



EDISON DV

VARIABLE SPEED
DIRECT DRIVEN
SCREW COMPRESSORS

NEWTON

DIRECT DRIVEN
SCREW COMPRESSORS



**POWER
SYSTEM**
Air Compressors

from 7.5 up to 315 kW
from 7.5 up to 13 bar

EDISON DV

Variable speed direct driven lubricated rotary screw

High performance energy saving solutions

ENERGY SAVING

With over 15 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

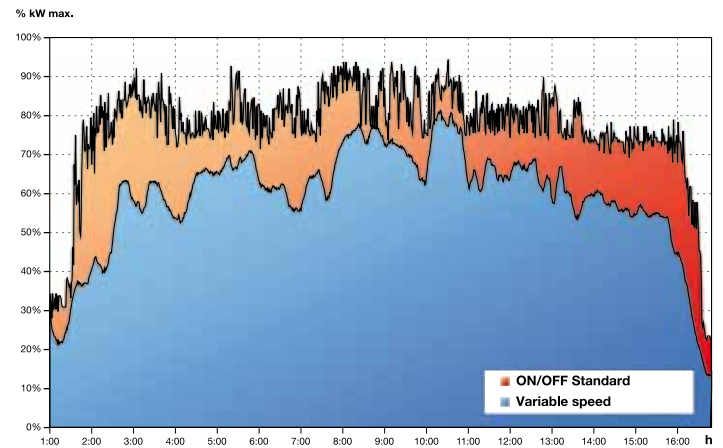
compressors from 9 to 315 kW, providing high performance, robust and reliable solutions to suit all heavy duty industrial requirements.

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 valve, 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 voltage/frequency/current values provided to the motor, 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.
- The air output is constantly adjusted between 25% and 100% of the compressor full capacity.



- Constant and accurate air pressure control selectable at any value between 6 and 10 bar (13 bar on demand).
- 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.

- Power-saving mode with a constant visual display of the energy savings achieved
- Optimum control of acceleration and other characteristics
- Selectable 2nd parameter set for different load characteristics
- Automatic re-start after a power failure





Building energy saving systems that work!



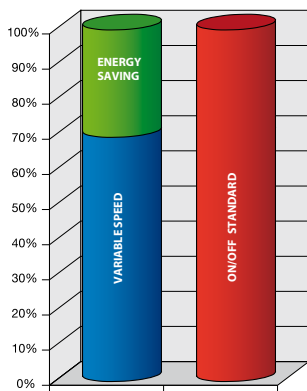
DIRECT DRIVE TRANSMISSION

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.

ENERGY CONSERVATION

By avoiding waste-full off load operations and over pressure generation, we can achieve a significant reduction in energy consumption. The graph below shows the significant energy saving available using variable speed compressors in a typical installation.



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 IE2 or 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.



ADVANCED COOLING SYSTEM

Our over sized premium quality air-oil heat exchangers 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.



INTELLIGENT CONTROLLERS

The advanced controllers fitted to the EDISON DV and NEWTON Series have 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.

■ DNAir Maxi (from 90 up to 315 kW)

The intelligent controller with clear alphanumeric LCD display features full menu in 12 languages and convenient RS 232 and RS 485 interfacing.

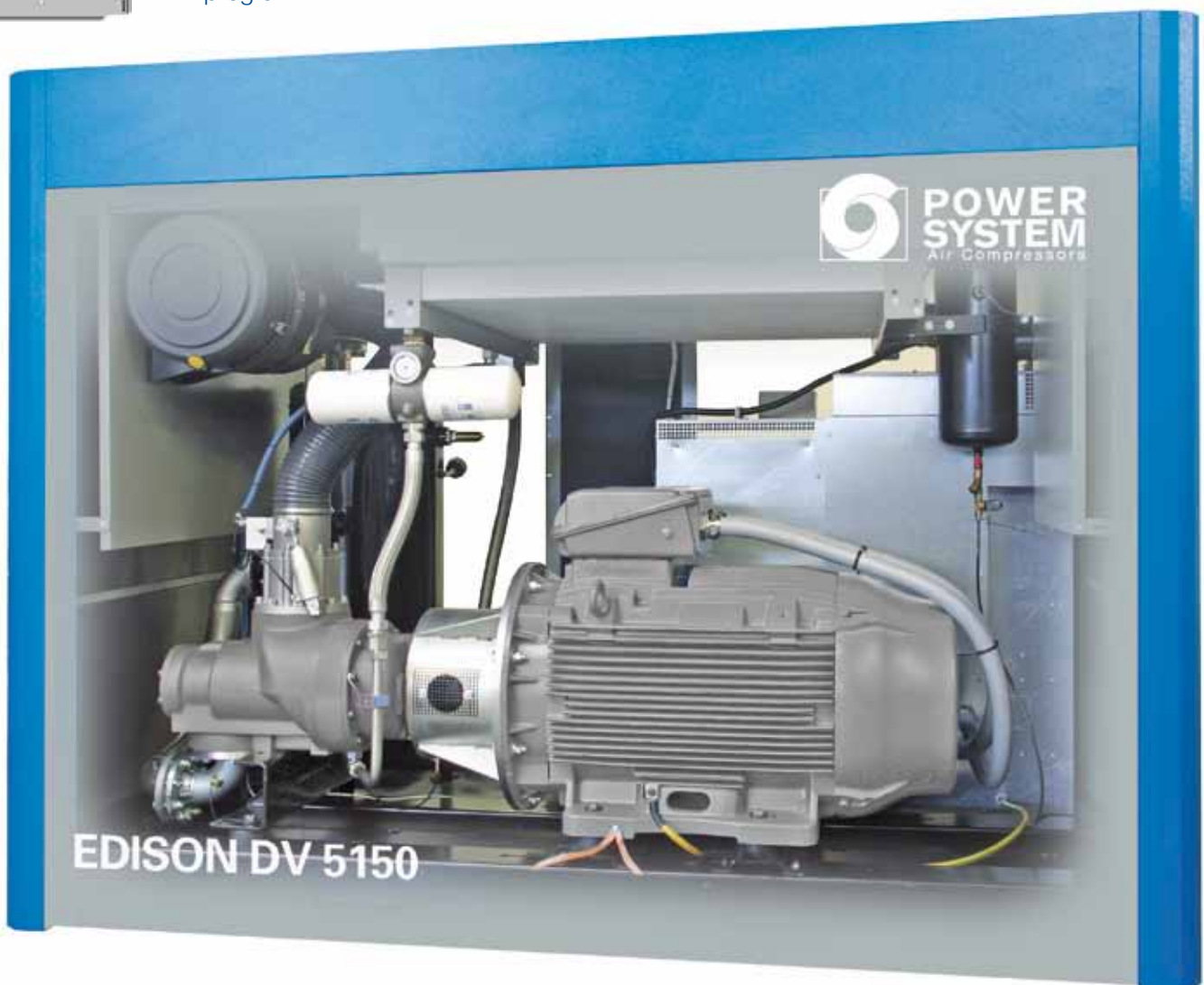
The controller also allows remote control, auto-restart, daily and weekly start up programming and convenient CAN-BUS interface. The System allows energy consumption monitoring and automatic reduction of operating pressure according to varying demands through the working profile. The controller includes a 'Fault Log' and routine maintenance information.

The extremely user-friendly serial interfacing allows maximum connectivity to peripheral controls and to up to 4 other compressors in the same network.



■ EPS4.3 (from 9 up to 75 kW)

The convenient electronic controller with clear alphanumeric LCD display allows the linking of up to 6 compressors and also features remote control, auto re-start, fault log and routine maintenance program.



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 7.5 kW to 250 kW with operating pressure from 7.5 to 13 bar.

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.



HIGH QUALITY COMPRESSED AIR TREATMENT

The EDISON DV and NEWTON series models from 7.5 up to 75 kW are optionally available with integrated refrigerated dryer (Dew point +3°C) ensuring high quality compressed air, improving operating efficiency and providing improved final product quality, and approved efficiency.

The NEWTON and EDISON DV models from 7.5 to 15 kW can also be mounted on an air receiver saving space and allowing a quick and simple installation.



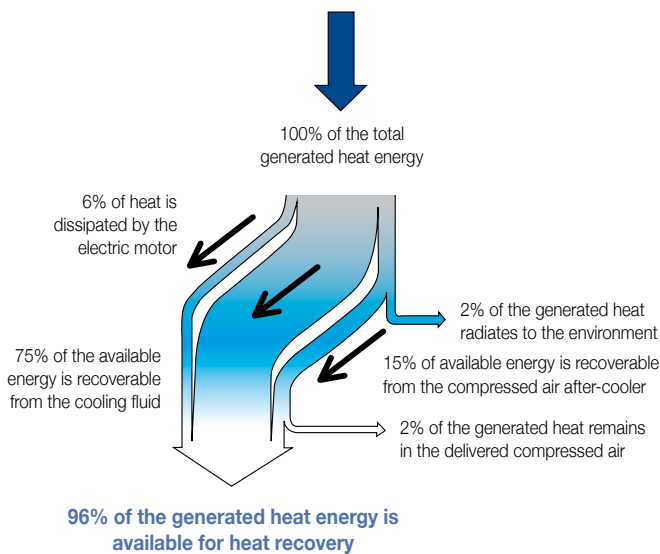
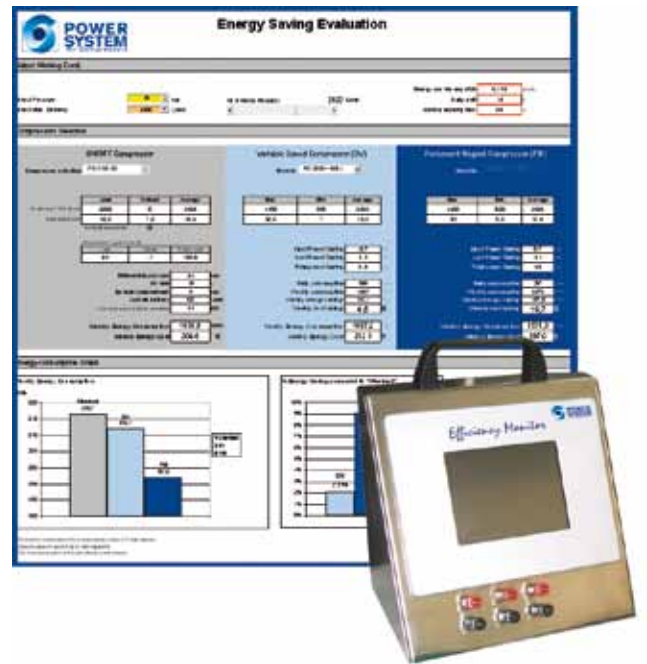
OBJECTIVES

- To reduce energy and environmental costs
- To increase efficiency in all areas of the compressors operation
- To eliminate losses and wastage during operation
- To provide the most modern, compact, robust, reliable and durable compressors.

CONSULTATION AND ADVISORY SERVICES

The world of compressed air is in continuous evolution. As a leading manufacturer in this sector we are justifiably and constantly challenged to provide competence, knowledge and innovation in new product development and to provide new solutions to all users of a most important energy source. Power System employs major resources in training and communication activities within our network of service and sales centers in order to provide the highest level of support to our partners.

Understanding your compressed air system and how to engage more efficient methods of production and the avoidance of energy wastage is not only made possible but also convenient and easy. Energy audits are available using our EFFICIENCY MONITORING data loggers. A complete analysis of your system can be made over 8 days recording all the operating data. Our engineers will then give you an accurate report of all the necessary information of your compressed air network, resulting in the best value choices for new equipment and controls, in order to reduce your energy consumption and improve efficiency.



INTEGRATED HEAT RECOVERY SYSTEM ADVANTAGES

An optional heat recovery system is available designed to provide heated or hot water (typically up to 70 °C) as a 'free energy resource' thanks to the energy extracted from the compressor cooling system. Either built-in at our premises during the compressor assembly or added later to existing compressors, the Power System Heat Recovery System will generate an additional, energy saving function to your air compressor; saving money and adding further value to your investment!



Model	Max Pressure		F.A.D.		Power kW-HP nom.	Noise level dB(A)	Weight Kg	Dimensions L x W x H (mm)
	bar max	psig max	m ³ /min. MIN=MAX	CFM MIN=MAX				
EDISON DV 1309	8 10 13	115 145 188	0.25 - 1.45 0.25 - 1.23 0.25 - 0.98	8.8 - 51.2 8.8 - 43.4 8.8 - 34.6	9 - 12	64 ± 3	250	1160 x 597 x 1034 1395 x 597 x 1034 (with dryer)
EDISON DV 1315	8 10 13	115 145 188	0.38 - 2.10 0.45 - 1.90 0.50 - 1.50	13.4 - 74.2 15.9 - 67.1 17.7 - 53.0	15 - 20	64 ± 3	295	1160 x 597 x 1034 1395 x 597 x 1034 (with dryer)
EDISON DV 1515	8 10 13	115 145 188	0.40 - 2.40 0.45 - 2.10 0.50 - 1.60	14.1 - 84.8 15.9 - 74.2 17.7 - 56.5	15 - 20	69 ± 3	418	1120 x 750 x 1092 1386 x 750 x 1092 (with dryer)
EDISON DV 1522	8 10 13	115 145 188	0.83 - 3.50 0.80 - 3.05 0.70 - 2.60	29.3 - 123.6 28.3 - 107.7 24.7 - 91.8	22 - 30	69 ± 3	462	1120 x 750 x 1092 1386 x 750 x 1092 (with dryer)
EDISON DV 2030	8 10 13	115 145 188	1.10 - 4.63 1.80 - 4.15 1.70 - 3.60	38.8 - 163.5 63.6 - 146.6 60.0 - 127.1	30 - 40	69 ± 3	650	1410 x 800 x 1500
EDISON DV 2037	8 10 13	115 145 188	1.10 - 5.60 1.42 - 5.00 1.72 - 4.50	38.8 - 197.8 50.1 - 176.6 60.7 - 158.9	37 - 50	69 ± 3	715	1410 x 800 x 1500
EDISON DV 3145	8 10 13	115 145 188	1.80 - 7.40 2.05 - 6.20 1.52 - 5.50	63.6 - 261.3 72.4 - 219.0 53.7 - 194.2	45 - 60	74 ± 3	1.200	1804 x 1100 x 1780
EDISON DV 3155	8 10 13	115 145 188	2.10 - 9.10 2.42 - 8.20 2.20 - 6.20	74.2 - 321.4 85.5 - 289.6 77.7 - 219.0	55 - 75	74 ± 3	1.300	1804 x 1100 x 1780
EDISON DV 3175	8 10 13	115 145 188	1.90 - 12.10 2.00 - 10.60 2.80 - 8.90	67.1 - 427.3 70.6 - 374.3 98.9 - 314.3	75 - 100	74 ± 3	1.650	1804 x 1100 x 1780
EDISON DV 4090	8 10 13	115 145 188	3.24 - 15.20 4.11 - 13.40 4.20 - 10.60	114.4 - 536.8 145.1 - 473.2 148.3 - 374.3	90 - 125	74 ± 3	2.150	2380 x 1300 x 1780
EDISON DV 5110	8 10 13	115 145 188	3.90 - 18.50 4.50 - 15.90 4.40 - 13.50	137.7 - 653.3 158.9 - 561.5 155.4 - 476.7	110 - 150	75 ± 3	2.860	2900 x 1550 x 2155
EDISON DV 5132	8 10 13	115 145 188	3.55 - 22.20 5.40 - 19.00 6.22 - 16.10	125.4 - 784.0 190.7 - 671.0 219.7 - 568.6	132 - 180	75 ± 3	2.860	2900 x 1550 x 2155
EDISON DV 5150	8 10 13	115 145 188	5.00 - 25.60 5.12 - 22.90 6.00 - 19.40	176.6 - 904.1 180.8 - 808.7 211.9 - 685.1	160 - 220	74 ± 3	3.350	2900 x 1550 x 2155
EDISON DV 6180	8 10 13	115 145 188	7.20 - 28.30 7.60 - 24.50 8.00 - 21.30	254.3 - 999.4 268.4 - 865.2 282.5 - 752.2	180 - 250	76 ± 3	4.670	3300 x 2100 x 2155
EDISON DV 6200	8 10 13	115 145 188	9.45 - 33.50 9.90 - 28.50 9.70 - 30.60	333.7 - 1183.0 349.6 - 1006.5 324.9 - 868.7	200 - 270	76 ± 3	4.670	3300 x 2100 x 2155
EDISON DV 6250	8 10 13	115 145 188	9.90 - 42.10 9.60 - 35.70 9.70 - 30.60	349.6 - 1486.7 339.0 - 1260.7 342.6 - 1080.6	250 - 340	76 ± 3	4.830	3300 x 2100 x 2155
NEW EDISON DV 6315	8 10	115 145	15.8 - 50.0 15.4 - 43.0	558 - 1765.7 543.8 - 1518.5	315 - 430	78 ± 3	5.400	3300 x 2100 x 2155

Model	Max Pressure		F.A.D.		Power kW-HP nom.	Noise level dB(A)	Weight Kg	Dimensions L x W x H (mm)
	bar max	psig max	m ³ /min. MIN=MAX	CFM MIN=MAX				
NEWTON 1307	8 10 13	115 145 188	1.13 0.98 1.65	39.9 34.6 58.3	7.5 - 10	64 ± 3	222	1160 x 597 x 1034 1395 x 597 x 1034 (with dryer)
NEWTON 1311	8 10 13	115 145 188	1.65 1.53 1.25	58.3 54.0 44.1	11 - 15	64 ± 3	258	1160 x 597 x 1034 1395 x 597 x 1034 (with dryer)
NEWTON 1315	8 10 13	115 145 188	2.11 1.92 1.57	74.5 67.8 55.4	15 - 20	69 ± 3	283	1160 x 597 x 1034 1395 x 597 x 1034 (con essiccatore)
NEWTON 1515	8 10 13	115 145 188	2.5 2.2 1.8	89.7 77.7 63.6	15 - 20	69 ± 3	408	1120 x 750 x 1092 1386 x 750 x 1092 (with dryer)
NEWTON 1518	8 10 13	115 145 188	2.9 2.6 2.1	103.1 91.8 74.2	18.5 - 25	69 ± 3	450	1120 x 750 x 1092 1386 x 750 x 1092 (with dryer)
NEWTON 1522	8 10 13	115 145 188	3.6 3.1 2.6	127.1 109.5 91.8	22 - 30	69 ± 3	452	1120 x 750 x 1092 1386 x 750 x 1092 (with dryer)
NEWTON 2030	8 10 13	115 145 188	4.8 4.3 3.6	169.5 151.9 127.1	30 - 40	74 ± 3	680	1410 x 800 x 1500
NEWTON 2037	8 10 13	115 145 188	5.8 5.3 4.5	204.8 185.4 158.9	37 - 50	74 ± 3	725	1410 x 800 x 1500
NEWTON 3145	8 10 13	115 145 188	7.8 6.3 5.4	275.5 222.5 190.7	45 - 60	74 ± 3	1.180	1804 x 1100 x 1780
NEWTON 3155	8 10 13	115 145 188	9.8 8.2 7.0	346.1 289.6 247.2	55 - 75	74 ± 3	1.260	1804 x 1100 x 1780
NEWTON 3175	8 10 13	115 145 188	12.6 10.5 8.8	445.0 370.8 310.8	75 - 100	75 ± 3	1.620	1804 x 1100 x 1780
NEWTON 4075	8 10 13	115 145 188	13.4 11.6 9.9	473.2 409.7 349.6	75 - 100	75 ± 3	2.270	2380 x 1300 x 1780
NEWTON 4090	8 10 13	115 145 188	15.9 13.4 11.6	561.5 473.2 409.7	90 - 125	75 ± 3	2.420	2380 x 1300 x 1780
NEWTON 5110	8 10 13	115 145 188	18.7 16.3 13.9	660.4 575.6 490.9	110 - 150	76 ± 3	3.240	2900 x 1550 x 2155
NEWTON 5132	8 10 13	115 145 188	23.4 19.9 16.3	826.4 702.8 575.6	132 - 180	76 ± 3	3.300	2900 x 1550 x 2155
NEWTON 5160	8 10 13	115 145 188	26.8 23.4 19.9	946.4 826.4 702.8	160 - 220	76 ± 3	3.850	2900 x 1550 x 2155
NEWTON 6200	8 10 13	115 145 188	34.8 29.8 24.4	1229.0 1017.1 861.7	200 - 270	76 ± 3	4.550	3300 x 2100 x 2155
NEWTON 6250	8 10 13	115 145 188	40.5 36.8 28.8	1430.2 1299.6 1017.1	250 - 340	76 ± 3	4.700	3300 x 2100 x 2155

Reference conditions: Intake air temperature 20°C (68°F) - atmospheric pressure 1 bar (14.5 psig).
The air flow rates are measured at the following working pressures: 7.5 bar for models at 10 bar - 9.5 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 performances in accordance with ISO 1217 directives. Sound level measured in accordance with PNEUROP/CAGI standards.

THE COMPANY

Since 1992 Power System Group has been leader in the design, development, production and distribution world-wide of Rotary Screw Compressors and Professional Reciprocating Compressors in a range of powers going from 0.55 to 315 kW satisfying air demands up to 50 m³/min. suitable for any technology sector, from the largest industry to the smallest enterprise. Power System Group is, since the very beginning, engaged in a Research mission aimed to create advanced solutions to compress air with the lowest possible energy consumption.



Full satisfaction of the Client is the constant and continuous effort of Power System Group.

Quality Certifications:

- UNI EN ISO 9001 Vision 2000 (TUV)
- Russian Gost-R Certification

Products Certifications:

- EC European Directives
- RINA-LLOYDS-REGISTER on request
- MOM for Singapore



We fear no
comparisons.
Choose quality!



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