A I R C O M P R E S S O R S ROLLAIR® 20V-30V-40V-50V-60V 75V-100V-125V-220V



ROLLAIR® 20V - 30V and VT



ROLLAIR® 40V - 50V - 60V - 75V and VT



**ROLLAIR® 100V - 125 V** 



ROLLAIR® 220V





# ROLLAIR® 20V-30V-40V-50V-60V-75V-100V-125V-220V A machine that makes you savings

Compressed air is a major part of many companies' production costs; It is therefore beneficial to optimise these cost reductions and increase manufacturing efficiency.

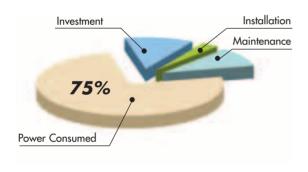
ROLLAIR® V range is the most effective solution and can generate up to 30% energy savings.

ROLLAIR® V technology features many benefits with one single goal: Savings on energy costs.

# Almost proportional energy consumption

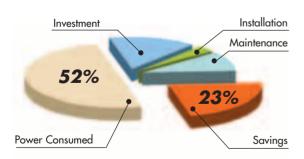
Energy accounts for the largest part of compressed air costs. For any amount invested in your compressor, up to 6 times more will be spent in energy over the next 5 years.

Power consumption of conventional compressors is higher when air demand is fluctuating, or not approaching maximum air delivery of the compressor.



With the ROLLAIR $^\circ$ , power consumption is directly proportional to the quantity of air used. It eliminates off load running and significantly reduces power consumption.

Whatever the air demand, ROLLAIR® will automatically adjust, with constant air pressure and reduced power consumption.



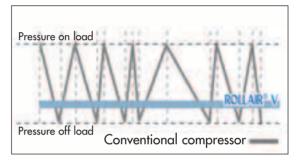
The amount of energy savings varies, and depends on the compressed air demands, but in some cases, a return on investment has been achieved less than a year:

Ask us for a running cost comparison.

### A constant pressure

Air pressure can be adjusted between 4 and 9.5 bar (13 bar as an option). Air delivery will therefore be optimised while achieving maximum efficiency from your compressor.

Conventional control systems work between two set pressures, resulting in the generated pressure being higher than the pressure required.



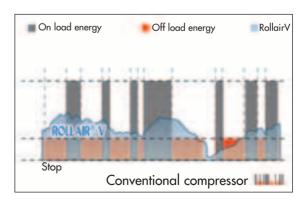
ROLLAIR® V maintains a constant pressure in the system, reducing component wear and eliminating off load running.

ROLLAIR® V control system makes it possible to use a pressure lower than that of a conventional compressor, giving additional savings.

### Stable running

Frequent changes from On load to Off load cycles with conventional control systems, put stress on pneumatic components and increase their rate of wear.

ROLLAIR® V, with variable speed control, ensures smooth and stable running, thereby minimising component wear.



### Soft start

Soft start of the variable speed control, eliminates electrical peaks that are generated during Star Delta starting sequences.

The inverter progessively increases motor frequency, avoiding any penalty that may be imposed as a result of electrical peaks.

## **ROLLAIR**® 20V-30V-40V-50V

# Totally designed with standard components

The most effective solution in the field of variable speed:

ROLLAIR® V has been designed using standard components for superior efficiency.



### High efficiency inverter

The latest generation of IP55 inverter has been built into our  $\textsc{ROLLAIR}^\circ\ V$  range for superior efficiency.

### • Compact:

Being small, it is easily integrated into the canopy of a standard ROLLAIR®, thus maintaining the footprint. There is no increase in cabinet dimensions.

### • Efficicency:

ROLLAIR® V invertor offers the most advanced technology in electronic control.

### Standard

The ROLLAIR® V invertor combines our goals of high efficiency, with the use of standard components.

# IP 55 motor, standard across the whole range

Worthington Creyssensac has achieved its goal through development with motor manufacturers.

We incorporate as standard a high efficiency motor in ROLLAIR® V, thus using standard components, making it user friendly, efficient and reliable.

# Turbine/motor combination For optimum motor cooling

One of the advantages of the ROLLAIR® 40 - 125 V is that the motor is placed directly under the cooling air turbine. This means that the motor has a constant flow of cooling air across it, resulting in low motor temperatures, even at low speeds.

This feature is especially important to make up for the low rotational speed of the internal motor fan during periods of reduced motor speed.

This will contribute to a longer motor life.

### High quality components are the reasons for ROLLAIR® V efficiency

### Direct drive: Safety and efficieency



Combined with a high efficiency standard IP55 motor, direct drive optimises energy efficiency and improves reliability. It also reduces maintenance costs.

# Superior ventilation capacity, less energy requirements

Air cooling turbine gives low rotational speed, superior air flow, 30% lower energy consumption compared to a conventional motor driven fan, and a very low noise level.



### 60V-75V-100V-125V-220V

# Components for a maximum reliability

### **ECM**: Electro Magnetic compatibility

An EMC certificate is delivered with all ROLLAIR® V machines which guarantees that there will be no electromagnetic interference on your system.





### • Pressure schedule

VCI 07 lets you program several pressure settings throughout the day, in order to satisfy any varying demands and pressure requirements.

### Optimised air delivery

Whatever the pressure requirement, air delivery will be optimised in such a way that ROLLAIR® V will be used on full load only, with no off load running.

### • Reaction time adjustment

The VC107 can be fully configured to suit your system.

### VCI 07: Intelligent control

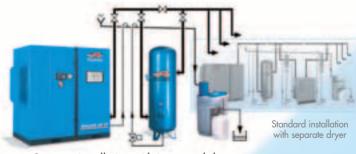
Simple and user friendly, the clear alphanumeric display gives instantaneous readings for :

- Operating status of the compresor
- Percentage loading readout (Power consumption)
- Service operation tracking.
- Fault indication.

### The integrated dryer of ROLLAIR® VT: an additional source of savings

Worthington offer an integrated refrigerated air dryer in order to benefit from the following advantages;:

- Reduced foot print, with an average of 30 to 40 % decrease.
- Reduced installation costs, as the dryer is factory fitted.
- Many installation possibilities, thanks to the combination of a low noise level and a reduced dimensions.
- Reduced risk of air leakage, as compressor/dryer package can installed close to workplace, thereby minimising pipe lengths.
- Optimised air quality, from a single unit, with very low noise levels.



Compact installation with integrated dryer

### Reasons why the ROLLAIR® V savings potential is Higher

- Standard components throughout the package.
- . Use of latest inverter technology minimises power.
- . Optimum air delivery whatever the pressure setting.
- . Precise and constant running pressure.
- . Wide range of ROLLAIR V so that selections can be made to suit requirements.
- . Low maintenance costs due to the use of standard components.
- . User friendly.
- . Compact, with a reduced foot print, even more competitive on VT model

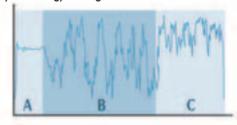
# ROLLAIR® 20V-30V-40V-50V-60V-75V-100V-125V-220V Optimise your energy savings

The RLR V must be selected according to your precise air demand to fully optimise potential savings. An intimate knowledge of your sytem demand pattern is the first step to select the correct RLR V to maximise your energy savings.

### Knowledge of your air demand

m3/h

Your air demand profile determines your potential energy savings. Selection of your proposed  $ROLLAIR^{\circ}$  V is very important and depends on your air demand .



- A Area : For a constant air demand, a standard ROLLAIR® single speed screw compressors will offer competitive energy efficiency.
- **B Area**: Air demand variations between 20 and 80 %, will generate maximum energy savings with variable speed drive.
- C Area: Only a small percentage of the air demand fluctuates. In this case, a standard ROLLAIR® compressor can be selected to cover the base load, and run in conjunction with a ROLLAIR® V, that will adjust to the variable air demand, and generate maximum energy savings.

### A correct selection of a ROLLAIR® V to match your air demand

To help you choose a compressor suited to your needs, Worthington Creyssensac has designed a complete range of variable speed compressors from 20 to 220 hp; Our goal is to satisfy any compressed air demand fluctuation, and any size of application.



The correct selection of your ROLLAIR® V guarantees:

- optimising your energy savings
- limiting investment to a ROLLAIR® V suited to your requirements.

### Worthington Creyssensac can help you

In order to demonstrate potential savings, and correctly size your compressor, Worthington Creyssensac can simulate an installation as it would be with a  $ROLLAIR^{\circ} V$ .

Savings can then be calculated, and the investment evaluated.





# Technical Specifications

Version	(1)FAD Mini	<sup>(1)</sup> FAD maxi												Motor		coustic	<sup>(3)</sup> Ø Compressed level	air output diameter	Weight V VT	
		4 bar m³/h cfm	5 t m³/h	oar cfm	6 b m³/h	ar cfm	7 bi m³/h	ar cfm	8 l m³/h	oar cfm	9 l m³/h	ar cfm	9,5 m³/h	bar cfm	kW	ch	dB (A)	и	k	
ROLLAIR® 20 V	26	190 112	187	110	177	104	169	99	159	94	150	88	145	85	15	20	65	1	470	530
ROLLAIR® 30 V	28	235 138	235	138	235	138	234	138	223	131	213	125	209	123	22	30	68	1	529	599
ROLLAIR® 40 V	75	331 195	331	195	331	195	331	195	310	182	292	172	283	167	30	40	65	1"1/2	945	1040
ROLLAIR® 50 V	75	406 239	406	239	405	238	398	234	376	221	355	209	346	204	37	50	66	1"1/2	935	1105
ROLLAIR® 60 V	81	495 291	494	291	493	290	476	280	451	265	426	251	416	245	45	60	67	1"1/2	1025	1195
ROLLAIR® 75 V	83	636 374	632	372	605	356	582	343	555	327	531	313	518	305	55	75	68	1"1/2	1055	1225
ROLLAIR® 100 V	140	850 500	849	500	848	499	835	491	780	459	739	435	719	423	75	100	73	2	1260	W -
ROLLAIR® 125 V	162	1 040 612	1 018	599	962	566	919	541	862	507	818	481	792	466	90	125	77	2	1460	1 -
ROLLAIR® 220 V	281				1 791	1 054	1 783	1 049	1 690	995	1 585	933	1 549	912	160	220	77	3	4000	-

<sup>(1)</sup> as per ISO 1217 : 1996

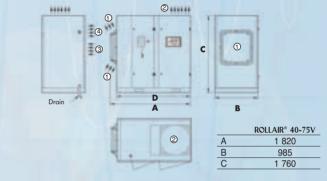
(2) as per CAGI PNEUROP Norm at 1 metre, at maximum absorbed power at 9.5 bar

3) G-thread

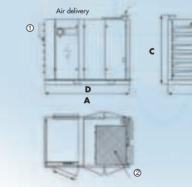
# **Dimensional requirements** 3 1 ROLLAIR® 20V-30V 1 250 ВС Ventilation: ① Compressor air entry ② Compressor air outlet ③ Dryer air entry ④ Dryer air outlet 1

Α

2



Ventilation: ① Compressor air entry ② Compressor air outlet ③ Dryer air entry ④ Dryer air outlet





Ventilation: ① Air Inlet ② Air Outlet

ROLLAIR® is a registered trademark of Worthington Creyssensac.

ROLLAIR® 100V-125V

1 110

1 700

1 690

Ventilation: ① Air Inlet ② Air Outlet

### **Worthington Creyssensac**

Zone Industrielle - 4 rue Emile Zola B.P. 80419 - 60114 Méru Cedex - FRANCE

### **Export**

Zone Industrielle 4 rue Emile Zola B.P. 80419 60114 Méru Cedex **FRANCE** 

Tél: 33 (0) 3 44 52 67 31 Fax: 33 (0) 3 44 52 67 35

# Your Distributor

### **Worthington Creyssensac**