evo / VSD 2.2kW to 7.5kW

rotary screw air compressors fixed and variable speed

















About the team

Avelair is a UK company specialising in the design and manufacturer of efficient air compressors. We have an in-house team of compressor specialists with over 150 years experience, passionate about exceptional design, reliability and energy efficiency.

With a factory trained technical support team and readily available service components, we offer an unrivalled service. Our philosophy is to focus on exceptional customer care as a foundation for long term relationships with our customers.

Quality

We are a long standing member of the British Compressed Air Society and we work in line with their professional values. Thanks to our UKAS accredited ISO 9001 quality system we continuously achieve high quality design and manufacturing.

Unrivalled service backup

Avelair and our global distributor network offer excellent local service ensuring long term confidence in your investment. High quality and proven genuine spare parts and components provide the best protection for your compressors for long term satisfaction.

Some of our clients

















XPOLogistics







evo / VSD compressor range

The Avelair evo / VSD air compressors use the latest rotary screw technology assuring superior reliability and long term satisfaction. Our constant drive to innovate has led to one of the most efficient and reliable compressor on the market today. Our confidence in our compressors is reflected in our 8 year warranty. Best of all, we design and manufacture the compressors here in the UK, which means quality workmanship and total technical backup whenever you need it.

Proven design

The Avelair air compressor is one of the market leaders using our NK EVO | TECHNOLOGY with rolling profile ensuring long term reliability and low noise levels. With over 25 years of compressor manufacturing, we are confident we can offer unrivalled quality, reliability and efficiency. Avelair NK EVO | TECHNOLOGY offers efficient quiet operation and is designed for continual use 24/7.

Energy efficient

Our rotary screw airend uses the latest in built NK EVO|TECHNOLOGY offering highly efficient air output to energy input. Along with compressor management controllers, high efficiency motors and the option of inverter driven, you can be confident of enhanced future savings.

Made in Britain

Made in Britain is something we are extremely proud of and ensures we offer the best possible quality product in terms of reliability, safety and efficiency through innovative design and build.

8 year performance+

Our confidence in our compressors is reflected in our 8 year warranty, ensuring long term peace of mind. Our comprehensive warranty covers the airend for 8 years and all major components for 5 years.

















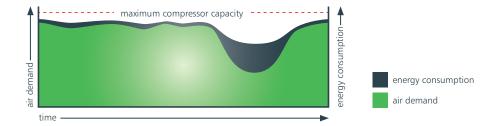






evo rotary screw compressors

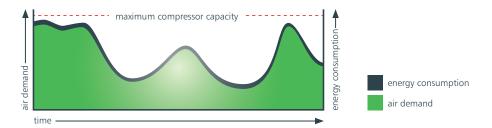
- evo fixed speed compressors are ideal for compressed air users who have a fairly constant demand or who require a base load compressor to work alongside a variable speed compressor.
- High performance air ends ensure high air output from energy input ensuring cost effective production of air.
- Premium IE3 efficiency motors ensure optimum running efficiency and longer service life.
- Tried and tested components ensure long term reliability.



The Avelair fixed speed compressors are efficient for constant air demand users. When air demand reduces, the compressor will run offload making it less efficient to run than a variable speed compressor.

VSD rotary screw compressors

- Variable speed drive (VSD) compressors are the perfect choice for users who have a variable compressed air demand.
- The compressors use a high performance inverter to smoothly alter the motor speed in response to demand for air, ensuring there is nminimun offload running.
 You only pay for the compressed air you use.
- In many cases this can reduce energy costs by 35% or more, with paybacks from around 6 18 months.
- The inverter further saves energy by accurately maintaining the system pressure within a 0.2 bar margin, and by soft starting which reduces start up current peaks and wear on the motor and drive system.



The Avelair variable speed compressors mirror the demand for air by altering the motor speed ensuring optimun energy efficiency.

INTEGRA range

The innovative evo / VSD INTEGRA range is a highly efficient and reliable receiver mounted rotary screw air compressor with built on refrigerant dryer and filtration.

Benefits:

- Oil free compressed air (ISO8573 Class 1)
- Dry compressed air (3 5°C dewpoint)
- Reliable and compact solution
- Easy to install

Integrated compressed air dryer

When compressed air cools after compression, water is precipitated in the form of an oily condensate. This can travel downstream in the pipe work where it can damage equipment and cause product spoilage. The Avelair refrigerant dryer will remove this moisture down to 3°C dewpoint and offers protection to your downstream equipment, product and services.

Integrated filtration

Oil and hydrocarbons from the ambient air and the compression process are carried across into the compressed air. The Avelair in line filters remove this contaminant from the system and will prevent damage to equipment, product spoilage and services.

Additional options

Additional filtration:

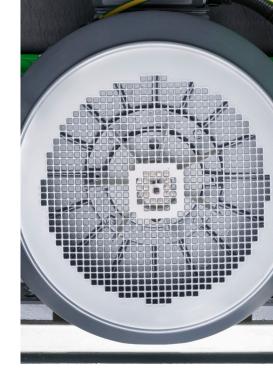
Stage A filter: activated carbon for removal of oil vapour

Integrated zero loss condensate drain on receiver:

Oily water will condensate in the receiver as the compressed air cools. A condensate drain will automatically remove this condensate from the receiver. This condensate needs to be removed otherwise it will be pushed downstream in the compressed air and the storage receiver will fill up with condensate and reduce it's storage capacity.

Integrated Condensate Management System

The condensate removed by the dryer, filtration and drain is a contaminated liquid and hence needs to be dealt with effectively. The Condensate Management System will collect this contaminant and will purify it to the legal discharge limits for a foul sewer drain.













evo / VSD 2.2kW to 7.5kW

rotary screw air compressor

technical overview

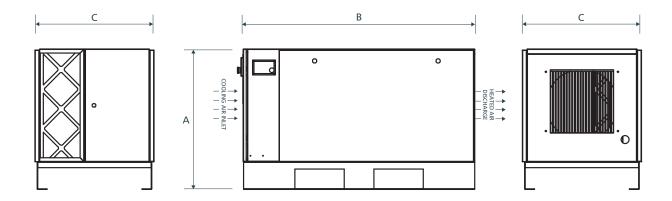


- 1. Designed and manufactured here in the UK, which means quality workmanship and total technical backup whenever you need it
- 2. 8 year airend performance+ warranty and 5 year compressor warranty offering long term peace of mind
- 3. High performance encapsulated air ends optimum air output from power input and no separator vessel inspections required, reducing future costs
- 4. Premium efficiency IE3 motors reduced running costs and longer service life
- 5. Built in oil/air aftercooler ensuring reduced compressed air temperature

- 6. Electronic control system user friendly information at the touch of a button, offers the ability to link in to a compressor management system
- 7. Ease of maintenance from the front of the compressor spin on / off separators and oil filters - reduced service
- 8. High quality robust steel enclosure and acoustic foam for low noise operation
- 9. Rigid steel piping for oil and air no expensive hose replacements or leaks
- **10.** Pre intake filter panel ensuring clean internal environment

evo / VSD 2.2kW to 7.5kW

base mounted rotary screw air compressor



VSD 7.5 layout drawing is the same as 11-15kW.

Model	evo 2.2	evo 2.2	evo 3.7	evo 4	evo 5.5	evo 7.5	vsd 7.5
Motor	2.2 kW	2.2 kW	3.7 kW	4 kW	5.5 kW	7.5 kW	7.5 kW
Type (speed)	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Variable
Capacity 8 bar	10 cfm	10 cfm	17cfm	25 cfm	35 cfm	39 cfm	39 cfm
Capacity 10 bar	-	-	12cfm	19 cfm	29 cfm	33 cfm	33 cfm
Capacity 13 bar	-	-	-	-	18 cfm	27 cfm	27 cfm
Phase required	1 phase	3 phase	1 phase	3 phase	3 phase	3 phase	3 phase
External isolator current rating (le)	20A	20A	32A	20A	20A	32A	32A
SWA incoming cable size 30°C	4mm	2.5mm	4mm	2.5mm	2.5mm	2.5mm	4mm
Circuit breaker rating (Amps)	20A	10A	32A	16A	20A	25A	32A
Circuit breaker setting (Amps)	N/A	N/A	N/A	N/A	N/A	N/A	30A
Circuit breaker type	D-Type	D-Type	D-Type	D-Type	D-Type	D-Type	MCCB*
Fuse rating	20A	10A	32A	16A	20A	25A	32A
Fuse class	aM	aM	aM	aM	aM	aM	gG
Fuse type	HRC	HRC	HRC	HRC	HRC	HRC	HRC
Starter	Direct on line	Star Delta	Inverter start				
Height** (A)	710 mm	710 mm	980 mm				
Length** (B)	1,170 mm	1,170 mm	1,075 mm				
Width** (C)	610 mm	610 mm	780 mm				
Weight	310 kg	310 kg	315 kg	323 kg	323 kg	347 kg	430 kg
Cooling air required	2,500 m³/hr	2,500 m³/hr	2,500 m³/hr				
Min / Max amb temp	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***

General Data	
Motor enclosure	IP55
Motor Insulation / temp rise	Class F / B
Control circuit	24 Vac
Oil carry over	2/3 ppm
Noise level at 1 metre	73 dB(A)
Min pressure d/p	0.7 bar
Outlet connection size	½" bspp m
Oil capacity (wet fill)	4 litres
Oil capacity (VSD 7.5) (wet fill)	6 litres

Important note: All values given are for guidance only. The individual site electrical characteristics MUST be measured and assessed by a qualified electrician in regards to suitable electrical equipment specification, installation and connection.

Please note: The cable size guidance has been provided with the following assumptions. Cable type, Multicore armoured 90°C thermosetting insulated cables (SWA, Table 4E4 of BS7671), installed using Reference Method E, in a maximum ambient air temperature of 30°C, with cable length

If the proposed installation is outside the above specification, then the installation electrician MUST re-assess the suitability of the cable in line with the requirements of BS7671 IET Wiring Regulations.

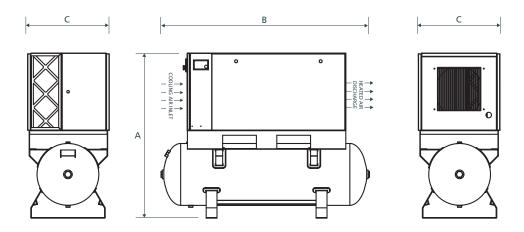
Note: If the compressor has an autodrain or dryer built on, then in addition, a neutral supply will be required. Dimensions and weight vary depending on special requirements.

- Device type, general purpose for line protection. Combined thermal / magnetic device.
- ** Measurements do not include such items as isolator, emergency stop button, anti vibration feet etc. *** Compressor is designed for continuous use up to 35°C and with intermittent temperature increase to 40°C. 40°C constant use will require additional design features - please contact Avelair to discuss.

Local machine isolator to be supplied by others. Specification subject to change without notice.

evo-r / VSD-r 2.2kW to 7.5kW

250l receiver mounted rotary screw air compressor



* VSDR 7.5 layout drawing is the same as 11-15kW.

Model	evo-r 2.2	evo-r 2.2	evo 3.7	evo-r 4	evo-r 5.5	evo-r 7.5	vsd-r 7.5
Motor	2.2 kW	2.2 kW	3.7 kW	4 kW	5.5 kW	7.5 kW	7.5 kW
Type (speed)	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Variable
Capacity 8 bar	10 cfm	10 cfm	17cfm	25 cfm	35 cfm	39 cfm	39 cfm
Capacity 10 bar	-	-	12cfm	19 cfm	29 cfm	33 cfm	33 cfm
Capacity 13 bar	-	-	-	-	18 cfm	27 cfm	27 cfm
Phase required	1 phase	3 phase	1 phase	3 phase	3 phase	3 phase	3 phase
External isolator current rating (le)	20A	20A	32A	20A	20A	32A	32A
SWA incoming cable size 30°C	4mm	2.5mm	4mm	2.5mm	2.5mm	2.5mm	4mm
Circuit breaker rating (Amps)	20A	10A	32A	16A	20A	25A	32A
Circuit breaker setting (Amps)	N/A	N/A	N/A	N/A	N/A	N/A	30A
Circuit breaker type	D-Type	D-Type	D-Type	D-Type	D-Type	D-Type	MCCB*
Fuse rating	20A	10A	32A	16A	20A	25A	32A
Fuse class	aM	aM	aM	aM	aM	aM	gG
Fuse type	HRC	HRC	HRC	HRC	HRC	HRC	HRC
Starter	Direct on line	Direct on line	Direct on line	Direct on line	Direct on line	Star Delta	Inverter start
Height** (A)	1,220 mm	1,220 mm	1,220 mm	1,220 mm	1,220 mm	1,220 mm	1,655 mm
Length** (B)	1,600 mm	1,600 mm	1,600 mm	1,600 mm	1,600 mm	1,600 mm	1,438 mm
Width** (C)	610 mm	610 mm	610 mm	610 mm	610 mm	610 mm	780 mm
Weight	399 kg	399 kg	404 kg	420 kg	420 kg	454 kg	518 kg
Cooling air required	2,500 m ³ /hr	2,500 m ³ /hr	2,500 m ³ /hr	2,500 m³/hr	2,500 m ³ /hr	2,500 m ³ /hr	2,500 m³/hr
Min / Max amb temp	>1°C/40°C***	>1°C/40°C***	$> 1^{\circ}\text{C}/40^{\circ}\text{C}^{***}$	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***

Will / Wax all b temp	- 1 C/ 10 C
General Data	
Motor enclosure	IP55
Motor Insulation / temp rise	Class F / B
Control circuit	24 Vac
Oil carry over	2/3 ppm
Noise level at 1 metre	73 dB(A)
Min pressure d/p	0.7 bar
Outlet connection size	½" bspp
Oil capacity (wet fill)	4 litres
Oil capacity (VSDR 7.5) (wet fill)	6 litres
Receiver	250 litres

Important note: All values given are for guidance only. The individual site electrical characteristics MUST be measured and assessed by a qualified electrician in regards to suitable electrical equipment specification, installation and connection.

Please note: The cable size guidance has been provided with the following assumptions. Cable type, Multicore armoured 90°C thermosetting insulated cables (SWA, Table 4E4 of BS7671), installed using Reference Method E, in a maximum ambient air temperature of 30°C, with cable length

If the proposed installation is outside the above specification, then the installation electrician MUST re-assess the suitability of the cable in line with the requirements of BS7671 IET Wiring Regulations.

Note: If the compressor has an autodrain or dryer built on, then in addition, a neutral supply will be required. Dimensions and weight vary depending on special requirements.

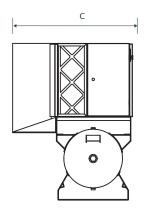
- Device type, general purpose for line protection. Combined thermal / magnetic device.
- ** Measurements do not include such items as isolator, emergency stop button, anti vibration feet etc. *** Compressor is designed for continuous use up to 35°C and with intermittent temperature increase

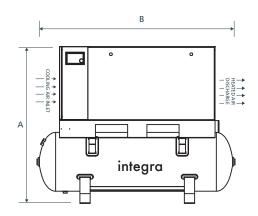
to 40°C. 40C constant use will require additional design features - please contact Avelair to discuss.

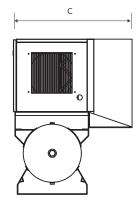
Local machine isolator to be supplied by others. Specification subject to change without notice.

evo / VSD integra 2.2kW to 7.5kW

receiver mounted rotary screw air compressor, integrated refrigerant dryer & filtration







* VSDR 7.5 FF layout drawing is the same as 11-15kW.

Model	evo 2.2 integra	evo 2.2 integra	evo 3.7 integra	evo 4 integra	evo 5.5 integra	evo 7.5 integra	vsd 7.5 integra
Motor	2.2 kW	2.2 kW	3.7 kW	4 kW	5.5 kW	7.5 kW	7.5 kW
Type (speed)	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Variable
Capacity 8 bar	10 cfm	10 cfm	17cfm	25 cfm	35 cfm	39 cfm	39 cfm
Capacity 10 bar	-	-	12cfm	19 cfm	29 cfm	33 cfm	33 cfm
Capacity 13 bar			-		18 cfm	27 cfm	27 cfm
Phase required	1 phase	3 phase	1 phase	3 phase	3 phase	3 phase	3 phase
External isolator current rating (le)	20A	20A	32A	20A	20A	32A	32A
SWA incoming cable size 30°C	4mm	2.5mm	4mm	2.5mm	2.5mm	2.5mm	4mm
Circuit breaker rating (Amps)	20A	10A	32A	16A	20A	25A	32A
Circuit breaker setting (Amps)	N/A	N/A	N/A	N/A	N/A	N/A	30A
Circuit breaker type	D-Type	D-Type	D-Type	D-Type	D-Type	D-Type	MCCB*
Fuse rating	20A	10A	32A	16A	20A	25A	32A
Fuse class	aM	aM	aM	aM	aM	aM	gG
Fuse type	HRC	HRC	HRC	HRC	HRC	HRC	HRC
Starter	Direct on line	Direct on line	Direct on line	Direct on line	Direct on line	Star Delta	Inverter start
Height** (A)	1,220 mm	1,220 mm	1,220 mm	1,220 mm	1,220 mm	1,220 mm	1,655 mm
Length** (B)	1,600 mm	1,600 mm	1,600 mm	1,600 mm	1,600 mm	1,600 mm	1,710 mm
Width** (C)	932 mm	932 mm	932 mm	932 mm	932 mm	932 mm	780 mm
Weight	428 kg	428 kg	433 kg	451 kg	454 kg	485 kg	549 kg
Cooling air required	2,500 m³/hr	2,500 m³/hr	2,500 m³/hr	2,500 m³/hr	2,500 m³/hr	2,500 m³/hr	2,500 m³/hr
Min / Max amb temp	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***	>1°C/40°C***

wiii / wax amb temp	, 1 G/10 C
General Data	
Motor enclosure	IP55
Motor Insulation / temp rise	Class F / B
Control circuit	24 Vac
Oil carry over	2/3 ppm
Noise level at 1 metre	73 dB(A)
Min pressure d/p	0.7 bar
Outlet connection size	½" bspp
Oil capacity (wet fill)	4 litres
Oil capacity (VSDR 7.5) (wet fill)	6 litres
Receiver	250 litres

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Important note: All values given are for guidance only. The individual site electrical characteristics MUST be measured and assessed by a qualified electrician in regards to suitable electrical equipment specification, installation and connection.

Please note: The cable size guidance has been provided with the following assumptions. Cable type, Multicore armoured 90°C thermosetting insulated cables (SWA, Table 4E4 of BS7671), installed using Reference Method E, in a maximum ambient air temperature of 30°C, with cable length being less than 20m.

If the proposed installation is outside the above specification, then the installation electrician MUST re-assess the suitability of the cable in line with the requirements of BS7671 IET Wiring Regulations.

Note: If the compressor has an autodrain or dryer built on, then in addition, **a neutral supply** will be required. Dimensions and weight vary depending on special requirements.

- * Device type, general purpose for line protection. Combined thermal / magnetic device.
- ** Measurements do not include such items as isolator, emergency stop button, anti vibration feet etc.
 *** Compressor is designed for continuous use up to 35°C and with intermittent temperature increase to 40°C. 40C constant use will require additional design features please contact Avelair to discuss.

Local machine isolator to be supplied by others. Specification subject to change without notice.