

MADE IN ITALY



**POWER
SYSTEM**
AIR COMPRESSORS

Oil injected rotary
screw compressors
with direct transmission.

NOBEL

FIXED SPEED
from 30 to 37 kW

NOBEL DV

VARIABLE SPEED
from 15 to 37 kW



NOBEL - NOBEL DV

Rotary screw compressors featuring direct drive.

A complete range of products: 3 cabinet sizes, multiple configurations, suitable for any specific application



High efficiency with maximum energy savings

Power System engineered Direct drive transmission. Optimised component technology. Utilisation of new generation high efficiency motors, drive and inverter technology.



Silent

The very low operating speed along with the use of radial cooling fans allows NOBEL series compressors to achieve the lowest noise levels in the sector, between 60 and 70 dB(A).



Simplified maintenance

All service access has been made simple and extremely convenient reducing down time and service costs.



Robust construction

The coaxial or gear driven transmission minimises maintenance and increases the reliability and longevity of the machine. The combination of proven technologies along with components designed and built by Power System, guarantees high efficiency and premium reliability.



Remote monitoring and preventive maintenance

The SMS system, which is utilised with the DNAir2 controller, allows for the remote control of the compressor and for the provision of alarm signals in case of any incidents.



15 kW DV



18.5-22 kW DV



30-37 kW

15 kW

- Floor mounted
- Floor mounted with integrated refrigerated dryer
- Variable speed (DV)

18,5-22 kW

- Floor mounted
- Floor mounted with integrated refrigerated dryer
- Variable speed (DV)

30-37 kW

- Floor mounted
- Floor mounted with integrated refrigerated dryer
- Fixed speed
- Variable speed (DV)

Optimal control and adjustment



The main screen display indicates:

- operating pressures;
- oil temperature;
- compressor status (stand-by, un-loaded, loaded);
- fan status (off/on);
- date and time;
- remaining hours for maintenance;
- flow rate supplied percentage (for machines with inverter);
- visual indicator of the dryer's dew point (integrated dryer versions).

Innovative DNaIr2 controller

The innovative DNaIr2 controller is utilised on all NOBEL models. Specially designed for simple and flexible programming, it adjusts and controls the operation of the compressor, guaranteeing its efficiency and safety. The user-friendly interface consists of a large backlit LCD display, with simple and clearly understood icons. All commands and functions are accessed easily using multilingual drop-down menus.

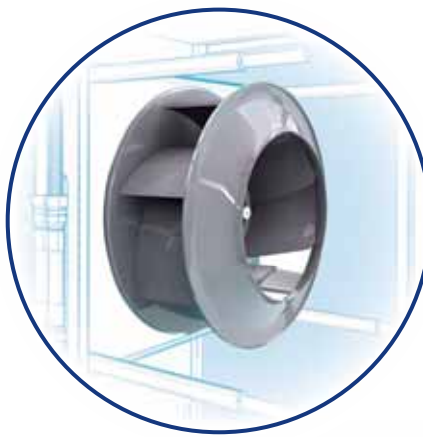
Compressor rotation management

With the fixed speed variants of NOBEL, it is possible for up to 4 compressors to be connected simultaneously. The controller software provides the ability to balance each machine's operating hours and at the same time the pre-set pressure values are rotated along with the machine sequence.



DNAir2 controller

Simple and intuitive, sophisticated functionality and flexible programming.



Radial ventilation

Combines the highest cooling efficiency with reduced energy consumption and very low noise levels.



Inverter

The latest generation inverter drive, allows for a controlled use of energy minimising CO₂ output and lowering energy costs.



Refrigerated dryer (optional)

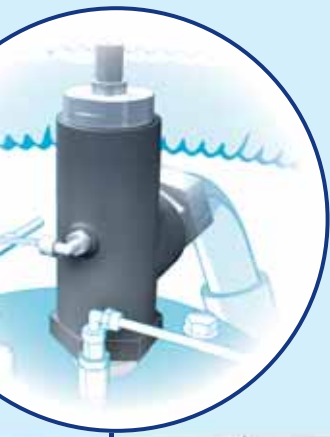
With a new design, which also includes the inlet filter and final filter to provide clean and dry compressed air and to simplify installation and at the same time reducing the space requirement. The function and control of the dryer is handled by the DNAir2 controller.



Thermostatic valve

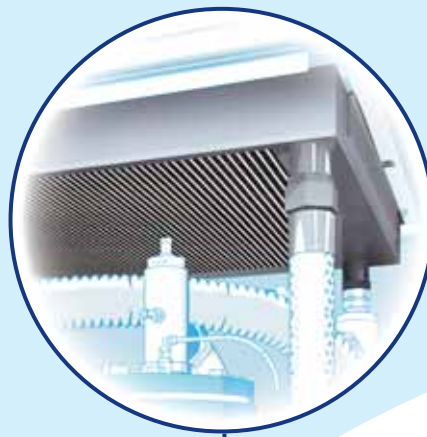
Controls the coolant flow avoiding sudden temperature changes and reduces the risk of condensation being formed.





Minimum pressure valve

Designed by Power System to guarantee low pressure losses and reduced energy consumption.



Heat exchangers

Generously dimensioned coolers combining high efficiency heat transfer and low pressure loss.



Integrated condensate drain

Available in standard configuration in models from 11 to 37 kW (without refrigerated dryer) and controlled by the DNAir2.



Intake regulator

Designed 'in house' by Power System, guaranteeing high efficiency, reduced noise levels and the highest reliability.

Transmission

Original Power System design offering the highest efficiency with ultimate reliability in both the direct and gear adopted versions.



NOBEL DV

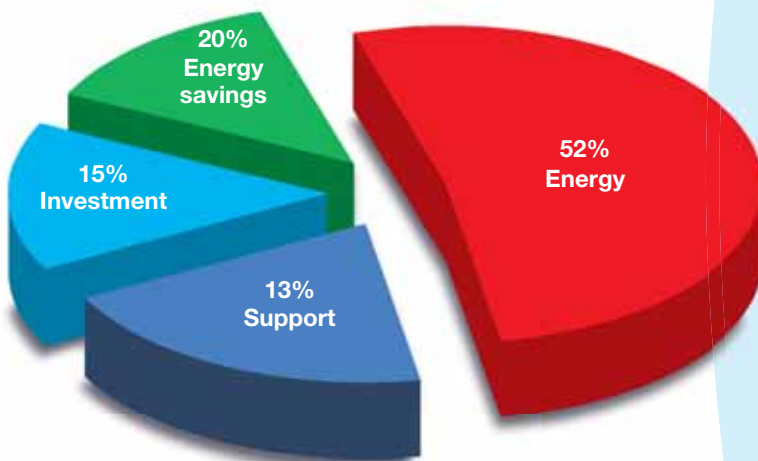
Maximum energy efficiency

Variable speed with inverter drive

The reduction of energy consumption and the protection of our precious environmental resources is one of the major global challenges in our times.

Thanks to decades of experience in the industry, Power System is recognised as a technological leader in the field of variable speed compressors, capable of guaranteeing high performance levels and efficient energy solutions.

The optimised frequency converter provides the capability to dynamically regulate the frequency, voltage and current values supplied to the main electric motor, constantly eliminating useless power drops, continuously adjusting the compressed air generation in line with the amount of compressed air that is required.



MANAGEMENT COSTS

The graph shows the considerable energy savings achieved with a variable speed compressor in a typical installation.

The benefits of using the NOBEL DV with inverter are remarkable:

- continuous control and regulation of the volume of air generated by varying the speed of the electric motor from 30% up to 100% of the motors full speed;
- the compressed air generated is therefore constantly proportional to the requirements of the system;
- the pressure control inside the system is controlled accurately and precisely, in a range between 6 and 13 bar, depending on the chosen compressor model.

SMS Device (Service Management System)

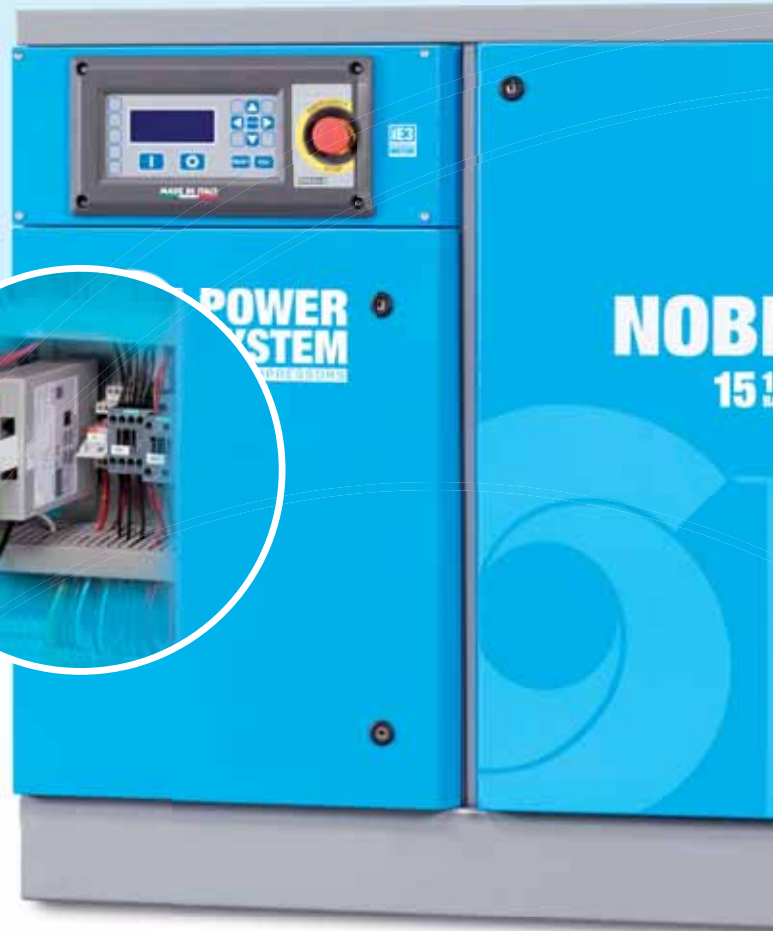
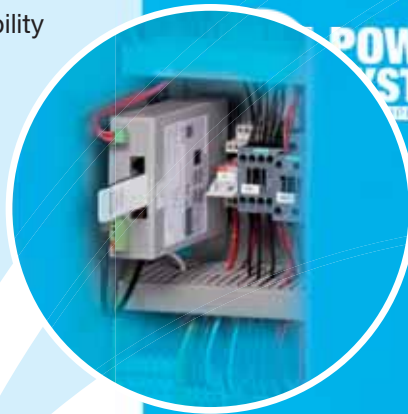
SMS is an innovative new device that allows operators and service centres the possibility to remotely control and perform preventive maintenance checks on screw compressors equipped with a DNAir2 controller. These facilities are provided when the device is configured for local internet network via Wi-Fi or Ethernet connectivity. The SMS system allows for e-mails to be sent automatically in the case of a fault or other anomalies and/or for automatic regular e-mails (hourly, daily or weekly) to be sent to monitor the proper operation of the compressor and to define the remaining hours for service. Other Information and settings can be accessed remotely aimed at safeguarding the reliability of the system.

Preventive and targeted maintenance

- automatic sending of e-mails in case of alarms,
- possibility of sending e-mails which notify the compressor status and settings at pre-set intervals (hourly, daily or weekly).

Remote control of the compressor

- access to the various menu levels (user, service),
- compressor online status check,
- on/off control,
- no additional software is required



Savings energy in your company? It is possible!

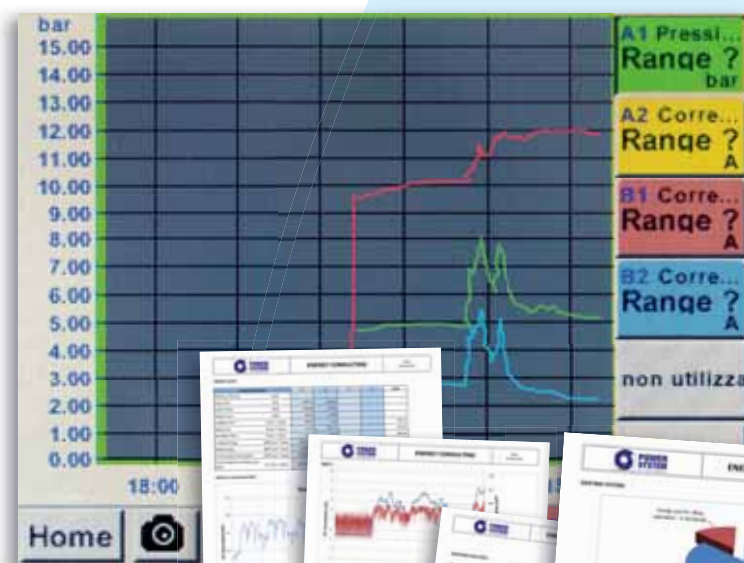
The energy efficiency of a production plant or any application using compressed air is most important as it may represent a very significant part of the whole energy consumption for the facility. The proper control of compressed air generation provides countless opportunities for the application to Improve the whole production process, in terms of energy consumption, efficiency, costs and emissions.

Based upon decades of experience in the industrial sector, Power System provides a professional auditing service to our clients. Our skilled technicians, using advanced measurement and analysis equipment (EATool and EASoftware) can carry out a full audit of any system. This allows us to fully understand your system demands, existing energy consumption and wastage.

Our advanced simulation software then allows us to propose various technical options that are aimed at providing considerable economic and energy consumption based savings.

EASoftware

- Using accurate data on the actual consumption or generation of compressed air in the system along with existing energy usage.
- Providing a complete and precise Energy Audit of the system (air generated, system load, pattern of use, pressure etc.).
- provides options for an alternative system that might include one or more compressors and controls as a possible alternative to the existing installation, to provide maximum energy savings and a reduction in wasted energy.



EATool

- Designed to measure compressed air systems in which up to 4 compressors will operate.
- Measurements are downloaded to a USB drive or USB/PC.
- Supplied: up to 4 x 400 A ampere clamps (optional up to 1000A) and a pressure sensor.
- Capable of analysing over a long time period (usually eight days or more is ideal).

Extend the life and efficiency of your compressor

In addition to offering the highest quality and technologically advanced products, Power System focuses its attention on customer care and full technical and product support, identifying our customer's needs and only then offering the most suitable solutions designed to work for our clients. Our professional technical support team provides on the phone assistance on all technical matters. We also provide on-site consultancy, maintenance plans, energy audits and training programmes etc.

Long-Life Kit for the scheduled maintenance of Power System screw compressors

To simplify the replacement of service items and to assist with efficient planning of routine maintenance, Power System has developed new spare parts packaging in the form of a "LONG-LIFE KIT", specially designed for each screw compressor model. By utilising our Long-Life Kit customers benefit from: increased maintenance intervals, improved energy efficiency, reduced costs and at the same time ensuring the product's continued performance and reliability and at the same time protecting your investment.



Technical data



NOBEL 15 kW DV

| Power | | Air outflow rate (DV = max. / min.) | | Max. pressure | | Sound level | Connec- tion | Net weight | | Net dimensions | | Gross weight | | Gross dimensions | |
|-------|----|--|--------|---------------|--------|-------------|-----------------|------------|-----|----------------|----|--------------|------------|------------------|--|
| kW | HP | m³/min. | c.f.m. | bar | p.s.i. | dB(A) | Ø | kg | Lbs | LxWxH (cm) | kg | Lbs | LxWxH (cm) | | |

| NOBEL 15 DV | | | | | | | | | | | | | | |
|-----------------|----|----|------------|---------|----|-----|----|------|-----|-----|------------|-----|-----|--------------|
| NOBEL 15-08 DV | 15 | 20 | 2.5 / 0.95 | 88 / 34 | 8 | 116 | 68 | 3/4" | 250 | 551 | 110x75x100 | 270 | 595 | 120x81x118 |
| NOBEL 15-10 DV | 15 | 20 | 2.1 / 0.84 | 74 / 30 | 10 | 145 | 68 | 3/4" | 250 | 551 | 110x75x100 | 270 | 595 | 120x81x118 |
| NOBEL 15-08 DVF | 15 | 20 | 2.5 / 0.95 | 88 / 34 | 8 | 116 | 68 | 3/4" | 310 | 683 | 145x76x100 | 332 | 732 | 150.5x81x118 |
| NOBEL 15-10 DVF | 15 | 20 | 2.1 / 0.84 | 74 / 30 | 10 | 145 | 68 | 3/4" | 310 | 683 | 145x76x100 | 332 | 732 | 150.5x81x118 |



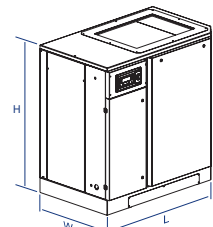
NOBEL 18.5-22 kW

| Power | | Air outflow rate (DV = max. / min.) | | Max. pressure | | Sound level | Connec- tion | Net weight | | Net dimensions | | Gross weight | | Gross dimensions | |
|-------|----|--|--------|---------------|--------|-------------|-----------------|------------|-----|----------------|----|--------------|----------------|------------------|--|
| kW | HP | m³/min. | c.f.m. | bar | p.s.i. | dB(A) | Ø | kg | Lbs | L x W x H (cm) | kg | Lbs | L x W x H (cm) | | |

| NOBEL 18.5 DV | | | | | | | | | | | | | | |
|-------------------|------|----|-------------|----------|------|-----|----|--------|-----|------|------------|-----|------|-------------|
| NOBEL 18.5-08 DV | 18.5 | 25 | 3.1 / 1.07 | 109 / 38 | 7.5 | 109 | 62 | 1" 1/4 | 615 | 1356 | 137x88x136 | 696 | 1534 | 150x100x160 |
| NOBEL 18.5-10 DV | 18.5 | 25 | 2.6 / 0.93 | 92 / 33 | 9.5 | 138 | 62 | 1" 1/4 | 615 | 1356 | 137x88x136 | 696 | 1534 | 150x100x160 |
| NOBEL 18.5-08 DVF | 18.5 | 25 | 3.1 / 1.07 | 109 / 38 | 12.5 | 181 | 62 | 1" 1/4 | 685 | 1510 | 172x88x136 | 766 | 1689 | 186x100x160 |
| NOBEL 18.5-10 DVF | 18.5 | 25 | 2.6 / 0.93 | 92 / 33 | 10 | 145 | 62 | 1" 1/4 | 685 | 1510 | 172x88x136 | 766 | 1689 | 186x100x160 |
| NOBEL 22 DV | | | | | | | | | | | | | | |
| NOBEL 22-08 DV | 22 | 30 | 3.6 / 1.17 | 127 / 41 | 7.5 | 109 | 64 | 1" 1/4 | 650 | 1433 | 137x88x136 | 731 | 1612 | 150x100x160 |
| NOBEL 22-10 DV | 22 | 30 | 3.01 / 1.17 | 106 / 41 | 9.5 | 138 | 62 | 1" 1/4 | 650 | 1433 | 137x88x136 | 731 | 1612 | 150x100x160 |
| NOBEL 22-13 DV | 22 | 30 | 2.56 / 0.96 | 90 / 34 | 12.5 | 181 | 62 | 1" 1/4 | 650 | 1433 | 137x88x136 | 731 | 1612 | 150x100x160 |
| NOBEL 22-08 DVF | 22 | 30 | 3.6 / 1.17 | 127 / 41 | 7.5 | 109 | 64 | 1" 1/4 | 720 | 1587 | 172x88x136 | 801 | 1766 | 186x100x160 |
| NOBEL 22-10 DVF | 22 | 30 | 3.01 / 1.17 | 106 / 41 | 9.5 | 138 | 62 | 1" 1/4 | 720 | 1587 | 172x88x136 | 801 | 1766 | 186x100x160 |
| NOBEL 22-13 DVF | 22 | 30 | 2.56 / 0.96 | 90 / 34 | 12.5 | 181 | 62 | 1" 1/4 | 720 | 1587 | 172x88x136 | 801 | 1766 | 186x100x160 |

Reference conditions: air intake temperature 20°C (68°F) – atmospheric pressure 1 bar (14.5 p.s.i.).
Air flow was measured in the following operative pressures: 7.5 bar for models at 8 bar -
9.5 bar for models at 10 bar - 12.5 bar for models at 13 bar.
The data and results were measured in accordance with standard ISO 1217.
The sound level was measured in accordance with standard ISO 3744.

| | |
|------------|--|
| DV | variable speed |
| DF | with refrigerated dryer |
| DVF | variable speed with refrigerated dryer |





NOBEL 30-37 kW

| Power | | Air outflow rate (DV = max. / min.) | | Max. pressure | | Sound level | Conne- ction | Net weight | | Net dimensions | | Gross weight | | Gross dimensions | |
|-------|----|--|--------|---------------|--------|-------------|-----------------|------------|-----|----------------|----|--------------|----------------|------------------|--|
| kW | HP | m ³ /min. | c.f.m. | bar | p.s.i. | dB(A) | Ø | kg | Lbs | L x W x H (cm) | kg | Lbs | L x W x H (cm) | | |

| NOBEL 30 | | | | | | | | | | | | | | |
|-----------------|----|----|-------------|----------|------|-----|----|--------|------|------|-------------|------|------|-------------|
| NOBEL 30-08 | 30 | 40 | 4.85 | 171 | 7.5 | 109 | 68 | 1" 1/2 | 1000 | 2205 | 162x102x156 | 1100 | 2425 | 180x116x178 |
| NOBEL 30-10 | 30 | 40 | 4.30 | 152 | 10 | 145 | 68 | 1" 1/2 | 1000 | 2205 | 162x102x156 | 1100 | 2425 | 180x116x178 |
| NOBEL 30-08 DF | 30 | 40 | 4.85 | 171 | 7.5 | 109 | 68 | 1" 1/2 | 1090 | 2403 | 196x102x156 | 1190 | 2623 | 212x116x178 |
| NOBEL 30-10 DF | 30 | 40 | 4.30 | 152 | 10 | 145 | 68 | 1" 1/2 | 1090 | 2403 | 196x102x156 | 1190 | 2623 | 212x116x178 |
| NOBEL 30 DV | | | | | | | | | | | | | | |
| NOBEL 30-08 DV | 30 | 40 | 4.85 / 1.98 | 171 / 70 | 7.5 | 109 | 68 | 1" 1/2 | 1000 | 2205 | 162x102x156 | 1100 | 2425 | 180x116x178 |
| NOBEL 30-10 DV | 30 | 40 | 4.30 / 1.60 | 152 / 57 | 9.5 | 138 | 68 | 1" 1/2 | 1000 | 2205 | 162x102x156 | 1100 | 2425 | 180x116x178 |
| NOBEL 30-08 DVF | 30 | 40 | 4.85 / 1.98 | 171 / 70 | 7.5 | 109 | 68 | 1" 1/2 | 1090 | 2403 | 196x102x156 | 1190 | 2623 | 212x116x178 |
| NOBEL 30-10 DVF | 30 | 40 | 4.30 / 1.60 | 152 / 57 | 9.5 | 138 | 68 | 1" 1/2 | 1090 | 2403 | 196x102x156 | 1190 | 2623 | 212x116x178 |
| NOBEL 37 | | | | | | | | | | | | | | |
| NOBEL 37-08 | 37 | 50 | 6.60 | 233 | 7.5 | 109 | 70 | 1" 1/2 | 1090 | 2403 | 162x102x156 | 1190 | 2623 | 180x116x178 |
| NOBEL 37-10 | 37 | 50 | 5.20 | 184 | 10 | 145 | 70 | 1" 1/2 | 1030 | 2271 | 162x102x156 | 1130 | 2491 | 180x116x178 |
| NOBEL 37-13 | 37 | 50 | 4.65 | 164 | 13 | 189 | 68 | 1" 1/2 | 1030 | 2271 | 162x102x156 | 1130 | 2491 | 180x116x178 |
| NOBEL 37-08 DF | 37 | 50 | 6.60 | 233 | 7.5 | 109 | 70 | 1" 1/2 | 1180 | 2601 | 196x102x156 | 1280 | 2822 | 212x116x178 |
| NOBEL 37-10 DF | 37 | 50 | 5.20 | 184 | 10 | 145 | 70 | 1" 1/2 | 1120 | 2469 | 196x102x156 | 1220 | 2690 | 212x116x178 |
| NOBEL 37-13 DF | 37 | 50 | 4.65 | 164 | 13 | 189 | 68 | 1" 1/2 | 1120 | 2469 | 196x102x156 | 1220 | 2690 | 212x116x178 |
| NOBEL 37 DV | | | | | | | | | | | | | | |
| NOBEL 37-08 DV | 37 | 50 | 6.60 / 2.68 | 233 / 95 | 7.5 | 109 | 70 | 1" 1/2 | 1090 | 2403 | 162x102x156 | 1190 | 2623 | 180x116x178 |
| NOBEL 37-10 DV | 37 | 50 | 5.40 / 1.71 | 191 / 61 | 9.5 | 138 | 69 | 1" 1/2 | 1030 | 2271 | 162x102x156 | 1130 | 2491 | 180x116x178 |
| NOBEL 37-13 DV | 37 | 50 | 4.52 / 1.70 | 160 / 60 | 12.5 | 181 | 67 | 1" 1/2 | 1030 | 2271 | 162x102x156 | 1130 | 2491 | 180x116x178 |
| NOBEL 37-08 DVF | 37 | 50 | 6.60 / 2.68 | 233 / 95 | 7.5 | 109 | 70 | 1" 1/2 | 1180 | 2601 | 196x102x156 | 1280 | 2822 | 212x116x178 |
| NOBEL 37-10 DVF | 37 | 50 | 5.40 / 1.71 | 191 / 61 | 9.5 | 138 | 69 | 1" 1/2 | 1120 | 2469 | 196x102x156 | 1220 | 2690 | 212x116x178 |
| NOBEL 37-13 DVF | 37 | 50 | 4.52 / 1.70 | 160 / 60 | 12.5 | 181 | 67 | 1" 1/2 | 1120 | 2469 | 196x102x156 | 1220 | 2690 | 212x116x178 |

Reference conditions: air intake temperature 20°C (68°F) – atmospheric pressure 1 bar (14.5 p.s.i.).

Air flow was measured in the following operative pressures: 7 bar for models at 7.5 bar -

9 bar for models at 9.5 bar - 9.5 bar for models at 10 bar - 12 bar for models at 12.5 bar - 12.5 bar for models at 13 bar.

The data and results were measured in accordance with standard ISO 1217.

The sound level was measured in accordance with standard ISO 3744.



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