

Portables line

MINI COMPACT

Electric



CONTACT US

CERTIFICATION: CE UNI EN ISO 9001:2015





Technical data

Type of gas	Breathing air EN 12021 - Nitrox 40% max O ₂ - Helium - Nitrogen
Intake pressure	Atmospheric max 300 mbar
Nominal pressure	230 bar / 330 bar
Filling pressure	230 bar / 330 bar
Max working pressure	330 bar
Permissible ambient temperature range	-10° C ÷ +40° C
Permissible altitude	0 ÷ 2.000 m SLM
Max permissible tilt	6°
Design	Basic
Operating voltage, standard	400 V; 50 Hz
Other operating voltage	230 V, 50 Hz / 440 V, 60 Hz / 230 V, 60 Hz
Oil	Synthetic Coltri Oil ST 755
Oil change interval	Every year / 50 h
Frame	Steel 1,5 mm thickness - colour RAL 9005 - Powder coating painting - scratch proof

Compressor

	100 EM	100 ET
Charging rate <small>Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.</small>	100 l/min	100 l/min
Purification System	Eco-filter	
Cooling air flow, min.	990 m ³ /h	990 m ³ /h
Weight <small>Standard model. Weight and dimensions may vary depending on accessories.</small>	47 kg 103.3 lb	47 kg 103.3 lb
Dimensions (W x D x H)	59,2 x 38 x 42,7 cm - 23.3 x 15 x 16.8 in	

Motor

	100 EM	100 ET
Power	2,2 kW, 3 Hp	3 kW, 4 Hp
Type	Single-phase electric motor	Three-phase electric motor
Operating voltage/frequency <small>Different voltage / frequency available on request.</small>	230 V, 50 Hz	400 V, 50 Hz
Rated current	14 A	6,7 A
Speed (RPM)	2.800	
Protection class	IP54 (TEFC)	

Dimensions

Width 59,2 cm (23.3")

Depth 38 cm (15")

Height 42,7 cm (16.8")

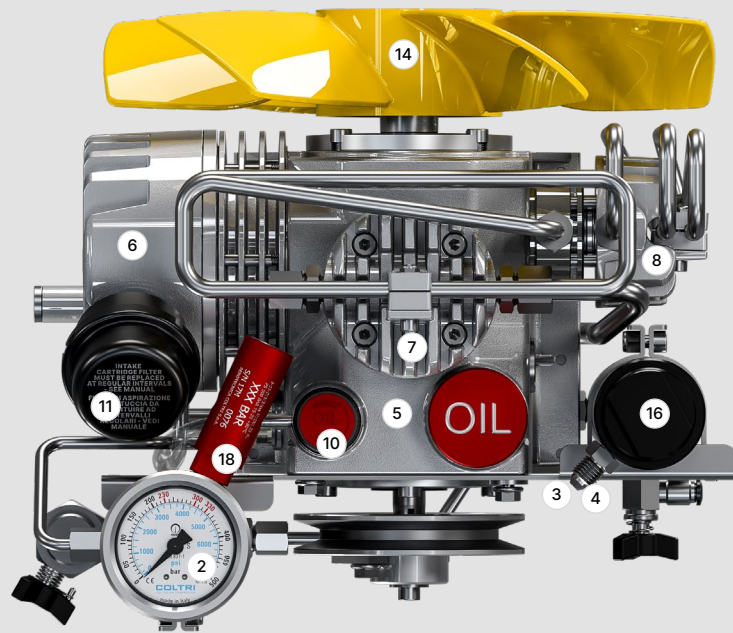
Dry weight

MINI COMPACT 100 EM

47 kg (103.3 lb)

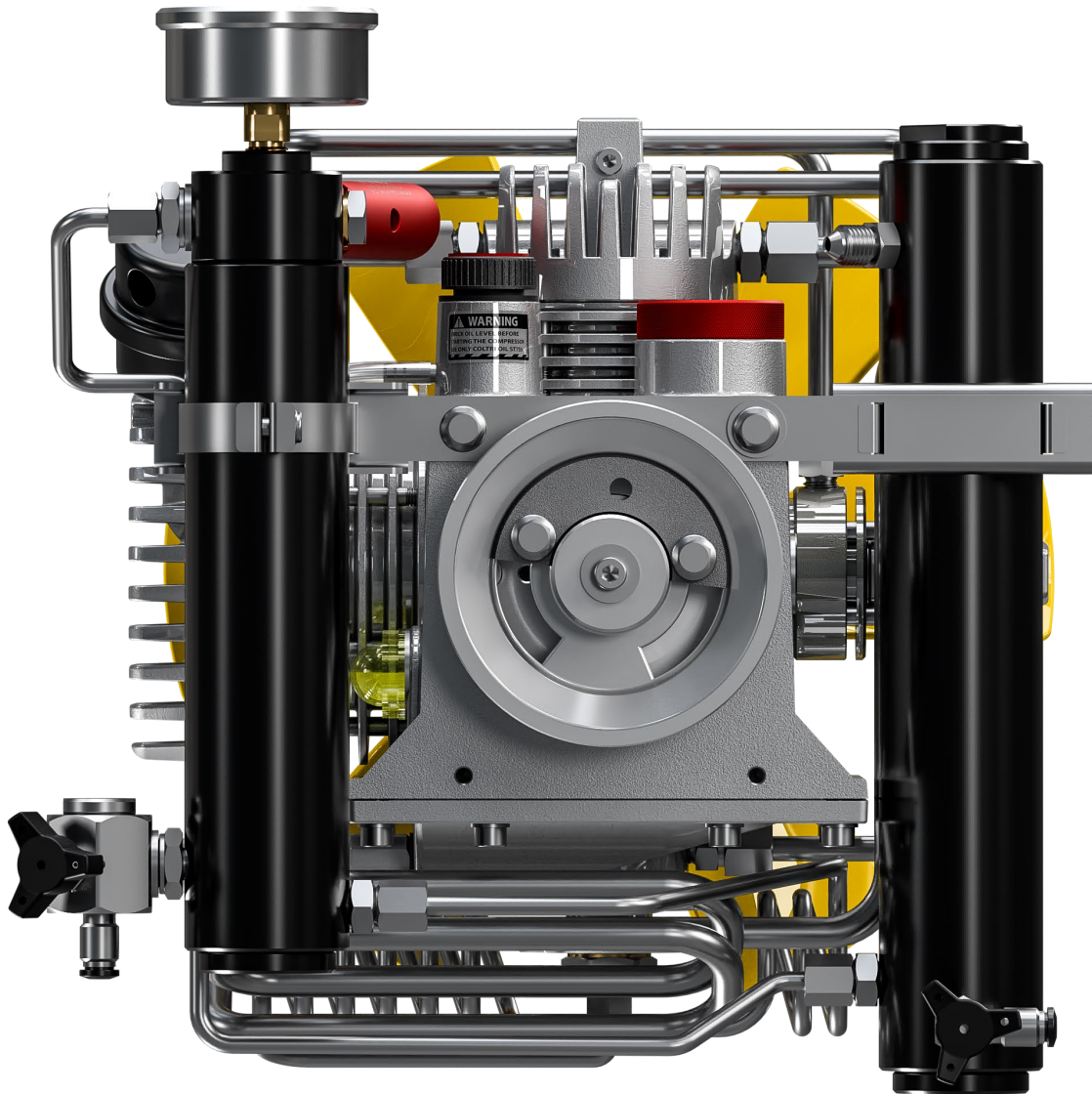
MINI COMPACT 100 ET

47 kg (103.3 lb)

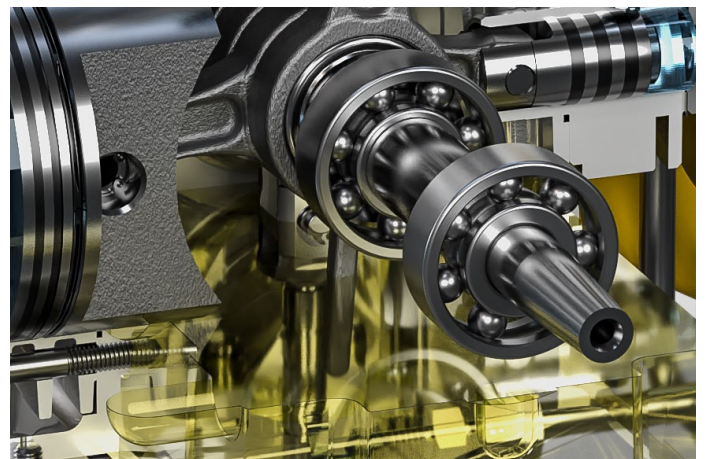


Machine parts

- | | | | | | |
|---|--------------------------|----|------------------------|----|----------------------|
| 1 | Frame | 8 | 3rd stage | 15 | Belt |
| 2 | Pressure gauge | 9 | 4th stage | 16 | Purification system |
| 3 | Refill hoses connection | 10 | Oil filler cap | 17 | Electric motor |
| 4 | High pressure air outlet | 11 | Air filter | 18 | Safety valve |
| 5 | Pumping unit | 12 | Safety mesh | 19 | Condensate drain |
| 6 | 1st stage | 13 | Anti-vibration devices | 20 | Condensate discharge |
| 7 | 2nd stage | 14 | Cooling fan | | |



1. Splash lubrication with conrod pin immersed in oil



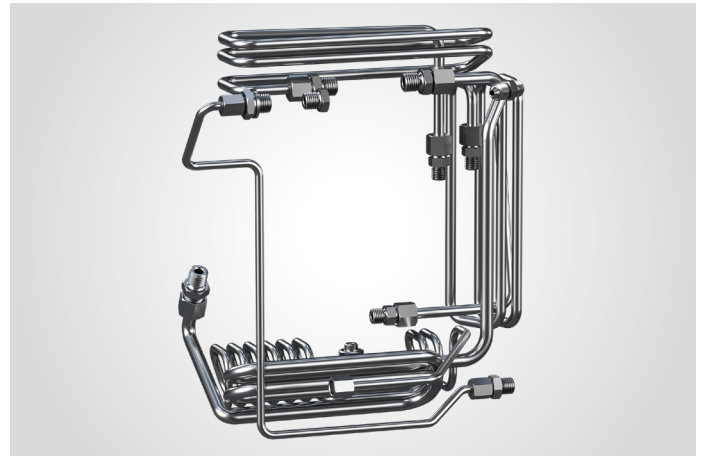
2.

Suction filter:
10 μ micron



3.

Pipes, fittings and nuts
in stainless steel



4.

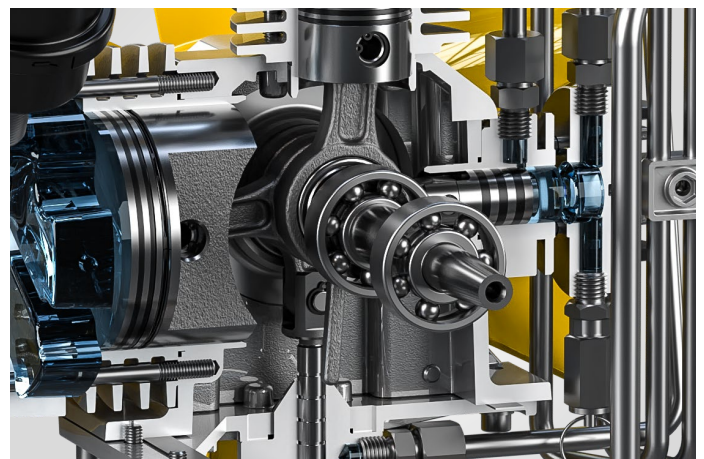
Aluminium crankcase
machined on horizontal
CNC machine to ensure
maximum precision



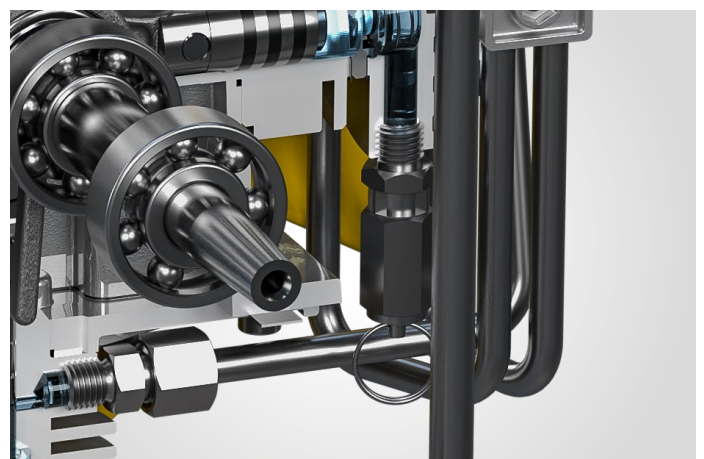
5. Forged aluminum connecting rods



6. Forged steel crankshaft with hardened rings



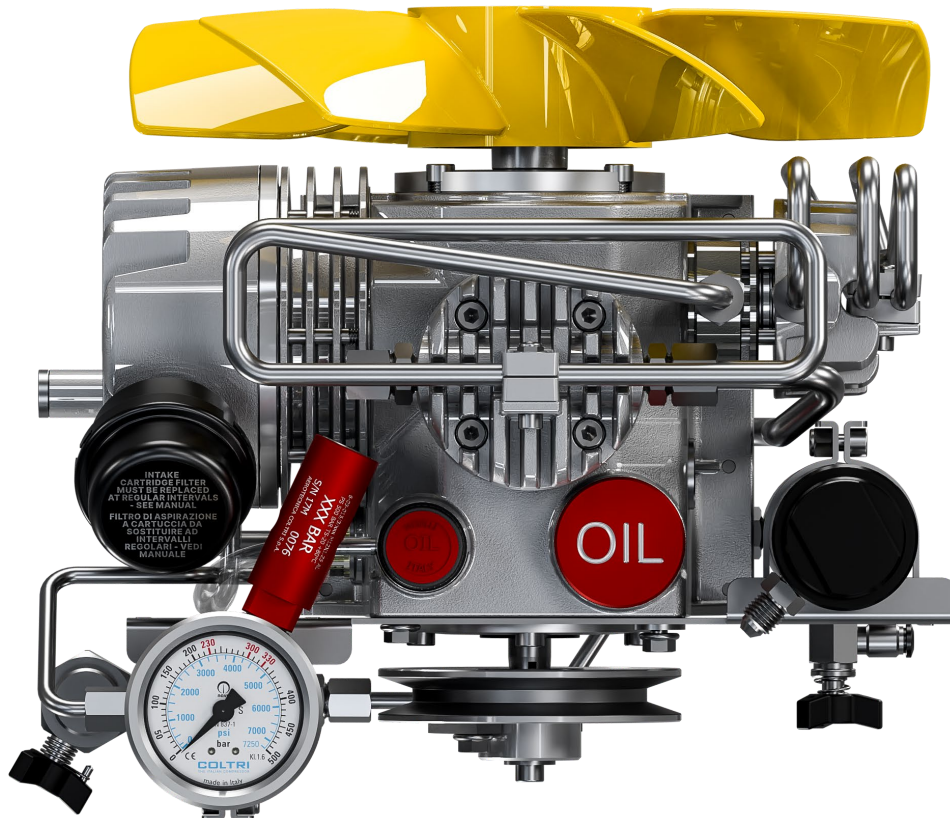
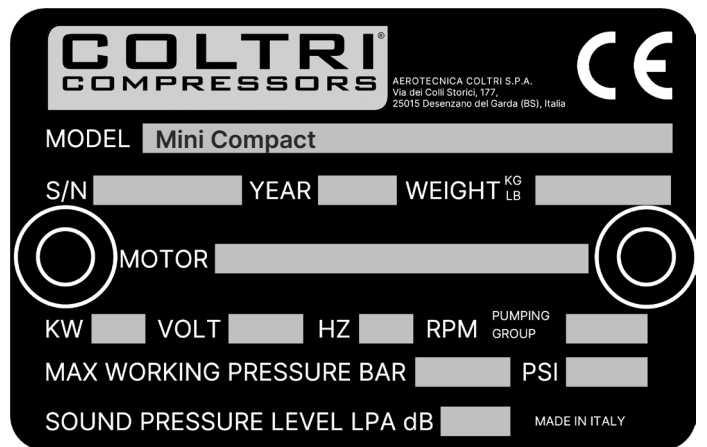
7. Safety valve on the third stage



8. Final safety valve PED certified

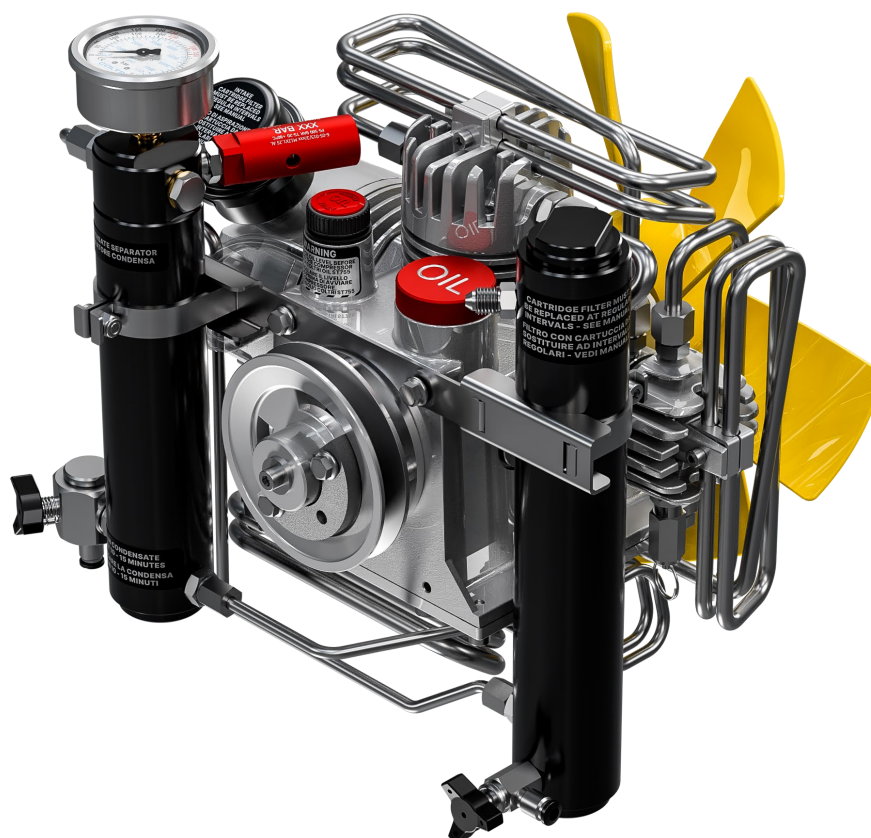


9. Identification label



Compressor block GP 100 (ex MCH 6)

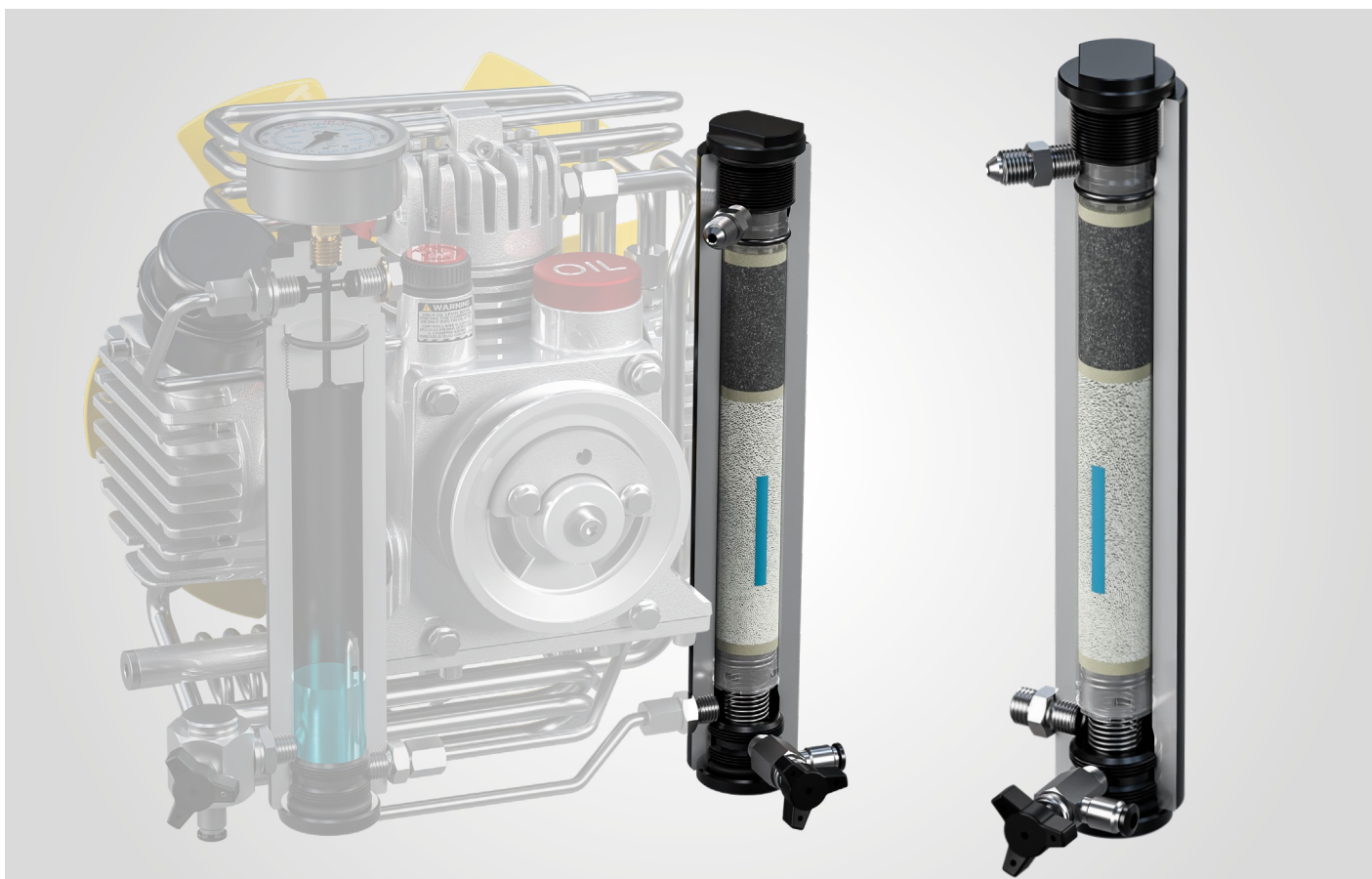
	100 EM	100 ET
Charging rate		
Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	100 l/min	100 l/min
Speed RPM	2.250	
Number of stages	4	
Number of cylinders	4	
Cylinder bore 1st stage	78 mm	
Cylinder bore 2nd stage	38 mm	
Cylinder bore 3rd stage	19 mm	
Cylinder bore 4th stage	9,7 mm	
Stroke	13,5 mm	
Direction of rotation (from flywheel side)	Right - clockwise	
Drive type	V-belt A type	
Intermediate pressure 1st stage	~ 4,5 bar	
Intermediate pressure 2nd stage	~ 16 bar	
Intermediate pressure 3rd stage	~ 75 bar	
Amount of oil	600 cc/ml	
Intake pressure	1,3 bar _a – 300 millibar	



Standard equipment

Purification system ECO-FILTER

ECO-FILTER disposable cartridge



Purification system

Eco-Filter

Operating pressure (Standard)

230 bar / 300 bar

Operating pressure max. (PS)

360 bar

Processable air capacity
(air inlet temperature in the filter 20° C at 300 bar)¹

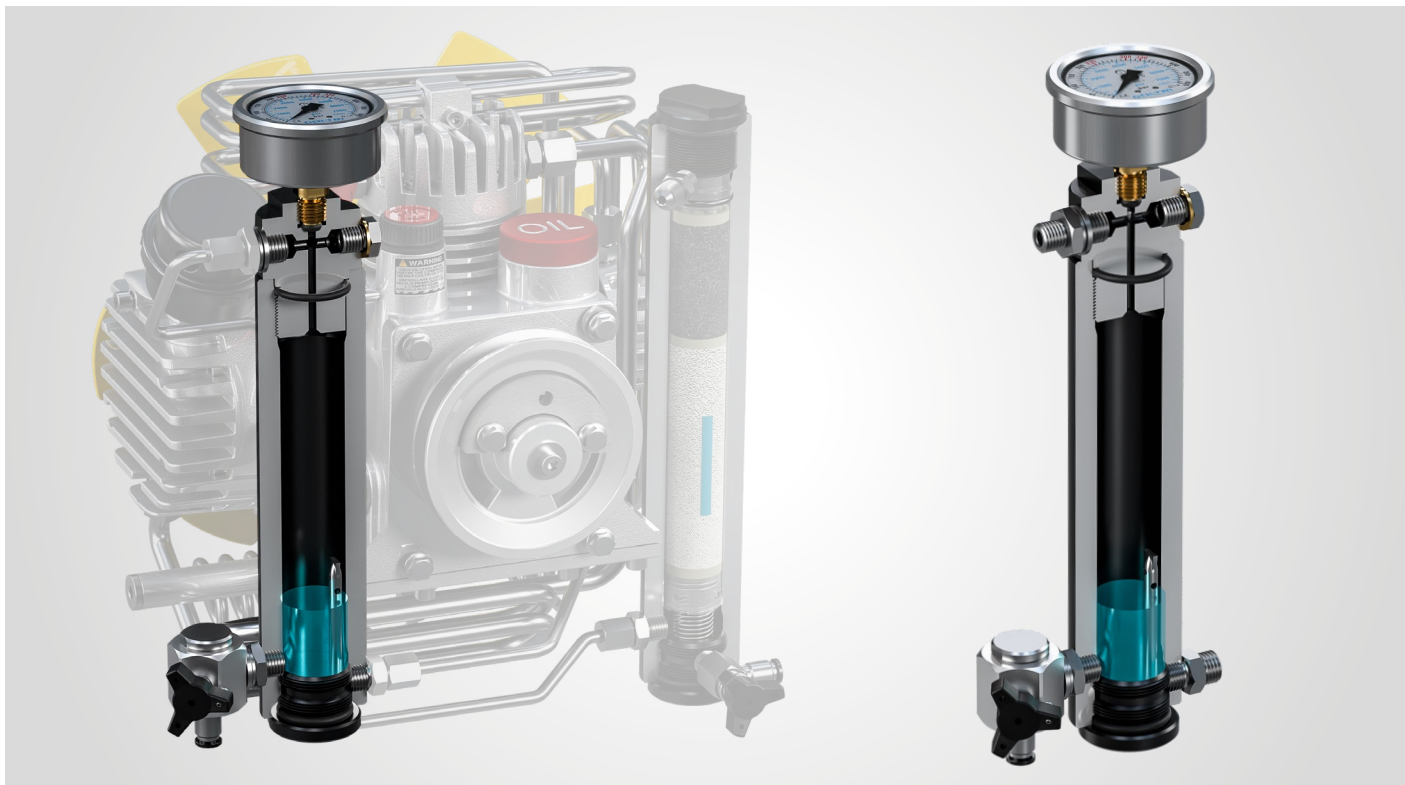
210 m³

¹ When using a filter cartridge without HOPCALITE CO CATALYST.

When using a cartridge with CO-removal, the processable air capacity is reduced by ca. 20%.

Separator system

- Final separator for removal of oil/water condensate
- Final safety valve, mounted on the separator housing



Contamination	Maximum content as per DIN EN 12021:2014	Air quality*
H ₂ O	25 mg/m ³	≤ 10 mg/m ³
CO	5 ppm(v)	≤ 4
CO ₂	500 ppm(v)	≤ 500
Oil	0,5 mg/m ³	≤ 0,5 mg/m ³

* Measured at our facility using ASCO HORA 160 ANALYZER.

1 Only with special filter cartridge with HOPCALITE CO CATALYST. and up to a maximum concentration of 25 ppm CO in intake air.

The compressed clean breathing air then contains a maximum of 5 ppm CO.

2 The level of CO₂ in the intake air must not exceed the maximum level of CO₂ as per EN 12021:2014

3 Reported values exceed ISO 8573-1 standards.

Filling connections

1 filling connection to choose from: DIN 232 bar - INT and DIN 300 bar.



Filling connection DIN 232 bar
COD. 6-05-024



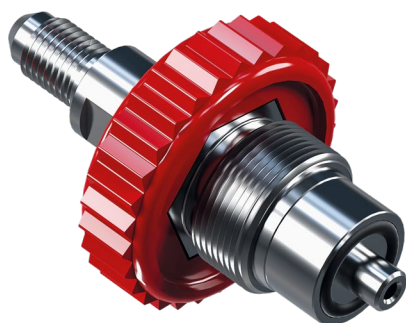
Filling connection INT
COD. 6-05-025

Filling device	DIN 232 bar
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Nominal pressure (PN)	250 bar
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Valve design

Filling valve with cylinder connector G 5/8"
 according to EN 144-2 and 477 PN232



Filling connection DIN 300 bar
COD. 6-05-024/300


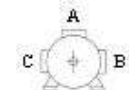
Filling device	DIN 300 bar
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Nominal pressure (PN)	330 bar
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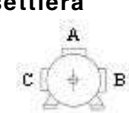
Valve design

Filling valve with integrated ventilation, with cylinder connector G 5/8"
 according to EN 144-2 and 477 PN232

Data sheet single-phase electric motor 2,2 kW

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>		Potenza/ Power (kW)	Poli/ Poles
				2,2	2
		Data	Rev.	24/06/2015	0
No	Descrizione/Description	Dati/Data			U.d.m.
1	Codice Soga / ref.code	159500			
2	Modello / Motor type	MMD1 90LA/2			
3	Descrizione / Description	Single-phase motor with starting capacitor 2,2kW 2 Poles 230V 50Hz			
4	Carcassa motore / Framesize	90L			
5	Poli / Poles	2			
6	Forma di costruzione / Mounting type	IM B3			
7	Potenza nominale / Rated output	2,2			[kW]
8	Fattore di servizio / Service factor	1.0			
9	Tipo di servizio / Duty type	S1			
10	Tensione / Rated voltage	230			[V]
11	Frequenza / Rated frequency	50			[Hz]
12	Corrente nominale / Rated current	16,5			[A]
13	Velocità nominale / Rated speed	2800			[min ⁻¹]
14	Fattore di potenza / Power factor	0,97			
15	Coppia nominale motore/ Rated motor torque	7,5			[Nm]
17	Corrente avviamento / Corrente nominale <i>Starting current / Rated current</i>	4,0			Isp/In
18	Coppia avviamento / Coppia nominale <i>Starting torque/Rated torque</i>	2,1			Msp/Mn
19	Classe d'isolamento / Insulation class	F			
20	Grado di protezione / Enclosure	IP54			
21	Posizione scatola morsettiera (motore con piedini) <i>Terminal box position</i> (motor with feet)				A
22	Terminali potenza / Power leads terminal	CAVO CON PRESA SCHUKO/ CABLE WITH SCHUKO PLUG			
23	Peso / Weight	18			[kg]
24	Cuscinetti /bearings	Drive end	6205		
		Non drive end	6205		
Note/remarks: Motore con condensatore permanente 60µF e disgiuntore elettromeccanico e condensatore di spunto 100µF. Il motore è anche provvisto di interruttore a pulsanti rosso-verde con protezione termica e contatore analogico. <i>Motor with 60µF permanent capacitor and centrifugal switch plus 100µF starting capacitor. The motor is also provided with switch (red-green push-buttons), thermal protectors and analogic hour meter.</i> Targa con logo Coltri Compressors.					

Data sheet three-phase electric motor 3 kW

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>			Potenza/ Power (kW)	Poli/ Poles
					3	2
					Data 24/06/2015	Rev. 0
No	Descrizione/Description	Dati/Data			U.d.m.	
1	Codice Soga / ref.code	124268				
2	Modello / Motor type	MT1 90LC/2				
3	Descrizione / Description	Three-phase asynchronous motor 3kW 2 Poles 230V 50Hz				
4	Carcassa motore / Framesize	90L				
5	Poli / Poles	2				
6	Forma di costruzione / Mounting type	IM B3				
7	Potenza nominale / Rated output	3	3	3,6	[kW]	
8	Fattore di servizio / Service factor	1.0				
9	Tipo di servizio / Duty type	S3-75%				
10	Tensione / Rated voltage	Δ 230	Δ 230	Δ 255-280	[V]	
11	Frequenza / Rated frequency	50	60	60	[Hz]	
12	Corrente nominale / Rated current	13,3	13,3	13,3	[A]	
13	Velocità nominale / Rated speed	2840	3410	3410	[min ⁻¹]	
14	Fattore di potenza / Power factor	0,84	0,84	0,84		
15	Coppia nominale motore/ Rated motor torque	10	8,4	10	[Nm]	
17	Corrente avviamento / Corrente nominale <i>Starting current / Rated current</i>	7,4			Isp/In	
18	Coppia avviamento / Coppia nominale <i>Starting torque/Rated torque</i>	3,5			Msp/Mn	
19	Classe d'isolamento / Insulation class	F				
20	Grado di protezione / Enclosure	IP54				
21	Posizione scatola morsettiera (motore con piedini) <i>Terminal box position</i> (motor with feet)				A	
22	Terminali potenza / Power leads terminal	CAVO / CABLE				
23	Peso / Weight	18			[kg]	
24	Cuscinetti /bearings	Drive end	6205			
		Non drive end	6205			
Note/remarks: MOTORE PROVVISORIO DI INTERRUTTORE MAGNETOTERMICO 3P REGOLABILE 10-16A CON BOBINA DI MINIMA TENSIONE 220-240V MOTOR PROVIDED WITH 3P CIRCUIT BREAKER (10-16A ADJUSTABLE) WITH MINIMUM VOLTAGE COIL (220-240V) Targa con logo Coltri Compressors.						

Optional

Automatic condensate drain with timer

The automatic condensate drain removes water from the intermediate separator and the final separator automatically during operation (every 7 minutes).

Consists of:

- 1 x timer
- 1 x solenoid valve



ASSEMBLY INSTRUCTIONS



COD. SC000522

Autostop

Compressor automatically shuts off when it reaches final pressure.

Composed of:

- 1 x Pressure switch
- 230 bar - COD. SC000521/232 (Safety valve 250 bar)
- 300 bar - COD. SC000521/300 (Safety valve 330 bar)



ASSEMBLY INSTRUCTIONS



COD. SC000521/232 - SC000521/300

Double pressure regulator 300/232 bar



COD. SC000531

Remote suction hose kit

1/2" adapter.
Hose length 3 meters.
Tube diameter 20 mm.



COD. HC010302

Suction filter cartridge



COD. SC000345

Pressure maintaining valve










Mandatory use of DRV filling connection



COD. 6-05-015-VMP-R

C - Monitor

Final filter monitoring system, oil change and technical interface.

The interface consists of an LCD display, a button  and two indicators (, ). The decimal points next to the digits are indicator lights to indicate alarms or warnings in progress. Each dot is associated with an explanatory icon (, , ). The icon  indicates an alarm condition while the symbol  indicates normal operation. Press the button  to scroll through the different functions of the menu. When pressed, the function is displayed the function and after two 2 seconds the related data.



COD. SC001200

- 1 Display
- 2 Cartridge saturation
- 3 Service indication
- 4 Battery charge level
- 5 Operation indicator

Filling connections optional

DRV DIN 232 bar



COD. DRV232

DRV DIN 232 bar with gauge



COD. DRV232/MANOM

Adapter DIN 232/INT



COD. RE100350

Filling connections optional

DRV DIN 300 bar



COD. DRV300

DRV DIN 300 bar with gauge



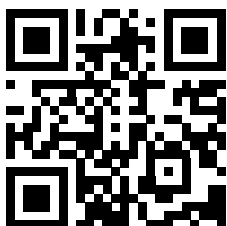
COD. DRV300/MANOM

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