

PORTABLE COMPRESSORS

BREATHING AIR

CATALOG 2017

High and low pressure compressors for pure breathing air and technical gases.

PORTABLE COMPRESSORS | Page 2

All the components of the pumping units parts are entirely designed and manufactured in the plants of Aerotecnica Coltri® and all compressors are fully assembled in the company's plants as well. The company has constantly evolved in the mechanics industry following the progress of newly designed equipment thus creating more and more reliable products using high-tech instruments like robots and fully electronically activated milling machines.

The capacity to be a leader in the advanced technology of the mechanics industry has given Aerotecnica Coltri® the ability to improve operational quality and the precision of the equipment used for numerically controlled milling. In the workshops of Aerotecnica Coltri® the design of new compressors and/or equipment is focused on the costant quest for highest quality in order to create absolutely reliable and long-lasting products.













The production of high quality mechanical parts in Aerotecnica Coltri® workshops is guaranteed by an efficient quality control system in the production cycle which ensures that the parts meet the specifications as per the design. DEA, our equipment, has a significant role in measuring dimensions since it can detect the geometrical characteristics of the parts and anticipate their behaviour when used as items of more complex components. DEA is capable of taking precise measurements

of objects with extremely variable dimensions and geometrical configurations as well as guaranteeing the manufacture of precise mechanical parts present in Coltri's compressors.

Through a constant monitoring of the products quality standards, Aerotecnica Coltri® obtains the coveted quality certifications UNI EN ISO 9001:2008 and IQNet.

QUALITY



















MCH 6 EM

STANDARD EQUIPMENT

- Hour-tacho meter
- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024

CODE 6-05-024/300

CODE 6-05-025

OPTIONAL ACCESSORIES

- Autostop
- · Autodrain with timer
- Pressure maintaining valve + BC filling valve
- · Remote intake kit
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m









AUTODRAIN WITH TIMER (optional)

AUTOSTOP (optional)

	(οριιοπαί)		
TECHNICAL DATA	MCH 6 EM		
CODES	BLUE (RAL 5015) SC000120/B for 230V - 50Hz / SC000121/B for 230V - 60Hz RED (RAL 3000) SC000120/R for 230V - 50Hz / SC000121/R for 230V - 60Hz STAINLESS STEEL SC000120/I for 230V - 50Hz / SC000121/I for 230V - 60Hz		
DRIVEN BY	SINGLE-PHASE ELECTRIC MOTOR		
CHARGING RATE	90 l/min - 4.8 m³/h - 2.8 CFM - 3.3 SCFM		
FILLING TIME	10 I-0-200 bar 25 min.		
POWER	2.2 kW full load Amp *16 A (230 V-50/60 Hz) **29 A (115 V-60 Hz)		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	35 x 65 x 39 cm 13.7" x 25.5" x 15.3"		
NET WEIGHT APPROX.	39.5 kg / 87 lbs		
NOISE LpA	91 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 ET









AUTODRAIN WITH TIMER (optional)



STANDARD EQUIPMENT

- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024 DIN 230 bar

CODE 6-05-024/300 DIN 300 bar

CODE **6-05-025**

OPTIONAL ACCESSORIES

- Autostop
- Autodrain with timer
- Pressure maintaining valve + BC filling valve
- Remote intake kit
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m

TECHNICAL DATA	MCH 6 ET		
CODES	BLUE (RAL 5015) SC000131/B for 230V - 50Hz / SC000132/B for 230V - 60Hz SC000130/B for 400V - 50Hz / SC000133/B for 440V - 60Hz RED (RAL 3000) SC000131/R for 230V - 50Hz / SC000132/R for 230V - 60Hz SC000130/R for 400V - 50Hz / SC000133/R for 440V - 60Hz STAINLESS STEEL SC000131/I for 230V - 50/60Hz / SC000130/I for 400/440V - 50/60Hz		
DRIVEN BY	THREE-PHASE ELECTRIC MOTOR		
CHARGING RATE	100 l/min - 6 m ³ /h - 3.5 CFM - 4 SCFM		
FILLING TIME	10 I-0-200 bar 20 min.		
POWER	3 kW		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	35 x 65 x 39 cm 13.7" x 25.5" x 15.3"		
NET WEIGHT APPROX.	39 Kg / 85 lbs		
NOISE LpA	95 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 EM COMPACT

STANDARD EQUIPMENT

- Hour-tacho meter
- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024 DIN 230 bar

CODE 6-05-024/300

CODE **6-05-02**5

OPTIONAL ACCESSORIES

- Autostop
- · Autodrain with timer
- Pressure maintaining valve + BC filling valve
- · Remote intake kit
- Pressure regulator 300/200 bar
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m









AUTODRAIN WITH TIMER (optional)

AUTOSTOP (optional)

	(ορασταί)		
TECHNICAL DATA	MCH 6 EM COMPACT		
CODES	BLUE (RAL 5015) SC000120/COMP for 230V - 50Hz - 2,2 kW / SC000121/COMP for 230V - 60Hz - 2,2 kW SC000120/COMP/S for 230V - 50Hz - 3 kW / SC000121/COMP/S for 230 - 60Hz - 3 kW STAINLESS STEEL SC000120/COMP/I for 230V - 50Hz - 2,2 kW / SC000121/COMP/I for 230V - 60Hz - 3 kW		
DRIVEN BY	SINGLE-PHASE ELECTRIC MOTOR		
CHARGING RATE	90 l/min - 4.8 m³/h - 2.8 CFM - 3.3 SCFM		
FILLING TIME	10 I-0-200 bar 25 min.		
POWER	2.2 kW full load Amp *16 A (230 V-50/60 Hz) **29 A (115 V-60 Hz)		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	47 x 73 x 37 cm 18.5" x 28.7" x 14.5"		
NET WEIGHT APPROX.	57.1 kg / 126 lbs		
NOISE LpA	91 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 ET COMPACT









AUTODRAIN WITH TIMER (optional)

STANDARD EQUIPMENT

- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024 DIN 230 bar

CODE 6-05-024/300 DIN 300 bar

CODE **6-05-025**

OPTIONAL ACCESSORIES

- Autostop
- · Autodrain with timer
- Pressure maintaining valve + BC filling valve
- Remote intake kit
- Pressure regulator 300/200 bar
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m

TECHNICAL DATA	MCH 6 ET COMPACT		
CODES	BLUE (RAL 5015) SC000131COMP for 230V - 50Hz / SC000132COMP for 230V - 60Hz SC000130COMP for 400V - 50Hz / SC000133COMP for 440V - 60Hz STAINLESS STEEL SC000131/COMP/I for 230V - 50/60Hz SC000130/COMP/I for 400/440V - 50/60Hz		
DRIVEN BY	THREE-PHASE ELECTRIC MOTOR		
CHARGING RATE	100 l/min - 6 m³/h - 3.5 CFM - 4 SCFM		
FILLING TIME	10 I-0-200 bar 20 min.		
POWER	3 kW		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	47 x 73 x 37 cm 18.5" x 28.7" x 14.5"		
NET WEIGHT APPROX.	56.7 Kg / 125 lbs		
NOISE LpA	95 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 SH

STANDARD EQUIPMENT

- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024 DIN 230 bar

CODE 6-05-024/300 DIN 300 bar

CODE 6-05-025

N 230 bar DIN 300 bar INT

OPTIONAL ACCESSORIES

- Autostop
- · Autodrain with timer
- Digital hour-tacho meter
- Pressure maintaining valve + BC filling valve
- · Remote intake kit
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m









AUTODRAIN WITH TIMER AUTOSTOP (optional) (optional)

	()		
TECHNICAL DATA	MCH 6 SH		
CODES	BLUE (RAL 5015) SC000100/R/B RED (RAL 3000) SC000100/R/R STAINLESS STEEL SC000100/I		
DRIVEN BY	HONDA PETROL ENGINE		
CHARGING RATE	100 l/min - 6 m³/h - 3.5 CFM - 4 SCFM		
FILLING TIME	10 I-0-200 bar 20 min.		
POWER	4.1 kW (5.5 HP) / 3600 rpm		
FUEL CONSUMPTION	1.7 litres/hour		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	35 x 78 x 32 cm 13.7" x 30.7" x 12.5"		
NET WEIGHT APPROX.	37 kg / 81.5 lbs		
NOISE LpA	97 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 SH COMPACT









AUTODRAIN WITH TIMER (optional)



STANDARD EQUIPMENT

- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024 DIN 230 bar

CODE 6-05-024/300 DIN 300 bar

CODE 6-05-025

OPTIONAL ACCESSORIES

- · Hour-tacho meter
- Autostop
- · Autodrain with timer
- Pressure maintaining valve + BC filling valve
- · Remote intake kit
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m

TECHNICAL DATA	MCH 6 SH COMPACT		
CODES	BLUE (RAL 5015) SC000100/COMP STAINLESS STEEL SC000100/COMP/I		
DRIVEN BY	HONDA PETROL ENGINE		
CHARGING RATE	100 l/min - 6 m³/h - 3.5 CFM - 4 SCFM		
FILLING TIME	10 I-0-200 bar 20 min.		
POWER	4.1 kW (5.5 HP) / 3600 rpm		
FUEL CONSUMPTION	1.7 litres/hour		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	47 x 73 x 37 cm 18.5" x 28.7" x 14.5"		
NET WEIGHT APPROX.	47.3 kg / 104 lbs		
NOISE LpA	97 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 SY

STANDARD EQUIPMENT

- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024

CODE 6-05-024/300 DIN 300 bar

CODE **6-05-025**

OPTIONAL ACCESSORIES

- Hour-tacho meter
- Autostop
- · Autodrain with timer
- Digital hour-tacho meter
- Pressure maintaining valve + BC filling valve
- · Remote intake kit
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m









AUTODRAIN WITH TIMER (optional)

AUTOSTOP (optional)

TECHNICAL DATA	MCH 6 SY	
CODES	SC000100/Y	
DRIVEN BY	YAMAHA MZ 175	
CHARGING RATE	100 l/min - 6 m ³ /h - 3.5 CFM - 4 SCFM	
FILLING TIME	10 I-0-200 bar 20 min.	
POWER	6.5 HP	
FUEL CONSUMPTION	1.7 litres/hour	
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi	
DIMENSION (W x H x D)	25 x 78 x 32 cm 13.7" x 30.7" x 12.5"	
NET WEIGHT APPROX.	37 kg / 81.5 lbs	
NOISE LpA	97 dB	
NUMBER STAGES AND CYLINDERS	4	
COOLERS	Stainless steel interstage coolers and after coolers	

MCH 6 SR



STANDARD EQUIPMENT

- Filling hose 120 cm length
- 1 filling connection (among the ones available)







CODE 6-05-024 DIN 230 bar

CODE 6-05-024/300 DIN 300 bar

CODE **6-05-025**

OPTIONAL ACCESSORIES

- Hour-tacho meter
- Autostop
- · Autodrain with timer
- Digital hour-tacho meter
- Pressure maintaining valve + BC filling valve
- Remote intake kit

AUTOSTOP (optional)

AUTODRAIN WITH TIMER (optional)

TECHNICAL DATA	MCH 6 SR		
CODES	BLUE (RAL 5015) SC000090		
DRIVEN BY	SUBARU PETROL ENGINE		
CHARGING RATE	100 l/min - 6 m³/h - 3.5 CFM - 4 SCFM		
FILLING TIME	10 I-0-200 bar 20 min.		
POWER	6.5 HP		
FUEL CONSUMPTION	1.7 litres/hour		
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi		
DIMENSION (W x H x D)	25 x 78 x 32 cm 13.7" x 30.7" x 12.5"		
NET WEIGHT APPROX.	37 kg / 81.5 lbs		
NOISE LpA	97 dB		
NUMBER STAGES AND CYLINDERS	4		
COOLERS	Stainless steel interstage coolers and after coolers		

MCH 6 EM - ET SILENT

STANDARD EQUIPMENT

- · Hour-tacho meter
- Filling hose 120 cm length
- Autodrain with tank
- Autostop
- Maxifilter
- 1 filling connection (among the ones available)







CODE 6-05-024

CODE 6-05-024/300

CODE **6-05-025**

OPTIONAL ACCESSORIES (from pag. 17)

- Pressure maintaining valve + BC filling valve
- Filling hoses length: 1.50 m 2.0 m 3.0 m 4.0 m 5.0 m 8.0 m 10.0 m





TECHNICAL DATA	MCH 6 EM SILENT	MCH 6 ET SILENT
CODES	SC000145 for 230V - 50 Hz SC000146 for 230V - 60 Hz	SC000148 for 400V - 50 Hz
DRIVEN BY	SINGLE-PHASE ELECTRIC MOTOR OR THREE-PHASE ELECTRIC MOTOR	SINGLE-PHASE ELECTRIC MOTOR OR THREE-PHASE ELECTRIC MOTOR
CHARGING RATE	90 l/min - 4.8 m³/h - 2.8 CFM - 3.3 SCFM	100 l/min - 6 m ³ /h - 3.5 CFM - 4 SCFM
FILLING TIME	10 I-0-200 bar 25 min.	10 I-0-200 bar 20 min.
POWER	Power 2,2 kW full load Amp for EM VERSION *16 A (230 V-50/60 Hz) **29 A (115 V-60 Hz)	Power 2,2 kW full load Amp for EM VERSION *16 A (230 V-50/60 Hz) **29 A (115 V-60 Hz)
WORKING PRESSURE	232 - 300 bar / 3300 - 4300 psi	232 - 300 bar / 3300 - 4300 psi
DIMENSION (W x H x D)	84 x 66 x 50 cm 33" x 26" x 19.7"	84 x 66 x 50 cm 33" x 26" x 19.7"
NET WEIGHT APPROX.	84.5 kg / 186.3 lbs	84.5 kg / 186.3 lbs
NOISE LpA	66 dB	66 dB
NUMBER STAGES AND CYLINDERS	4	4
COOLERS	Stainless steel interstage coolers and after coolers	Stainless steel interstage coolers and after coolers

TESEO - NETTUNO THIRD LUNG COMPRESSOR



OPTIONAL ACCESSORIES

- Remote intake kit
- Food grade floating LP pipe
- 2nd stage regulator
- Double outlet
- Suction filter

TECHNICAL DATA	TESE0	NETTUNO
CODE	HC101554	HC144613
DRIVEN BY	ELECTRIC MOTOR SINGLE-PHASE	HONDA PETROL ENGINE
AIR DELIVER	205 l/min - 12.3 m³/h	280 l/min - 16.8 m³/h
WORKING PRESSURE	10 bar / 145 psi	10 bar / 1445 psi
POWER	1.1 kW - 8A (230V-50/60 Hz) full load Ampere	3.6 kW (4.8 HP) / 3600 rpm
CAPACITY AIR TANK	3 I / 3.2 quarts	6 I / 6.3 quarts
DIMENSION (W x H x D)	46 x 30 x 46 cm 18.1" x 11.8" x 18.1"	46 x 30 x 46 cm 18.1" x 11.8" x 18.1"
NET WEIGHT APPROX.	21 kg / 46 lbs	24 kg / 53 lbs
NOISE LpA	72 dB	94 dB
NUMBER STAGES AND CYLINDERS	1	1
FILTER	Filter cartridge with activated carbon and molecular sieve	Filter cartridge with activated carbon and molecular sieve
VALVE	Safety valve on the volume tank	Safety valve on the volume tank 11 bar

EOLO 330 SH THIRD LUNG COMPRESSOR

OPTIONAL ACCESSORIES

- Remote intake kit
- Food grade floating LP pipe
- 2nd stage regulator
- Double outlet



TECHNICAL DATA	E0L0 330 SH		
CODE	HC010330		
DRIVEN BY	HONDA PETROL ENGINE		
AIR DELIVER	330 l/min - 19.8 m³/h		
WORKING PRESSURE	8 bar / 120 psi		
POWER	3.6 kW (5.5 HP) / 3600 rpm		
CAPACITY AIR TANK	4.5 I / 4.75 quarts		
DIMENSION (W x H x D)	57 x 90 x 45 cm 22.4" x 35.4" x 17.7"		
NET WEIGHT APPROX.	54 kg / 119 lbs		
NOISE LpA	100.5 dB		
NUMBER STAGES AND CYLINDERS	2		
FILTER	Filter cartridge with activated carbon and molecular sieve		
VALVE	Safety valve on the volume tank 11 bar		
COOLER	Aluminum aftercooler		

EOLO 330 EM/ET THIRD LUNG COMPRESSOR



OPTIONAL ACCESSORIES (from pag. 17)

- Remote intake kit
- Food grade floating LP pipe
- 2nd stage regulator
- Double outlet

TECHNICAL DATA	EOLO 330 EM	EOLO 330 ET
CODE	HC015130 for 230V - 50 Hz HC015131 for 230V - 60 Hz	CODE HC015150 for 400V - 50 Hz CODE HC015151 for 230V - 50 Hz CODE HC015152 for 230V - 60 Hz
DRIVEN BY	SINGLE-PHASE ELECTRIC MOTOR	THREE-PHASE ELECTRIC MOTOR
AIR DELIVER	330 l/min - 19.8 m³/h	330 l/min - 19.8 m³/h
WORKING PRESSURE	8 bar / 120 psi	8 bar / 120 psi
POWER	2.2 kW 14 A (230V-50/60 Hz) full load Ampere	3 kW 11.5 A (230/400V-50Hz) 6.7 A (230V-60 Hz) full load Ampere
CAPACITY AIR TANK	4.5 I / 4.75 quarts	4.5 I / 4.75 quarts
DIMENSION (W x H x D)	51 x 78 x 45 cm 20" x 30.7" x 17.7"	51 x 78 x 45 cm 20" x 30.7" x 17.7"
NET WEIGHT APPROX.	55 kg / 121 lbs	55 kg / 121 lbs
NOISE LpA	81.7 dB	83 dB
NUMBER STAGES AND CYLINDERS	2	
FILTER	Filter cartridge with activated carbon and molecular sieve	Filter cartridge with activated carbon and molecular sieve
VALVE	Safety valve on the volume tank 11 bar	Safety valve on the volume tank 11 bar
COOLER	Aluminum aftercooler	Aluminum aftercooler

OPTIONALS ACCESSORIES

DIGITAL HOUR-TACHO METER REMOTE INTAKE KIT

ADAPTER 1/2"



CODE 13-04-0210



CODE HC010302

3 METRES LENGHT PIPE AND 20 mm DIAMETER

OPTIONALS ACCESSORIES MCH 6

AUTOSTOP

AUTODRAINWITH TIMER



CODE SC000521



CODE SC000522

OPTIONALS ACCESSORIES EOLO - THIRD LUNGS

FOOD GRADE
FLOATING LP PIPE

2ND STAGE REGULATOR

DOUBLE OUTLET



CODE HC010160



CODE HC010170



CODE HC010180

ACCESSORIES AND EXPENDABLE MATERIALS

AIR FILTER CARTRIDGE

A CODE SC000340/ABS

WITH MOLECULAR SIEVE AND ACTIVATED CARBON

B CODE SC000340/ABS/SM

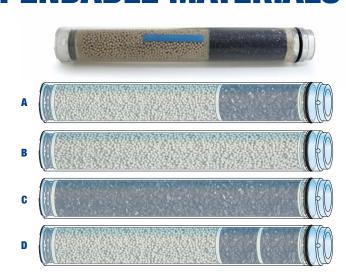
WITH MOLECULAR SIEVE

C CODE SC000340/CARB

WITH ACTIVATED CARBON

D CODE SC000340/ABS/CO-CATALYST

WITH MOLECULAR SIEVE. ACTIVATED CARBON AND CO-CATALYST



SUCTION FILTER CARTRIDGE

ONLY FOR MCH 6

SUCTION FILTER
ONLY FOR EOLO 330

WRENCH FOR FILTER PLUG MCH 6



CODE SC000345



CODE HC010301



CODE 6-0

6-00-0200

SYNTHETIC COLTRI OIL CE 750



Easier start up, faster oil circulation at low temperature, year-round operation, reduced warm-up, cleaner compressor, higher film strength.

CODE 1 I

SC000496

SPECIAL MOTOR OIL FOR PETROL AND DIESEL ENGINES



CODE 1 I

SC000430

PERSONAL FILTER



CODE OP900932
DIN 300 bar VERSION

OP900931

DIN 200 bar VERSION

ANALYZERS



CODE SC000321
PRO 0, ANALYZER FOR OXYGEN

CODE

SC000313 REPLACEMENT SENSOR



SC000322

CODE PRO CO ANALYZER
FOR CARBON MONOXIDE

CODE

SC000312 REPLACEMENT SENSOR

232 BAR HP/LP REGULATOR FOR ANALYZERS



CODE

SC000321/RID

PRESSURE MAINTAINING VALVE



CODE

6-05-015/VMP/R USE ONLY WITH BC FILLING CONNECTION

TRANSFER HOSE



CODE

OP900341 FOR DIN 230 bar 50 cm OP900342 FOR DIN 300 bar 50 cm

PAINTBALL FITTING



CODE

SC000342 for 200/200 bar SC000341 for 300/300 bar

PRESSURE REDUCER DIN 300 F TO DIN 232 M



CODE

SC000335 DIN VERSION WITH SAFETY VALVE 300 bar F / 232 bar M

FINAL SAFETY VALVE



CODE

6-05-015/2/232 232 bar VERSION 6-05-015/2/250 250 bar VERSION 6-05-015/2/300 300 bar VERSION 6-05-015/2/330 330 bar VERSION

PRESSURE REGULATOR 300/200 BAR



CODE

SC000531 FOR MCH 6 COMPACT WITH ELECTRIC MOTORS ONLY

OPTIONAL FILLING CONNECTIONS



CODE **SC000460** BC DIN 300 bar



CODE **SC000470** BC DIN 232 bar



CODE **SC000450 BC INT**









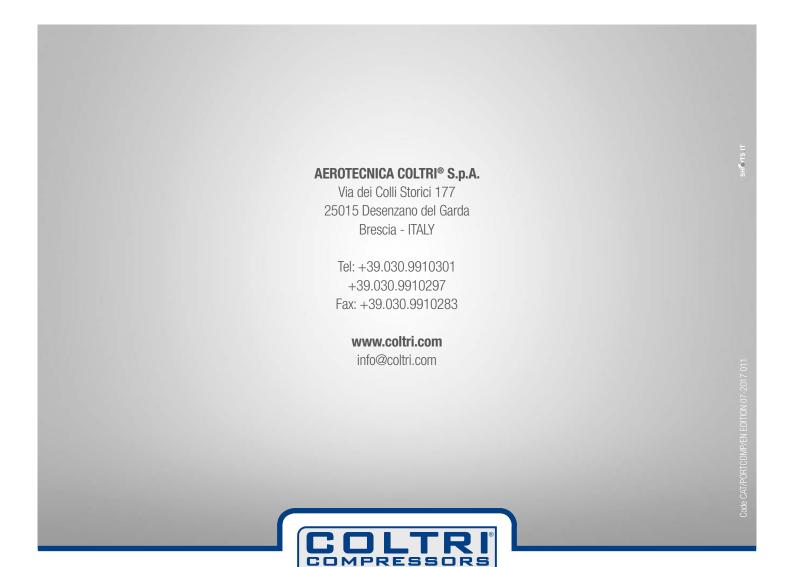
CODE SC000460/M/D230/SP BC DIN 230 bar WITH PRESSURE GAUGE

CODE SC000460/M/D300/SP BC DIN 300 bar WITH PRESSURE GAUGE

CODE **RE100350 DIN/INT FITTING**



CODE **VA800188 SERVICE KIT FOR BC ALL TYPES**



High and low pressure compressors for pure breathing air and technical gases.

Some technical characteristics and products presented in this catalog may be modified or substituted without prior notice.