

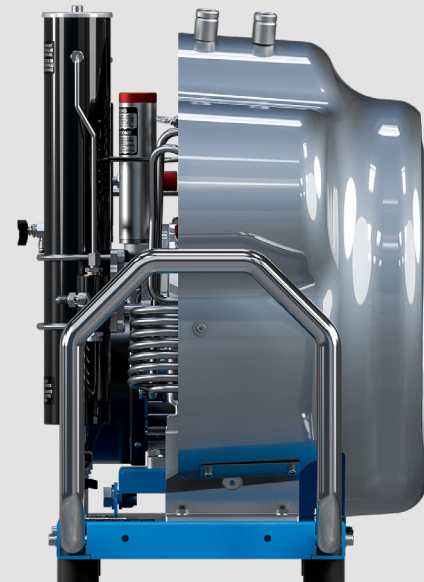
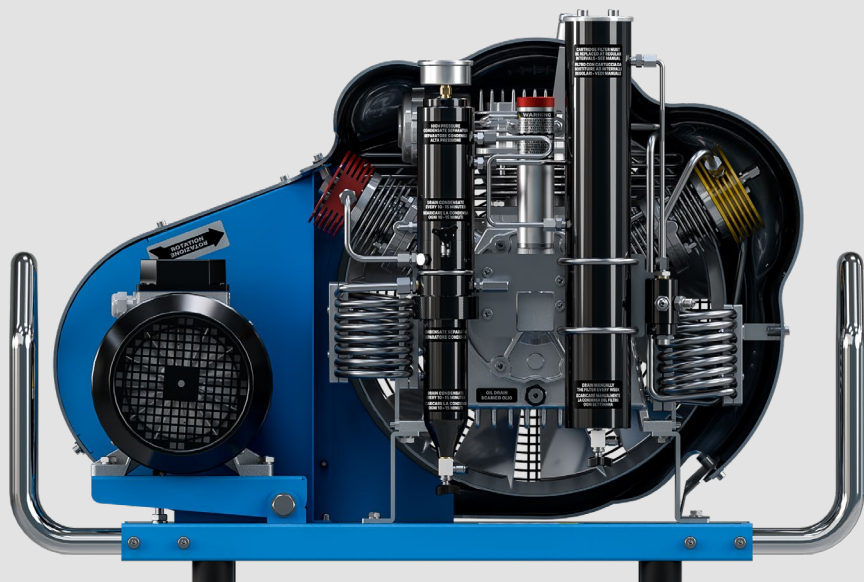
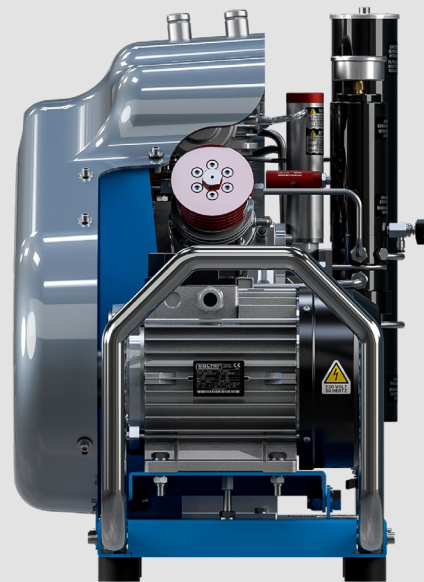
Efficient line
SMART
Electric



CONTACT US

CERTIFICATION: CE UNI EN ISO 9001:2015





Technical data

Type of gas	Breathing air EN 12021 - Nitrox 40% max O2 - Helium - Nitrogen
Intake pressure	Atmospheric max 300 mbar
Nominal pressure	250 bar / 330 bar / 360 bar
Filling pressure	232 bar / 300 bar / 330 bar
Max working pressure	232 bar (single-phase electric) - 420 bar (three-phase electric)
Permissible ambient temperature range	-10° C ÷ +40° C
Permissible altitude	0 ÷ 1.500 m AMSL
Max permissible tilt	6°
Design	Basic
Operating voltage, standard	230 V; 50 Hz / 400 V; 50 Hz
Other operating voltage	230 V, 50 Hz / 230 V, 60 Hz / 440 V, 60 Hz
Oil	Synthetic Coltri Oil ST 755
Oil change interval	Every year / 1.000 h
Frame	Steel 1,5 mm thickness - colour RAL 5015 - Powder coating painting - scratch proof

Compressor

	125 EM	210 EM	270 EM	235 ET	315 ET
Charging rate Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	125 l/min	210 l/min	270 l/min	235 l/min	315 l/min
Purification System	Maxifilter				
Cooling air flow, min.	1.710 m ³ /h	1.240 m ³ /h	2.180 m ³ /h	1.440 m ³ /h	2.180 m ³ /h
Weight Standard model. Weight and dimensions may vary depending on accessories.	93 kg 205 lb	100 kg 220.4 lb	105 kg 231.5 lb	95 kg 209.4 lb	105 kg 231.5 lb
Dimensions (W x D x H)	100 x 46 x 70 cm - 39.4 x 18.1 x 27.6 in				

Motor

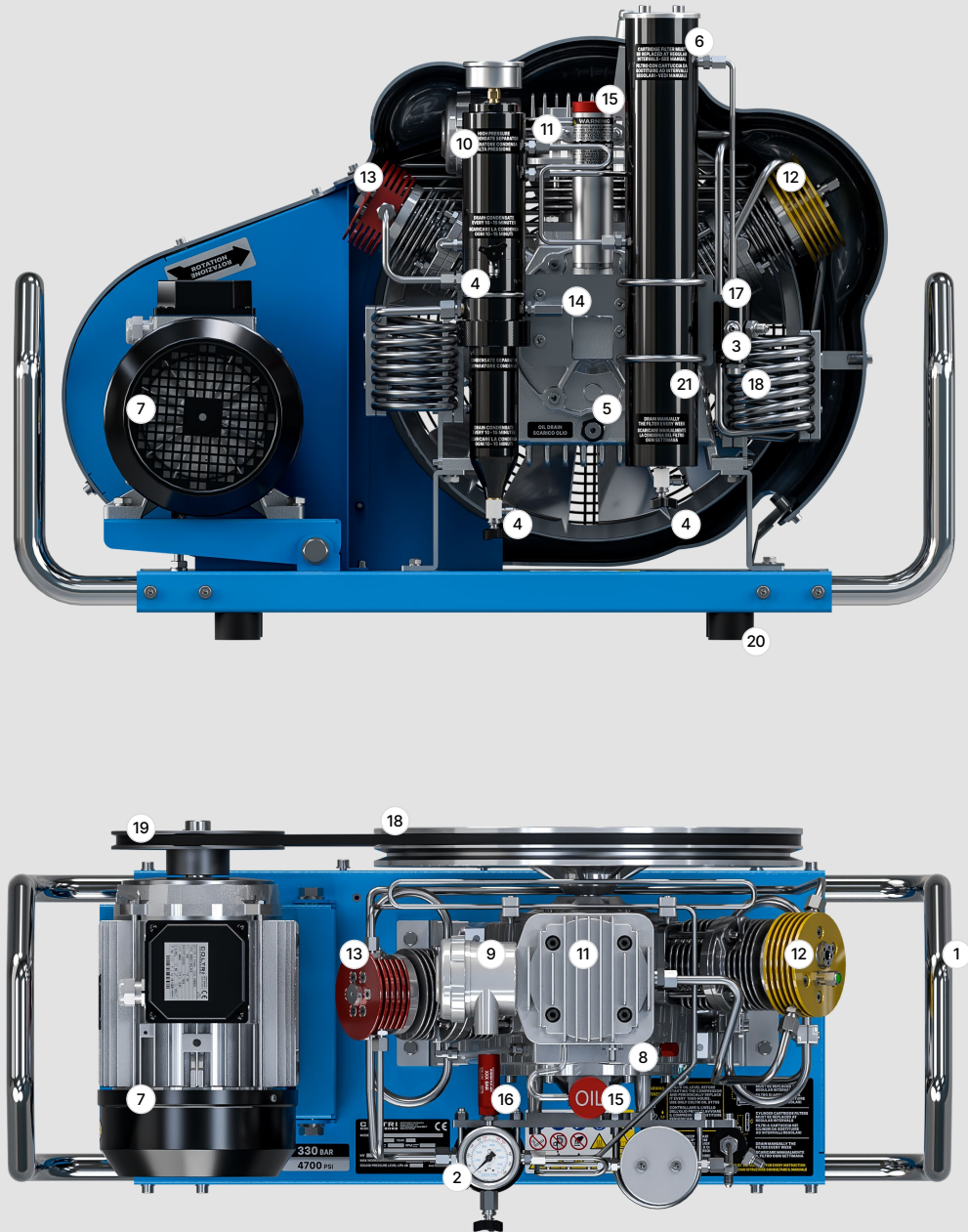
	125 EM	210 EM	270 EM	235 ET	315 ET
Power	3 kW, 4 Hp	4 kW, 5.5 Hp	5 kW, 7.5 Hp	4 kW, 5.5 Hp	5 kW, 7.5 Hp
Type	Single-phase electric motor			Three-phase electric motor	
Operating voltage/frequency Different voltage / frequency available on request.	230 V, 50 Hz			400 V, 50 Hz	
Speed (RPM)	2.800	2.800	2.840	2.840	2.840
Protection class	IP55 (TEFC)				

Dimensions

Width 100 cm (39.9")
 Depth 46 cm (18.1")
 Height 70 cm (27.5")

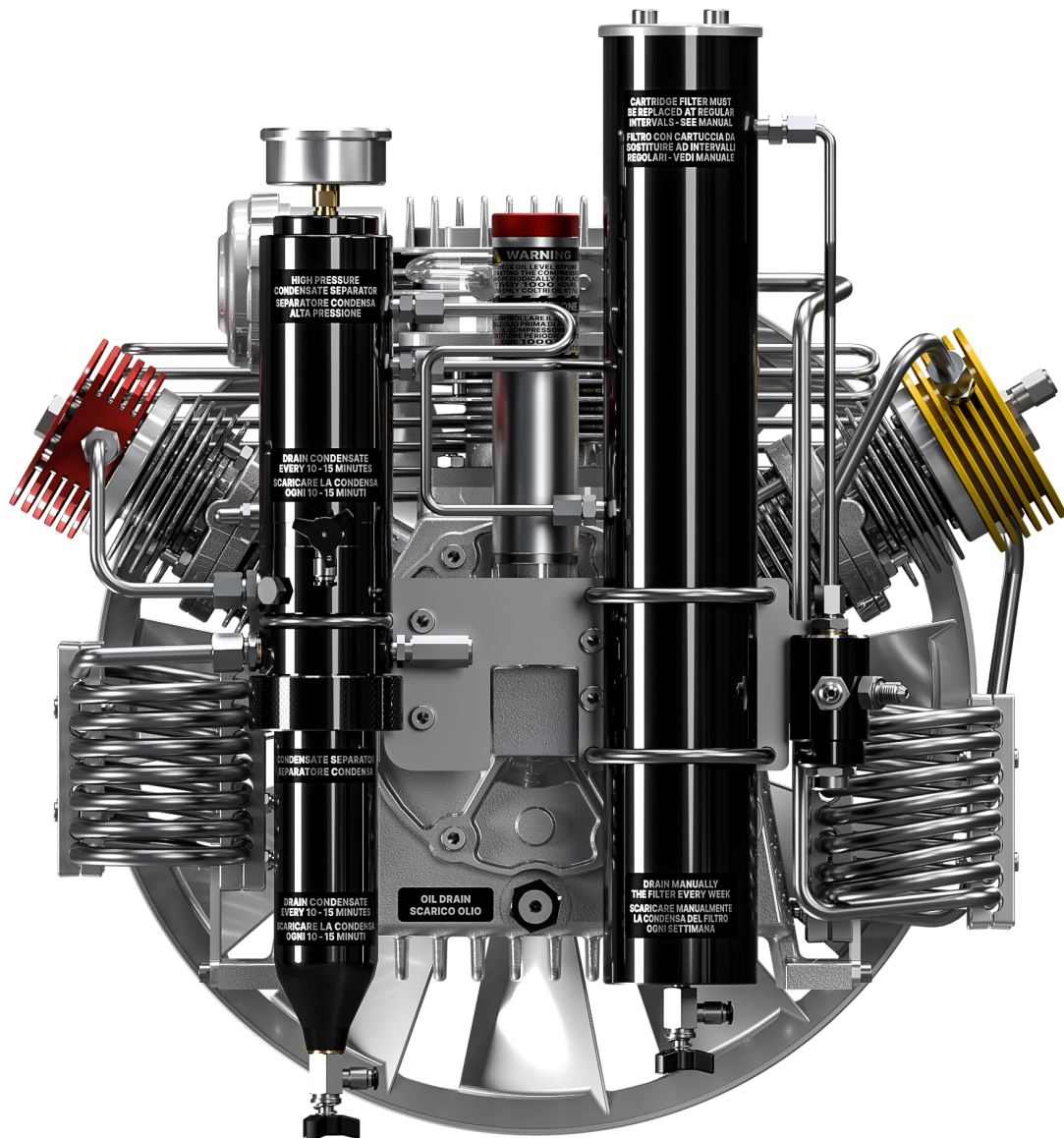
Dry weight

- SMART 125 EM**
93 kg (205 lb)
- SMART 210 EM**
100 kg (220 lb)
- SMART 270 EM**
105 kg (231 lb)
- SMART 235 ET**
95 kg (210 lb)
- SMART 315 ET**
105 kg (231 lb)



Machine parts

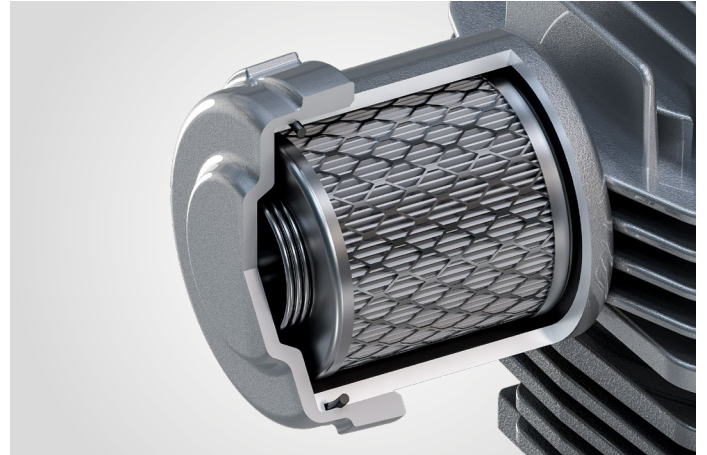
- | | | |
|-------------------------------|-------------------------|-------------------------------|
| 1 Frame | 8 Pumping unit | 15 Oil filler plug |
| 2 Pressure gauge | 9 Intake air filter | 16 Safety valve |
| 3 Refill hoses connection | 10 Condensate separator | 17 Pressure maintenance valve |
| 4 Condensate discharge valves | 11 1st stage | 18 Cooling fan |
| 5 Oil discharge valves | 12 2nd stage | 19 Belt |
| 6 Purifier filter | 13 3rd stage | 20 Anti-vibration device |
| 7 Electric motor | 14 Monoblock crankcase | 21 Oil level |



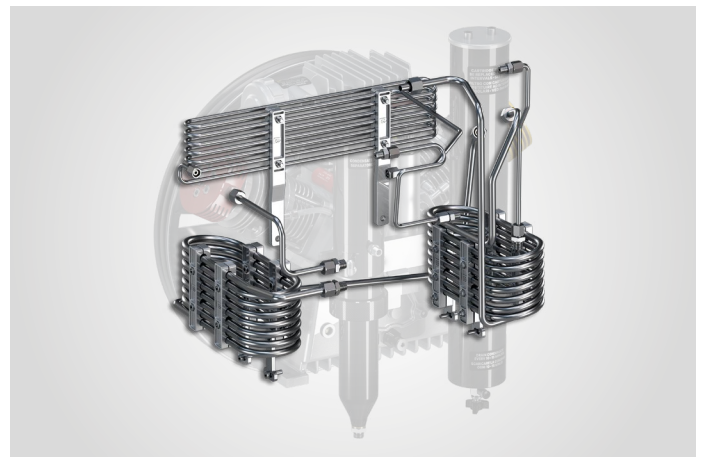
1.
 Splash lubrication
 with conrod pin
 immersed in oil



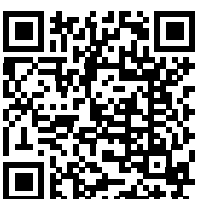
2. Suction filter: 10 μ micron



3. Pipes, fittings and nuts in stainless steel AISI 316

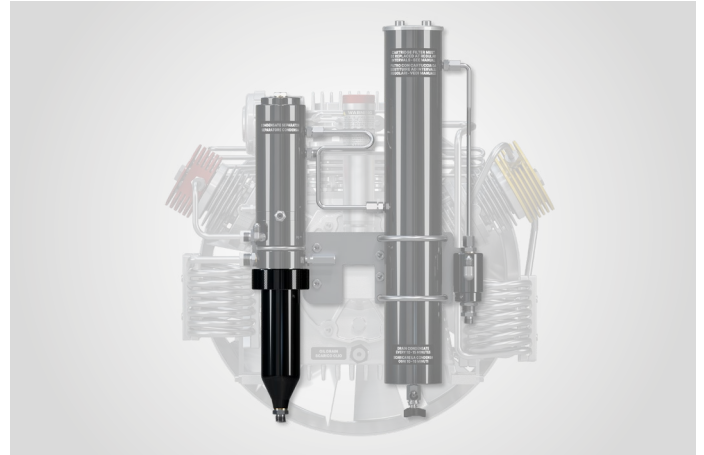


4. Synthetic oil with special formulation for HP compressors

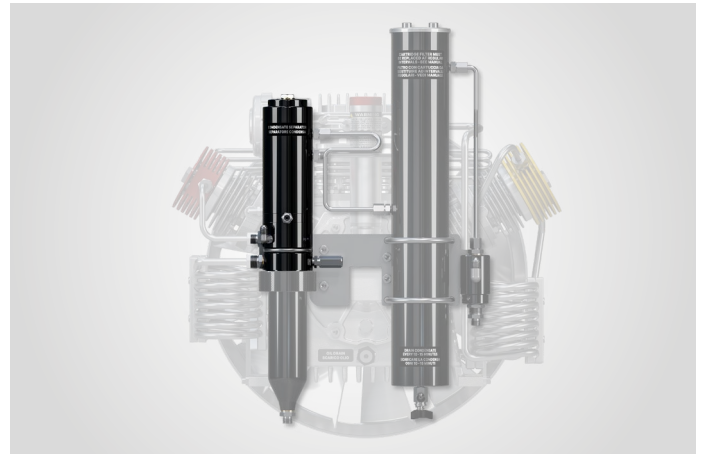


Discover more on Coltri Oil ST 755

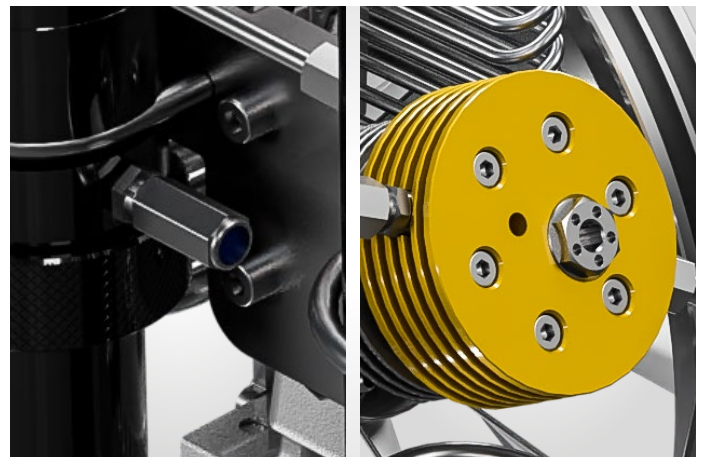
5. Intermediate condensate separator after the second stage



6. High pressure final condensate separator



7. Safety valves after each stage of compression



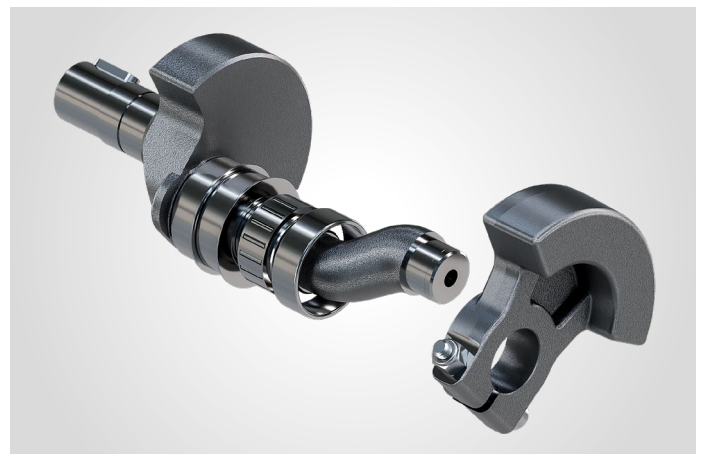
8.
Die-cast aluminum
cylinders with barrel
coating in nicasil



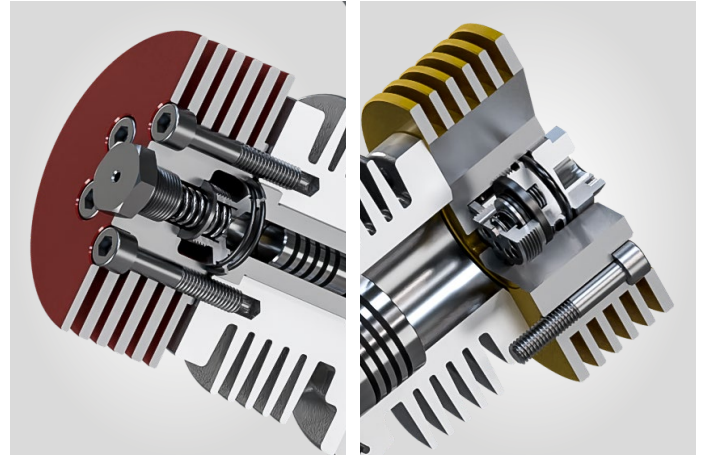
9.
Forged aluminum
connecting rods



10.
Forged steel
crankshaft



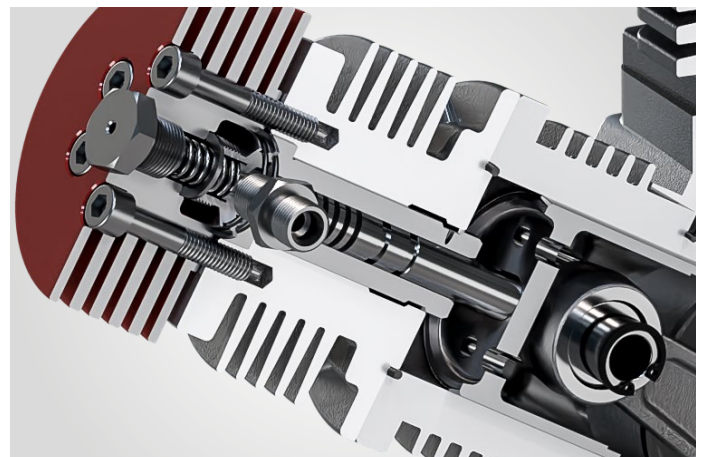
11. Stainless steel second and third stage valves



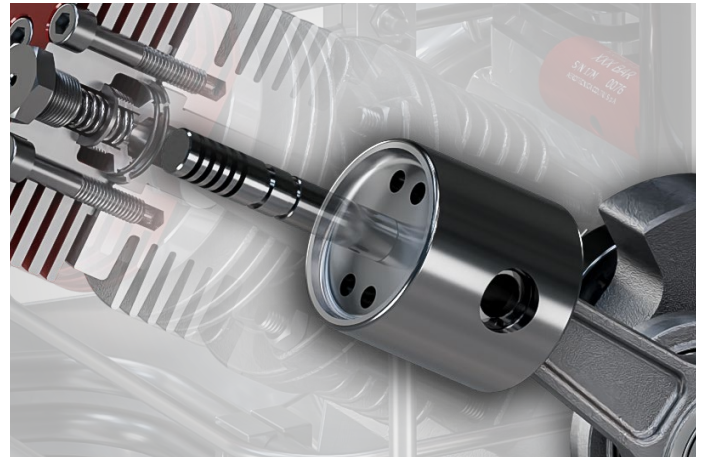
12. Roller Bearings for intensive work load



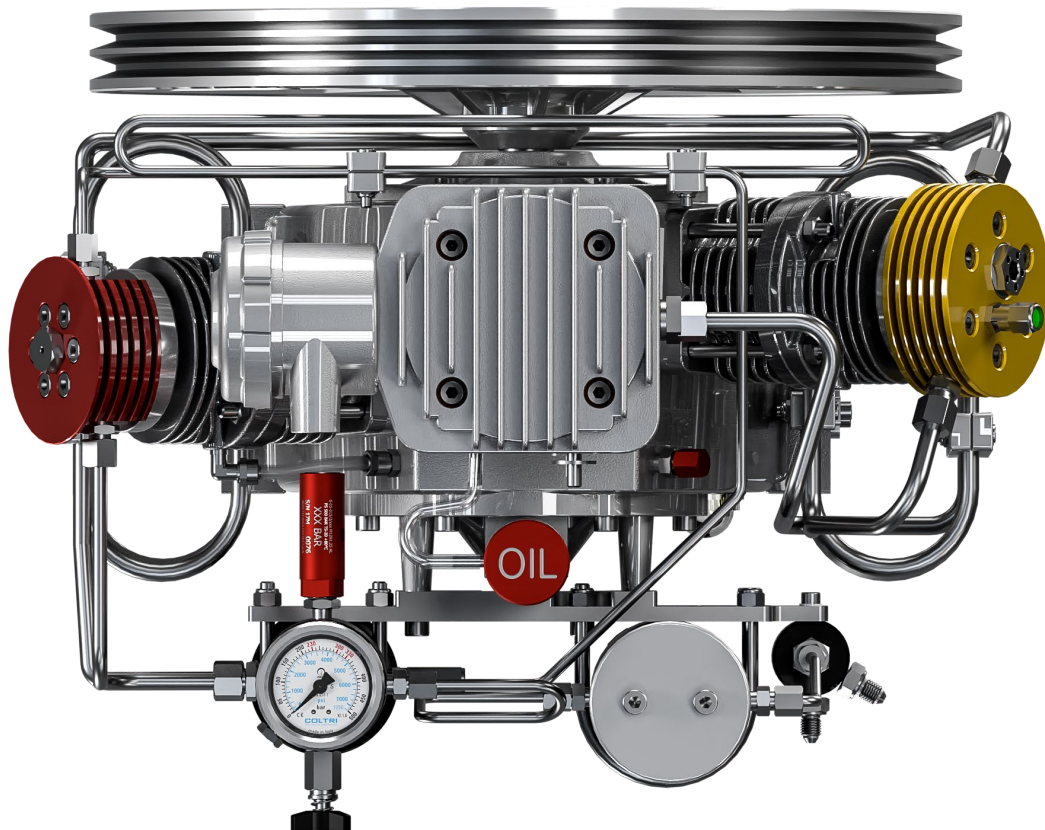
13. Third stage in tempered steel with 5 piston rings in special cast iron



14.
 Second and third stage
 with pushing pistons
 to eliminate lateral forces
 on the pistons

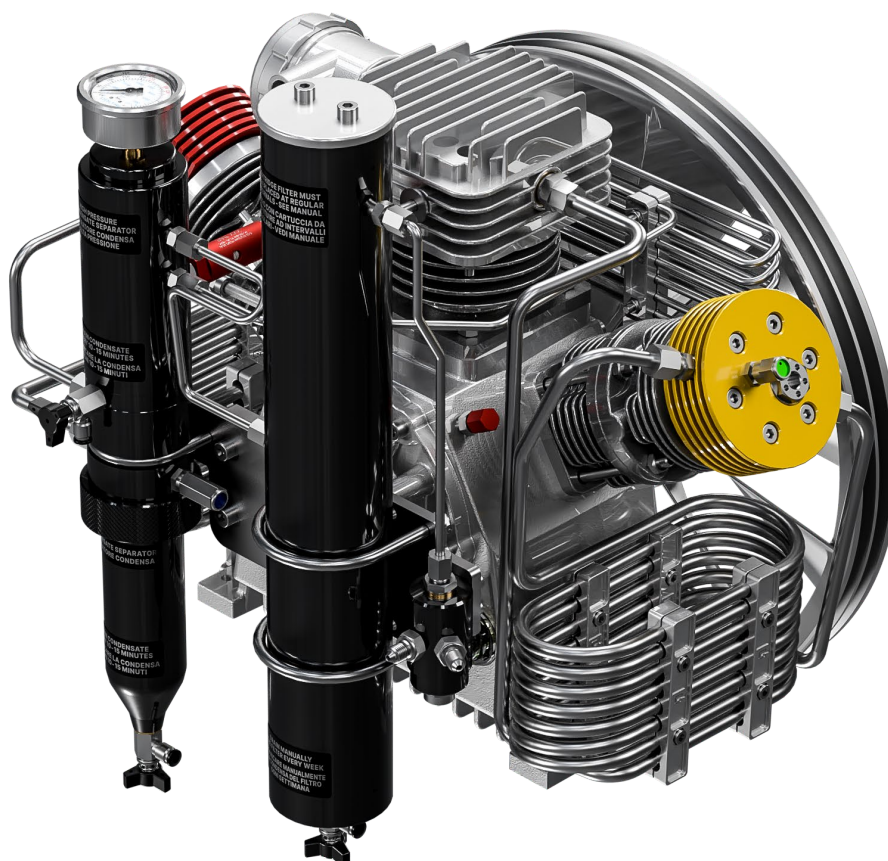


15.
 CE certification



Compressor block GP 125 / 315 (Ex MCH 8 / 16)

	125 EM	210 EM	270 EM	235 ET	315 ET
Charging rate					
Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	125 l/min	195 l/min	270 l/min	235 l/min	315 l/min
Speed RPM	1.500	1.040	1.600	1.200	1.600
Number of stages	3				
Number of cylinders	3				
Cylinder bore 1st stage	95 mm				
Cylinder bore 2nd stage	38 mm				
Cylinder bore 3rd stage	14 mm				
Stroke	40 mm				
Direction of rotation (from flywheel side)	Left - counter clockwise				
Drive type	V-belt A type				
Intermediate pressure 1st stage	~ 6 bar				
Intermediate pressure 2nd stage	~ 45 bar				
Amount of oil	1,8 liters				
Intake pressure	1,3 bar _a – 300 millibar				



Standard equipment

Purification system MAXIFILTER

MAXIFILTER polypropylene cartridge repackable or disposable



Purification system	Maxifilter
Operating pressure (Standard)	250 bar / 330 bar / 360 bar
Operating pressure max. (PS)	420 bar
Processable air capacity (air inlet temperature in the filter 20° C at 300 bar) ¹	890 m ³

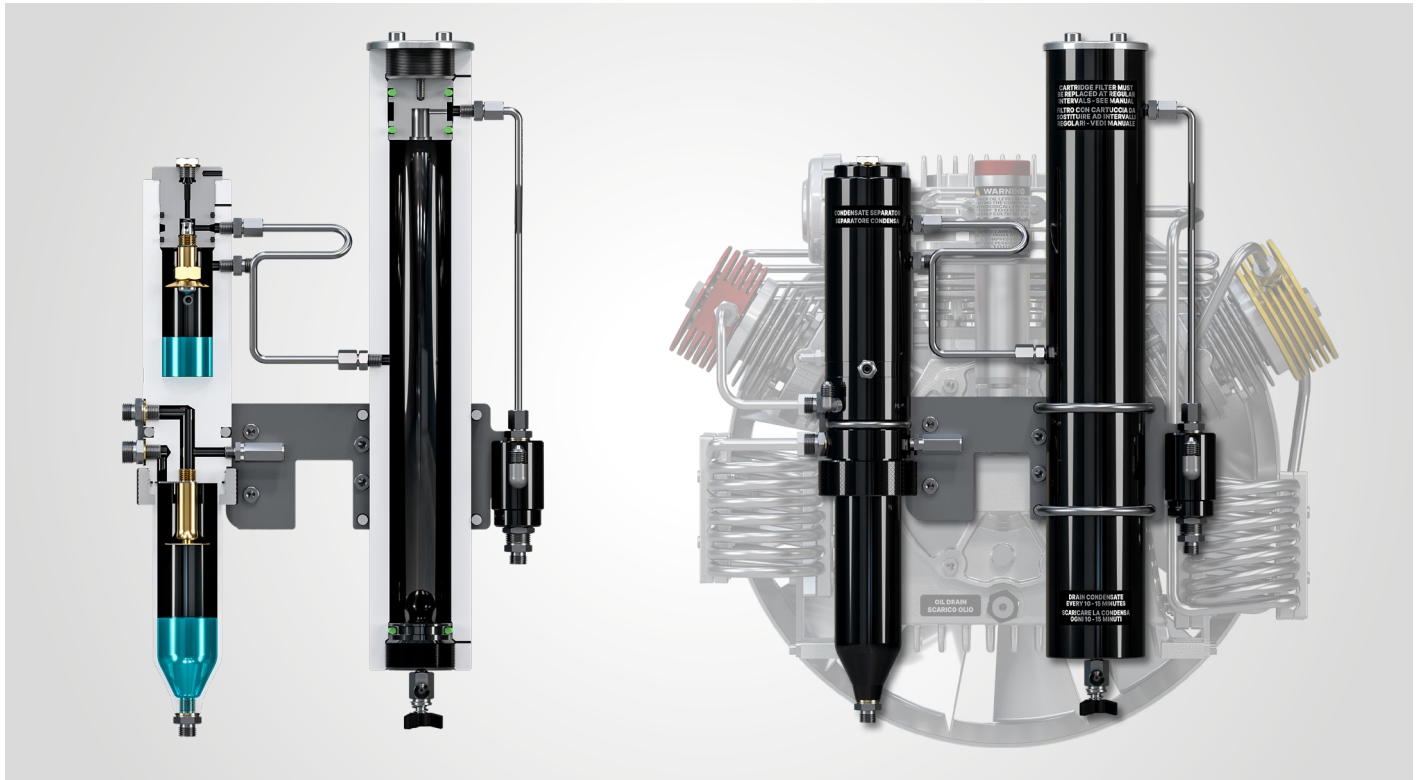
¹ When using a filter cartridge without HOPCALITE CO CATALYST.

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

Separator system

- Interstage separator after 2nd stage ,stainless steel AISI 316.
- Final separator for the removal of oil/water condensate.
- Final safety valve, fitted to separator housing.
- Pressure maintaining/non return valve, fitted to filter bracket.

	Direttiva PED 2014/68/UE - Modulo D PED Directive 2014/68/EU - Module D		
	Conformità al tipo basata sulla garanzia della qualità del processo di produzione Conformity to type based on quality assurance of the production process		
Certificato n. Certificato no. Attrezzatura a pressione Pressure equipment Tipo Fabbricante Manufacturer Sito produttivo Production site Verbale di verifica Evaluation report	714-P-1759 VALVOLA DI SICUREZZA A MOLLA 6-05-015 Aerotecnica Coltri S.p.A. Via dei Colli Storti 177 - 25015 Desenzano del Garda BS P4300439-01-R04	REV. 00 Categoria Category IV	Numero di pratica Job Number P4300439



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

2 Filling connection to choose from: DRV DIN 232 bar and DRV DIN 300 bar.



Filling connection DRV DIN 232 bar
COD. DRV232



Filling connection DRV DIN 300 bar
COD. DRV300

Filling device	DRV DIN 232	DRV DIN 300
Nominal pressure (PN)	250 bar	330 bar
Valve design	Filling valve with integrated ventilation, with cylinder connector G 5/8" according to EN 144-2 and 477 PN232	Filling valve with integrated ventilation, with cylinder connector G 5/8" according to EN 144-2 and 477 PN232

Filling hose

1200 mm stainless steel fittings - max working pressure 420 bar


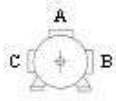


Carrying handles


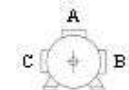
Convenient handles for easy transport of the compressor.




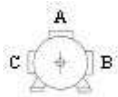
Data sheet single-phase electric motor 3 kW

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>		Potenza/ Power (kW)	Poli/ Poles
				3	2
				Data 16/05/2018	Rev. 0
No	Descrizione/Description	Dati/Data		U.d.m.	
1	Codice Soga / ref.code	169637			
2	Modello / Motor type	MME1 100LB/2			
3	Descrizione / Description	Single-phase motor with starting capacitor 3kW 2 Poles 230V 50Hz			
4	Carcassa motore / Framesize	100L			
5	Poli / Poles	2			
6	Forma di costruzione / Mounting type	IM B3L DX			
7	Potenza nominale / Rated output	3			[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	20			[A]
13	Velocità nominale / Rated speed	2800			[min ⁻¹]
14	Fattore di potenza / Power factor	0,92			
15	Coppia nominale motore/ Rated motor torque	10,2			[Nm]
17	Corrente avviamento / Corrente nominale <i>Starting current / Rated current</i>	3,6		Isp/In	
18	Coppia avviamento / Coppia nominale <i>Starting torque/Rated torque</i>	1,6		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	22,4		[kg]	
24	Cuscinetti /bearings	Drive end	6206-2Z		
		Non drive end	6206-2Z		
Note/remarks: Motore con condensatore permanente 60µF e disgiuntore elettronico con condensatore di spunto 150µF. <i>Motor with 60µF permanent capacitor and electronic switch with 150µF starting capacitor.</i> Targa con logo Coltri Compressors.					

Data sheet single-phase electric motor 4 kW

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>		Potenza/ Power (kW)	Poli/ Poles
				4	2
				Data 25/06/2015	Rev. 0
No	Descrizione/Description	Dati/Data		U.d.m.	
1	Codice Soga / ref.code	125413			
2	Modello / Motor type	MM1 100LC/2			
3	Descrizione / Description	Single-phase motor with starting capacitor 4kW 2 Poles 220V 50Hz			
4	Carcassa motore / Framesize	100L			
5	Poli / Poles	2			
6	Forma di costruzione / Mounting type	IM B3			
7	Potenza nominale / Rated output	4			[kW]
8	Fattore di servizio / Service factor	1.0			
9	Tipo di servizio / Duty type	S1			
10	Tensione / Rated voltage	220			[V]
11	Frequenza / Rated frequency	50			[Hz]
12	Corrente nominale / Rated current	25,2			[A]
13	Velocità nominale / Rated speed	2850			[min ⁻¹]
14	Fattore di potenza / Power factor	0,92			
15	Coppia nominale motore/ Rated motor torque	13,4			[Nm]
17	Corrente avviamento / Corrente nominale <i>Starting current / Rated current</i>	3,9		Isp/In	
18	Coppia avviamento / Coppia nominale <i>Starting torque/Rated torque</i>	1,9		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	6206		
		Non drive end	6203		
Note/remarks: Motore con condensatore permanente 80µF e disgiuntore elettromeccanico e condensatore di spunto 160µF. <i>Motor with 80µF permanent capacitor and centrifugal switch plus 160µF starting capacitor.</i> Targa con logo Coltri Compressors.					










Data sheet three-phase electric motor 5.5 kW

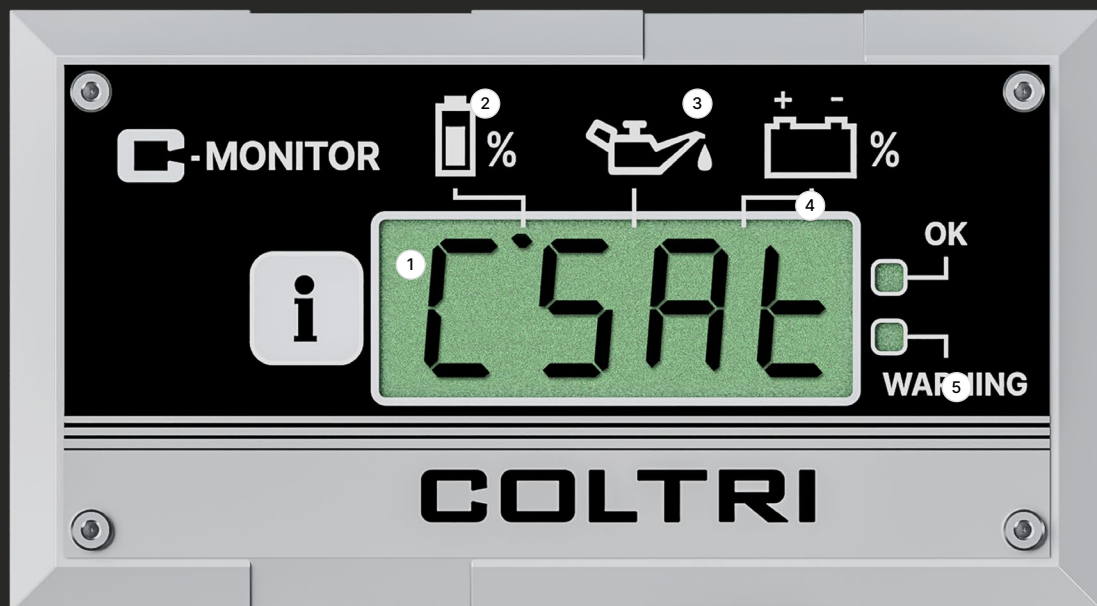
		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>			Potenza/ Power (kW)	Poli/ Poles
					5,5	2
		Data	Rev.		0	
		24/06/2015				
No	Descrizione/Description	Dati/Data			U.d.m.	
1	Codice Soga / ref.code	124421				
2	Modello / Motor type	MT1 112MB/2				
3	Descrizione / Description	Three-phase asynchronous motor 5,5kW 2 Poles 400/690V 50Hz				
4	Carcassa motore / Framesize	112M				
5	Poli / Poles	2				
6	Forma di costruzione / Mounting type	IM B3				
7	Potenza nominale / Rated output	5,5	5,5	6,5	[kW]	
8	Fattore di servizio / Service factor	1.0				
9	Tipo di servizio / Duty type	S3-75%				
10	Tensione / Rated voltage	400/690	400/690	Δ 440-480	[V]	
11	Frequenza / Rated frequency	50	60	60	[Hz]	
12	Corrente nominale / Rated current	12,6/7,3	12,6/7,3	12,6	[A]	
13	Velocità nominale / Rated speed	2850	3420	3420	[min ⁻¹]	
14	Fattore di potenza / Power factor	0,86	0,86	0,86		
15	Coppia nominale motore/ Rated motor torque	18,4	15,4	18,2	[Nm]	
17	Corrente avviamento / Corrente nominale <i>Starting current / Rated current</i>	7,6			Isp/In	
18	Coppia avviamento / Coppia nominale <i>Starting torque/Rated torque</i>	3,1			Msp/Mn	
19	Classe d'isolamento / Insulation class	F				
20	Grado di protezione / Enclosure	IP55				
21	Posizione scatola morsettiera (motore con piedini) <i>Terminal box position</i> (motor with feet)				A	
22	Terminali potenza / Power leads terminal	M5				
23	Peso / Weight	28			[kg]	
24	Cuscinetti /bearings	Drive end	6206			
		Non drive end	6206			
Note/remarks: Targa con logo Soga.						

Optional

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

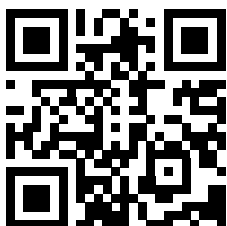
- 1 Display
- 2 Cartridge saturation
- 3 Service indication
- 4 Battery charge level
- 5 Operation indicator

Aerotecnica Coltri S.p.A.

Via dei Colli Storici, 177
25015 Desenzano del Garda
Brescia - Italy

Ph. +39 030 9910301
+39 030 9910297

info@coltri.com



coltri.com

