# hydrovane

Rotary vane air compressors for industry

### Standard Products



## hydrovane

### Rotary vane compressors for industry

### 50 / 60 Hz Rotary Vane Air Compressors

٢	1.1 to 75 kW
٢	Fixed Speed
€	Regulated Speed (RS)

### Hydrovane. Our business

Hydrovane has manufactured over 775,000 compressors to date and they can be found throughout all sectors of industry, with specialist solutions within transit, gas and snow. In fact they are the perfect business solution to meet your requirements for reliable, high quality compressed air or gas.

Hydrovane's principle global manufacturing and distribution centre is based at Redditch in the UK. The Hydrovane management system conforms to BS EN ISO 9001: 2008, ensuring the manufacture of first class compressors. For over 50 years Hydrovane has been a market leader in rotary sliding vane compressors, which are proven to be:

### Reliable

- Up to 100,000+ operating hours due to its simple integral design
- Delivering quality pulse free air with automatic regulation
- Low speed, direct drive, minimal stresses and no roller bearings to replace.

### Versatile

• Quiet in operation and can be located at the point of use

hydrovane

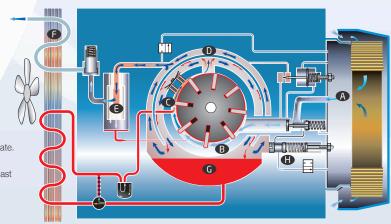
- Air intake modulation produces only the air you require
- Complete packages or separate air ends
- Vertical and horizontal formats.

### Powerful and Cost Effective

- Energy Saving Regulated Speed models
- Reduced Energy Venting System (REVS) for lower off-load power consumption
- Easy and cost competitive maintenance
- Protection from the Advance<sup>™</sup> extended warranty programme.

### The Hydrovane principle

- Air is drawn in through the intake valve.
- B Air is contained between the rotor and the stator wall.
- Air is compressed by decreasing volume. Oil is continually injected to cool, seal and lubricate.
- D High pressure air passes into the primary oil separator.
- E Remaining traces of oil are removed in a final separator element, providing high quality air.
- System air passes through the aftercooler, removing most of the condensate.
- G Oil is circulated by differential internal air pressure. It passes through an air-blast oil cooler and filter before being returned into the compressor.
- H Air flow is regulated by an inbuilt modulation system.



### The Hydrovane Advantages. Our compressors' features are ultimately your benefits

### Long life and reliability by design

Proven, simple and long-lasting technology with fewer moving parts, allowing up to 100,000+ operating hours being achieved with no expensive Air End change or refurbishment, when correctly serviced with genuine parts and lubricants. **Proven solutions for more challenging conditions.** 

### Quiet as standard

With noise levels as low as 62 dB(A), even in an open format. A Hydrovane can be located at the point of use.

### Slow Speed

All Hydrovane Fixed Speed models operate at a slow 1450 rpm. Even Hydrovane Regulated Speed models operate from only 880 to 2220 rpm\*. Slow speed operation results in low noise, low stresses and long life.

### High quality air

Hydrovane compressed air is clean, dry and pulse free straight from the outlet, with no receiver required as standard. Oil carryover (OCO) is typically less than 3 ppm. Less downstream equipment required.

### Direct drive

No gears and no belts mean fewer components to maintain, fail or replace, and no power loss. **Maximising energy consumption.** 

### Intake modulation control

With automatic regulation, a Hydrovane only compresses the air demanded by the system. **No wasteful overproduction of air.** 

### Ease of maintenance

Common replacement items such as air/oil separators and oil filters are all 'spin-off/spin-on'\*. Delivering quick, cost effective servicing, with minimal downtime.

### Reduced Energy Venting System (REVS)

Solenoid control rapidly vents the internal pressure to 2 bar; reducing off-load power to as low as 20% as well as lowering the starting current\*. **Reducing energy consumption.** 

### Regulated Speed (RS) Energy Efficiency

Regulated Speed compressor models are available\*, where air output exactly matches the demand, utilising proven air cooled inverter technology. Typically delivering energy savings of 30 - 50% annually.

### Electronic control - Hydrovane Pro Controller

This new control system continuously monitors the operational parameters of the compressor, incorporates MODBUS as standard and has the capacity to have programmable inputs and outputs for increased control of ancillary equipment. Offering the customer total control, greater connectivity and flexibility\*.

### No roller bearings

Hydrovane uses white metal bearings instead of roller bearings, ensuring long life. **No replacements and reduced maintenance costs.** 



### Package Options

Both Vertical (small foot print) and Horizontal formats are available as standard; enclosed or open, offering customers a real choice in the applications solution. Having a small footprint means all vertical Hydrovane's can fit through a standard door opening of 915 mm (36"). **Probably the most versatile range of compressor on the market.** 

#### Performance improvement

A Hydrovane's performance improves over time once parts are bedded-in within the rotor stator unit resulting from standard operation. **Reducing power consumption and energy costs.** 

### Market leading warranty

Up to 10 years or 48,000 operating hours<sup>\*\*</sup> is available to protect your investment. **Total peace of mind.** 

Our compressor technology wears in....not out!

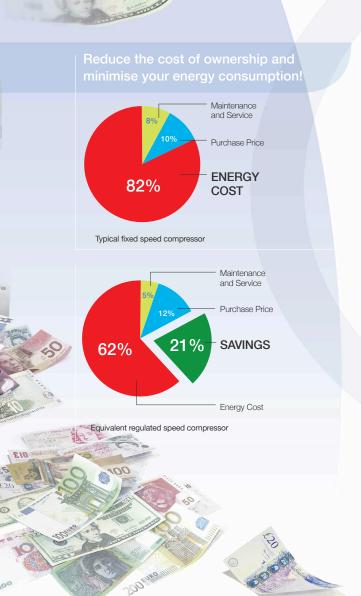
### Energy saving. Hydrovane leads from the front

The reduction of energy wastage and ultimately energy costs is an increasing priority for every business within every market sector on a global basis. To help achieve this objective, Hydrovane offers a comprehensive range of Regulated Speed compressors.

Hydrovane Regulated Speed compressors can reduce your energy bills by up to 50% with a typical payback in 3 years\*.

### Hydrovane Regulated Speed (RS) Compressors

Regulated speed compressors from Hydrovane (7.5 to 75<sup>\*\*</sup> kW ACE) can efficiently and reliably meet the varying air demand found in the majority of air systems, by automatically controlling air output to meet your exact requirements. The right regulated speed compressor in the right application delivers significant energy savings and a stable air supply at a constant pressure. Most air systems operate between 50% and 75% of full load capacity.



### How does a Hydrovane RS compressor save energy?

- RS control ensures optimum load conditions throughout the speed range
   Delivering maximum efficiency
- Air intake modulation at minimum speed deliveries further energy savings
   To match the reducing air demand
- In-built Reduced Energy Venting System (REVS)
   Improved part-load and off-load performance
- Optimised motor, drive and air end (6 to 10 bar\*)
  - Proven air cooled inverter drive
  - High efficiency across a broad flow range
  - Substantial energy savings delivered.

### Reduced Energy Venting System (REVS) Inside

REVS is a pneumatic system that reduces the internal compressor pressure to 2 bar\*\*\*, when the air demand reduces to zero (off-load), reducing energy consumption to as low as 20%. Air is instantly available at anytime during this venting period. Motor power is also reduced on re-start, as the intake valve is closed during the start sequence. REVS is standard on all Fixed and Regulated Speed compressors (ACE and PEAS).

### **Government Subsidies**

As global energy costs continue to rise, many governments are introducing schemes to reward moves towards energy saving and greener technologies. Please contact your local government department or local authorised Hydrovane distributor for information on what schemes are available in your territory.

### Air System Energy Review

Please contact your local authorised Hydrovane distributor for an Air System Energy Review and Data Logging.

### 50 Hz Hydrovane Pro Electronic Controller. HV04 - HV75 (4 - 75 kW) Models\*

All Hydrovane compressors in both Fixed and Regulated Speed in the 4 to 75 kW ACE and PEAS ranges now come with the Hydrovane Pro Electronic Controller. This new control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters of the compressor. The Hydrovane Pro also has the capability to have programmable inputs and outputs for increased control of ancillary equipment.

It is now possible to simply connect a Hydrovane Pro controlled compressor to the range of Sequencer Technologies within the Gardner Denver group allowing flexibility of use and maximising energy reduction.

\* ACE (Air Centre Electronic - Enclosed) and PEAS (Package Unit, Electronic Control, Aftercooler and Starter - Open)

### **Controller Features:**

- Real Time Clock
- **Timer Control**
- Status Display
- Group Fault Outputs
- Error Logs
- **Digital Inputs**
- MODBUS RTU
- Sequencer Capability
- Flash Programmable



- Visibility and removing the need for an external timer
- Start/stop at set times offering flexibility
- Second Pressure Setting Different pressure setting for low production periods
  - Words not codes, in multiple languages
  - Forward to an external monitoring device
  - Explanation, times and dates
  - 4 digital inputs for external control of ancillary equipment
  - RS485 enabled, communication with external interfaces
  - Pro Master 4, SmartAir Lite and Connect 4
  - Software upgrades completed on-site

### Air Management Systems. Electronic Sequencers

Electronic compressed air management control system sequencers are available, which are designed to save energy. Sequencers have a compact all inclusive design, and come complete with fully programmed software to meet most requirements. The sequencer allows central control of multi compressor installations, resulting in a large reduction in energy consumption. Compressors are only brought 'on-line' when needed, so service costs are minimized. Sequencers constantly sense system pressure and immediately respond to pressure changes, resulting in a totally reliable air supply.

### Hydrovane Pro-Master Sequencer Series

The Hydrovane Pro-Master 4 is a narrow pressure band controller used as a compressor sequencer suitable for an installation of up to 4 compressors. It has four different preprogrammed defined sequences that provide a solution for specific characteristics of any installation:

- First In First Out (FIFO)
- Timer Rotation
- Equal Hours
- Fixed Cascade

The sequencer has a number of adjustable parameters offering flexibility to adapt the control mode to further fine tune the operation to suit the installation site, including Pre-Fill.





### The industrial sectors we serve. Proven applications

Hydrovane provides versatile energy efficient air and gas compression within a wide range of industries, covering numerous applications:

### Automotive and Garage

Tyre inflation / Product finishing / Air operated robots / Plasma cutting and welding / Air tools / Paint shops / Breathing air.

#### Construction

Fluidization of product / Reverse jet cleaning / Shot blasting / Pneumatic drilling, ramming or piling machines / Concrete conveying or spraying / Air conditioning / Air operated tools / Ventilation systems / Blasting.

#### Energy (Including Gas)

Gas boosting for micro turbines / Air operated process equipment / Process / Cooling / Air operated pumps / Filter cleaning / Pipe pigging / Cleaning / Wind generation / Control valves / Raw material handling / Conveying / Filtration cleaning.

#### **Entertainment and Leisure**

Water fountains / Leisure pools / Theme park rides / Simulators.

#### Farm and Agriculture

Milk production / Farm equipment / Conveying.

#### Food and Beverage

Packaging / Product handling / Food filling machines / Fluid pumps / Nitrogen generation / Air knives.

#### Manufacturing

Aluminium and steel processing plants / Air operated tools / Spray finishing equipment / Air operating lifting equipment / Shot blasting / Cooling and heating / Cleaning / Welding equipment.

#### Marine

Breathing air / Nitrogen generation / Air tools / Air grinder / Paint spraying equipment / Ballast water purification / Dock loading equipment / Chemical tankers.

#### Medical and Dental

Air driven medical tools / Breathing air / Sterilization equipment / Laboratory applications / Dentists / Air separation.

#### Military

Mobile tyre inflation / Simulators / Shooting range targets / Mobile tank cannon cleaning.

#### **Pharmaceutical**

Process air / Control valves and cylinders / Material handling / Nitrogen generation / Air curtains / Product drying.

#### Snow

Snow cannons.

#### **Special Applications**

Aluminium smelting plant gantry crane / Cement batching plant / Water industry – purity control / Dentistry / Food packaging / Farming / Construction / Shipboard / Low duty usage / Duplex configurations / Mobile motor racing – tyre inflation, etc.

#### Transit - Main Line and Light Rail Trains, Underground Trains, Shunters, Trams, Metros and Hybrid/Electric Buses

Air braking systems / Air operated doors / Suspension systems / Floor levelling systems / Pantographs / Claxons (horns) / Wipers.

#### **Utility Services**

Fibre optic cable blowing / Sewage plant flow control and air oxidation / Water purification and oxidization / Landfill sites.

Please visit our website for a comprehensive listing of applications by industrial sector at www.hydrovaneproducts.com

### Custom Solutions. Versatile technology

The Hydrovane rotary vane compressor technology is an incredibly versatile piece of engineering. The possibilities are endless when it comes to supplying air to a specific application inside and outside the standard industrial arena. Hydrovane has over 50 years experience in supplying proven solutions to OEMs, either as air ends or complete packages, designed and purpose built. In addition, there are occasions when a customer may require a special build, and this is where Hydrovane can deliver custom solutions.



Air Ends





Custom Package

### Aftermarket Support. Back-up you can trust

Hydrovane service philosophy is one of regular maintenance being the key to long, reliable, trouble free compressor life. Hydrovane offers extensive aftermarket support with genuine service kits, individual spare parts and approved lubricants for both our current compressor models and historical models from a comprehensive catalogue.

### Only Hydrovane Aftermarket can provide:

Protection

Compressor longevity and a lifetime of productivity

Reliability

Regular Preventative Maintenance Programme

Quality

Genuine OEM engineered service kits, parts and lubricants

Performance

Guaranteed efficiency and optimisation, year in year out

### Business made easy

Dedicated support team to handle all your Aftermarket needs

### Value for money

Everything you need under one roof.

#### Service Kits - Genuine OEM spare parts

The service kit concept has been developed to make our compressor servicing quick, easy and cost effective. Hydrovane kits have been carefully constructed to contain all the necessary parts required for an effective preventative maintenance programme. Using the service kits as part of the recommended service schedule will prevent costly breakdowns, ensuring a continuous supply of high quality compressed air.

### Lubricants - Approved for vane usage

Seal

Even the most reliable compressors in the world require routine lubricant changes to maintain peak performance. Over many years, Hydrovane has developed a range of high quality lubricants that have been specifically formulated to guarantee optimum compressor performance and designed to:

Cool
 Lubricate

The Hydrovane range of approved Fluid Force lubricants are:

•	Fluid Force Red 2000	For standard installations
•	Fluid Force HPO	For high temperature and
		arduous environments
•	Fluid Force Clear	For food and environmentally
		sensitive applications. Also used for
		oil change flushing operations
•	Fluid Force Gas	For sweet, sour and bio gas boosting*.



### Service Training

Hydrovane is committed to providing every Hydrovane compressor owner with fully trained Service Engineers to care for their investment throughout our Global Distribution Network. All Service Engineers are trained on the proven procedures for servicing and repairs.



### Advance<sup>™</sup> Warranty that delivers complete peace of mind

The Hydrovane Advance extended warranty programme is a unique market leading compressor care package designed to deliver comprehensive warranty cover for up to 10 years or 48,000 operating hours\* on all Hydrovane compressors\*\*. This includes a life-time guarantee on the cast iron vane blades contained within the compression element.\*\*\*

The use of genuine service kits, parts and lubricants are mandatory for continued Advance warranty cover. Advance servicing must be carried out by an authorised Hydrovane Distributor, whose personnel are fully trained and competent in the maintenance of a Hydrovane Compressor.

### Your key benefits:

### Free

The Advance warranty is totally free to the compressor owner\*\*\*

### Guaranteed Quality

A Hydrovane authorised service provider will deliver a guaranteed quality of service

### Accurate Maintenance Budgeting

An Advance service agreement underpinning the warranty will enable accurate maintenance budgeting and cost of ownership

### Maximise Compressor Life

The use of genuine Hydrovane service kits, parts and lubricants will maximise compressor life and efficiency.

### ReAdvance

Existing Hydrovane customers have an opportunity to join the Advance warranty programme and achieve up to 10 years warranty cover\*\*\*.

### **Standard Warranty**

All Hydrovane compressors are guaranteed for 12 months from the date of installation providing the installation is approved by an authorised Hydrovane distributor and the correct service procedures and genuine service kits, parts and lubricants are used.

Please consult your local Hydrovane Distributor for Advance availability within your territory.

- \* Whichever comes first.
- \*\* Excluding gas compressors, HV04RM, HV05RM and HV07RM and non-standard product (NSP).
- \*\*\* Subject to Terms and Conditions.



### 50 / 60 Hz Rotary Vane Air Compressors

### 50 / 60 Hz Horizontal Open – Fixed Speed HV01 – HV07 (1.1 – 7.5 kW) Models\*

The HV (PUTS and PURS) range of compressors are engineered to meet the most stringent of specifications. Their compact, simple, robust and integrated design allows them to be fitted anywhere undercover. They are easy to install and maintain. Available in either tripod or receiver mounted versions<sup>\*\*</sup>, they are designed for a wide variety of applications including automobile, car body shops, dentistry, packaging and machine tools.

### **Specification Overview:**

- 10 bar
- Low Noise: 62 to 73 dB(A)
- Slow Speed: 1450 rpm (50Hz) 1760 rpm (60 Hz)
- IP55 Electric Motor Rating
- Direct Drive

### Receivers (BS EN 286-1: Air and Nitrogen only):

- HV01 and HV02 (1.1 2.2 kW)
- 75 litre receiver - 200 litre receiver

Less than 3 ppm Oil Carryover

Continuous Run or Start/Stop

Standard 1 Year Warranty

Standard Starter
Integral Oil Cooler\*\*\*

- HV04 (4 kW), HV05 (5.5 kW) and HV07 (7.5 kW)
- PUTS (Package Unit, Tripod and Starter) and PURS (Package Unit, Receiver and Starter).
   HV04, 05 and 07 available in receiver mounted version only, as standard.
- \*\*\* Air aftercooler kit available (HV01 HV02RM (PURS and PUTS) plus HV04RM (PURS) only).





4 kW PURS

5.5 - 7.5 kW PURS

The only model available in 60 Hz is the 1.5 kW PUTS / PURS. Hypac versions available (HV01RM to HV04RM): Aftercooler, Dryer and Filtration.

### Air Management Systems. Simple Controllers

### Controller Options for Standard Starters - HV01 to HV04 Models Only

### **HFP02 Duty Selector**

- The duty selector is ideal where fluctuating air demand exists.
- Reduces energy consumption and balances the running hours of each compressor unit.
- Two compressors can be remotely selected in two modes, base load or standby duties.

### **HFP04 Automatic Time Controller**

- A time controller that enables the operating times of the compressor to be pre-programmed for a period of up to one week.
- The compressor will switch on and off at preset times.
- The compressor retains its auto start functions offering greater flexibility.

### HPF05 Remote Stop/Start Controller

- Allows compressors to be remotely operated.
- This controller is fitted with 'compressor running' and 'compressor tripped' indicators to give the operator information on the compressor's status.

### HFP06 Short Run Auto Timer (Low Duty Usage) - HV01 and HV02 Models Only

- This auto timer is designed to prevent condensation build-up where compressors run for short periods of time.
- The Auto Timer starts the compressor at an off duty period and runs it 'on-load' for a period at optimum working temperature to remove any excess moisture (Discharging to atmosphere).
- A Hydrovane compressor must run for a minimum of 2 hours per week discharging to atmosphere for the moisture to be removed (When in use).

### 50 Hz Horizontal Open – Fixed Speed

### HV11 - HV45 (11 - 45 kW) Models\*

The HV (PEAS) range of compressors is ideal for heavy duty applications, where reduced footprint and low noise levels are not key specification criteria. The PEAS range offers an alternative solution to the vertical enclosed range (ACE). The range also features 'spin-off/spin-on' maintenance items i.e. air/oil separators and oil filters for easy maintenance.

Please check with your local Distributor, as the PEAS range is not available in every territory; noise restrictions may apply.

### **Specification Overview:**

- 8 and 10 bar
- Low Noise: 75 to 85 dB(A)
- Slow Speed: 1450 rpm
- Full Air Intake Modulation
- Low Off-load Power (REVS)
- Direct Drive
- IP55 Electric Motor Rating\*\*
- Less than 3 ppm Oil Carryover
- Pro Electronic Controller
- Automatic Start/Stop
- Over-Temperature Protection
- Remote Air Intake Filtration
- High Quality Air <10°C Above Ambient
- Integral Air and Oil Cooler
- Standard 1 Year Warranty
- Advance 10 Year Warranty Available\*\*\*

\* PEAS (Package Unit, Electronic Control, Aftercooler and Starter).

\*\* HV30 to HV45 IP23 motor as standard (IP55 motors available on special request, as non-standard product (NSP)).

\*\*\* Subject to Terms and Conditions.

### 50 / 60 Hz Vertical Enclosed – Fixed Speed HV04 – HV45 (4 – 45 kW) Models\*

The HV (ACE) range of compressors is the heart of the Hydrovane product line, offering world class flexibility and reliability. Maintenance time and costs are reduced by simple construction and grouped service components, with 'spin-off/spin-on' maintenance items i.e. air/oil separators and oil filters.

The HV (ACE) range is enclosed for quiet operation, with a small footprint, and they can be conveniently located at the point of use. Installation is hassle free, as all enclosed units will fit through a standard 915mm (36") door opening and stand on a flat floor surface.

### **Specification Overview:**

- 7 and 10 bar 4 to 7.5 kW
- 8 and 10 bar 11 to 45 kW
- Low Noise: 66 to 73 dB(A)
- Slow Speed: 1450 rpm (50 Hz) 1760 rpm (60 Hz)
- Full Air Intake Modulation
- Low Off-load Power (REVS)
- Direct Drive
- Fully Enclosed
- IP55 Electric Motor Rating

- Less than 3 ppm Oil Carryover
- Pro Electronic Controller
- Automatic Start/Stop
- Over-Temperature Protection
- Remote Air Intake Filtration
- Smallest Footprint in its Class
- High Quality Air <10°C Above Ambient
- Integral Air and Oil Cooler
- Standard 1 Year Warranty
- Advance 10 Year Warranty Available\*\*

Hypac combination versions available (HV04 to HV22) in 50 Hz only: Integrated packages with receiver, dryer and filtration.





\*\* Subject to Terms and Conditions.



Hypac builds are not available.

### 50 / 60 Hz Vertical Enclosed – Regulated Speed (RS)

HV07 - HV45 (7.5 - 45 kW) Models\*

The HV (ACE) RS range provides a variable speed offering for the Vertical Enclosed product selection. Whilst most fixed speed compressors are most efficient in continuous duty applications, regulated speed machines optimise energy efficiency when operated below full load capacity. However, most air installations operate between 50% and 75% of full load capacity.

The HV (ACE) RS series offer all the same features and benefits of the Vertical Enclosed Fixed Speed models; REVS off-load Power System, small footprint and low noise levels, with easy installation at point of use, plus the added benefits of saving up to 50% energy savings due to decreased energy consumption. RS units only produce the amount of air required to meet the applications demand.

### **Specification Overview:**

- 6 to 10 bar
- Low Noise: 67 to 73 dB(A)
- Slow Speed: 880-2220\*\* rpm
- Proven Air Cooled Inverter Drive
- Built-in EMC Filter
- Line Reactor (Choke) Standard
- Low Off-load Power (REVS)
- Direct Drive

Fully Enclosed

- IP55 Electric Motor Rating
- Less than 3 ppm Oil Carryover
- Pro Electronic Controller
- Selectable Target Pressure
- Automatic Start/Stop
- Full Air Intake Modulation
- **Over-Temperature Protection**
- Remote Air Intake Filtration
- Smallest Footprint in its Class
- High Quality Air <10°C Above Ambient
- Integral Air and Oil Cooler
- Standard 1 Year Warranty
- Advance 10 Year Warranty Available\*\*\*



7 - 45 kW ACE RS

Hypac combination versions available (HV07 to HV22) in 50 Hz only: Integrated packages with receiver, dryer and filtration.

\* ACE (Air Centre Electronic).

\*\* Model dependent.

\*\*\* Subject to Terms and Conditions.

50 / 60 Hz Horizontal Enclosed - Fixed and Regulated Speed (RS) HV55 - HV75 (55 - 75 kW) Models\*

The HV (ACE) range of Horizontal Enclosed fixed and regulated speed compressors offers world class flexibility and reliability to customers and satisfies the larger air demands of industry. Operating at slow speed with direct drive, coupled with few moving parts means less components to fail and no power loss through belts or gears, with the added benefit of low noise levels. Maintenance time and costs are reduced by the simple construction and grouped service components; 'spin-off/spin-on' air/oil separators and oil filters.

The HV (ACE) RS offers energy savings up to 50% due to reduced energy consumption. RS units only produce the air required to meet the application demand.

\*\* Subject to Terms and Conditions.



55 - 75 kW ACE including 75 kW ACE RS

### **Specification Overview: Fixed Speed**

- 7.5 bar 55 to 75 kW
- Slow Speed: 1450 rpm

The energy saving Regulated Speed option is only available in 75 kW.

#### \* ACE (Air Centre Electronic).

### **Regulated Speed**

- 6 to 8 bar 75 kW
- Slow Speed: 880 to 1870 rpm
- Proven Air Cooled Inverter
- Built-in EMC Filter
- Line Reactor (Choke) Standard
- Selectable Target Pressure

### All Compressors

- Low Noise: 71 to 73 dB(A) Lower Off-load Power (Auto-Idle)
- Direct Drive
- Fully Enclosed
- IP55 Electric Motor Rating
- Less than 3 ppm Oil Carryover
- Pro Electronic Controller
- Automatic Start/Stop
- Full Air Intake Modulation

Over-temperature Protection

Hypac builds are not available.

- Remote Air Intake Filtration
- High Quality Air <10°C Above Ambient
- Integral Air and Oil Cooler
- Standard 1 Year Warranty
- Advance 10 Year Warranty Available\*\*

12

### 50 Hz Hypacs (Packaged Units)

### Membrane Dryer Range HV01 - HV04 (1.1 - 4 kW) Fixed Speed Models\*

Hydrovane HV (PURS) range of Horizontal Open fixed speed compressors are available as fully integrated packages. Hypacs are available as a factory built package or can be supplied as a kit for local assembly.

### **Specification Overview:**

- HV01 and HV02 (1.1 and 2.2 kW)
   Ultra Dry Air - 75 Litre Receiver\*\*
- HV04 (4 kW)
- 200 Litre Receiver\*\*
- Horizontal Open Compressor
- Membrane Dryer Technology

\* PURS (Package Unit, Receiver and Starter)

- Pressure Dew Point 30°C Below Ambient
- In-line Filtration (0.01 micron)
- Automatic Start/Stop
- Fully Connected and Ready to Run
- Aftercooler for Primary Water Separation
- Standard 1 Year Warranty

\*\* Receivers: (BS EN 286-1: Air and Nitrogen only)



HV05 RM and HV07 RM are not available as Hypacs.

RS Hypac versions only available in 7.5 - 22 kW.

### 50 Hz Hypac - Refrigerant Dryer Range HV04 – HV22 (4 – 22 kW) Fixed and Regulated Speed Models\*

The HV (ACE) range of Vertical Enclosed range of compressors are available in 3 versions; fully connected and ready to run - ACER, ACED and AERD



### - ACE with Receiver

### **Specification Overview:**

- Hydrovane Vertical Compressor
- Integrated with Receiver\*\*\*
- HV04 to HV07 (4 to 7.5 kW) - 250 Litre Receiver
- HV11 to HV22 (11 to 22 kW) - 272 Litre Receiver
- Regulated Speed Option
- Automatic Start/Stop Option

ACED

### - ACE with Dryer and Filtration

### **Specification Overview:**

- Hydrovane Vertical Compressor
- Integrated with Refrigerant Dryer
- Water Trap
- Refrigerant Dryer
  - Pressure Dew Point 3°C **Below Ambient**
- In-line Filter (1 micron)
- Regulated Speed Option
- Automatic Start/Stop Option

### - ACE with Receiver, Dryer and Filtration

### **Specification Overview:**

- Hydrovane Vertical Compressor
- Integrated with Refrigerant Dryer and Receiver\*\*\*
- HV04 to HV07 (4 to 7.5 kW) 250 Litre Receiver
- HV11 to HV22 (11 to 22 kW 272 Litre Receiver
- Water Trap
- Refrigerant Dryer
  - Pressure Dew Point 3°C Below Ambient
- In-line Filter (1 micron)
- Regulated Speed Option
- Automatic Start/Stop Option
- All ACER, ACED and AERD Hypacs Warranty Cover:
- Standard 1 Year Warranty
- Advance 10 Year Warranty available\*\*

\* ACE (Air Centre Electronic).



### 50 / 60 Hz Rotary Vane Air Compressors

### Horizontal Open - Fixed Speed



Motor	Model	Volter	e/Phase	Starter	Mounting	Receiver	Movimum EA	D m <sup>3</sup> /min (cfm)	Motor	Oil	Air		ensions (	(mm)	Noise	Weight	Air
Power	Woder	50Hz	60Hz	Type	Configuration	Capacity	8 bar	10 bar	Speed	Capacity	Outlet	Dim	Width	mm) Height	dB(A)	(kg)	Cleanliness
(kW)			60HZ			(litres)	o Dar	TU bar	(rpm)	(litres)	(Rp)	Depth	wiatri	Height			(mg/m³)
1.1	HV01 (PUTS)	240V 1Ph 400V 3Ph	-	DOL	Tripod	-	-	0.12 (4.3)	1450	1.0	3%"	270	700	470	62	41	<3
1.5	HV01 (PUTS)	-	230V 1Ph 230V 3Ph 460V 3Ph	DOL	Tripod	-	-	0.14 (4.9)	1760	1.0	3/2"	270	700	470	65	41	<3
2.2	HV02 (PUTS)	240V 1Ph 400V 3Ph	-	DOL	Tripod	-	-	0.23 (8.0)	2900	1.0	36"	270	700	470	69	41	<3
1.1	HV01 (PURS)	240V 1Ph 400V 3Ph	-	DOL	Horizontal Receiver	75	-	0.12 (4.3)	1450	1.0	36"	300	1120	730	62	77	<3
1.5	HV01 (PURS)	-	230V 1Ph 230V 3Ph 460V 3Ph	DOL	Horizontal Receiver	75	-	0.14 (4.9)	1760	1.0	%"	300	1120	730	65	77	<3
2.2	HV02 (PURS)	240V 1Ph 400V 3Ph	-	DOL	Horizontal Receiver	75	-	0.23 (8.0)	2900	1.0	3%"	300	1120	730	69	77	<3
4.0	HV04RM (PURS)	400V 3Ph	-	DOL SD	Horizontal Receiver	200	-	0.57 (20.1)	1450	1.8	1/2"	455	1410	990	73	145	<3
5.5	HV05RM (PURS)	400V 3Ph	-	SD	Horizontal Receiver	200	-	0.71 (25.0)	1450	4.0	3/17	540	1370	1070	73	218	<3
7.5	HV07RM (PURS)	400V 3Ph	-	SD	Horizontal Receiver	200	-	1.00 (35.0)	1450	4.0	3/1"	540	1370	1070	73	218	<3
11.0	HV11 (PEAS)	400V 3Ph	-	SD	Tripod	-	1.63 (57.7)	1.41 (49.8)	1450	8.5	34"	1717	741	830	75	320	<3
15.0	HV15 (PEAS)	400V 3Ph	-	SD	Tripod	-	2.21 (78.2)	2.01 (71.0)	1450	8.5	3/1"	1717	741	830	76	330	<3
18.0	HV18 (PEAS)	400V 3Ph	-	SD	Tripod	-	2.88 (101.7)	2.55 (90.1)	1450	9.0	1"	1890	792	906	77	410	<3
22.0	HV22 (PEAS)	400V 3Ph	-	SD	Tripod	-	3.60 (127.1)	2.96 (104.5)	1450	9.0	1"	1890	792	906	78	425	<3
30.0	HV30 (PEAS)	400V 3Ph	-	SD	Tripod	-	5.00 (176.6)	4.31 (152.2)	1450	23.0	1½"	1965	812	860	82	585	<3
37.0	HV37 (PEAS)	400V 3Ph	-	SD	Tripod	-	5.95 (210.1)	5.07 (179.0)	1450	23.0	1½"	1965	892	1106	84	690	<3
45.0	HV45 (PEAS)	400V 3Ph	-	SD	Tripod	-	7.33 (258.9)	6.54 (231.0)	1450	23.0	1½"	1965	892	1106	85	710	<3

### Vertical Enclosed - Fixed Speed



.

Motor	Model	50H	lz	60H	z	Mounting		Maxir	mum FAE	) m³/mir	ı (cfm)		Motor	Speed	Oil	Air	Dime	ensions	(mm)	Noise	Weight	Air
Power		Voltage/	Starter	Voltage/	Starter	Config.		50Hz			60Hz		(rr	om)	Capacity	Outlet			· /	dB(A)		Cleanliness
(kW)		Phase	Туре	Phase	Туре		7 bar	8 bar	10 bar	7 bar	8 bar	10 bar	50Hz	60Hz	(litres)	(Rp)	Depth	Width	Height			(mg/m³)
4.0	HV04 (ACE)	400V 3Ph	DOL SD	460V 3Ph 575V 3Ph	DOL	Base	0.68 (24.0)	-	0.57 (20.1)	0.57 (20.0)	-	0.47 (16.5)	1450	1760	3.0	3/4"	650	500	1050	66	181	<3
5.5	HV05 (ACE)	400V 3Ph	DOL SD	460V 3Ph 575V 3Ph	DOL	Base	0.91 (32.1)	-	0.71 (25.1)	0.84 (29.8)	-	0.58 (20.4)	1450	1760	3.0	3⁄4"	650	500	1050	66	186	<3
7.5	HV07 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	1.25 (44.1)	-	1.00 (35.0)	1.03 (36.2)	-	0.79 (28.0)	1450	1760	3.0	3/1"	650	500	1050	67	197	<3
11.0	HV11 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	1.63 (57.6)	1.41 (49.8)	-	1.48 (52.4)	1.29 (45.6)	1450	1760	7.0	3⁄4"	850	700	1550	69	384	<3
15.0	HV15 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	2.21 (78.1)	2.01 (71.0)	-	1.90 (67.1)	1.65 (58.4)	1450	1760	7.0	3/1"	850	700	1550	70	397	<3
18.0	HV18 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	2.88 (101.7)	2.55 (90.1)	-	2.80 (99.0)	2.44 (86.2)	1450	1760	7.5	1"	850	700	1550	70	481	<3
22.0	HV22 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	3.60 (127.1)	2.96 (104.5)	-	3.25 (114.6	2.83 (100.0)	1450	1760	7.5	1"	850	700	1550	71	494	<3
30.0	HV30 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	5.00 (176.6)	4.31 (152.2)	-	4.43 (156.5	3.86 (136.2)	1450	1760	23.0	1½"	1130	900	1640	73	857	<3
37.0	HV37 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	5.95 (210.1)	5.07 (179.0)	-	5.48 (193.7	) 4.77 (168.5)	1450	1760	23.0	1½"	1130	900	1640	73	911	<3
45.0	HV45 (ACE)	400V 3Ph	SD	460V 3Ph 575V 3Ph	DOL	Base	-	7.33 (258.9	6.54 (231.0)	-	6.54 (231.0	5.73 (202.3)	1450	1760	23.0	1½"	1130	900	1640	73	940	<3
							start -	1 1 1 1 1		d tomation	1000											

### Horizontal Enclosed - Fixed Speed

Motor Power	Model	Voltage/Phase		Mounting Configuration	Maximum FAD m³/min (cfm)	Motor Speed	Oil Capacity	Air Outlet	Din	nensions (r	nm)	Noise dB(A)	Weight (kg)	Air Cleanliness
(kW)		50Hz	Туре	Configuration	7.5 bar	(rpm)	(litres)	(Rp)	Depth	Width	Height	UD(A)	(Kg)	(mg/m <sup>3</sup> )
55.0	HV55 (ACE)	400V 3Ph	SD	Base	9.10 (318.0)	1450	45.0	1½"	955	2330	1600	71	1450	<3
75.5	HV75 (ACE)	400V 3Ph	SD	Base	12.06 (425.9)	1450	45.0	1½"	955	2330	1600	73	1450	<3



DOL Direct On Line SD Star Delta V Regulated Spee Regulated Speed (RS) Free Air Delivered (FAD) according to BS ISO1217:2009-Annex B, C and E Fixed Speed compressors operate up to 45°C ambient temperatures (Regulated Speed (RS) compressors operate up to 40°C)

Hydrovane compressors are designed for indoor installation under cover only.

### Vertical Enclosed - Regulated Speed (RS)



### Note: The 50 Hz / 400 Volts / 3 Phase Regulated Speed (RS) models also cover 60 Hz / 460 Volts / 3 Phase

Motor	Model	Voltage	e/Phase	Starter	Mounting	Maximu	ım FAD m³/n	nin (cfm)	Motor	Oil	Air	Dim	ensions (	mm)		Weight	
Power (kW)		50Hz	60Hz	Туре	Configuration	6 bar	8 bar	10 bar	Speed (rpm)	Capacity (litres)	Outlet (Rp)	Depth	Width	Height	dB(A)	(kg)	Cleanliness (mg/m <sup>3</sup> )
7.5	HV07RS (ACE)	400V 3Ph	460V 3Ph	V	Base	1.18 (41.6)	1.06 (37.6)	0.95 (33.6)	870 to 2220	3.0	3/17	650	500	1050	67	204	<3
11.0	HV11RS (ACE)	400V 3Ph	460V 3Ph	V	Base	1.74 (61.6)	1.56 (55.0)	1.37 (48.5)	870 to 1900	7.0	3/1"	850	700	1550	69	393	<3
15.0	HV15RS (ACE)	400V 3Ph	460V 3Ph	V	Base	2.29 (80.8)	2.03 (71.6)	1.72 (60.7)	870 to 1800	7.0	3/19	850	700	1550	70	406	<3
18.0	HV18RS (ACE)	400V 3Ph	460V 3Ph	V	Base	2.96 (104.6)	2.75 (96.9)	2.51 (88.5)	870 to 1800	7.5	1"	850	700	1550	70	507	<3
22.0	HV22RS (ACE)	400V 3Ph	460V 3Ph	V	Base	3.53 (124.5)	3.22 (113.8)	3.07 (108.3)	870 to 1800	7.5	1"	850	700	1550	71	520	<3
30.0	HV30RS (ACE)	400V 3Ph	460V 3Ph	V	Base	5.38 (189.9)	4.87 (171.9)	4.51 (159.3)	870 to 1700	23.0	1½"	1115	900	1640	73	909	<3
37.0	HV37RS (ACE)	400V 3Ph	460V 3Ph	V	Base	6.17 (217.8)	5.72 (202.1)	5.27 (186.1)	870 to 1700	23.0	1½"	1115	900	1640	73	963	<3
45.0	HV45RS (ACE)	400V 3Ph	460V 3Ph	V	Base	7.47 (263.7)	6.90 (243.5)	6.51 (230.0)	870 to 1700	23.0	1½"	1115	900	1640	73	992	<3

### Horizontal Enclosed - Regulated Speed (RS)

Motor	Model	Voltage	e/Phase	Starter	Mounting Configuration	Maximum FAI	D m³/min (cfm)	Motor Speed	Oil Capacity	Air Outlet	Dimensions (mm)		mm)	Noise dB(A)	Weight (kg)	Air Cleanliness
Power (kW)		50Hz	60Hz	Туре	Configuration	6 bar	8 bar	(rpm)	(litres)	(Rp)	Depth	Width	Height		(Kg)	(mg/m <sup>3</sup> )
75.0	HV75RS (ACE)	400V 3Ph	460V 3Ph	V	Base	11.95 (422.0)	11.04 (390.0)	up to 1870	45.0	1½"	955	2330	1600	73	1560	<3

Note: The only 60 Hz model available is the HV01RM

### Hypac 50/60 Hz Horizontal Open - Membrane Dryer Range

Model	Package	e Dimensio	ns (mm)		age Weigh al Fixed Si		Ambient Temperature	Receiver		Air Cleanliness
	Depth	Width	Height	1.1kW	2.2kW	4.0kW	Min - Max(°C)	(litres)	(°C)	(mg/m <sup>3</sup> )
HV01RM (PURS)	300	1120	730	93	-	-	0 - 40	75	30*	0.01
HV02RM (PURS)	300	1120	730	-	93	-	0 - 40	75	30*	0.01
HV04RM (PURS)	455	1410	990	-	-	156	0 - 40	200	30*	0.01

### Hypac Kits

Outle (Rp) %" %"

Model	Full Membrane Dryer Kit Option	Aftercooler Option Only
HV01RM (PUTS)	ACA-501BD-P	ACA-5-B
HV02RM (PUTS)	ACA-502-BD-P	ACA-5-B
HV04RM (PUTS)	ACA-504BD-300	ACA-504-WEG

Note: The 50 Hz / 400 Volts / 3 Phase Regulated Speed (RS) models

also cover 60 Hz / 460 Volts / 3 Phase

Hypac Membrane dryer kits installed within the factory have a nominal fitting charge. Please contact your local distributor to determine your exact requirements.

Model	Docker	e Dimensio	nc (mm)	1	_		F	Packad	e Weigh	ts (ka)	- Vertica	al				Ambient	Receiver	Pressure	Air	Air
Model						Fixed	d Speed					Regulat	ed Spe	ed (RS)		Temperature	Capacity	Dew Point	Cleanliness	Outlet
	Depth	Width	Height	4kW	5.5kW	7.5kW	11kW	15kW	18kW	22kW	7.5kW	11kW	15kW	18kW	22kW	Min - Max(°C)	(litres)	(°C)	(mg/m³)	(Rp)
HV04 / HV0	5 / HV07 /	HV07RS																		
ACER	741	1570	1520	306	311	322	-	-	-	-	329	-	-	-	-	0 - 45**	250	8	<2	3/17
ACED	741	900	1050	223	229	240	-	-	-	-	247	-	-	-	-	0 - 45**	-	3	<1	3/1"
AERD	741	1570	1520	348	354	365	-	-	-	-	372	-	-	-	-	0 - 45**	250	3	<1	3/17
HV11 / HV1	1RS																			
ACER	1187	1355	1550	-	-	-	521	-	-	-	-	528	-	-	-	0 - 45**	272	8	<2	3/19
ACED	825	1215	1550	-	-	-	446	-	-	-	-	453	-	-	-	0 - 45**	-	3	<1	3/19
AERD	1187	1355	1550	-	-	-	586	-	-	-	-	593	-	-	-	0 - 45**	272	3	<1	3/179
HV15 / HV1	5RS																			
ACER	1187	1355	1550	-	-	-	-	534	-	-	-	-	541	-	-	0 - 45**	272	8	<2	3/17
ACED	825	1215	1550	-	-	-	-	459	-	-	-	-	466	-	-	0 - 45**	-	3	<1	3/17
AERD	1187	1355	1550	-	-	-	-	586	-	-	-	-	606	-	-	0 - 45**	272	3	<1	3/4**
HV18 / HV1	8RS																			
ACER	1187	1355	1550	-	-	-	-	-	618	-	-	-	-	644	-	0 - 45**	272	8	<2	3/17
ACED	825	1215	1550	-	-	-	-	-	543	-	-	-	-	569	-	0 - 45**	-	3	<1	3/17
AERD	1187	1355	1550	-	-	-	-	-	683	-	-	-	-	709	-	0 - 45**	272	3	<1	3/17
HV22 / HV2	2RS																			
ACER	1187	1355	1550	-	-	-	-	-	-	631	-	-	-	-	657	0 - 45**	272	8	<2	3/17
ACED	825	1215	1550	-	-	-	-	-	-	556	-	-	-	-	582	0 - 45**	-	3	<1	3/19
AERD	1187	1355	1550	-	-	-	-	-	-	696	-	-	-	-	722	0 - 45**	272	3	<1	3/19
																		Note These a		

#### DOL Direct On Line

SD Star Delta V Regulated Spe

Regulated Speed (RS)

Free Air Delivered (FAD) according to BS ISO1217:2009-Annex B, C and E

 \* Below ambient
 \*\* Fixed Speed compressors operate up to 45°C ambient temperatures (Regulated Speed (RS) compressors operate up to 40°C) Hydrovane compressors are designed for indoor installation under cover only.

Note: There are no 60 Hz Hypac models

15

### Hypac 50 Hz Vertical Enclosed - Refrigerant Dryer Range

Please contact your local authorised Hydrovane distributor to discuss your needs and how we can reduce your energy costs with a compressed air system energy audit.

## <sup>®</sup>hydrovane

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