Technical Data Sheet

COLTRI COMPRESSORS

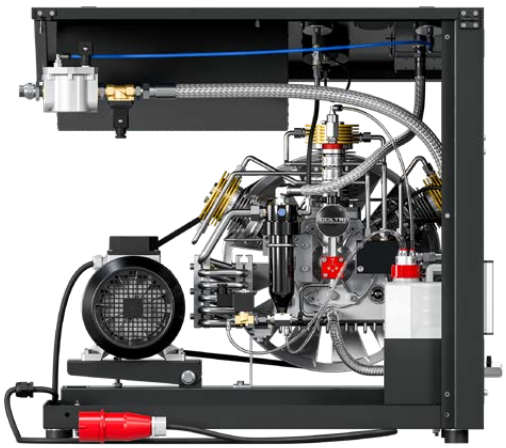
BOOSTER LINE

BOOSTER INDY III

ELECTRIC

Contact

Cutting edge for superior performance



Technical data

Type of gas	Air - Nitrogen
Intake pressure*	Min. 2 bar Max. 8 bar
Nominal pressure	40 bar
Working pressure	40 bar
Permissible ambient temperature range	-10° C ÷ +40° C
Max permissible tilt	15°
Design	Soundproof cabinet with sound absorbing
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	1 year / 1.000 h
Frame	Steel - Colour Black RAL 9005 - Powder coating painting - Scratch proof

* with a working pressure set at **40 bar / 580 psi** → minimum intake pressure = **4 bar / 58 psi**
with a working pressure set at **30 bar / 435 psi** → minimum intake pressure = **3 bar /43,5 psi**
with a working pressure set at **25 bar / 362 psi** → minimum intake pressure = **2 bar / 29 psi**

Compressor

	BOOSTER INDY III 7,5 KW
Flow rate	Min. 489 - Max. 1.466 l/min Min. 29.4 - Max. 88 m^3/h Min. 17.3 - Max. 51.8 cfm
Cooling air flow	1.400 m^3/h
Weight[1]	200 kg - 441 lb
Dimensions (W x D x H)[1]	103 × 73 × 91 cm - 40.5 × 28.7 × 35.8 in

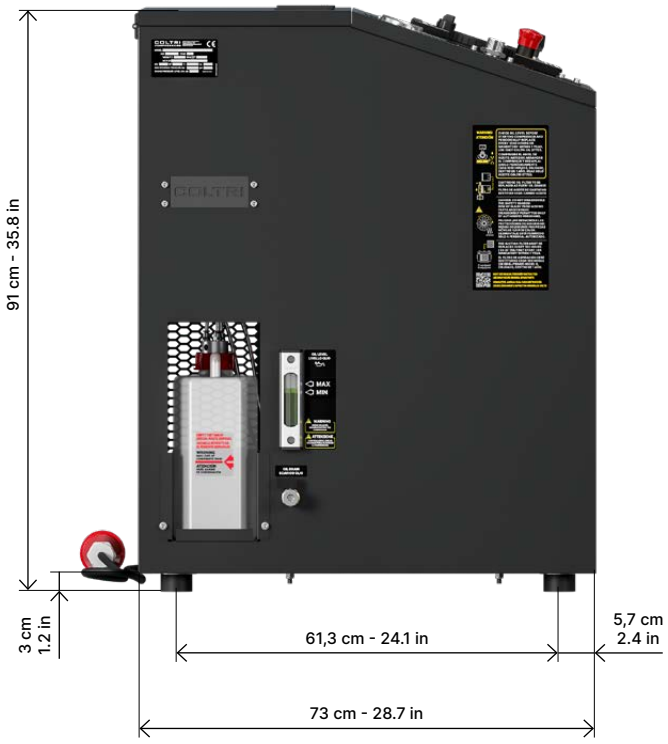
1 Standard model. Dimensions and weight may vary depending on accessories.

Electric motor

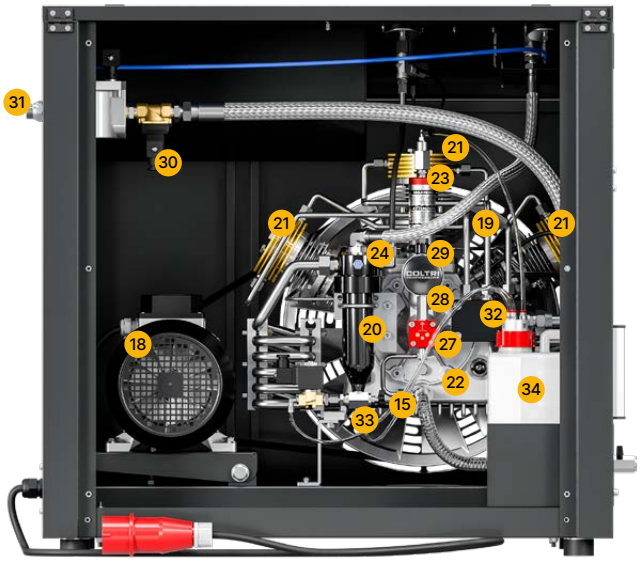
	BOOSTER INDY I 7,5 KW
Power	7,5 kW - 10 Hp
Type	Three-phase electric
Operating voltage/frequency Different voltage / frequency available on request.	400 V, 50 Hz
Rated current	15 A
Speed (RPM)	2.870
Protection class	IP55

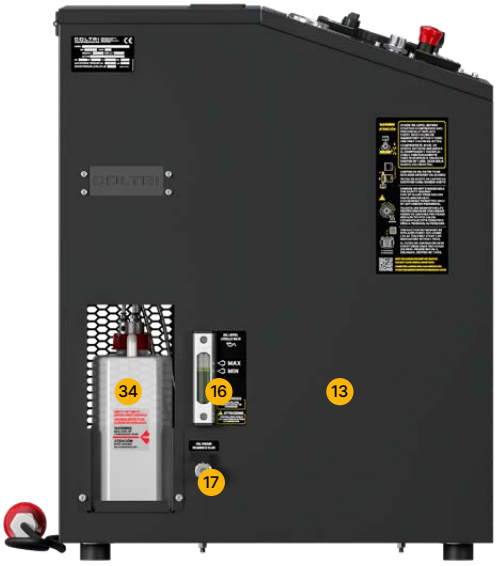
Dimensions

INDY III
BOOSTER
COLTRI
COLTRI
91,9 cm - 36,2 in
4,2 cm
1.7 in
103 cm - 40.6 in
0,5 cm
0.2 in


91 cm - 35.8 in
3 cm
1.2 in
61,3 cm - 24.1 in
5,7 cm
2.4 in
73 cm - 28.7 in

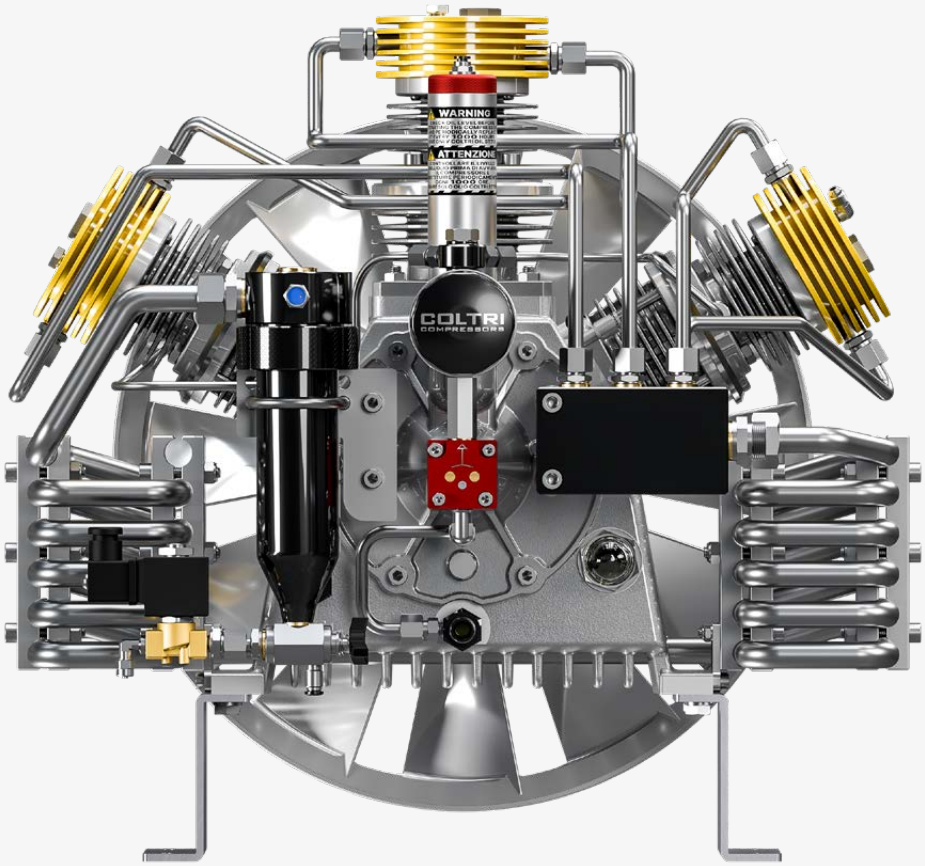
Components

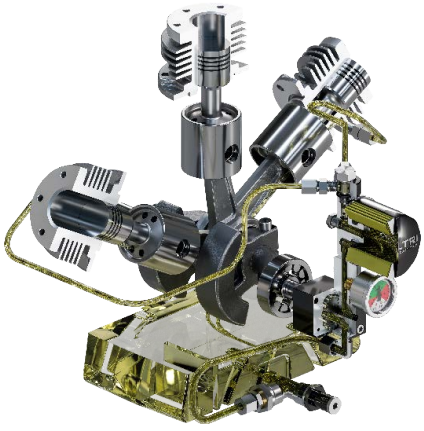




1. Control pannel
2. ON switch
3. Stop pushbutton
4. Condensate discharge pushbutton
5. Oil level warning light
6. Direction of rotation indicator light
7. Emergency button
8. Cooled air inside/cabin temperature
9. Hour meter
10. Intlet pressure gauge
11. Outlet pressure gauge
12. Electronic pressure switch with automatic shutdown
13. Frame
14. Compressed gas outlet
15. Condensate discharge valve
16. Oil level
17. Oil discharge valves
18. Motor
19. Compressor
20. Condensate separator
21. Compression stages
22. Collettore
23. Oil filler plug
24. Safety valve
25. Cooling fan
26. Belt
27. Oil pump
28. Oil pressure gauge
29. Oil filter
30. Pressure switch
31. Suction gas inlet
32. Manifold
33. Automatic condensate drain valve
34. Condensate drain tank

Pumping unit MCH 16





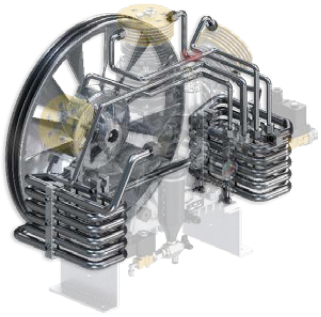
Forced lubrification with low pressure gear pump

Micronic intake filter:
10 µ micron

Die-cast aluminum cylinders with barrel coating in nicasil

Final safety valve

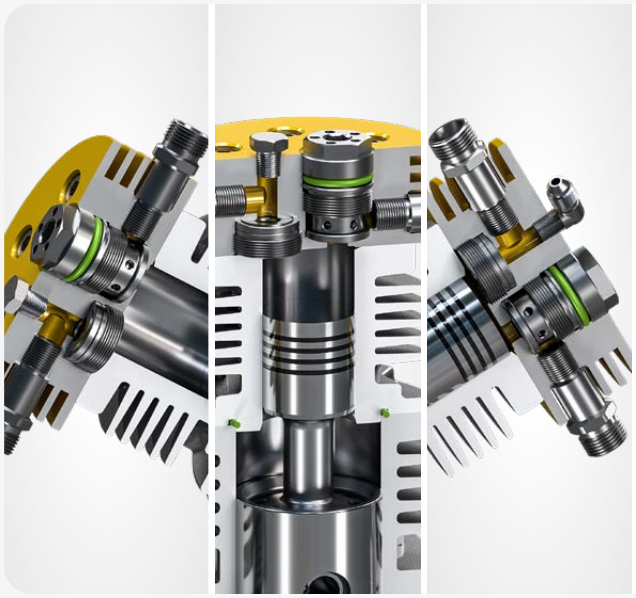
Pipes, fitting and nuts in stainless steel AISI 316



utlet temperature approx. 15 °C above cooling air temperature

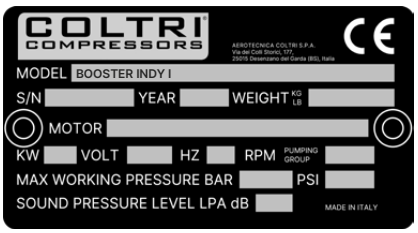
Forged aluminum connecting rods

Forged steel crankshaft



Stainless steel stage valves

Roller Bearings for intensive work



CE certification

Technical data pumping unit MCH 16

	BOOSTER INDY I 7,5 KW
Intake pressure*	Min. 2 bar Max. 8 bar
Flow rate	Min. 489 - Max. 1.466 l/min Min. 29.4 - Max. 88 m³/h Min. 17.3 - Max. 51.8 cfm
Speed (RPM)	1.400
Number of stages	3
Number of cylinders	3
Cylinder bore	38 mm
Stroke	50 mm
Direction of rotation from flywheel side	Counter clockwise (left)
Drive type	V-belt A type
Oil sump capacity	1,8 liters

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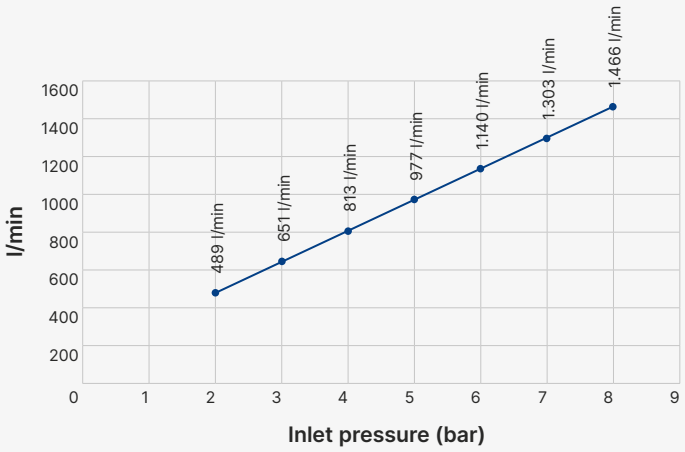
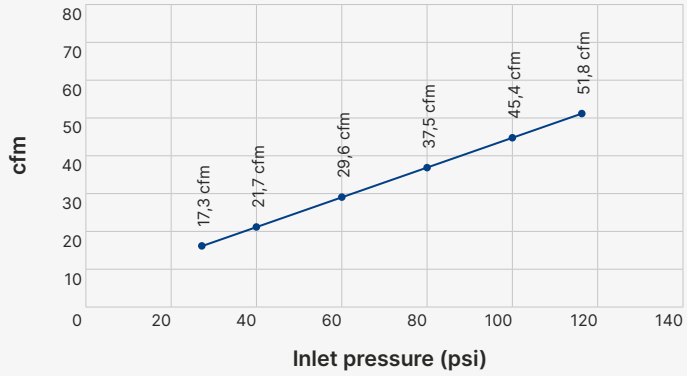




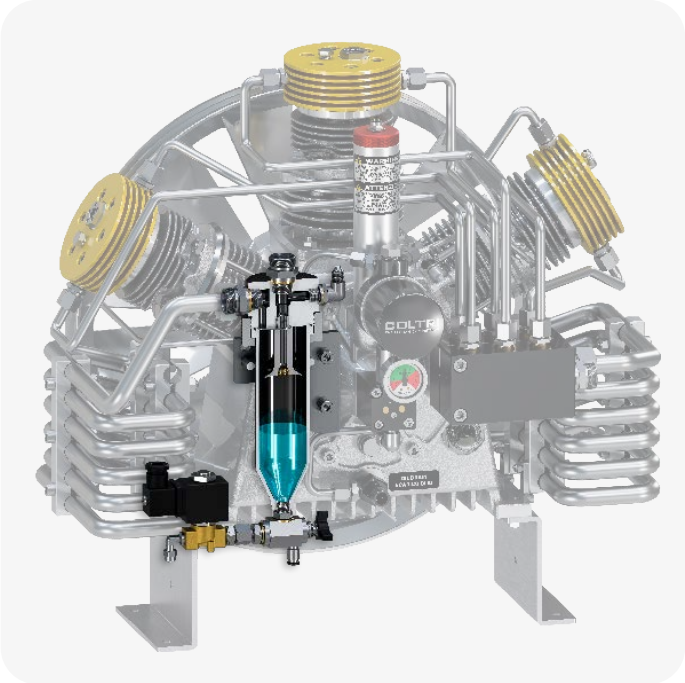
BOOSTER INDY III 7,5 KW

l/min	Min. 489 - Max. 1.466
cfm	Min. 17,3 - Max. 51,8

Standard equipment

Condensate separation system

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



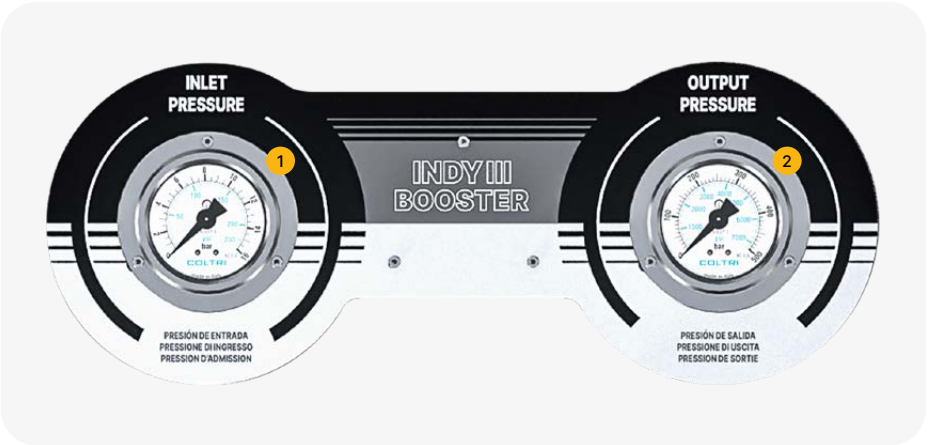
Electronic pressure switch

The instrument allows to visualize the pressure expressed in bar, psi or MPa.

Through the programming buttons it allows to set the intervention pressure of the relay contact (SPDT) and hysteresis. The settings are protected by passwords at 3 levels: manufacturer, customer and end user. The instrument also has the function of hours counter and no. of cycles of separator intervention, ensuring a general improvement of the operation of the recharge station over time and the longevity of its filters.

Interstage pressure gauges

The function of the interstage pressure gauges is to show the operating pressure of the individual compression levels. This information is indispensable because it allows to quickly recognize a possible error by checking the tightness of the respective level valves (inlet and outlet). The interstage pressure gauges are mounted on the control panel of the compressor.



1. Inlet pressure
2. Outlet pressure

Compressor control and automatic condensate drain system

- ON/OFF switch with motor protection switch.
- Transformer.
- The pressure switch stops the compressor at the final pressure and restarts it at the minimum set pressure.
- Timer for automatic condensate drainage device.
- Integrated vacuum start-up (automatic drain when the unit is switched off).
- Condensate collection tank 5 liters, with silencer; capacity approx. 3 liters, for environmentally friendly disposal of condensate.
- Interstage pressure gauges display the operating pressure for the individual compression stages. This pressure information allows you to check the tightness of the valves (inlet and outlet) of each stage and quickly identify potential sources of failure.

The interstage pressure gauges are mounted in the compressor frame.

1. Autostart
2. Stop button
3. Condensate drain button
4. Oil level warning light
5. Wrong direction indicator light
6. Emergency button
7. Inside temperature cabin/cooled air
8. Operating hour meter

Soundproof frame

Polyether-based expanded polyurethane impregnated with halogen and CFC-free flame retardant substances. Soundproofing useful in any environment that requires a strong reduction of high frequencies.

		Certifications
Color	Black	
Thermal conductivity	W/mk 0,040 40° C	
Temperature resistance	-70° C - 100° C	
Density	75 / 110 Kg/m3	ISO 1855
Hardness	> 300 N	ISO 2439 (ILD% 40)
Tensile hardness	> 85 Kpa	ISO 1798
Resistance to de-tensioning	> 85 %	ISO 1798
Self-extinguishing	Class 0 / Class 1	BS 476 Part 6 / BS 476 Part 7

Plugs available according to electric motor

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/200/346 - 240/415V~

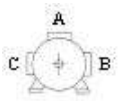
50÷60 Hz

32 A

3P+N+⏚

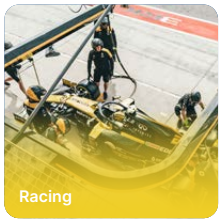
Data sheet three-phase electric motor 7,5 kW

soga®	**SPECIFICA TECNICA MOTORE EL.** *Electric motor technical data sheet*	**Potenza/** *Power* (kW) **7,5**	**Poli/** Poles **2**
		Data 16/05/2018	Rev. 0

No	Descrizione/*Description*		Dati/Data			*U.d.m.*
1	**Codice Soga** / *ref.code*		166657			
2	**Modello /** *Motor type*		MT1 132SB/2			
3	**Descrizione** / *Description*		Three-phase asynchronous motor 7,5kW 2 Poles 230/400V 50Hz			
4	**Carcassa motore** / *Framesize*		132S			
5	**Poli** / *Poles*		2			
6	**Forma di costruzione** / *Mounting type*		IM B3			
7	**Potenza nominale** / *Rated output*		7,5	7,5	9	[kW]
8	**Fattore di servizio** / *Service factor*		1.0			
9	**Tipo di servizio** / *Duty type*		S3-75%			
10	**Tensione** / *Rated voltage*		230/400	230/400	Δ440-480	[V]
11	**Frequenza** / *Rated frequency*		50	60	60	[Hz]
12	**Corrente nominale** / *Rated current*		26/15	26/15	15	[A]
13	**Velocità nominale** / *Rated speed*		2870	3440	3440	[min^{-1}]
14	**Fattore di potenza** / *Power factor*		0,87	0,87	0,87	
15	**Coppia nominale motore**/ *Rated motor torque*		25	20,8	25	[Nm]
17	**Corrente avviamento / Corrente nominale** *Starting current / Rated current*		6,9			Isp/In
18	**Coppia avviamento / Coppia nominale** *Starting torque/Rated torque*		2,7			Msp/Mn
19	**Classe d'isolamento** / *Insulation class*		F			
20	**Grado di protezione** / *Enclosure*		IP55			
21	**Posizione scatola morsettiera** (motore con piedini) *Terminal box position (motor with feet)* 		A			
22	**Terminali potenza** / *Power leads terminal*		M6			
23	**Peso /** Weight		42			[kg]
24	**Cuscinetti** /bearings	Drive end	6208			
		Non drive end	6208			

Note/remarks:
Targa con logo Coltri Compressors.

Application fields



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DT-TDS-BOOSTER IDNYIII-25-V3

QUALITY SYSTEM CERTIFICATION DNV ISO 9001

ENVIRONMENTAL SYSTEM CERTIFICATION DNV ISO 14001

SAFETY SYSTEM CERTIFICATION DNV ISO 45001

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