



GENERAL CATALOGUE

Compressors



for Commercial Refrigeration
R134a · R404A · R507 · R600a · R290 · R1234yf



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.

More than 50 years

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

1. General Information	
The Company	9
The Product	11
Family of Compressors and Condensing Units	12
The Green Cooling Ranges	14
DC Compressors for mobile applications	16
Condensing Units	17
2. Compressor Information	
Compressor ranges by Cooling Capacity	20
Labels and Approvals	23
Nomenclature U, L, P, X and S ranges	24
Nomenclature Small L & B ranges	25
SOA	26
Voltage	28
Type of Electrical Motors	28
How to Read this Catalogue	29
3. Compressors Catalogue	
R290 / R600a	32
R134a	40
R404A / R507	48
DC and Variable Speed Compressors	54
4. Technical Information	
Technical Datasheets online	58
Compressor Dimensional Drawings	60
Fixings	64
Wiring Diagrams and Electrical Assembly	66
Packaging & Logistics	72



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 more than 50 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 2.2 to 38cc, 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



small L range

Features:

More compact, more efficient

Range:

2.20 to 3.10 cc

Refrigerants:

R134a, R600a

Applications:

Small refrigerators and freezers

B range

Features:

More displacement, more efficient, compactness

Range:

2.20 to 6.50 cc

Refrigerants:

R134a, R600a, R290

Applications:

Water coolers, can / bottle coolers, small refrigerator and freezers



U range

Features:

The most efficient, Compact size, Extremely silent, Green Cooling

Range:

4.50 to 8.90 cc

Refrigerants:

R134a, R290, R600a, R1234yf

Applications:

Ice Cream Freezers, Bottle Coolers, Chest coolers, Freezers, Refrigerated display counters, Display cabinets



L range

Features:

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

Range:

4.56 to 10.7 cc

Refrigerants:

R134a, R404A, R452A, R600a, R290, R507, R1234yf

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:

12.10 to 18.00 cc

Refrigerants:

R134a, R404A, R452A, R600a, R290, R507, R1234yf

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:

16.03 to 23.20 cc

Refrigerants:

R134a, R404A, R452A, R290, R407C, R507, R1234yf

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:

18.10 to 38 cc

Refrigerants:

R290, R134a, R404A, R452A, R407C, R507, R1234yf, R290

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 2.20 to 34.42 cc

High reliability & top-quality components

Specific customized versions

Designed to work under 43° C tropical conditions

Refrigerants:

R134a, R404A, R290, R407C, R507, R1234yf

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 CO₂ 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.

Variable
Speed
Compressors



Features:

High Efficiency, Flexible Speed Drive

Drop-in Configuration

External Controlling

200-240 V / 50-60Hz

Models:

GLT99FSN, NPT12FSC, NLT60FSN, NVT70FSC

Refrigerant:

R290, R134a





DC Compressors for mobile applications

The Cubigel Compressors mobile cooling solutions for transportation vehicles are designed to operate from a 24-42V 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 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 GLT80TDC is 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.

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.

DC
Compressors
Range



Features:

DC compressors for mobile applications, exceptionally silent
Ready to work under heavy duty operating conditions

24-42V DC

Models:

GLT80TDC

Refrigerant:

R134a

Condensing Units

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, Benefits and Customized versions

Features and Benefits

- Complete range from 2.2 to 38 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

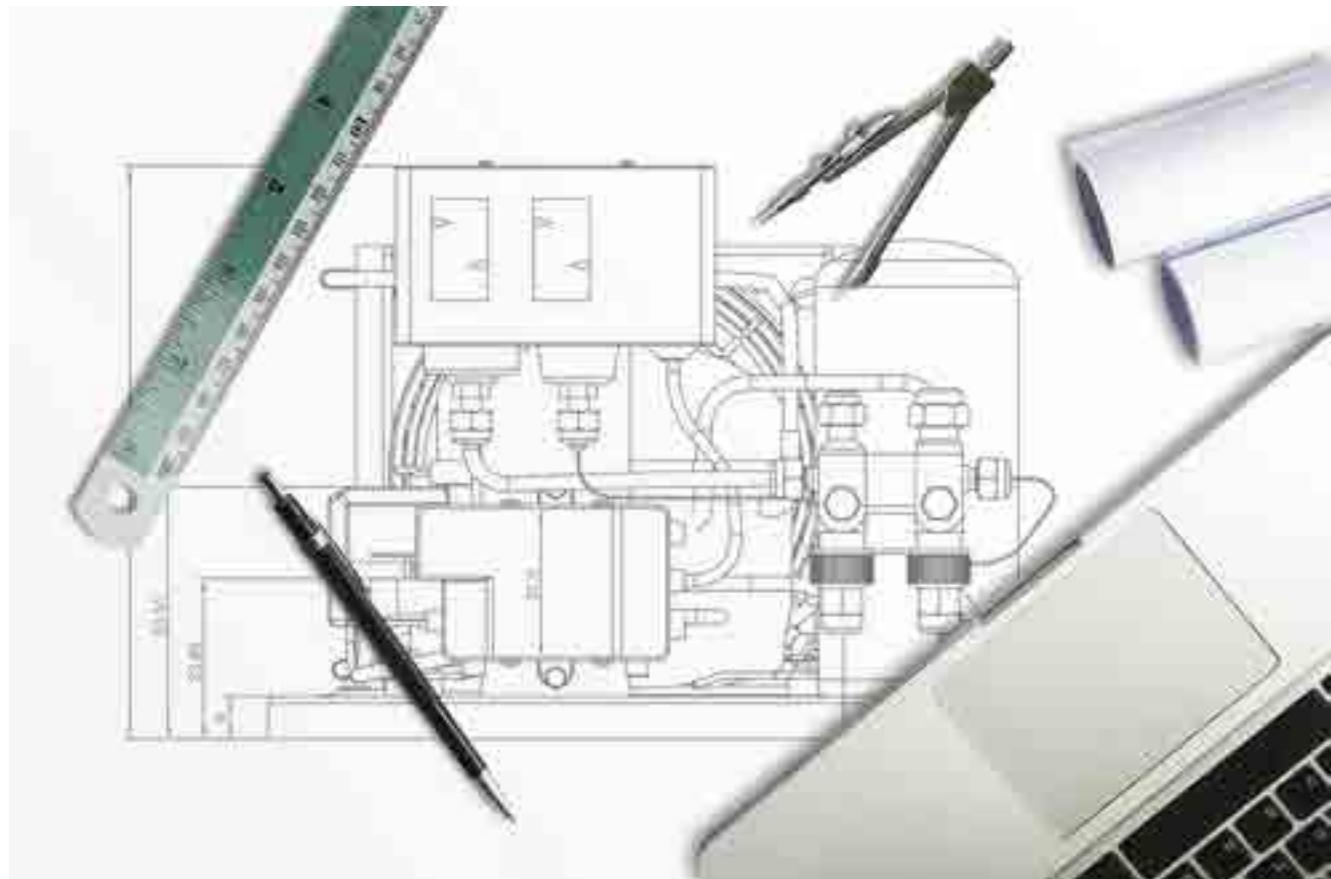


Main specific components

- 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
- Evaporating tray

Main specific services

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



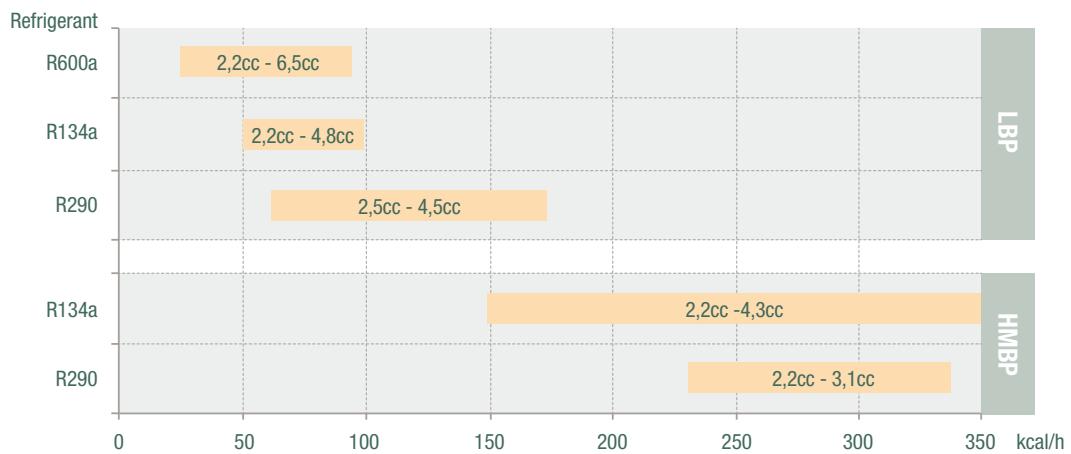


2

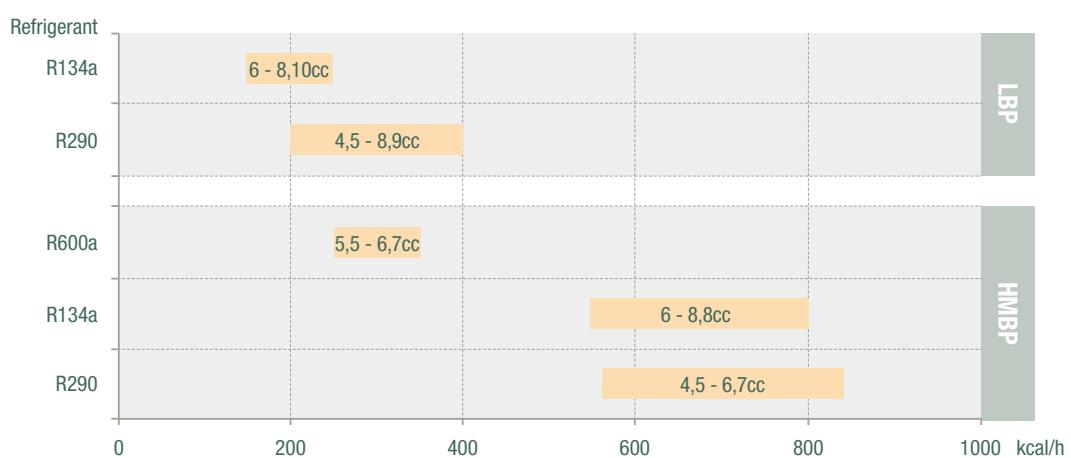
Compressor Information

Compressors ranges by Cooling Capacity

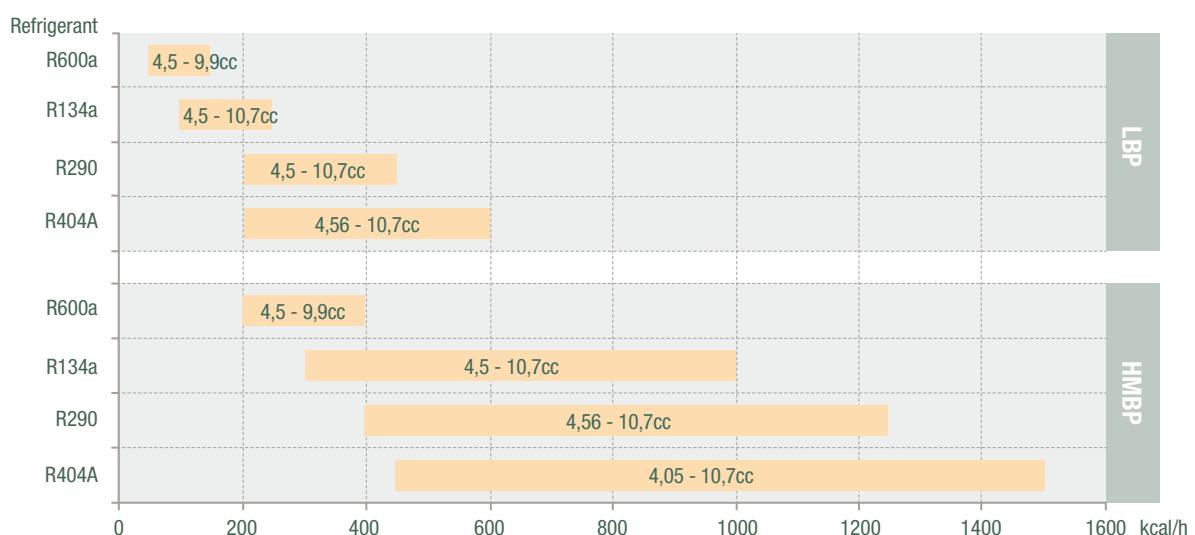
Compressors Ranges Small L & B



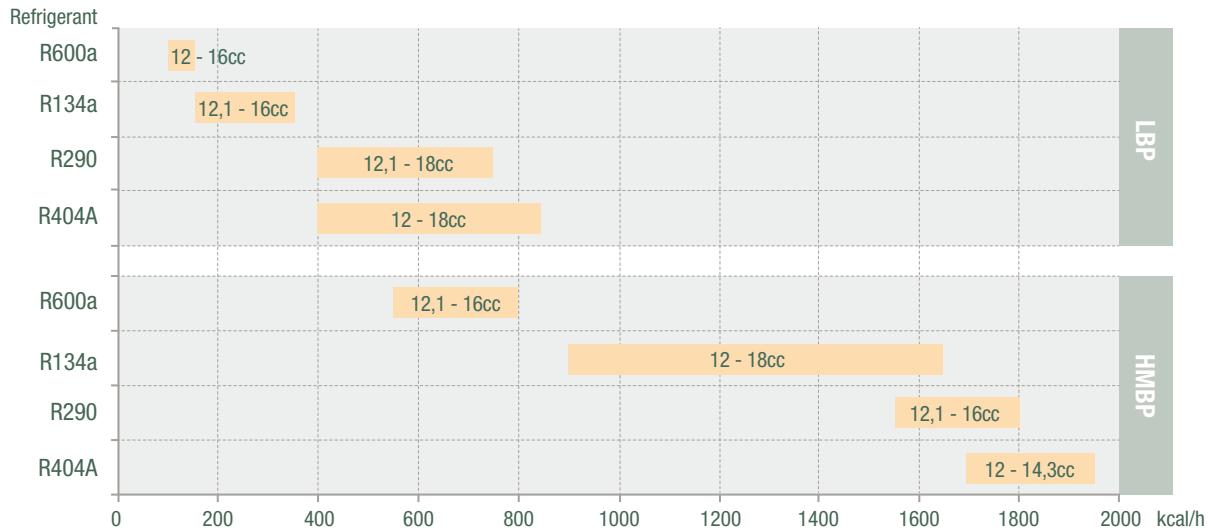
Compressors Ranges U



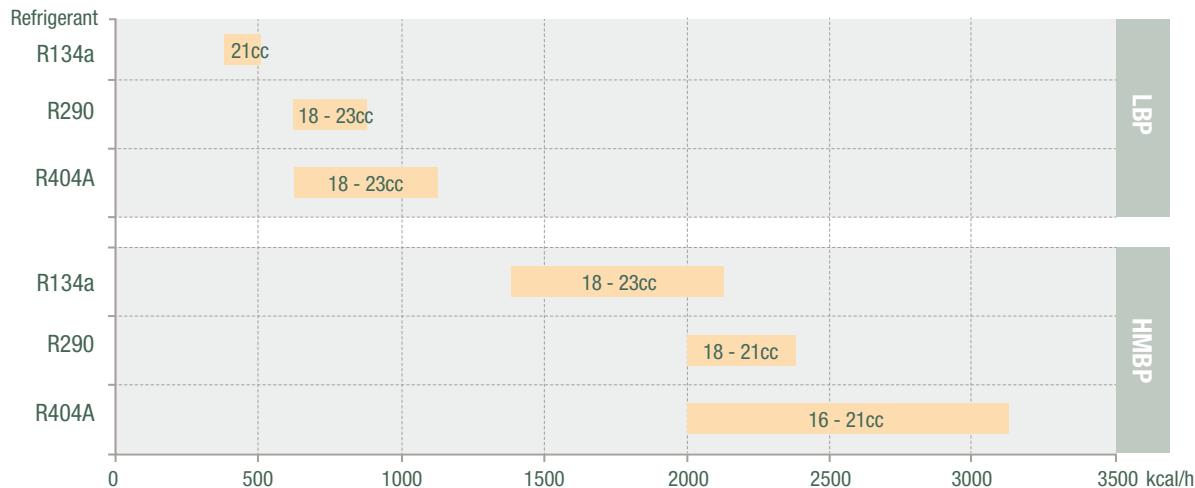
Compressors Ranges L



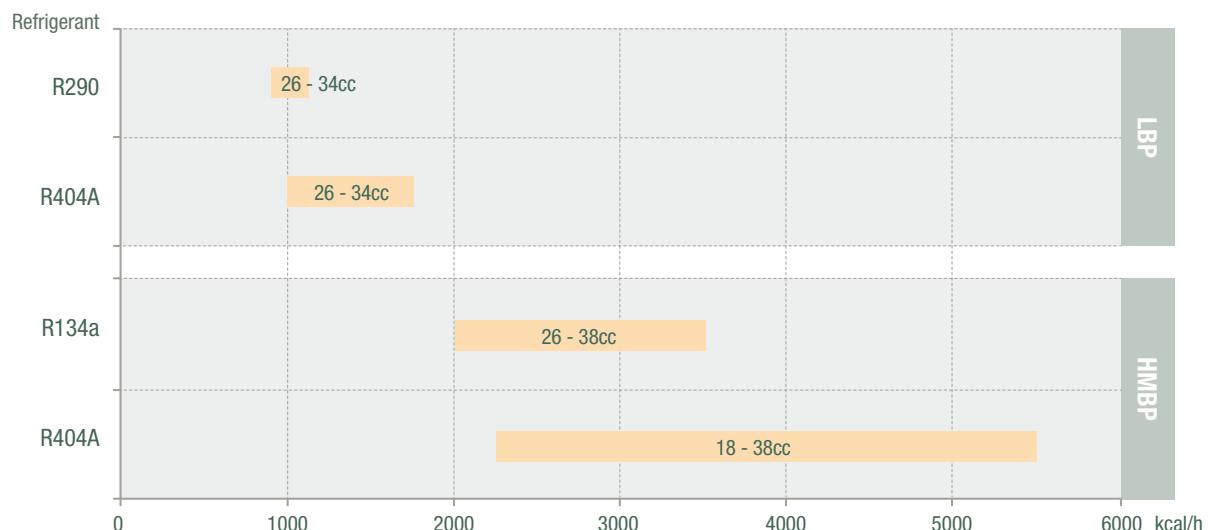
Compressors Ranges P



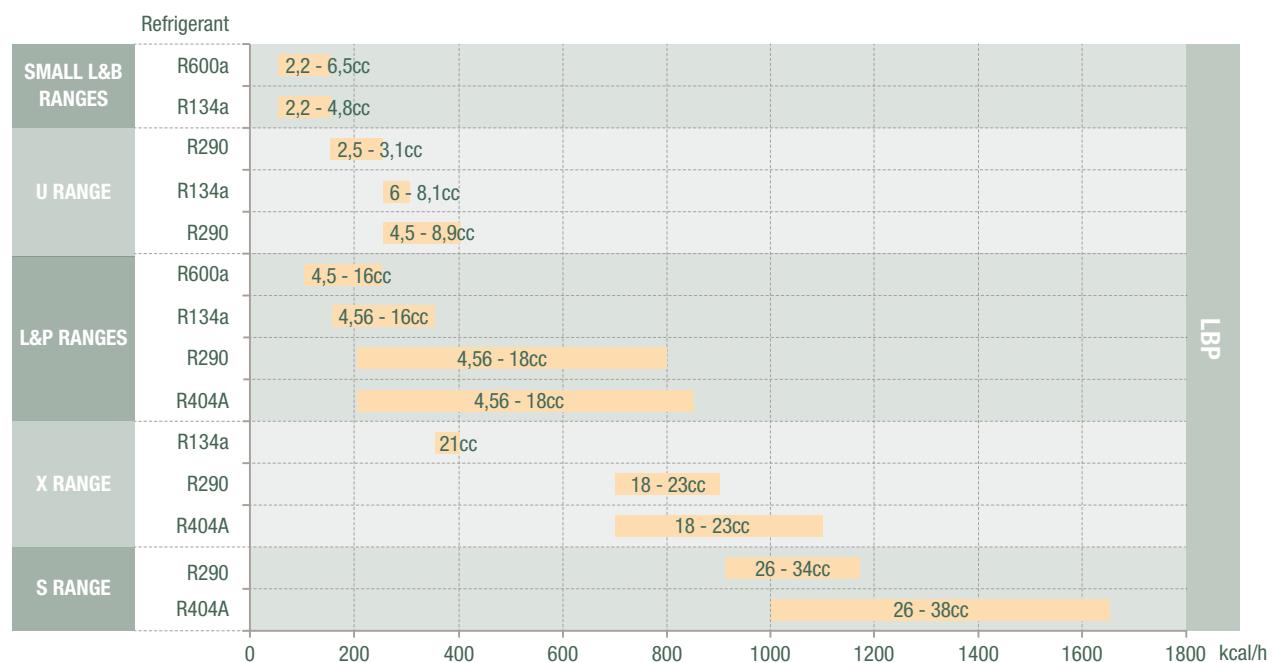
Compressors Ranges X



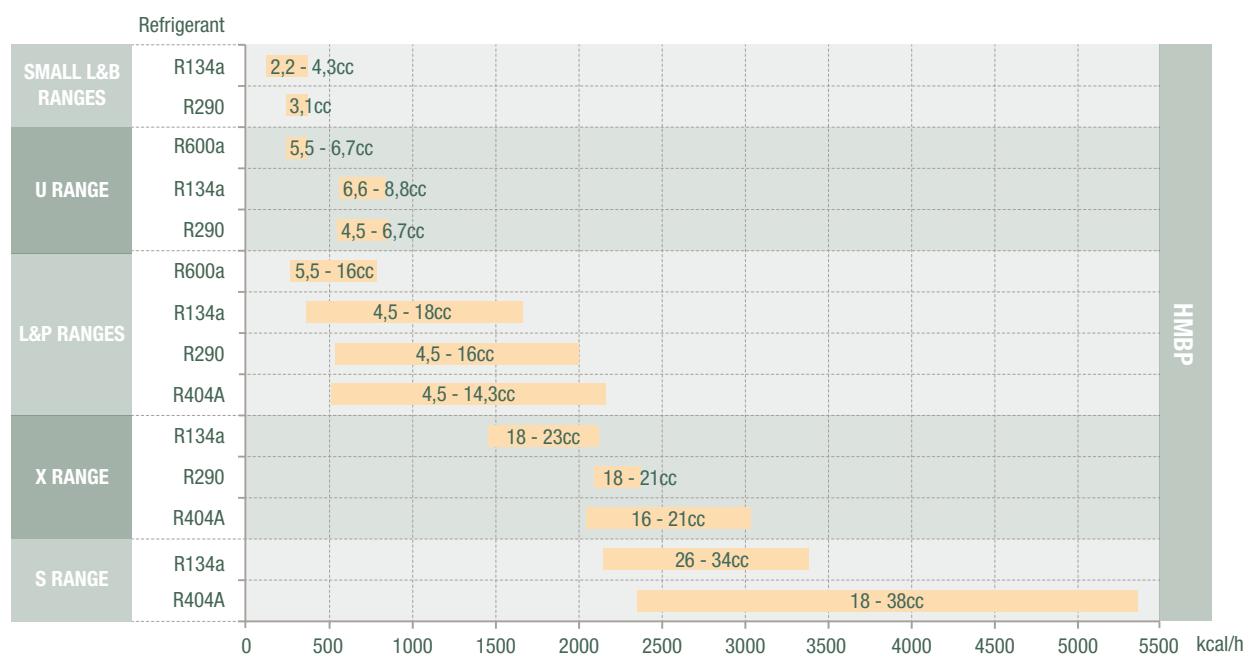
Compressors Ranges S



Compressors Ranges LBP

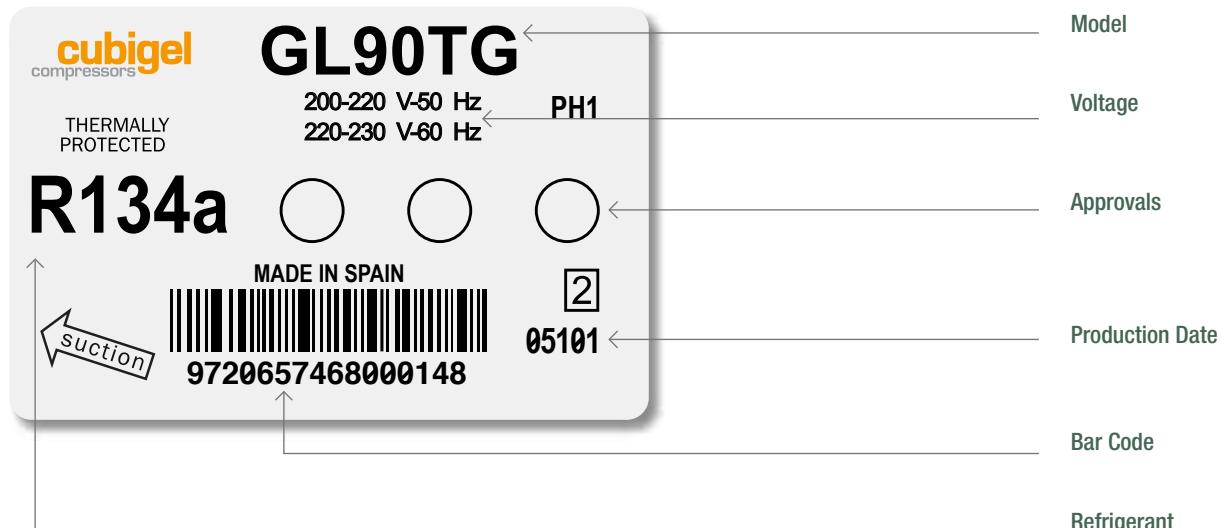


Compressors Ranges HMBP

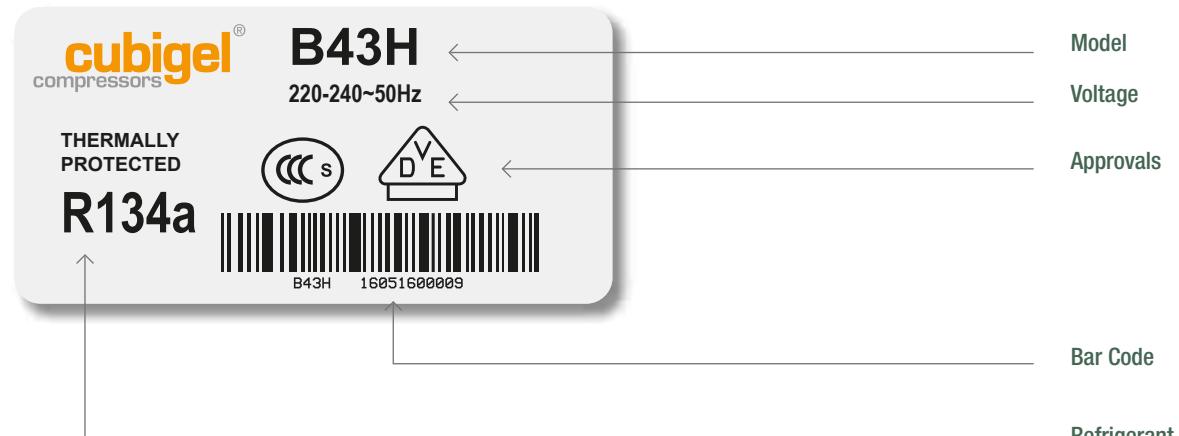


Labels and Approvals

For U, L, P, X, S



For Small L & B



Approvals



Directive compliance declarations



Flammable gases



Nomenclature U, L, P, X and S Ranges

model

G	L	Y	60	R	A	a
---	---	---	----	---	---	---

Indicates refrigerant.

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

Indicates compressor range (overall design).

L = 4.5 - 10.7cm³ **X** = 16.0 - 23.0cm³
U = 4.5 - 8.9cm³ **P** = 12.0 - 18.0cm³ **S** = 18.0 - 38.0cm³

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

Blank = Standard Efficiency **T** = Top Efficiency - Run Capacitor
C = Enhance Efficiency RSCR or CSR
M = Medium **S** = Super Efficiency - Run Capacitor
Y = High Efficiency - Run Capacitor
Optional RSIR/RSCR or CSIR/CSR

Indicates approximate compressor displacement under the following rule:

U / L ranges 10 times the approx. displacement in cm³/rev (GL90TB -> approx 9 cm³/rev)
P / X / S ranges The approx. displacement in cm³/rev (MX21TG -> approx 21 cm³/rev)

Indicates the starting torque, application type and compressor cooling:

A = LBP - LST - S	L = LBP - HST - Fan (Current Relay)	R = HMBP - HST - FAN
C = LBP - LST - FAN	M = HMBP - LST/HST - S/FAN	(CSR versions with Current Relay)
D = LBP - HST - S	N = LMBP - LST/HST - S/FAN	T = HMBP - HST - FAN
F = LBP - HST - FAN	P = HMBP - LST - FAN	(CSR versions with Potential Relay)

Indicates the rated voltage:

A = 220-240V 50Hz	G = 200-220V 50Hz / 220-230V 60Hz
B = 220-240V 50Hz (standard efficiency)	J = 100V 50/60Hz
C = 100V 50/60Hz (standard efficiency)	N = 200-220V 50Hz or 200-240V 50Hz /
D = 115V 60Hz	220-230V 60Hz
E = 115V 60Hz (standard efficiency)	R = 115-127V 60Hz
F = 208-230V 60Hz	3 = 3 phase 400-440V 50/60Hz

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 HCB 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.

a = no use of running capacitor
b = use of running capacitor

2. In X range it indicates the electrical accessories corresponding to the following situations:

a = Current relay + NTC
(no external connecting box).

Nomenclature Small L & B Ranges

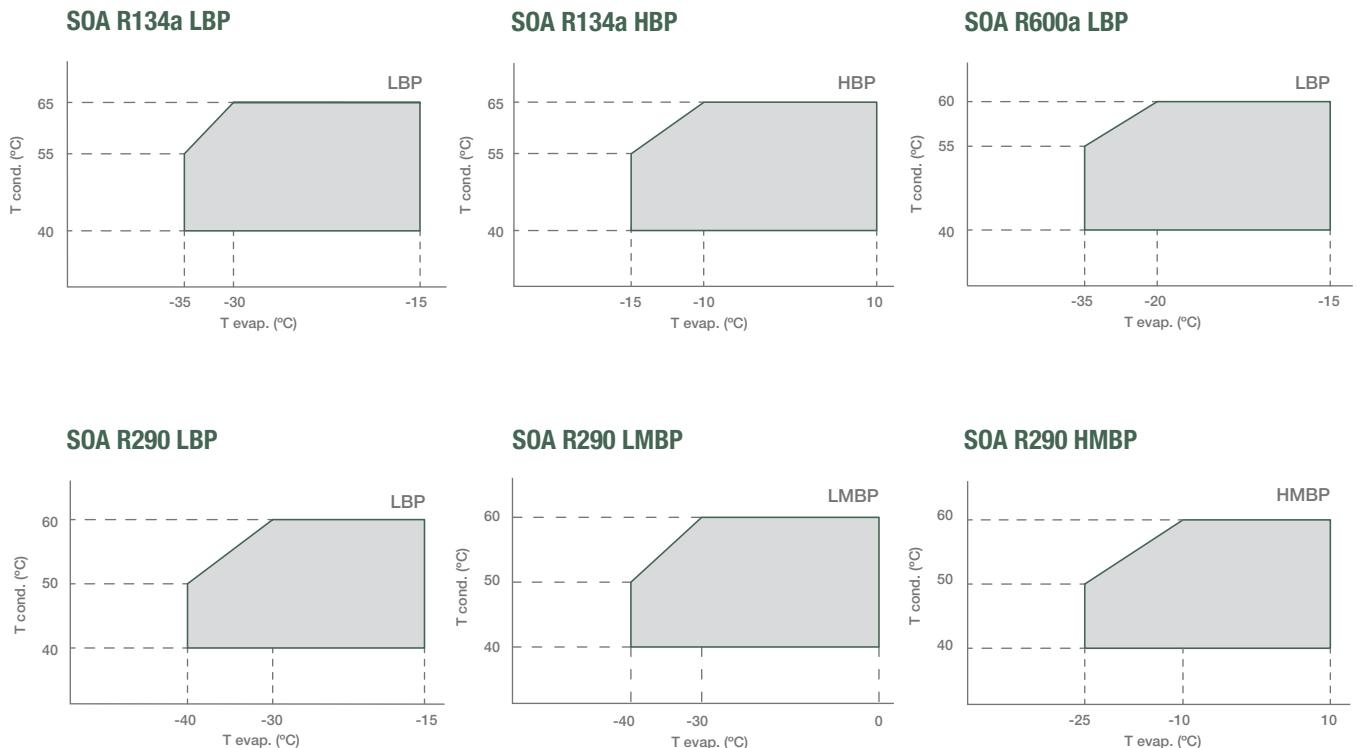
model						
B	35	C	5		B	
Range:						
L --> Small L range						
B --> B range						
Displacement x10:						
22 - 2.2cc						
25 - 2.5cc						
30 - 3.0cc						
Refrigerant & application:						
H = R134a LBP						
G = R134a HBP						
C = R600a LBP						
M = R600a HBP						
Voltage & Frequency:						
Blank = 220-240V 50Hz and 220-240V 60 Hz						
0 = 100V 50/60Hz						
5 = 115V 60Hz						
7 = 127V 60Hz						
Efficiency level:						
Blank = Standard Efficiency						
B = High Efficiency						
A = Very High Efficiency						
S = Top efficiency						

model						
N	B	C	30	R	A	
R290 Models						
Range:						
L --> Small L range						
B --> B range						
C --> Without Running Capacitor						
G --> With Running Capacitor						
Displacement x10:						
22 - 2.2cc						
25 - 2.5cc						
30 - 3.0cc						
Refrigerant & application:						
For R290 (Propane) Models:						
C = LBP – LST – Static						
N = LMBP – HST – Static / Fan						
R = HMBP – HST - Fan						
Voltage & Frequency:						
A = 220-240V 50Hz						
R = 115-127V 60Hz						

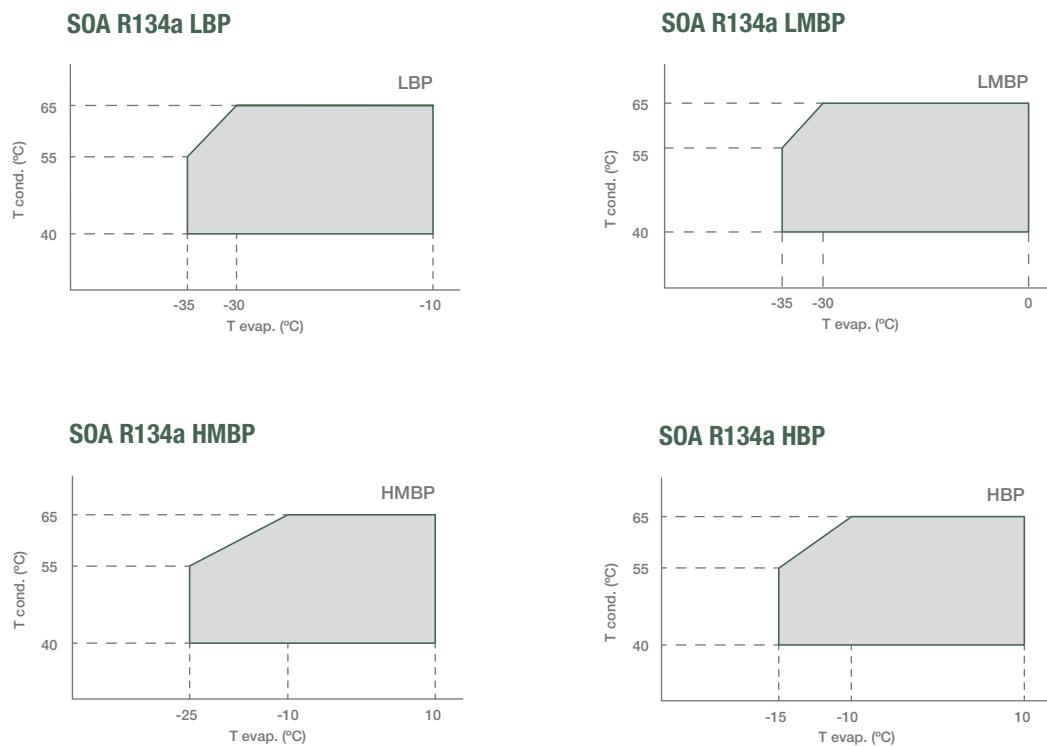
SOA - Safe Operating Area

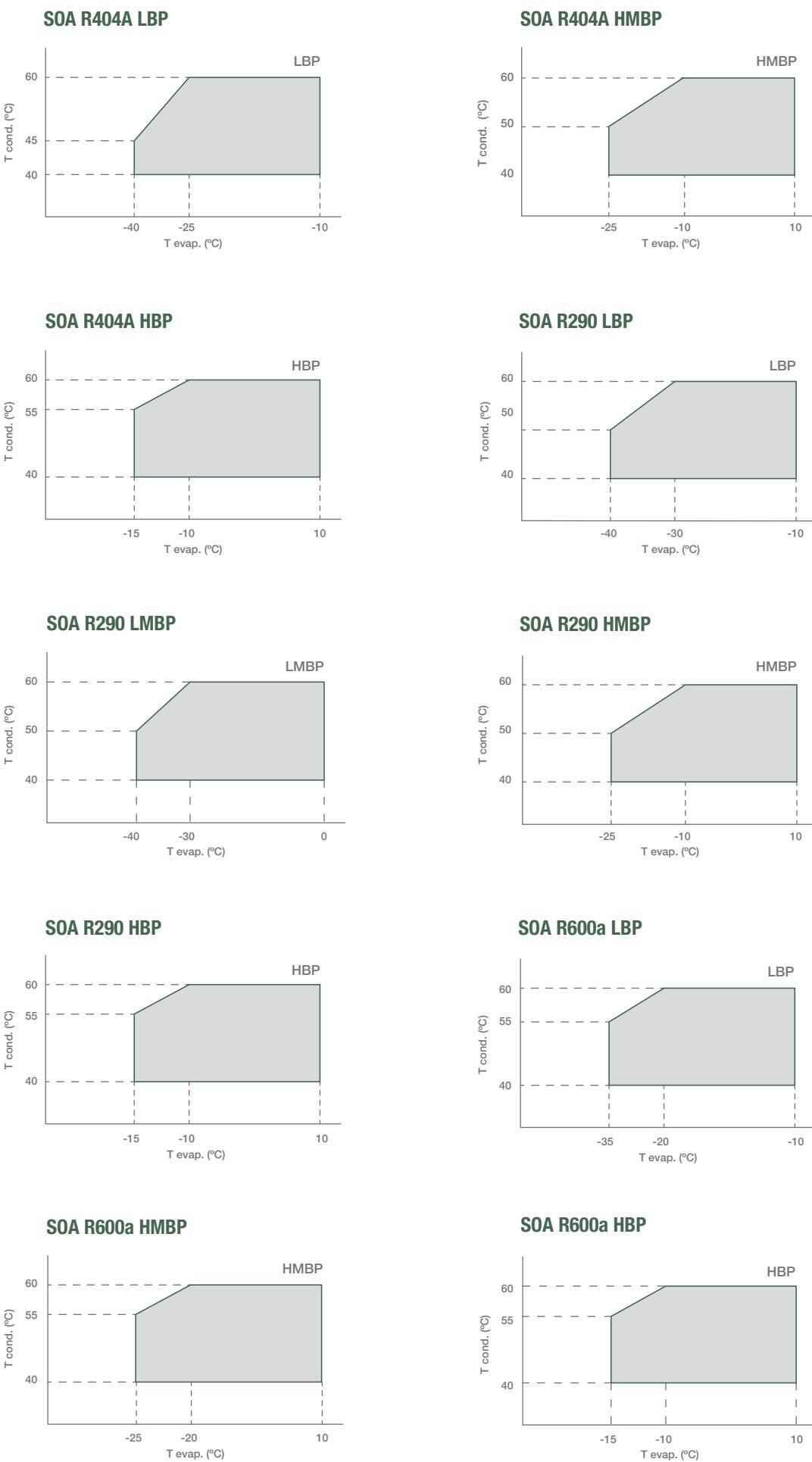
In order to grant the compressor reliability it is recommended that the point representing the operating conditions (suction and discharge pressures) falls within the shadowed area of the corresponding graph.

For Small L and B ranges:



For U, L, P, X and S ranges:





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

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: CSR	Starting device: Current relay + NTC for L & P ranges Potential relay for P, X & S ranges	Motor type: RSCR	Starting device: PTC
Without Running capacitor	Motor type: CSIR	Starting device: Current Relay	Motor type: RSIR	Starting device: Current Relay or PTC

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 or RSCR motors in the Small L, B, 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.



3

Compressors Catalogue

R290/R600a



3

Compressors Catalogue

R134a

R134a (*) HMBP | HBP • 60 Hz

MODEL	DISPLACEMENT cm ³	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				
GPY16RDa	16.15	1/2	HBP	F	115V 60Hz ~1	CSIR	R	C-V	-	614	1518	1.88	1822	1814	2.17	12.05	Pd	
GPY16RDb	16.15	1/2	HBP	F	115V 60Hz ~1	CSR	R	C-V	-	614	1518	2.00	1822	1814	2.31	12.15	Pd	
GPT18RG	18.00	1/2	HBP	F	200-220/230V 50/60Hz ~1	CSR	R	C-V	-	693	1640	1.90	1979	1964	2.20	12.84	Pd	
GX18TG	18.40	1/2	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	333	630	1625	1.87	1957	1946	2.17	16.08	Xc	
GX23TG	23.20	5/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	429	792	2021	1.71	2433	2419	1.98	16.34	Xd	
GX23TF (*)	23.20	5/8	HMBP	F	208-230V 60Hz ~1	CSIR	R	C-V	429	792	2021	1.71	2433	2419	1.98	16.34	Xd	
GS26T3	25.93	3/4	HMBP	F	400/440V 50/60Hz ~3	3PHASE	P	C-V	307	824	2419	2.07	2935	2908	2.40	22.70	Sc	
GS26TG	25.93	3/4	HMBP	F	200-220/220-230V 50/60Hz ~1	CSIR	R	C-V	307	824	2419	2.06	2935	2908	2.40	22.70	Sc	
GS30TG	29.95	7/8	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	370	920	2865	2.23	3527	3466	2.61	23.00	Sd	
GS34TF	34.42	1	HMBP	F	220-230V 60Hz ~1	CSR	R	C-V	550	1247	3327	2.17	3990	3977	2.50	22.70	Sd	
GS34TG	34.42	1	HMBP	F	200-220/220-230V 50/60Hz ~1	CSR	R	C-V	440	1093	3248	2.11	3963	3913	2.44	22.27	Sd	

Green Cooling Models

(*) Or HFO1234yf

New Models

(**) Under development

Conditions			
CECOMAF		ASHRAE	
LBP (A)	HMBP/HBP (C)	LBP (B)	HMBP/HBP (D)
Evaporating temperature °C	-25	5	-23.3
Condensing temperature °C	55	55	55
Liquid temperature °C	55	55	32
Suction temperature °C	32	32	32
Ambient temperature °C	32	32	35

Measurement conversion

R134a

W (A) x 1.37 = W (B)

W (C) x 1.19 = W (D)

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



3

Compressors Catalogue

R404A/R507



3

Compressors Catalogue

DC/VSC





Technical Information

Technical Datasheets online

Complete data for each model of Cubigel Condensing Units

can be downloaded from the website:

<https://catalog.huayicompressor.es>

Technical Data Sheet

ASHRAE						
A	B	C	D	E	F	G
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70

CEC/MAF						
H	I	J	K	L	M	N
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70





Technical Data Sheet

Compressor model NPT16LA						
Voltage 220-240V 50Hz ~1						
Refrigerant R290						
APPLICATION		COMPRESSOR		MOTOR		
Application	Low Back Pressure	Displacement	15.13 ml/r	Nominal Power	1.07 kW	
Refrigerant	R290	Capacity	21.79 ml/r	Voltage/Frequency	220-240V 50Hz	
Evaporating Temp.	-60.0 °C to -10.2 °C	Stroke	21.79 ml/r	Voltage Range	197-256 V	
Expansion Valve	Capillary Valve	Net Weight	12.17 kg	Type	CEC	
Cooling	Fan cooled	Oil type	ISO VG 32 SAE10W	Phase number	1 PH	
Max. ambient temp.	60.0 °C	Oil charge	400 mL	Locked Rotor Amps (LRA)	18.00 A	
				Max. Cont. Current (MCC)	5.60 A	
				Max. IR. current at 25°C	5.36 A	
				Start IR. current at 25°C	5.70 A	
NOMINAL PERFORMANCE		ASHRAE	CEC/MAF	APPROVALS		
Cooling Capacity	850 W/KmH	850 W/KmH	850 W/KmH			
COP	1.50 W/W	1.50 W/W	1.50 W/W			
EEI	1.29 W/GW/Hr	1.29 W/GW/Hr	1.29 W/GW/Hr			
Input Power	354 W	355 W	355 W			
Current	2.49 A	2.49 A	2.49 A			
TEST CYCLE CONDITIONS		ASHRAE	CEC/MAF			
Evaporating temp. (T _e)	LBP (A)	LBP (A)				
Condensing temp. (T _c)	40.0 °C	40.0 °C				
Liquid temp. (T _l)	40.0 °C	40.0 °C				
Ambient temp. (T _a)	40.0 °C	40.0 °C				
Source temp. (T _{source})	40.0 °C	40.0 °C				
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz				
ELECTRICAL COMPONENTS						
Starting capacitor	72.00 µF 330 V					
Run capacitor	12.00 µF 400 V					
Poly	Option 1					
Reference	3004116.4 HTC16C					
Pins-Up	0.00 A					
Drop-Out	7.79 A					
Protektor	Option 1	Option 2				
Reference	MRAS0616C	10368				
Current	10.20 A	8.90 A				
Time (ms)	7.0-14 ms	7.0-14 ms				
Set temp. (Open/Closed)	100.00 / 50.00 °C	100.00 / 50.00 °C				
<small>For more information about CEC/MAF models refer to section 4.2.3.1.2 CEC/MAF models (ASCE 2020) and ASHRAE 2020.10.3.1.2 CEC/MAF models (ASHRAE 2020).</small>						

HUAYI
COMPRESSOR
BARCELONA

Plaza del Lince, 20 - 08122 - L'Hospitalet de Llobregat

Teléfono: +34 93 400 04 00

6

58

Technical Data Sheet

cubigel
compact solutions

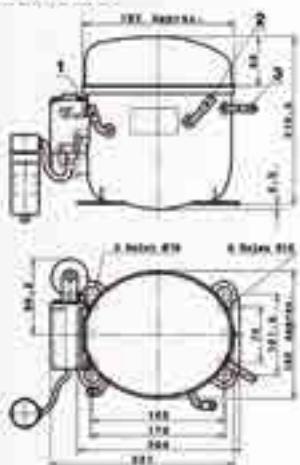
FIXINGS



cubigel
compact solutions

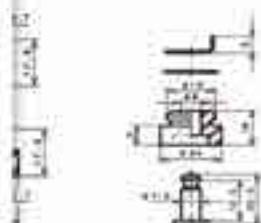
Technical Data Sheet

COMPRESSOR DIMENSIONS



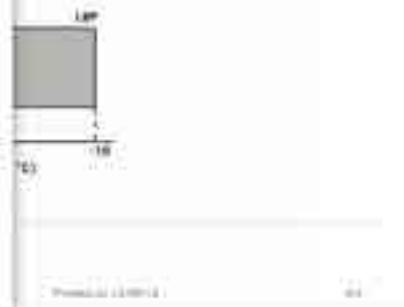
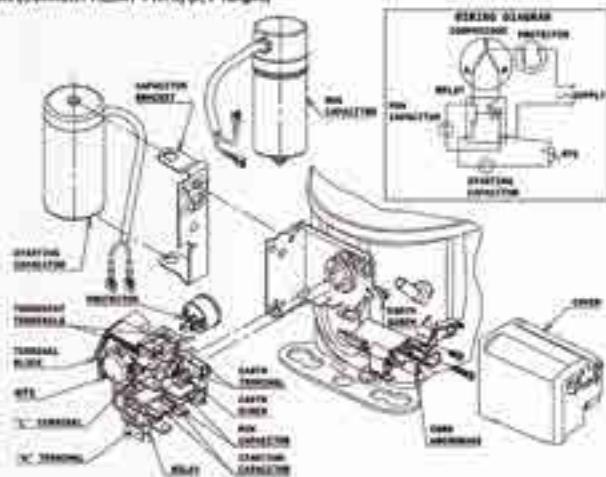
DESIGNATION	INTERNAL DIAM.
1 Suction	6.1 mm
2 Service	6.1 mm
3 Discharge	6.5 mm

EET
151.6 mm²
SNAP-ON
Ø16 holes (170x70 mm)



WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + RTC) (L, P ratings)



 FRIGATE
COMPRESSION
BARCELONA

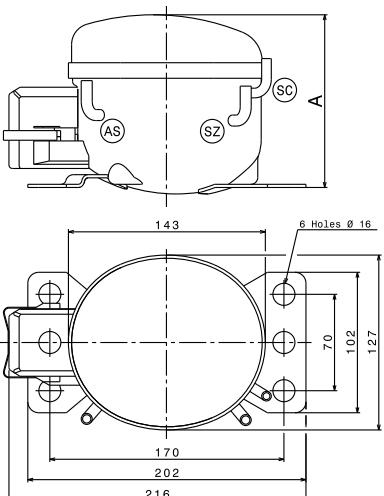
http://www.frigate.com/PTC002

Document ref.: 000000000000

00

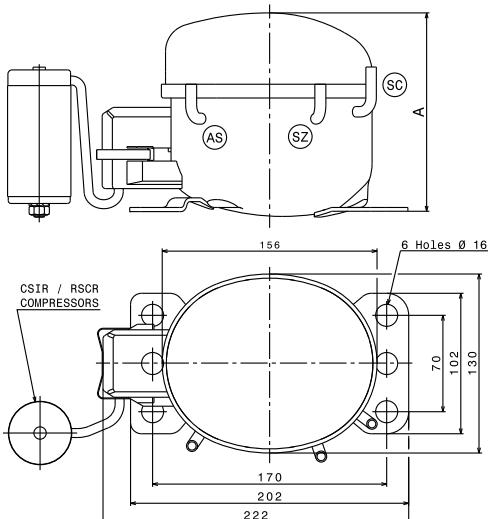
Compressor Dimensional Drawings

Small L range



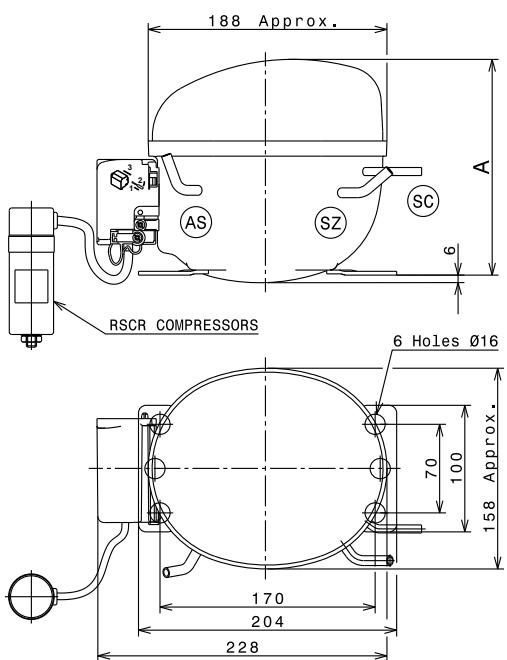
	Designation	Internal diam.	A (mm)
AS	Suction	6.2	SLb
SC	Discharge	4.9	SLc
SZ	Service	6.2	SLd
			SLe

B range



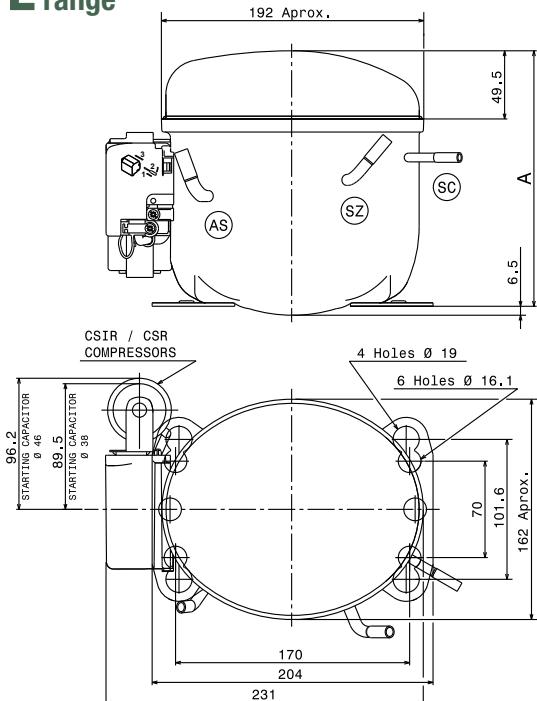
	Designation	Internal diam.	A (mm)
AS	Suction	6.2	Bb
SC	Discharge	4.9	Bc
SZ	Service	6.2	Bd
			Be
			Bf

U range



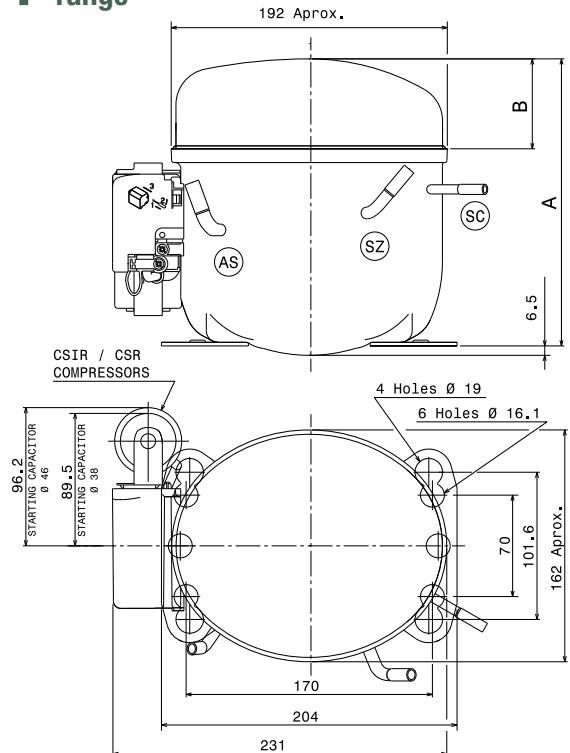
	A (mm)	LEGEND
Ub	173.5	AS Suction/Service
Uc	176.5	SC Discharge
		SZ Service/Suction

L range



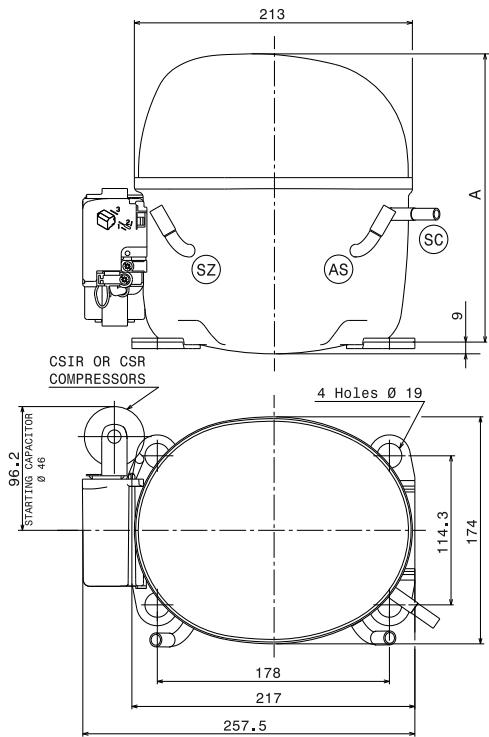
	A (mm)	LEGEND
Lb	175	AS Suction/Service
Lc	185.6	SC Discharge
Ld	198	SZ Service/Suction

P range



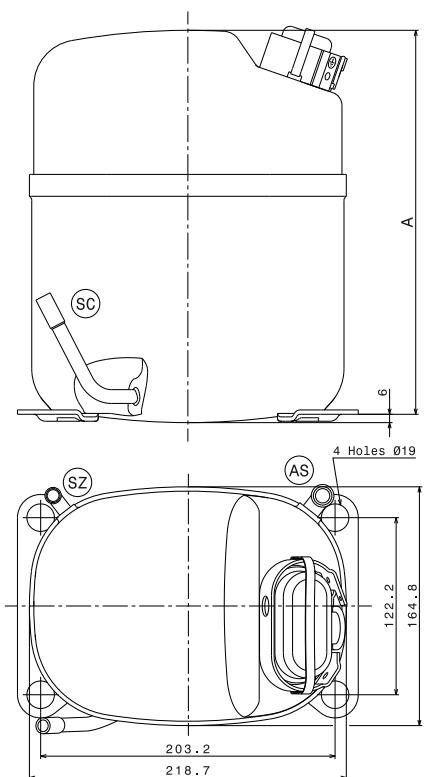
	A (mm)	B (mm)	LEGEND
Pc	198.1	62	AS Suction/Service
Pd	210.5	62	SC Discharge
Pe	215.5	67	SZ Service/Suction

X range



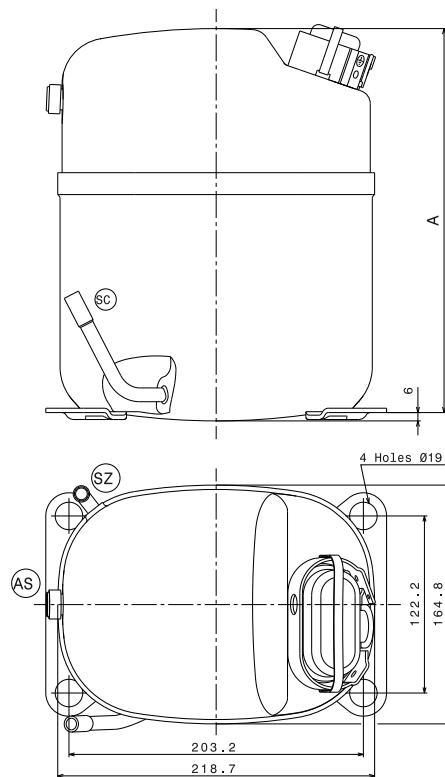
	A (mm)	LEGEND
Xc	215	AS Suction/Service
Xd	221	SC Discharge
		SZ Service/Suction

S range (Tube)



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

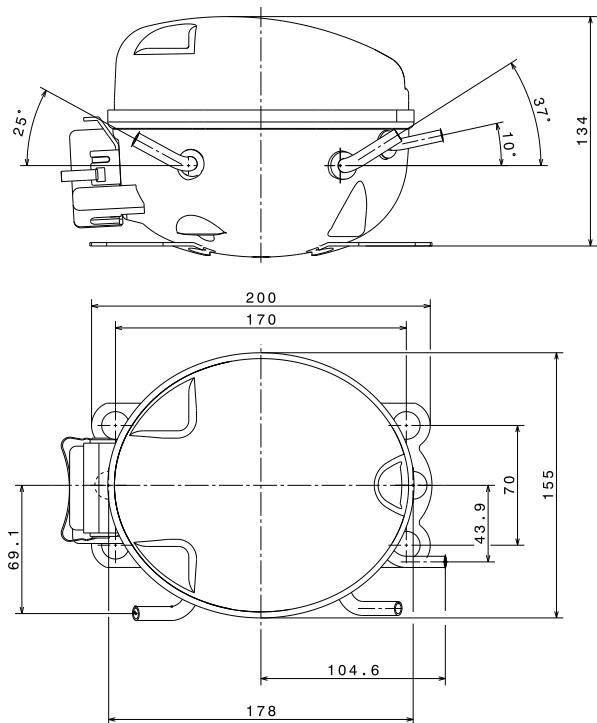
S range (Valve)



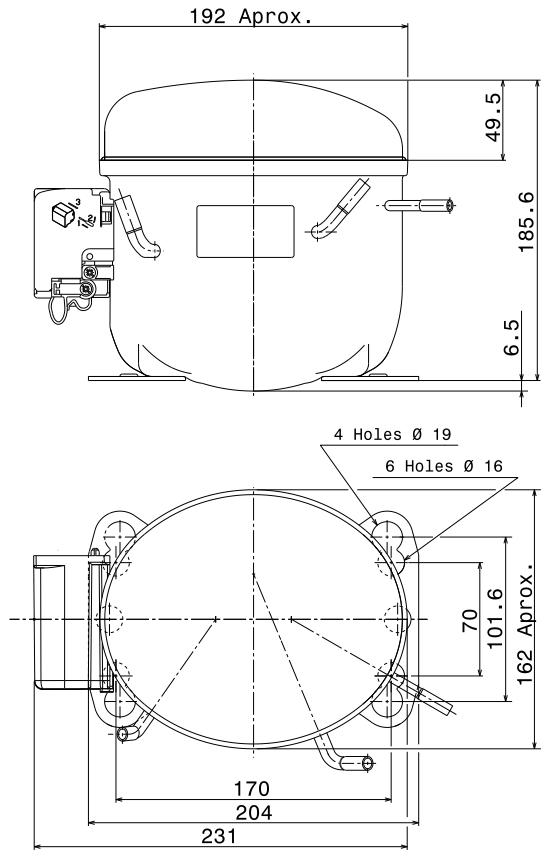
	A (mm)	LEGEND (VALVE)
Sb	252	AS Valve Service
Sc	265	SC Discharge
Sd	276	SZ Service/Suction

Variable Speed Compressors

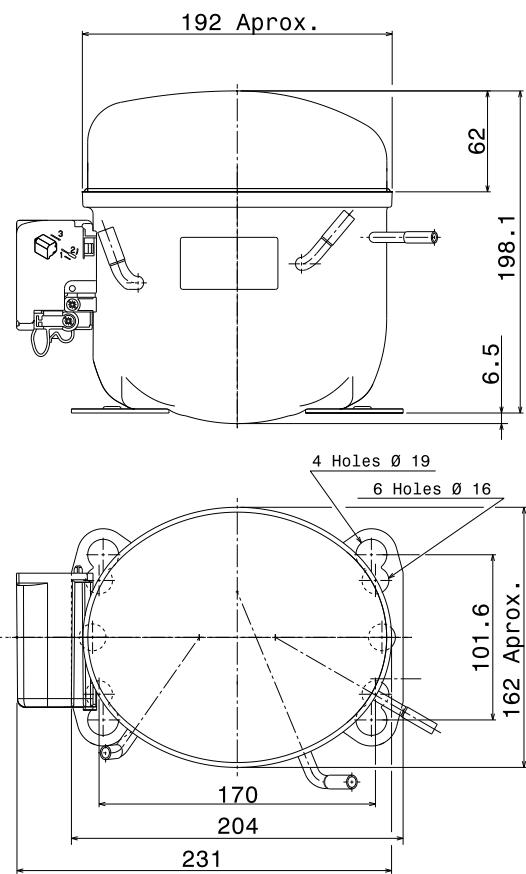
NVT70FSC



GLT99FSN and NLT60FSN

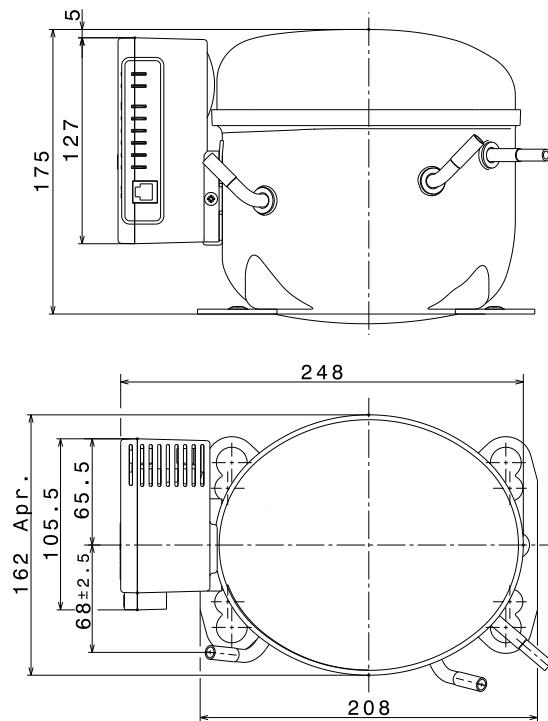


NPT12FSC

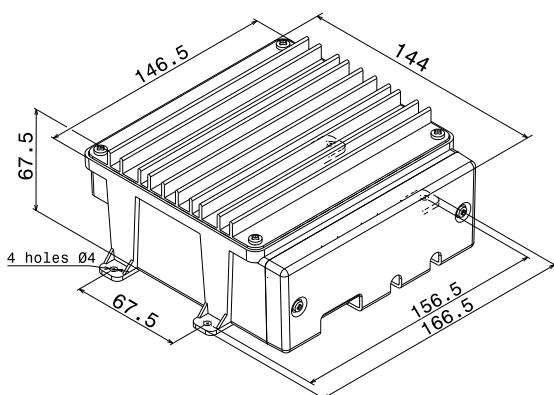


12-42V DC Compressors

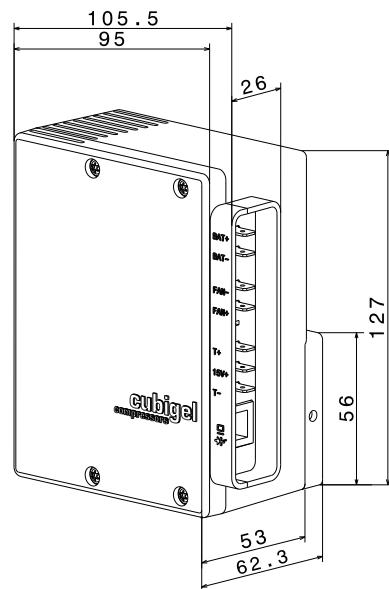
GLT80TDC



Electronic driver (FAC1)
for GLT99FSN, NLT60FSN and NPT12FSN



Electronic driver (FDC3) for GLT80TDC



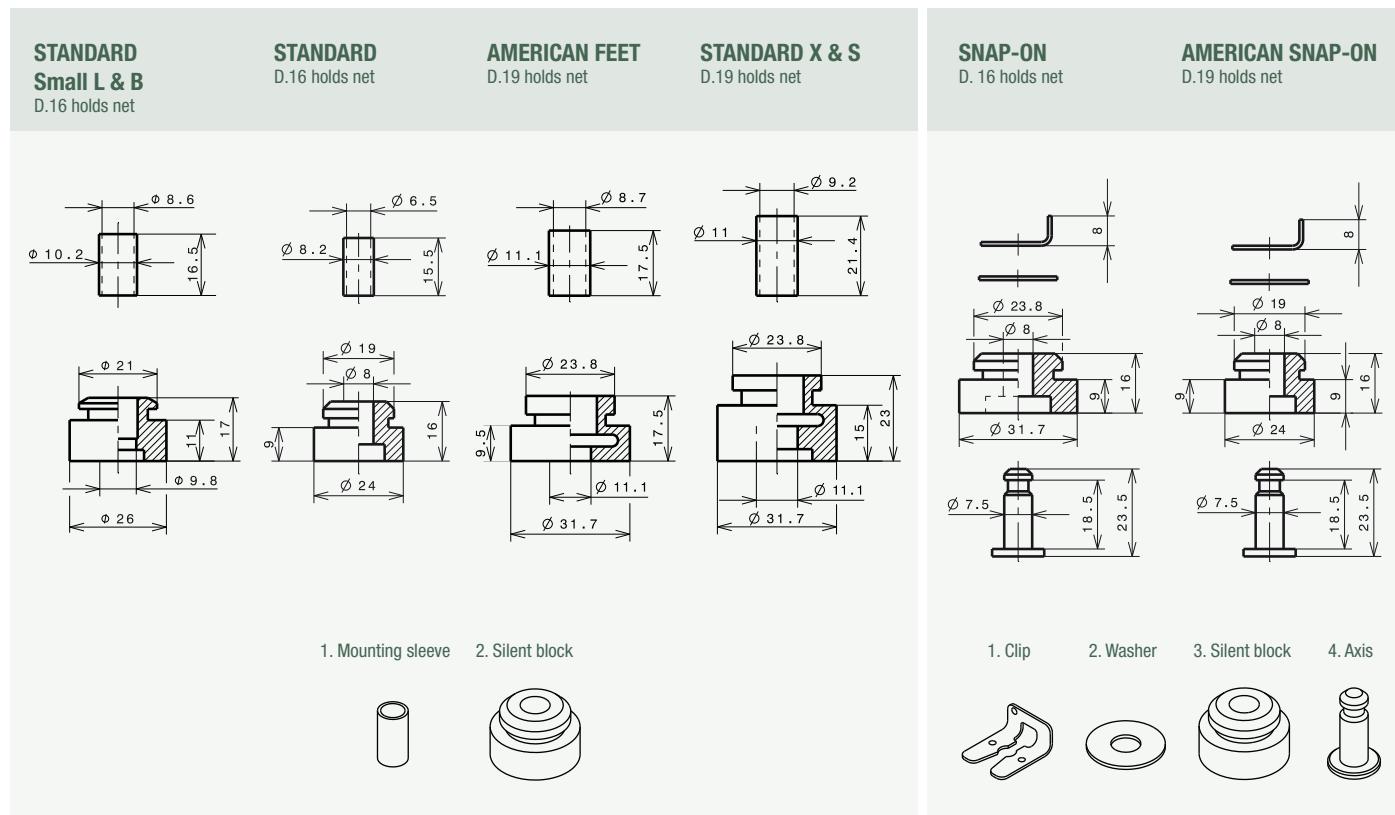
Fixings

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

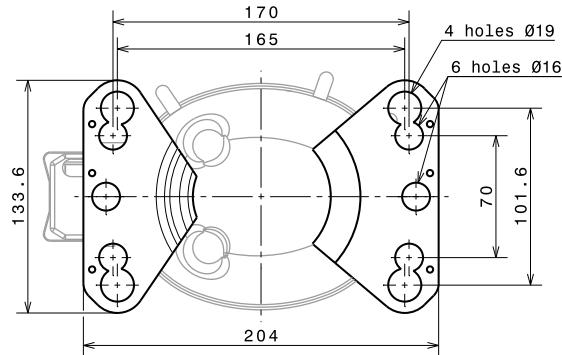
Mounting feet

Range	Mounting feet	
Small L	Set of 4 holes of 16mm DIA with inter-axes: 70x170mm	
B, L, P, U	European type Set of 4 holes of 16 mm DIA with inter-axes: 70 x 170 mm	American type Two sets of 4 holes: 1.- Set of 16 mm DIA with inter-axes: 70 x 170 mm 2.- Set of ¾ inch (19 mm) DIA with inter-axes: 4 x 6 1/2 inch (101.6 x 165 mm)
X	One set of 4 holes of 19 mm (¾ inch) DIA with inter-axes: 114.3 x178 mm (41/2 x 7 inch)	
S	One set of 4 holes of 19 mm (¾ inch) DIA with inter-axes: 122.2 x 203.2 mm (413/16 x 7 7/8 inch)	

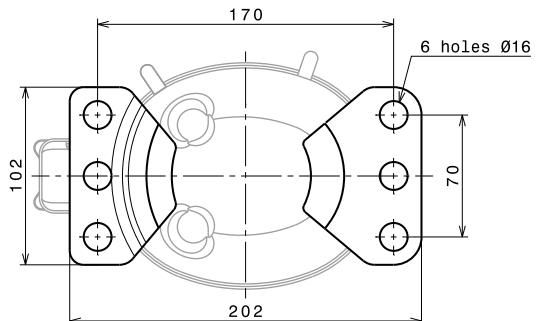
Silent Blocks (Mounting accessories)



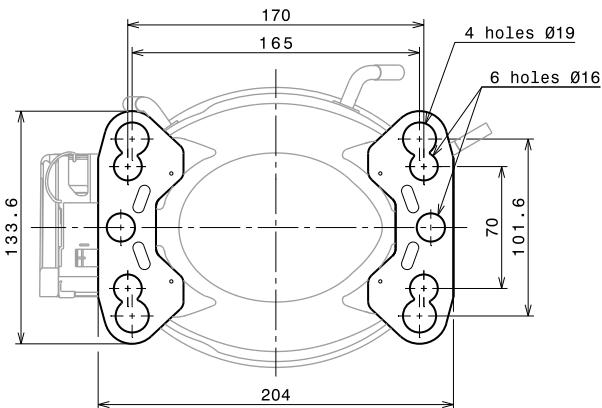
B Range (American mounting feet)



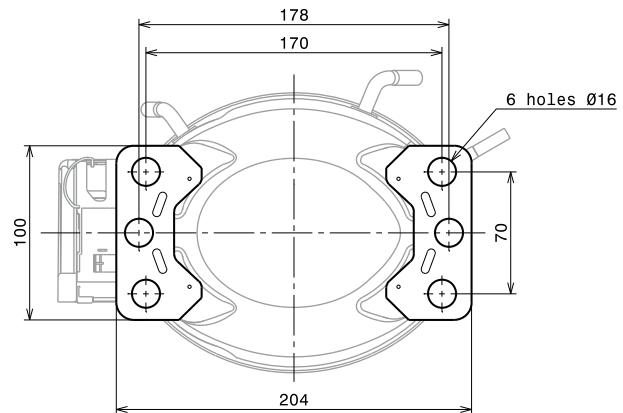
Small L & B Range (European mounting feet)



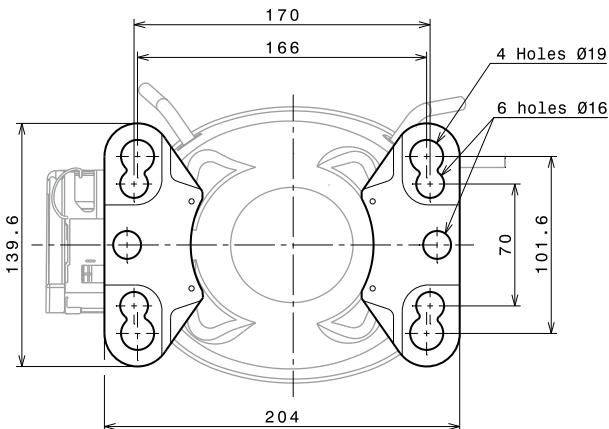
L / P Range (American mounting feet)



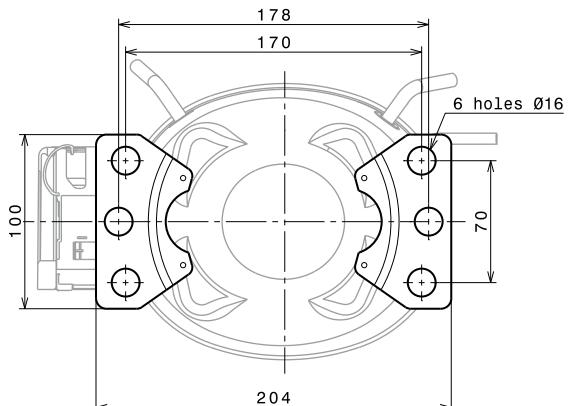
L / P Range (European mounting feet)



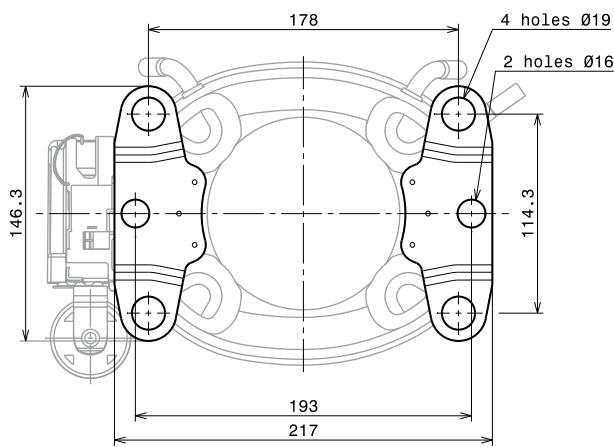
U Range (American mounting feet)



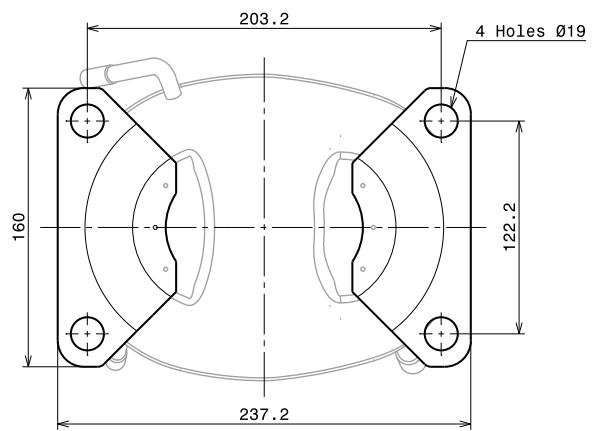
U Range (European mounting feet)



X Range

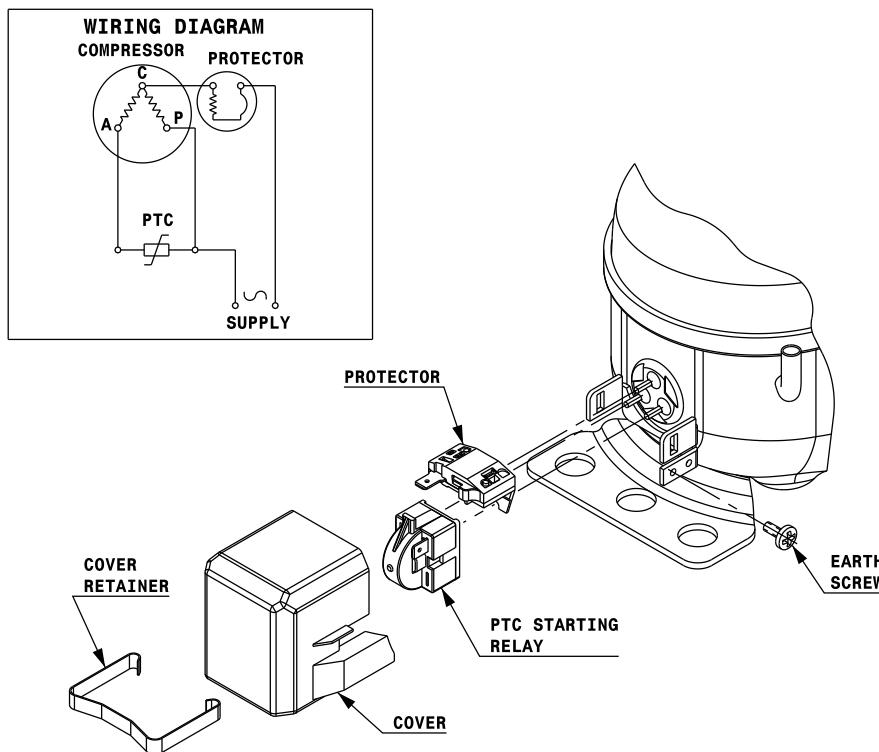


S Range

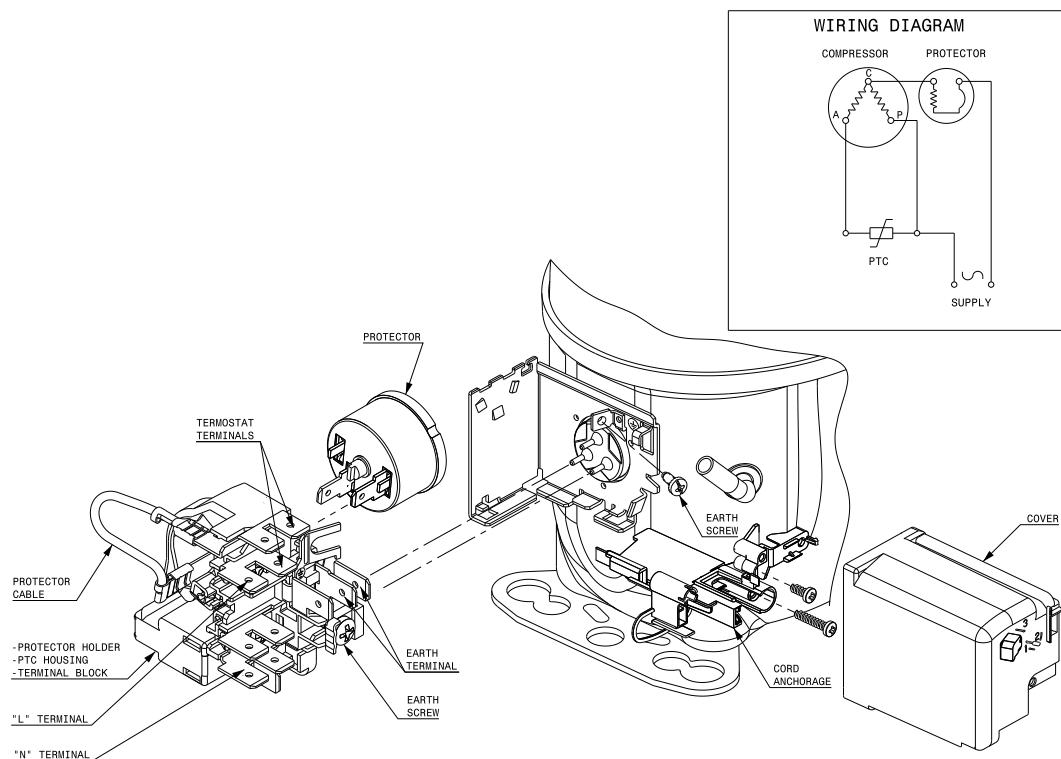


Wiring Diagrams and Electrical Assembly

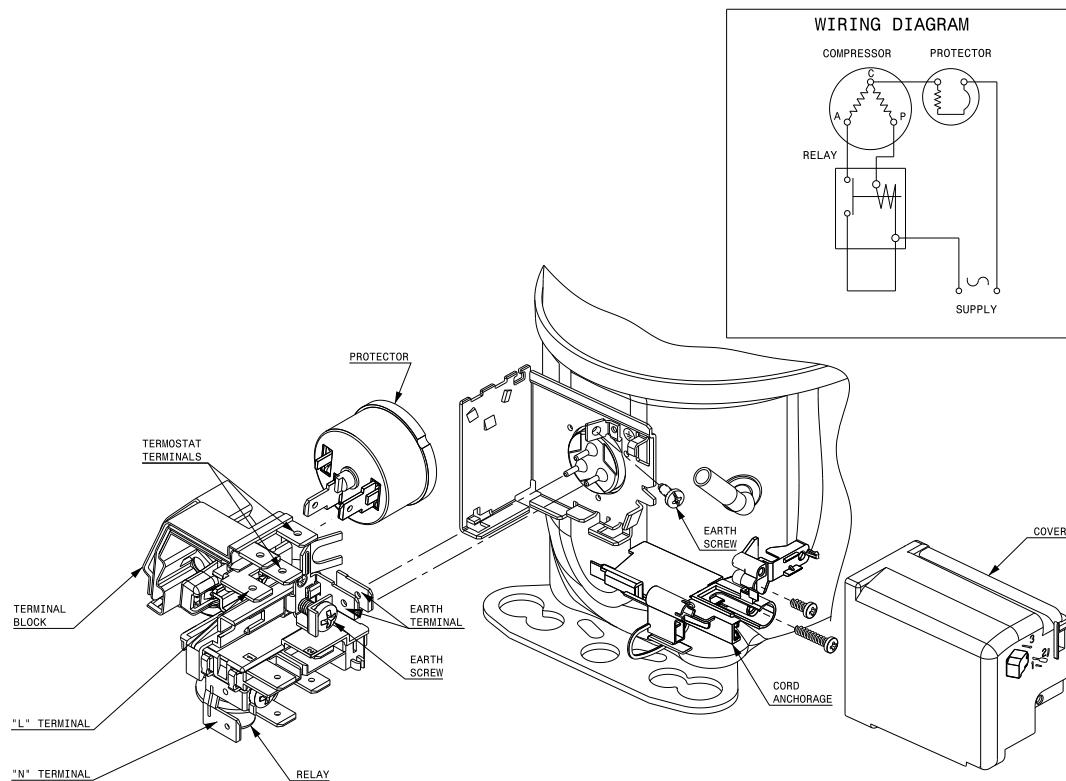
RSIR CONNECTION (PTC) Small L & B



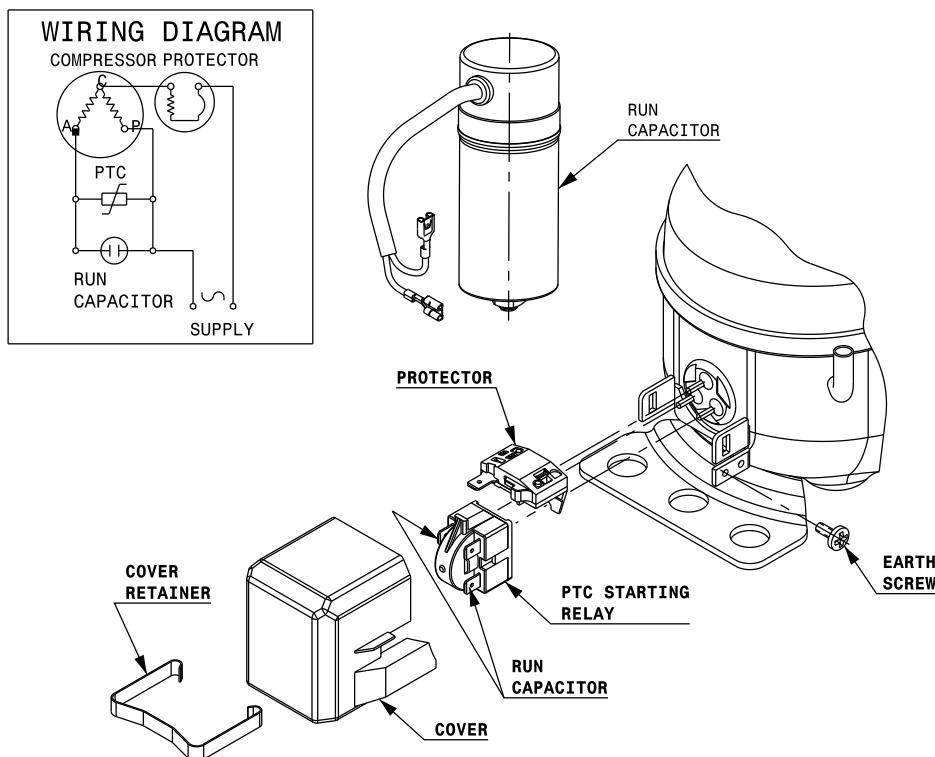
RSIR CONNECTION (PTC)



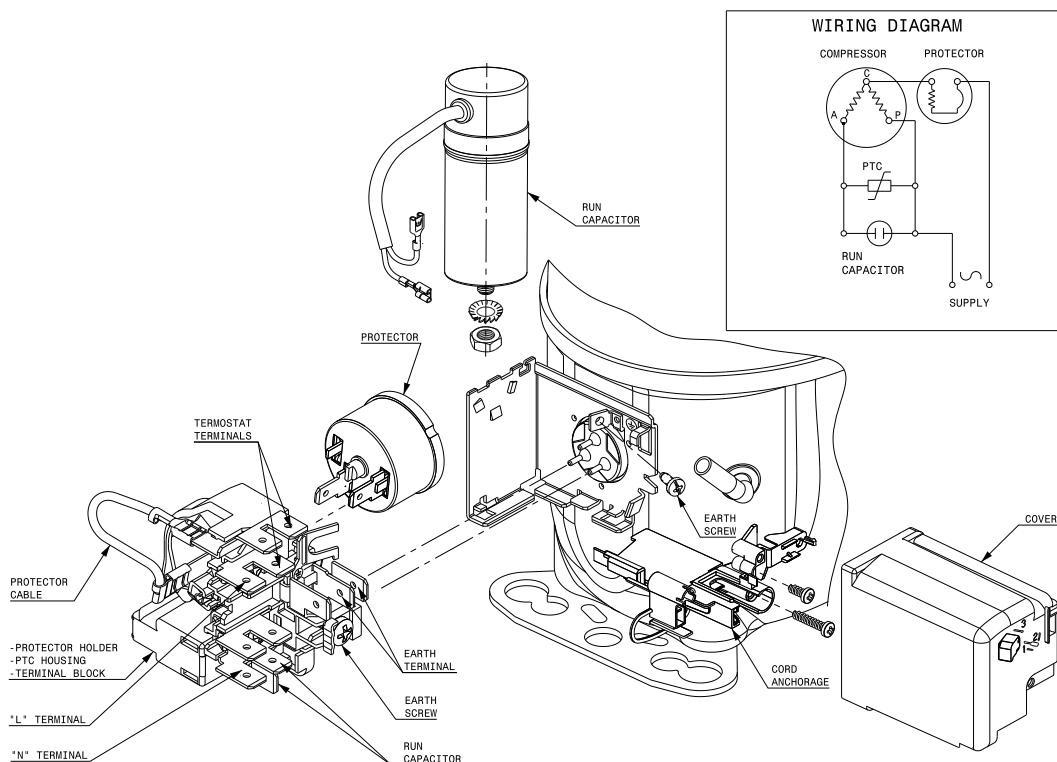
RSIR CONNECTION (RELAY)



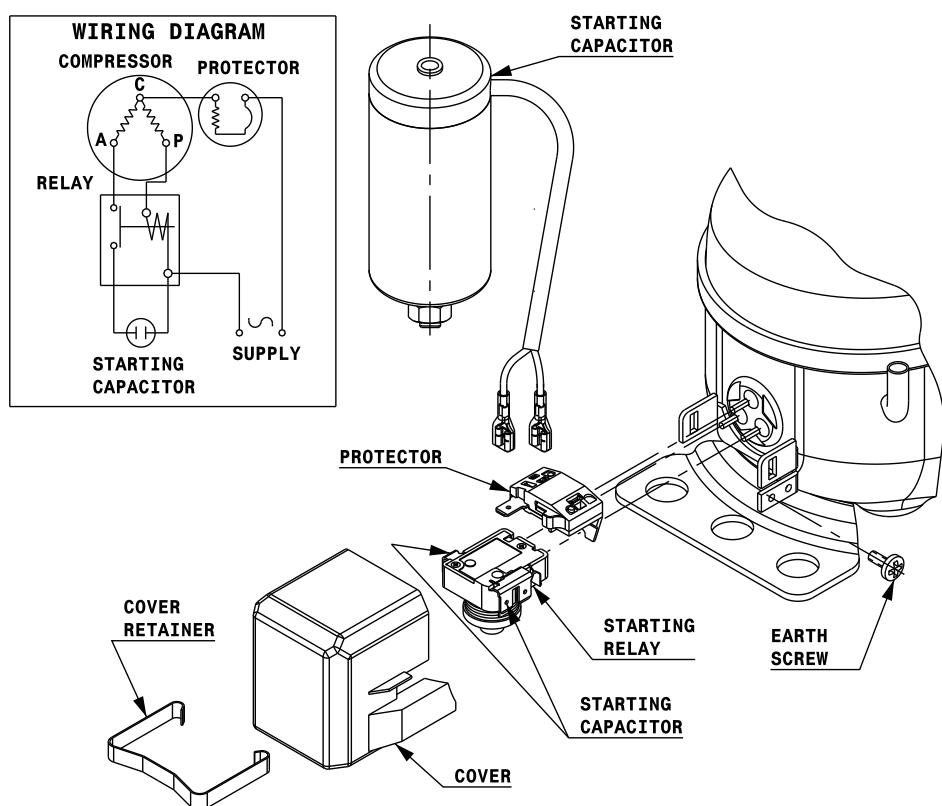
RSCR CONNECTION (PTC) Small L & B



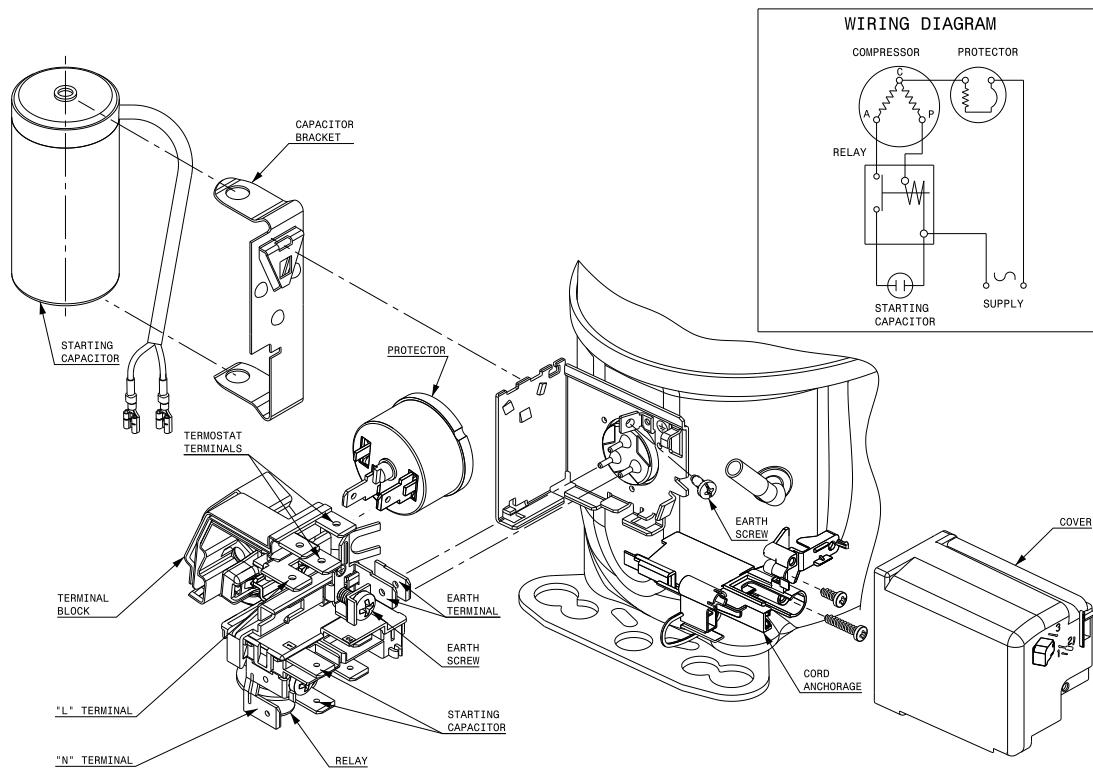
RSCR CONNECTION



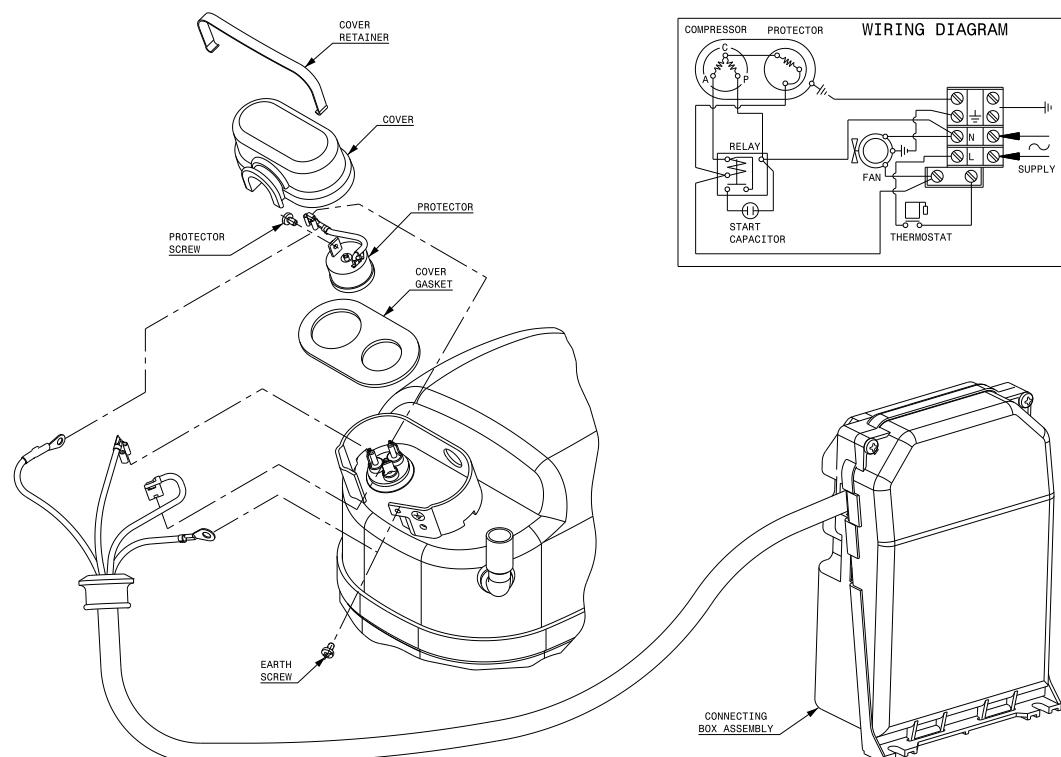
CSIR CONNECTION Small L & B



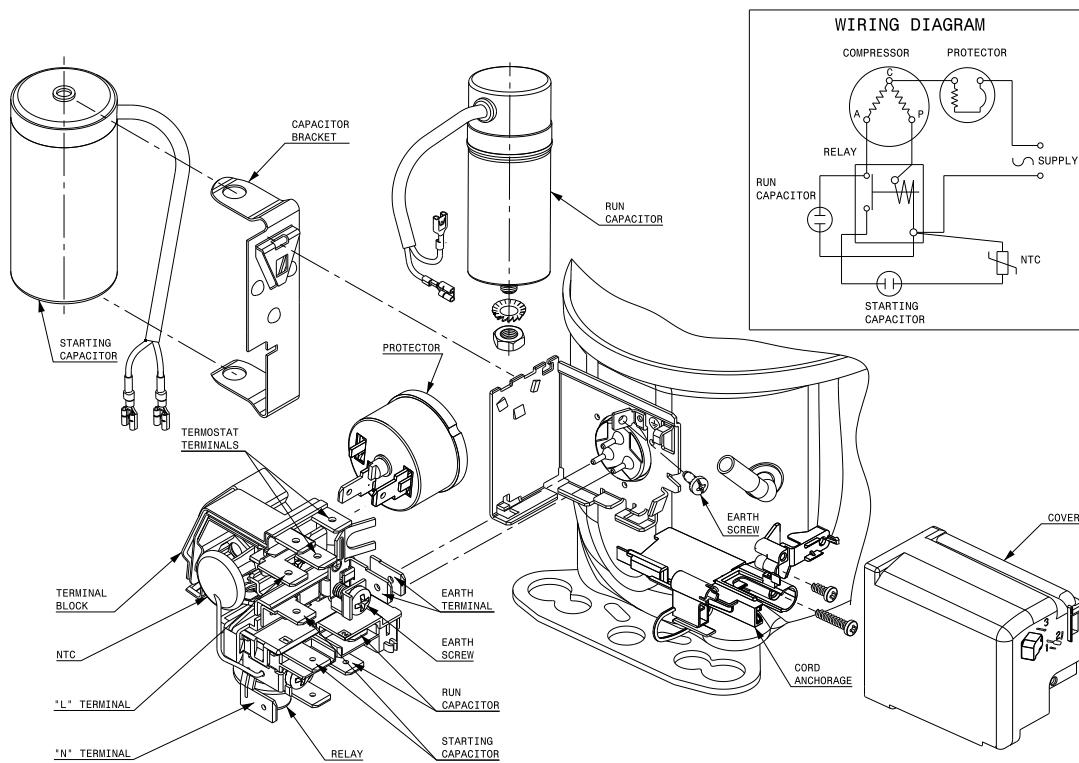
CSIR CONNECTION



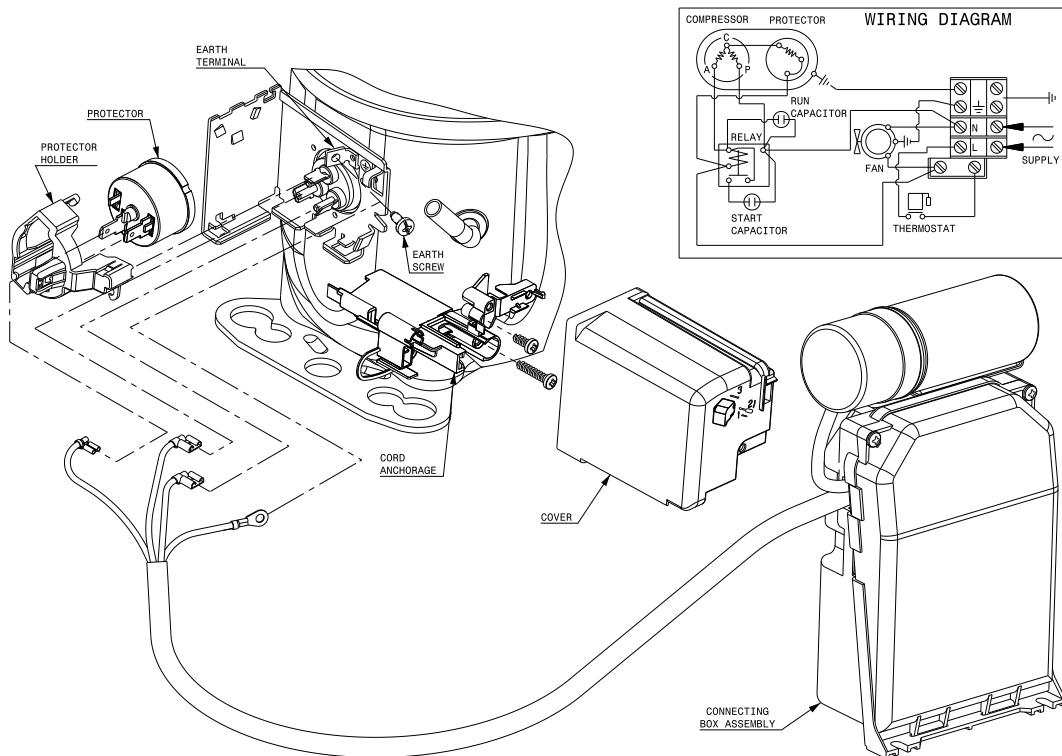
CSIR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



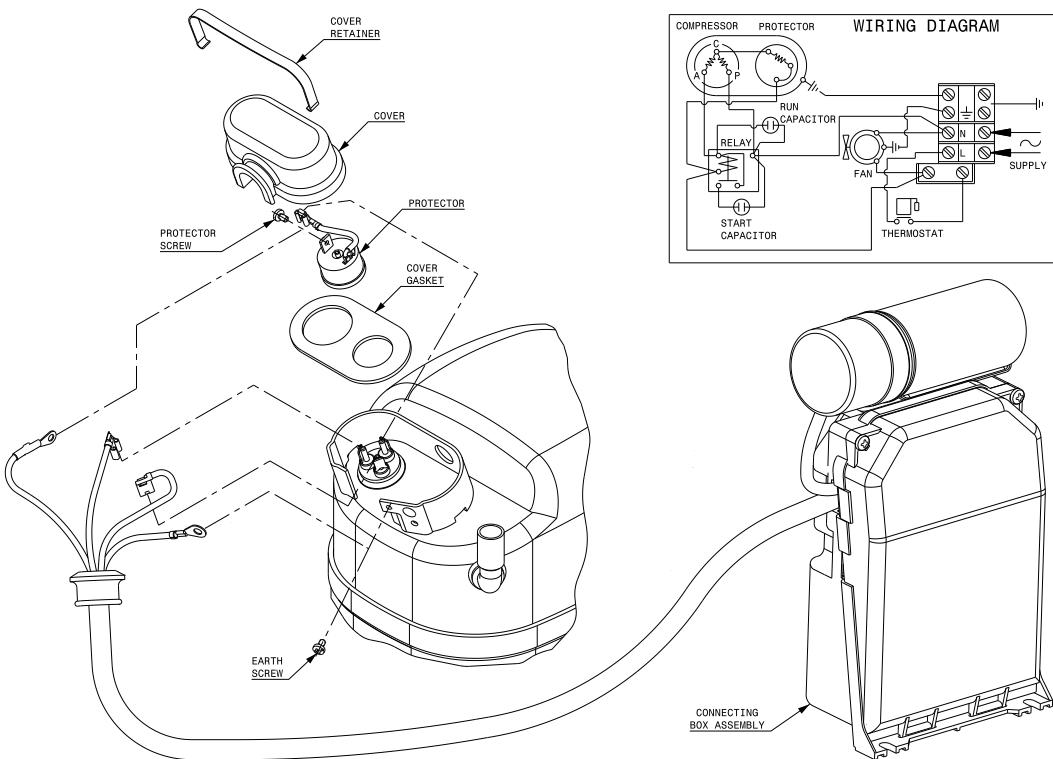
CSR CONNECTION (CURRENT RELAY + NTC)



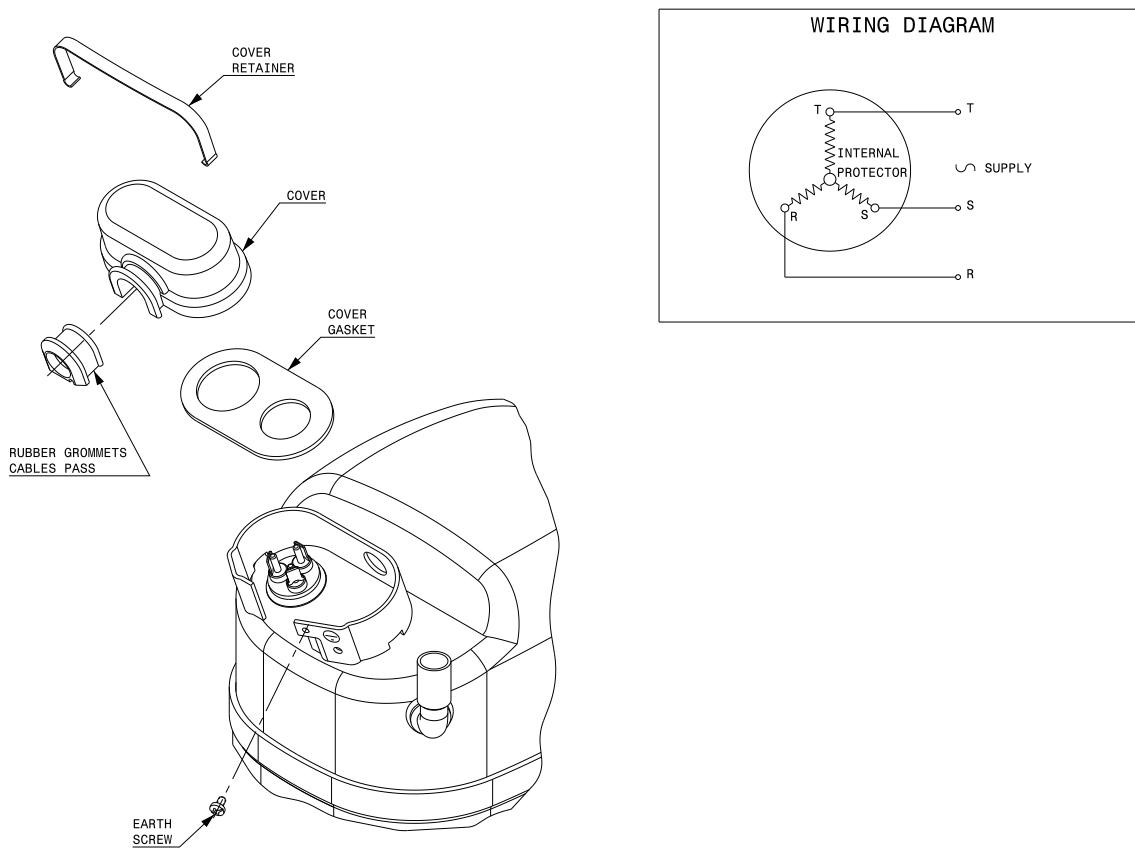
CSR CONNECTION (EXTERNAL CONNECTING BOX) (P, X ranges)



CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



3PH CONNECTION (S range)



Packaging & Logistics

Single Box

Range	Box dimensions (mm)			Pallet dimensions (mm)	
	Length	Width	Height	Length	Width
Small L	250	165	141/151	1010	1010
B	250	165	151/166	1010	1010
U	290	194	180/198	1200	1050
L & P	290	194	180/198/209/227	1200	1050
X (w/ connecting box)	315	187	235	1050	1050
X	342	202	242	1050	1050
S	275	209	410	1010	1010

Tray

Range	Tray dimensions (mm)		Pallet dimensions (mm)	
	Length	Width	Length	Width
Small L	1110	815	1135	830
B	1110	815	1135	830
U (TIR)	1120	810	1200	800
U (Container)	1120	810	1120	800
L & P	1060	990	1050	1050
X	1050	1020	1050	1050
S	1050	1050	1050	1050

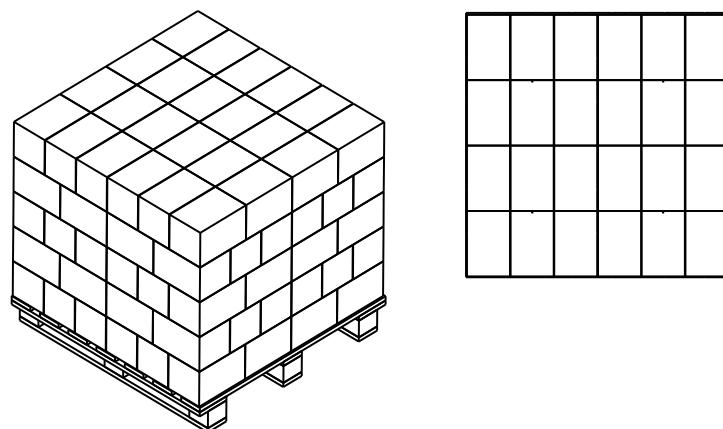
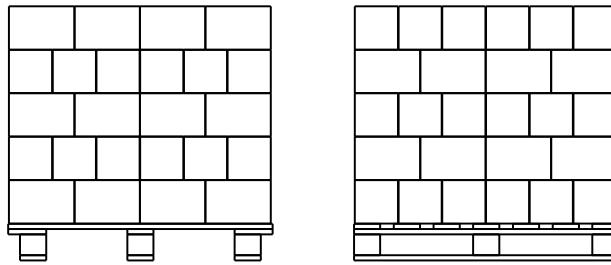
Quantities by Pallet Compressors

Range	Tray			Single Box		
	Qty / Level	Nº Levels	Qty / Pallet	Qty / Level	No. Levels	Qty / Pallet
Small L	25	6	150	24	5	120
B	25	5	125	24	5	120
U	18	5	90	20	5	100
L	24	5	120	20	5	100
P	24	5	120	20	5	100
X	17	4	68	16	4	64
X w/ connecting Box	17	4	68	15	4	60
S	24	2	48	16	3	48

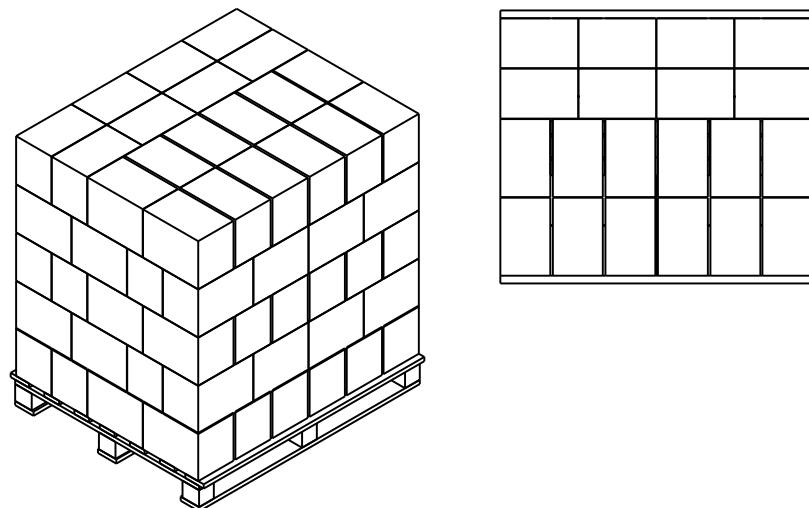
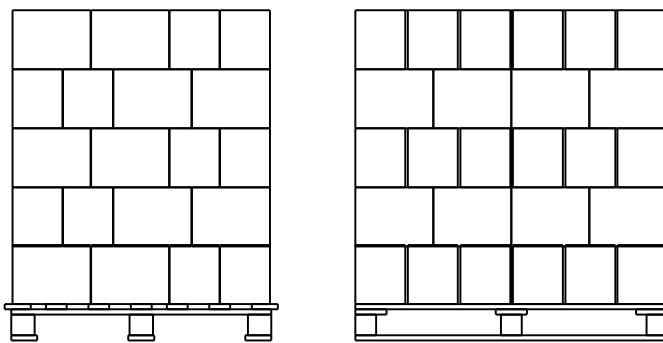
Pallet Product Layout

Single Box Pallet Distribution

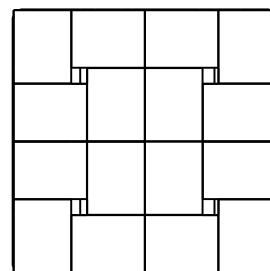
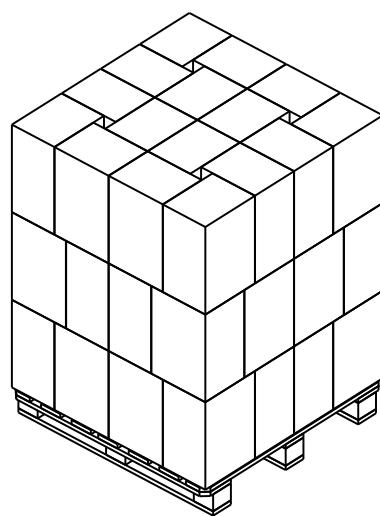
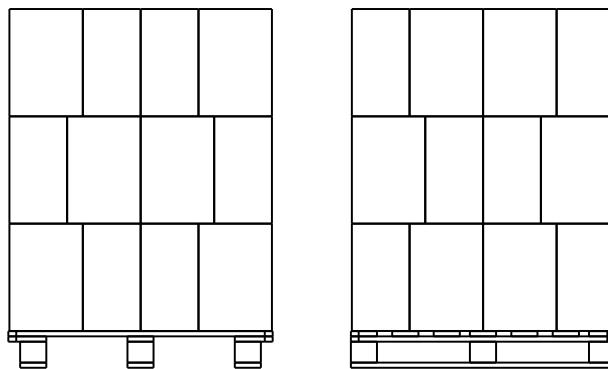
Small L, B Range



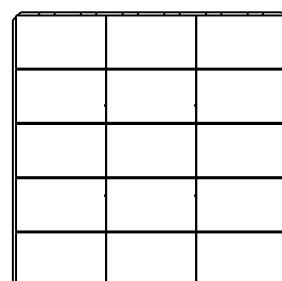
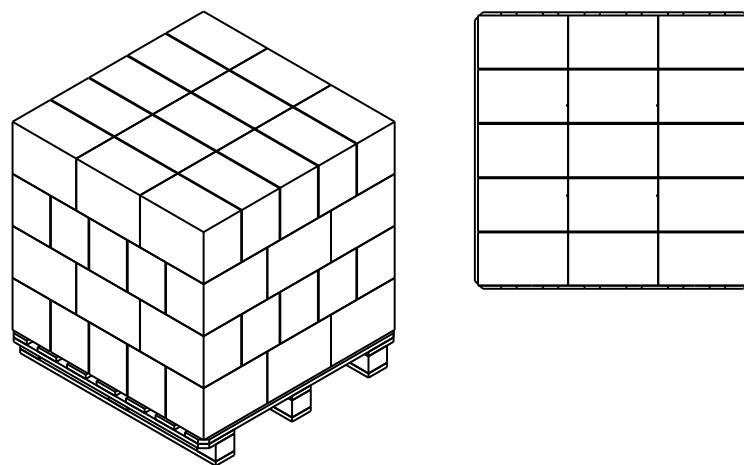
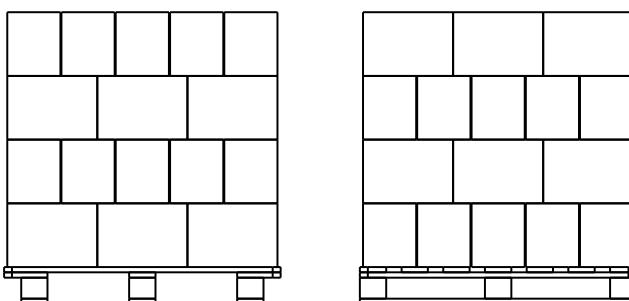
U, L & P Ranges



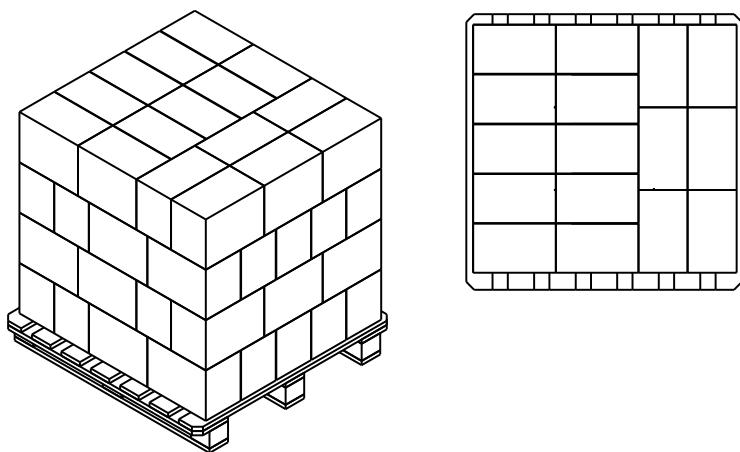
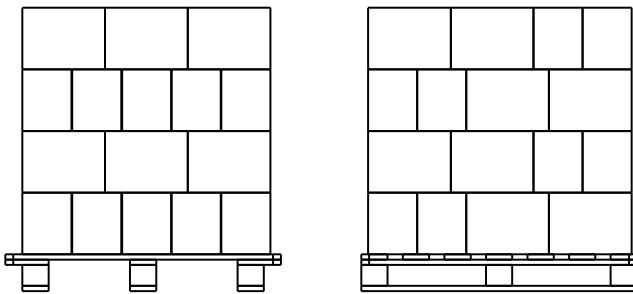
S Range



X Range (con caja conex.)

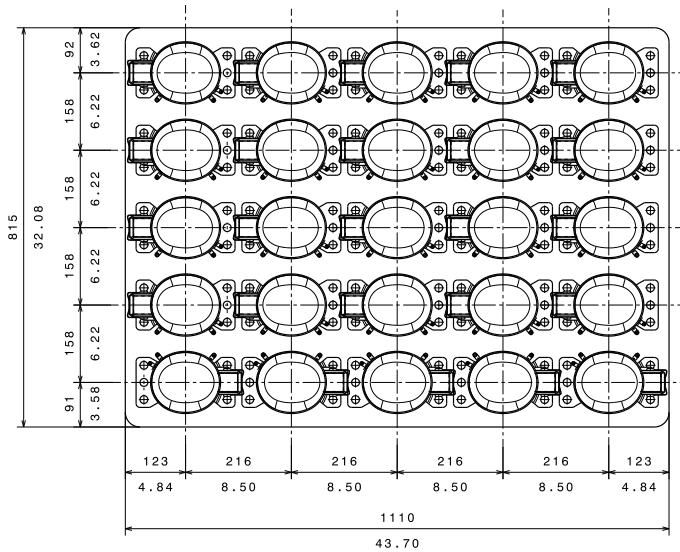


X Range (sin caja conex.)

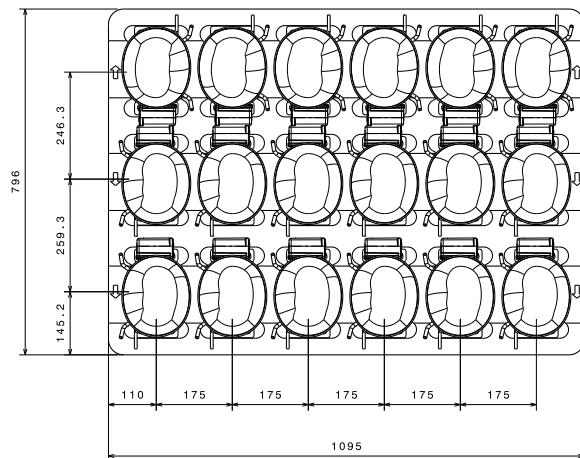


Tray per Pallet

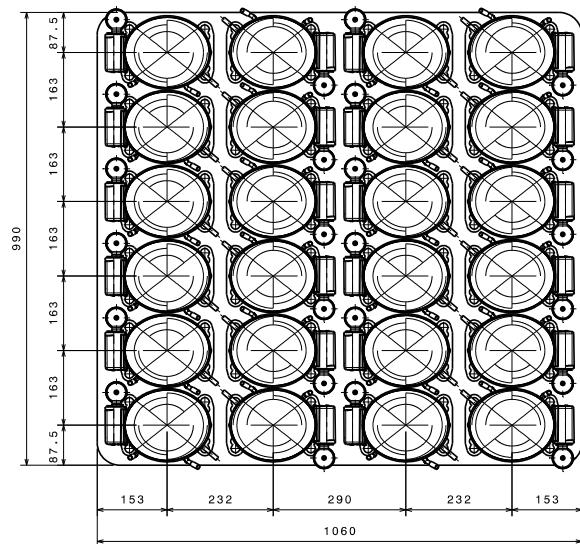
Small L & B compressor tray distribution



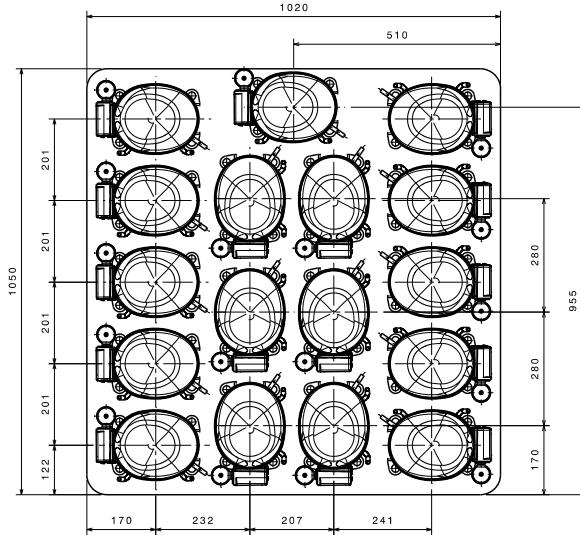
U compressor tray distribution



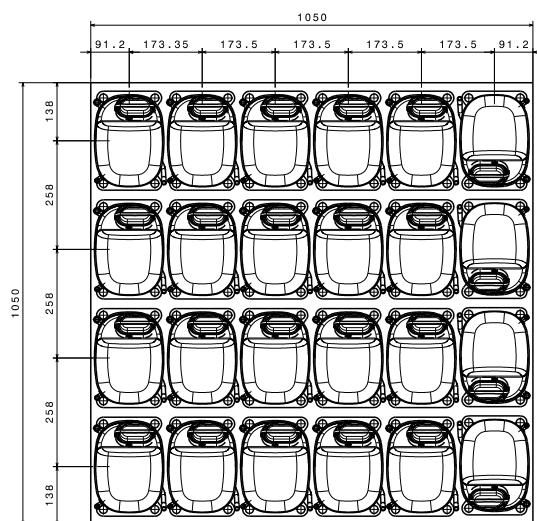
L and P compressor tray distribution



X compressor tray distribution



S compressor tray distribution

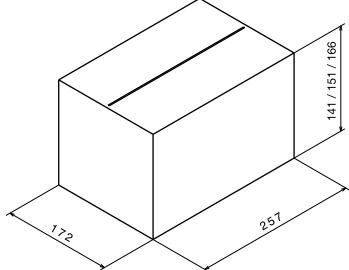


Pallet label

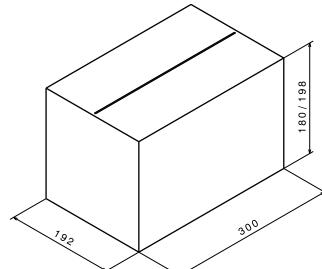
Receiver CUSTOMER	Customer 00000	Customer part number 00000000-000
Work Order 00000	Supplier name HUAYI COMPRESSOR	
Part Name(P) 000000	 	0000 A00 / MUELLE 000000 DD.MM.YYYY 00:00:00
Quantity(Q) 00,000 UN 	Description COMPRESSOR MODEL	
Supplier ID(V)	Date DD/MM/YYYY	Drawing number
Palet number 0000000000 	Part number barcode 	

Single Boxes Drawings

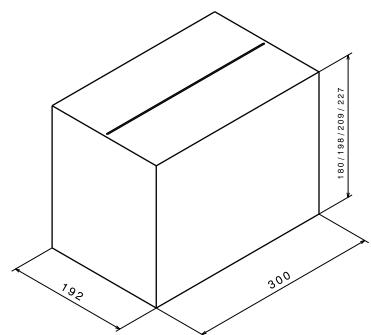
Small L & B Range



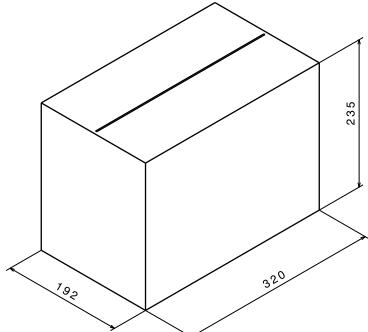
U Range



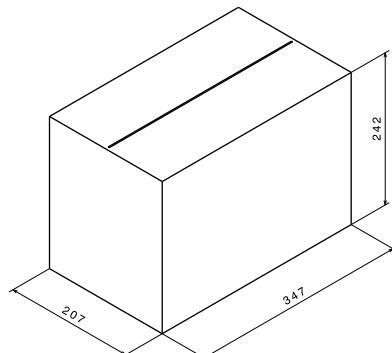
L & P Ranges



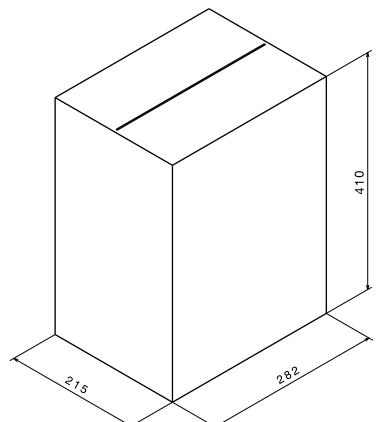
X Range



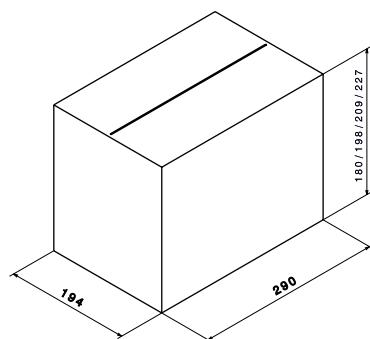
X Range with connecting box



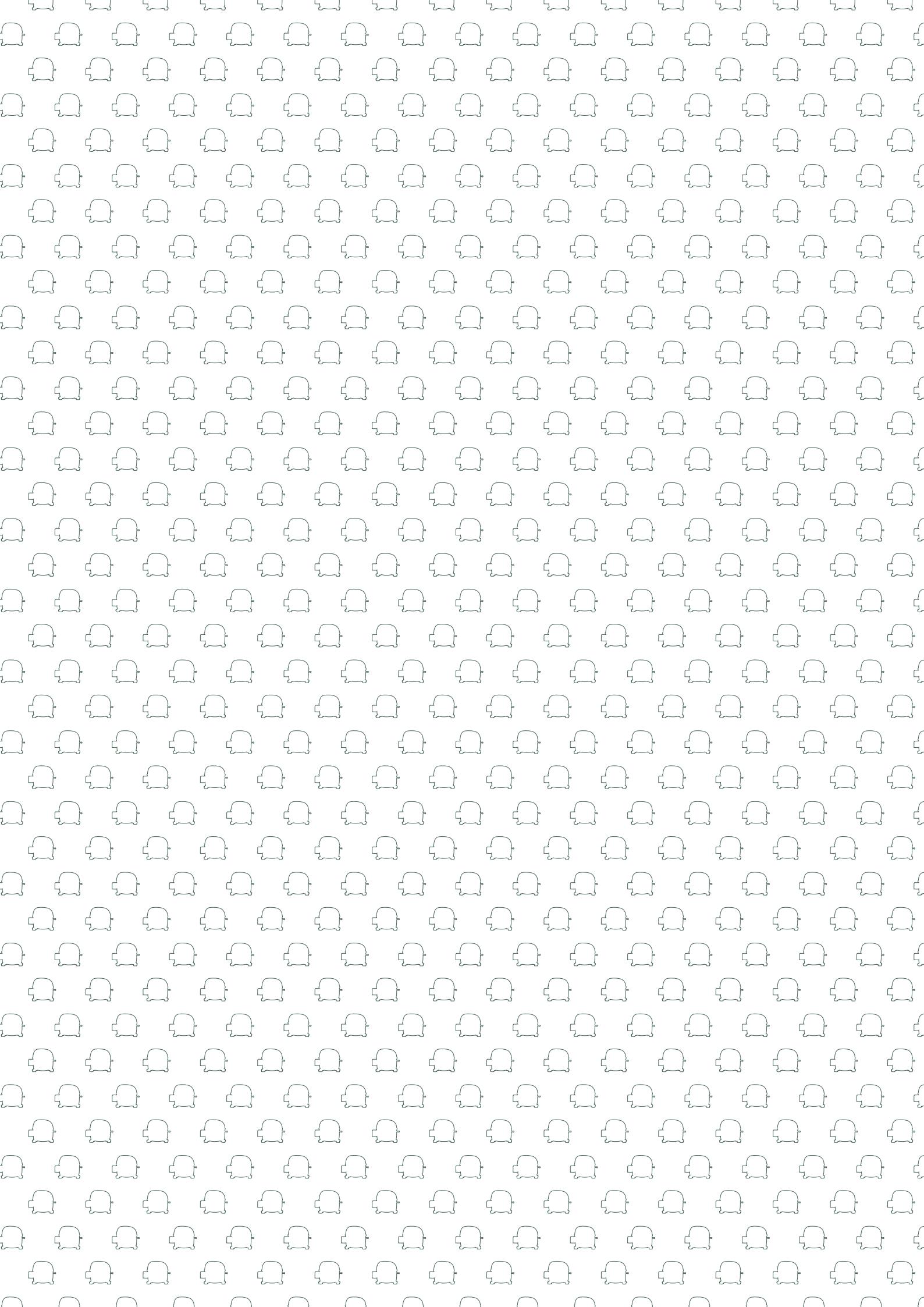
S Range



GLT80TDC Compressor



notes





**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