

# **CNG SERIES**

Delivery m<sup>3</sup>h 3,6 - 10 - 14 - 18 - 27 - 36

Filling type P30 (200 BAR) / P36 (250 BAR)

> MAX Pressure BAR 350 / PSI 5000



Quality system certified to iso 9001

All technical data may be changed

MADE IN ITALY BY NARDI COMPRESSORI

www.nardicompressori.com

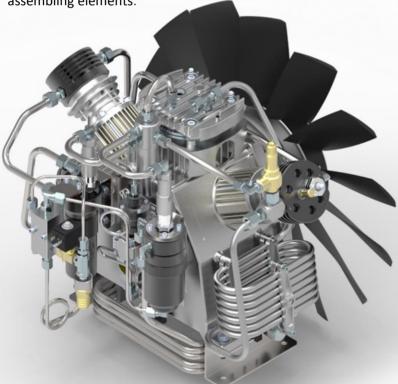


# **CNG SERIES**

CNG SERIES is a product line that includes several compressors made by NARDI COMPRESSORI, designed for the refueling of vehicles that run on natural gas. CNG-5.0 is an ATEX Certified compressor that sucks natural gas from the domestic natural gas pipeline and compresses it to the required pressure to refuel vehicles directly or to place the compressed gas in high pressure storage cylinders.

# **QUALITY** OF COMPRESSOR BLOCK

The compressor block or pump unit is the heart of the PACIFIC compressors and it is a critical component in which NARDI has put particular attention. It has features that make it unique in the world. Among these, the use of light alloys with high thermal efficiency, such as aluminum alloys that are also used for the construction of the cylinders. The pump unit does not undergo any paint coating to enhance the heat dissipation of its low corrosion assembling elements.



The bearings of the crankshaft have rollers, extremely robust and made in Europe which guarantee a long life of the compressor. An oil pump provides a constant lubrication of the inner workings of the block with oil

cleaned of impurities by a filter and by a magnet which catches any metals present in the lubricating oil.

The compressed air cooling is obtained by inter-stage stainless steel cooling coils.

## **EFFICIENCY** OF THE FRAME

The sound insulated frame or cabinet is constructed with panels that are designed to work in harsh conditions and to withstand harsh environments. In addition to this the sound absorbing internal lining of the panels make the cabinet very quiet. The large wing-shaped fan blades guarantee not only a very low sound pressure but also a highly efficient ventilation.

## **CONTROL** AND ELECTRONICS

For proper operation of the compressor, NARDI has designed a new electronic control panel. This new system, controls all the key points as temperature, oil level, current consumption, inlet pressure, outlet pressure and manages all the valves and solenoid valves. In addition to this, the electronic control panel handles the service schedule and monitors the status of the failures, guaranteeing safety. For direct refueling of vehicles, it monitors the external temperature and regulates the delivery pressure so as to balance the pressure of the tank of the vehicle due to an increase in temperature.

## SIMPLE and ECOLOGIC

Every single aspect of these compressors has been designed to make it EASY TO USE. In fact, with very few moves the operator can refuel a vehicle safely: insert the nozzle into the vehicle's gas tank, click on the start button and the rest is done automatically by the compressor.

Once the maximum pressure is reached or when pressing the stop button the compressor depressurizes the filling hose and nozzle. Then the nozzle can be removed from the vehicle to conclude the refueling operation.

During depressurization, the compressed gas is reabsorbed by the compressor and then placed in an expansion tank which makes it a more ecologic solution as the gas is not vented into the environment and wasted but reutilized the next time the compressor is used.

All technical data may be changed

MADE IN ITALY BY NARDI COMPRESSORI

www.nardicompressori.com

Art. CNG (eng) Rev. 01/2016 Proprietà di NARDI<sup>®</sup> COMPRESSORI



- 1 Compressor Block
- 2 3-Phase Electric Motor
- **3** Sound Absorbing Panels
- 4 Electronic Control Panel
- **5** Compressor Pressure Gauge
- 6 Suction Control Valve



- **7** Connection for direct refueling to vehicle
- **8** System to switch from direct refueling to gas storage
- 9 Condensate Drain

### All technical data may be changed

MADE IN ITALY BY NARDI COMPRESSORI

www.nardicompressori.com

Art. CNG (eng) Rev. 01/2016 Proprietà di NARDI<sup>®</sup> COMPRESSORI



| Compressor Model    | F. <i>F</i> | A.D. | Intake Pressure   | Stage | Revolution | Power     | Noise  | Weight |     | Dimensions     |
|---------------------|-------------|------|-------------------|-------|------------|-----------|--------|--------|-----|----------------|
| Modello Compressore | Aria resa   |      | Pres. aspirazione | Stadi | Giri       | Motore    | Rumore | Pe     | so  | Dimensioni     |
| Туре                | l/min.      | m³/h | MBar              | N°    | Rpm        | HP - kW   | dB     | Kg     | Lbs | cm (LxWxH)     |
| CNG - 1.0           | 60          | 3,6  | 50 - 500          | 3     | 550        | 4 - 3,0   | 62     | 205    | 450 | 75 x 85 x 110  |
| CNG - 2.8           | 170         | 10   | 50 - 500          | 3     | 1050       | 5,5 - 4,0 | 65     | 215    | 475 | 75 x 85 x 110  |
| CNG - 3.8           | 233         | 14   | 50 - 500          | 3     | 1050       | 7,5 - 5,5 | 65     | 230    | 510 | 75 x 85 x 110  |
| CNG - 5.0           | 300         | 18   | 50 - 650          | 3     | 1550       | 10 - 7,5  | 65     | 275    | 610 | 80 x 110 x 140 |
| CNG - 7.5           | 450         | 27   | 100 - 650         | 3     | 1150       | 15 - 11,0 | 68     | 415    | 915 | 83 x 150 x 174 |
| CNG - 10.0          | 600         | 36   | 100 - 650         | 3     | 1450       | 20 - 15,0 | 68     | 430    | 958 | 83 x 150 x 174 |

5

STORAGE 2 CYLINDERS FOR CNG7.5 and CNG-10.0

| Gas Storage Model          | Cylinders | Volume | Max Pressure      |      | Standard | Weight |     | Dimensions    |
|----------------------------|-----------|--------|-------------------|------|----------|--------|-----|---------------|
| Modello Stoccaggio         | Bombole   | Volume | Pressione massima |      | Norma    | Peso   |     | Dimensioni    |
| Туре                       | N°        | Litri  | BAR               | PSI  | Туре     | Kg     | Lbs | cm (LxWxH)    |
| CNG-5.0 STOCK 2 CYLINDERS  | 2         | 100    | 300               | 4350 | PED      | 205    | 452 | 72 x 68 x 185 |
| CNG-10.0 STOCK 2 CYLINDERS | 2         | 100    | 300               | 4350 | PED      | 215    | 475 | 72 x 68 x 185 |

#### NARDI COMPRESSORI SRL

 Via Marco Polo, 2
 Phone +39 0444 159111

 36075 Montecchio Maggiore (VI) ITALY
 Fax +39 0444 159122

#### SUBJECT TO TECHNICAL MODIFICATIONS

info@nardicompressori.com

www.nardicompressori.com

Art. CNG (eng) Rev. 01/2016 Proprietà di NARDI<sup>®</sup> COMPRESSORI