

Rotary screw compressors with belt transmission





FNA Group

Over 75 years of compressed air.

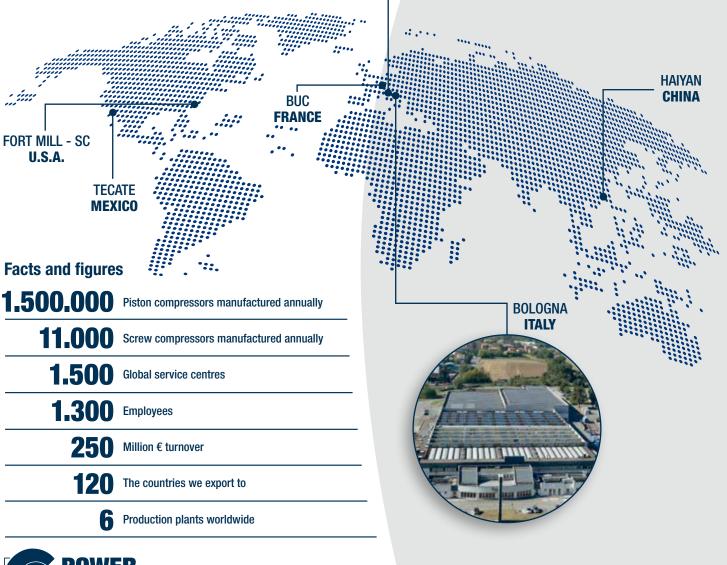
FNA is a Multinational Group with over 75 years of experience in the compressed air sector, founded from the merger of three great Italian compressor traditions, which has developed an industrial synergy capable of competing on the world market without fear of comparison. Thanks to the consolidated experience and leadership of a family that has been operating exclusively in the compressed air sector for two generations, since 1948, FNA is one of the leading manufacturers of air compressors for industrial, professional and consumer use.

Today, Power System is part of the FNA family and is the Groups brand that represents the pinnacle of our technology, aimed specifically at the Industrial market. Power System is an undisputed leader in the design, development, production and distribution of high-tech solutions for compressing air with the greatest possible energy savings, serving every sector, from large industry to small business.

Power System's screw compressors, in the 2.2 to 315 kW power range, are manufactured entirely in Italy in the province of Bologna, an area renowned for its excellence in precision engineering, where the most modern design, construction, assembly and testing technologies are applied to ensure customers reliable compressors with first-class performance.



Production sites around the world





The Power System brand

Manufacturers of air-ends for over 30 years.

Power System is the leading Italian company, that has been able to combine craftsmanship with the most modern industrial technologies and highly specialised labour. The Made in Italy trademark is the expression of typical Italian quality and creativity, recognised and appreciated around the world, and which is now one of the distinguishing elements of our industrial production.

What makes Power System screw compressors unique is the guarantee of a product that is made entirely in Italy: from design to packaging, each stage of production is carefully overseen by our engineers and aimed at developing a machine that exceeds the most demanding requirements in terms of efficiency, quality, energy saving, performance, quiet and safe operation. Each component is thoroughly selected to integrate perfectly with our air-ends and intake regulators.

NOT JUST AIR.

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Power System air-ends feature rotors with an optimised profile and outstanding performance. The production process is completely integrated

thanks to avant-garde machine tools with robotic component positioning and sophisticated control instrumentation that guarantees the highest level of quality.

Each single rotor is cut in four very specific manufacturing stages to achieve high precision, execution and repeatability.

Before reaching the customer, every individual compressor is fully tested before completing final checks that ensure total compliance with over fifty stringent technical requirements.

Since 1996, the company's Quality System has been certified according to UNI EN ISO 9001:2015.

DARWIN 2.2-75

A range of compact and highly reliable industrial air compressors with multiple versions to suit many applications.

Power System screw compressors in the DARWIN range with belt transmission provide a high performance solution for the most demanding applications. The DARWIN range has been designed to fulfill compressed air requirements in terms of reliability and efficiency, excellent energy consumption, quiet operation, reduced maintenance costs and simple installation. The DARWIN range offers a broad selection of models, from 2.2 to 75 kW with operating pressures between 7.5 and 15 bar. Each compressor is built according to the highest standards, using high quality components, to guarantee a long operating life and complete reliability. The transmission with long life Poly-V belt ensures long service life and extended maintenance intervals.

MADE IN ITALY

The entire production cycle takes place in-house and the air-ends as well as the essential components are fully designed and manufactured in Italy. + N HOUSE AIR-ENDS
+ ADVANCED CONTROLLER
+ Fremium Efficiency MOTOR





A complete range from 2.2 kW to 75 kW with more than 150 possible configurations!

Size	Power (kW)	Model	Floor mounted	Floor mounted + dryer (D)	With air receiver	With air receiver + dryer (D)	Air-end	Electronic controller	Electric motor efficiency	Fixed speed	Variable speed (DV)
	2.2	DARWIN SE 2.2	•	-	200 ℓ	200 l	FS14	-	IE3	•	-
1	3	DARWIN SE 3.0	•	_	200 ℓ	200 l	FS14	-	IE3	•	-
	4	DARWIN SE 4.0	•	_	200 ℓ	200 l	FS14	-	IE3	•	-
0	4	DARWIN 4.0	•	-	200 ℓ	200 l	FS14	DNAir1	IE3	•	-
2	5.5	DARWIN 5.5	•	_	270-500 ℓ	270-500 <i>l</i>	FS14	DNAir1	IE3	•	-
	7.5	DARWIN 8	•	-	270-500 ℓ	270-500 <i>l</i>	FS26	DNAir1	IE3	•	-
0	11	DARWIN 11	•	-	270-500 ℓ	270-500 <i>l</i>	FS26	DNAir1	IE3	•	-
3	45	DARWIN 15	•	_	500 l	500 <i>l</i>	FS26	DNAir1	IE3	•	-
	15	DARWIN 16	•	-	500 l	500 l	FS50	DNAir1	IE3	•	-
4	18.5	DARWIN 18.5	•	•	-	_	FS50	DNAir2	IE3	•	-
4	22	DARWIN 22	•	•	_	_	FS50	DNAir2	IE3	•	٠
-	30	DARWIN 31	•	•	-	-	FS100	DNAir2	IE3	•	٠
5	37	DARWIN 38	•	•	_	-	FS140	DNAir2	IE3	•	٠
0	45	DARWIN 45	•	-	-	-	FS140	DNAir2	IE3	•	-
6	55	DARWIN 55	•	_	-	_	FS140	DNAir2	IE3	•	-
7	75	DARWIN 56	•	-	-	-	FS270	DNAir2	IE3	•	٠
1	90	DARWIN 75	•	-	-	-	FS270	DNAir2	IE4	•	٠





DARWIN 56 - 75 - 56DV - 75DV 55 - 75 kW

* DARWIN 75 kW models are equipped with new electric motors, even more performing, in "IE4 Super Premium Efficiency" energy efficiency class.

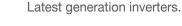


DARWIN with asynchronous motor



High efficiency and energy saving

Significant energy savings thanks to the "IE3 Premium Efficiency class" motors, reaching the "IE4" class in the DARWIN 75 kW models. Original Power System design. Our own in-house air ends offering the highest performance with the lowest energy consumption. Air and oil circuits components optimization.





Silenced operation

The low speed air-ends and radial fans allow DARWIN compressors to maintain the lowest noise values in their category, thus, ensuring the possibility for the installation close to the point-of-use.



Simplified maintenance

All machine parts subject to periodic maintenance are placed in a convenient and easily accessible position.

Maintenance costs are reduced thanks to the use of selected, top quality materials.



Robust construction

The compact design has been created to achieve the best performance with the utmost reliability, proven in thousands of installation around the world. Every compressor undergoes thorough testing to ensure, dependability with a long service life.

Remote monitoring and preventive maintenance

Our optional SMS system allows the remote control of the compressor and promptly informs the user or service center of the machine's condition, reporting anomalies and indicating all maintenance requirements.



Refrigerated dryer (optional)

The DARWIN models from 2.2 to 37 kW can be equipped with a refrigerated dryer powered and controlled separately by its own electronic controller.

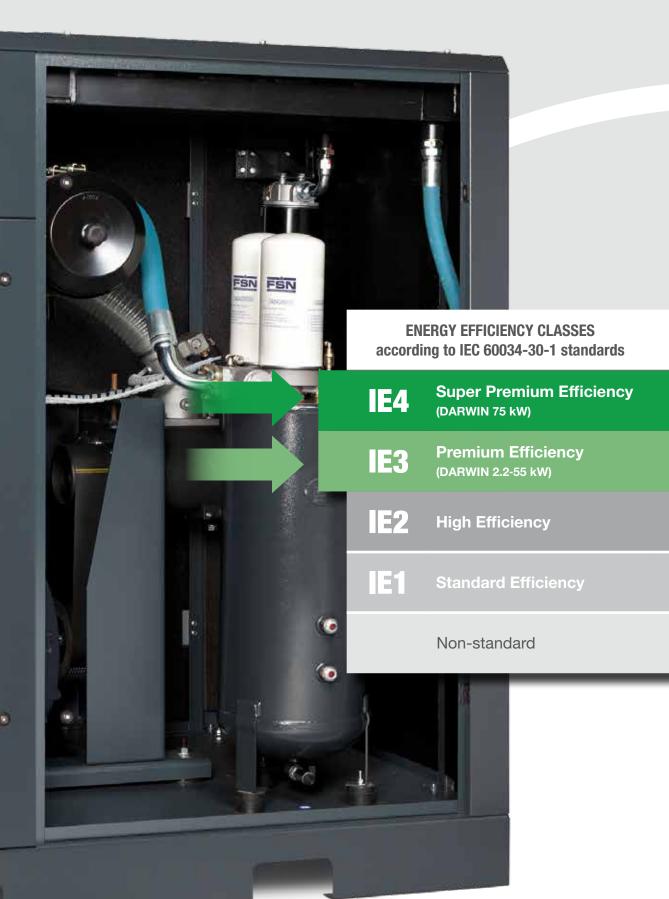








IOT JUST AIR.





DNAir smart controllers



DNAir1 Installed on models from 4 to 15 kW.

The DNAir1 controller provides the complete control of all functions and operations in multiple languages, also offering remote ON-OFF and access to the maintenance program. The backlit screen shows: operating pressure, loading/operating hours, idle/load operation, oil temperature. It keeps a log of the alarms list to simplify troubleshooting.

Four maintenance timers (air filter cartridge, oil, oil filter, separator filter).

- > Auto-restart after power failure.
- Programmable cooling fan temperature.
- Programmable remote control start of the compressor.
- > Integrated phases sequence control.

DNAir2 Installed on models from 18.5 to 75 kW.

The DNAir2 controller was specially designed for intuitive and flexible programming, it adjusts and controls the operation of the compressor, guaranteeing its efficiency and safety. It features a large backlit LCD display, with simple and intuitive information icons and commands with multilingual drop-down menus.

The multi-function display shows:

- > Operating pressure values;
- > Oil temperature;
- Compressor status (stand-by, idle, load);
- Fan status (off/on);
- > Date and time;
- > Remaining hours to maintenance;
- > Inverter percentage of use (only DV models);
- > Total and load operation hours.



Weekly programming

With the DNAir2 controller it is possible to set up to 9 separate compressor operating programs.

For each program it is possible to set the start and stop time, the days of the week it needs to operate and the relative pressure range.

With a multiple-compressor system, whether fixed or variable speed, it is possible to set various programs so as to create a "virtual network" (therefore without having to physically connect then).



Total control, even remotely

SMS Device

SMS is the innovative tool to remotely control and perform predictive maintenance on screw compressors equipped with a DNAir2 controller. If the device is configured on internet networks via Wi-Fi or Ethernet, it allows e-mails to be sent automatically in case of faults and/or automatic regular e-mails (hourly, daily or weekly) to monitor the proper operation of the compressor and the remaining hours for the main programmed maintenance.

Preventive and targeted maintenance

- > automatic forwarding of email in case of alarms;
- option of sending e-mails reporting the status of the compressor at a set frequency (hourly, daily or weekly).

Compressor remote control

- > access to the various menu levels (user, service),
- > on/off control,
- > no additional software requirements;
- > compressor online status check.

9062744 ANTENNA KIT + SMS DEVICE

EasyX4



Optimised plant room management

Many compressed air stations include several compressors: EasyX4 is the easiest solution to manage complex compressor system, with fixed speed, programmable on a weekly basis, capable of configuring up to 4 units, based on the amount of air actually required.

Three programming levels:

- MANUAL: compressors set on a given operating pressure range;
- AUTOMATIC: with pressure range exchange after a programmable time period;
- GROUP PROGRAMMING: the compressors can be managed within groups.





Pre-filtering panel

The ventilation system includes a pre-filtration panel on models from 18.5kW. This facility ensures that all internal components are protected, for longer life.

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Radial cooling

This design provides excellent cooling, lower noise and economical operation.



NOT JUST AIR.

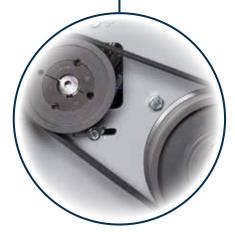


Oil filter and oil separator filter

Both items are of a 'spin-on' design providing efficiency and simple maintenance.

Reliable transmission

The Poly-V drive belt provides much lower energy losses with three times the service life of other systems. The unique belt tensioning arrangements ensures continuous performance.







Pressure sensor

This carefully positioned device ensures optimised control of the operating pressures in sequence with the electronic controller for complete reliability.



Intake regulator

Our own production intake regulator provides the control to the load cycle of the compressor with reduced pressure during idle operation and subsequent lower power consumption.



Minimum pressure valve

Made with corrosion resistant materials and of a proven design, capable of operating in extreme conditions.

Simplified maintenance

All routine maintenance can be carried out safely and conveniently thanks to a considered design, that allows unhindered access to all areas.





DARWIN 38

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Air filter

The two stage filter cartridge allows use in dusty environments.

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FSN

FSZ

Variable speed DARWIN DV

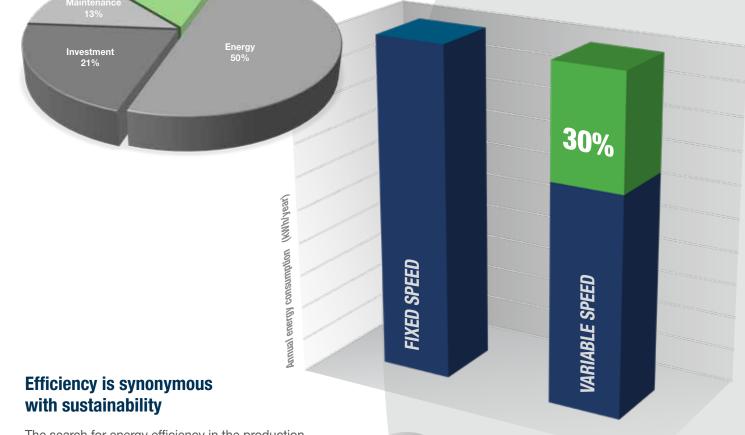
The inverter, intalled in the electrical panel of the compressor, dynamically adjusts the speed of the electric motor and the air-end, adjusting the delivered air flow to the real demand. It also eliminates current surges thanks to the soft start-up and drastically reduces operating cycles in idling operation, reducing wear to components with greatly reduced energy consumption.

Significant energy savings

In comparison to a fixed speed compressor, with a DARWIN DV it is possible to achieve significant savings, up to 30% on energy consumption and, therefore a reduction of approximately 16% of the cost of the life cycle in 10 years of use.

16%





The search for energy efficiency in the production processes is one of the main leveraging points to maintain our competitivity advantage on the market also under the profile of sustainability. Living sustainably means preserving the natural resources as much as possible: choosing a DARWIN or a DARWIN DV, reducing energy consumption and CO₂ emissions, therefore also represents an ecological choice.





Energy

consumption

Energy savings

The calculation represented in the graphs is based on the energy analysis of a 37 kW model, with 55% duty cycle, considering an energy cost of $0.17 \notin kWh$ and 47 work weeks per year.

Analyze your company's consumption to minimize energy waste.

Compressed air is an essential resource in industrial applications, as well as one of the main sources of energy consumption. Energy costs are constantly increasing, therefore it is a fundamental need to monitor, analyse and reduce the energy consumption of the compressed air system. This not only applies for large companies, but equally for medium and small-sized facilities.

Why run an energy audit?

Compressed air is most critical to production and manufacturing operations everywhere. The energy audit provides a valuable analysis of the system, identifying all operating data including power consumption. The very precise data collected is then used to provide a simulation report, identifying opportunities for reducing energy consumption and improving efficiencies.

Our experience at your service

Thanks to decades of experience in the industrial sector, Power System can provide companies with a detection and analysis service for professional auditing (EATool).



	ideal for compressors' rooms up to 3 units
EA 400 code 9062747	 4 analogue inputs: 3 amperometric clamps 1 pressure sensor 1 extension for cables (10m long) 4.3" colour touch screen display
	ideal for compressors' rooms up to 4 units
EA 500	 5 analogue inputs: 4 amperometric clamps 1 pressure sensor
code 9062748	> 2 extensions for cables (10m long)
	7" colour touch screen display



DARWIN SE	Code	Air receiver	Pov	ver	Aii	r outflow r	ate		lax. ssure	Air- end	Sound level	Air outlet	Net weight	Net dimensions	Gross weight	Gross dimensions
2.2-4 kW		l	kW	HP	l/min.	m³/min.	c.f.m.	bar	p.s.i.		dB(A)	G	kg	L x W x H (mm)	kg	L x W x H (mm)
ELECTROMECHANICAL																
2.2 kW																
DARWIN SE 2.2-08	V51JU72PWSA87	-	2.2	3	325	0.33	11	8	116	FS14	58	1/2"	93	580x480x760	104	720x670x970
DARWIN SE 2.2-10	V51JT72PWSA87	-	2.2	3	290	0.29	10	10	145	FS14	58	1/2"	93	580x480x760	109	720x670x970
DARWIN SE 2.2-08 M	V51JU60PWSA87	-	2.2	3	300	0.30	11	8	116	FS14	58	1/2"	98	580x480x760	109	720x670x970
DARWIN SE 2.2-10 M	V51JT60PWSA87	-	2.2	3	240	0.24	8	10	145	FS14	58	1/2"	98	580x480x760	109	720x670x970
DARWIN SE 2.2-08-200	V77JU72PWSA80	200	2.2	3	325	0.33	11	8	116	FS14	58	1/2"	142	1480x520x1280	175	1560x660x1430
DARWIN SE 2.2-10-200	V77JT72PWSA80	200	2.2	3	290	0.29	10	10	145	FS14	58	1/2"	142	1480x520x1280	175	1560x660x1430
DARWIN SE 2.2-10-200 M	V77JT60PWSA80	200	2.2	3	240	0.24	8	10	145	FS14	58	1/2"	148	1480x520x1280	181	1560x660x1430
DARWIN SE 2.2-08-200 D	V77JU72PWSB80	200	2.2	3	325	0.33	11	8	116	FS14	58	1/2"	164	1480x520x1280	197	1560x660x1430
DARWIN SE 2.2-10-200 D	V77JT72PWSB80	200	2.2	3	290	0.29	10	10	145	FS14	58	1/2"	164	1480x520x1280	197	1560x660x1430
DARWIN SE 2.2-10-200 D M	V77JT60PWSB80	200	2.2	3	240	0.24	8	10	145	FS14	58	1/2"	144	1480x520x1280	190	1560x660x1430
3 kW										_						
DARWIN SE 3.0-08	V51JS72PWSA87	-	3	4	430	0.43	15	8	116	FS14	59	1/2"	99	580x480x760	110	720x670x970
DARWIN SE 3.0-10	V51JQ72PWSA87	-	3	4	385	0.39	14	10	145	FS14	59	1/2"	99	580x480x760	110	720x670x970
DARWIN SE 3.0-08-200	V77JS72PWSA80	200	3	4	430	0.43	15	8	116	FS14	59	1/2"	155	1480x520x1280	188	1560x660x1430
DARWIN SE 3.0-10-200	V77JQ72PWSA80	200	3	4	385	0.39	14	10	145	FS14	59	1/2"	155	1480x520x1280	188	1560x660x1430
DARWIN SE 3.0-08-200 D	V77JS72PWSB80	200	3	4	430	0.43	15	8	116	FS14	59	1/2"	177	1480x520x1280	210	1560x660x1430
DARWIN SE 3.0-10-200 D	V77JQ72PWSB80	200	3	4	385	0.39	14	10	145	FS14	59	1/2"	177	1480x520x1280	210	1560x660x1430
4 kW																
DARWIN SE 4.0-08	V51JR72PWSA87	-	4	5.5	580	0.58	20	8	116	FS14	60	1/2"	108	580x480x760	119	720x670x970
DARWIN SE 4.0-10	V51JP72PWSA87	-	4	5.5	485	0.49	17	10	145	FS14	60	1/2"	108	580x480x760	109	720x670x970
DARWIN SE 4.0-08-200	V77JR72PWSA80	200	4	5.5	580	0.58	20	8	116	FS14	60	1/2"	157	1480x520x1280	190	1560x660x1430
DARWIN SE 4.0-10-200	V77JP72PWSA80	200	4	5.5	485	0.49	17	10	145	FS14	60	1/2"	157	1480x520x1280	190	1560x660x1430
DARWIN SE 4.0-08-200 D	V77JR72PWSB80	200	4	5.5	580	0.58	20	8	116	FS14	60	1/2"	179	1480x520x1280	212	1560x660x1430
DARWIN SE 4.0-10-200 D	V77JP72PWSB80	200	4	5.5	485	0.49	17	10	145	FS14	60	1/2"	179	1480x520x1280	212	1560x660x1430

DARWIN 4-5.5 kW	Code	Air receiver	Pov	wer	Air	outflow r	ate		ax. ssure	Air- end	Sound level	Air outlet	Net weight	Net dimensions	Gross weight	Gross dimensions
4-3.3 KW		l	kW	HP	l/min.	m³/min.	c.f.m.	bar	p.s.i.		dB(A)	G	kg	L x W x H (mm)	kg	L x W x H (mm)
ELECTRONIC - DNAir	1															
4 kW NEW MOTOR AND C	ABINET															
DARWIN 4.0-08	V51JR92PWSA87	-	4	5.5	580	0.58	20	8	116	FS14	60	1/2"	126	600x520x780	137	720x670x970
DARWIN 4.0-10	V51JP92PWSA87	-	4	5.5	485	0.49	17	10	145	FS14	60	1/2"	126	600x520x780	137	720x670x970
DARWIN 4.0-13	V51JV92PWSA87	-	4	5.5	330	0.33	12	13	189	FS14	60	1/2"	126	600x520x780	137	720x670x970
DARWIN 4.0-08-200	V77JR92PWSA80	200	4	5.5	580	0.58	20	8	116	FS14	60	1/2"	178	1430x550x1310	205	1540x620x1470
DARWIN 4.0-10-200	V77JP92PWSA80	200	4	5.5	485	0.49	17	10	145	FS14	60	1/2"	178	1430x550x1310	205	1540x620x1470
DARWIN 4.0-08-200 D	V77JR92PWSB80	200	4	5.5	580	0.58	20	8	116	FS14	60	1/2"	208	1430x550x1310	232	1540x620x1470
DARWIN 4.0-10-200 D	V77JP92PWSB80	200	4	5.5	485	0.49	17	10	145	FS14	60	1/2"	208	1430x550x1310	232	1540x620x1470
5.5 kW																
DARWIN 5.5-08	V51JW92PWSA87	-	5.5	7.5	720	0.72	25	8	116	FS14	64	1/2"	130	600x520x780	141.5	720x670x970
DARWIN 5.5-10	V51JO92PWSA87	-	5.5	7.5	650	0.65	23	10	145	FS14	64	1/2"	130	600x520x780	141.5	720x670x970
DARWIN 5.5-13	V51JM92PWSA87	-	5.5	7.5	485	0.49	17	13	189	FS14	64	1/2"	130	600x520x780	141.5	720x670x970
DARWIN 5.5-08-270	V91JW92PWSA80	270	5.5	7.5	720	0.72	25	8	116	FS14	64	1/2"	205	1560x570x1390	240	1720x750x1680
DARWIN 5.5-10-270	V91JO92PWSA80	270	5.5	7.5	650	0.65	23	10	145	FS14	64	1/2"	205	1560x570x1390	240	1720x750x1680
DARWIN 5.5-08-500	V83JW92PWSA80	500	5.5	7.5	720	0.72	25	8	116	FS14	64	1/2"	275	2000x600x1480	320	2070x800x1680
DARWIN 5.5-10-500	V83JO92PWSA80	500	5.5	7.5	650	0.65	23	10	145	FS14	64	1/2"	275	2000x600x1480	320	2070x800x1680
DARWIN 5.5-08-270 D	V91JW92PWSB80	270	5.5	7.5	720	0.72	25	8	116	FS14	64	1/2"	230	1560x570x1390	265	1720x750x1680
DARWIN 5.5-10-270 D	V91JO92PWSB80	270	5.5	7.5	650	0.65	23	10	145	FS14	64	1/2"	230	1560x570x1390	265	1720x750x1680
DARWIN 5.5-13-270 D	V91JM92PWSB80	270	5.5	7.5	485	0.49	17	13	189	FS14	64	1/2"	229	1560x570x1390	265	1720x750x1680
DARWIN 5.5-08-500 D	V83JW92PWSB80	500	5.5	7.5	720	0.72	25	8	116	FS14	64	1/2"	310	2000x600x1480	352	2070x800x1680
DARWIN 5.5-10-500 D	V83JO92PWSB80	500	5.5	7.5	650	0.65	23	10	145	FS14	64	1/2"	310	2000x600x1480	352	2070x800x1680



D = fixed speed model with refrigerated dryer and automatic condensate drain (filters excluded - refer to page 17). 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: 8 bar for models at 8 bar - 10 bar for models at 10 bar - 13 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 2151, with a tolerance of ±3 dB(A).

DARWIN	Code	Air receiver	Po	wer	Air	outflow	rate		ax. ssure	Air-	Sound level	Air outlet	Net weight	Net dimensions	Gross weight	Gross dimensions
7.5-15 kW		l	kW	HP	l/min.	m³/min.	c.f.m.	bar	p.s.i.	end	dB(A)	G	kg	L x W x H (mm)	kg	L x W x H (mm)
FIXED SPEED - DNAi 7.5 kW	r 1															
DARWIN 8-08	V60NG92PWSA87	-	7.5	10	1250	1.25	44	8	116	FS26	68	3/4"	205	820x680x980	219	940x770x1150
DARWIN 8-10	V60NH92PWSA87	-	7.5	10	1000	1.00	35	10	145	FS26	68	3/4"	205	820x680x980	219	940x770x1150
DARWIN 8-13	V60NI92PWSA87	-	7.5	10	750	0.75	26	13	189	FS26	68	3/4"	205	820x680x980	219	940x770x1150
DARWIN 8-15	V60NV92PWSA87	-	7.5	10	670	0.67	24	15	218	FS26	68	3/4"	205	820x680x980	219	940x770x1150
DARWIN 8-08-270	V91NG92PWSA80	270	7.5	10	1250	1.25	44	8	116	FS26	68	3/4"	288	1560x680x1510	318	1720x750x176
DARWIN 8-10-270	V91NH92PWSA80	270	7.5	10	1000	1.00	35	10	145	FS26	68	3/4"	288	1560x680x1510	318	1720x750x176
DARWIN 8-13-270	V91NI92PWSA80	270	7.5	10	750	0.75	26	13	189	FS26	68	3/4"	288	1560x680x1510	367	1720x750x176
DARWIN 8-15-270	V91NV92PWSA80	270	7.5	10	670	0.67	24	15	218	FS26	68	3/4"	288	1560x680x1510	367	1720x750x176
DARWIN 8-08-270 D	V91NG92PWSB80	270	7.5	10	1250	1.25	44	8	116	FS26	68	1"	315	1560x680x1510	345	1720x750x176
DARWIN 8-10-270 D	V91NH92PWSB80	270	7.5	10	1000	1.00	35	10	145	FS26	68	1"	315	1560x680x1510	345	1720x750x176
DARWIN 8-13-270 D	V91NI92PWSB80	270	7.5	10	750	0.75	26	13	189	FS26	68	1"	315	1560x680x1510	394	1720x750x176
DARWIN 8-15-270 D	V91NV92PWSB80	270	7.5	10	670	0.67	24	15	218	FS26	68	1"	315	1560x680x1510	394	1720x750x176
DARWIN 8-08-500	V83NG92PWSA80	500	7.5	10	1250	1.25	44	8	116	FS26	68	3/4"	334	2000x680x1630	374	2070x800x185
DARWIN 8-10-500	V83NH92PWSA80	500	7.5	10	1000	1.00	35	10	145	FS26	68	3/4"	334	2000x680x1630	374	2070x800x185
DARWIN 8-13-500	V83NI92PWSA80	500	7.5	10	750	0.75	26	13	189	FS26	68	3/4"	334	2000x680x1630	374	2070x800x185
DARWIN 8-08-500 D DARWIN 8-10-500 D	V83NG92PWSB80 V83NH92PWSB80	500 500	7.5	10 10	1250 1000	1.25 1.00	44 35	8	116	FS26	68	1" 1"	361	2000x680x1630	401	2070x800x185
			_					10	145	FS26	68	1"	361	2000x680x1630	401	2070x800x185
DARWIN 8-13-500 D 11 kW	V83NI92PWSB80	500	7.5	10	750	0.75	26	13	189	FS26	68	I	361	2000x680x1630	401	2070x800x185
DARWIN 11-08	V60NL92PWSA87	-	11	15	1650	1.65	58	8	116	FS26	69	3/4"	216	820x680x980	230	940x770x1150
DARWIN 11-08 DARWIN 11-10	V60NM92PWSA87	-	11	15	1500	1.50	53	10	145	FS26	69	3/4"	216	820x680x980	230	940x770x1150
DARWIN 11-13	V60NN92PWSA87	_	11	15	1100	1.10	39	13	189	FS26	69	3/4"	216	820x680x980	230	940x770x1150
DARWIN 11-15	V60NX92PWSA87	_	11	15	980	0.98	35	15	218	FS26	69	3/4"	216	820x680x980	230	940x770x1150
DARWIN 11-08-270	V91NL92PWSA80	270	11	15	1650	1.65	58	8	116	FS26	69	3/4"	302	1560x680x1510	332	1720x750x176
DARWIN 11-10-270	V91NM92PWSA80	270	11	15	1500	1.50	53	10	145	FS26	69	3/4"	302	1560x680x1510	332	1720x750x176
DARWIN 11-13-270	V91NN92PWSA80	270	11	15	1100	1.10	39	13	189	FS26	69	3/4"	302	1560x680x1510	381	1720x750x176
DARWIN 11-15-270	V91NX92PWSA80	270	11	15	980	0.98	35	15	218	FS26	69	3/4"	302	1560x680x1510	381	1720x750x176
DARWIN 11-08-270 D	V91NL92PWSB80	270	11	15	1650	1.65	58	8	116	FS26	69	1"	329	1560x680x1510	359	1720x750x176
DARWIN 11-10-270 D	V91NM92PWSB80	270	11	15	1500	1.50	53	10	145	FS26	69	1"	329	1560x680x1510	359	1720x750x176
DARWIN 11-13-270 D	V91NN92PWSB80	270	11	15	1100	1.10	39	13	189	FS26	69	1"	329	1560x680x1510	359	1720x750x176
DARWIN 11-15-270 D	V91NX92PWSB80	270	11	15	980	0.98	35	15	218	FS26	69	1"	329	1560x680x1510	359	1720x750x176
DARWIN 11-08-500	V83NL92PWSA80	500	11	15	1650	1.65	58	8	116	FS26	69	3/4"	353	2000x680x1630	393	2070x800x185
DARWIN 11-10-500	V83NM92PWSA80	500	11	15	1500	1.50	53	10	145	FS26	69	3/4"	353	2000x680x1630	393	2070x800x185
DARWIN 11-13-500	V83NN92PWSA80	500	11	15	1100	1.10	39	13	189	FS26	69	3/4"	353	2000x680x1630	393	2070x800x185
DARWIN 11-08-500 D	V83NL92PWSB80	500	11	15	1650	1.65	58	8	116	FS26	69	1"	380	2000x680x1630	420	2070x800x185
DARWIN 11-10-500 D	V83NM92PWSB80	500	11	15	1500	1.50	53	10	145	FS26	69	1"	380	2000x680x1630	420	2070x800x185
DARWIN 11-13-500 D	V83NN92PWSB80	500	11	15	1100	1.10	39	13	189	FS26	69	1"	380	2000x680x1630	420	2070x800x185
15 kW																
DARWIN 15-08	V60NP92PWSA87	-	15	20	2150	2.15	76	8	116	FS26	70	3/4"	220	820x680x980	234	940x770x1150
DARWIN 15-10	V60NQ92PWSA87	-	15	20	1850	1.85	65	10	145	FS26	70	3/4"	220	820x680x980	234	940x770x1150
DARWIN 15-13	V60NR92PWSA87	-	15	20	1500	1.50	53	13	189	FS26	70	3/4"	220	820x680x980	234	940x770x1150
DARWIN 15-15	V60NZ92PWSA87	-	15	20	1300	1.30	46	15	218	FS26	70	3/4"	220	820x680x980	234	940x770x1150
DARWIN 15-08-500	V83NP92PWSA80	500	15	20	2150	2.15	76	8	116	FS26	70	3/4"	383	2000x680x1630	423	2070x800x185
DARWIN 15-10-500	V83NQ92PWSA80	500	15	20	1850	1.85	65	10	145	FS26	70	3/4"	383	2000x680x1630	423	2070x800x185
DARWIN 15-13-500	V83NR92PWSA80	500	15	20	1500	1.50	53	13	189	FS26	70	3/4"	383	2000x680x1630	423	2070x800x185
DARWIN 15-15-500	V83NZ92PWSA80	500	15	20	1300	1.30	46	15	218	FS26	70	3/4"	383	2000x680x1630	455	2070x800x185
DARWIN 15-08-500 D	V83NP92PWSB80	500	15	20	2150	2.15	76	8	116	FS26	70	1"	412	2000x680x1630	452	2070x800x185
DARWIN 15-10-500 D	V83NQ92PWSB80	500	15	20	1850	1.85	65	10	145	FS26	70	1"	412	2000x680x1630	452	2070x800x185
DARWIN 15-13-500 D	V83NR92PWSB80	500	15	20	1500	1.50	53	13	189	FS26	70	1"	412	2000x680x1630	452	2070x800x185
DARWIN 15-15-500 D	V83NZ92PWSB80	500	15	20	1300	1.30	46	15	218	FS26	70	1"	412	2000x680x1630	452	2070x800x185
15 kW with FS50 air-e			45	00	0050	0.05	0.0	0	110	EDEO	60	0/4"	004	800+680-000	0.40	040,770.445
DARWIN 16-08 DARWIN 16-10	V60NB92PWSA87	-	15	20	2350 2050	2.35	83	8	116 145	FS50 FS50	68 68	3/4" 3/4"	234 234	820x680x980	248 248	940x770x1150
DARWIN 16-10 DARWIN 16-13	V60NY92PWSA87	-	15	20	1750	2.05				FS50	68 68	3/4"	234 234	820x680x980		940x770x1150
	V60NW92PWSA87		15	20 20	2350	1.75 2.35	62 83	13	189	FS50	68 68	3/4"		820x680x980	248 450	940x770x1150
DARWIN 16-08-500 DARWIN 16-10-500	V83NB92PWSA80 V83NY92PWSA80	500 500	15 15	20	2350	2.35	72	8	116 145	FS50	68 68	3/4"	410 410	2000x680x1630 2000x680x1630	450	2070x800x185 2070x800x185
DARWIN 16-13-500	V83NW92PWSA80	500	15	20	1750	1.75	62	13	189	FS50	68	3/4"	410	2000x680x1630	511	2070x800x185
DARWIN 16-13-500 DARWIN 16-08-500 D	V83NB92PWSA80	500	15	20	2350	2.35	83	8	116	FS50	68	3/4 1"	410	2000x680x1630	479	2070x800x185
	V83NB92PWSB80	500	15	20	2350	2.35	72	10	145	FS50	68	1"	439	2000x680x1630 2000x680x1630	479	2070x800x185
DARWIN 16-10-500 D		000	10	20	2000	2.00	12	10	140	1000	00		409	200000000000000000000000000000000000000	+19	C010X000X100

D = fixed speed model with refrigerated dryer and automatic condensate drain (filters excluded - refer to page 17). 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:
8 bar for models at 8 bar - 10 bar for models at 10 bar - 13 bar for models at 13 bar - 15 bar for models at 15 bar. The data and results were measured in accordance with standard ISO 1217. The sound level was measured in accordance with standard ISO 2151, with a tolerance of ±3 dB(A).



DARWIN		D		Air	outflow	ato	M	ax.		Sound	Air	Net	Net	Gross	Gross
18.5-75 kW	Code	Po	-		outflow r	1		ssure	Air-end	level	outlet	weight	dimensions	weight	dimensions
		kW	HP	l/min.	m³/min.	c.f.m.	bar	p.s.i.		dB(A)	G	kg	L x W x H (mm)	kg	L x W x H (mm)
FIXED SPEED - DNA	Air 2			_	_	_			_	_	_	_		_	
18.5 kW	V60QA92PWSA87	10 5	25	2800	2.80	99	0	116	E850	66	1"	397	1360x830x1130	470	1520×1000×1280
DARWIN 18.5-08 DARWIN 18.5-10	V60QB92PWSA87	18.5	25 25	2800 2500	2.80	88	8	116 145	FS50 FS50	66	1"	397		470	1530x1000x1380
DARWIN 18.5-10	V60QC92PWSA87	18.5 18.5	25	2150	2.50	76	13	145	FS50	66	1"	397	1360x830x1130 1360x830x1130	470	1530x1000x1380
DARWIN 18.5-15	V60QS92PWSA87	18.5	25	1650	1.65	58	15	218	FS50	66	1"	397	1360x830x1130	470	1530x1000x1380
DARWIN 18.5-08 D	V60QA92PWSB87	18.5	25	2800	2.80	99	8	116	FS50	66	1" 1/4	447	1740x830x1130	537	2050x1140x1670
DARWIN 18.5-00 D	V60QA92PWSB87	18.5	25	2500	2.50	88	10	145	FS50	66	1" 1/4	447	1740x830x1130	537	2050x1140x1670
DARWIN 18.5-10 D	V60QC92PWSB87	18.5	25	2150	2.15	76	13	143	FS50	66	1" 1/4	447	1740x830x1130	537	2050x1140x1670
22 kW	V00QC92FW3B87	10.5	20	2150	2.15	70	15	109	1350	00	1 1/4	447	1740805081150	557	20307114071070
DARWIN 22-08	V60QD92PWSA87	22	30	3350	3.35	118	8	116	FS50	68	1"	419	1360x830x1130	492	1530x1000x1380
DARWIN 22-00	V60QE92PWSA87	22	30	3000	3.00	106	10	145	FS50	68	1"	419	1360x830x1130	492	1530x1000x1380
DARWIN 22-13	V60QF92PWSA87	22	30	2400	2.40	85	13	143	FS50	68	1"	419	1360x830x1130	492	1530x1000x1380
DARWIN 22-15	V60QK92PWSA87	22	30	1970	1.97	70	15	218	FS50	68	1"	419	1360x830x1130	492	1530x1000x1380
DARWIN 22-15	V60QD92PWSB87	22	30	3350	3.35	118	8	116	FS50	68	1" 1/4	469	1740x830x1130	559	2050x1140x1670
DARWIN 22-00 D	V60QE92PWSB87	22	30	3000	3.00	106	10	145	FS50	68	1" 1/4	469	1740x830x1130	559	2050x1140x1670
DARWIN 22-13 D	V60QF92PWSB87	22	30	2400	2.40	85	13	189	FS50	68	1" 1/4	469	1740x830x1130	559	2050x1140x1670
30 kW	FOOQI OLI MODOI		00	2100	2.10	00	10	100	1 000	00	1 1/1	100	11 10,000,11100	000	2000001110001010
DARWIN 31-08	V60BU92PWSA87	30	40	4700	4.70	166	8	116	FS100	70	1" 1/4	663	1530x880x1440	737	1690x1030x1730
DARWIN 31-10	V60BV92PWSA87	30	40	4200	4.20	148	10	145	FS100	70	1" 1/4	663	1530x880x1440	737	1690x1030x1730
DARWIN 31-13	V60BW92PWSA87	30	40	3400	3.40	120	13	189	FS100	70	1" 1/4	663	1530x880x1440	737	1690x1030x1730
DARWIN 31-08 D	V60BU92PWSB87	30	40	4700	4.70	166	8	116	FS100	70	1" 1/2	728	1860x910x1440	818	2050x1140x1670
DARWIN 31-10 D	V60BV92PWSB87	30	40	4200	4.20	148	10	145	FS100	70	1" 1/2	728	1860x910x1440	818	2050x1140x1670
DARWIN 31-13 D	V60BW92PWSB87	30	40	3400	3.40	120	13	189	FS100	70	1" 1/2	728	1860x910x1440	818	2050x1140x1670
37 kW							1	1							
DARWIN 38-08	V60BK92PWSA87	37	50	6000	6.00	212	7.5	109	FS140	68	1" 1/4	724	1530x880x1440	798	1690x1030x1730
DARWIN 38-10	V60BJ92PWSA87	37	50	5300	5.30	187	10	145	FS140	68	1" 1/4	724	1530x880x1440	798	1690x1030x1730
DARWIN 38-13	V60BI92PWSA87	37	50	4000	4.00	141	13	189	FS140	68	1" 1/4	724	1530x880x1440	798	1690x1030x1730
DARWIN 38-08 D	V60BK92PWSB87	37	50	6000	6.00	212	7.5	109	FS140	68	1" 1/2	789	1860x910x1440	879	2050x1140x1670
DARWIN 38-10 D	V60BJ92PWSB87	37	50	5300	5.30	187	10	145	FS140	68	1" 1/2	789	1860x910x1440	879	2050x1140x1670
DARWIN 38-13 D	V60BI92PWSB87	37	50	4000	4.00	141	13	189	FS140	68	1" 1/2	789	1860x910x1440	879	2050x1140x1670
45 kW		1	1				1								
DARWIN 45-08	V60BM92PWSA87	45	60	7200	7.20	254	7.5	109	FS140	72	1" 1/2	946	1590x1000x1570	1032	1800x1200x2110
DARWIN 45-10	V60BN92PWSA87	45	60	6500	6.50	230	10	145	FS140	72	1" 1/2	946	1590x1000x1570	1032	1800x1200x2110
DARWIN 45-13	V60BQ92PWSA87	45	60	5100	5.10	180	13	189	FS140	72	1" 1/2	946	1590x1000x1570	1032	1800x1200x2110
55 kW															
DARWIN 55-08	V60BR92PWSA87	55	75	8600	8.60	304	7.5	109	FS140	74	1" 1/2	1009	1590x1000x1570	1095	1800x1200x2110
DARWIN 55-10	V60BS92PWSA87	55	75	7800	7.80	275	10	145	FS140	74	1" 1/2	1009	1590x1000x1570	1095	1800x1200x2110
DARWIN 55-13	V60BT92PWSA87	55	75	6400	6.40	226	13	189	FS140	74	1" 1/2	1009	1590x1000x1570	1095	1800x1200x2110
55 kW with FS270 a	ir-end														
DARWIN 56-08	V60BA92PWSA87	55	75	9300	9.30	328	7.5	109	FS270	70	2"	1360	1800x1140x1860	1470	2000x1290x2270
DARWIN 56-10	V60BB92PWSA87	55	75	8300	8.30	293	10	145	FS270	70	2"	1360	1800x1140x1860	1470	2000x1290x2270
DARWIN 56-13	V60BC92PWSA87	55	75	7000	7.00	247	13	189	FS270	70	2"	1360	1800x1140x1860	1470	2000x1290x2270
75 kW															
DARWIN 75-08	V60BD92PWSA87	75	100	12200	12.20	431	7.5	109	FS270	72	2"	1470	1800x1140x1860	1580	2000x1290x2270
DARWIN 75-10	V60BE92PWSA87	75	100	10500	10.50	371	10	145	FS270	72	2"	1470	1800x1140x1860	1580	2000x1290x2270
DARWIN 75-13	V60BF92PWSA87	75	100	8300	8.30	293	13	189	FS270	72	2"	1470	1800x1140x1860	1580	2000x1270x2270

D = fixed speed model with refrigerated dryer and automatic condensate drain.

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:





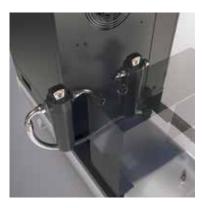
The sound level was measured in accordance with standard ISO 2151, with a tolerance of ±3 dB(A).



											0				
DARWIN	Code	Pov	wer	Air outflo	ow rate (minr	nax.)		lax. ssure	Air-	Sound level	Air outlet	Net weight	Net dimensions	Gross weight	Gross dimensions
22-75 kW		kW	HP	l/min.	m³/min.	c.f.m.	bar	p.s.i.	end	dB(A)	G	kg	L x W x H (mm)	kg	L x W x H (mm)
VARIABLE SPEED	- DNAir 2														
22 kW															
DARWIN 22-08 DV	V60QD97PWSA87	22	30	1350-3350	1.35-3.35	48-118	8	116	FS50	68	1"	437	1360x830x1130	519	1530x1000x1380
DARWIN 22-10 DV	V60QE97PWSA87	22	30	1220-3050	1.22-3.05	43-108	10	145	FS50	68	1"	437	1360x830x1130	519	1530x1000x1380
DARWIN 22-08 DV-D	V60QD97PWSB87	22	30	1350-3350	1.35-3.35	48-118	8	116	FS50	68	1" 1/4	487	1740x830x1130	586	2050x1140x1670
DARWIN 22-10 DV-D	V60QE97PWSB87	22	30	1220-3050	1.22-3.05	43-108	10	145	FS50	68	1" 1/4	487	1740x830x1130	586	2050x1140x1670
30 kW															
DARWIN 31-08 DV	V60BU97PWSA87	30	40	1700-4700	1.70-4.70	60-166	8	116	FS100	67	1" 1/4	695	1530x880x1440	756	1690x1030x1730
DARWIN 31-10 DV	V60BV97PWSA87	30	40	1500-4200	1.50-4.20	53-148	10	145	FS100	68	1" 1/4	695	1530x880x1440	756	1690x1030x1730
DARWIN 31-13 DV	V60BW97PWSA87	30	40	1300-3400	1.30-3.40	46-120	13	189	FS100	64	1" 1/4	695	1530x880x1440	756	1690x1030x1730
37 kW															
DARWIN 38-08 DV	V60BK97PWSA87	37	50	2400-6000	2.40-6.00	85-212	8	116	FS140	68	1" 1/4	748	1530x880x1440	817	1690x1030x1730
DARWIN 38-10 DV	V60BJ97PWSA87	37	50	2100-5300	2.10-5.30	74-187	10	145	FS140	68	1" 1/4	748	1530x880x1440	817	1690x1030x1730
DARWIN 38-08 DV-D	V60BK97PWSB87	37	50	2400-6000	2.40-6.00	85-212	8	116	FS140	68	1" 1/2	813	1860x910x1440	898	2050x1140x1670
DARWIN 38-10 DV-D	V60BJ97PWSB87	37	50	2100-5300	2.10-5.30	74-187	10	145	FS140	68	1" 1/2	813	1860x910x1440	898	2050x1140x1670
55 kW															
DARWIN 56-08 DV	V60BA97PWSA87	55	75	3700-9300	3.70-9.30	131-328	8	116	FS270	70	2"	1396	1800x1140x1860	1515	2000x1290x2270
DARWIN 56-10 DV	V60BB97PWSA87	55	75	3300-8300	3.30-8.30	117-293	10	145	FS270	70	2"	1396	1800x1140x1860	1515	2000x1290x2270
75 kW															
DARWIN 75-08 DV	V60BD97PWSA87	75	100	4800-12200	4.80-12.20	170-431	8	116	FS270	72	2"	1506	1800x1140x1860	1645	2000x1290x2270
DARWIN 75-10 DV	V60BE97PWSA87	75	100	4200-10500	4.20-10.50	148-371	10	145	FS270	72	2"	1506	1800x1140x1860	1645	2000x1290x2270

DV = variable speed model with inverter.

DV = Variable speed model with inverter. DV-D = variable speed model with inverter, refrigerated dryer and automatic condensate drain.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. The data and results were measured in accordance with standard ISO 1217. The sound level was measured in accordance with standard ISO 2151, with a tolerance of ±3 dB(A).





Compressor model	Motor power	Air receiver	Dryer	Air flow	Filter kit
IIIouei	kW	I	type	m³/min.	code
	2.2-5.5	200-270-500	RD17	1.6	#260KFL010
DARWIN	7.5 - 11	270	RD17	2.5	#260KFL020
	7.5-11-15	500	RD17-RD24	2.5	#260KFL030



A complete solution

For all versions ranging from 2.2 to 15 kW with air receiver and dryer, it is available a retroffittable optional filter set (1 prefilter and 1 microfilter).



Extend the life and efficiency of your screw 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 customers' needs and the most suitable solutions.

Our skilled and professional team grants assistance over the phone/email, technical on-site consultancy, personalised quotations, maintenance programs, training programmes, etc.

The importance of original spare parts...

FSN is the brand of the original spare parts and after sales activities for all Power System compressors. FSN guarantees that the components are original and that they were carefully selected, checked and tested by skilled technicians. Using FSN certified original spare parts reduces management costs and guarantees the efficiency, reliability and longevity of the compressor. Our "Hot-Line" service guarantees the shipment of urgent spare parts within twenty-four hours from the order.

Long Life Kit: for the scheduled maintenance of screw compressors

To make maintenance planning simple and in accordance with the recommendations, Power System has developed its "LONG LIFE SERVICE KITS", specifically created for all Power System screw compressor models.

Using Long Life Kits ensures an extended service life, increased safety whilst ensuring maximum compressor performance.

Investment guaranteed up to 5 years! with the TRUST warranty extension

Power System believes so strongly in the quality and reliability of its compressors that we guarantee them for up to FIVE years! By choosing Trust it is possible to extend the standard warranty period by 3 or 5 years, through a complete preventive maintenance program.

There are many benefits: the customer can thereby avail of the qualified assistance of authorised technicians in complete safety, reducing the uncertainty of maintenance costs and foreseeing any downtime. Also, the use of original spare parts guaranteed by the FSN trademark will ensure that the compressor operates with maximum efficiency and for a longer service life. The "Trust" warranty can be easily extended online through EasyConnect, the Power System service portal specially created to simplify the customers' experience by providing them with quick, clear responses about product availability, order tracking and shipping times.









...and specific lubricants

RotarECOFLUID 46 cSt mineral oil

#600000020	1 x 3.8-litre can (3.3 kg)
#600000021	1 x 20-litre can (17.36 kg)
#600000022	1 x 200-litre drum (174 kg)

Formulated with high quality selected mineral oil, this lubricant offers optimal control of oxidation and residue deposits as well as an excellent level of thermal stability and oxidation to ensure the longevity of equipment and continued high performance.

RotEnergyPlus 46 cSt synthetic oil

#600000018A	1 x 3.8-litre can (3.25 kg)
#600000007A	1 x 19-litre can (16 kg)
#600000012A	1 x 208-litre drum (181 kg)

Ensures quick water separation with reduced friction and energy consumption, provides long maintenance intervals and ensures excellent lubrication of the bearings while offering an excellent protection throughout.

RotEnergyFood 46 cSt synthetic oil

#600000019A	1 x 3.9-litre can (3.25 kg)
#600000016A	1 x 19-litre can (18.5 kg)
#600000017A	1 x 208-litre drum (175 kg)

suitable for use in the food industry, where specific quality standards are required.

Our FSN mineral or synthetic based lubricants, are specifically designed for use on our screw compressors. They are available in cans or drums in various sizes.

We recommend replacing the oil according to the interval reported in the handbook/maintenance manual of the compressor or once a year if sooner. We recommend using our original RotarECOFLUID mineral oils, or RotEnergyPlus and RotEnergyFood synthetic oils (OILS NOT INCLUDED IN LONG LIFE KITS).



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