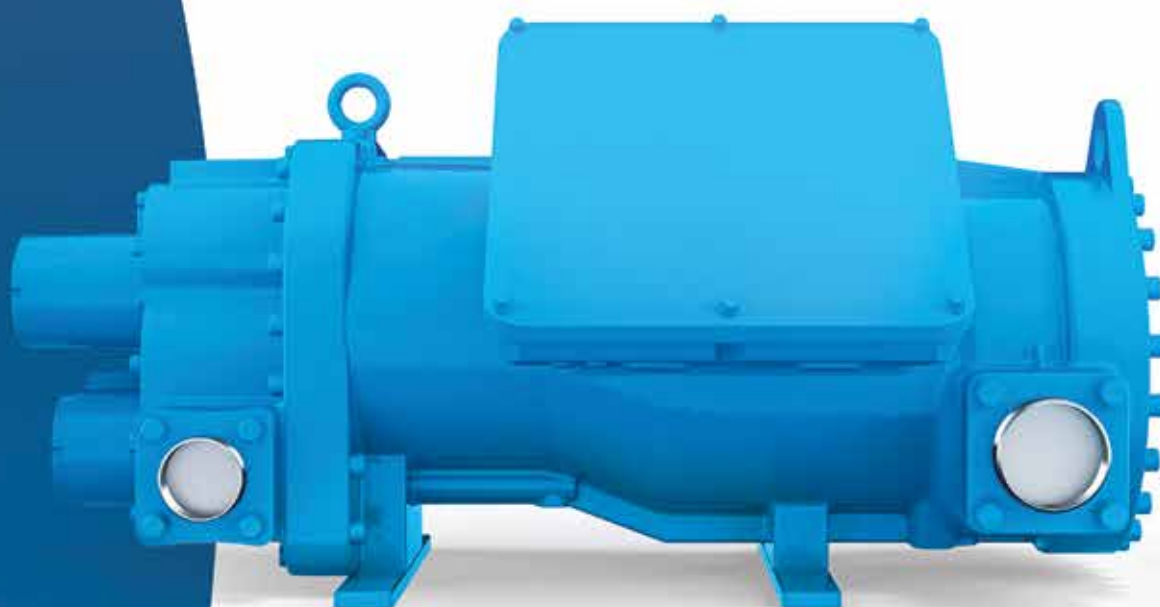


50 Hz & 60 Hz ●

ALUMINIUM SERIES

NH₃ SEMI-HERMETIC
SCREW COMPRESSORS



富士豪
FRASCOLD SPA

ALUMINIUM SERIES

NH₃ SEMI-HERMETIC SCREW
COMPRESSORS



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ALUMINIUM SEMI-HERMETICS SCREW COMPRESSORS

Fracold's **ALUMINIUM** screw compressors combine the innovation of the permanent magnet aluminium motor with the excellent **thermodynamic properties of ammonia (NH₃)**, offering a high-performance solution for natural refrigeration.

The semi-hermetic configuration with integrated motor **eliminates sealing and maintenance problems related to shaft sealing**, ensuring **maximum reliability and lower maintenance requirements**.

The characteristics of ammonia with **high energy efficiency and zero environmental impact** ensure **maximum efficiency and sustainability**.

Ideal for **industrial, food and process** applications, this series represents the perfect synergy between **advanced engineering and natural refrigeration**, in full compliance with **performance and reliability** requirements.



4 FEATURES & BENEFITS



MAXIMUM EFFICIENCY AND RELIABILITY



SAFE AND VERSATILE



IPM MOTOR

CONFORMITY DECLARATION

The **Frascold Aluminium screw compressors for refrigeration** are intended for installation in refrigeration systems.

The partially-completed machine or machines must comply with the local safety regulations and standards of the place of installation **(within the EU according to EU Directives 2006/42/EC Machinery Directive, 2014/68 / EU Pressure Equipment Directive, 2014/35/EU Low Voltage Directive)**.

The compressor can only be operated if installed according to the assembly instructions provided in the installation manual.

Commissioning is only possible if the entire system in which it is integrated has been tested and approved according to the relevant legal provisions.

The standards applied are described in the Manufacturer's Declaration of Incorporation, in accordance with Directive 2006/42/EC, available at: **www.frascold.it**

PERFORMANCE DATA - FSS3 SOFTWARE

Refer to our Frascold Selection Software FSS3 to check the performance of all our compressors.



OPERATING LIMITS



TECHNICAL INFORMATION



COOLING CAPACITY



DRAWINGS



ALL OPERATIONAL DATA
WITH ANY TYPE
OF REFRIGERANT



MANUALS



EUROPEAN STANDARD EN12900
At 50Hz



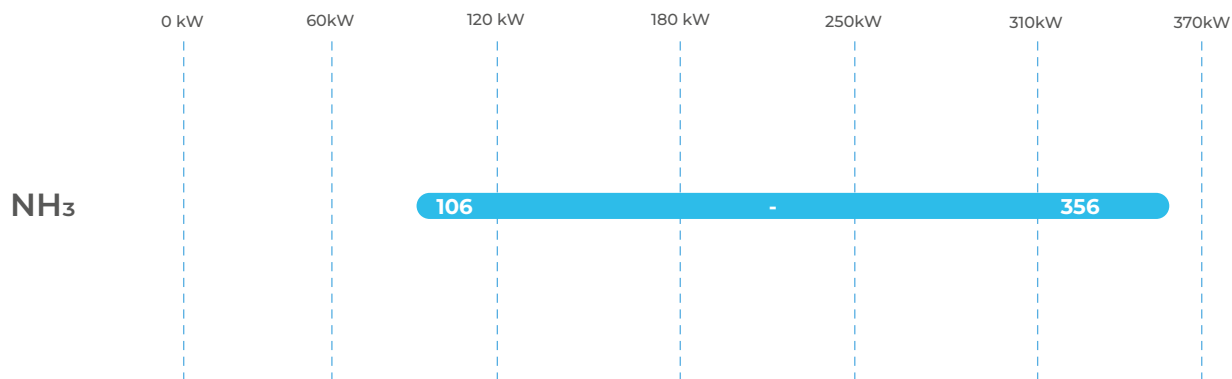
CATALOGUES AND
CERTIFICATIONS

CAPACITY



LEGAL DISCLAIMER: While Frascold has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications and performance may be subject to change without notice. You can find the most up-to-date information in our Frascold Selection Software FSS3 at the link: <https://www.frascold.it/software>

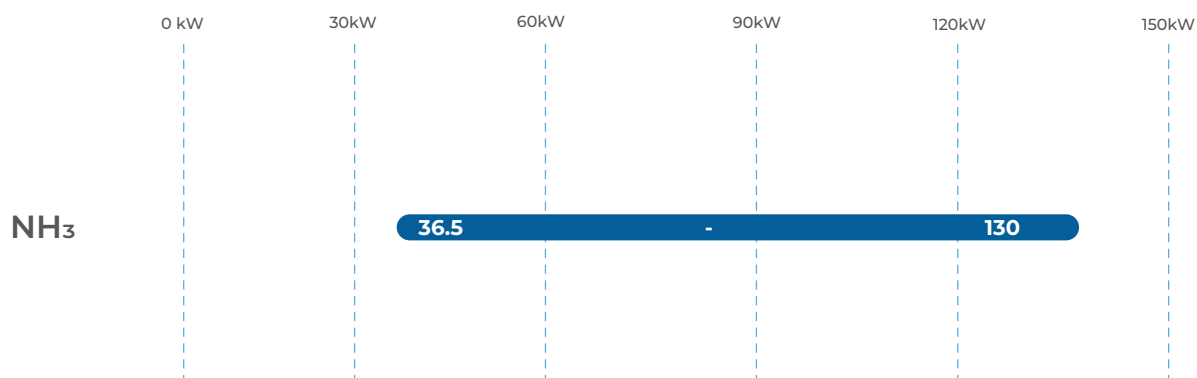
ALUMINIUM H



FVR-H-ALU
@-10/+45°C
Overheating 5°C

VOLUMETRIC DISPLACEMENT
1600 - 3600 rpm

ALUMINIUM L



FVR-H-ALU
@-35/+40°C ECO
Overheating 5°C

VOLUMETRIC DISPLACEMENT
1600 - 3600 rpm

PRODUCT RANGE



ALUMINIUM
H

4 Models

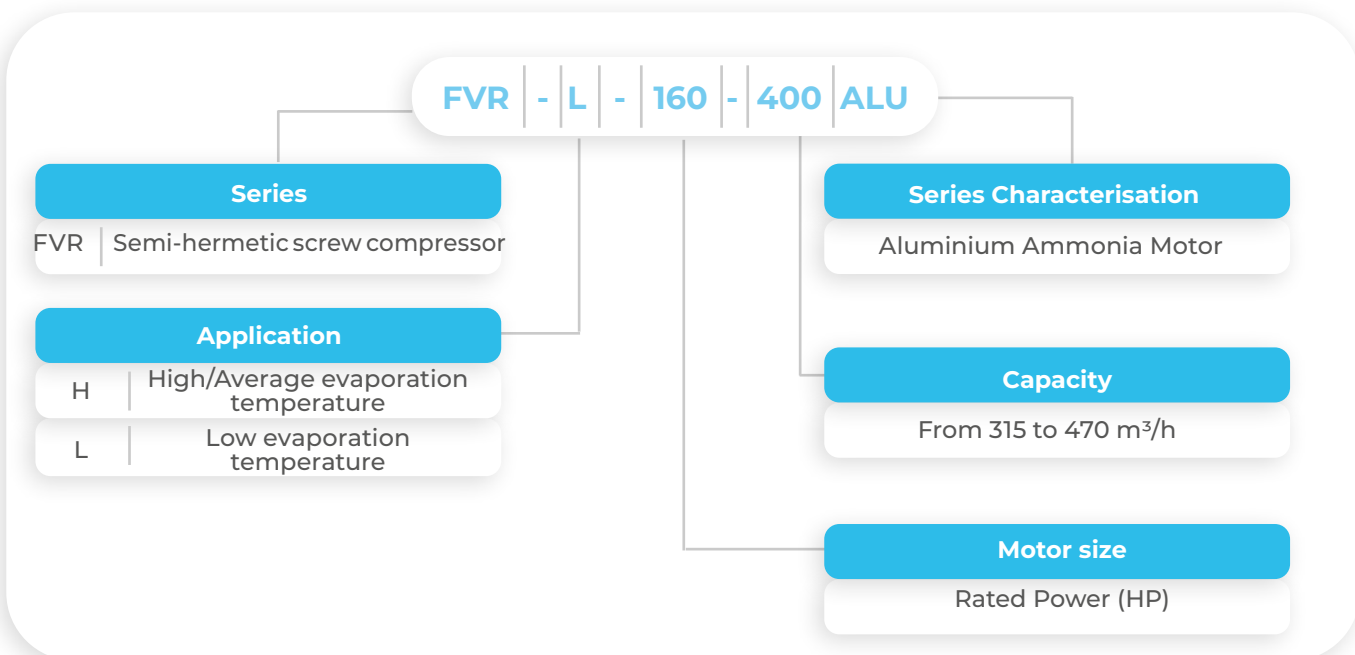
130 - 160 HP
315 - 470 m³/h

ALUMINIUM
L

4 Models

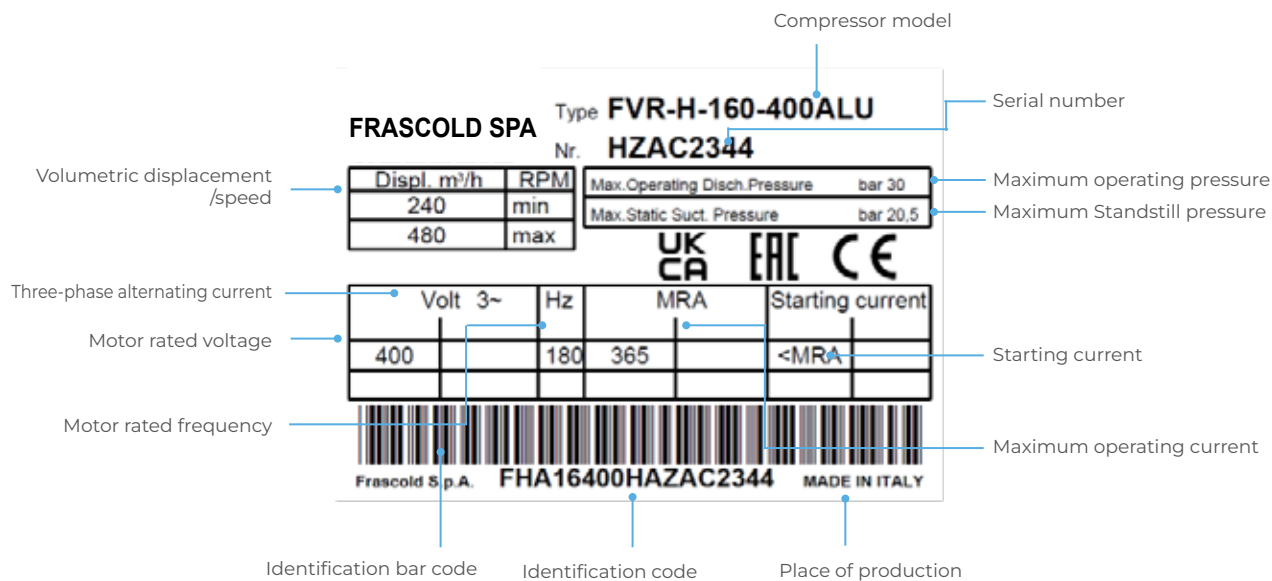
130 - 160 HP
315 - 470 m³/h

MODEL DESIGNATION



INFORMATION PLATE

All important information to identify the compressor is shown on the data plate.
The production date is contained in the serial number.
The user is responsible for indicating the type of refrigerant.



Motor power supply 400 / 3 / 50

Models	Volumetric displacement		MRA	Starting Current	Rated power	Permitted speed		Maximum operating pressure HP	LP minimum static pressure	Net weight
	Max	Min				Max	Min			
	m³/h					[rpm]				
			[A]	[A]	[HP]			[bar]	[bar]	[Kg]
FVR-H-130-315-ALU	379	169	261	< MRA	130	3600	1600	30	20.5	749
FVR-H-140-370-ALU	446	198	312	< MRA	140	3600	1600	30	20.5	749
FVR-H-160-400-ALU	478	212	365	< MRA	160	3600	1600	30	20.5	749
FVR-H-160-470-ALU	562	250	365	< MRA	160	3600	1600	30	20.5	749
FVR-L-130-315-ALU	379	169	261	< MRA	130	3600	1600	30	20.5	749
FVR-L-140-370-ALU	446	198	312	< MRA	140	3600	1600	30	20.5	749
FVR-L-160-400-ALU	478	212	365	< MRA	160	3600	1600	30	20.5	749
FVR-L-160-470-ALU	562	250	365	< MRA	160	3600	1600	30	20.5	749

LEGAL DISCLAIMER:

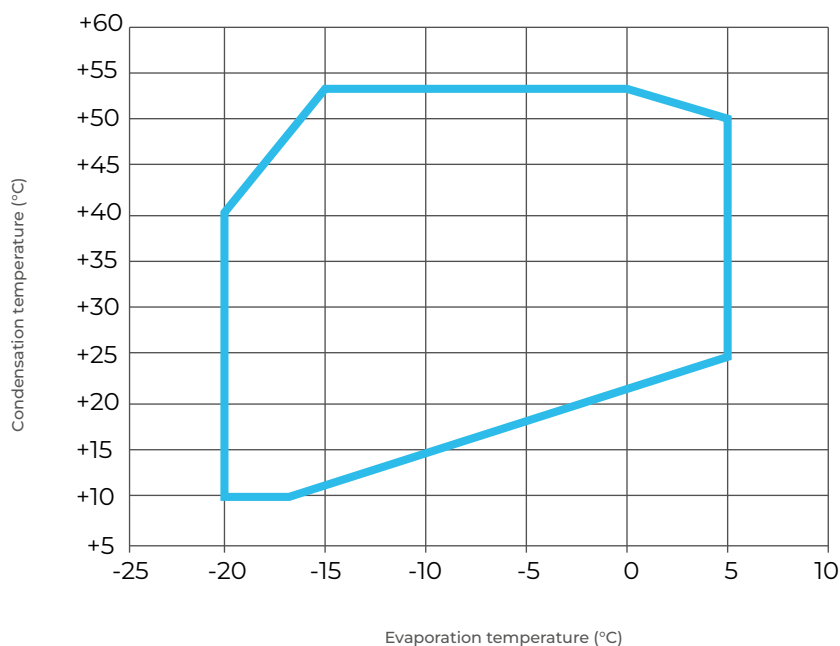
While Frascold has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications and performance may be subject to change without notice. You can find the most up-to-date information in our Frascold Selection Software FSS3 at the link: <https://www.frascold.it/software>

OPERATING LIMITS



The diagrams published in this catalogue are to be considered as a general layout for the entire range of semi-hermetic screw compressors. For specific models and performance data, use the FSS3 selection software, available for free download at www.frascold.it.

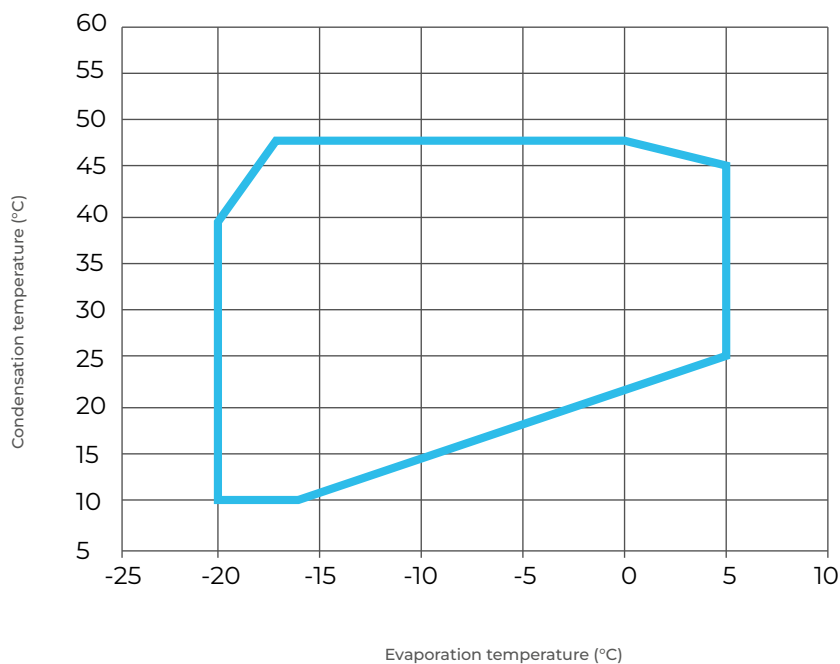
ALUMINIUM H



Standard application diagram
Compressor capacity 100%
Overheating = 10K

10

ALUMINIUM H

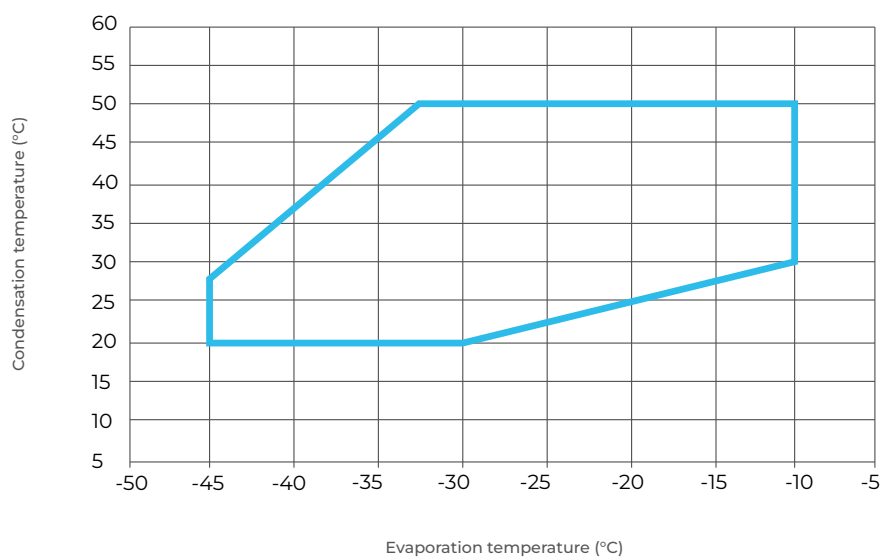


Standard application diagram
Compressor capacity 100%
Overheating = 10K

OPERATING LIMITS



ALUMINIUM L

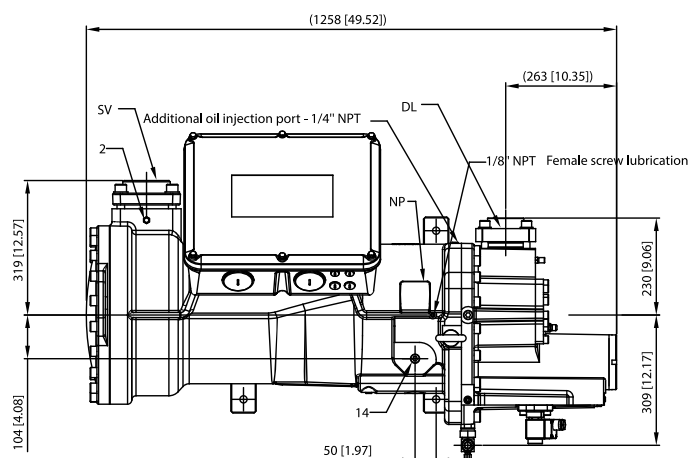
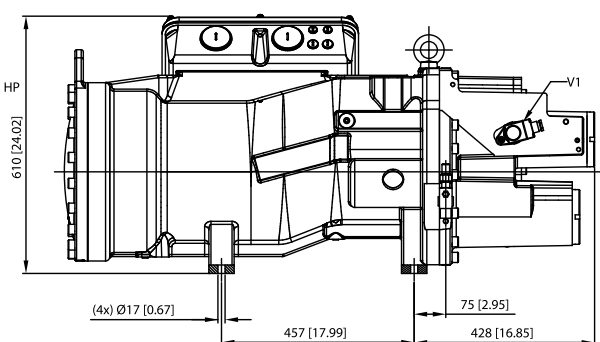
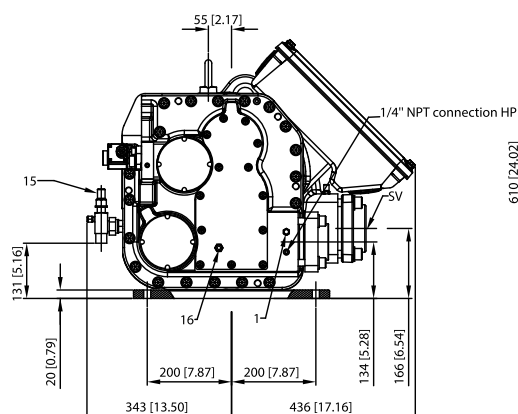


Standard application diagram
Compressor capacity 100%
Overheating = 10K

TECHNICAL DRAWINGS AND DIMENSIONS

ALUMINIUM H

H-130-315 / 140-370 / 160-400 / 160-470-ALU

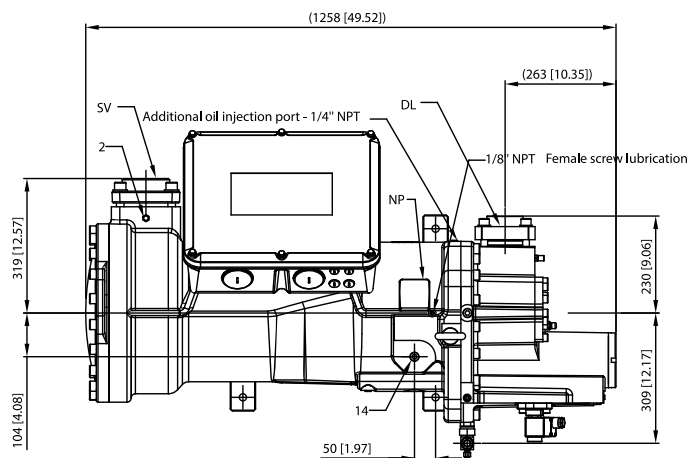
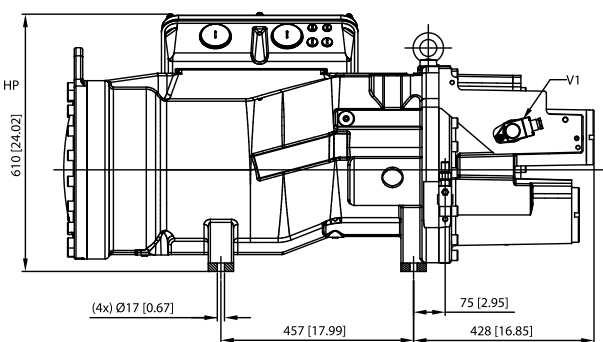
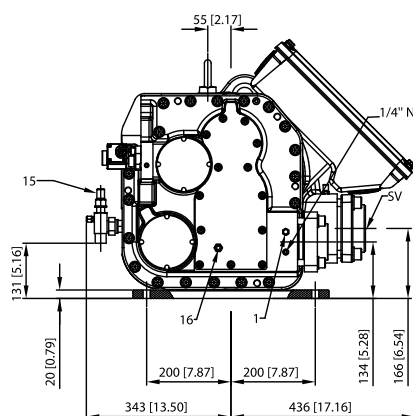


1	High pressure attachment	1/4" SAE
2	Low pressure attachment	1/4" SAE
14	Liquid initiation/economiser connection	3/4" NPT
15	Oil return line connection	DN20
16	Discharge temperature sensor	
VI	Vi control valve	
SL	Suction line connection	DN100
DL	Discharge line connection	DN80
NP	Name plate	

TECHNICAL DRAWINGS AND DIMENSIONS

ALUMINIUM L

L-130-315 / 140-370 / 160-400 / 160-470-ALU



13

1	High pressure attachment	1/4" SAE
2	Low pressure attachment	1/4" SAE
14	Liquid initiation/economiser connection	3/4" NPT
15	Oil return line connection	DN20
16	Discharge temperature sensor	
V1	Vi control valve	
SL	Suction line connection	DN100
DL	Discharge line connection	DN80
NP	Name plate	

OIL CIRCUIT KIT

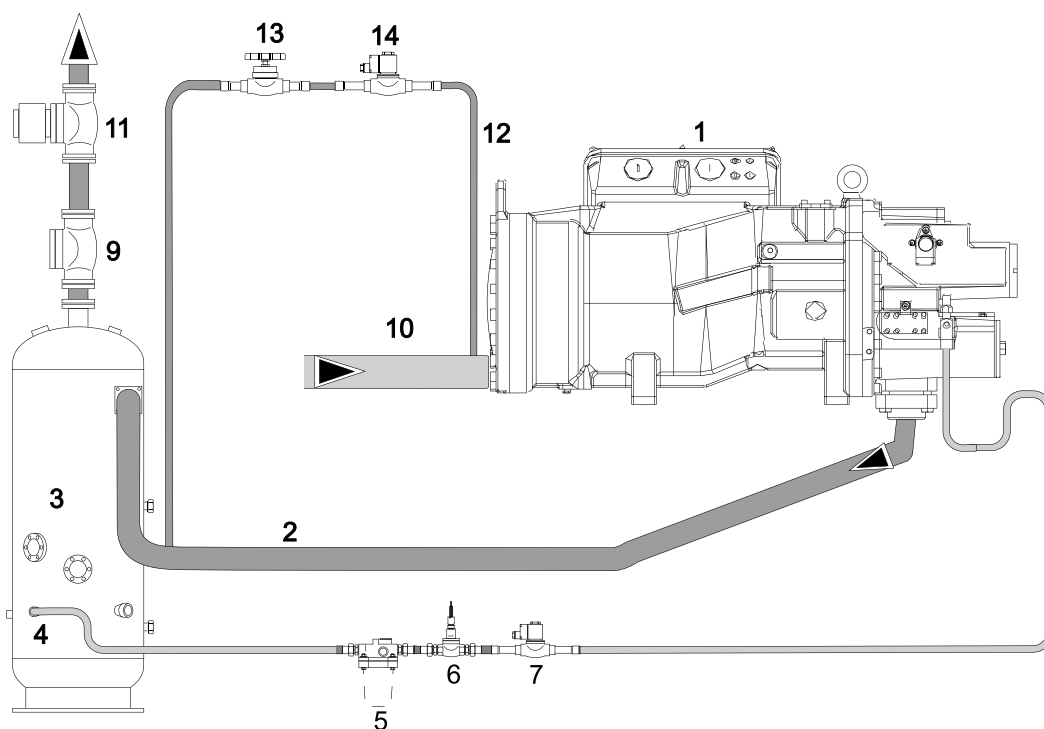
T00WK103AMF Oil Circuit Kit:

No. 1 Oil Filter LMP1103 for NH3 cod. T00WP092AM

No. 1 Solenoid valve ICF20 cod. T00EC1024B

No. 1 Coil 230V AC 50-60Hz cod. T00EC1210

No. 1 Flow switch cod. T00WP160A



1	Compressor
2	Delivery line
3	Remote oil separator
4	Oil return line
5	Oil filter
6	Oil flow switch
7	Electromagnetic valve
9	Check valve
10	Suction line
11	Delivery pressure adjustment valve

EQUALISATION LINE:

12	Equalisation line
13	Shut-off valve
14	Electromagnetic valve

CONTACTS & SUBSIDIARIES

HEADQUARTERS AND PRODUCTION PLANT

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www.frascold.it

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Ho Chi Minh City - Vietnam
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frascold.china@frascold.net
www.frascold.net

PRODUCTIONS DEDICATED TO LOCAL MARKETS

CHINA - FVR PRODUCTION

Frascold refrigeration equipment Co. Ltd
Block 10, Phase 3 of the Standard Building
in the General Free Trade Zone
no. 88 Weichuang road,
Taizhou city of Jiangsu province - China

INDIA - CDU ASSEMBLY

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A1/2/15/16 Gallops Industrial Park,
NH-8A, Sarkhej-Bavla Rd, Rajoda,
Ahmedabad 382220 Gujarat - India



Pulsing **innovation**