Technical Data Sheet

COLTRI COMPRESSORS

PORTABLES LINE

PREDATOR

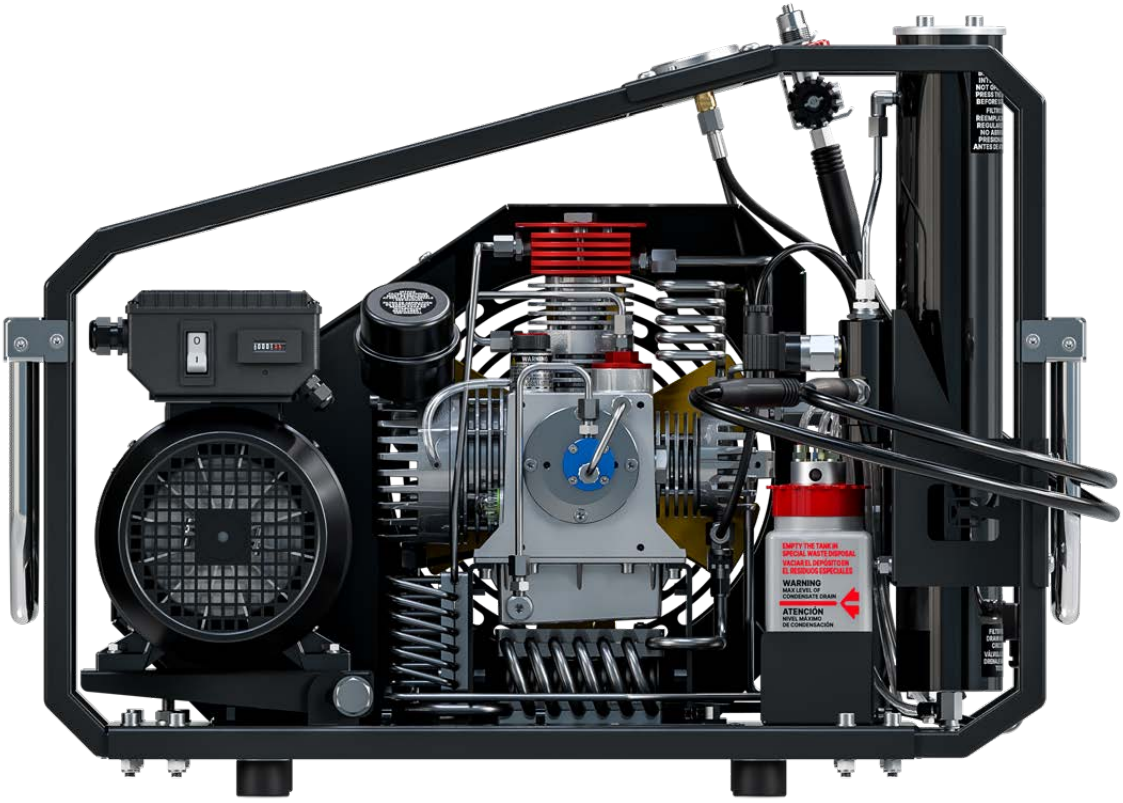
ELECTRIC



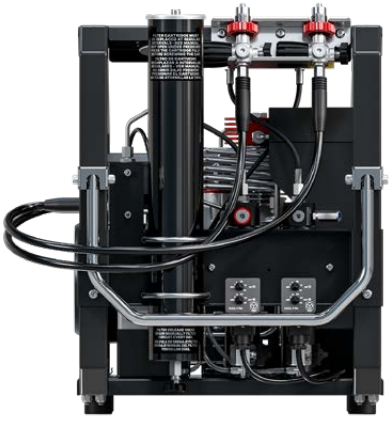
Contact

Compact power, relentless performance.

The new **PREDATOR** by Coltri Compressors expands the Portable Line, delivering top-tier performance in a compact design. With an air flow rate of 140 l/min and a 3 kW single-phase or three-phase motor, it ensures efficiency and reliability anywhere. Equipped with automatic condensate drain and auto-stop, it features the new MCH 7 three-stage pumping unit and the Maxifilter purification system for consistently clean air. Ergonomic handles make transportation easy, while the optional C-Monitor allows real-time monitoring of the final filter and oil change. Powerful, compact, and smart, **PREDATOR** is ready for any challenge.







Technical data

Type of gas	Breathing air EN 12021 - Nitrox 40% max O_2 - Helium - Nitrogen
Intake pressure	Atmospheric max 300 millibar
Nominal pressure	230 bar / 330 bar
Filling pressure	230 bar / 330 bar
Max working pressure	350 bar
Permissible ambient temperature range	-10° C ÷ +40° C
Permissible altitude	0 ÷ 2.000 m SLM
Max permissible tilt	6°
Design	Fully protective cage
Operating voltage	230 V, 50 Hz
Other operating voltage	230 V, 60 Hz / 400 V, 50 Hz / 440 V, 60 Hz
Oil	Synthetic Coltri Oil ST 755 (1 liter)
Oil change interval	1 year / 50 h
Frame	Steel - colour Black RAL 9005 - Powder coating painting - scratch proof

Compressor

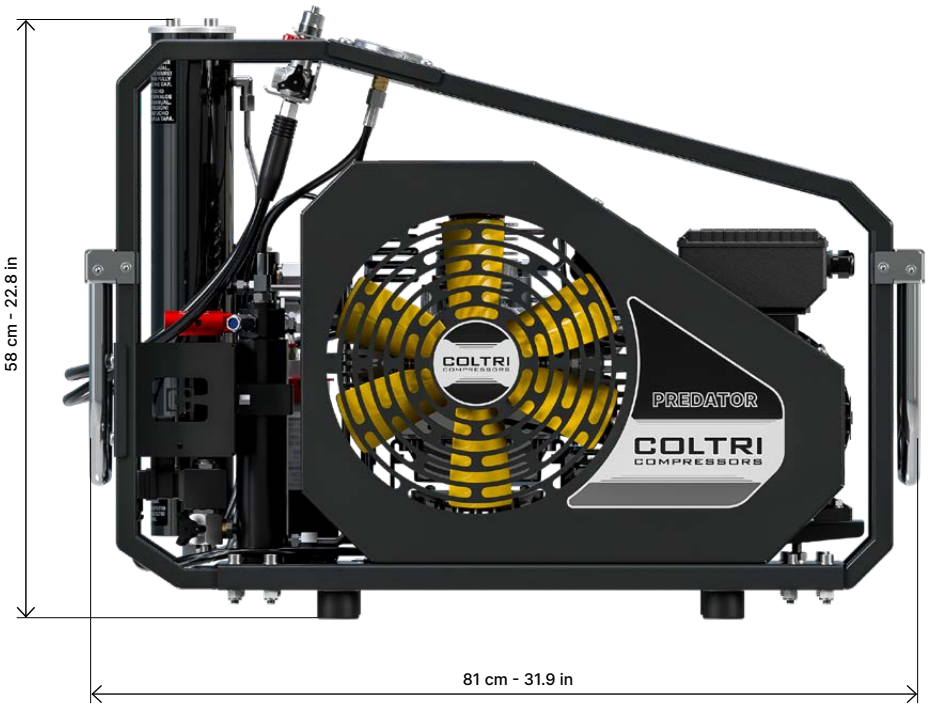
	140 EM FA	140 ET FA
Charging rate Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	140 l/min 8,4 m^3/h 4.9 cfm	
Purification System	Maxifilter	
Cooling air flow	792 m^3/h	
Weight[1]	79 kg / 174.2 lb	75 kg / 165.3 lb
Dimensions (W x D x H)[1]	81 × 44 × 58 cm - 31.9 × 17.3 × 22.8 in	

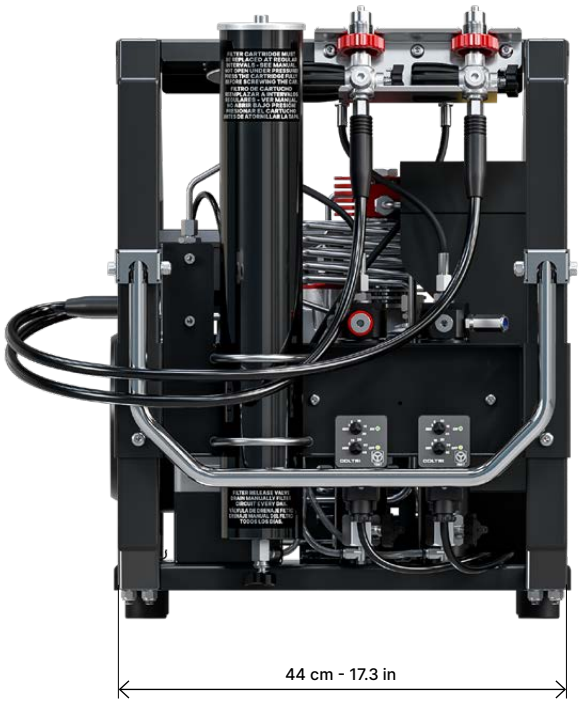
1 Standard model. Dimensions may vary depending on accessories.

Electric motor

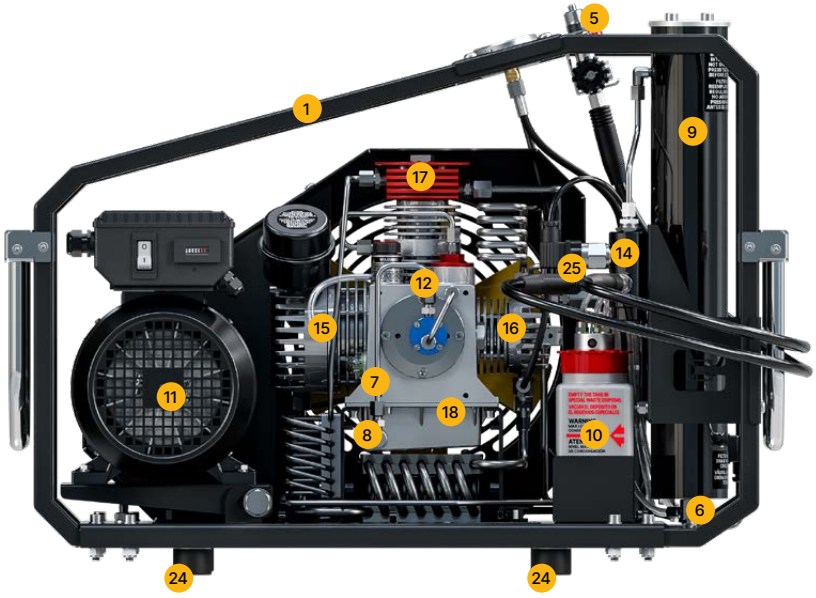
	140 EM FA		140 ET FA
Power	3 kW - 4 Hp		
Type	Single-phase electric		Three-phase electric
Operating voltage/frequency Different voltage / frequency available on request.	230 V, 50 Hz	230 V, 60 Hz	400 V, 50 Hz
Rated current	20 A		7,7 A
Speed (RPM)	2.800	3.400	2.840
Protection class	IP54		

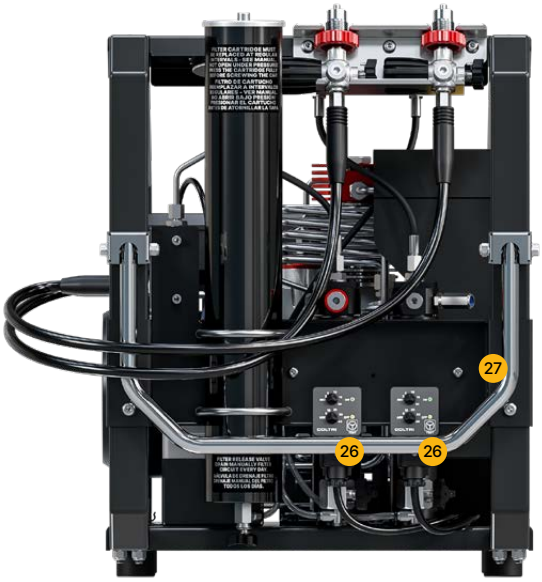
Dimensions

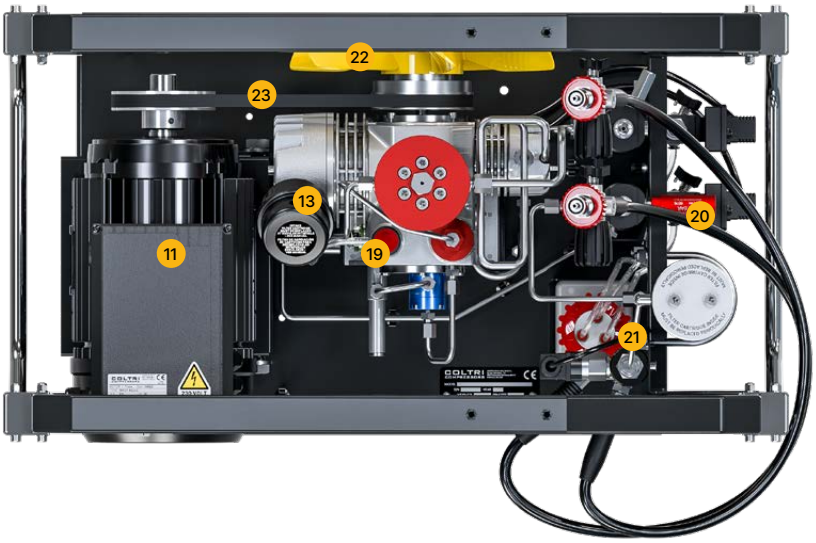

58 cm - 22.8 in
COLTRI
PREDATOR
COLTRI
COMPRESSORS
81 cm - 31.9 in


44 cm - 17.3 in

Components



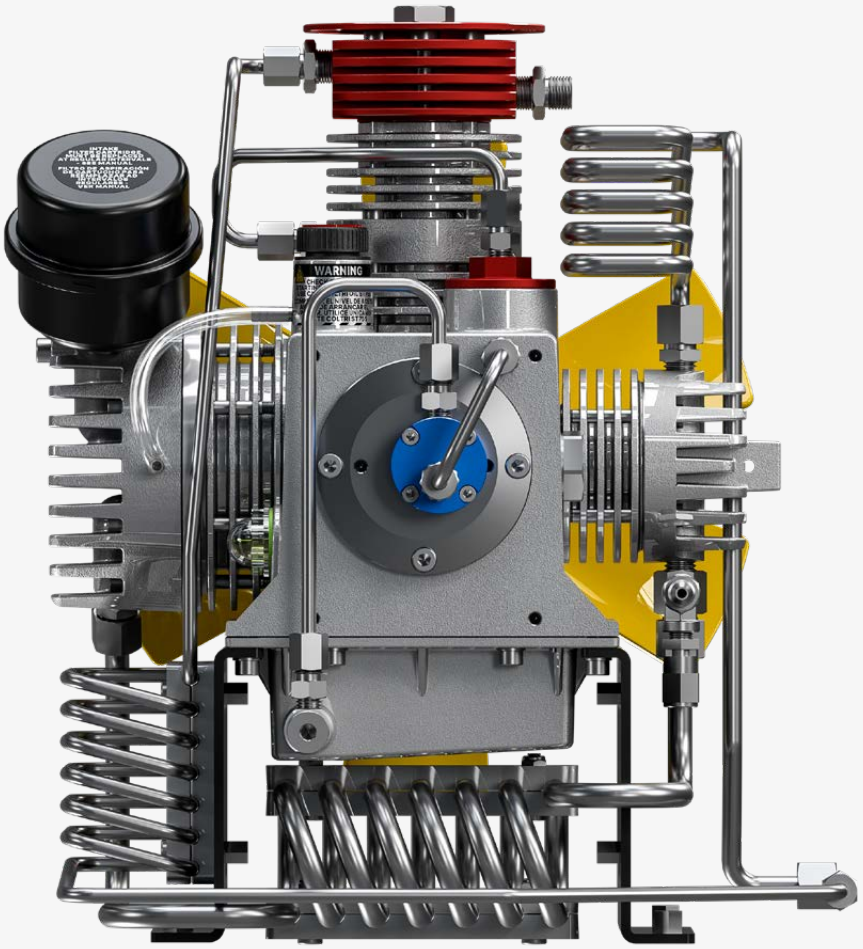






1. Frame
2. 1st stage pressure gauge
3. 2nd stage pressure gauge
4. 3rd stage pressure gauge
5. Refill hoses connection
6. Condensate discharge valves
7. Oil level
8. Oil discharge valves
9. Purifier filter
10. Condensate collection tank
11. Motor
12. Compressor
13. Intake air filter
14. Intermediate condensate separator
15. 1st stage
16. 2nd stage
17. 3rd stage
18. Crankcase
19. Oil filler plug
20. Safety valve
21. Pressure maintenance valve
22. Cooling fan
23. Belt
24. Anti-vibration devices
25. Autostop
26. Automatic condensate drain with timer
27. Carrying handles

Pumping unit MCH 7





Splash lubrication with conrod pin immersed in oil and low pressure constant flow oil pump geared to the shaft.

Oil: 1 liter.

Suction filter:
10 µ micron





Pipes, fitting and nuts in stainless steel AISI 316



Forged aluminium connection rods



Aluminium crankcase machined on horizontal CNC machine to ensure maximum precision



Forged steel crankshaft with hardened rings





Safety valves

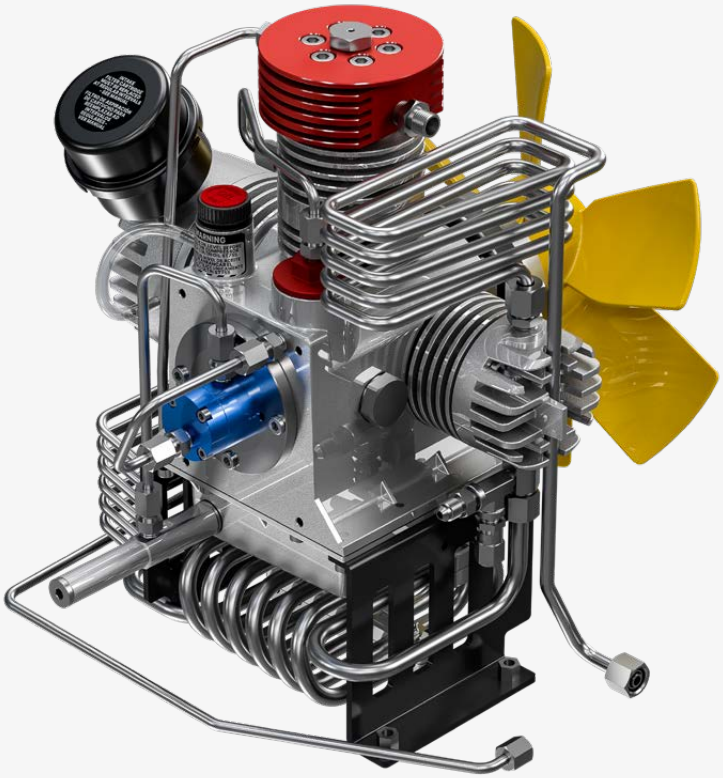
(final safety valve PED certified)

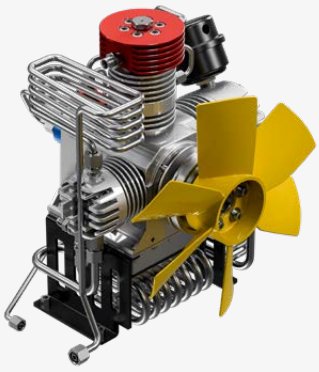


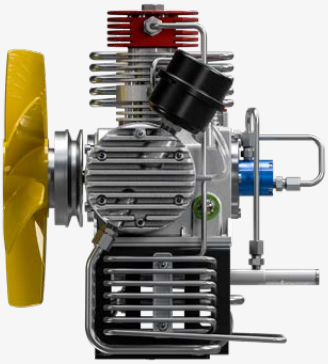
CE certification

Technical data pumping unit MCH 7

	140 EM FA
Charging rate Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	140 l/min 8,4 m^3/h 4.9 cfm
Speed (RPM)	2.250
Number of stages	3
Number of cylinders	3
Cylinder bore 1st stage	78 mm
Cylinder bore 2nd stage	32 mm
Cylinder bore 3rd stage	14 mm
Stroke	20 mm
Direction of rotation (from flywheel side)	Clockwise (right)
Drive type	V-belt A type
Intermediate pressure 1st stage	~ 4,5 bar
Intermediate pressure 2nd stage	~ 16 bar
Amount of oil	1 liter
Max intake pressure	1,3 bar_a – 300 millibar







Standard equipment

Purification system Maxifilter

MAXIFILTER polypropylene cartridge repackable or disposable



1. Moisture saturation indicator stripe
2. Molecular sieve
3. Activated carbon
4. Felt disc



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 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.





Contamination	Maximum content as per DIN EN 12021:2014	Air quality*
H_2O	25 mg/m³	≤ 10 mg/m³
CO	5 ppm(v)	≤ 4
CO_2	500 ppm(v)	≤ 500
Oil	0,5 mg/m³	≤ 0,5 mg/m³

* 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 connection

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 connection DRV/INT232 bar

COD. DRVINT

Filling device	DRV DIN 232	DRV DIN 300	DRV/INT 232
Nominal pressure (PN)	250 bar	330 bar	250 bar
Technical Specifications	Filling valve with integrated ventilation, with connection for G 5/8" cylinders to EN 144-2 and 477 PN232	Filling valve with integrated ventilation, with connection for G 5/8" cylinders to EN 144-2 and 477 PN300	Filling valve with integrated venting, compatible with DRV/INT YOKE connections according to EN 144-1 PN232

Plugs available according to electric motor



230 V single-phase electric motor

6h/200 - 250V~

50÷60 Hz

32 A

2P+⏚



230 V three-phase electric motor

9h/200 - 250V~

50÷60 Hz

32 A

3P+⏚



400 V three-phase electric motor

6h/380 - 415V~

50÷60 Hz

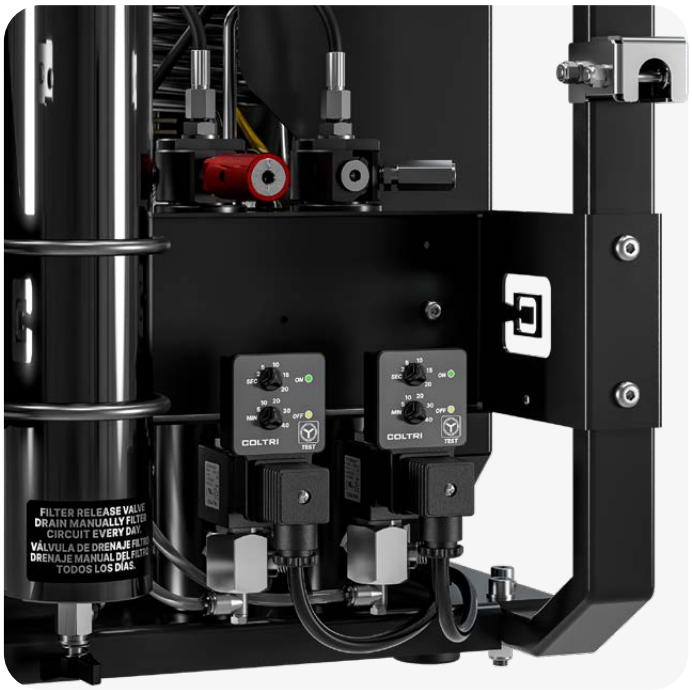
16 A

3P+⏚

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).

Composed of:
• 2 x timer
• 2 x solenoid valve



Autostop

Compressor automatically shuts off when it reaches final pressure.

Composed of:
1 x Pressure switch
• 230 bar (Safety valve 250 bar)
• 300 bar (Safety valve 330 bar)



Data sheet single-phase electric motor 3 kW - 230 V, 50 Hz

soga®	SPECIFICA TECNICA MOTORE EL. *Electric motor technical data sheet*	Potenza/ *Power* (kW) 3	Poli/ Poles 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** *Starting current / Rated current*		3,6			Isp/In
18	**Coppia avviamento / Coppia nominale** *Starting torque/Rated torque*		1,6			Msp/Mn
19	**Classe d'isolamento** / *Insulation class*		F			
20	**Grado di protezione** / *Enclosure*		IP54			
21	**Posizione scatola morsettiera** (motore con piedini) *Terminal box position (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.
Motor with 60µF permanent capacitor and electronic switch with 150µF starting capacitor.
Targa con logo Coltri Compressors.

Data sheet single-phase electric motor 3 kW - 230 V, 60 Hz

soga®	SPECIFICA TECNICA MOTORE EL. *Electric motor technical data sheet*	Potenza/ *Power* (kW) 3	Poli/ Poles 2
		Data 25/06/2015	Rev. 0

No	Descrizione/*Description*		Dati/Data			U.d.m.
1	**Codice Soga** / *ref.code*		160743			
2	**Modello /** *Motor type*		MMD1 100LB/2			
3	**Descrizione** / *Description*		Single-phase motor with starting capacitor 3kW 2 Poles 230V 60Hz			
4	**Carcassa motore** / *Framesize*		100L			
5	**Poli** / *Poles*		2			
6	**Forma di costruzione** / *Mounting type*		IM B3			
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*		60			[Hz]
12	**Corrente nominale** / *Rated current*		20			[A]
13	**Velocità nominale** / *Rated speed*		3400			[min^{-1}]
14	**Fattore di potenza** / *Power factor*		0,92			
15	**Coppia nominale motore**/ *Rated motor torque*		8,4			[Nm]
17	**Corrente avviamento / Corrente nominale** *Starting current / Rated current*		3,6			Isp/In
18	**Coppia avviamento / Coppia nominale** *Starting torque/Rated torque*		1,5			Msp/Mn
19	**Classe d'isolamento** / *Insulation class*		F			
20	**Grado di protezione** / *Enclosure*		IP54			
21	**Posizione scatola morsettiera** (motore con piedini) *Terminal box position (motor with feet)* 		A			
22	**Terminali potenza** / *Power leads terminal*		M5			
23	**Peso /** Weight		18			[kg]
24	**Cuscinetti** /bearings	Drive end	6206			
		Non drive end	6203			

Note/remarks:
Motore con condensatore permanente 60µF e disgiuntore elettromeccanico e condensatore di spunto 160µF. Albero rotore ridotto.
Motor with 60µF permanent capacitor and centrifugal switch plus 160µF starting capacitor. Reduced shaft length.
Targa con logo Coltri Compressors.

Data sheet three-phase electric motor 3 kW

soga®	SPECIFICA TECNICA MOTORE EL. *Electric motor technical data sheet*	Potenza/ *Power* (kW) 3	Poli/ Poles 2
		Data 24/06/2015	Rev. 0

No	Descrizione/*Description*		Dati/Data			U.d.m.
1	**Codice Soga** / *ref.code*		124297			
2	**Modello /** *Motor type*		MT1 90LC/2			
3	**Descrizione** / *Description*		Three-phase asynchronous motor 3kW 2 Poles 400V 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*		400 Y	400 Y	440-480 Y	[V]
11	**Frequenza** / *Rated frequency*		50	60	60	[Hz]
12	**Corrente nominale** / *Rated current*		7,7	7,7	7,7	[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** *Starting current / Rated current*		7,4			Isp/In
18	**Coppia avviamento / Coppia nominale** *Starting torque/Rated torque*		3,5			Msp/Mn
19	**Classe d'isolamento** / *Insulation class*		F			
20	**Grado di protezione** / *Enclosure*		IP54			
21	**Posizione scatola morsettiera** (motore con piedini) *Terminal box position (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			

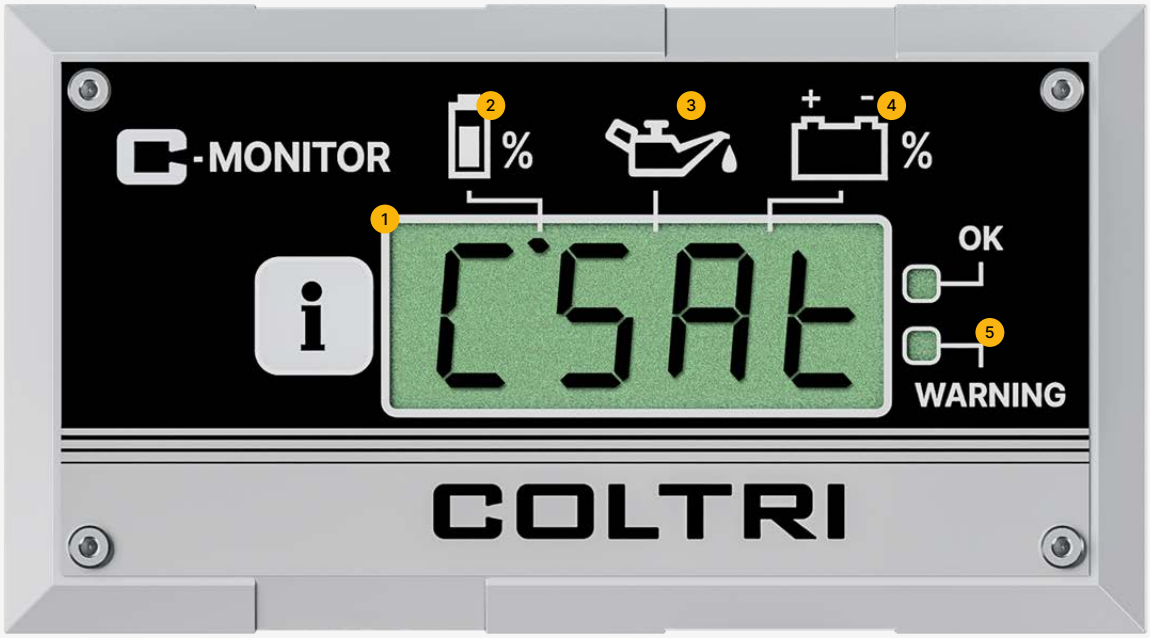
Note/remarks:
MOTORE PROVVISTO DI INTERRUTTORE MAGNETOTERMICO 3P REGOLABILE 6,3-10A CON BOBINA DI MINIMA TENSIONE 380-400V
MOTOR PROVIDED WITH 3P CIRCUIT BREAKER (6,3-10A ADJUSTABLE) WITH MINIMUM VOLTAGE COIL (380-400V)
Targa con logo Coltri Compressors.

Optional

C - Monitor

Final filter monitoring system, oil change and technical interface.

The interface consists of an LCD display, a button and two indicators (O,●). 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 O 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.



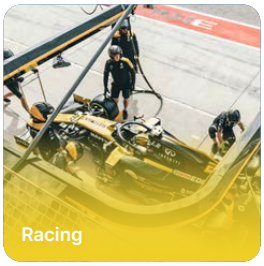
COD. SC001200

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

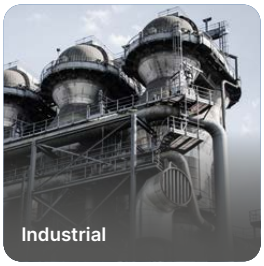
Application fields











Aerotecnica Coltri S.p.A.

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

Tel. +39 030 9910301
+39 030 9910297

info@coltri.com

QUALITY SYSTEM CERTIFICATION DNV ISO 9001
ENVIRONMENTAL SYSTEM CERTIFICATION DNV ISO 14001
SAFETY SYSTEM CERTIFICATION DNV ISO 45001

DT-TDS-PREDATOR-25-V2

Printed on paper from
sustainably managed forests

Visit our showroom in Virtual Reality

coltri.com

coltri.com/showroom

COLTRI® COMPRESSORS