

E2M40 Two Stage Rotary Vacuum Pumps



Edwards E2M40 series two stage oil sealed rotary vane vacuum pumps are renowned for their high ultimate vacuum, rapid pumping speeds, quiet operation and ability to handle water vapour. These direct drive rotary vane pumps are inherently compact and vibration free, and with their finger-proof fan and coupling housings they offer excellent operator protection.

A comprehensive range of accessories is available to allow use on the widest variety of vacuum applications.

Supplied with Ultragrade 70 Oil. Fomblin® must be purchased separately for PFPE prepared pumps E2M40FX, E2M80FX, and E2M175FX.

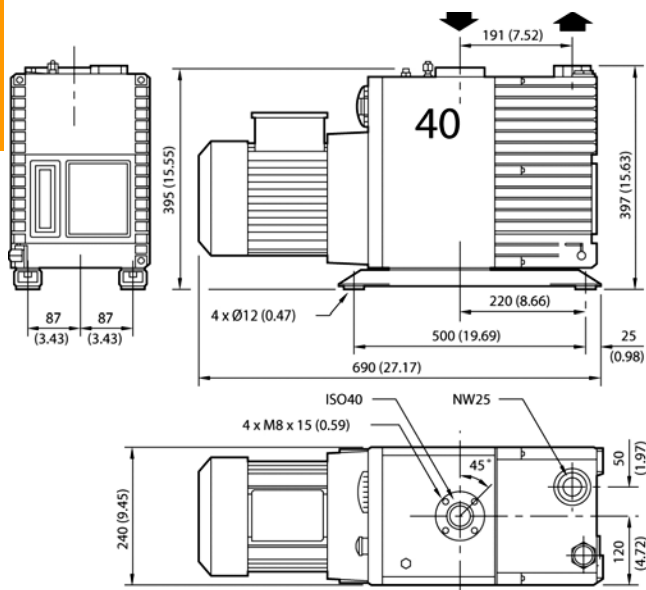
Features & Benefits

- Advanced pressurised oil circuit to give effective lubrication even under high gas loads
- When the pump is switched off, the spring loaded distributor valve provides oil and air suck-back protection
- Gas Ballast control to assist in handling high water vapour loads
- Industrial roller bearings on drive shaft for ultimate reliability and long, trouble free life
- Full height oil sight glass for easy checking of oil level and condition

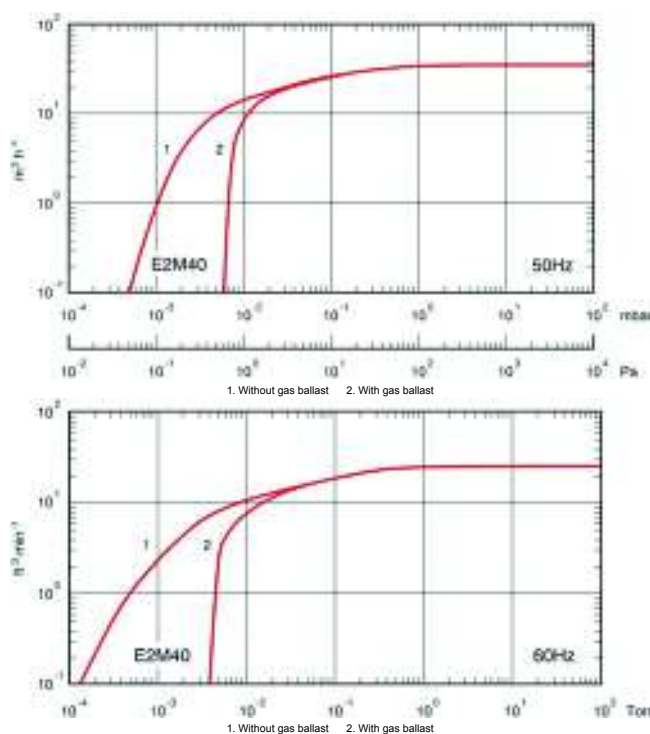
Applications

- Vacuum metallurgy processes
- Thin film coating technologies
- Pharmaceutical freeze drying
- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Transformer and cable drying and impregnation, insulating oil treatment plant

Dimensions



Performance Curves



Technical Data

Displacement	
50Hz	42.5 m ³ h ⁻¹ / 25 ft ³ min ⁻¹
60Hz	50.5 m ³ h ⁻¹ / 29.7 ft ³ min ⁻¹
Speed (Pneurop)	
50Hz	37 m ³ h ⁻¹ / 21.8 ft ³ min ⁻¹
60Hz	44 m ³ h ⁻¹ / 25.9 ft ³ min ⁻¹
Number of stages	2
Ultimate vacuum (total pressure)	
Without gas ballast	1 x 10 ⁻³ mbar / 7.7 x 10 ⁻⁴ Torr
With gas ballast	7 x 10 ⁻³ mbar / 5.4 x 10 ⁻³ Torr
Ultimate with Fomblin®	
Without gas ballast	1 x 10 ⁻² mbar
Inlet connection	ISO40
Outlet connection	25 mm flange suitable for NW25
Max outlet pressure	0.5 bar gauge
Max inlet pressure for water vapour	7 mbar / 5.3 Torr
Max water vapour pumping rate	0.2 kg h ⁻¹ / 0.4 lb h ⁻¹
Weight	72 kg / 159 lb
Motor protection rating	IP44 or IP54
Motor power	
50Hz	1.1 kW / 1.5 hp
60Hz	1.5 kW / 2 hp
Standard oil capacity	
maximum	3.5 litre / 3.2 qt
minimum	1.32 litre / 1.6 qt
PFPE oil capacity	
maximum	3.5 litre / 3.2 qt
minimum	1.32 litre / 1.6 qt
Recommended oil	Ultragrade 70
Noise level	65 dB (A)

Ordering Information

Product Description	Order No.
E2M40 220-240 / 380-415V, 3-ph, 50Hz	A36401935
E2M40 208-230/460V, 3-ph, 60Hz	A36402982
E2M40 200/380V, 3-ph, 50/60Hz	A36401934
E2M40FX 220-240/380-415V, 3-ph, 50Hz	A36411935
E2M40FX 208-230/460V, 3-ph 60Hz	A36412982
E2M40FX 200/380V, 3-ph, 50/60Hz	A36411934
E2M40T4 400V, 3-ph, 50Hz	A36418993
Accessories & Spares	Order No.
Spares Kit C&O E1/2M40 HC/F	A34401131
Spares Kit Blade E1M40	A34401050
Spares Kit Blade E2M40	A36401050
Spares Kit Major E1M40	A34401814
Spares Kit Major Service E2M40	A36401814

E2M80 Two Stage Rotary Vacuum Pumps



Edwards E2M80 series two stage oil sealed rotary vane vacuum pumps are renowned for their high ultimate vacuum, rapid pumping speeds, quiet operation and ability to handle water vapour. These direct drive rotary vane pumps are inherently compact and vibration free, and with their finger-proof fan and coupling housings they offer excellent operator protection.

This pump is suitable for most duties and is safe to handle non-flammable gases and vapours within the normal operating parameters of the pump.

Supplied with Ultragrade 70 Oil. Fomblin® must be purchased separately for PFPE prepared pumps E2M40FX, E2M80FX, and E2M175FX.

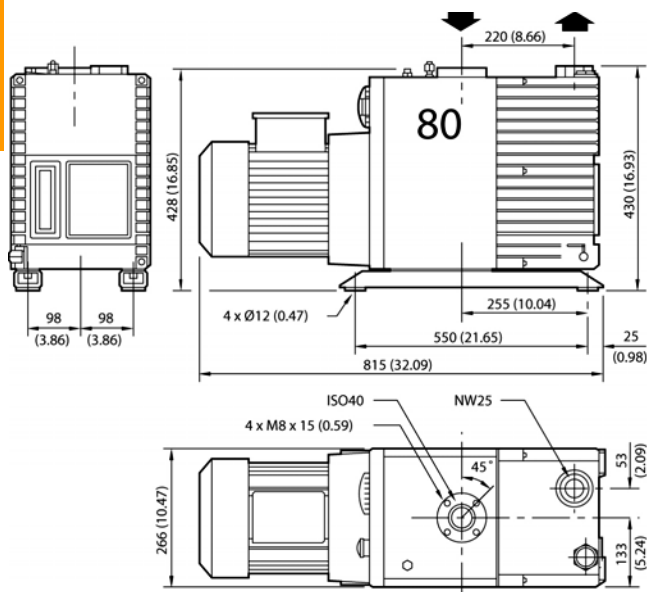
Features & Benefits

- Advanced pressurised oil circuit to give effective lubrication even under high gas loads
- When the pump is switched off, the spring loaded distributor valve provides oil and air suck-back protection
- Gas Ballast control to assist in handling high water vapour loads
- Industrial roller bearings on drive shaft for ultimate reliability and long, trouble free life
- Full height oil sight glass for easy checking of oil level and condition

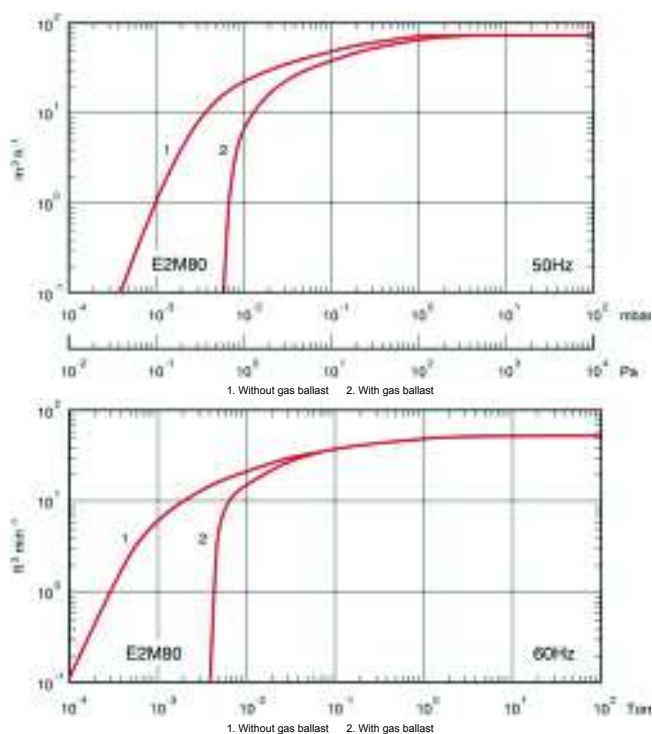
Applications

- Vacuum metallurgy processes
- Thin film coating technologies
- Pharmaceutical freeze drying
- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Transformer and cable drying and impregnation, insulating oil treatment plant

Dimensions



Performance Curves



Technical Data

Displacement	
50Hz	80 m ³ h ⁻¹ / 47.1 ft ³ min ⁻¹
60Hz	96 m ³ h ⁻¹ / 56.5 ft ³ min ⁻¹
Speed (Pneurop)	
50Hz	74 m ³ h ⁻¹ / 43.6 ft ³ min ⁻¹
60Hz	90 m ³ h ⁻¹ / 53 ft ³ min ⁻¹
Number of stages	2
Ultimate vacuum (total pressure)	
Without gas ballast	1 x 10 ⁻³ mbar / 7.7 x 10 ⁻⁴ Torr
With gas ballast	7 x 10 ⁻³ mbar / 5.4 x 10 ⁻³ Torr
Ultimate with Fomblin®	
Without gas ballast	1 x 10 ⁻² mbar
Inlet connection	ISO40
Outlet connection	25 mm flange suitable for NW25
Max outlet pressure	0.5 bar gauge
Max inlet pressure for water vapour	5 mbar / 3.8 Torr
Max water vapour pumping rate	0.3 kg h ⁻¹ / 0.7 lb h ⁻¹
Weight	105 kg / 231 lb
Motor protection rating	IP44 or IP54
Motor power	
50Hz	2.2 kW / 3 hp
60Hz	3 kW / 4 hp
Standard oil capacity	
maximum	6.3 litre / 6.7 qt
minimum	4 litre / 4.2 qt
PFPE oil capacity	
maximum	4.01 litre / 4.2 qt
minimum	2.19 litre / 2.3 qt
Recommended oil	Ultragrade 70
Noise level	70 dB (A)

Ordering Information

Product Description	Order No.
E2M80 220-240/380-415V, 3-ph, 50Hz	A36501935
E2M80 208-230/460V, 3-ph, 60Hz	A36502982
E2M80 200/380V, 3-ph, 50/60Hz	A36501934
E2M80FX 220-240/380-415V, 3-ph, 50Hz	A36511935
E2M80FX, 208-230/460V, 3-ph, 60Hz	A36512982
E2M80FX 200/380V, 3-ph, 50/60Hz	A36511934
E2M80T4 400V, 3-ph, 50Hz	A36518993
Accessories & Spares	Order No.
Spares Kit C&O E1/2M80 HC/F	A34501131
Spares Kit Blade E2M80	A36501050
Spares Kit Blade E1M80	A34501050
Spares Kit Major Service E1M80	A34501814
Spares Kit Major Service E2M80	A36501814

E2M175 Two Stage Rotary Vacuum Pumps



Edwards E2M175 series two stage oil sealed rotary vane vacuum pumps are renowned for their high ultimate vacuum, rapid pumping speeds, quiet operation and ability to handle water vapour. These direct drive rotary vane pumps are inherently compact and vibration free, and with their finger-proof fan and coupling housings they offer excellent operator protection.

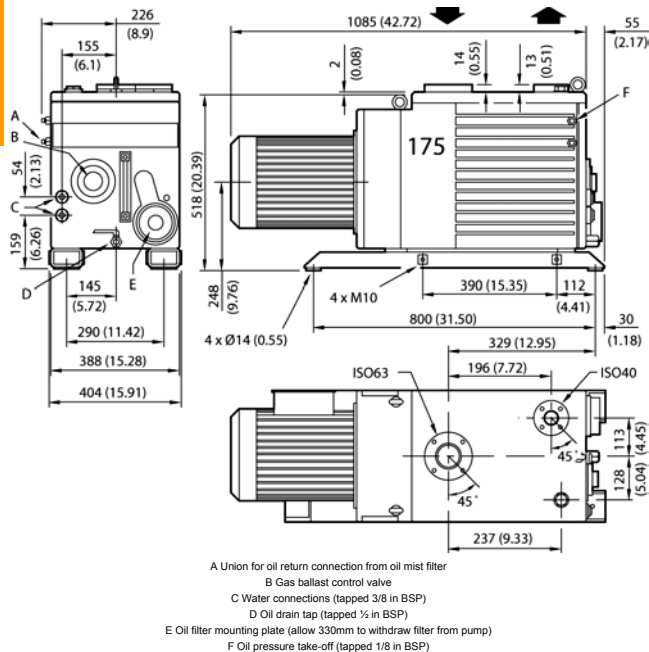
This pump is suitable for most duties and is safe to handle non-flammable gases and vapours within the normal operating parameters of the pump.

Supplied with Ultragrade 70 Oil. Fomblin® must be purchased separately for PFPE prepared pumps E2M40FX, E2M80FX, and E2M175FX.

Features & Benefits

- Advanced pressurised oil circuit to give effective lubrication even under high gas loads
- When the pump is switched off, the spring loaded distributor valve provides oil and air suck-back protection
- Gas Ballast control to assist in handling high water vapour loads
- Industrial roller bearings on drive shaft for ultimate reliability and long, trouble free life
- Full height oil sight glass for easy checking of oil level and condition

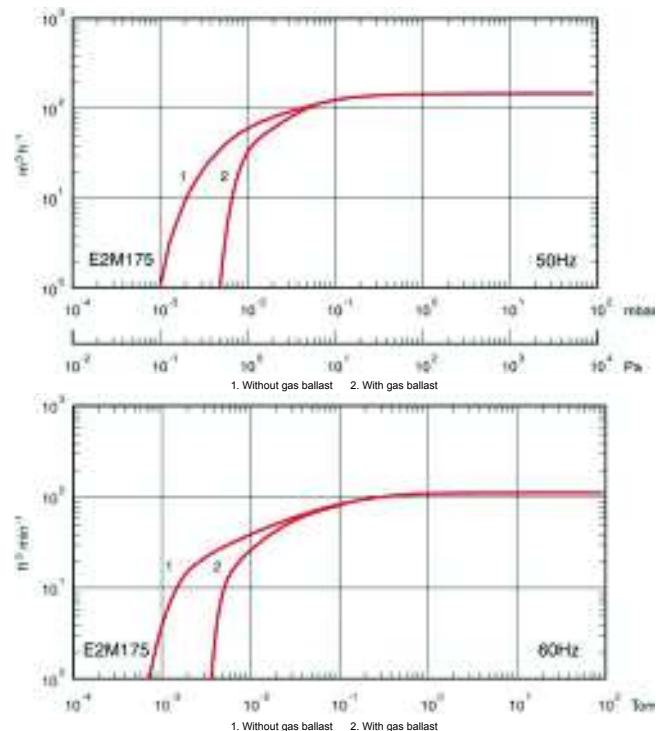
Dimensions



Applications

- Vacuum metallurgy processes
- Thin film coating technologies
- Pharmaceutical freeze drying
- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Transformer and cable drying and impregnation, insulating oil treatment plant

Performance Curves



Technical Data

Displacement	
50Hz	178 m ³ h ⁻¹ / 105 ft ³ min ⁻¹
60Hz	214 m ³ h ⁻¹ / 126 ft ³ min ⁻¹
Speed (Pneurop)	
50Hz	160 m ³ h ⁻¹ / 94 ft ³ min ⁻¹
60Hz	196 m ³ h ⁻¹ / 115 ft ³ min ⁻¹
Number of stages	2
Ultimate vacuum (total pressure)	
Without gas ballast	1 x 10 ⁻³ mbar / 7.7 x 10 ⁻⁴ Torr
With gas ballast	7 x 10 ⁻³ mbar / 5.4 x 10 ⁻³ Torr
Ultimate with Fomblin®	
Without gas ballast	1 x 10 ⁻² mbar
Inlet connection	ISO63 blank flange with seal
Outlet connection	ISO40 flange centre tapped
Max outlet pressure	0.5 bar gauge
Max inlet pressure for water vapor	20 mbar / 15 Torr
Max water vapor pumping rate	0.3 kg h ⁻¹ / 0.7 lb h ⁻¹
Weight	200 kg / 441 lb
Motor protection rating	IP44
Motor power	
50Hz	5.5 kW / 7.5 hp
60Hz	6.5 kW / 8.5 hp
Standard oil capacity	
maximum	25 litre / 26 qt
minimum	16 litre / 17 qt
PFPE oil capacity	
maximum	18 litre / 19 qt
minimum	6.5 litre / 6.9 qt
Recommended oil	Ultragrade 70
Noise level	75 dB (A)
Water cooling requirement	1.3 lmin ⁻¹

Ordering Information

Product Description	Order No.
E2M175 220-240/380-415V, 3-ph, 50Hz	A36601935
E2M175 208-230/460V, 3-ph, 60Hz 4 pole	A36603982
E2M175 200/380V, 3-ph, 50/60Hz	A36601934
E2M175FX 220-240/380-415V, 3-ph, 50Hz	A36615935
E2M175FX 208-230/460V, 3-ph, 60Hz	A36616982
E2M175FX 200/380V, 3-ph, 50/60Hz	A36611934
E2M175T3 220-240/380-415V, 3-ph, 50Hz	A36618993
Accessories & Spares	Order No.
Spares Kit C&O E1M175/275S	A34601131
Spares Kit C&O E2M175/275	A36601131
Service Interior Assy E1M175	A34601100
Service Interior Assy E2M175	A36601100
Spares Kit Blade E2M175	A36601134
Spares Kit Blade Springless E1M175	A34601134
Spares Kit Major E1M175S	A34601831
Spares Kit Major Service E2M175	A36601831

E2M275 Two Stage Rotary Vacuum Pumps



Edwards E2M275 series two stage oil sealed rotary vane vacuum pumps are renowned for their high ultimate vacuum, rapid pumping speeds, quiet operation and ability to handle water vapour. These direct drive rotary vane pumps are inherently compact and vibration free, and with their finger-proof fan and coupling housings they offer excellent operator protection.

This pump is suitable for most duties and is safe to handle non-flammable gases and vapours within the normal operating parameters of the pump. Supplied with Ultragrade 70 Oil.

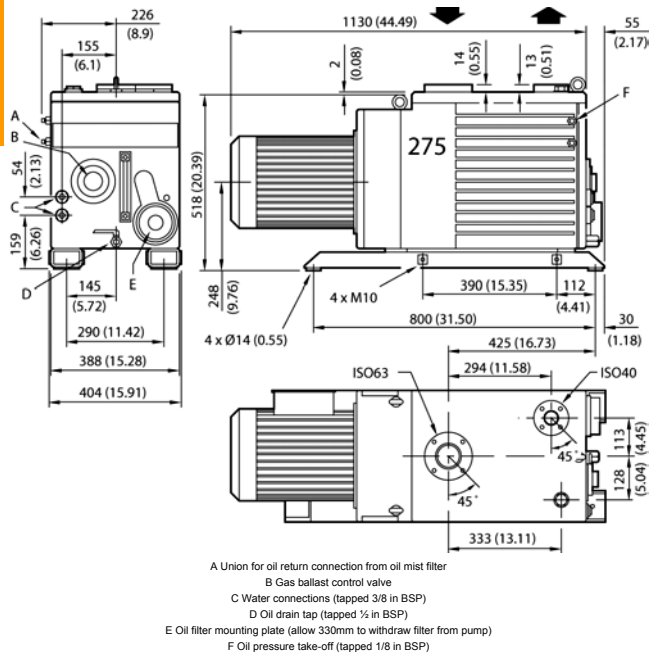
Features & Benefits

- Advanced pressurised oil circuit to give effective lubrication even under high gas loads
- When the pump is switched off, the spring loaded distributor valve provides oil and air suck-back protection
- Gas Ballast control to assist in handling high water vapour loads
- Industrial roller bearings on drive shaft for ultimate reliability and long, trouble free life
- Full height oil sight glass for easy checking of oil level and condition

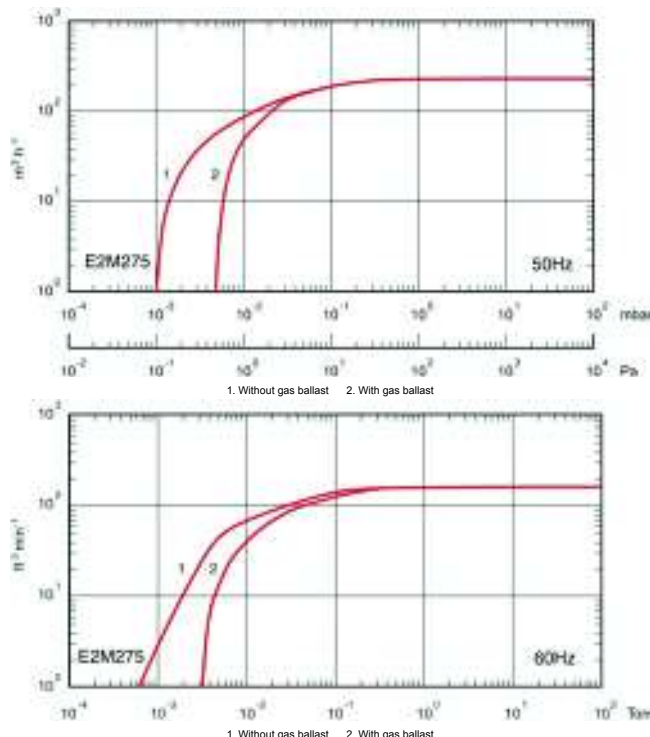
Applications

- Vacuum metallurgy processes
- Thin film coating technologies
- Pharmaceutical freeze drying
- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Transformer and cable drying and impregnation, insulating oil treatment plant

Dimensions



Performance Curves



Technical Data

Displacement	
50Hz	292 m ³ h ⁻¹ / 172 ft ³ min ⁻¹
60Hz	350 m ³ h ⁻¹ / 206 ft ³ min ⁻¹
Speed (Pneurop)	
50Hz	255 m ³ h ⁻¹ / 150 ft ³ min ⁻¹
60Hz	306 m ³ h ⁻¹ / 180 ft ³ min ⁻¹
Number of stages	2
Ultimate vacuum (total pressure)	
Without gas ballast	1.0 x 10 ⁻³ mbar / 7.7 x 10 ⁻⁴ Torr
With gas ballast	5.0 x 10 ⁻³ mbar / 3.8 x 10 ⁻³ Torr
Inlet connection	ISO63 blank flange with seal
Outlet connection	ISO40 flange centre tapped
Max outlet pressure	0.5 bar gauge
Max inlet pressure for water vapour	12 mbar / 9 Torr
Max water vapour pumping rate	2.3 kg h ⁻¹ / 5.1 lb h ⁻¹
Weight	225 kg / 495 lb
Motor protection rating	IP44
Motor power	
50Hz	7.5 kW / 10 hp
60Hz	8.5 kW / 11 hp
Standard oil capacity	
maximum	28 litre / 29.5 qt
minimum	19 litre / 20 qt
Recommended oil	Ultragrade 70
Noise level	75 dB (A)
Water cooling requirement	2 lmin ⁻¹

Ordering Information

Product Description	Order No.
E2M275 220-240/380-415V, 3-ph, 50Hz	A36701935
E2M275 208-230/460V, 3-ph, 60Hz	A36703982
E2M275 200/380V, 3-ph, 50/60Hz	A36701934
E2M275T3 400V, 3-ph, 50Hz	A36718993
Accessories & Spares	Order No.
Spares Kit C&O E1M175/275S	A34601131
Spares Kit C&O E2M175/275	A36601131
Service Interior Assy E1M275	A34701100
Service Interior Assy E2M275	A36701100
Spares Kit Blade E2M275	A36701134
Spares Kit Blade Springless E1M275	A34701134
Spares Kit Major E1M275S	A34701831
Spares Kit Major Service E2M275	A36701831