

PORTABLES LINE

ICON LSE

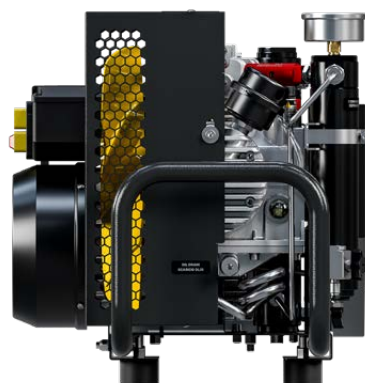
ELECTRIC



Contact

A great little portable

The **ICON LSE** series are the world's most widely used portable compressors. Due to their small size and light weight, the models are perfect for a wide range of needs: high-pressure breathing air for diving, recreation, fire fighting and paintball facilities. The models are available with petrol or electric motors, both three-phase and single-phase, and are equipped with the GP 100 pumping unit. Standard equipment includes a hose fill port with operating pressures from 232 to 330 bar. The user experience is highly customizable with the various options available such as pressure maintenance valve, automatic condensate drain and autostop.



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	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	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	1 year / 50 h
Frame	Steel - colour Black RAL 9005 - Powder coating painting - scratch proof

Compressor

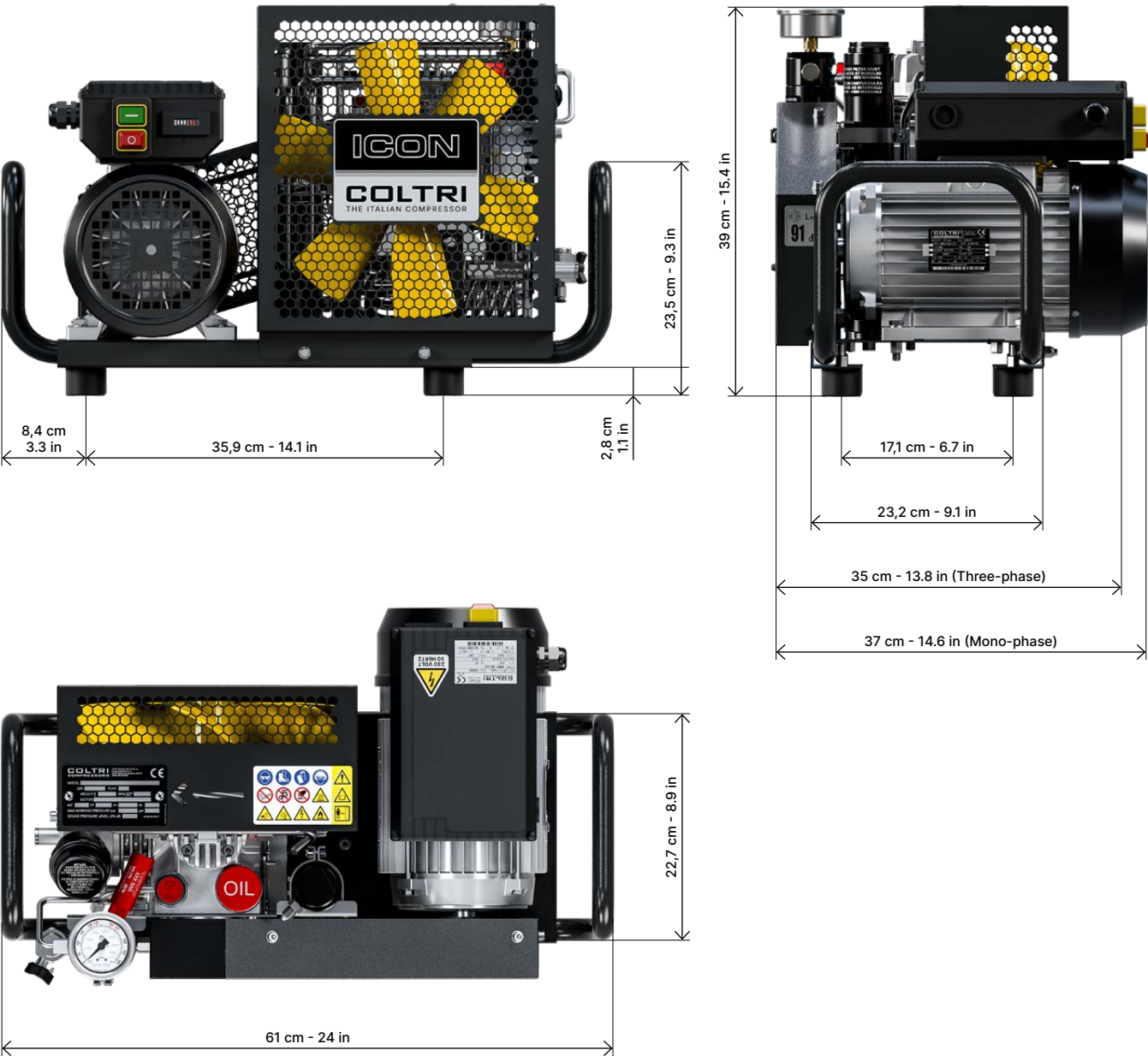
	ICON LSE 100 EM	ICON LSE 100 ET
Charging rate Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	100 l/min 6 m ³ /h 3.5 cfm	
Purification System	Eco-filter	
Cooling air flow	990 m ³ /h	
Weight¹	38 kg - 83.8 lb	
Dimensions (W x D x H)¹	61 × 37 × 39 cm 24 × 14.6 × 15.4 in	61 × 35 × 39 cm 24 × 13.8 × 15.4 in

¹ Standard model. Dimensions may vary depending on accessories.

Electric motor

ICON LSE 100 EM				ICON LSE 100 ET	
Power	2,2 kW - 3 Hp			3 kW - 4 Hp	
Type	Single-phase electric			Three-phase electric	
Operating voltage/frequency Different voltage / frequency available on request.	110 V, 60 Hz	230 V, 50 Hz	220 V, 60 Hz	230 V, 50 Hz	400 V, 50 Hz
Rated current	34,5 A	16,5 A		13,3 A	7,7 A
Speed (RPM)	3.400	2.800	3.400	2.840	
Protection class	IP54				

Dimensions

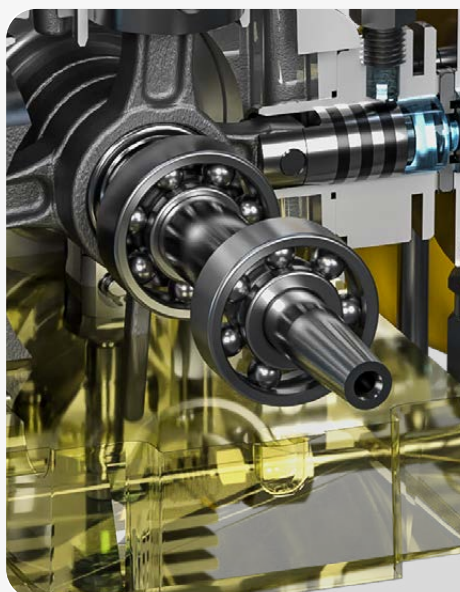
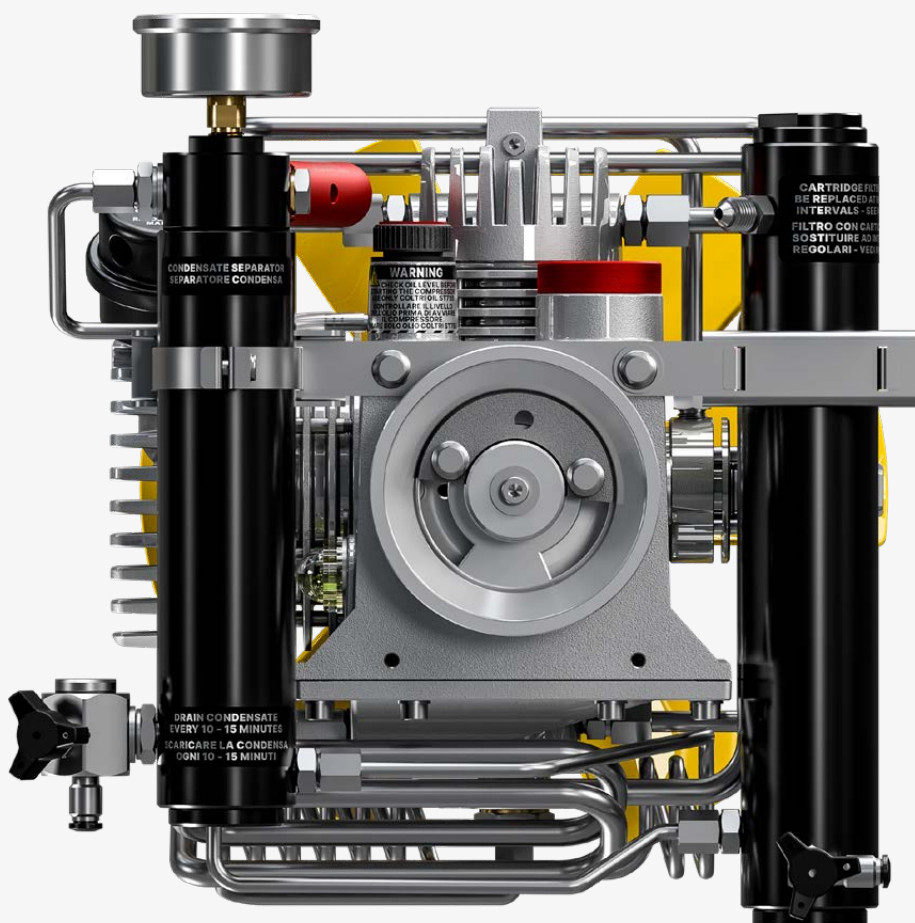


Components



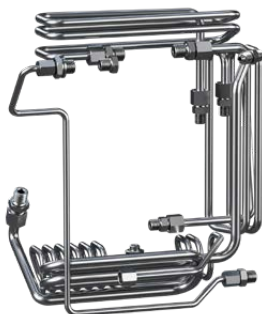
- | | | |
|------------------|--------------------------|-------------------------|
| 1 Frame | 6 Intake air filter | 11 Purification system |
| 2 Pressure gauge | 7 Safety mech | 12 Condensate separator |
| 3 Electric motor | 8 Anti-vibration devices | 13 Safety valve |
| 4 Pumping unit | 9 Cooling fan | 14 Condensate discharge |
| 5 Oil filter cap | 10 Belt | |

Pumping unit MCH 3/6



Splash lubrication with
conrod pin immersed in oil

**Suction filter:
10 µ micron**



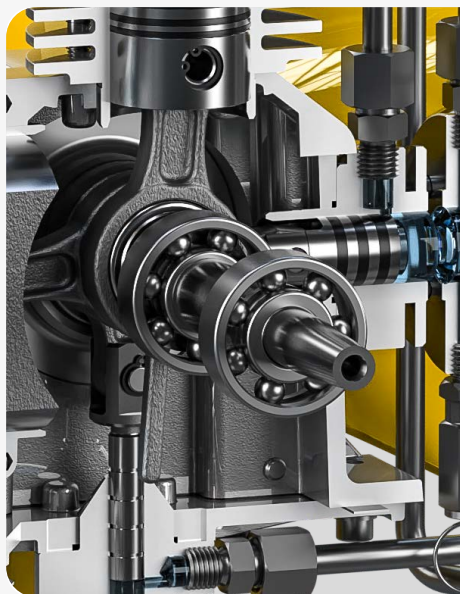
**Pipes, fitting and nuts in
stainless steel AISI 316**



**Forged aluminium
connection rods**



**Aluminium crankcase
machined on horizontal
CNC machine to ensure
maximum precision**



**Forged steel crankshaft
with hardened rings**



**Safety valve on the third
stage**



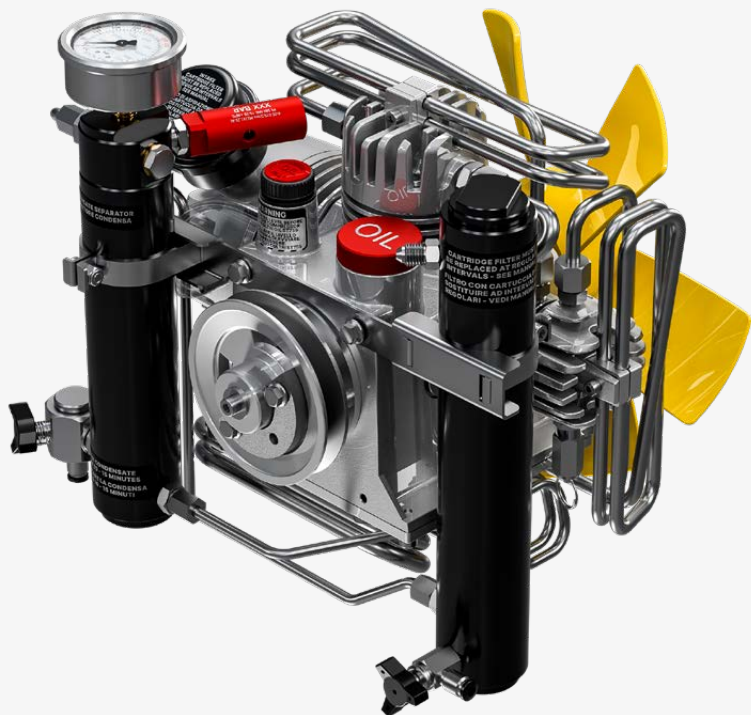
**Final safety valve PED
certified**

COLTRI COMPRESSORS		AEROTECNICA COLTRI S.P.A. Via dei Colli Storici, 177, 25015 Desenzano del Garda (BS), Italia		CE	
MODEL ICON LSE					
S/N		YEAR		WEIGHT KG LB	
MOTOR					
KW		VOLT		HZ	
MAX WORKING PRESSURE BAR		PSI		PUMPING GROUP	
SOUND PRESSURE LEVEL LPA dB					
MADE IN ITALY					

CE certification

Technical data pumping unit MCH 3/6

	ICON LSE 100 EM	ICON LSE 100 ET
Charging rate Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	100 l/min 6 m³/h 3.5 cfm	
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)	Clockwise (right)	
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	
Max intake pressure	1,3 bar _a – 300 millibar	



Standard equipment

Purification system ECO-FILTER

ECO-FILTER disposable cartridge



Separator system

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



Purification system ECO-FILTER

Purification system	Eco-Filter
Operating pressure (Standard)	232 bar / 330 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.
If a cartridge with CO removal is used, the process air capacity is reduced by about 20%.

Separator system

Contamination	Maximum content as per DIN EN 12021:2014	Air quality*
H ₂ O	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

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



Filling connection INT
COD. 6-05-025

Filling device	DIN 232	DIN 300
Nominal pressure (NP)	250 bar	330 bar
Technical specification	Filling valve with cylinder connector G 5/8" according to EN 144-2 and 477 PN232	Filling valve with cylinder connector G 5/8" according to EN 144-2 and 477 PN300

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+⏏

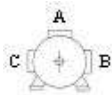


400 V three-phase electric motor
6h/380 - 415V~
50÷60 Hz
16 A
3P+⏏

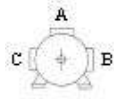


400 V three-phase electric motor
6h/380 - 415V~
50÷60 Hz
32 A
3P+⏏

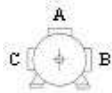
Data sheet single-phase electric motor 2,2 kW 110 V 60 Hz

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>			Potenza/ Power (kW)	Poli/ Poles
					2,2	2
					Data 25/06/2015	Rev. 0
No	Descrizione/Description	Dati/Data			U.d.m.	
1	Codice Soga / ref.code	125387				
2	Modello / Motor type	MMD1 90LA/2				
3	Descrizione / Description	Single-phase motor with starting capacitor 2,2kW 2 Poles 110V 60Hz				
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	S3-75%				
10	Tensione / Rated voltage	110			[V]	
11	Frequenza / Rated frequency	60			[Hz]	
12	Corrente nominale / Rated current	34,5			[A]	
13	Velocità nominale / Rated speed	3400			[min ⁻¹]	
14	Fattore di potenza / Power factor	0,92				
15	Coppia nominale motore/ Rated motor torque	6,2			[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>	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 (motor with feet)</i> 	A				
22	Terminali potenza / Power leads terminal	CAVO/ CABLE				
23	Peso / Weight	19			[kg]	
24	Cuscinetti /bearings	Drive end	6205			
		Non drive end	6205			
Note/remarks: Motore con condensatore permanente 160µF e disgiuntore elettromeccanico e condensatore di spunto 315-400µF. Il motore è anche provvisto di interruttore a pulsanti rosso-verde e protezione termica. <i>Motor with 160µF permanent capacitor and centrifugal switch plus 315-400µF starting capacitor. The motor is also provided with switch (red-green push-buttons) and thermal protectors.</i> Targa con logo Coltri Compressors.						

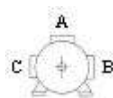
Data sheet single-phase electric motor 2,2 kW 230 V 50 Hz

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>			Potenza/ Power (kW)	Poli/ Poles
					2,2	2
					Data 24/06/2015	Rev. 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 Starting current / Rated current	4,0			Isp/In	
18	Coppia avviamento / Coppia nominale Starting torque/Rated torque	2,1			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 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 contaore analogico. 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. Targa con logo Coltri Compressors.						

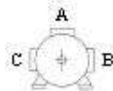
Data sheet single-phase electric motor 2,2 kW 220 V 60 Hz

		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>			Potenza/ Power (kW)	Poli/ Poles
					2,2	2
					Data 24/06/2015	Rev. 0
No	Descrizione/Description	Dati/Data			U.d.m.	
1	Codice Soga / ref.code	125384				
2	Modello / Motor type	MMD1 90LA/2				
3	Descrizione / Description	Single-phase motor with starting capacitor 2,2kW 2 Poles 220V 60Hz				
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	S3-75%				
10	Tensione / Rated voltage	220			[V]	
11	Frequenza / Rated frequency	60			[Hz]	
12	Corrente nominale / Rated current	16,5			[A]	
13	Velocità nominale / Rated speed	3400			[min ⁻¹]	
14	Fattore di potenza / Power factor	0,94				
15	Coppia nominale motore/ Rated motor torque	6,2			[Nm]	
17	Corrente avviamento / Corrente nominale Starting current / Rated current	3,6			Isp/In	
18	Coppia avviamento / Coppia nominale Starting torque/Rated torque	1,1			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 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. Motor with 60µF permanent capacitor and centrifugal switch plus 100µF starting capacitor. The motor is also provided with switch. Targa con logo Coltri Compressors.						

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

		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 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 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.						

Data sheet three-phase electric motor 3 kW 400 V 50 Hz

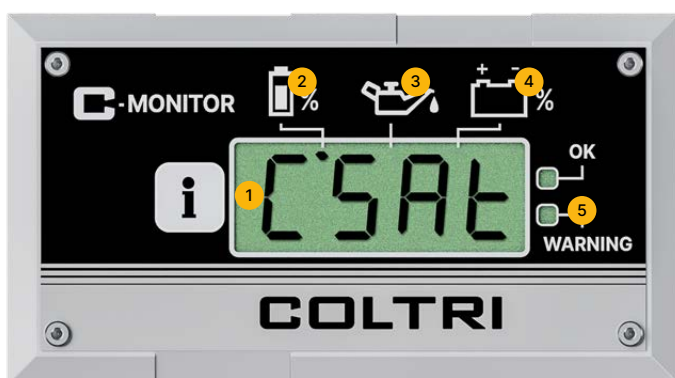
		SPECIFICA TECNICA MOTORE EL. <i>Electric motor technical data sheet</i>			Potenza/ Power (kW)	Poli/ Poles
					3	2
					Data 24/06/2015	Rev. 0
No	Descrizione/Description	Dati/Data			U.d.m.	
1	Codice Soga / ref.code	124297				
2	Modello / Motor type	MT1 90LC/2				
3	Descrizione / Description	Three-phase 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 PROVVISORIO 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 (, ). 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.



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

COD. SC001200

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:

- 1 x timer
- 1 x solenoid valve



COD. SC000522



Assembly
instruction

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)



COD. SC000521/232 - SC000521/300



Assembly
instruction

Remote suction hose kit

1/2" adapter.

Hose length 3 meters.

Tube diameter 20 mm.



Suction filter cartridge



Pressure maintaining valve

Mandatory use of DRV filling connection



Filling connections optional



**Filling connection DRV
DIN 232 bar**

COD. DRV232



**Filling connection DRV
DIN 300 bar**

COD. DRV300



**Filling connection DRV
DIN 232 bar with gauge**

COD. DRV232/MANOM



**Filling connection DRV
DIN 300 bar with gauge**

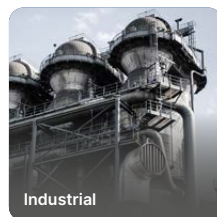
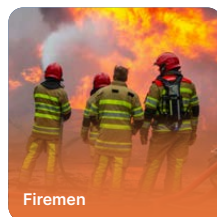
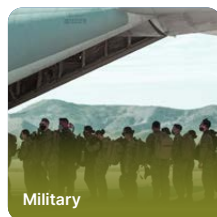
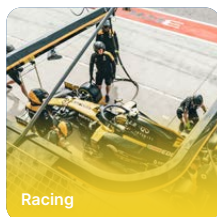
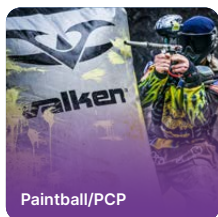
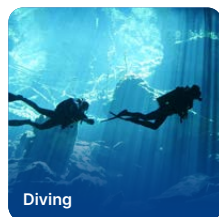
COD. DRV300 /MANOM



Adapter DIN 232/INT

COD. RE100350

Application fields



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