/h (H)

W x 0.86 = kcal/h

# R134a (\*) HMBP | HBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									5		10		7.2					
									-25	-15	W	COP	10	kcal/h	COP			
GD24MEa	2.44	1/14	HMBP	S	115V 60Hz ~1	RSIR	P	C	38	75	203	1.41	247	210	1.63	5.1	Db	
GD24MEc	2.44	1/14	HMBP	S	115V 60Hz ~1	CSIR	R	C-V	38	75	203	1.41	247	210	1.63	5.1	Db	
GD30MEa	3.08	1/10	HMBP	S	115V 60Hz ~1	RSIR	P	C	57	104	272	1.43	330	281	1.63	5.8	Dc	
GD30MEb	3.08	1/10	HMBP	F	115V 60Hz ~1	RSIR	P	C	57	104	272	1.43	330	281	1.63	5.8	Dc	
GD30MEc	3.08	1/10	HMBP	S	115V 60Hz ~1	CSIR	R	C-V	57	104	272	1.43	330	281	1.63	5.8	Dc	
GD30MEd	3.08	1/10	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	57	104	272	1.43	330	281	1.63	5.8	Dc	
GD36MEa	3.62	1/10	HMBP	S	115V 60Hz ~1	RSIR	P	C	61	111	305	1.45	373	316	1.67	6.7	Dd	
GD36MEb	3.62	1/10	HMBP	F	115V 60Hz ~1	RSIR	P	C	61	111	305	1.45	373	316	1.67	6.7	Dd	
GD36MEc	3.62	1/10	HMBP	S	115V 60Hz ~1	CSIR	R	C-V	61	111	305	1.45	373	316	1.67	6.7	Dd	
GD36MEd	3.62	1/10	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	61	111	305	1.45	373	316	1.67	6.7	Dd	
GD40MEa	4.06	1/8	HMBP	S	115V 60Hz ~1	RSIR	P	C	74	137	353	1.47	425	363	1.69	6.7	Dd	
GD40MEb	4.06	1/8	HMBP	F	115V 60Hz ~1	RSIR	P	C	74	137	353	1.47	425	363	1.69	6.7	Dd	
GD40MEc	4.06	1/8	HMBP	S	115V 60Hz ~1	CSIR	R	C-V	74	137	353	1.47	425	363	1.69	6.7	Dd	
GD40MEd	4.06	1/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	74	137	353	1.47	425	363	1.69	6.7	Dd	
GL45MG	4.50	1/6	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	90	157	400	1.66	483	412	1.92	8.8	Lb	
GL45PE	4.50	1/6	HMBP	F	115V 60Hz ~1	RSIR	R	C	89	157	400	1.60	483	412	1.84	8.4	Lb	
GL45TE	4.50	1/6	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	89	157	400	1.60	483	412	1.84	8.6	Lb	
GL45TG	4.50	1/6	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	89	157	400	1.66	483	412	1.92	8.8	Lb	
GL60PE	5.68	1/5	HMBP	F	115V 60Hz ~1	RSIR	R	C	111	199	511	1.75	616	526	2.01	9.5	Lc	
GL60TE	5.68	1/5	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	111	199	511	1.75	616	526	2.01	9.7	Lc	
GL60MG	5.68	1/5	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	108	185	501	1.74	615	520	2.02	9.9	Lb	
GL60TC	5.68	1/5	HMBP	F	100V 50/60Hz ~1	CSIR	R	C-V	111	199	511	1.75	616	526	2.01	9.8	Lc	
GL60TG	5.68	1/5	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	111	199	511	1.77	616	526	2.04	9.9	Lc	
GLY80RDa	8.10	1/5	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	169	299	776	2.03	939	800	2.34	10.6	Lc	
GLY80RDb	8.10	1/5	HMBP	F	115V 60Hz ~1	CSR	R	C-V	169	299	776	2.18	939	800	2.51	10.6	Lc	
GL80PE	7.57	1/5	HMBP	F	115V 60Hz ~1	RSIR	R	C	130	249	648	1.79	781	667	2.04	9.5	Lc	
GL80TE	7.57	1/5	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	130	249	648	1.79	781	667	2.04	10.1	Lc	
GL80MG	7.57	1/5	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	203	276	677	1.86	830	702	2.15	10.1	Lc	
GL80TC	7.57	1/5	HMBP	F	100V 50/60Hz ~1	CSIR	R	C-V	130	249	648	1.93	781	667	2.22	10.4	Lc	
GL80TG	7.57	1/5	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	130	249	648	1.79	781	667	2.04	10.1	Lc	
GLY90RDa	9.09	1/4	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	198	348	875	1.96	1053	900	2.25	10.6	Lc	
GLY90RDb	9.09	1/4	HMBP	F	115V 60Hz ~1	CSR	R	C-V	198	348	875	2.11	1053	900	2.42	10.6	Lc	
GL90PE	8.85	1/4	HMBP	F	115V 60Hz ~1	RSIR	R	C	167	303	773	1.79	932	796	2.06	10.8	Ld	
GL90TE	8.85	1/4	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	167	303	773	1.79	932	796	2.06	10.8	Ld	
GL90TG	8.85	1/4	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	168	303	773	1.72	932	796	1.97	10.8	Ld	
GL90MG	8.85	1/4	HBP	S	230V 50/60Hz ~1	CSIR	R	C-V	172	300	775	1.84	940	800	2.11	10.8	Ld	
GL90TC	8.85	1/4	HMBP	F	100V 50/60Hz ~1	CSIR	R	C-V	167	303	773	1.83	932	796	2.10	10.9	Ld	
GPY12RDa	12.10	3/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	281	480	1151	1.96	1375	1180	2.25	12.3	Pd	
GPY12RDb	12.10	3/8	HMBP	F	115V 60Hz ~1	CSR	R	C-V	281	480	1151	2.12	1375	1180	2.44	12.3	Pd	
GP12PE	12.05	3/8	HMBP	F	115V 60Hz ~1	RSIR	R	C	198	395	1045	1.83	1260	1076	2.10	11.2	Pc	
GP12TE	12.05	3/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	198	395	1045	1.83	1260	1076	2.10	11.2	Pc	
GP12TG	12.05	3/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	198	395	1045	1.69	1260	1076	1.93	11.2	Pc	
GPY14RDa	14.32	1/2	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	318	516	1411	1.91	1739	1467	2.22	12.8	Pd	
GPY14RDb	14.32	1/2	HMBP	F	115V 60Hz ~1	CSR	R	C-V	318	516	1411	2.04	1739	1467	2.36	12.8	Pd	




Green Cooling Models

(\*) Or HFO1234yf / See design drawing on page 62  
 R134a: W (A) x 1.18 = kcal/h (B)    R134a: W (C) x 1.02 = kcal/h (D)  
 R134a: W (E) x 0.85 = kcal/h (F)    R134a: W (G) x 0.97 = kcal/h (H)

W x 0.86 = kcal/h

This table continues in the following page

## R134a (\*) HMBP | HBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
									Cecomaf (W)			Ashrae					
									-25	-15	5		10	7.2			
											W	COP		kcal/h			COP
GP14PE	14.17	3/8	HMBP	F	115V 60Hz ~1	RSIR	R	C	222	437	<b>1168</b>	<b>1.78</b>	1414	<b>1205</b>	<b>2.03</b>	11.5	Pd
GP14TE	14.17	3/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	222	437	<b>1168</b>	<b>1.78</b>	1414	<b>1205</b>	<b>2.03</b>	11.5	Pd
GP14TG	14.17	3/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	222	437	<b>1168</b>	<b>1.78</b>	1414	<b>1205</b>	<b>2.03</b>	12.9	Pd
 GPY16RDa	16.15	1/2	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	349	614	<b>1519</b>	<b>1.89</b>	1822	<b>1560</b>	<b>2.17</b>	12.5	Pd
 GPY16RDb	16.15	1/2	HMBP	F	115V 60Hz ~1	CSR	R	C-V	349	614	<b>1519</b>	<b>2.01</b>	1822	<b>1560</b>	<b>2.31</b>	12.5	Pd
GP16TE	16.15	3/8	HBP	F	115V 60Hz ~1	CSIR	R	C-V	313	557	<b>1409</b>	<b>1.71</b>	1698	<b>1450</b>	<b>1.96</b>	12.9	Pd
GP16TG	16.15	3/8	HBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	313	557	<b>1409</b>	<b>1.75</b>	1698	<b>1450</b>	<b>2.00</b>	12.9	Pd
 GPT16RG	16.15	1/2	HBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	342	619	<b>1596</b>	<b>2.06</b>	1923	<b>1612</b>	<b>2.37</b>	12.5	Pd
GX18TG	18.40	1/2	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	334	630	<b>1626</b>	<b>1.89</b>	1958	<b>1673</b>	<b>2.17</b>	15.9	Xc
GX23TG	23.20	5/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	429	792	<b>2022</b>	<b>1.73</b>	2434	<b>2080</b>	<b>1.98</b>	17.0	Xd
GS26TG	25.93	3/4	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	307	824	<b>2421</b>	<b>2.08</b>	2936	<b>2500</b>	<b>2.40</b>	22.7	Sc
GS26T3	25.93	3/4	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	307	824	<b>2421</b>	<b>2.09</b>	2936	<b>2500</b>	<b>2.40</b>	22.7	Sc
GS30TG	29.95	7/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	371	921	<b>2867</b>	<b>2.24</b>	3528	<b>2981</b>	<b>2.61</b>	23.0	Sd
GS34TF	34.42	1	HMBP	F	220-230V 60Hz ~1	CSR	R	C-V	551	1248	<b>3329</b>	<b>2.18</b>	3992	<b>3421</b>	<b>2.50</b>	22.7	Sd

Compressors  
R134a

## R134a (\*) MBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY					WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C						
									-25	-20	-10	-5	0		
									GD24NG	2.44	1/14	MBP	S		
GD24NBa	2.44	1/14	MBP	S	220-240V 50Hz ~1	RSIR	P	C	33	47	86	111	140	5.1	Db

## R134a (\*) MBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY					WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C						
									-25	-20	-10	-5	0		
									GD24NEa	2.44	1/14	MBP	S		
GD24NG	2.44	1/14	MBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	38	55	101	130	164	5.5	Db
GD30NEa	3.08	1/10	MBP	S	115V 60Hz ~1	RSIR	P	C	57	77	137	175	220	5.8	Dc
GD40NEa	4.06	1/8	MBP	S	115V 60Hz ~1	RSIR	P	C	74	102	180	230	288	6.0	Dd

 Green Cooling Models

(\*) Or HF01234yf / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B) R134a: W (C) x 1.02 = kcal/h (D)

W x 0.86 = kcal/h

R134a: W (E) x 0.85 = kcal/h (F) R134a: W (G) x 0.97 = kcal/h (H)

## R134a (\*) VHBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY					WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C						
									0	5	10	20	25		
GL45YG	4.50	1/6	VHBP	S	230V 50/60Hz ~1	CSIR	R	C-V	264	329	409	610	732	8.8	Lb
GL99YB	9.95	3/8	VHBP	S	220-240V 50Hz ~1	RSCR	P	C	592	750	930	1355	1599	11.2	Ld
GP12YG	12.05	3/8	VHBP	S	230V 50/60Hz ~1	CSIR	R	C-V	732	913	1130	1675	2003	12.7	Pd
GP14YB	14.17	3/8	VHBP	S	220-240V 50Hz ~1	RSCR	P	C	904	1101	1346	1980	2369	13.5	Pd
GP16YB	16.15	1/2	VHBP	S	220-240V 50Hz ~1	RSCR	P	C	931	1151	1404	2007	2358	13.5	Pd
GP16YGb	16.15	1/2	VHBP	S	230V 50/60Hz ~1	CSR	R	C-V	974	1201	1475	2167	2585	12.9	Pd

## R134a (\*) VHBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY					WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C						
									0	5	10	20	25		
GL45YG	4.5	1/6	VHBP	S	230V 50/60Hz ~1	CSIR	R	C-V	307	382	474	708	851	8.8	Lb
GP12YG	12.05	3/8	VHBP	S	230V 50/60Hz ~1	CSIR	R	C-V	856	1070	1324	1958	2337	12.7	Pd
GP16YGb	16.15	1/2	VHBP	S	230V 50/60Hz ~1	CSR	R	C-V	1131	1399	1723	2533	3021	12.9	Pd

## R134a HMBP • 50 | 60 Hz

## Variable Speed Compressors

MODEL	DISPLACEMENT cm <sup>3</sup>	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
								COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
								Cecomaf (W)			Ashrae					
								-25	-15	+10	+5	+7.2	+10			
GLT99FSN	9.95	HMBP	F	220-240V 50/60Hz ~1 100-127V 50/60Hz ~1 (**)	ECM	C-V	1800	115	205	<b>542</b>	<b>2.52</b>	658	<b>560</b>	<b>2.92</b>	11.2	Lc
							2100	135	242	<b>630</b>	<b>2.60</b>	764	<b>651</b>	<b>2.98</b>		
							2400	153	275	<b>712</b>	<b>2.54</b>	860	<b>734</b>	<b>2.92</b>		
							3000	188	340	<b>868</b>	<b>2.42</b>	1046	<b>894</b>	<b>2.77</b>		
							3600	222	391	<b>1030</b>	<b>2.30</b>	1253	<b>1065</b>	<b>2.62</b>		

Green Cooling Models

(\*) Or HF01234yf (\*\*) Model under development / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B) R134a: W (C) x 1.02 = kcal/h (D) W x 0.86 = kcal/h

R134a: W (E) x 0.85 = kcal/h (F) R134a: W (G) x 0.97 = kcal/h (H)

# R134a LBP | MBP | HBP • DC 50 | 60 Hz

# Mobile Compressors

MODEL	DISPLACEMENT cm <sup>3</sup>	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
								COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
								Cecomaf (W)			Ashrae					
								-30	-25		-10	+10	-23.3			
W	COP	kcal/h	COP													
GD30FDC 12-42V	3.0	LBP MBP HBP	S / F	12-24-42V DC	ECM	C	1500	18	<b>24</b>	<b>0.97</b>	57	150	<b>28</b>	<b>1.24</b>	5.4	Db (**)
							2000	25	<b>34</b>	<b>0.98</b>	82	210	<b>40</b>	<b>1.28</b>		
							2500	30	<b>42</b>	<b>0.96</b>	104	264	<b>50</b>	<b>1.26</b>		
							3000	35	<b>49</b>	<b>0.95</b>	122	-	<b>58</b>	<b>1.24</b>		
							3500	39	<b>54</b>	<b>0.94</b>	136	-	<b>64</b>	<b>1.22</b>		
GD30FDC Dual (*)	3.0	LBP MBP HBP	S / F	12-24-42V DC 100-240V 50/60Hz	ECM	C	1500	18	<b>24</b>	<b>0.97</b>	57	150	<b>28</b>	<b>1.24</b>	5.5	Db (**)
							2000	25	<b>34</b>	<b>0.98</b>	82	210	<b>40</b>	<b>1.28</b>		
							2500	30	<b>42</b>	<b>0.96</b>	104	-	<b>50</b>	<b>1.26</b>		
							3000	35	<b>49</b>	<b>0.95</b>	122	-	<b>58</b>	<b>1.24</b>		
							3500	39	<b>54</b>	<b>0.94</b>	-	-	<b>64</b>	<b>1.22</b>		
GD30FDC 48-56V (*)	3.0	LBP MBP HBP	S / F	48-56V DC	ECM	C	1500	18	<b>24</b>	<b>0.97</b>	57	150	<b>28</b>	<b>1.24</b>	5.4	Db (**)
							2000	25	<b>34</b>	<b>0.98</b>	82	210	<b>40</b>	<b>1.28</b>		
							2500	30	<b>42</b>	<b>0.96</b>	104	264	<b>50</b>	<b>1.26</b>		
							3000	35	<b>49</b>	<b>0.95</b>	122	-	<b>58</b>	<b>1.24</b>		
							3500	39	<b>54</b>	<b>0.94</b>	136	-	<b>64</b>	<b>1.22</b>		

Compressors R134a

# R134a HMBP • DC

# Mobile Compressors

MODEL	DISPLACEMENT cm <sup>3</sup>	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
								COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
								Cecomaf (W)			Ashrae					
								-25	-15		+10	+7,2				
W	COP	kcal/h	COP													
GLT80TDC 24-42V	8.1	HMBP	F	24-42V DC	ECM	C	1500	78	139	<b>362</b>	<b>1.93</b>	421	<b>369</b>	<b>2.19</b>	8.4	Lc (**)
							2000	107	190	<b>487</b>	<b>2.06</b>	565	<b>497</b>	<b>2.34</b>		
							2500	135	238	<b>601</b>	<b>1.99</b>	710	<b>613</b>	<b>2.26</b>		
							3000	161	281	<b>711</b>	<b>1.91</b>	840	<b>725</b>	<b>2.17</b>		
							3500	185	320	<b>818</b>	<b>1.82</b>	962	<b>834</b>	<b>2.07</b>		

(\*) Or HF01234yf (\*\*) Model under development / See design drawing on page 62

R134a: W (A) x 1.18 = kcal/h (B) R134a: W (C) x 1,02 = kcal/h (D) W x 0.86 = kcal /h

R134a: W (E) x 0.85 = kcal/h (F) R134a: W (G) x 0.97 = kcal/h (H)

	Conditions			
	CECOMAF		ASHRAE	
	LBP (A)	HMBP/HBP (C)	LBP (B)	HMBP/HBP (D)
Evaporating temperature °C	-25	5	-23,3	7,2
Condensing temperature °C	55	55	55	55
Liquid temperature °C	55	55	32	46
Suction temperature °C	32	32	32	35
Ambient temperature °C	32	32	32	35

	Conditions			
	HCB CECOMAF		HCB ASHRAE	
	MBP (E)	VHBP (G)	MBP (F)	VHBP (H)
Evaporating temperature °C	-10	25	-10	25
Condensing temperature °C	55	70	55	70
Liquid temperature °C	55	55	46	61
Suction temperature °C	32	32	35	35
Ambient temperature °C	32	32	35	35

### Measurement conversion

R134a  
W (A) x 1.18 = kcal/h (B) W (E) x 0.85 = kcal/h (F)  
W (C) x 1.02 = kcal/h (D) W (G) x 0.97 = kcal/h (H)

S compressor's range can be provided with tube or valve





# 2.

## Compressors Catalogue

# R404A/R507

# R404A • R507 (\*) LBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
											-25				-23.3			
									-40	-30	W	COP	-10	kcal/h	COP			
MLY40AAa	4.02	1/7	LBP	S	220-240V 50Hz ~1	RSIR	P	C	45	95	130	0.89	271	166	1.25	10.1	Lb	
MLY40AAb	4.02	1/7	LBP	S	220-240V 50Hz ~1	RSCR	P	C	45	95	130	0.94	271	166	1.32	10.1	Lb	
MLY45LAa	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	61	118	158	0.92	318	200	1.30	9.9	Lc	
MLY45LAb	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	61	118	158	0.98	318	200	1.38	9.9	Lc	
ML45FB	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	52	100	134	0.66	275	170	0.94	9.9	Lb	
ML45FG	4.56	1/6	LBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	52	100	134	0.68	275	170	0.96	10.3	Lc	
MLY60LAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	87	169	222	0.90	430	280	1.26	10.3	Lc	
MLY60LAb	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	87	169	222	0.97	430	280	1.36	10.3	Lc	
ML60FB	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	69	134	178	0.71	352	225	1.01	10.2	Lc	
ML60FG	5.98	1/5	LBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	69	134	178	0.71	352	225	1.01	10.3	Lc	
MLY80LAa	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	104	208	276	0.91	550	350	1.28	11.6	Ld	
MLY80LAb	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	104	208	276	0.98	550	350	1.38	11.6	Ld	
ML80FB	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	100	190	253	0.78	507	320	1.09	10.0	Lc	
ML80FG	8.10	1/4	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	100	190	253	0.77	507	320	1.08	11.3	Ld	
MLY90LAa	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	121	236	313	0.91	614	395	1.28	11.9	Ld	
MLY90LAb	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	121	236	313	0.98	614	395	1.38	11.9	Ld	
ML90FB	8.86	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	104	208	276	0.83	550	350	1.16	10.1	Ld	
ML90FG	8.86	1/3	LBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	104	208	276	0.80	550	350	1.13	11.3	Ld	
MPT12LA	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	194	348	453	1.01	876	570	1.42	13.0	Pd	
MPT14LA	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	243	420	535	0.99	988	670	1.38	13.4	Pd	
MPT16LA	16.15	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	260	467	610	0.97	1165	765	1.40	12.8	Pd	
MP12FB	12.05	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	104	252	351	0.83	747	450	1.16	12.0	Pd	
MP12FG	12.05	3/8	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	104	252	351	0.82	747	450	1.16	12.7	Pd	
MP14FB	14.17	1/2	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	121	304	422	0.80	880	540	1.12	13.9	Pd	
MP14FG	14.17	1/2	LBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	121	304	422	0.80	880	540	1.12	13.0	Pd	
MX18FBa	18.40	5/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	174	397	548	0.96	1151	700	1.36	16.0	Xd	
MX21FBa	20.72	3/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	213	464	632	0.96	1301	805	1.35	16.0	Xd	
MX21FG	20.72	3/4	LBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	213	464	632	0.96	1301	805	1.35	16.2	Xd	
MX23FBa	23.21	7/9	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	260	536	720	0.97	1460	915	1.36	16.5	Xd	
MX23FG	23.20	7/8	LBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	260	536	720	0.95	1460	915	1.34	17.8	Xd	
MS26FB	25.93	3/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	182	572	816	0.97	1744	1050	1.37	22.6	Sd	
MS26FG	25.93	3/4	LBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	174	550	779	0.96	1632	1000	1.35	22.6	Sd	
MS26F3	25.93	3/4	LBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	174	550	779	0.96	1632	1000	1.35	20.8	Sd	
MS30FB	29.95	7/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	208	657	935	0.95	1977	1201	1.35	22.7	Sd	
MS30F3	29.95	7/8	LBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	208	657	934	0.93	1976	1200	1.32	24.0	Sd	
MS34FB	34.42	1	LBP	F	220V 50Hz ~1	CSR	R	C-V	243	764	1089	0.96	2319	1400	1.35	22.7	Sd	
MS34FBb	34.42	1	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	243	764	1089	0.96	2319	1400	1.35	22.7	Sd	
MS34F3	34.42	1	LBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	243	764	1089	1.00	2319	1400	1.40	22.9	Sd	









Green Cooling Models

New Models

(\*) Or R407B / See design drawing on page 62

R404A: W (A) x 1.29 = kcal/h (B) R404A: W (C) x 1.08 = kcal/h (D) W x 0.86 = kcal/h

# R404A • R507 (\*) LBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
											-25				-23.3			
									-40	-30	W	COP	-10	kcal/h	COP			
ML45FR	4.56	1/6	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	61	118	<b>157</b>	<b>0.72</b>	322	<b>200</b>	<b>1.01</b>	10.3	Lc	
ML45FG	4.56	1/6	LBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	61	118	<b>157</b>	<b>0.69</b>	322	<b>200</b>	<b>0.97</b>	10.3	Lc	
 MLY60Lda	5.98	1/5	LBP	F	115V 60Hz ~1	CSIR	R	C-V	102	198	<b>260</b>	<b>0.89</b>	503	<b>328</b>	<b>1.25</b>	10.3	Lc	
 MLY60Ldb	5.98	1/5	LBP	F	115V 60Hz ~1	CSR	R	C-V	102	198	<b>260</b>	<b>0.95</b>	503	<b>328</b>	<b>1.34</b>	10.3	Lc	
ML60FR	5.98	1/5	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	82	157	<b>208</b>	<b>0.72</b>	412	<b>263</b>	<b>1.01</b>	11.0	Lc	
ML60FG	5.98	1/5	LBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	82	157	<b>208</b>	<b>0.70</b>	412	<b>263</b>	<b>0.99</b>	10.3	Lc	
ML80FR	8.10	1/4	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	117	224	<b>297</b>	<b>0.75</b>	593	<b>376</b>	<b>1.05</b>	11.3	Ld	
ML80FG	8.10	1/4	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	117	224	<b>297</b>	<b>0.76</b>	593	<b>376</b>	<b>1.07</b>	11.3	Ld	
 MLT90LD	9.09	1/3	LBP	F	115V 60Hz ~1	CSR	R	C-V	160	285	<b>375</b>	<b>0.99</b>	753	<b>474</b>	<b>1.40</b>	10.3	Ld	
 MLT90CD	9.09	1/3	LBP	F	115V 60Hz ~1	RSCR	P	C	165	291	<b>383</b>	<b>1.03</b>	773	<b>485</b>	<b>1.45</b>	10.3	Ld	
 MLT90CDc	9.09	1/3	LBP	S	115V 60Hz ~1	CSR	R	C-V	160	285	<b>375</b>	<b>0.99</b>	753	<b>474</b>	<b>1.40</b>	10.3	Ld	
ML90FR	8.86	1/3	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	121	243	<b>324</b>	<b>0.79</b>	644	<b>410</b>	<b>1.11</b>	11.3	Ld	
ML90FG	8.86	1/3	LBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	121	243	<b>324</b>	<b>0.80</b>	644	<b>410</b>	<b>1.12</b>	11.3	Ld	
 MPT12LD	12.10	3/8	LBP	F	115V 60Hz ~1	CSR	R	C-V	226	398	<b>516</b>	<b>1.01</b>	996	<b>650</b>	<b>1.41</b>	11.5	Pd	
 MPT12CD	12.10	3/8	LBP	F	115V 60Hz ~1	RSCR	P	C	226	398	<b>516</b>	<b>1.01</b>	996	<b>650</b>	<b>1.41</b>	11.5	Pd	
MP12FR	12.05	3/8	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	121	295	<b>411</b>	<b>0.81</b>	874	<b>527</b>	<b>1.15</b>	12.7	Pd	
MP12FG	12.05	3/8	LBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	121	295	<b>411</b>	<b>0.85</b>	874	<b>527</b>	<b>1.19</b>	12.7	Pd	
MP14FE	14.17	1/2	LBP	F	115V 60Hz ~1	CSIR	R	C-V	142	356	<b>494</b>	<b>0.77</b>	1030	<b>632</b>	<b>1.10</b>	13.0	Pd	
MP14FG	14.17	1/2	LBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	142	356	<b>494</b>	<b>0.82</b>	1030	<b>632</b>	<b>1.15</b>	13.0	Pd	
 MPT14LF	14.32	1/2	LBP	F	208-230V 60Hz ~1	CSR	R	C-V	268	472	<b>610</b>	<b>0.95</b>	1190	<b>770</b>	<b>1.34</b>	13.4	Pd	
MX21FG	20.72	3/4	LBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	248	542	<b>738</b>	<b>0.94</b>	1520	<b>940</b>	<b>1.32</b>	16.2	Xd	
MX23FG	23.20	7/8	LBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	304	628	<b>846</b>	<b>0.94</b>	1718	<b>1075</b>	<b>1.32</b>	17.8	Xd	
MS26FF	25.93	3/4	LBP	F	208-230V 60Hz ~1	CSR	R	C-V	203	643	<b>912</b>	<b>0.92</b>	1910	<b>1170</b>	<b>1.30</b>	22.6	Sd	
MS26FG	25.93	3/4	LBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	203	643	<b>912</b>	<b>0.92</b>	1910	<b>1170</b>	<b>1.31</b>	22.6	Sd	
MS26F3	25.93	3/4	LBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	203	643	<b>912</b>	<b>0.92</b>	1910	<b>1170</b>	<b>1.31</b>	20.8	Sd	
MS30FF	29.95	7/8	LBP	F	208-230V 60Hz ~1	CSR	R	C-V	243	765	<b>1090</b>	<b>0.93</b>	2311	<b>1400</b>	<b>1.31</b>	22.7	Sd	
MS30FG	29.95	7/8	LBP	F	230V 60Hz ~1	CSR	R	C-V	243	765	<b>1090</b>	<b>0.96</b>	2311	<b>1400</b>	<b>1.36</b>	22.7	Sd	
MS30F3	29.95	7/8	LBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	243	765	<b>1090</b>	<b>0.94</b>	2311	<b>1400</b>	<b>1.32</b>	24.0	Sd	
MS34F3	34.42	1	LBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	278	887	<b>1267</b>	<b>0.96</b>	2706	<b>1630</b>	<b>1.35</b>	22.9	Sd	













 Green Cooling Models

(\*) Or R407B / See design drawing on page 62

 New Models

R404A: W (A) x 1.29 = kcal/h (B) R404A: W (C) x 1.08 = kcal/h (D) W x 0.86 = kcal/h

# R404A (\*) HMBP | HBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-25		-15		10		7.2			
									W	COP	W	COP	W	COP	kcal/h	COP		
ML40TB	4.05	1/6	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	133	214	<b>473</b>	<b>1.43</b>	558	<b>510</b>	<b>1.74</b>	10.0	Lc	
ML40TG	4.05	1/6	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	133	214	<b>473</b>	<b>1.43</b>	558	<b>510</b>	<b>1.74</b>	10.0	Lc	
ML45TB	4.50	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	151	238	<b>528</b>	<b>1.49</b>	624	<b>570</b>	<b>1.82</b>	10.1	Lc	
ML45TG	4.50	1/5	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	151	238	<b>528</b>	<b>1.49</b>	624	<b>570</b>	<b>1.82</b>	10.0	Lc	
 MLY60RAa	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	212	346	<b>766</b>	<b>1.77</b>	902	<b>825</b>	<b>2.15</b>	10.5	Lc	
 MLY60RAb	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	212	346	<b>766</b>	<b>1.93</b>	902	<b>825</b>	<b>2.36</b>	10.5	Lc	
ML60TB	5.68	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	166	277	<b>647</b>	<b>1.53</b>	769	<b>700</b>	<b>1.85</b>	10.1	Lc	
ML60TG	5.68	1/4	HMBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	166	277	<b>647</b>	<b>1.53</b>	769	<b>700</b>	<b>1.85</b>	10.0	Lc	
 MLY80RAa	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.86</b>	1250	<b>1140</b>	<b>2.27</b>	10.2	Ld	
 MLY80RAb	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	282	463	<b>1055</b>	<b>2.02</b>	1250	<b>1140</b>	<b>2.46</b>	10.2	Ld	
ML80TB	7.57	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	227	385	<b>880</b>	<b>1.63</b>	1040	<b>950</b>	<b>1.99</b>	11.4	Ld	
ML80TG	7.57	3/8	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	227	385	<b>880</b>	<b>1.63</b>	1040	<b>950</b>	<b>1.99</b>	11.2	Ld	
 MLY90RAa	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	317	512	<b>1132</b>	<b>1.75</b>	1334	<b>1220</b>	<b>2.13</b>	11.3	Ld	
 MLY90RAb	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	317	511	<b>1136</b>	<b>1.92</b>	1340	<b>1225</b>	<b>2.34</b>	11.3	Ld	
ML90TB	8.86	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.63</b>	1250	<b>1140</b>	<b>1.98</b>	11.6	Ld	
ML90TG	8.86	3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	282	463	<b>1055</b>	<b>1.63</b>	1250	<b>1140</b>	<b>1.98</b>	12.7	Ld	
MP12TG	12.05	1/2	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	373	634	<b>1463</b>	<b>1.85</b>	1732	<b>1580</b>	<b>2.25</b>	13.5	Pd	
 MPT12RA	12.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	398	676	<b>1560</b>	<b>1.93</b>	1845	<b>1685</b>	<b>2.35</b>	12.6	Pd	
 MPT14RA	14.32	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	478	784	<b>1760</b>	<b>1.81</b>	2078	<b>1900</b>	<b>2.20</b>	13.5	Pd	
 MX16TBa	16.03	3/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	484	818	<b>1880</b>	<b>1.76</b>	2225	<b>2030</b>	<b>2.15</b>	16.2	Xc	
 MX18TBa	18.40	7/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	554	937	<b>2157</b>	<b>1.78</b>	2554	<b>2330</b>	<b>2.18</b>	16.0	Xd	
MX18TG	18.40	7/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	554	937	<b>2157</b>	<b>1.78</b>	2554	<b>2330</b>	<b>2.18</b>	17.0	Xd	
 MX21TBa	20.73	2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	625	1052	<b>2425</b>	<b>1.78</b>	2873	<b>2620</b>	<b>2.16</b>	17.5	Xd	
MX21TG	20.72	1	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	625	1052	<b>2425</b>	<b>1.77</b>	2873	<b>2620</b>	<b>2.15</b>	17.6	Xd	
MS18T3	18.10	7/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	423	838	<b>2137</b>	<b>1.92</b>	2557	<b>2320</b>	<b>2.35</b>	20.0	Sb	
MS22TB	21.75	1	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	453	972	<b>2566</b>	<b>2.04</b>	3077	<b>2789</b>	<b>2.50</b>	20.5	Sc	
MS22T3	21.75	1	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	453	975	<b>2576</b>	<b>2.01</b>	3090	<b>2800</b>	<b>2.45</b>	20.0	Sb	
MS26TB	25.93	1 3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	675	1295	<b>3185</b>	<b>2.02</b>	3789	<b>3449</b>	<b>2.46</b>	23.0	Sd	
MS26TG	25.93	1 3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	675	1295	<b>3186</b>	<b>2.02</b>	3791	<b>3451</b>	<b>2.46</b>	23.0	Sd	
MS26T3	25.93	1 3/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	675	1295	<b>3186</b>	<b>2.01</b>	3791	<b>3451</b>	<b>2.45</b>	18.6	Sd	
MS34TB	34.42	1 5/8	HBP	F	220-240V 50Hz ~1	CSR	R	C-V	1012	1860	<b>4231</b>	<b>1.92</b>	4959	<b>4551</b>	<b>2.30</b>	22.7	Sd	
MS34T3	34.42	1 5/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	1007	1860	<b>4231</b>	<b>1.82</b>	4958	<b>4551</b>	<b>2.20</b>	22.8	Sd	
 MS34TG	34.42	1 5/8	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	1012	1860	<b>4231</b>	<b>1.92</b>	4959	<b>4551</b>	<b>2.30</b>	22.7	Sd	

 Green Cooling Models

(\*) Or R407B / See design drawing on page 62

 New Models

R404A: W (A) x 1.29 = kcal/h (B) R404A: W (C) x 1.08 = kcal/h (D) W x 0.86 = kcal /h

# R404A (\*) HMBP | HBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									5				7.2					
									-25	-15	W	COP	10	kcal/h	COP			
ML45TG	4.50	1/5	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	177	279	<b>618</b>	<b>1.44</b>	731	<b>667</b>	<b>1.74</b>	10.0	Lc	
MLY60RDa	5.98	1/4	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	252	411	<b>905</b>	<b>1.73</b>	1065	<b>975</b>	<b>2.10</b>	11.0	Lc	
MLY60RDb	5.98	1/4	HMBP	F	115V 60Hz ~1	CSR	R	C-V	252	411	<b>905</b>	<b>1.86</b>	1065	<b>975</b>	<b>2.27</b>	11.0	Lc	
ML60TG	5.68	1/4	HMBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	194	325	<b>758</b>	<b>1.51</b>	901	<b>820</b>	<b>1.83</b>	10.0	Lc	
ML60TR	5.68	1/4	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	194	325	<b>758</b>	<b>1.5</b>	901	<b>820</b>	<b>1.83</b>	10.0	Lc	
MLY80RDa	8.10	3/8	HMBP	F	115V 60Hz ~1	CSIR	R	C-V	330	543	<b>1232</b>	<b>1.77</b>	1457	<b>1330</b>	<b>2.15</b>	11.2	Ld	
MLY80RDb	8.10	3/8	HMBP	F	115V 60Hz ~1	CSR	R	C-V	330	543	<b>1232</b>	<b>1.83</b>	1457	<b>1330</b>	<b>2.22</b>	11.2	Ld	
ML80TG	7.57	3/8	HMBP	F	200-240/220-230V 50/60Hz ~1	CSIR	R	C-V	265	451	<b>1029</b>	<b>1.61</b>	1215	<b>1110</b>	<b>1.96</b>	11.2	Ld	
ML90TG	8.86	3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSIR	R	C-V	330	542	<b>1235</b>	<b>1.56</b>	1463	<b>1334</b>	<b>1.89</b>	12.7	Ld	
MP12TG	12.05	1/2	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	433	741	<b>1713</b>	<b>1.81</b>	2028	<b>1850</b>	<b>2.20</b>	13.5	Pd	
MX18TG	18.40	7/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	648	1095	<b>2523</b>	<b>1.76</b>	2989	<b>2726</b>	<b>2.15</b>	17.0	Xd	
MX21TG	20.72	1	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	730	1217	<b>2799</b>	<b>1.74</b>	3318	<b>3026</b>	<b>2.12</b>	17.6	Xd	
MS18T3	18.10	7/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	494	976	<b>2487</b>	<b>1.85</b>	2976	<b>2700</b>	<b>2.25</b>	20.0	Sb	
MS22T3	21.75	1	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	530	1140	<b>3014</b>	<b>1.97</b>	3615	<b>3277</b>	<b>2.40</b>	20.0	Sb	
MS26TG	25.93	1 3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	790	1516	<b>3729</b>	<b>1.96</b>	4436	<b>4038</b>	<b>2.37</b>	23.0	Sd	
MS26T3	25.93	1 3/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	790	1516	<b>3729</b>	<b>1.86</b>	4436	<b>4038</b>	<b>2.25</b>	18.6	Sd	
MS34T3	34.42	1 5/8	HMBP	F	400/440V 50/60Hz ~3	3PHASE	R	C-V	1179	2176	<b>4948</b>	<b>1.73</b>	5797	<b>5321</b>	<b>2.10</b>	22.8	Sd	
MS34TG	34.42	1 3/8	HMBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	1173	2158	<b>4910</b>	<b>1.86</b>	5755	<b>5280</b>	<b>2,23</b>	23.0	Sd	

Green Cooling Models  
 New Models

(\*) Or R407B / See design drawing on page 62  
 R404A: W (A) x 1.29 = kcal/h (B) R404A: W (C) x 1.08 = kcal/h (D) W x 0.86 = kcal /h

Compressors  
R404A / R507

	Conditions			
	CECOMAF		ASHRAE	
	LBP (A)	HMBP/HBP (C)	LBP (B)	HMBP/HBP (D)
Evaporating temperature °C	-25	5	-23,3	7,2
Condensing temperature °C	55	55	55	55
Liquid temperature °C	55	55	32	46
Suction temperature °C	32	32	32	35
Ambient temperature °C	32	32	32	35

### Measurement conversion

R404A  
 W (A) x 1.29 = kcal/h (B)  
 W (C) x 1.08 = kcal/h (D)

S compressor's range can be provided with tube or valve



# 2.

Compressors  
Catalogue

**R290/R600a**

## R290 LBP • 50 Hz

## Natural Refrigerant

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
									Cecomaf (W)				Ashrae				
											-25			-23.3			
									-40	-30	W	COP	-10	kcal/h	COP		
NLY45LAa	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	62	115	<b>151</b>	<b>1.04</b>	298	<b>176</b>	<b>1.35</b>	10.0	Lc
NLY45LAb	4.56	1/6	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	62	115	<b>151</b>	<b>1.11</b>	298	<b>176</b>	<b>1.44</b>	10.0	Lc
NLY60LAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	85	152	<b>198</b>	<b>1.02</b>	388	<b>230</b>	<b>1.33</b>	10.3	Lc
NLY60LAb	5.98	1/5	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	85	152	<b>198</b>	<b>1.09</b>	388	<b>230</b>	<b>1.42</b>	10.3	Lc
NLY60CAa	5.98	1/5	LBP	F	220-240V 50Hz ~1	RSIR	P	C	85	152	<b>198</b>	<b>1.02</b>	388	<b>230</b>	<b>1.33</b>	10.3	Lc
NLY60CAb	5.98	1/5	LBP	F	220-240V 50Hz ~1	RSCR	P	C	85	152	<b>198</b>	<b>1.09</b>	388	<b>230</b>	<b>1.42</b>	10.3	Lc
NLY80LAa	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	113	201	<b>263</b>	<b>1.04</b>	524	<b>306</b>	<b>1.35</b>	10.9	Ld
NLY80LAb	8.10	1/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	113	201	<b>263</b>	<b>1.10</b>	524	<b>306</b>	<b>1.43</b>	10.9	Ld
NLY90LAa	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	130	236	<b>306</b>	<b>1.05</b>	590	<b>355</b>	<b>1.37</b>	11.1	Ld
NLY90LAb	9.09	1/3	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	130	236	<b>306</b>	<b>1.11</b>	590	<b>355</b>	<b>1.44</b>	11.1	Ld
NPY12LAa	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	174	308	<b>401</b>	<b>1.04</b>	781	<b>465</b>	<b>1.35</b>	12.3	Pd
NPY12LAb	12.10	3/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	174	308	<b>401</b>	<b>1.15</b>	781	<b>465</b>	<b>1.49</b>	12.3	Pd
NPY14LAa	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSIR	R	C-V	216	375	<b>484</b>	<b>1.05</b>	926	<b>560</b>	<b>1.35</b>	12.8	Pd
NPY14LAb	14.32	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	216	375	<b>484</b>	<b>1.14</b>	926	<b>560</b>	<b>1.48</b>	12.8	Pd
NPT16LA	16.15	1/2	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	251	445	<b>556</b>	<b>1.15</b>	1122	<b>650</b>	<b>1.50</b>	12.8	Pd
NX18FBa	18.40	5/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	237	472	<b>603</b>	<b>1.11</b>	1193	<b>705</b>	<b>1.44</b>	16.0	Xd
NX21FBa	20.72	3/4	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	257	507	<b>667</b>	<b>1.09</b>	1285	<b>780</b>	<b>1.42</b>	16.0	Xd
NX23FB	23.20	7/8	LBP	F	220-240V 50Hz ~1	CSR	R	C-V	304	600	<b>737</b>	<b>1.08</b>	1394	<b>862</b>	<b>1.41</b>	17.5	Xd

## R290 LBP • 60 Hz

## Natural Refrigerant

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
									Cecomaf (W)				Ashrae				
											-25			-23.3			
									-40	-30	W	COP	-10	kcal/h	COP		
NLY45LRa (**)	4.56	1/6	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	76	136	<b>178</b>	<b>1.05</b>	349	<b>207</b>	<b>1.35</b>	10.3	Lc
NLY45LRb (**)	4.56	1/6	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	76	136	<b>178</b>	<b>1.12</b>	349	<b>207</b>	<b>1.44</b>	10.3	Lc
NLY60LRa	5.98	1/5	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	111	197	<b>257</b>	<b>1.11</b>	504	<b>300</b>	<b>1.44</b>	10.3	Lc
NLY60LRb	5.98	1/5	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	111	197	<b>257</b>	<b>1.16</b>	504	<b>300</b>	<b>1.51</b>	10.3	Lc
NLY80LRa	8.10	1/4	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	136	244	<b>319</b>	<b>1.05</b>	625	<b>373</b>	<b>1.37</b>	10.9	Lc
NLY80LRb	8.10	1/4	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	136	244	<b>319</b>	<b>1.12</b>	625	<b>373</b>	<b>1.46</b>	10.9	Lc
NLY90LRa (**)	9.09	1/3	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	153	275	<b>359</b>	<b>1.05</b>	704	<b>417</b>	<b>1.36</b>	11.2	Ld
NLY90LRb (**)	9.09	1/3	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	153	275	<b>359</b>	<b>1.12</b>	704	<b>417</b>	<b>1.44</b>	11.2	Ld
NPY12LRa (**)	12.10	3/8	LBP	F	115-127V 60Hz ~1	CSIR	R	C-V	200	361	<b>470</b>	<b>1.05</b>	922	<b>546</b>	<b>1.35</b>	12.3	Pd
NPY12LRb (**)	12.10	3/8	LBP	F	115-127V 60Hz ~1	CSR	R	C-V	200	361	<b>470</b>	<b>1.12</b>	922	<b>546</b>	<b>1.44</b>	12.3	Pd

Green Cooling Models

New Models

(\*\*) Model under development. Provisional performance/data / See design drawing on page 62

R290: W (A) x 1.17 = kcal/h (B) R290: W (C) x 1.03 = kcal/h (D)



## R290 HMBP • 50 Hz

## Natural Refrigerant

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									5		10		7.2		7.2			
									-25	-15	W	COP	10	kcal/h	COP	10		
✓ NL40TBa	4.05	1/5	HMBP	F	220-240V 50Hz ~1	RSIR	R	C	121	194	<b>434</b>	<b>1.88</b>	513	<b>445</b>	<b>2.20</b>	9.5	Lc	
✓ NL40TBb	4.05	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	121	194	<b>434</b>	<b>1.88</b>	513	<b>445</b>	<b>2.20</b>	9.5	Lc	
✓ NLY45RAa	4.56	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	148	237	<b>518</b>	<b>2.15</b>	609	<b>530</b>	<b>2.51</b>	10.0	Lc	
✓ NLY45RAb	4.56	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	148	237	<b>518</b>	<b>2.35</b>	609	<b>530</b>	<b>2.75</b>	10.0	Lc	
✓ NLY60RAa	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	211	324	<b>703</b>	<b>2.21</b>	829	<b>720</b>	<b>2.58</b>	10.4	Lc	
✓ NLY60RAb	5.98	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	211	324	<b>703</b>	<b>2.40</b>	829	<b>720</b>	<b>2.79</b>	10.4	Lc	
✓ NLY75RAa (**)	7.57	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	228	364	<b>822</b>	<b>2.16</b>	976	<b>847</b>	<b>2.51</b>	11.0	Ld	
✓ NLY75RAb (**)	7.57	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	228	364	<b>822</b>	<b>2.31</b>	976	<b>847</b>	<b>2.68</b>	11.0	Ld	
✓ NLY80RAa	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	258	411	<b>929</b>	<b>2.22</b>	1103	<b>955</b>	<b>2.60</b>	11.4	Ld	
✓ NLY80RAb	8.10	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	258	411	<b>929</b>	<b>2.39</b>	1103	<b>955</b>	<b>2.80</b>	11.4	Ld	
✓ NLY90RAa	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	306	480	<b>1054</b>	<b>2.20</b>	1244	<b>1080</b>	<b>2.56</b>	11.4	Ld	
✓ NLY90RAb	9.09	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	306	480	<b>1054</b>	<b>2.38</b>	1244	<b>1080</b>	<b>2.78</b>	11.4	Ld	
✓ NPY12RAa	12.10	1/2	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	408	655	<b>1462</b>	<b>2.12</b>	1728	<b>1500</b>	<b>2.45</b>	12.3	Pd	
✓ NPY12RAb	12.10	1/2	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	408	655	<b>1462</b>	<b>2.33</b>	1728	<b>1500</b>	<b>2.70</b>	12.3	Pd	
✓ NPT14RA	14.32	1/2	HBP	F	220-240V 50Hz ~1	CSR	R	C-V	476	769	<b>1724</b>	<b>2.30</b>	2038	<b>1776</b>	<b>2.69</b>	12.3	Pd	
✓ NX18TB	18.40	3/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	529	886	<b>2041</b>	<b>2.23</b>	2415	<b>2102</b>	<b>2.61</b>	16.8	Xc	
✓ NX21TBa	20.72	7/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	587	979	<b>2266</b>	<b>2.18</b>	2678	<b>2334</b>	<b>2.55</b>	17.3	Xd	

## R290 HMBP • 60 Hz

## Natural Refrigerant

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									5		10		7.2		7.2			
									-25	-15	W	COP	10	kcal/h	COP	10		
✓ NLY45RRa	4.56	1/6	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	177	279	<b>615</b>	<b>2.06</b>	725	<b>633</b>	<b>2.41</b>	10.5	Lc	
✓ NLY45RRb	4.56	1/6	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	177	279	<b>615</b>	<b>2.23</b>	725	<b>633</b>	<b>2.61</b>	10.5	Lc	
✓ NLY60RRa (**)	5.98	1/5	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	236	372	<b>820</b>	<b>2.08</b>	968	<b>845</b>	<b>2.43</b>	10.8	Lc	
✓ NLY60RRb (**)	5.98	1/5	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	236	372	<b>820</b>	<b>2.26</b>	968	<b>845</b>	<b>2.65</b>	10.8	Lc	
✓ NL60TR	5.68	1/4	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	196	319	<b>721</b>	<b>1.92</b>	854	<b>740</b>	<b>2.24</b>	9.5	Lc	
✓ NLY80RRa	8.10	1/4	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	314	496	<b>1092</b>	<b>2.09</b>	1289	<b>1125</b>	<b>2.45</b>	11.1	Ld	
✓ NLY80RRb	8.10	1/4	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	314	496	<b>1092</b>	<b>2.28</b>	1289	<b>1125</b>	<b>2.67</b>	11.1	Ld	
✓ NLY90RRa (**)	9.09	1/3	HMBP	F	115-127V 60Hz ~1	CSIR	R	C-V	357	562	<b>1239</b>	<b>2.19</b>	1462	<b>1269</b>	<b>2.56</b>	11.4	Ld	
✓ NLY90RRb (**)	9.09	1/3	HMBP	F	115-127V 60Hz ~1	CSR	R	C-V	357	562	<b>1239</b>	<b>2.36</b>	1462	<b>1269</b>	<b>2.76</b>	11.4	Ld	

✓ Green Cooling Models

▲ New Models

(\*\*) Model under development. Provisional performance/data / See design drawing on page 62

R290: W (A) x 1.17 = kcal/h (B) R290: W (C) x 1.03 = kcal/h (D)

## R290 HMBP • 50 | 60 Hz

## Variable Speed Compressors

MODEL	DISPLACEMENT cm <sup>3</sup>	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
								COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
								Cecomaf (W)				Ashrae				
								+5		+10		+7,2				
		W	COP			kcal/h	COP									
NLT60FSN (*)(**)	5.98	HMBP	F	220-240V 50/60Hz ~1 100-127V 50/60Hz ~1	ECM	C	1800	101	180	<b>476</b>	<b>2.75</b>	578	<b>466</b>	<b>3.08</b>	10.8	Lc
							2100	119	214	<b>557</b>	<b>2.79</b>	675	<b>545</b>	<b>3.12</b>		
							2400	136	244	<b>633</b>	<b>2.75</b>	764	<b>619</b>	<b>3.07</b>		
							3000	171	308	<b>787</b>	<b>2.63</b>	948	<b>770</b>	<b>2.94</b>		
							3600	203	358	<b>941</b>	<b>2.55</b>	1144	<b>920</b>	<b>2.85</b>		

## R290 LBP • 50 | 60 Hz

## Variable Speed Compressors

MODEL	DISPLACEMENT cm <sup>3</sup>	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	REFRIGERATION CAPACITY						WEIGHT Kg	DESIGN	
								COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C								
								Cecomaf (W)				Ashrae				
								-25		-10		-23.3				
		W	COP			kcal/h	COP									
NPT12FSC (*)	12.10	LBP	F	220-240V 50/60Hz ~1 100-127V 50/60Hz ~1 (**)	ECM	C	1800	115	196	<b>257</b>	<b>1.18</b>	521	<b>300</b>	<b>1.52</b>	12.1	Pc
							2100	134	233	<b>306</b>	<b>1.28</b>	601	<b>352</b>	<b>1.65</b>		
							2400	152	268	<b>349</b>	<b>1.26</b>	680	<b>405</b>	<b>1.63</b>		
							3000	178	326	<b>419</b>	<b>1.25</b>	-	<b>485</b>	<b>1.60</b>		
							3600	216	393	<b>506</b>	<b>1.22</b>	-	<b>585</b>	<b>1.57</b>		

Green Cooling Models (\*) Different electronic driver depending on the voltage range. (\*\*) Model under development. Provisional performances/data. / See design drawing on page 62

	Conditions			
	CECOMAF		ASHRAE	
	LBP (A)	HMBP/HBP (C)	LBP (B)	HMBP/HBP (D)
Evaporating temperature °C	-25	5	-23,3	7,2
Condensing temperature °C	55	55	55	55
Liquid temperature °C	55	55	32	46
Suction temperature °C	32	32	32	35
Ambient temperature °C	32	32	32	35

### Measurement conversion

R290

W (A) x 1.17 = kcal/h (B)

W (C) x 1.03 = kcal/h (D)

S compressor's range can be provided with tube or valve

## R600a LBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-35	-30	-25		-10	-23.3				
W	COP	kcal/h	COP															
HD40AA	4.06	1/20	LBP	S	220-240V 50Hz ~1	RSIR	P	C	32	36	<b>44</b>	<b>0.67</b>	94	<b>50</b>	<b>0.86</b>	5.2	Db	
HLY45AAa	4.56	1/12	LBP	S	220-240V 50Hz ~1	RSIR	P	C	23	36	<b>52</b>	<b>0.97</b>	111	<b>60</b>	<b>1.25</b>	6.8	Lb	
HLY45AAb	4.56	1/12	LBP	S	220-240V 50Hz ~1	RSCR	P	C	23	36	<b>52</b>	<b>1.02</b>	112	<b>60</b>	<b>1.32</b>	6.8	Lb	
HLY55AAa	5.46	1/9	LBP	S	220-240V 50Hz ~1	RSIR	P	C	28	44	<b>62</b>	<b>1.03</b>	130	<b>72</b>	<b>1.33</b>	8.9	Lb	
HLY55AAb	5.46	1/9	LBP	S	220-240V 50Hz ~1	RSCR	P	C	28	44	<b>62</b>	<b>1.10</b>	131	<b>72</b>	<b>1.42</b>	8.9	Lb	
HLY70AAa	6.65	1/8	LBP	S	220-240V 50Hz ~1	RSIR	P	C	42	59	<b>80</b>	<b>1.08</b>	162	<b>92</b>	<b>1.37</b>	9.1	Lb	
HLY70AAb	6.65	1/8	LBP	S	220-240V 50Hz ~1	RSCR	P	C	41	59	<b>81</b>	<b>1.15</b>	163	<b>93</b>	<b>1.46</b>	9.1	Lb	
HLY80AAa	8.10	1/7	LBP	S	220-240V 50Hz ~1	RSIR	P	C	53	74	<b>99</b>	<b>1.11</b>	201	<b>113</b>	<b>1.41</b>	9.1	Lb	
HLY80AAb	8.10	1/7	LBP	S	220-240V 50Hz ~1	RSCR	P	C	54	74	<b>99</b>	<b>1.17</b>	203	<b>113</b>	<b>1.49</b>	9.1	Lb	
HLY90AAa	9.09	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	67	84	<b>109</b>	<b>1.11</b>	230	<b>125</b>	<b>1.41</b>	9.5	Lc	
HLY90AAb	9.09	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	65	84	<b>111</b>	<b>1.17</b>	233	<b>127</b>	<b>1.49</b>	9.5	Lc	
HLY99AAa	9.95	1/6	LBP	S	220-240V 50Hz ~1	RSIR	P	C	69	90	<b>119</b>	<b>1.10</b>	248	<b>136</b>	<b>1.40</b>	10.6	Lc	
HLY99AAb	9.95	1/6	LBP	S	220-240V 50Hz ~1	RSCR	P	C	67	90	<b>119</b>	<b>1.16</b>	249	<b>137</b>	<b>1.48</b>	10.6	Lc	
HPY12AAa	12.10	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	78	107	<b>144</b>	<b>1.12</b>	300	<b>165</b>	<b>1.43</b>	11.0	Pc	
HPY12AAb	12.10	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	78	107	<b>144</b>	<b>1.18</b>	300	<b>165</b>	<b>1.50</b>	11.0	Pd	
HPY12AGa	12.10	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	78	107	<b>144</b>	<b>1.10</b>	300	<b>165</b>	<b>1.40</b>	10.9	Pc	
HPY12AGb	12.10	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSCR	P	C	78	107	<b>144</b>	<b>1.16</b>	300	<b>165</b>	<b>1.48</b>	10.9	Pc	
HPY14AAa	14.32	1/5	LBP	S	220-240V 50Hz ~1	RSIR	P	C	92	124	<b>166</b>	<b>1.13</b>	344	<b>190</b>	<b>1.43</b>	11.0	Pc	
HPY14AAb	14.32	1/5	LBP	S	220-240V 50Hz ~1	RSCR	P	C	92	124	<b>166</b>	<b>1.18</b>	344	<b>190</b>	<b>1.50</b>	11.0	Pd	
HPY14AJa	14.32	1/5	LBP	S	100V 50/60Hz ~1	RSIR	P	C	88	122	<b>161</b>	<b>1.03</b>	336	<b>185</b>	<b>1.25</b>	11.0	Pc	
HPY14AJb	14.32	1/5	LBP	S	100V 50/60Hz ~1	RSCR	P	C	88	122	<b>161</b>	<b>1.07</b>	336	<b>185</b>	<b>1.35</b>	11.0	Pd	
HPY16AAa	16.15	1/4	LBP	S	220-240V 50Hz ~1	RSIR	P	C	101	136	<b>181</b>	<b>1.13</b>	380	<b>208</b>	<b>1.44</b>	11.0	Pc	
HPY16AAb	16.15	1/4	LBP	S	220-240V 50Hz ~1	RSCR	P	C	101	136	<b>181</b>	<b>1.19</b>	380	<b>208</b>	<b>1.51</b>	11.0	Pd	

## R600a LBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY								WEIGHT Kg	DESIGN
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
									Cecomaf (W)				Ashrae					
									-35	-30	-25		-10	-23.3				
W	COP	kcal/h	COP															
HPY12AGa	12.10	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSIR	P	C	90	124	<b>167</b>	<b>1.08</b>	348	<b>191</b>	<b>1.37</b>	10.9	Pc	
HPY12AGb	12.10	1/4	LBP	S	200-220/220-230V 50/60Hz ~1	RSCR	P	C	90	124	<b>167</b>	<b>1.14</b>	348	<b>191</b>	<b>1.44</b>	10.9	Pc	
HPY14AJa	14.32	1/5	LBP	S	100V 50/60Hz ~1	RSIR	P	C	102	141	<b>190</b>	<b>1.07</b>	390	<b>220</b>	<b>1.35</b>	11.0	Pc	
HPY14AJb	14.32	1/5	LBP	S	100V 50/60Hz ~1	RSCR	P	C	102	141	<b>190</b>	<b>1.13</b>	390	<b>220</b>	<b>1.44</b>	11.0	Pd	

Green Cooling Models

/ See design drawing on page 62

New Models

W (A) x 1.15 = kcal/h (B) W (C) x 1.02 = kcal/h (D)

W x 1.16 = kcal /h

## R600a HMBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	APPLICATION	CPR COOLING	VOLTAGE FREQUENCY	MOTOR	STARTING	EXPANSION	REFRIGERATION CAPACITY							WEIGHT Kg	DESIGN		
									COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C										
									Cecomaf (W)				Ashrae						
									-25		-15		5		10			7.2	
									W	COP	W	COP	W	COP	kcal/h			COP	
HD40MBa	4.06	1/14	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	40	72	178	1.65	214	182	1.91	6.0	Dd		
HLY55MAa	5.46	1/10	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	48	96	250	2.20	300	255	2.51	9.0	Lb		
HLY55MAb	5.46	1/10	HMBP	S	220-240V 50Hz ~1	RSCR	P	C	48	96	250	2.32	300	255	2.67	9.0	Lb		
HLY55MAac (***)	5.46	1/10	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	48	96	250	2.20	300	255	2.51	9.0	Lb		
HLY70MAa	6.65	1/8	HMBP	S	220-240V 50Hz ~1	RSIR	P	C	66	120	307	2.18	370	314	2.50	8.4	Lb		
HLY70MAb	6.65	1/8	HMBP	S	220-240V 50Hz ~1	RSCR	P	C	66	120	307	2.34	370	314	2.69	8.4	Lb		
HLY70MAac (***)	6.65	1/8	HMBP	S	220-240V 50Hz ~1	CSIR	R	C-V	66	120	307	2.18	370	314	2.50	8.4	Lb		
HLY70MAad (***)	6.65	1/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	66	120	307	2.18	370	314	2.50	8.4	Lb		
HLY99RAa	9.95	1/5	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	111	197	460	2.07	553	470	2.39	10.2	Lc		
HLY99RAb	9.95	1/5	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	111	197	460	2.26	553	470	2.61	10.2	Lc		
HPY12RAa	12.10	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	138	252	562	2.12	680	575	2.45	10.5	Pc		
HPY12RAb	12.10	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	138	252	562	2.32	680	575	2.68	10.5	Pc		
HPY14RAa	14.32	1/4	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	164	294	670	2.11	808	685	2.43	10.9	Pd		
HPY14RAb	14.32	1/4	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	164	294	670	2.31	808	685	2.66	10.9	Pd		
HPY16RAa	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSIR	R	C-V	182	334	753	2.40	905	770	2.40	11.1	Pd		
HPY16RAb	16.15	3/8	HMBP	F	220-240V 50Hz ~1	CSR	R	C-V	182	334	753	2.27	905	770	2.62	11.1	Pd		

## R600a LBP | MBP | HBP • DC 50 | 60 Hz

## Mobile Compressor

MODEL	DISPLACEMENT cm <sup>3</sup>	APPLICATION	COOLING	VOLTAGE FREQUENCY	MOTOR	EXPANSION	SPEED rpm	REFRIGERATION CAPACITY							WEIGHT Kg	DESIGN	
								COP in W/W 1 W = 0,864 kcal/h = 3,415 BTU/h Evaporating Temperature °C									
								Cecomaf (W)				Ashrae					
								-25		-10		+10		-23.3			
								W	COP	W	COP	W	COP	kcal/h			COP
HD36FDC 12-42V (*)	3.6	LBP MBP HBP	S / F	12-24-42V DC	ECM	C	1500	16	19	1.03	44	112	22	1.26			
							2000	20	25	1.05	58	147	28	1.28			
							2500	26	31	1.06	72	182	35	1.30			
							3000	30	37	1.02	86	216	42	1.24			
							3500	34	42	1.01	102	250	48	1.22			

Green Cooling Models  
New Models

/ See design drawing on page 62

W (A) x 1.15 = kcal/h (B) W (C) x 1.02 = kcal/h (D)

W x 1.16 = kcal/h

(\*) Model under development. Provisional performances/data.

(\*\*) See User's manual for final dimensions with its electronic driver

(\*\*\*) First lowercase letter indicates:

b = Running capacitor included; a = Running capacitor not included

Second lowercase letter indicates:

c = Statically cooled with starting capacitor; a = Statically cooled without starting capacitor; d = Fan cooled with starting capacitor; b = Fan cooled without starting capacitor

/ See design drawing on page 66

	Conditions			
	CECOMAF		ASHRAE	
	LBP (A)	HMBP/HBP (C)	LBP (B)	HMBP/HBP (D)
Evaporating temperature °C	-25	5	-23,3	7,2
Condensing temperature °C	55	55	55	55
Liquid temperature °C	55	55	32	46
Suction temperature °C	32	32	32	35
Ambient temperature °C	32	32	32	35

### Measurement conversion

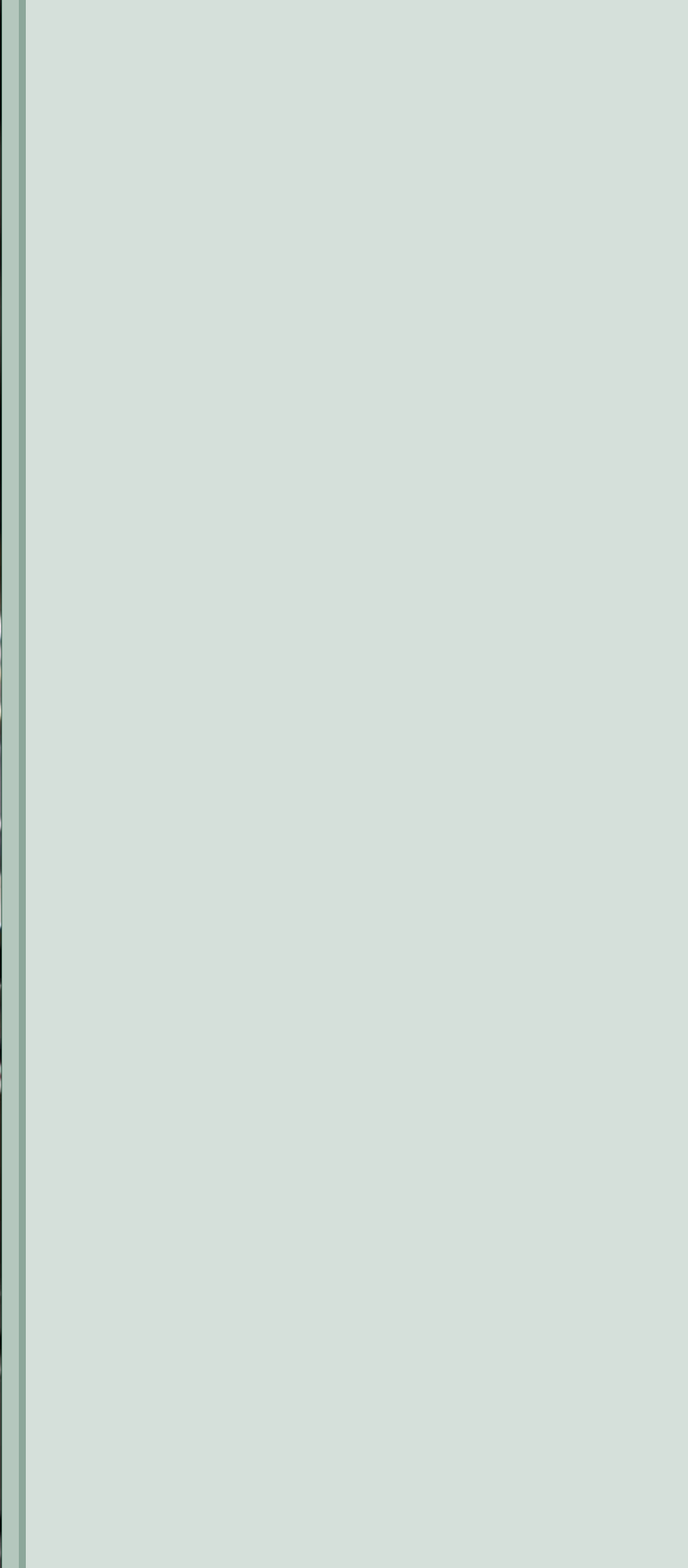
R600a

W (A) x 1.15 = kcal/h (B)

W (C) x 1.02 = kcal/h (D)

S compressor's range can be provided with tube or valve




















# 3.

## Condensing Units Catalogue

**R134a/R404A/  
R290/12-42VDC**

# R134a (\*) HMBP | HBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY								VERSION "3"					
								W W x 0.86 = kcal/h    W x 3.412 = BTU/h Evaporating Temperature °C								DIMENSIONS W x L x H mm	TUBES		WEIGHT Kg	DESIGN	
								-25	-15	-5	5	7.2			10		SUCTION Inch	COMPRESSION Inch			
												W	W inp	A							
CGD30MB_N	3.08	1/10	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	71	119	191	285	309	168	1.02	341	255x300x200	1/4	1/4	8.7	4A
CGD36MB_N	3.62	1/10	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	91	147	230	341	369	196	1.0	407	255x300x200	1/4	1/4	8.8	4A
CGD40MB_N	4.06	1/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	97	156	243	357	385	215	1.0	423	255x300x200	1/4	1/4	9.6	4A
CGL45PB_N	4.50	1/6	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	108	183	286	416	448	238	1.0	491	320x425x220	3/8	1/4	14.5	3B
CGL45TB_N	4.50	1/6	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	108	183	286	416	448	238	1.0	491	320x425x220	3/8	1/4	14.5	3B
CGL45TG_N	4.50	1/6	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C - V	109	180	279	407	439	219	1.0	482	320x425x220	3/8	1/4	14.5	3B
 CGLY45RAa_N	4.56	1/6	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	140	208	312	452	490	235	1.0	535	320x425x235	3/8	1/4	16	3B
 CGLY45Rab_N	4.56	1/6	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	140	208	312	452	490	211	0.99	535	320x425x235	3/8	1/4	16	3B
CGL60PB_N	5.68	1/5	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	130	232	361	520	558	271	1.0	609	320x425x235	3/8	1/4	17	3B
CGL60TB_N	5.68	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	130	232	361	520	558	271	1.0	609	320x425x235	3/8	1/4	17	3B
CGL60TG_N	5.68	1/5	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C - V	136	227	366	551	599	271	1.0	662	320x425x235	3/8	1/4	17	3B
 CGLY60RAa_N	5.98	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	137	251	396	573	616	264	1.0	673	340x425x235	3/8	1/4	17	3B
 CGLY60Rab_N	5.98	1/5	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	137	251	396	573	616	242	0.99	673	340x425x235	3/8	1/4	17	3A
CGL80PB_N	7.57	1/5	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	166	285	441	636	684	343	2.02	747	340x425x235	3/8	1/4	17	3B
CGL80TB_N	7.57	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	166	285	441	636	684	343	2.02	747	340x425x235	3/8	1/4	17	3B
CGL80TG_N	7.57	1/5	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	178	300	473	699	755	333	2.02	831	340x425x235	3/8	1/4	17	3B
 CGLY80RAa_N	8.10	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	219	351	543	795	858	349	2.02	943	340x425x235	3/8	1/4	18.5	3B
 CGLY80Rab_N	8.10	1/5	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	219	351	543	795	858	324	1.0	943	320x425x235	3/8	1/4	18.5	3A
CGL90PB_N	8.85	1/4	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	203	341	533	780	842	386	2.02	924	340x425x235	3/8	1/4	18.5	3B
CGL90TB_N	8.85	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	203	341	533	780	842	386	2.02	924	340x425x235	3/8	1/4	18.5	3B
CGL90TG_N	8.85	1/4	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	193	335	529	775	836	382	1.99	917	340x425x235	3/8	1/4	18.5	3B
 CGLY90RAa_N	9.09	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	215	360	564	827	893	437	2.0	981	350x425x270	3/8	1/4	19.5	3B
 CGLY90Rab_N	9.09	1/4	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	215	360	564	827	893	397	2.02	981	350x425x270	3/8	1/4	19.5	3A
CGP12PB_N	12.05	3/8	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	251	448	704	1019	1097	604	3.02	1199	350x425x270	3/8	1/4	20	3B
CGP12TB_N	12.05	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	251	448	704	1019	1097	604	3.02	1199	350x425x270	3/8	1/4	20	3B
CGP12TG_N	12.05	3/8	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	251	412	671	1030	1123	539	2.99	1247	350x425x270	3/8	1/4	20	3B
 CGPY12RAa_N	12.10	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	314	504	768	1104	1188	571	3.02	1300	350x425x270	3/8	3/8	21.5	3B
 CGPY12Rab_N	12.10	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	314	504	768	1104	1188	523	1.99	1300	350x425x270	3/8	3/8	21.5	3A
CGP14PB_N	14.17	3/8	43	T	HMBP	220-240V 50Hz ~1	RSIR	C	292	498	778	1130	1217	668	4.01	1334	350x425x270	3/8	1/4	21.5	3B
CGP14TB_N	14.17	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	292	498	778	1130	1217	668	4.01	1334	350x425x270	3/8	1/4	21.5	3B
CGP14TG_M	14.17	3/8	38	-	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	327	534	820	1184	1275	630	2.99	1395	350x425x270	3/8	1/4	21.5	3B
 CGPY14RAa_N	14.32	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	442	618	867	1190	1270	623	2.99	1378	365x510x300	3/8	3/8	23.5	2D
 CGPY14Rab_N	14.32	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	442	618	867	1190	1270	579	3.02	1378	365x510x300	3/8	3/8	23.5	2E
 CGPY16RAa_N	16.15	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	390	644	964	1350	1444	659	2.99	1568	365x510x300	3/8	3/8	23.5	2D
 CGPY16Rab_N	16.15	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	390	644	964	1350	1444	659	2.99	1568	365x510x300	3/8	3/8	23.5	2D
 CGPT16RG_N	16.15	1/2	43	T	HBP	200-220/220-230V 50/60Hz ~1	CSR	C - V	*	673	981	1397	1503	690	3.42	1644	365x510x300	3/8	3/8	23.5	2D
CGX18TB_N	18.40	1/2	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	383	674	1050	1510	1622	832	5.01	1771	365x510x300	3/8	3/8	28.5	2C
CGX18TG_N	18.40	1/2	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	398	699	1079	1538	1650	758	5.01	1797	365x510x300	3/8	3/8	28.5	2C
CGX21TB_N	20.72	5/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	450	759	1178	1707	1838	926	5.02	2012	450x480x315	3/8	3/8	33	1E
CGX23TB_N	23.20	5/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	492	906	1360	1853	1967	1027	6.04	2115	450x480x315	3/8	3/8	33	1E
CGS26TB_N	25.93	3/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	524	989	1542	2182	2335	1125	6.01	2535	425x510x350	5/8	3/8	36	1B
CGS26TG_M	25.93	3/4	38	-	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	565	1012	1597	2320	2498	1075	7.04	2734	425x530x350	5/8	3/8	36	1B
CGS30TB_N	29.95	7/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	609	1134	1811	2640	2843	1174	6.03	3112	425x530x350	5/8	3/8	39	1B
CGS34TB_N	34.42	1	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	686	1283	1992	2813	3009	1358	6.03	3266	425x530x350	5/8	3/8	39	1B
CGS34TB_N 2F	34.42	1	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	774	1071	1818	3017	3341	1362	6.03	3785	480x650x335	5/8	3/8	41.5	6A

 Green Cooling Models (\*) Or HFO1234yf / See design drawing on page 64

 New Models



## R134a (\*) HMBP | HBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								VERSION "3"				DESIGN				
								-25				-15				-5					DIMENSIONS W x L x H mm	SUCTION Inch	COMPRESSION Inch	WEIGHT Kg
								5				7.2				10								
								W	W inp	A	10	W	W inp	A	10	W	W inp	A	10					
CGD40ME_N	4.06	1/8	43	T	HMBP	115V 60Hz ~1	CSIR	C - V	109	187	292	423	455	265	3.02	499	255x300x200	1/4	1/4	9.6	4A			
CGL45TE_N	4.5	1/6	43	T	HMBP	115V 60Hz ~1	CSIR	C - V	135	223	345	501	540	289	3.02	591	320x425x220	3/8	1/4	14.5	3B			
CGL45TG_N	4.5	1/6	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C - V	119	207	324	471	507	268	1.0	555	320x425x220	3/8	1/4	14.5	3B			
CGL60TE_N	5.68	1/5	43	T	HMBP	115V 60Hz ~1	CSIR	C - V	157	278	431	616	661	315	2.99	721	320x425x235	3/8	1/4	17	3B			
CGL60TG_N	5.68	1/5	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C - V	156	270	427	626	676	341	1.0	742	320x425x235	3/8	1/4	17	3B			
CGL80PE_N	7.57	1/5	43	T	HMBP	115V 60Hz ~1	RSIR	C	213	358	561	822	887	412	4.02	974	340x425x235	3/8	1/4	17	3B			
CGL80TE_N	7.57	1/5	43	T	HMBP	115V 60Hz ~1	CSIR	C - V	213	358	561	822	887	412	4.02	974	340x425x235	3/8	1/4	17	3B			
CGL80TG_N	7.57	1/5	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	208	355	559	819	884	415	2.02	970	340x425x235	3/8	1/4	17	3B			
CGL90TE_N	8.85	1/4	43	T	HMBP	115V 60Hz ~1	CSIR	C - V	226	400	624	899	967	489	5.01	1056	340x425x235	3/8	1/4	18.5	3B			
CGL90TG_N	8.85	1/4	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	231	401	623	896	963	472	1.99	1052	340x425x235	3/8	1/4	18.5	3B			
CGP12TE_N	12.05	3/8	43	T	HMBP	115V 60Hz ~1	CSIR	C - V	326	547	843	1213	1304	703	7.01	1425	350x425x270	3/8	1/4	20	3B			
CGP12TG_N	12.05	3/8	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	306	532	827	1190	1279	668	2.99	1397	350x425x270	3/8	1/4	20	3B			
CGP14TE_M	14.17	3/8	38	-	HMBP	115V 60Hz ~1	CSIR	C - V	367	616	934	1320	1415	779	8.03	1539	350x425x270	3/8	1/4	21.5	3B			
CGP14TG_M	14.17	3/8	38	-	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	374	620	947	1355	1456	763	4.01	1590	350x425x270	3/8	1/4	21.5	3B			
CGPT16RG_N	16.15	1/2	43	T	HBP	200-220/220-230V 50/60Hz ~1	CSR	C - V	*	848	1203.7	1666.8	1782.6	790	3.42	1935	365x510x300	3/8	3/8	23.5	2D			
CGX18TG_N	18.4	1/2	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	506	881	1324	1835	1957	868	5.01	2116	365x510x300	3/8	3/8	28.5	2C			
CGS26TG_M	25.93	3/4	38	-	HMBP	200-220/220-230V 50/60Hz ~1	CSIR	C - V	652	1177	1838	2635	2828	1368	7.04	3084	425x530x350	5/8	3/8	36	1B			

## R404A HMBP | HBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								VERSION "3"				DESIGN				
								-25				-15				-5					DIMENSIONS W x L x H mm	SUCTION Inch	COMPRESSION Inch	WEIGHT Kg
								5				7.2				10								
								W	W inp	A	10	W	W inp	A	10	W	W inp	A	10					
CML40TB_N	4.06	1/6	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	199	300	428	583	621	349	2.02	671	320x425x235	3/8	1/4	14.6	3B			
CML45TB_N	4.5	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	215	328	464	623	662	386	2.02	712	320x425x235	3/8	1/4	14.7	3B			
CML60TB_N	5.68	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	266	409	579	777	824	479	1.99	886	325x425x235	3/8	1/4	22.5	3B			
CMLY60RAa_N	5.98	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	317	469	668	912	972	486	1.99	1051	345x450x270	3/8	3/8	23	3B			
CMLY60Rab_N	5.98	1/4	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	317	469	668	912	972	441	2.02	1051	345x450x270	3/8	3/8	23	3A			
CML80TB_N	7.57	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	408	567	795	1094	1170	572	3.02	1271	345x450x270	3/8	1/4	23.5	3B			
CML80TG_N	7.57	3/8	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C - V	344	551	793	1070	1136	574	2.99	1223	345x450x270	3/8	1/4	23.5	3B			
CMLY80RAa_N	8.1	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	421	646	914	1226	1301	606	2.99	1399	350x425x270	3/8	3/8	23.9	3B			
CMLY80Rab_N	8.1	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	421	646	914	1226	1301	560	3.01	1399	350x425x270	3/8	3/8	23.9	3A			
CML90TB_N	8.85	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	421	646	914	1226	1301	702	2.99	1399	350x425x270	3/8	3/8	23.9	3B			
CML90TG_N	8.85	3/8	43	T	HMBP	200-220/230V 50/60Hz ~1	CSIR	C - V	412	631	893	1196	1268	689	4.02	1363	350x425x270	3/8	3/8	23.9	3B			
CMLY90RAa_N	9.09	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	466	712	1004	1344	1425	720	4.02	1531	365x510x300	3/8	3/8	25	2D			
CMLY90Rab_N	9.09	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	466	712	1004	1344	1425	660	3.02	1531	365x510x300	3/8	3/8	25	2E			
CMP12TB_N	12.05	1/2	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	581	898	1281	1728	1835	863	4.01	1976	425x480x350	3/8	3/8	29.8	1F			
CMP12TG_N	12.05	1/2	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSR	C - V	588	898	1300	1797	1918	785	4.02	2080	425x500x350	3/8	3/8	29.5	1D			
CMP14TB_N	14.17	1/2	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	613	972	1389	1863	1975	1003	4.01	2122	425x500x350	3/8	3/8	29.9	1F			
CMX16TB_M	16.15	5/8	38	-	HMBP	220-240V 50Hz ~1	CSR	C - V	730	1160	1623	2121	2235	1202	5.01	2382	450x480x340	3/8	3/8	30	1C			
CMX16TB_N	16.15	5/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	698	1074	1536	2084	2216	1157	5.01	2390	430x495x350	3/8	3/8	30.5	1C			

Green Cooling Models (\*) Or HF01234yf / See design drawing on page 64  
New Models

This table continues in the following page












## R404A HMBP | HBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY								VERSION "3"					
								W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								DIMENSIONS W x L x H mm	TUBES		WEIGHT Kg	DESIGN	
								-25	-15	-5	5	7.2			10		SUCTION Inch	COMPRESSION Inch			
												W	W inp	A							
CMX18TB_M	18.4	7/8	38	-	HMBP	220-240V 50Hz ~1	CSR	C - V	790	1206	1650	2121	2228	1375	6.01	2367	430x500x350	3/8	3/8	33	1C
CMX21TB_N	20.72	1	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	847	1265	1798	2445	2603	1384	6.0	2812	455x500x440	3/8	3/8	36	1C
CMS18T3_N	18.1	7/8	43	T	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	706	1130	1644	2249	2395	1199	2.02	2586	425x530x350	1/2	3/8	36	1A
CMS22T3_M	21.75	1	38	-	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	943	1484	2121	2854	3028	1501	1.99	3256	455x515x440	1/2	3/8	38	1A
CMS22TB_N	21.75	1	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	859	1354	1975	2720	2900	1292	6.03	3139	455x525x440	1/2	3/8	41.7	1B
CMS22TB_N2F	21.75	1	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	880	1437	2126	2948	3146	1352	6.01	3408	480x650x335	1/2	3/8	39	6A
CMS26T3_N	25.93	1 3/8	43	T	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	1206	1919	2723	3617	3826	1707	3.02	4099	455x515x440	5/8	3/8	43.2	1A
CMS26TB_N	25.93	1 3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	1183	1853	2615	3468	3668	1778	8.03	3930	455x515x440	5/8	3/8	43.7	1B
CMS26TB_N 2F	25.93	1 3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	1166	1834	2584	3417	3611	1744	8.03	3864	480x650x335	5/8	3/8	40	6A
CMS34T3_N	34.42	1 5/8	43	T	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	1527	2368	3289	4288	4519	2492	4.02	4818	455x515x440	5/8	3/8	44	1A
CMS34TB_M	34.42	1 5/8	38	-	HBP	220-240V 50Hz ~1	CSR	C - V	1335	2424	3475	4485	4702	2434	12.07	4976	455x515x440	5/8	3/8	44.5	1B
CMS34TB_M 2F	34.42	1 5/8	38	-	HBP	220-240V 50Hz ~1	CSR	C - V	1253	2237	3217	4192	4405	2532	12.07	4677	480x650x335	5/8	3/8	41	6A
CMS34TB_N	34.42	1 5/8	43	T	HBP	220-240V 50Hz ~1	CSR	C - V	1369	2459	3524	4563	4788	2461	12.07	5073	455x515x440	5/8	3/8	44.5	1B

## R404A HMBP | HBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY								VERSION "3"					
								W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								DIMENSIONS W x L x H mm	TUBES		WEIGHT Kg	DESIGN	
								-25	-15	-5	5	7.2			10		SUCTION Inch	COMPRESSION Inch			
												W	W inp	A							
CML80TG_N	7.57	3/8	43	T	HMBP	200-240/220-230V 50/60Hz ~1	CSIR	C - V	420	654	930	1247	1322	721	2.99	1421	345x450x270	3/8	1/4	23.5	3B
CML90TG_N	8.86	3/8	43	T	HMBP	200-220/230V 50/60Hz ~1	CSIR	C - V	483	745	1040	1367	1443	862	4.01	1542	350x425x270	3/8	3/8	23.9	3B
CMP12TG_N	12.05	1/2	43	T	HMBP	200-220/220-230V 50/60Hz ~1	CSR	C - V	669	1040	1467	1950	2064	988	4.01	2213	425x500x350	3/8	3/8	29.5	1D
CMS18T3_N	18.4	7/8	43	T	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	778	1293	1859	2476	2619	1496	2.02	2804	425x530x350	1/2	3/8	36	1A
CMS22T3_M	21.75	1	38	-	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	1079	1728	2407	3117	3277	1913	3.01	3483	455x515x440	1/2	3/8	38	1A
CMS26T3_N	25.93	1 3/8	43	T	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	1383	2202	3080	4017	4231	2189	3.02	4508	455x515x440	5/8	3/8	43.2	1A
CMS34T3_N	34.42	1 5/8	43	T	HMBP	400/440V 50/60Hz ~3	3 PHASE	C - V	1678	2597	3511	4419	4618	3047	5.04	4871	455x515x440	5/8	3/8	44	1A

## R404A LBP • 50 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY								VERSION "3"				DESIGN
								W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								DIMENSIONS W x L x H mm	TUBES		WEIGHT Kg	
								-40	-30	-23.3			-20	-10	SUCTION Inch		COMPRESSION Inch			
										W	W inp	A								
CML45FB_N	4.5	1/6	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	95	162	220	225	1.0	253	370	320x425x220	3/8	1/4	14.5	3B
 CMLY45LAa_N	4.56	1/6	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	102	179	244	194	0.99	281	410	320x425x220	3/8	1/4	15.5	3B
 CMLY45LAb_N	4.56	1/6	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	102	179	244	181	0.99	281	410	320x425x220	3/8	1/4	15.5	3A
CML60FB_N	5.68	1/5	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	122	206	277	268	0.99	316	453	320x425x220	3/8	1/4	16.5	3B
 CMLY60LAa_N	5.98	1/5	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	147	249	335	262	0.99	383	548	320x425x220	3/8	1/4	17	3B
 CMLY60LAb_N	5.98	1/5	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	147	249	335	247	0.99	383	548	320x425x220	3/8	1/4	17	3A
CML80FB_N	7.57	1/4	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	169	274	357	342	1.99	401	548	320x425x220	3/8	1/4	17.2	3B
 CMLY80LAa_N	8.1	1/4	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	195	310	419	338	1.99	482	709	325x425x235	3/8	1/4	19.2	3B
 CMLY80LAb_N	8.1	1/4	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	195	310	419	338	1.99	482	709	320x425x235	3/8	1/4	19.2	3A
CML90FB_N	8.86	1/3	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	195	310	419	355	1.99	482	709	325x425x235	3/8	1/4	19.2	3B
 CMLY90LAa_N	9.09	1/4	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	267	370	477	373	2.0	541	779	340x425x245	3/8	1/4	19.2	3B
 CMLY90LAb_N	9.09	1/4	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	267	370	477	373	2.0	541	779	340x425x245	3/8	1/4	19.2	3A
CMP12FB_N	12.05	3/8	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	250	432	586	467	1.99	670	965	340x425x245	3/8	1/4	22.3	3B
 CMP12LA_N	12.1	3/8	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	308	487	638	450	1.98	722	1012	350x425x270	3/8	1/4	20.7	3A
CMP14FB_N	14.17	1/2	43	T	LBP	220-240V 50Hz ~1	CSIR	C - V	267	461	620	567	2.98	707	1006	340x425x245	3/8	1/4	22.3	1F
 CMP14LA_N	14.32	1/2	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	378	586	743	535	1.98	825	1093	425x340x270	3/8	3/8	23.9	3A
 CMP16LA_N	16.15	1/2	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	432	669	848	601	2.15	941.98	1248	350x510x275	3/8	3/8	24.8	2E
CMX18FBa_N	18.4	5/8	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	349	611	820	639	2.97	933	1313	350x510x275	3/8	3/8	28	2E
CMX21FBa_N	20.72	3/4	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	544	840	1062	712	2.98	1178	1560	365x510x305	3/8	3/8	29.8	2E
CMX23FB_M	23.2	7/8	38	-	LBP	220-240V 50Hz ~1	CSR	C - V	667	973	1209	813	3.97	1334	1750	365x510x305	3/8	3/8	30.3	2A
CMS26FB_N	25.93	3/4	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	523	1028	1400	883	3.97	1593	2217	425x510x350	1/2	3/8	39	1B
CMS30FB_N	29.95	7/8	43	T	LBP	220-240V 50Hz ~1	CSR	C - V	617	1132	1518	1120	4.96	1721	2385	425x530x350	5/8	3/8	39	1B
CMS34F3_N	34.42	1	43	T	LBP	400/440V 50/60Hz ~3	3 PHASE	C - V	627	1139	1535	1209	1.99	1746	2448	425x530x350	5/8	3/8	44	1A
CMS34FB_N	34.42	1	43	T	LBP	220V 50Hz ~1	CSR	C - V	826	1210	1638	1209	5.95	1899	2892	425x530x350	5/8	3/8	39.5	1B
CMS34FBb_N	34.42	1	43	T	LBP	220V 50Hz ~1	CSR	C - V	826	1210	1638	1209	5.95	1899	2892	425x530x350	5/8	3/8	39.5	1B

## R404A LBP • 60 Hz

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY								VERSION "3"				DESIGN
								W W x 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								DIMENSIONS W x L x H mm	TUBES		WEIGHT Kg	
								-40	-30	-23.3			-20	-10	SUCTION Inch		COMPRESSION Inch			
										W	W inp	A								
CMP14FE_N	14.17	1/2	43	T	LBP	115V 60Hz ~1	CSIR	C - V	335	561	752	739	8.97	859	1229	345x450x270	3/8	1/4	20.8	3B
CMS34F3_N	34.42	1	43	T	LBP	400/440V 50/60Hz ~3	3 PHASE	C - V	649	1247	1680	1415	1.98	1903	2616	425x530x350	5/8	3/8	44	1A

 Green Cooling Models / See design drawing on page 64

 New Models

## R290 HMBP • 50 Hz

	MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY W Wx 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								VERSION "3"					
													7.2				DIMENSIONS W x L x H mm	TUBES			DESIGN	
									-25	-15	-5	5	W	W inp	A	10		SUCTION Inch	COMPRESSION Inch	WEIGHT Kg		
	CNLY60RAa_N**	5.98	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	*	*	*	*	878	365	*	*	340x425x245	3/8	1/4	24	3B
	CNLY60Rab_N**	5.98	1/4	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	*	*	*	*	878	335	*	*	340x425x245	3/8	1/4	24	3A
	CNLY80RAa_N**	8.10	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	*	*	*	*	1165	512	*	*	325x425x270	3/8	1/4	23.9	3B
	CNLY80Rab_N**	8.10	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	*	*	*	*	1165	470	*	*	325x425x270	3/8	1/4	23.9	3A
	CNLY90RAa_N**	9.09	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	*	*	*	*	1204	554	*	*	325x425x270	3/8	1/4	24.2	3B
	CNLY90Rab_N**	9.09	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	*	*	*	*	1204	503	*	*	325x425x270	3/8	1/4	24.2	3A
	CNPT14RA_N	14.32	1/2	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	608	979	1468.4	2078.5	2228.7	723.95	3.02	2427.2	425x340x270	3/8	3/8	23.9	3A
	CNX18TB_M	18.0	7/8	38	-	HMBP	220-240V 50Hz ~1	CSR	C - V	694	1059	1559	2195	2353	982	3.99	2564	430x500x350	3/8	3/8	33	1C

## R290 LBP • 50 Hz

	MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	EXPANSION	REFRIGERATION CAPACITY W Wx 0.86 = kcal/h W x 3.412 = BTU/h Evaporating Temperature °C								VERSION "3"				
													-23.3				DIMENSIONS W x L x H mm	TUBES			DESIGN
									-40	-30			-20	-10	SUCTION Inch	COMPRESSION Inch		WEIGHT Kg			
											W	W inp	A								
	CNLY45LAa_N	4.56	1/6	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	103	175	238	172	1.00	270	383	320x425x220	3/8	1/4	15.5	3B
	CNLY45Lab_N	4.56	1/6	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	103	175	238	160	0.99	270	383	320x425x220	3/8	1/4	15.5	3A
	CNLY60LAa_N	5.98	1/5	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	137	205	272	211	1.02	307	443	320x425x220	3/8	1/4	17	3B
	CNLY60Lab_N	5.98	1/5	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	137	205	272	199	1.0	307	443	320x425x220	3/8	1/4	17	3A
	CNLY80LAa_N	8.1	1/4	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	198	266	334	260	2.00	371	514	320x425x220	3/8	1/4	20	3B
	CNLY80Lab_N	8.1	1/4	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	198	266	334	251	2.02	371	514	320x425x220	3/8	1/4	20	3A
	CNLY90LAa_N	9.09	1/3	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	220	321	412	305	2.00	460	638	340x425x245	3/8	1/4	19.2	3B
	CNLY90Lab_N	9.09	1/3	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	220	321	412	293	1.99	460	638	340x425x245	3/8	1/4	19.2	3A
	CNPY12LAa_N	12.1	3/8	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	273	455	588	425	3.02	634	870	350x425x270	3/8	1/4	23	3B
	CNPY12Lab_N	12.1	3/8	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	273	455	588	414	2.98	634	870	350x425x270	3/8	1/4	23	3A
	CNPY14LAa_N	14.32	1/2	43	T	HMBP	220-240V 50Hz ~1	CSIR	C - V	302	502	654	481	2.98	730	986	350x425x270	3/8	1/4	23.5	3B
	CNPY14Lab_N	14.32	1/2	43	T	HMBP	220-240V 50Hz ~1	CSR	C - V	302	502	654	465	1.99	730	986	350x425x270	3/8	1/4	23.5	3A

Green Cooling Models (\*\*\*) Model under development. Provisional performances/data. / See design drawing on page 64

New Models

# R134a LBP | MBP | HBP 12-42V

MODEL	DISPLACEMENT cm <sup>3</sup>	POWER hp	MAX. AMBIENCE TEMP. °C	T = TROPICALIZED	APPLICATION	VOLTAGE FREQUENCY	MOTOR	REFRIGERATION CAPACITY											VERSION "3"				
								W W x 0.86 = kcal/h    W x 3.412 = BTU/h Evaporating Temperature °C											DIMENSIONS W x L x H mm	TUBES			DESIGN
								rpm	-30	-23.3				-15	-5	5	10	SUCTION Inch		COMPRESSION Inch	WEIGHT Kg		
										W	W inp	COP	A										
CGD30FDC	3.0	1/10	43	T	LBP / MBP / HBP	12-42 V DC	ECM	1500	28	<b>41</b>	<b>27</b>	<b>1.52</b>	2.23	63	102	155	186	167x293x159	5/8" 18 UNF male	5/8" 18 UNF female	8	5A	
								2000	38	<b>52</b>	<b>37</b>	<b>1.43</b>	3.08	80	127	185	221						
								2500	44	<b>61</b>	<b>46</b>	<b>1.33</b>	3.84	97	151	215	256						
								3000	50	<b>72</b>	<b>58</b>	<b>1.24</b>	4.85	114	174	-	-						
								3500	56	<b>85</b>	<b>71</b>	<b>1.20</b>	5.93	134	-	-	-						

/ See design drawing on page 64

	Conditions			
	CECOMAF		ASHRAE	
	LBP (A)	HMBP/HBP (C)	LBP (B)	HMBP/HBP (D)
Evaporating temperature °C	-25	5	-23,3	7,2
Condensing temperature °C	55	55	55	55
Liquid temperature °C	55	55	32	46
Suction temperature °C	32	32	32	35
Ambient temperature °C	32	32	32	35

	Conditions			
	HCB CECOMAF		HCB ASHRAE	
	MBP (E)	VHBP (G)	MBP (F)	VHBP (H)
Evaporating temperature °C	-10	25	-10	25
Condensing temperature °C	55	70	55	70
Liquid temperature °C	55	55	46	61
Suction temperature °C	32	32	35	35
Ambient temperature °C	32	32	35	35

## Measurement conversion

R134

W (A) x 1.18 = kcal/h (B)

W (C) x 1.02 = kcal/h (D)

W (E) x 0.85 = kcal/h (F)

W (G) x 0.97 = kcal/h (H)

R290

W (A) x 1.17 = kcal/h (B)

W (C) x 1.03 = kcal/h (D)

R404A

W (A) x 1.29 = kcal/h (B)

W (C) x 1.08 = kcal/h (D)

R600a

W (A) x 1.15 = kcal/h (B)

W (C) x 1.02 = kcal/h (D)

S compressor's range can be provided with tube or valve

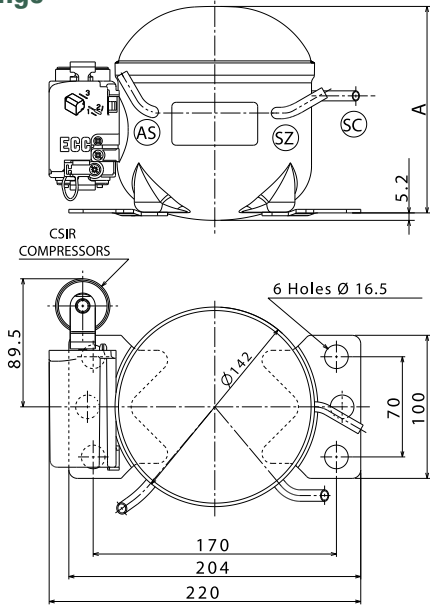


# 4.

## Technical Information

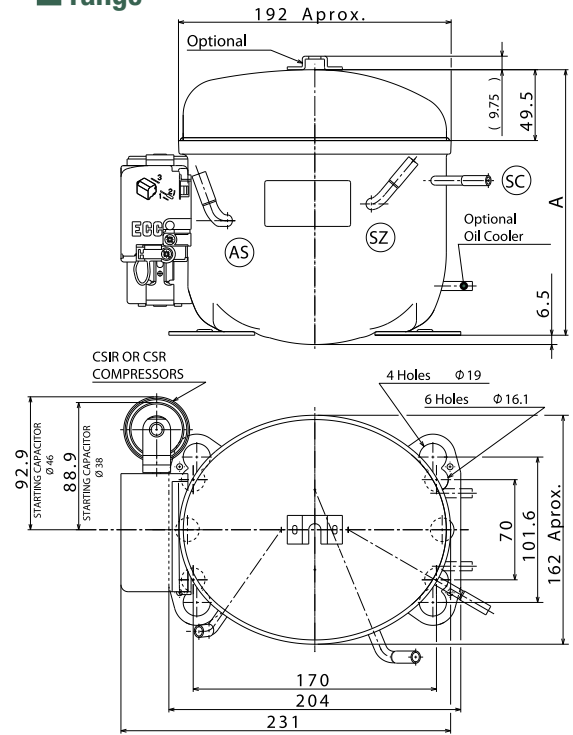
# Compressor Dimensional Drawings

## D range



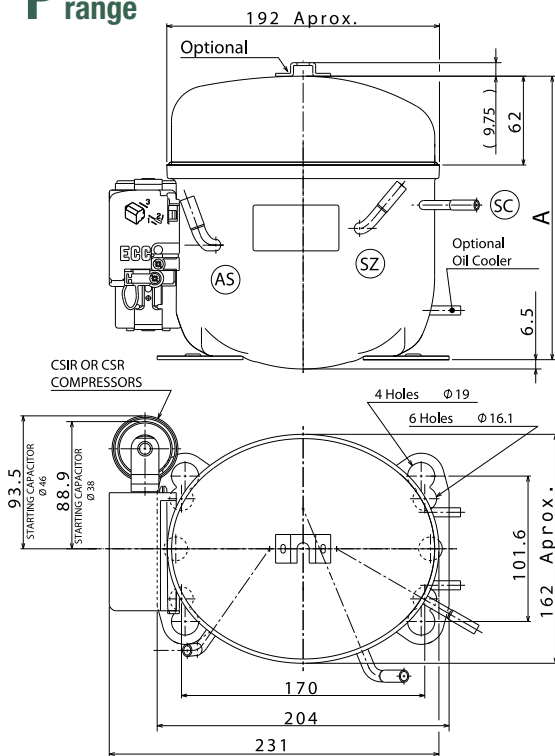
	A (mm)	LEGEND	
Db	149.5	AS	Suction/Service
Dc	157.5	SC	Discharge
Dd	162.5	SZ	Service/Suction

## L range



	A (mm)	LEGEND	
Lb	175	AS	Suction/Service
Lc	185.6	SC	Discharge
Ld	198	SZ	Service/Suction

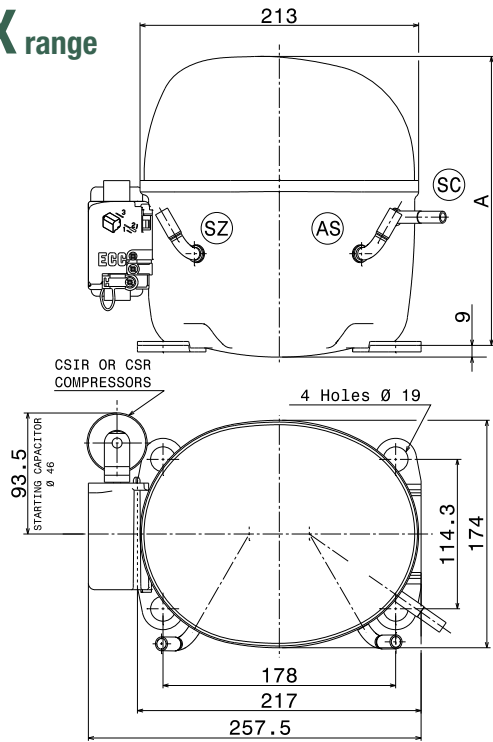
## P range



	A (mm)	LEGEND	
Pc	198.1	AS	Suction/Service
Pd	210.5	SC	Discharge
		SZ	Service/Suction

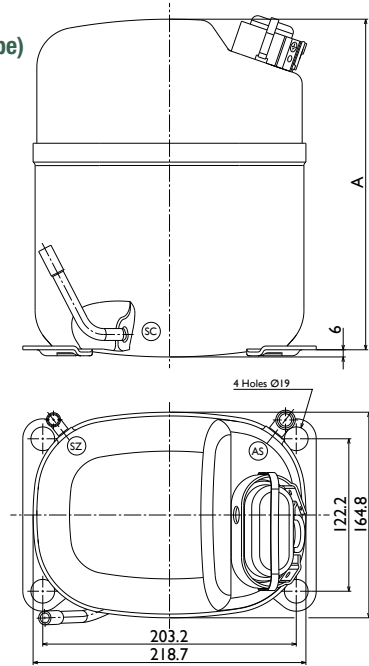


## X range



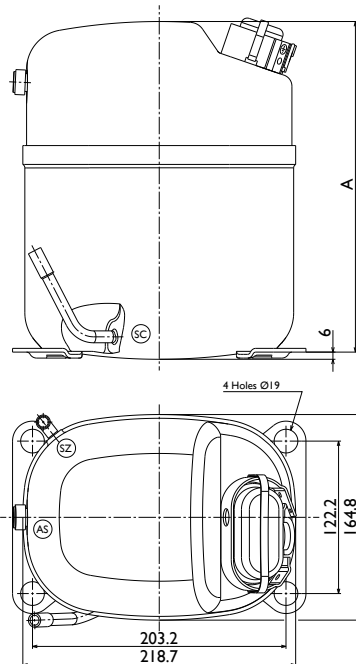
	A (mm)	LEGEND
Xc	215	AS Suction
Xd	221	SC Discharge
		SZ Service

## S range (Tube)



	A (mm)	TUBE
Sb	252	LEGEND
Sc	265	AS Suction
Sd	276	SC Discharge
		SZ Service

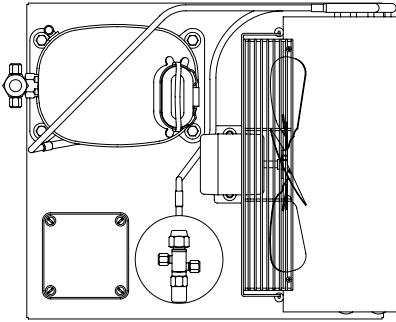
## S range (Valve)



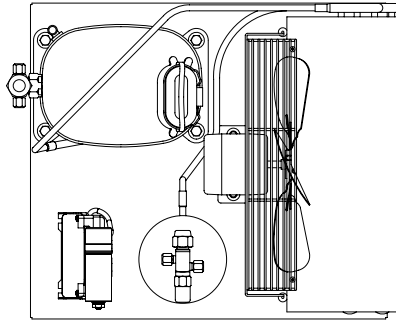
	A (mm)	VALVE
Sb	252	LEGEND
Sc	265	AS Valve serv.
Sd	276	SC Discharge
		SZ Service

# Condensing Unit Layouts

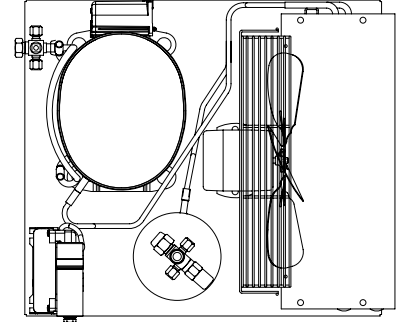
1A



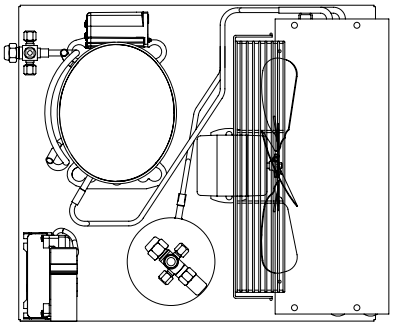
1B



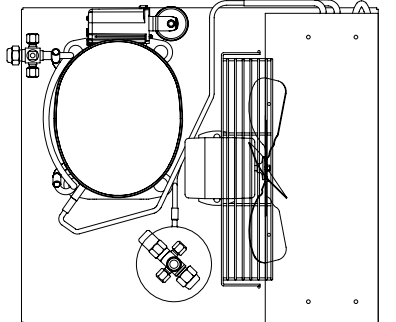
1C



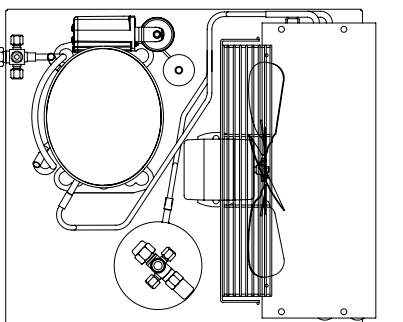
1D



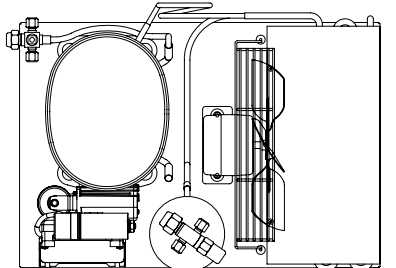
1E



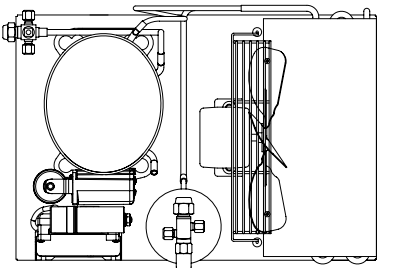
1F



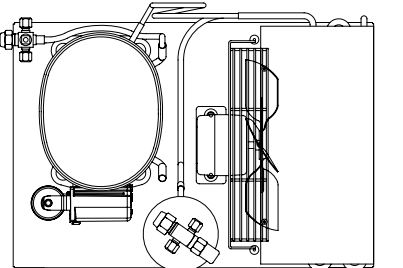
2A



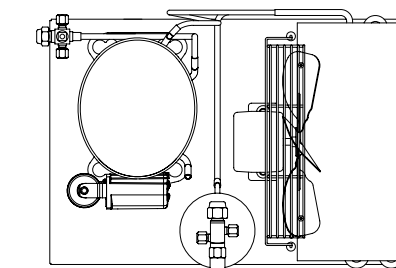
2B



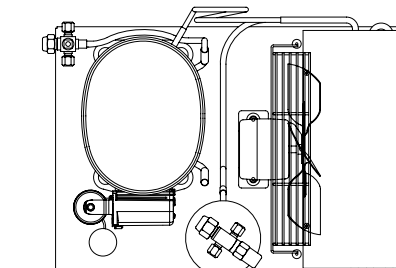
2C



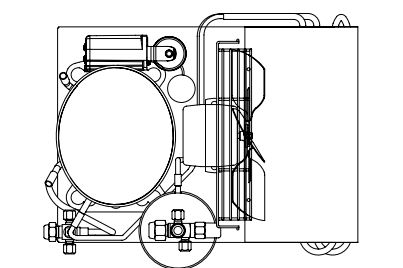
2D



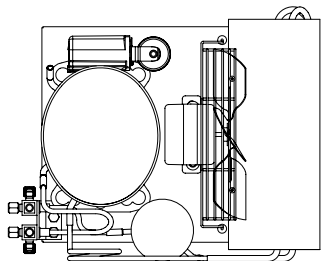
2E



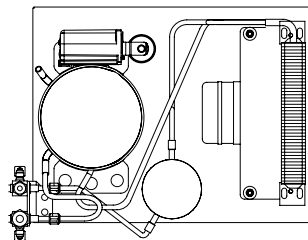
3A



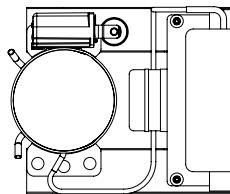
3B



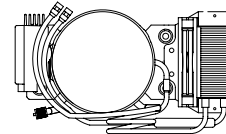
3C



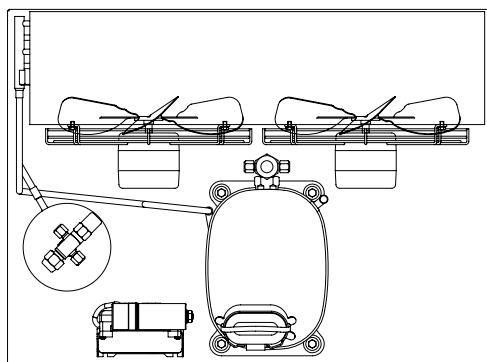
4A



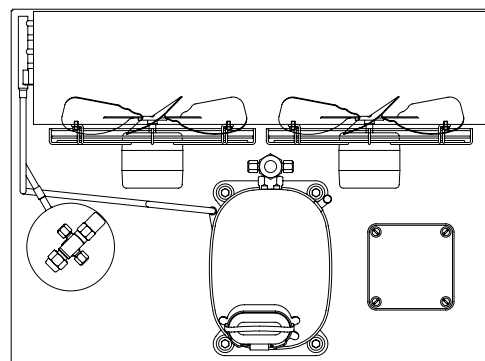
5A



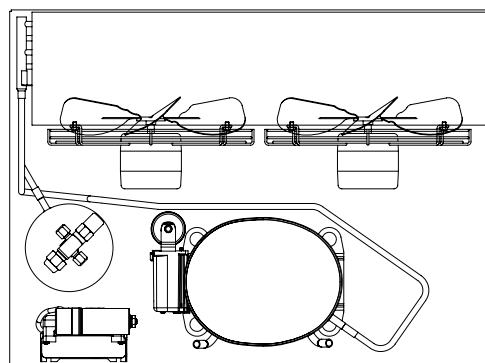
6A



6B



6C



# Packaging

## Single Box

	Range	Box dimensions (mm)			Pallet dimensions (mm)	
		Length	Width	Height	Length	Width
Compressors	D	257	172	145/160	1010	1010
	L & P	300	192	167/185/198/214	1200	1050
	X & P (w/ connecting box)	320	192	222	1050	1050
	X	347	207	230	1050	1050
	S	282	215	363	1010	1010
Condensing Units (CU)	Versions 3A,3B,3C	484	380	260	1200	1050
	Versions 2A,2B,2C,2D,2E	556	442	302	1360	1150
	Versions 1A,1B,1C,1D,1E,1F	577	537	345/440	1160	1100
	Versions 6A,6B	670	500	280	1360	1150
	Versions 6C	670	500	335	1360	1150

## Tray

	Range	Tray dimensions (mm)		Pallet dimensions (mm)	
		Length	Width	Length	Width
Compressors	D	1010	1010	1010	1010
	L & P	1060	990	1050	1050
	X	1050	1020	1050	1050
	S	1050	1050	1050	1050
CU	Versions 3A,3B,3C	374	290	1200	1050

## Quantities by Pallet Compressors

Range	Tray			Single Box		
	Qty / Level	N° Levels	Qty / Pallet	Qty / Level	No. Levels	Qty / Pallet
D	24	5	120	24	5	120
L	24	5	120	20	5	100
P	24	5	120	20	5	100
P w/ connecting Box	24	5	120	16	4	64
X	17	4	68	16	4	64
X w/ connecting Box	17	4	68	15	4	60
S	24	2	48	16	3	48

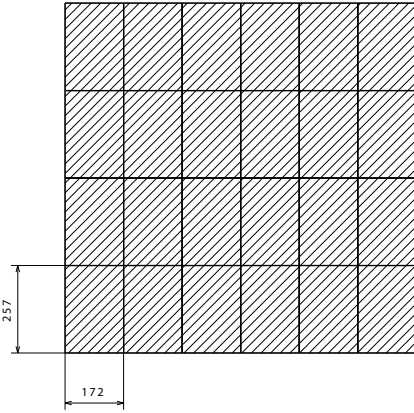
## Quantities by Pallet Condensing Units

Range	Tray			Single Box		
	Qty / Level	N° Levels	Qty / Pallet	Qty / Level	No. Levels	Qty / Pallet
Versions 3A,3B,3C	8	4	32	6	4 or 3	24 or 18
Versions 2A,2B,2C,2D,2E	-	-	-	6	3 or 2	18 or 12
Versions 1A,1B,1C,1D,1E,1F	-	-	-	4	3 or 2	12 or 8
Versions 6A,6B	-	-	-	4	2 or 3	8 or 12
Versions 6C	-	-	-	4	2 or 3	8 or 12
Esp (360x310 / 350x270)	9	4	36	-	-	-

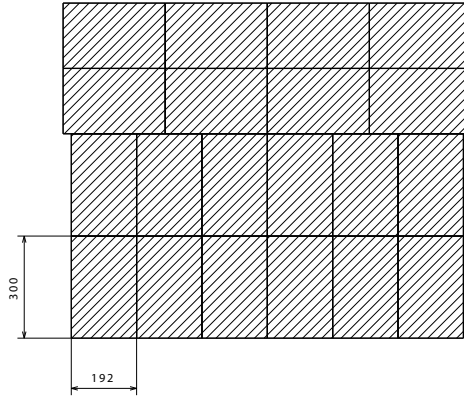
## Pallet Product Layout

### Single Box Pallet Distribution

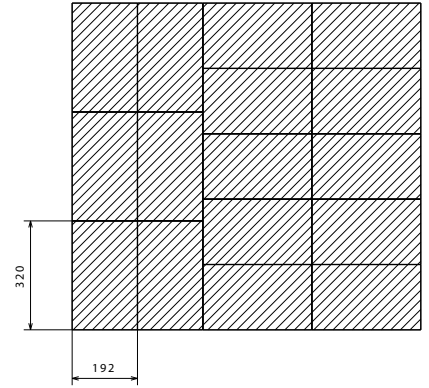
**D Range**



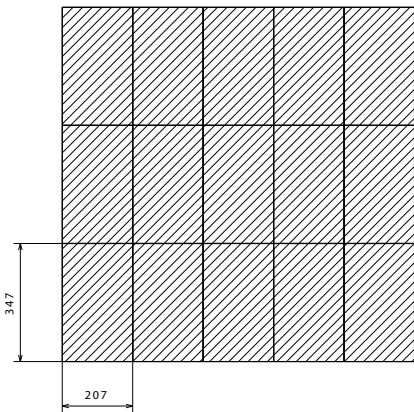
**L & P Ranges**



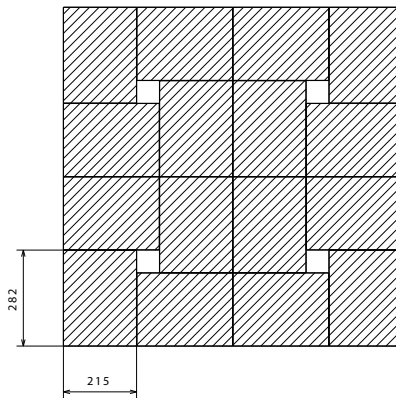
**P Range with connecting box and X Range**



**X Range with connecting box**

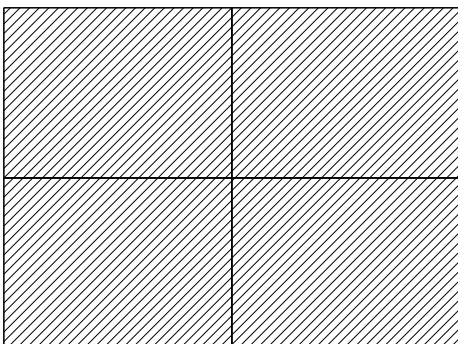


**S Range**

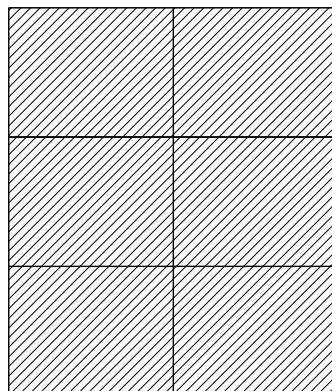


## Condensing Units Box Pallet Distribution

**Versions 1A,1B,1C,1D,1E,1F**  
**Versions 6A,6B,6C**

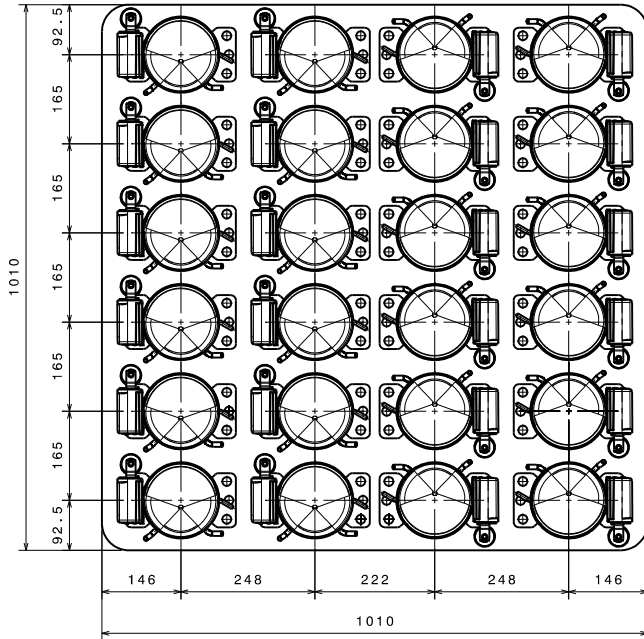


**Versions 2A,2B,2C,2D,2E**  
**Versions 3A,3B,3C**

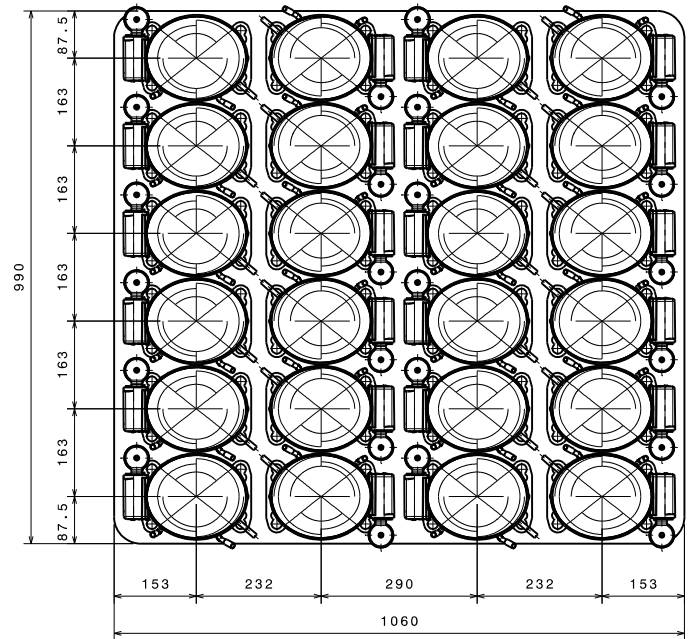


## Tray per Pallet

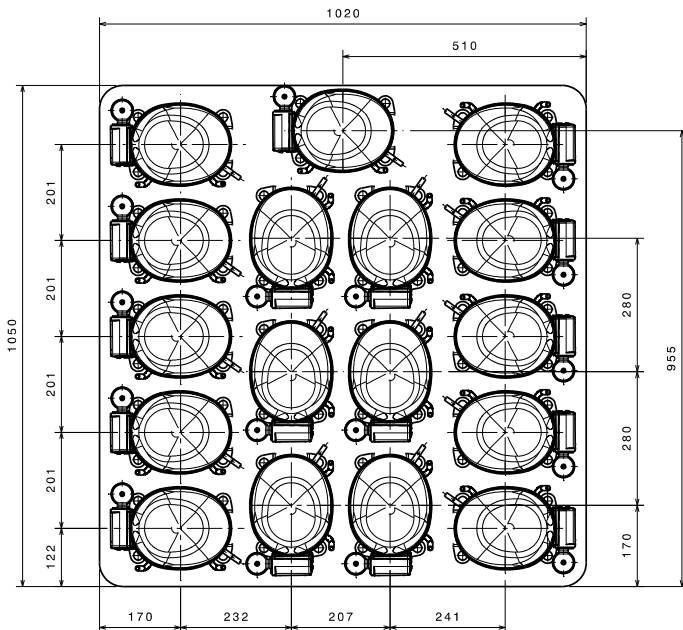
### D compressor tray distribution



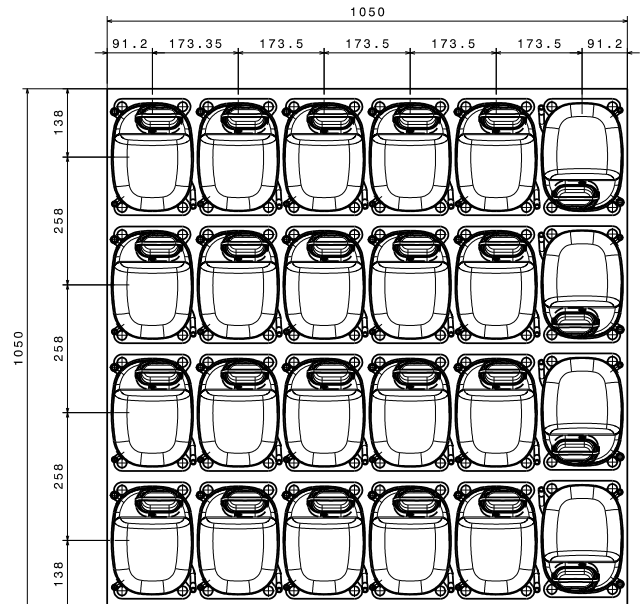
### L and P compressor tray distribution



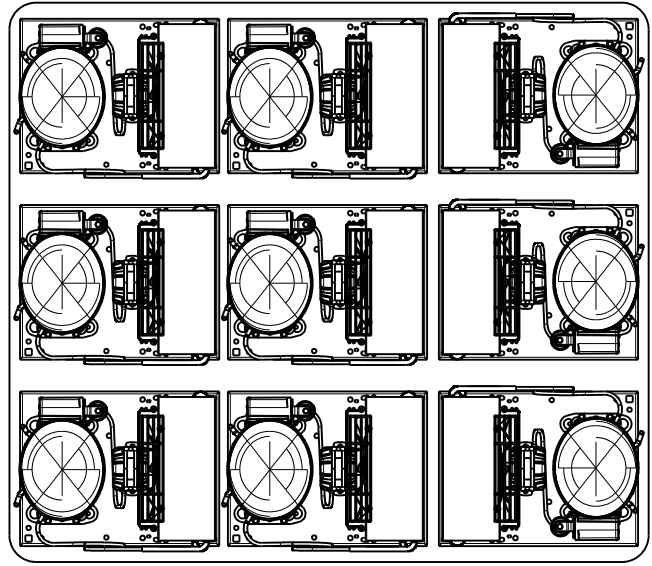
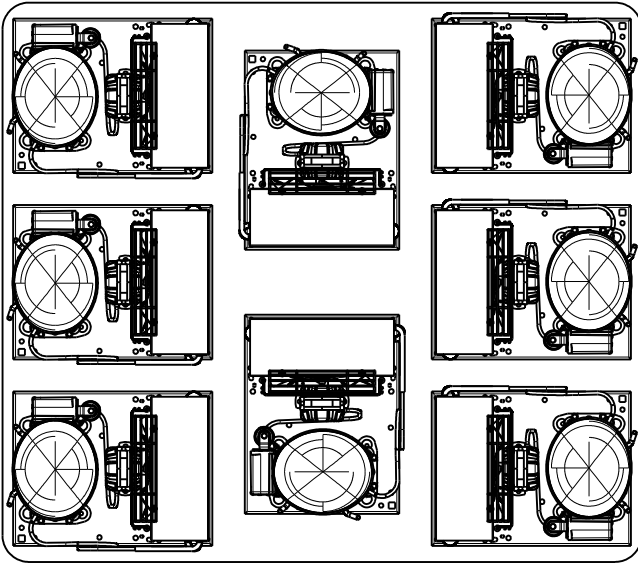
### X compressor tray distribution



### S compressor tray distribution



## Condensing Units Pallet Distribution

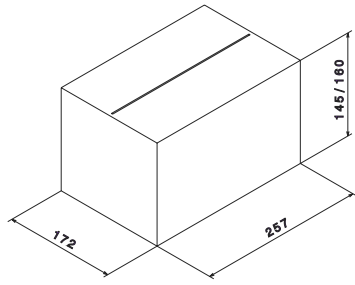


### Pallet label

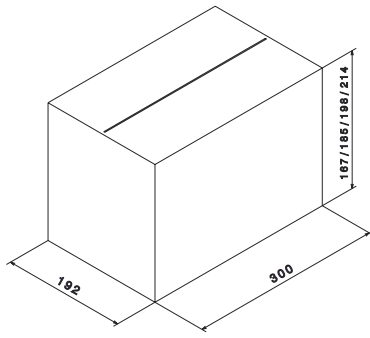
Receiver <b>CUSTOMER</b>		Customer <b>00000</b>	
Work Order <b>000000</b>		Supplier name <b>HUAYI COMPRESSOR</b>	
Part Name(P) <b>000000</b> 		<b>0000</b> <b>A00 / MUELLE</b> <b>000000</b> <b>DD.MM.YYYY 00:00</b>	
Quantity(Q) <b>000,000 UN</b> 		Description <b>COMPRESSOR MODEL</b>	
Supplier ID(V)		Date <b>DD/MM/YYYY</b>	Drawing number
Palet number <b>0000000000</b> 		Part number barcode 	

# Single Boxes Drawings

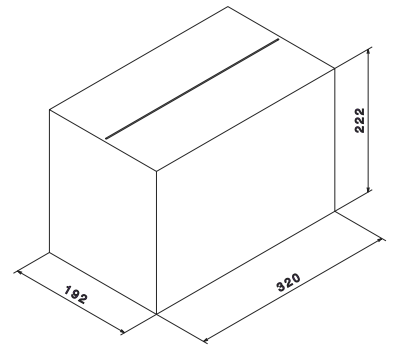
## D Range



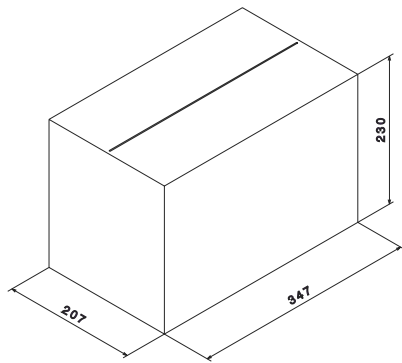
## L & P Ranges



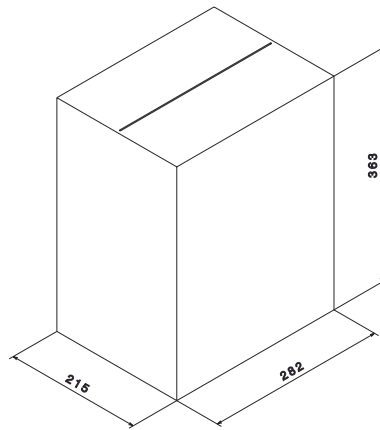
## P / X Range



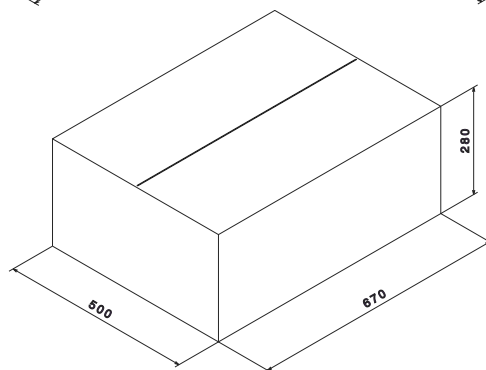
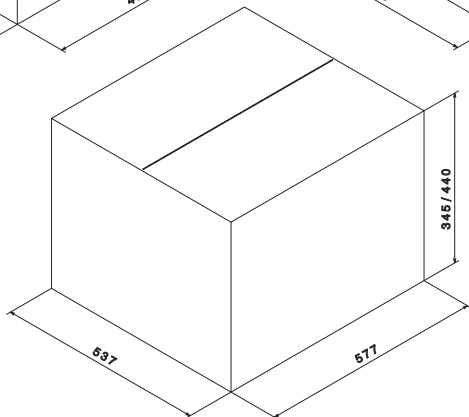
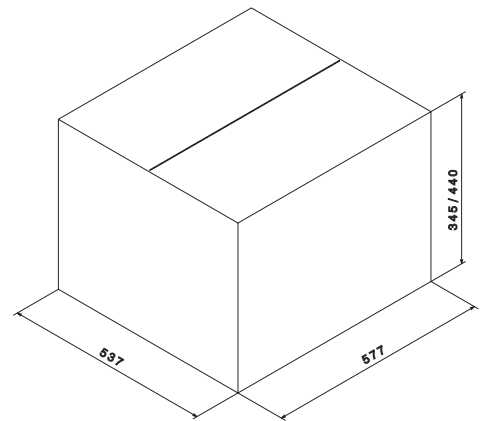
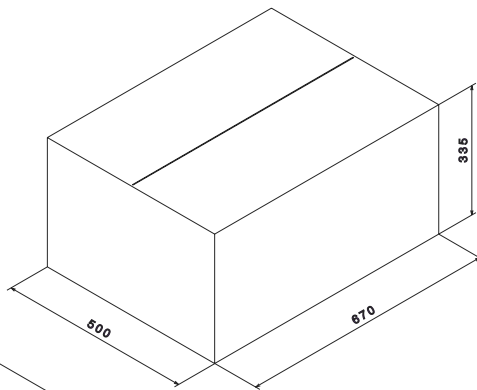
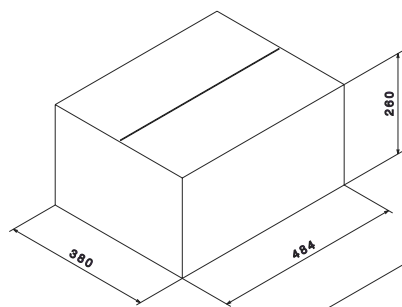
## X Range with connecting box



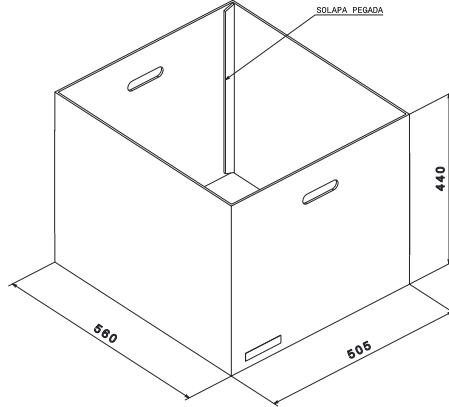
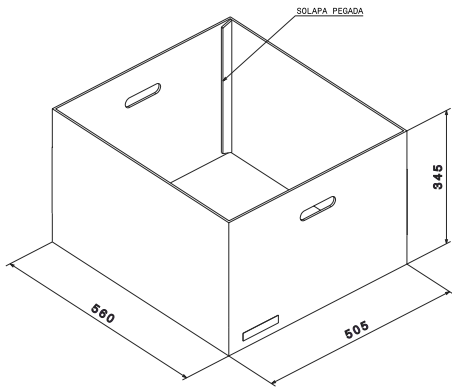
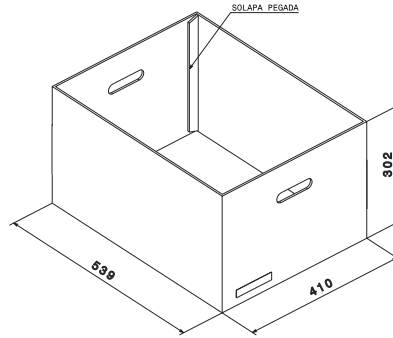
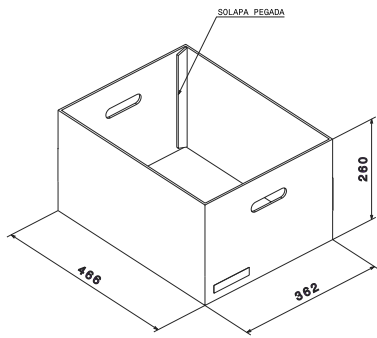
## S Range



## Condensing Units

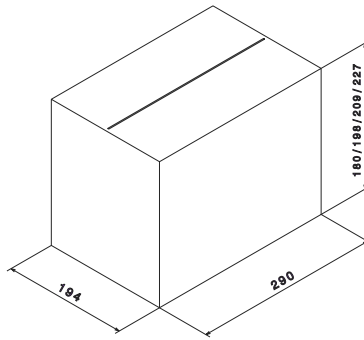
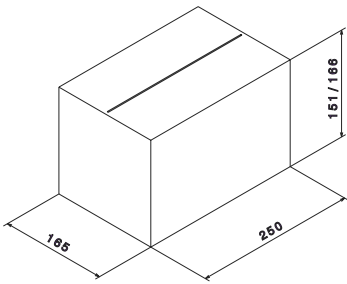




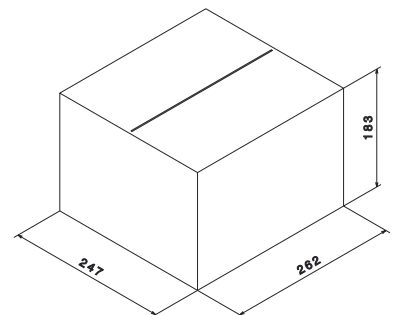
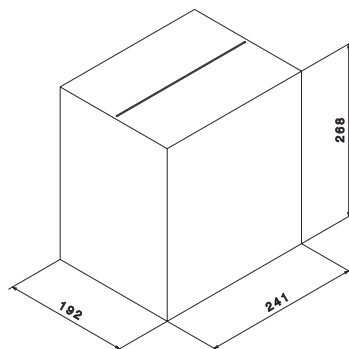
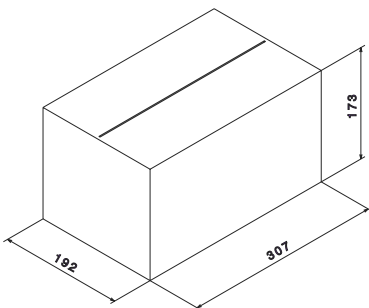


### GD30FDC Compressor

### GLT80TDC Compressor



### GD30FDC Condensing Units



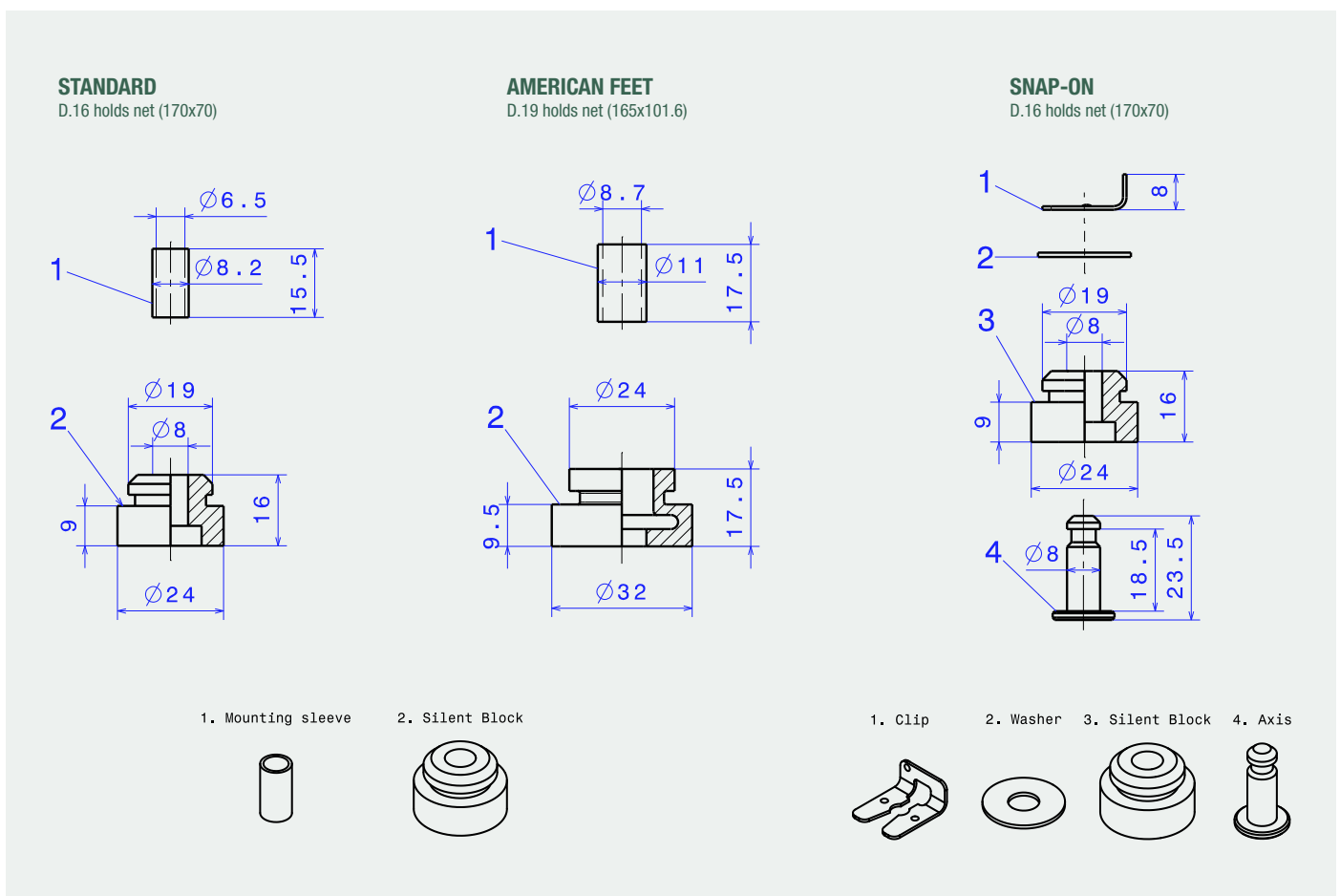
# Fixings

Fixings allow the manufacturer of appliances to fix the compressor to the appliance base, connecting it to the cooling system

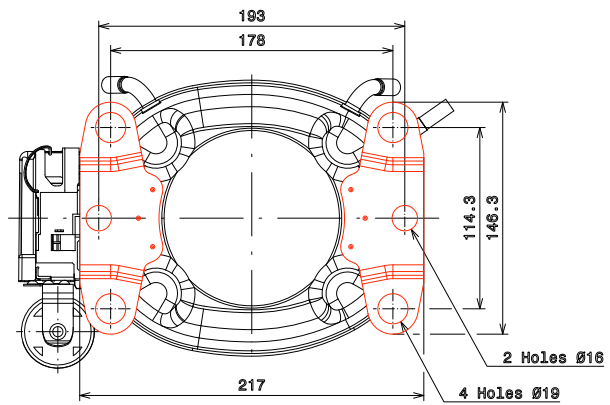
## Mounting feet

Range	Mounting feet	
<b>D</b>	European type. Set of 4 holes of 16.5 mm DIA with inter-axes: 70 x 170 mm	
<b>L / P</b>	European type Set of 4 holes of 16.5 mm DIA with inter-axes: 70 x 170 mm	American type Two sets of 4 holes: 1.- Set of 16.5 mm DIA with inter-axes: 70 x 170 mm 2.- Set of 3/4 inch (19 mm) DIA with inter-axes: 4 x 61/2 inch (101.6 x 165 mm)
<b>X</b>	One set of 4 holes of 19 mm (3/4 inch) DIA with inter-axes: 114.3 x 178 mm (4 1/2 x 7 inch)	
<b>S</b>	One set of 4 holes of 19 mm (3/4 inch) DIA with inter-axes: 122.2 x 200.2 mm (4 13/16 x 7 7/8 inch)	

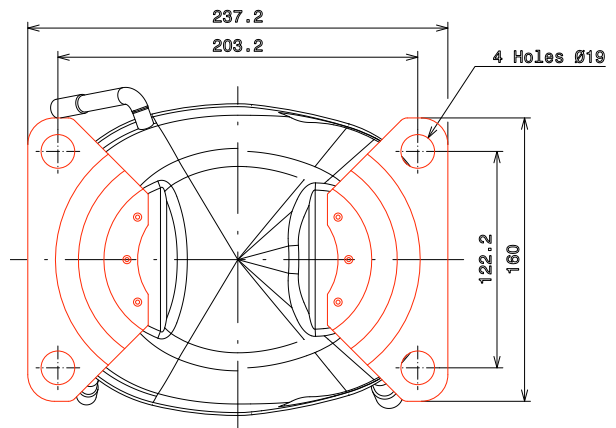
## Silent Blocks (Mounting accessories)



## X Range

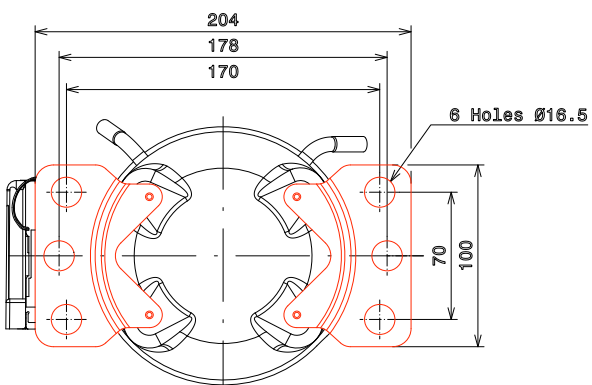


## S Range



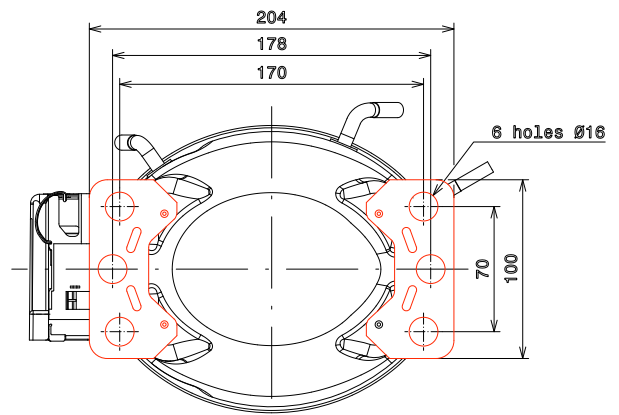
## European mounting feet

### D Range

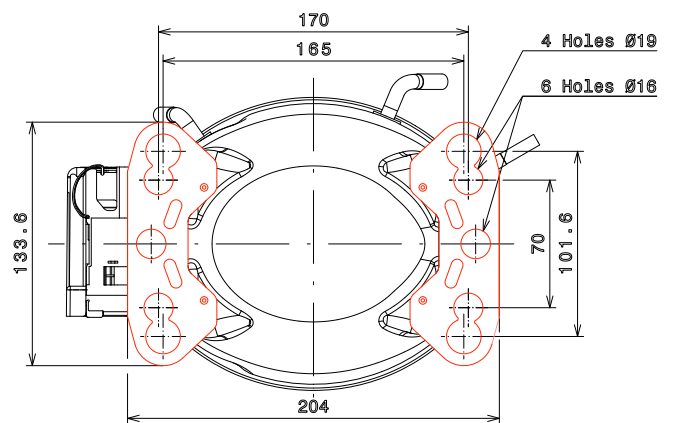


## European mounting feet

### L / P Range

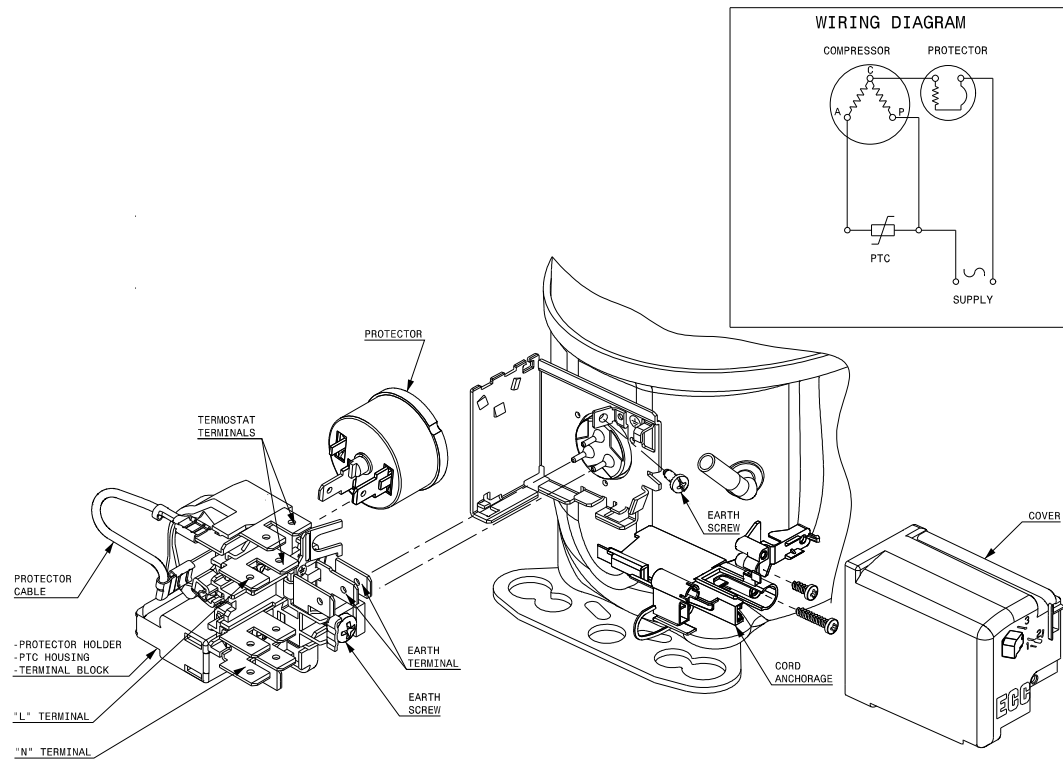


## American mounting feet

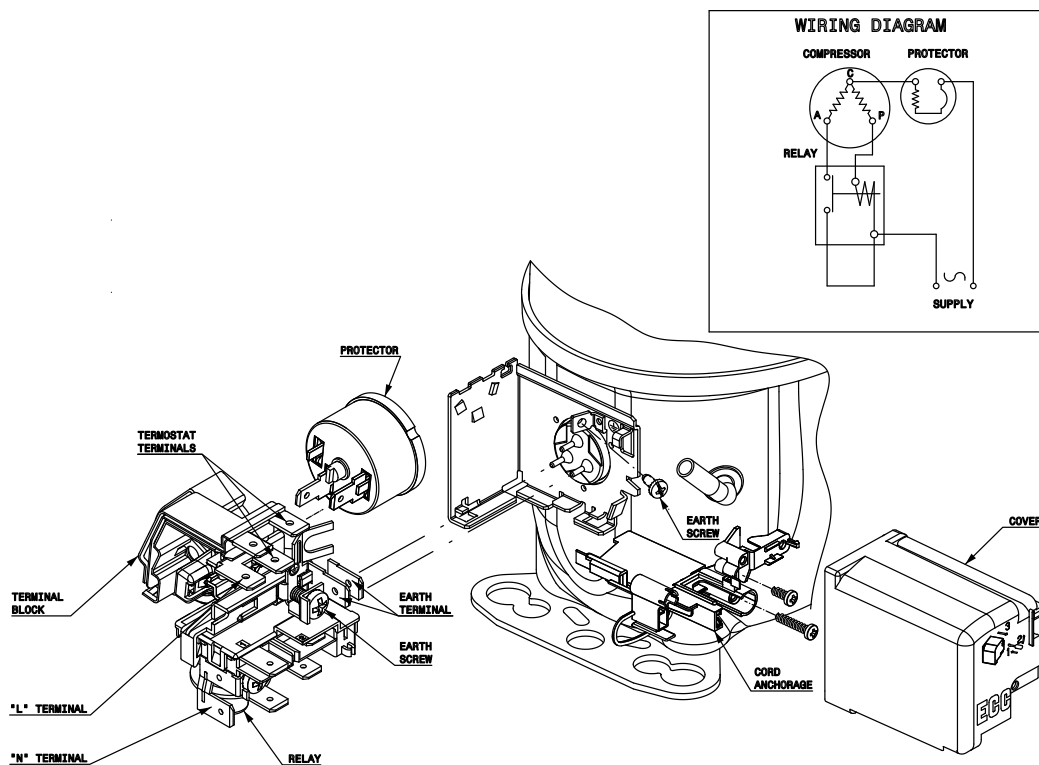


# Wiring Diagrams and Electrical Assembly

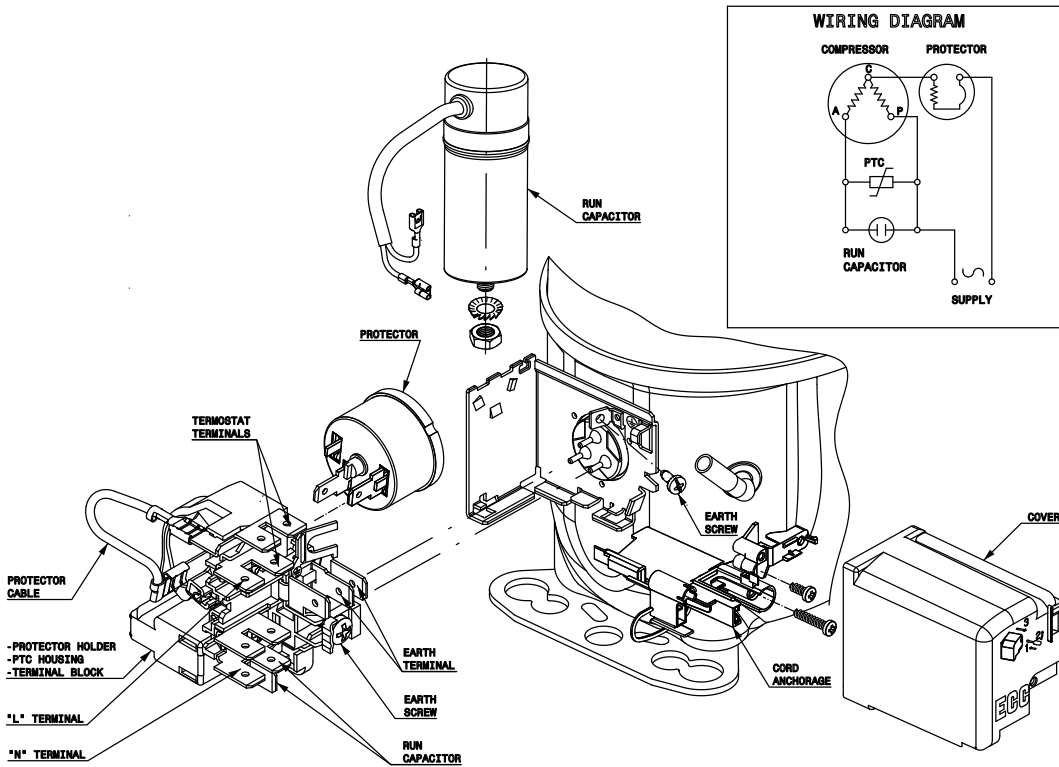
## RSIR CONNECTION (PTC)



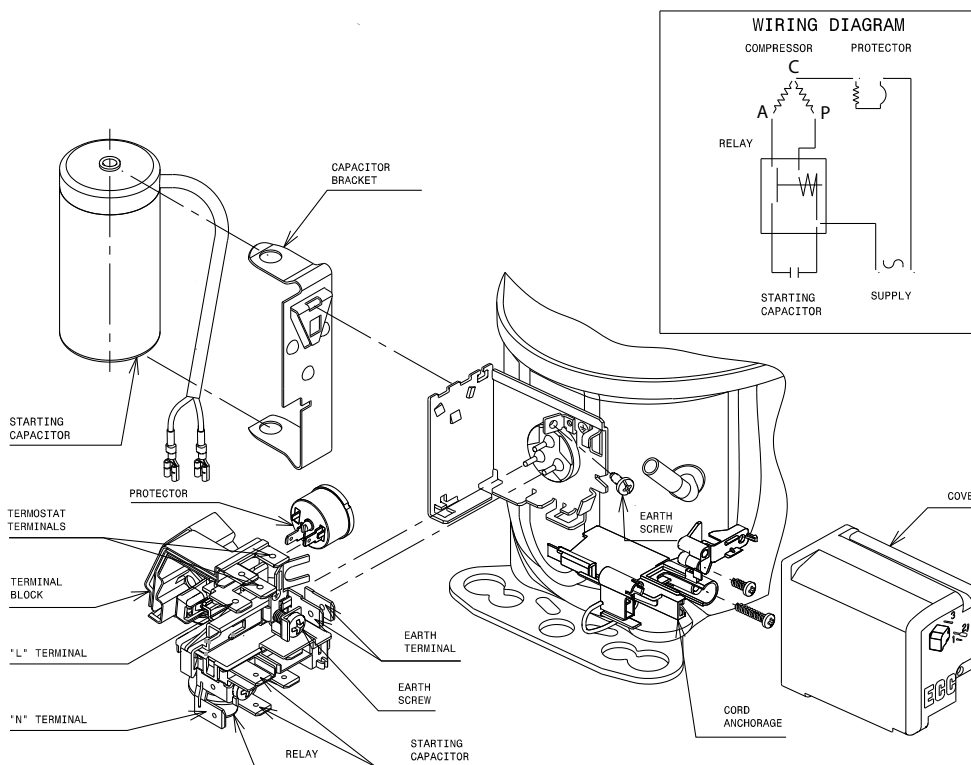
## RSIR CONNECTION (RELAY)



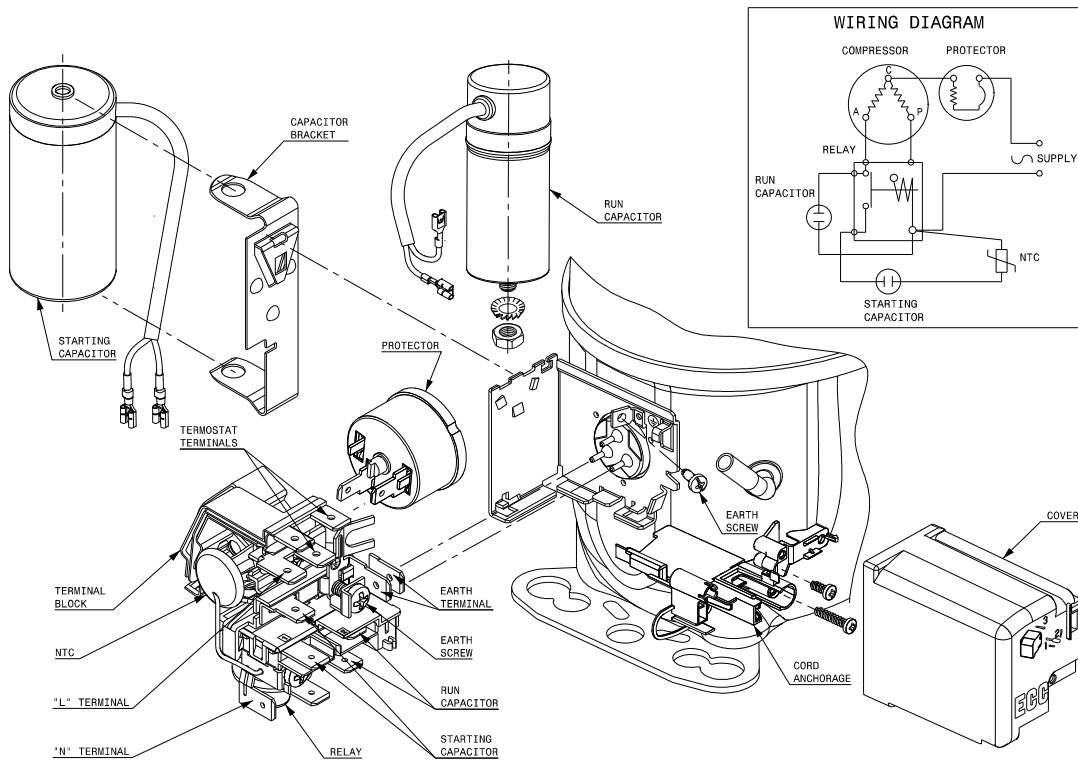
## RSCR CONNECTION



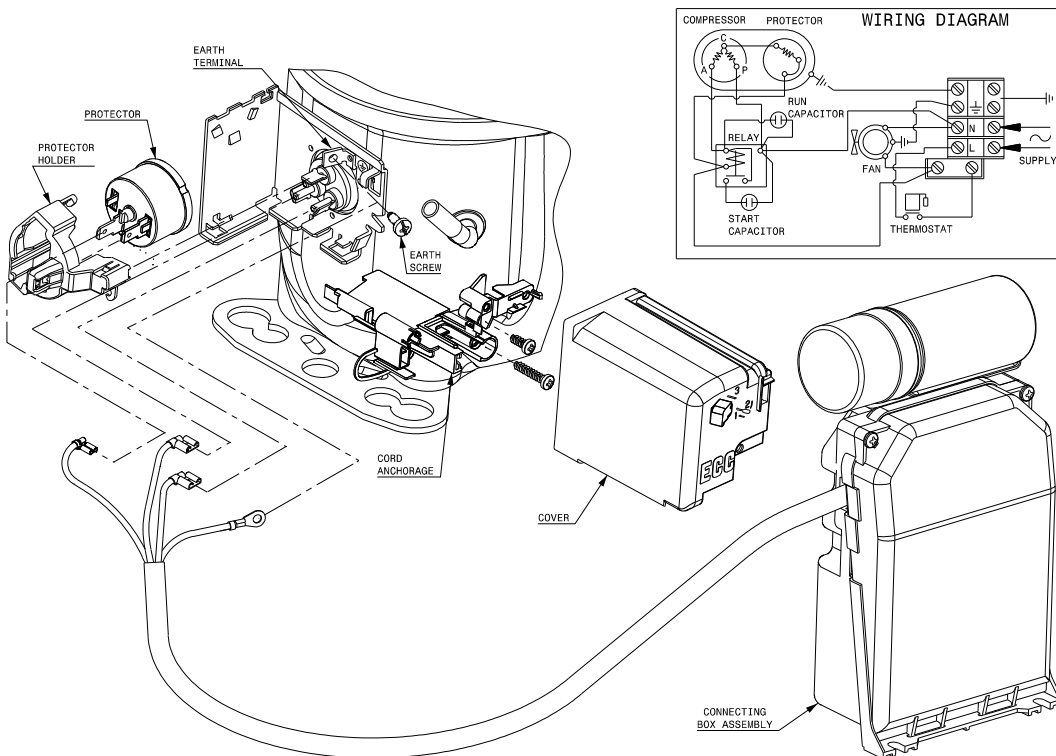
## CSIR CONNECTION



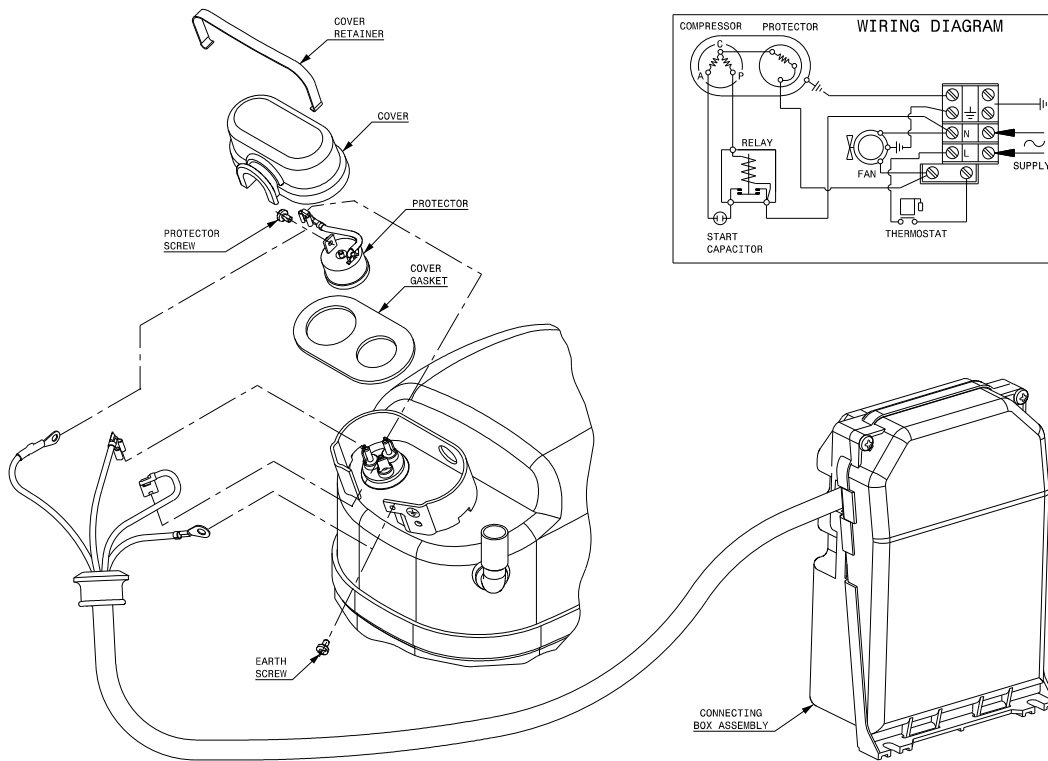
## CSR CONNECTION (CURRENT RELAY + NTC)



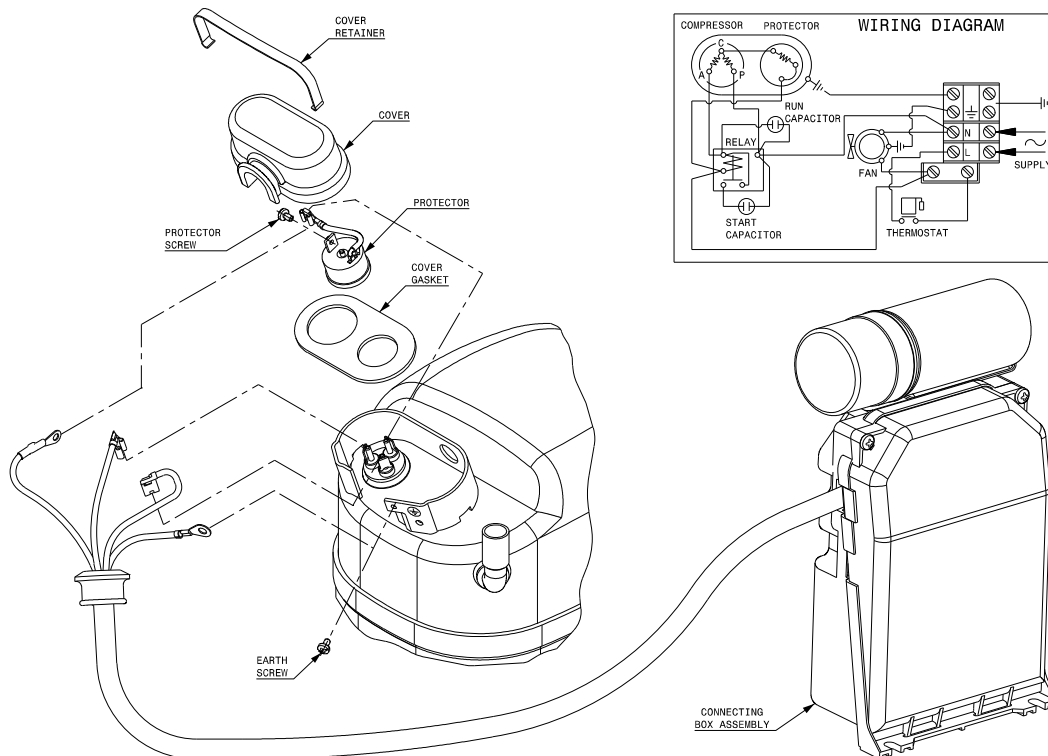
## CSR CONNECTION (EXTERNAL CONNECTING BOX) (P, X ranges)



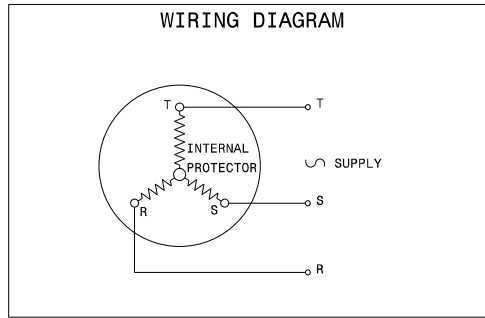
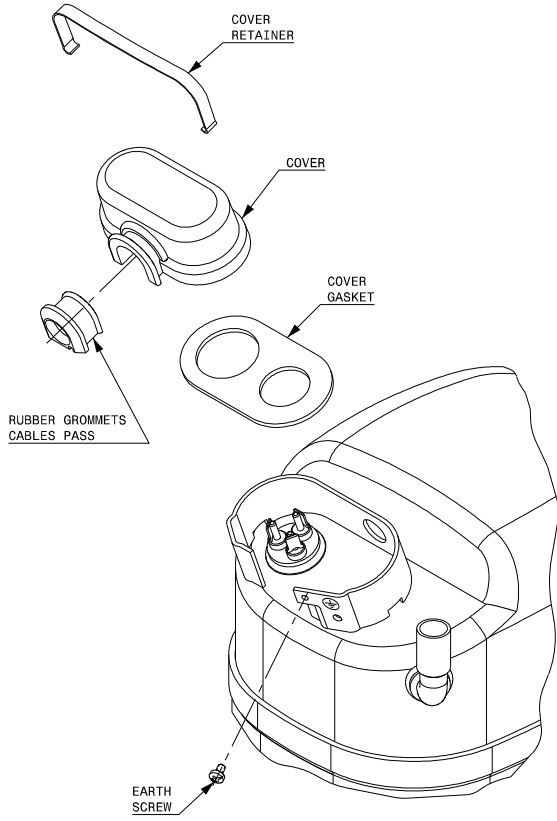
## CSIR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



## CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)

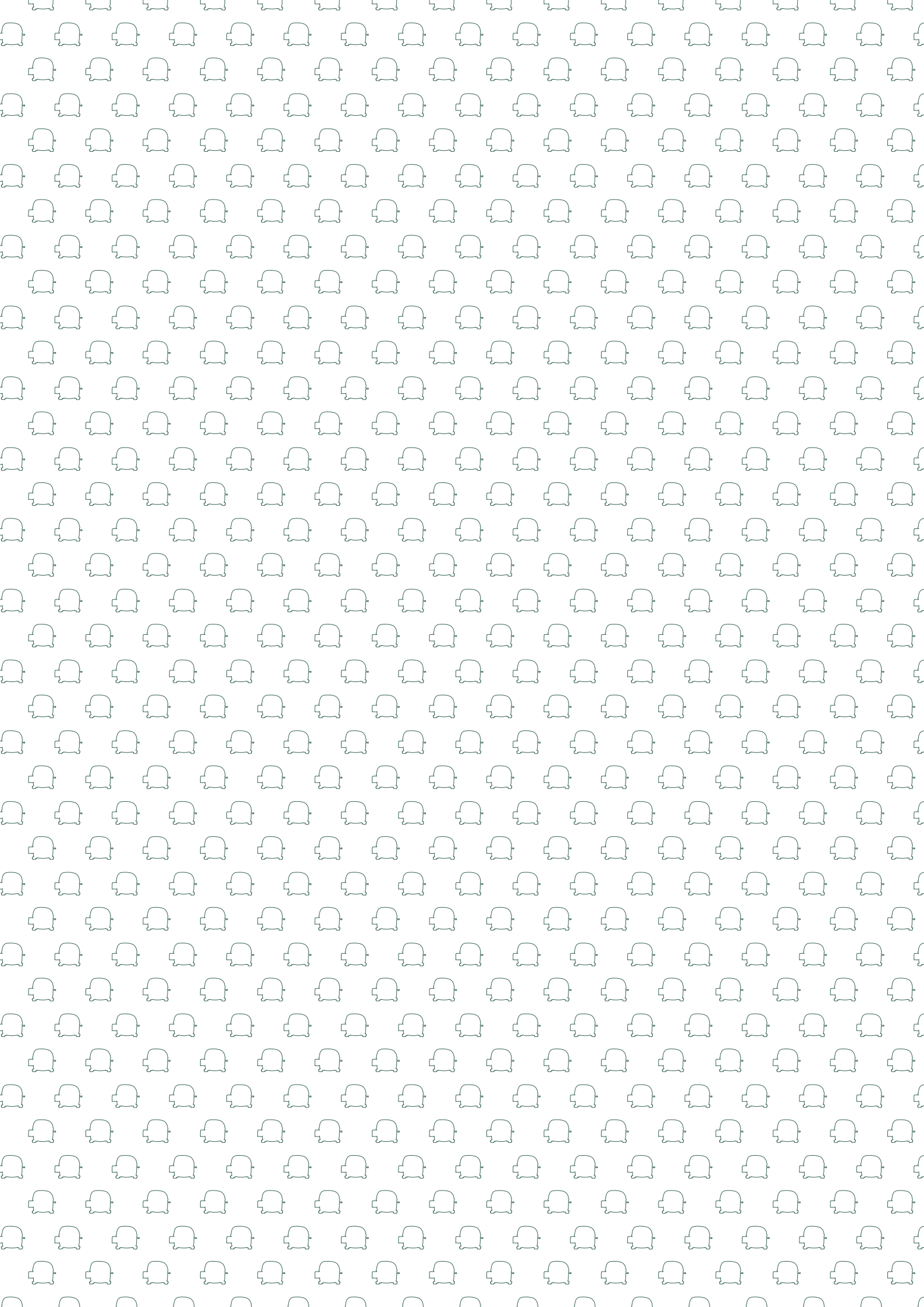


## 3PH CONNECTION (S range)













**HUAYI  
COMPRESSOR  
BARCELONA**

**Huayi Compressor Barcelona, S.L.**  
Antoni Forrellad, 2 · 08192  
Sant Quirze del Vallès · BCN · Spain  
Phone: +34 93 710 60 08  
Fax +34 93 710 69 58

[www.huayicompressor.es](http://www.huayicompressor.es)