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RV3 Two Stage Rotary Vane Pump

Edwards RV pumps have become the industry standard for scientific primary pumping applications. RV pumps are uniquely capable of delivering high or low throughputs with high ultimate vacuum. This, combined with ultra-low noise levels, makes them ideal for a wide range of applications including GCMS and other small bench top type applications.

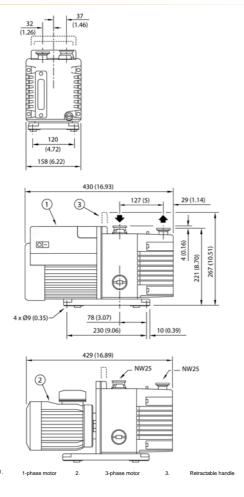
All pumps are approved to UL and CSA standards by an external test house. Edwards has a global network, providing world-wide support for product applications and service.

Supplied with: 1 litre of Ultragrade 19 oil, inlet filter and O-ring. Fomblin® must be purchased separately for PFPE RV pumps.

Features & Benefits

- 48 dBA and intrusive frequencies minimised.
- Dual mode. Suitable for high throughput and high vacuum applications.
- Easy-to-use gas ballast.
- Fast acting inlet valve for system protection.
- High torque, dual voltage/dual frequency motor, electronic start relay.

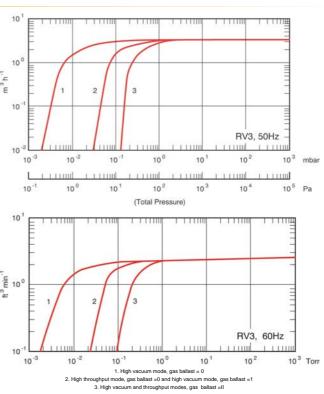
Dimensions



Applications

- Analytical instruments
- · Laboratory bench top vacuum
- · Turbomolecuar backing pumps
- Freeze drying
- Research and development

Performance Curves



Displacement	
50Hz	$3.7 \mathrm{m}^3 \mathrm{h}^{-1} / 2.2 \mathrm{ft}^3 \mathrm{min}^{-1}$
60Hz	$4.5 \mathrm{m}^3 \mathrm{h}^{-1} / 2.6 \mathrm{ft}^3 \mathrm{min}^{-1}$
Speed (Pneurop 6602)	
50Hz	$3.3 \mathrm{m}^3 \mathrm{h}^{-1} / 2 \mathrm{ft}^3 \mathrm{min}^{-1}$
60Hz	$3.9 \mathrm{m}^3 \mathrm{h}^{-1} / 2.3 \mathrm{ft}^3 \mathrm{min}^{-1}$
Ultimate pressure	$2.0 \times 10^{-3} \text{ mbar} / 1.5 \times 10^{-3} \text{ Torr}$
Ultimate pressure GB I	$3.0 \times 10^{-2} \text{mbar} / 2.3 \times 10^{-2} \text{Torr}$
Ultimate pressure GB II	1.2 x 10 ⁻¹ mbar / 9.1 x 10 ⁻² Torr
Ultimate Pressure with Fomblin®	2 x 10 ⁻² mbar / 1.5 x 10 ⁻² Torr
Max inlet pressure for water vapour	80 mbar / 60 Torr
Max water vapour pumping rate – GB I	60 gh ⁻¹
Max water vapour pumping rate – GB II	220 gh ⁻¹
Max allowed outlet pressure	1 bar gauge / 14 psig
Max allowed inlet and gas ballast pressure	0.5 bar gauge / 7 psig
Motor power 50/60Hz	450 / 550W
Power connector 1-ph	IEC EN60320 C13
Nominal rotation speed 50/60Hz	1500 / 1800rpm
Weight (without oil)	25 kg / 55 lb
Oil capacity min/max	0.42/0.7 litres
Recommended oil	Ultragrade 19
Inlet flange	NW25
Exhaust flange	NW25
Noise level	48 dBA @ 50 Hz
Operating temperature range	12 – 40 °C

Ordering Information

Product Description	Order No.
RV3 115/230V, 1-ph, 50/60Hz, Factory set to 230V for Europe	A65201903
RV3 100/200V, 1-ph, 50/60Hz, Factory set to 200V for Japan	A65201904
RV3 200-220/380-415V, 3-ph, 50Hz and 200-230/460V, 3-ph, 60Hz Factory set to 380/460V	A65201905
RV3 115/230V, 1-ph, 50/60Hz, Factory set to 115V for USA	A65201906
PFPE RV3 115/230V, 1-ph, 50/60 Hz, Factory set to 230V for Europe	A65209903
PFPE RV3 100/200V, 1-ph, 50/60Hz, Factory set to 200V for Japan	A65209904
PFPE RV3 200-220/380-415V, 3-ph, 50Hz and 200-230/460V, 3-ph, 60Hz, Factory set to 380/460V	A65209905
PFPE RV3 115/230V, 1-ph, 50/60Hz, Factory set to 115V for USA	A65209906
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, UK, Three-pin plug	A50505000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, no plug	A50508000
RV gas-ballast adaptor	A50502000
RV exhaust nozzle kit	A50509000
Model EMF10 mist filter	A46226000
Clean and overhaul kit	A65201131
Clean and overhaul kit (Nitrile)	A65201137
Blade Kit RV3	A65201130
Outer Shaft Seal Kit RV	A65201134
Spares Kit Inlet Valve RV3/5/8/12	A65201036
Spares Kit Cartridge RV3	A65201032