

HIGH AND LOW PRESSURE COMPRESSORS FOR PURE  
BREATHING AIR - NITROX AND TECHNICAL GASES

CATALOGUE  
**2019**

# BOOSTER COMPRESSORS



# COMPANY

The company has constantly evolved by closely following the rapid progress of production tools, thus creating more and more reliable products using cutting-edge equipment, such as robots and mechanical equipment with numerical controls.

In the Aerotecnica Coltri workshops, designing new products is predominately aimed at the quest for quality in order to create absolutely reliable and long-lasting products.



■ Every component of our pumping units is designed and manufactured in the Aerotecnica Coltri workshops. All the compressors found in this catalogue are assembled entirely within the company.

Aerotecnica Coltri's readiness to foresee advanced technology has led us to improve the operational quality and precision of our compressors.



# PRODUCTION



The production of high quality mechanical parts in Aerotecnica Coltri workshops is guaranteed by an efficient quality control system in the production cycle.

■  
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 pieces of more complex components.

■  
DEA® makes it possible to carry out precise measurements of objects with extremely variable dimensions and geometrical configurations as well as guaranteeing the production of the precise mechanical parts present in Coltri's compressors.

Through continuous refinement, Aerotecnica Coltri obtains quality certificates recognised around the world.

## QUALITY

UNI EN ISO 9001:2015



SISTEMA DI GESTIONE  
QUALITÀ CERTIFICATO



Breathing-Air Quality Testing Regulations EN12021

# COMPACT

LINE: BOOSTER

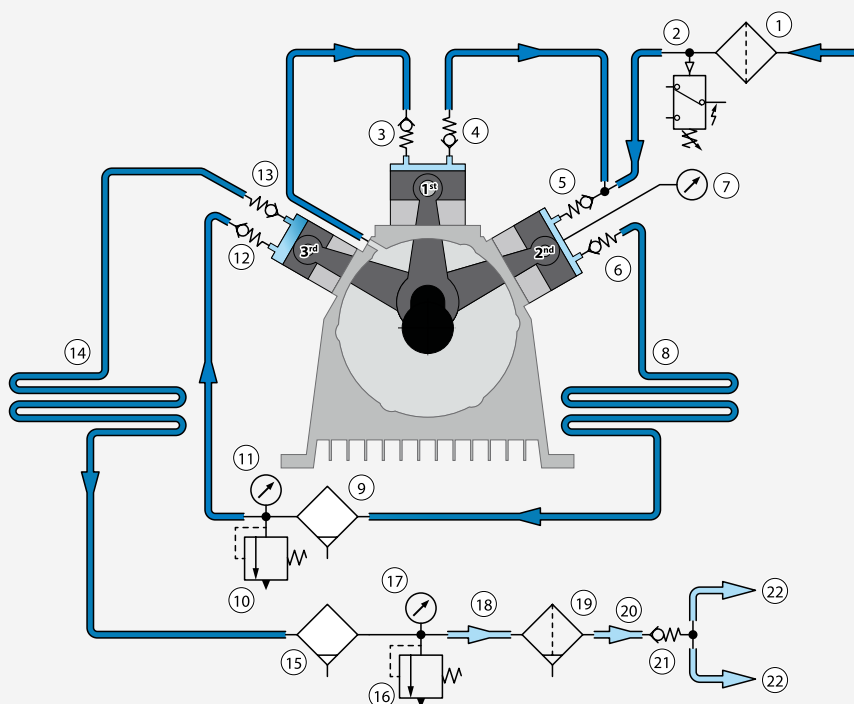


## DESCRIPTION

The COMPACT air-cooled high-pressure booster is the ideal solution for compressing air, nitrogen and technical gases when there is a non-atmospheric suction pressure between 2 and 8 bar. The ergonomic design offers excellent accessibility to the controls, and its compact dimensions mean it can be installed in confined spaces. Equipped with automatic condensate drain as well as an autostop and re-start switch.



## BOOSTER 16 PUMPING UNIT



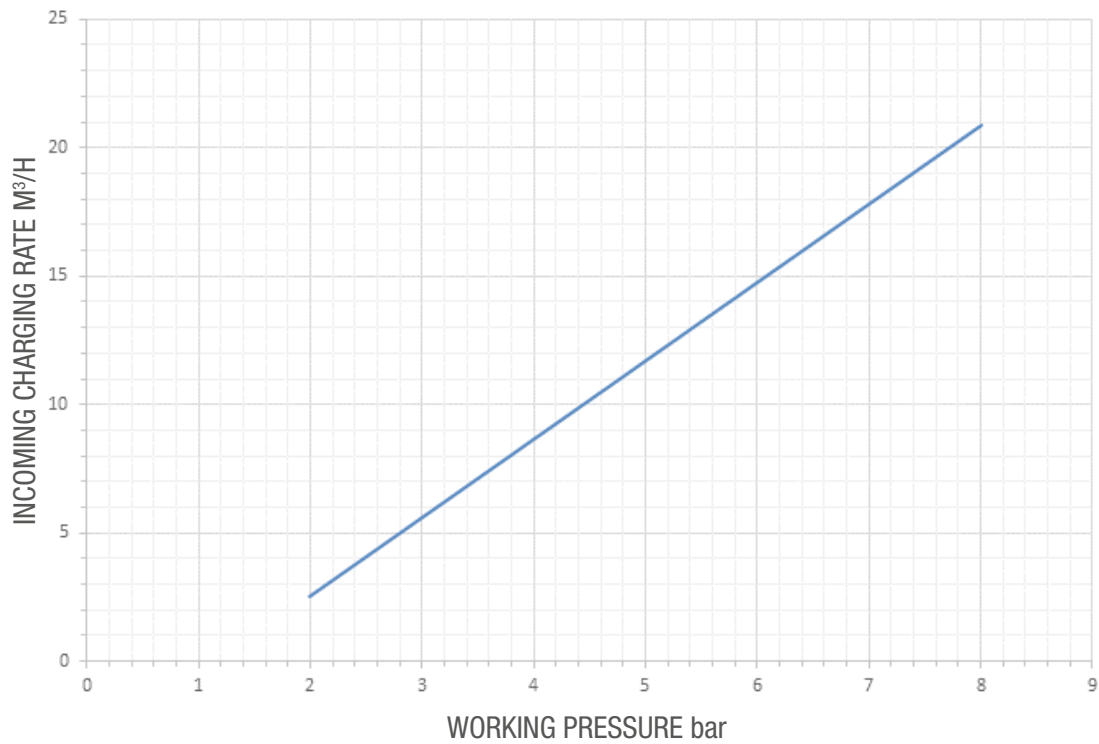
- |  |  |
|--|--|
| <b>1</b> Intake filter                         | <b>12</b> Intake valve 3rd stage                 |
| <b>2</b> Pressure switch                       | <b>13</b> Outlet valve 3rd stage                 |
| <b>3</b> Intake valve 1st stage                | <b>14</b> Aftercooler                            |
| <b>4</b> Outlet valve 1st stage                | <b>15</b> Condensate separator                   |
| <b>5</b> Intake valve 2nd stage                | <b>16</b> Safety valve                           |
| <b>6</b> Outlet valve 2nd stage                | <b>17</b> Pressure gauge                         |
| <b>7</b> Suction pressure gauge                | <b>18</b> Pipe separator/filter                  |
| <b>8</b> Cooling pipe 2nd/condensate separator | <b>19</b> Purifier filter                        |
| <b>9</b> Condensate separator                  | <b>20</b> Pipe filter/pressure maintenance valve |
| <b>10</b> Safety valve 2nd stage               | <b>21</b> Pressure maintenance valve             |
| <b>11</b> Pressure gauge 2nd stage             | <b>22</b> Flex hoses                             |

# TECHNICAL DATA

DRIVEN BY	THREE-PHASE ELECTRIC MOTOR
CHARGING RATE	255÷615 l/min - 15.2÷36.8 m³/h - 8.9÷21.6 CFM FAD
INCOMING CHARGING RATE	From 2.5 m³/h - 1.4 CFM FAD 2 bar - 29 psig to 21 m³/h - 12.6 CFM FAD 8 bar - 116 psig
WORKING PRESSURE	232 - 300 - 330 bar - 3365 - 4351 - 4786 psig
NET WEIGHT Approx.	163 kg - 359 lb
NOISE Lwa	74,5 dB

# GRAPHIC

BOOSTER CHARGING RATE 5,5 KW



# STANDARD



Electrical cabinet  
with hour meter



Automatic condensate drain  
and autostop



Oil level  
switch/auto shut off



Phase controller  
that prohibits reverse rotation



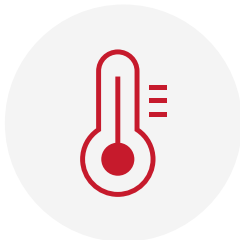
Pressure gauges  
interstage control  
+ entry pressure



Restart

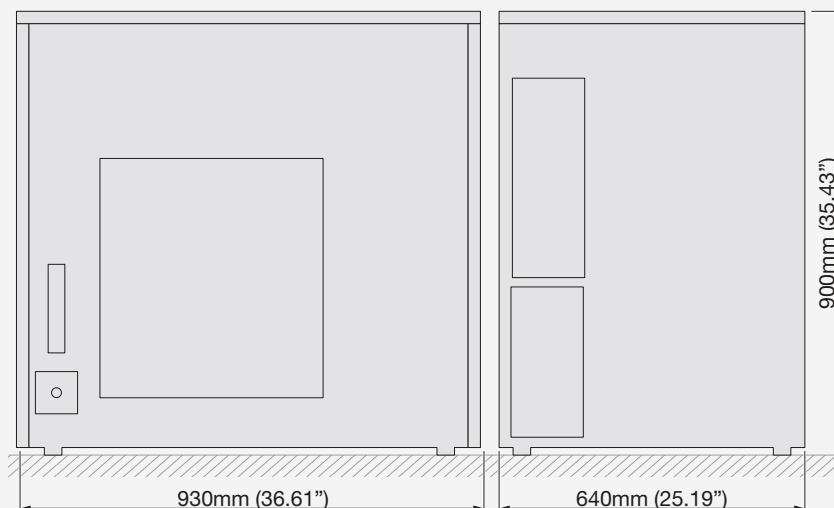


Pressure switch  
on entrance

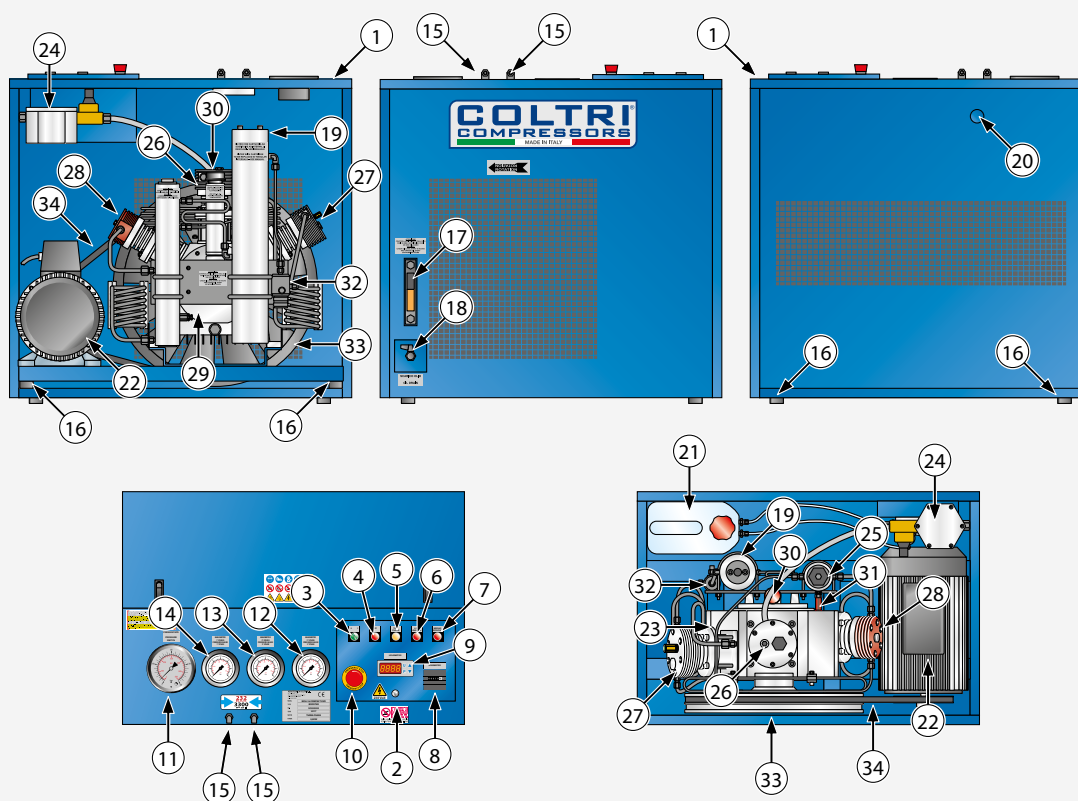


Thermostat  
Cabin temperature  
thermostat/auto shut off

## DIMENSIONS



## MACHINE PARTS



- |   |                                     |                                      |
|---|-------------------------------------|--------------------------------------|
| <b>1</b> Frame                                      | <b>12</b> 3rd stage pressure gauge  | <b>24</b> Filter                     |
| <b>2</b> Control pannel                             | <b>13</b> 2nd stage pressure gauge  | <b>25</b> Final condensate separator |
| <b>3</b> ON switch                                  | <b>14</b> 1st stage pressure gauge  | <b>26</b> 1st stage                  |
| <b>4</b> Stop pushbutton                            | <b>15</b> High pressure gas output  | <b>27</b> 2nd stage                  |
| <b>5</b> Condensate discharge pushbutton            | <b>16</b> Anti-vibration device     | <b>28</b> 3rd stage                  |
| <b>6</b> Oil level warning light                    | <b>17</b> Oil level                 | <b>29</b> Monobloc                   |
| <b>7</b> Direction of rotation indicator light      | <b>18</b> Oil discharge valves      | <b>30</b> Oil filler plug            |
| <b>8</b> Hour counter                               | <b>19</b> Purifier filter           | <b>31</b> Safety valve               |
| <b>9</b> Cabinet interior / cooling air temperature | <b>20</b> Intake extension hole     | <b>32</b> Maintenance valve          |
| <b>10</b> Emergency pushbutton                      | <b>21</b> Condensate collection can | <b>33</b> Cooling fan                |
| <b>11</b> Automatic shutdown pressure switch        | <b>22</b> Motor                     | <b>34</b> Belt                       |
|   | <b>23</b> Compressor                |                                      |

# OPEN

## LINE: BOOSTER

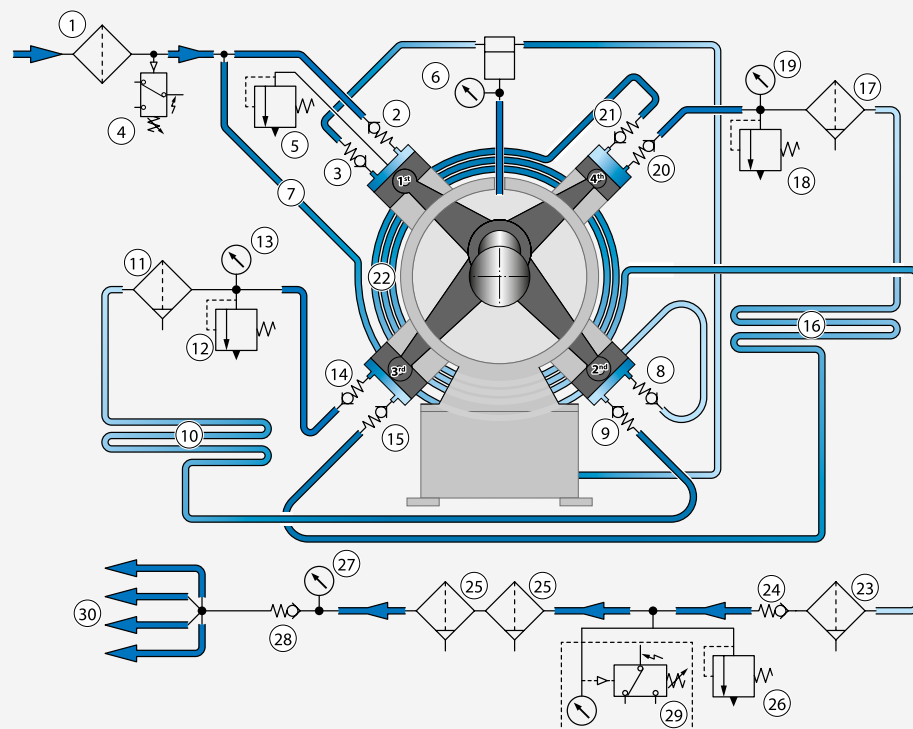


## DESCRIPTION

The OPEN model is a high pressure booster compressor based on the efficient MCH 36 pumping unit. The control and command components, essential for daily tasks, are on the front panel for easy access.



## BOOSTER 40 PUMPING UNIT

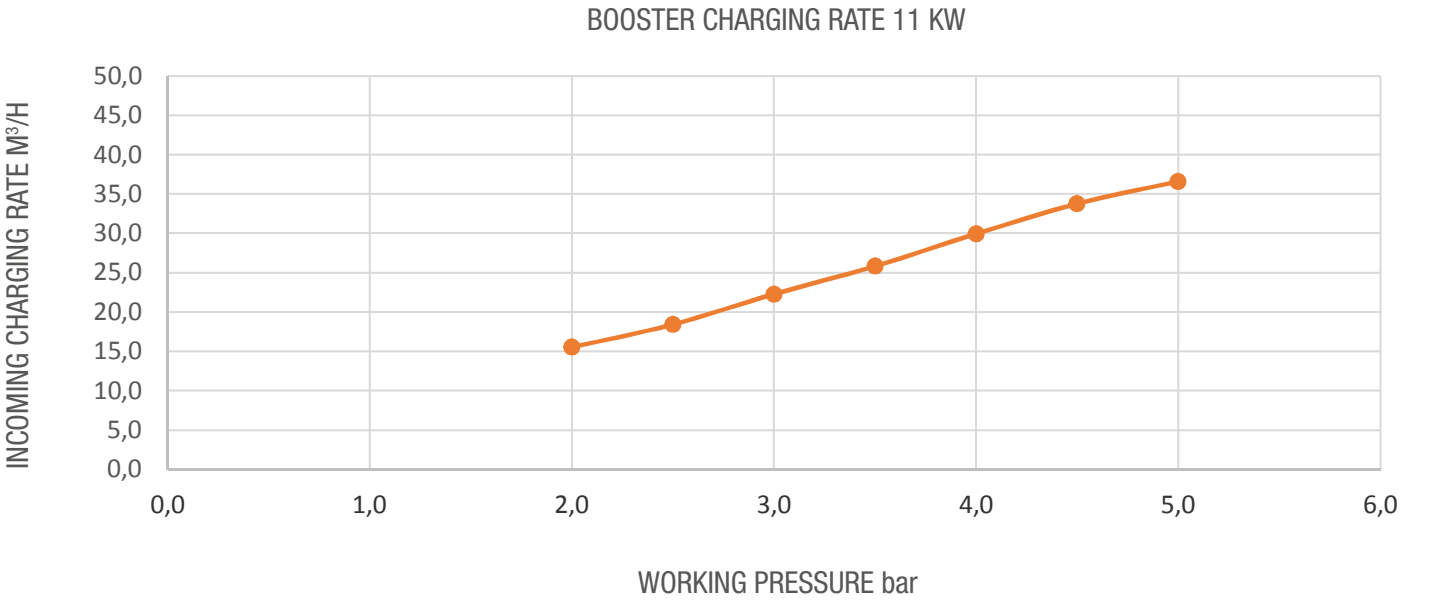


- |                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| 1 Intake filter               | 11 Condensate separator       | 21 Outlet valve 4th stage     |
| 2 Intake valve 1st stage      | 12 Safety valve 2nd stage     | 22 Final cooling pipe         |
| 3 Outlet valve 1st stage      | 13 Pressure gauge 2nd stage   | 23 Condensate separator       |
| 4 Pressure switch             | 14 Intake valve 3rd stage     | 24 Non return valve           |
| 5 Safety valve 1st stage      | 15 Outlet valve 3rd stage     | 25 Active carbon air filter   |
| 6 Pressure gauge 1st stage    | 16 Cooling pipe 3rd-4th stage | 26 Safety valve               |
| 7 Cooling pipe 1st-2nd stage  | 17 Condensate separator       | 27 Pressure gauge 4th stage   |
| 8 Intake valve 2nd stage      | 18 Safety valve 3rd stage     | 28 Pressure maintenance valve |
| 9 Outlet valve 2nd stage      | 19 Pressure gauge 3rd stage   | 29 Pressure switch            |
| 10 Cooling pipe 2nd-3rd stage | 20 Intake valve 4th stage     | 30 Flex hoses                 |

# TECHNICAL DATA

DRIVEN BY	THREE-PHASE ELECTRIC MOTOR
CHARGING RATE	258÷610 l/min - 15,48÷36,6 m³/h - 9.1÷21.5 CFM FAD
INCOMING CHARGING RATE	From 15,5 m³/h - 9.1 CFM FAD 2 bar - 29 psig to 36,6 m³/h - 21.5 CFM FAD a 5 bar - 72.5 psig
WORKING PRESSURE	232 - 300 - 330 - 420 bar - 3365 - 4351 - 4786 - 6091 psig
NET WEIGHT Approx.	375 kg - 827 lb
NOISE Lwa	78 dB

# GRAPHIC



# STANDARD



Electrical cabinet  
with hour meter



Automatic condensate drain  
and autostop



Oil level  
switch/auto shut off



Phase controller  
that prohibits reverse rotation



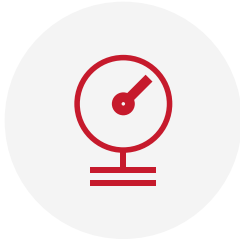
Pressure gauges  
interstage control  
+ entry pressure



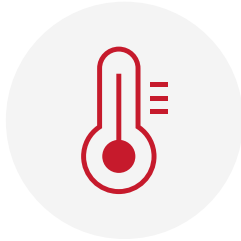
Oil pump



Restart

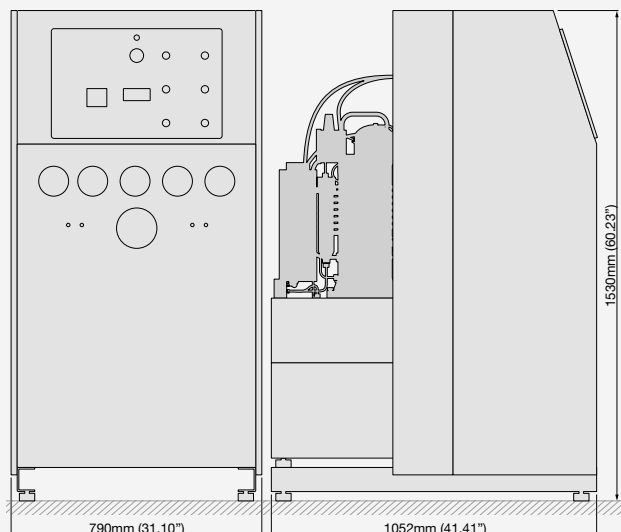


Pressure switch  
on entrance

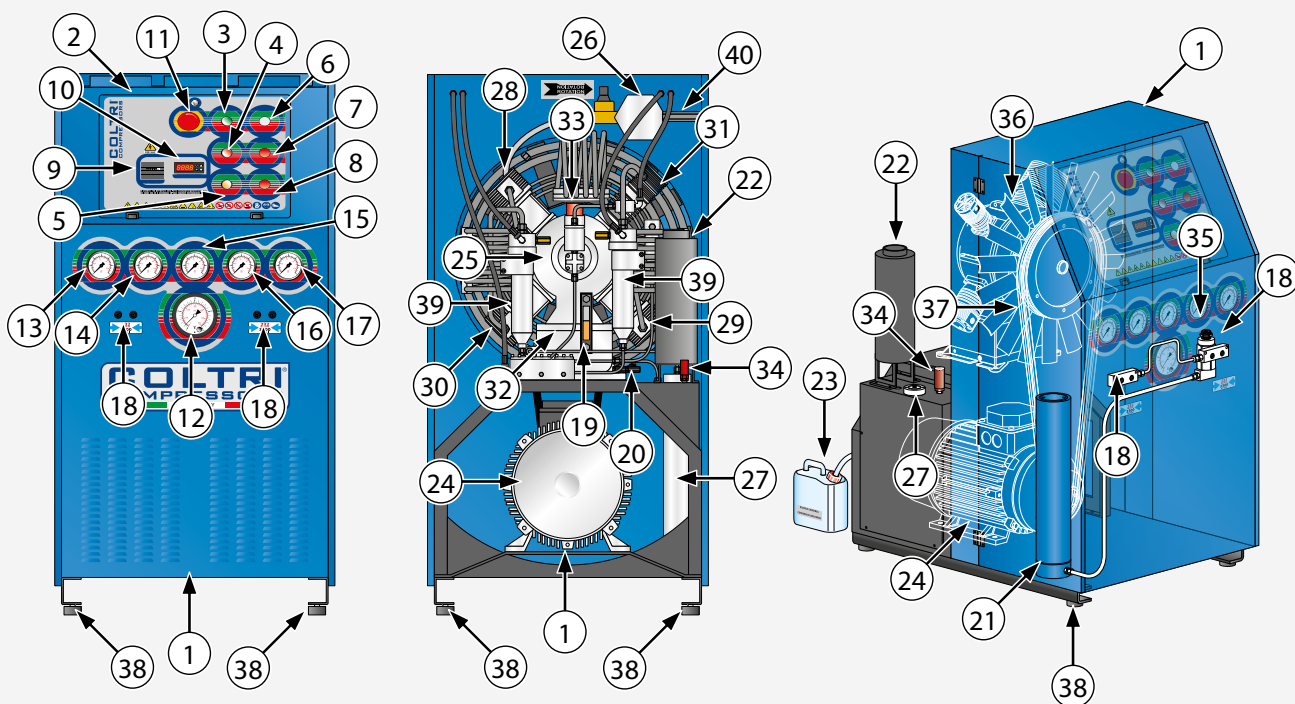


Thermostat  
Cabin temperature  
thermostat/auto shut off

## DIMENSIONS



## MACHINE PARTS



- |    |  |    |   |    |                       |
|----|--|----|---|----|-----------------------|
| 1  | Frame                                      | 15 | 2nd stage pressure gauge                      | 28 | 1st stage             |
| 2  | Control pannel                             | 16 | 3rd stage pressure gauge                      | 29 | 2nd stage             |
| 3  | ON pushbutton                              | 17 | 4th stage pressure gauge/<br>working pressure | 30 | 3rd stage             |
| 4  | Stop pushbutton                            | 18 | Pressure gas outlet                           | 31 | 4th stage             |
| 5  | Condensate discharge pushbutton            | 19 | Oil level                                     | 32 | Monobloc              |
| 6  | Power indicator light                      | 20 | Oil discharge valves                          | 33 | Oil filler plug       |
| 7  | Direction of rotation indicator light      | 21 | Purifier filter                               | 34 | Safety valve          |
| 8  | Oil level warning light                    | 22 | Condensate collection container               | 35 | Maintenance valve     |
| 9  | Hour counter                               | 23 | Condensate collection can                     | 36 | Cooling fan           |
| 10 | Cabinet interior / cooling air temperature | 24 | Motor   | 37 | Belt                  |
| 11 | Emergency pushbutton                       | 25 | Compressor                                    | 38 | Anti-vibration device |
| 12 | Automatic shutdown pressure switch         | 26 | Air filter                                    | 39 | Condensate separator  |
| 13 | Oil pressure gauge                         | 27 | Final condensate separator                    | 40 | Gas inlet 2÷5bar      |
| 14 | 1st stage pressure gauge                   |    |   |    |                       |

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