MADE IN ITALY

POWER SYSTEM
AIR COMPRESSORS

Oil injected rotary
screw compressors
with direct transmission.

EDISON DV

VARIABLE SPEED
from 110 to 250 kW

NEWTON

FIXED SPEED
from 110 to 250 kW

EDISON DV

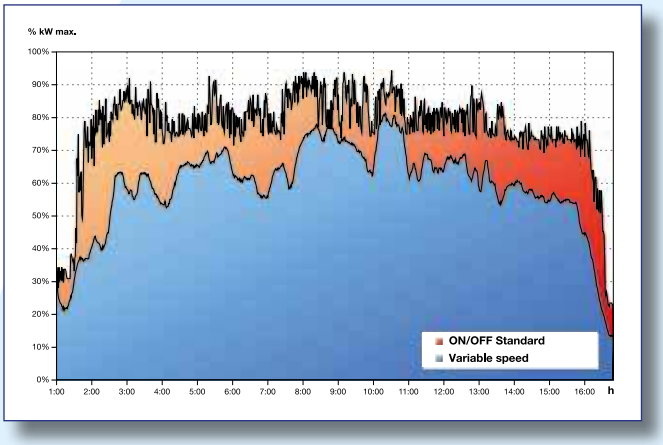
Variable speed direct driven screw compressors

Energy saving

With over 25 years of experience in the manufacture and design of Variable Speed rotary screw compressors, Power System is recognized as a technological leader in the field of Inverter employed variable speed technology.
Reducing power consumption and protecting our valuable energy resources represents one of the greatest global environmental challenges of our times.

Power System offers a wide range of Direct Driven Variable Speed screw compressors from 110 to 250 kW, providing high performance, robust and reliable solutions to suit all heavy duty industrial requirements.

Power System is your ideal partner and uniquely qualified to offer the correct energy saving solutions, whatever your application.



Variable speed drive

A conventional fixed speed air compressor is typically controlled by the inlet, opening and closing continuously to meet the air demand. This type of operation results in a large amount of wasted energy due to the compressor's operation within an on and off load position, and to the large variance in the line pressure. The application of a frequency inverter, able to dynamically adjust the motor's speed, allows the elimination of unnecessary power losses by constantly adjusting the generation of compressed air to match the real air demand, offering many proven advantages to the user:

- Continuous regulation of the motor speed and compressed air generation to precisely match the air demand.
- Constant and accurate air pressure control selectable between 8 and 10 bar (13 bar on request).
- Energy consumption is proportional to the compressed air delivered.

Inverter

The 'Vector' type frequency inverters with exceptional power saving features, are characterized by the ability to provide a constant load torque curve over the motor's total operating speed range.
Power System selects premium quality inverters, to guarantee the end user total reliability and first class service assistance world-wide.

- Optimum control of acceleration and other characteristics.
- Automatic re-start after a power failure.

POWER SYSTEM
AIR COMPRESSORS

Building energy saving systems that work!

Direct drive transmission

The simple direct drive system with elastic coupling provides the most energy efficient drive transmission available, with guaranteed alignment of the air end to the main motor.
Lower noise levels, reduced vibration, fewer components and lower maintenance requirements.

Compressor air end

Our proven and extremely reliable lubricated single-stage compressor air end with asymmetrical profile to the rotors, 5 male lobe rotors and 6 female lobe rotors, ensures low maintenance and long lasting durability characteristics.

Main electric motor

Asynchronous IE3 High Efficiency electric motor fully protected with insulation class F and protection to IP 55. All the energy of the motor is transferred to the compression process thanks to the simple direct drive arrangement, ensuring the most energy efficient operation and maximum reliability.

How to achieve maximum energy saving?

Based upon decades of experience in the industrial sector, Power System provides a professional auditing service to its 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 savings.

EATool

- Designed to measure compressed air systems in which up to 3 compressors will operate.
- Measurements are downloaded to a USB drive or USB/PC.
- Supplied: up to 3 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).

EA Software

- 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.

POWER SYSTEM
AIR COMPRESSORS

EDISON DV

Variable speed direct driven screw compressors

Innovative DNAir2 controller

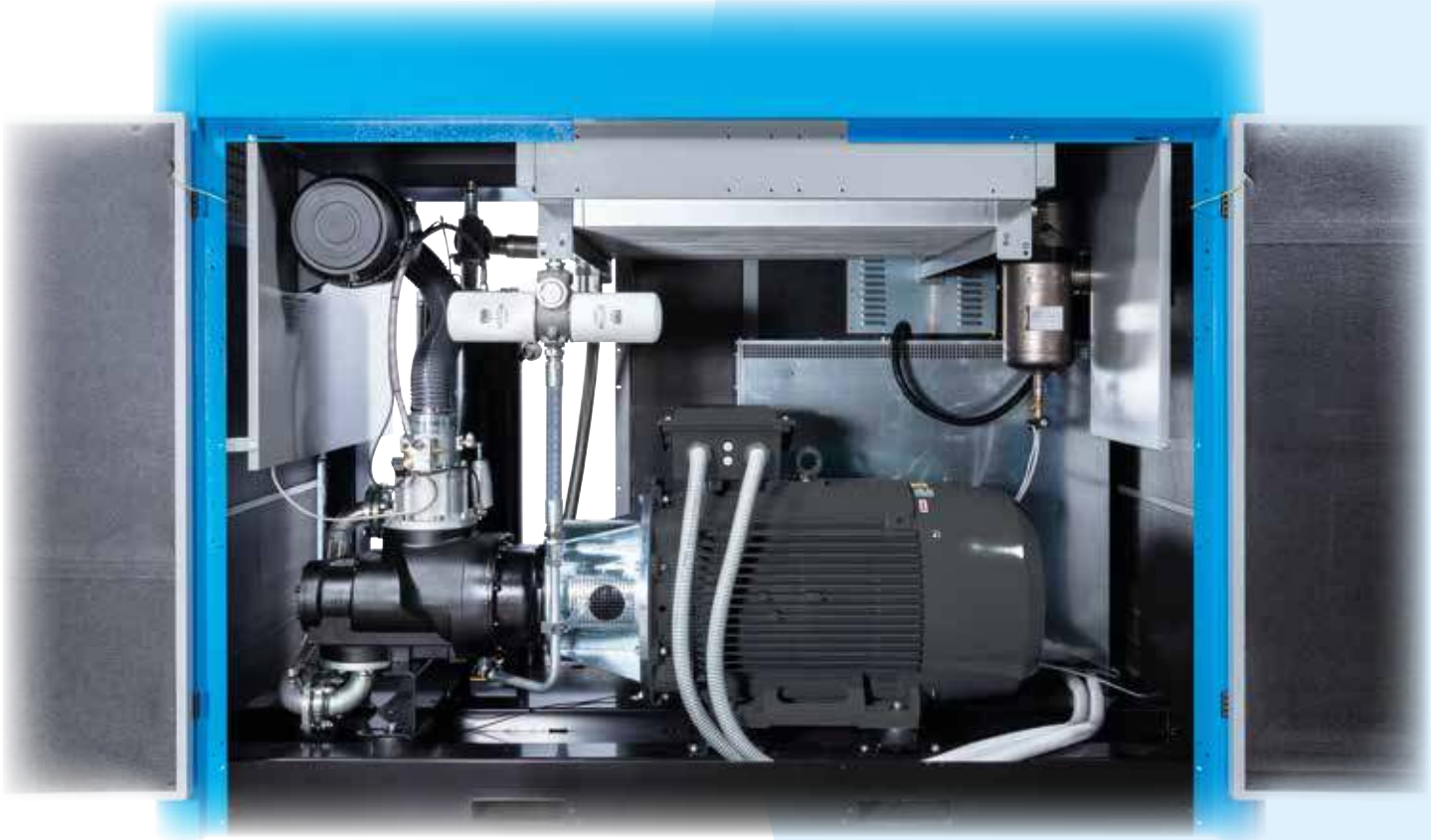
The advanced controller DNAir2 fitted to the EDISON DV and NEWTON Series has been specifically developed to guarantee optimum monitoring and regulation of the compressors operation, allowing flexibility and full programming of the complete compressed air station for maximum efficiency and safety.
The DNAir2 Controller features a large backlit LCD display with clear and simple icons, covering 19 languages and one RS 485 communicating port.

The main screen display indicates:

- Operating pressure
- Oil temperature
- Compressor status (stand-by, idle, load)
- Fan status (off/on)
- Date and time
- Remaining hours for maintenance
- Drive speed percentage (for units with inverter)

Compressor rotation management

The extremely user-friendly serial interfacing allows maximum connectivity to up to 4 fixed speed or 4 variable speed Power System screw compressors (equipped with the same DNAir2 controller).
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.



NEWTON

Fixed speed direct driven screw compressors

Reliable operation, durable solutions

The Power System Direct Driven screw compressors of the NEWTON range provide a very high performance solution for the most demanding applications. The NEWTON range offer a wide selection of models from 110 kW to 250 kW with operating pressure from 8 to 10 bar (13 bar on request).

The direct drive arrangement eliminates power losses in the transmission and is virtually maintenance free. The low operating speed and low operating temperature ensure very reliable operation and a long service life. The direct drive system also contributes to a higher output and a consequent reduction in power consumption.

NEWTON compressors are built using the highest quality components throughout. The attention to detail in the build, finishing and testing of the product results in a high performance, extremely durable, quiet and energy efficient air compressor that is built to last.

Standards... not options

- **Direct drive with elastic coupling element**
- **Phase sequence relay**
- **Air inlet pre-filtration**
- **Two-stage air inlet filter**
- **Condensate separator with automatic drain from 110 to 160 kW**
- **IE3 Motors with enclosure IP55 - Class F**

Advanced cooling system

Our over sized premium quality air-oil heat exchagers guarantee low operating temperatures even in severe working conditions. The large coolers coupled with separate thermostatically controlled electro-fans and a thermostatic valve within the oil cooling system ensures lower compressed air outlet temperatures, eliminating the risk of condensate formation in the lubricant, providing the best protection against damage to internal components, ensuring a much longer service life to the entire compressor.

Extend the life and efficiency of your compressor by remote monitoring

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.

Remote control + preventive maintenance

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 features 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),
- programmed maintenance advise.

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.

Technical data

NEWTON
110-250 kW

		Power		Air outflow rate		Max. pressure		Sound level	Connec-tion	Net Weight		Net Dimensions	Gross Weight		Gross Dimensions
	Code	kW	HP	m³/min.	c.f.m.	bar	p.s.i.	dB(A)	G	kg	Lbs	LxWxH (cm)	kg	Lbs	LxWxH (cm)
FIXED SPEED															
NEWTON 5110-8	V60MT92PWS180	110	150	18.7	660.4	8	116	75 ± 3	3"	3,240	7,143	290x155x216	3,410	7,502	306x171x234
NEWTON 5110-10	V60MI92PWS180	110	150	16.3	575.6	10	145	75 ± 3	3”	3,240	7,143	290x155x216	3,410	7,502	306x171x234
NEWTON 5110-13	ON DEMAND	110	150	13.9	490.9	13	189	75 ± 3	3”	3,240	7,143	290x155x216	3,410	7,502	306x171x234
NEWTON 5132-8	V60MV92PWS180	132	180	23.4	826.4	8	116	76 ± 3	3”	3,300	7,275	290x155x216	3,470	7,634	306x171x234
NEWTON 5132-10	V60MN92PWS180	132	180	19.9	702.8	10	145	76 ± 3	3”	3,300	7,275	290x155x216	3,470	7,634	306x171x234
NEWTON 5132-13	V60MZ92PWS180	132	180	16.3	575.6	13	189	76 ± 3	3”	3,300	7,275	290x155x216	3,470	7,634	306x171x234
NEWTON 5160-8	V60MX92PWS180	160	220	26.8	946.4	8	116	76 ± 3	3”	3,850	8,488	290x155x216	4,020	8,844	306x171x234
NEWTON 5160-10	V60MQ92PWS180	160	220	23.4	826.4	10	145	76 ± 3	3”	3,850	8,488	290x155x216	4,020	8,844	306x171x234
NEWTON 5160-13	ON DEMAND	160	220	19.9	702.8	13	189	76 ± 3	3”	3,850	8,488	290x155x216	4,020	8,844	306x171x234
NEWTON 6200-8	V60MA92PWS180	200	270	34.8	1,229	8	116	76 ± 3	5”	4,550	10,031	330x210x216	4,728	10,402	346x226x234
NEWTON 6200-10	V60MC92PWS180	200	270	28.8	1,017.1	10	145	76 ± 3	5"	4,550	10,031	330x210x216	4,728	10,402	346x226x234
NEWTON 6200-13	ON DEMAND	200	270	24.4	861.7	13	189	76 ± 3	5”	4,550	10,031	330x210x216	4,728	10,402	346x226x234
NEWTON 6250-8	V60ML92PWS180	250	340	40.5	1,430.2	8	116	76 ± 3	5”	4,700	10,362	330x210x216	4,878	10,732	346x226x234
NEWTON 6250-10	V60MO92PWS180	250	340	36.8	1,299.6	10	145	76 ± 3	5”	4,700	10,362	330x210x216	4,878	10,732	346x226x234
NEWTON 6250-13	ON DEMAND	250	340	28.8	1,017.1	13	189	76 ± 3	5”	4,700	10,362	330x210x216	4,878	10,732	346x226x234

EDISON DV
110-250 kW

		Power		Air outflow rate		Max. pressure		Sound level	Connec-tion	Net Weight		Net Dimensions	Gross Weight		Gross Dimensions
	Code	kW	HP	m³/min. MIN / MAX	c.f.m. MIN / MAX	bar	p.s.i.	dB(A)	G	kg	Lbs	LxWxH (cm)	kg	Lbs	LxWxH (cm)
VARIABLE SPEED															
EDISON DV 5110-8	V60MT97PWS180	110	150	3.90 / 18.50	137.7 / 653.3	8	116	75 ± 3	3”	3,315	7,293	290x155x216	3,485	7,667	306x171x234
EDISON DV 5110-10	V60MI97PWS180	110	150	4.50 / 15.90	158.9 / 561.5	10	145	75 ± 3	3”	3,315	7,293	290x155x216	3,485	7,667	306x171x234
EDISON DV 5110-13	ON DEMAND	110	150	4.40 / 13.50	155.4 / 476.7	13	189	75 ± 3	3”	3,315	7,293	290x155x216	3,485	7,667	306x171x234
EDISON DV 5132-8	V60MV97PWS180	132	180	3.55 / 22.20	125.4 / 784	8	116	75 ± 3	3”	3,380	7,436	290x155x216	3,550	7,810	306x171x234
EDISON DV 5132-10	V60MN97PWS180	132	180	5.40 / 19.00	190.7 / 671	10	145	75 ± 3	3”	3,380	7,436	290x155x216	3,550	7,810	306x171x234
EDISON DV 5132-13	ON DEMAND	132	180	6.22 / 16.10	219.7 / 568.6	13	189	75 ± 3	3”	3,380	7,436	290x155x216	3,550	7,810	306x171x234
EDISON DV 5160-8	V60MX97PWS180	160	220	5.00 / 25.60	176.6 / 904.1	8	116	74 ± 3	3”	3,950	8,690	290x155x216	4,120	9,064	306x171x234
EDISON DV 5160-10	V60MQ97PWS180	160	220	5.12 / 22.90	180.8 / 808.7	10	145	74 ± 3	3”	3,950	8,690	290x155x216	4,120	9,064	306x171x234
EDISON DV 5160-13	ON DEMAND	160	220	6.00 / 19.40	211.9 / 685.1	13	189	74 ± 3	3”	3,950	8,690	290x155x216	4,120	9,064	306x171x234
EDISON DV 6200-8	V60MA97PWS180	200	270	9.45 / 33.50	333.7 / 1,183	8	116	76 ± 3	5”	4,660	10,252	330x210x216	4,838	10,644	346x226x234
EDISON DV 6200-10	V60MC97PWS180	200	270	9.90 / 28.50	349.6 / 1,006.5	10	145	76 ± 3	5”	4,660	10,252	330x210x216	4,838	10,644	346x226x234
EDISON DV 6200-13	ON DEMAND	200	270	9.20 / 24.60	324.9 / 868.7	13	189	76 ± 3	5”	4,660	10,252	330x210x216	4,838	10,644	346x226x234
EDISON DV 6250-8	V60ML97PWS180	250	340	9.90 / 42.10	349.6 / 1,486.7	8	116	76 ± 3	5”	4,855	10,681	330x210x216	5,033	11,073	346x226x234
EDISON DV 6250-10	V60MO97PWS180	250	340	9.60 / 35.70	339 / 1,260.7	10	145	76 ± 3	5”	4,855	10,681	330x210x216	5,033	11,073	346x226x234
EDISON DV 6250-13	ON DEMAND	250	340	9.70 / 30.60	342.6 / 1,080.6	13	189	76 ± 3	5”	4,855	10,681	330x210x216	5,033	11,073	346x226x234

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.

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The science of compressed air.