edwardsvacuum.com

EDC DRY CLAW VACUUM PUMPS

EDWARDS

EDWARDS
THE PARTNER OF CHOICE

Edwards is a world leader in the design, technology and manufacture of vacuum pumps for industrial applications with over 100 years' history.

We believe in delivering results that bring value to our customers by using our breadth of industry experience to identify and apply solutions. Using the most innovative and up-to-date modelling techniques, we can optimise the pumping configuration for customers to provide a system design giving the maximum performance in the most reliable and cost-effective way.

INNOVATION AND RELIABILITY

Edwards EDC range of robust single stage dry claw vacuum pumps.

Edwards range of EDC dry claw pumps features an innovative design which creates a new benchmark in the claw pump market. The simplicity, robustness, efficiency and contaminant handling capability of these pumps make them the smart choice for your application. Built to the exacting standards and quality demanded by our customers, Edwards dry claw pump provides you with a trouble-free and cost-effective solution to meet your needs.

Built to last
Innovative construction materials and coatings for a lifetime of reliable operation even in harsh conditions.

Easy maintenance with lower cost
Long life bearings and seals with a separate and isolated pumping element offering quick access for easy cleaning in the event of product carry-over.

Low cost of ownership
Best-in-class power consumption.

Quiet operation
Low noise levels.

Reliability you can trust
Quiet and efficient operation with low failure rate over a long lifetime, even in the most challenging conditions.

Improved productivity
Superior performance: excellent ultimate vacuum level, fast pumping speed and lower continuous vacuum level.

Innovation driven
The durability of our claw is rooted in our expertise. We first introduced claw technology to vacuum applications in the high tech electronics industry. Now our knowledge and experience leads to low cost, efficient and reliable single stage claw products.

Fully certified
Our dry claw machines meet the demanding requirements of ISO 9001, ISO 14001. They are backed up a market-leading warranty and a service support network across 180 countries. The result? 24/7 assurance that your products and your processes are constantly kept in the best possible working order.

EDC65-300 - DESIGNED FOR A LONG LIFE OF RELIABLE, EFFICIENT OPERATION

The dry claw vacuum pump includes noteworthy design features including corrosion resistant claws due to the renowned surface coating applied to the pumps process chambers.

1 Innovative features

- Dry (oil-free) pumping chamber
- Efficient motor with variable speed option for full controllability
- Simple maintenance with contact-free internals eliminating wear
- Cool running with effective air cooling
- Compact design with a small footprint

2 Built-in corrosion resistance (standard)

- Corrosion resistant claws
- Coated pumping chamber
- Suitable for many harsh applications

3 Cleverly designed element

- Easily accessible pumping chamber for cleaning without accessing the gearbox and disturbing the timing
- Modular design allows flexibility and efficiency in terms of maintenance and life cycle costs

4 Upgraded bearings and seals

- Based on proven compressor and screw vacuum pump design for long trouble free life even in the harshest applications

5 Compact machine with a small footprint

- Ideally suited for replacement market, compressor house installations and OEM machinery

6 Variable Speed Drive compatible (VSD)

- Significant energy savings: up to 50%* compared to fixed speed machines
- Improved response to varying demand
- Opportunity to replace multiple machines and centralize pumps in one location to optimise system performance

7 Set-point control (option on EDC65, EDC150 & EDC300)

- Allows you to optimise the energy you use to maintain your process duty point
- The lowest possible flow will be delivered to match your required duty point or speed - nothing is wasted

**In most applications compared to traditional fixed speed vacuum technologies based on measurement with our Vbox energy audit tool.*

EDC500-1000 - EDWARDS NEW HIGH CAPACITY DRY CLAW PUMPS

Compact dry claw pumps with latest claw technology that are reliable, clean, modular and energy efficient.

1 Reliable

- Suitable for demanding industrial applications as claws and rotor housing are coated with durable high temperature resistant material. It ensures excellent compatibility with a wide range of materials and prevent corrosion
- Pressure regulation on-board for continuous operation at 200 mbar
- Tolerant to water vapour, with a drain valve on the bottom silencer

2 Clean

- Dry (oil-free) pumping chamber, no mechanical contact between claws and nearly no maintenance required
- Inlet check valve to prevent back contamination when the pump stops

3 Modular

- Modular design with gears chamber separated from the pumping chamber by a labyrinth seal for extended lifetime
- Integrated bottom silencer to reduce footprint. It allows the connection of an external silencer at the pump exhaust for even more silent operation

4 Energy efficient

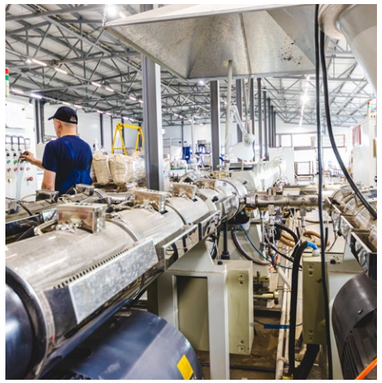
- High energy efficiency, at least 30% better than oil sealed pumps, for lower cost of ownership
- Built with an IE4 motor as standard. Possible use of a VSD for further energy savings

APPLICATIONS

With pumps up to 1000 m^3/h and the ability to be driven by a proven variable speed drive (VSD) technology the EDC claw pumps afford you complete flexibility, efficiency and control over your process. These machines designed with robustness, durability and superior materials of construction and technological advances to give you a trouble-free solution to your specific application.

The EDC range is suitable for a range of applications in various industries including:

- Steam sterilisation
- Plastic extrusion
- Wood working
- Vacuum conveying
- Pick and place
- Water and sewage handling
- Printing and paper converting
- Medical systems
- Dairy industry for milking and milk transfer
- Thermoforming
- Waste removal

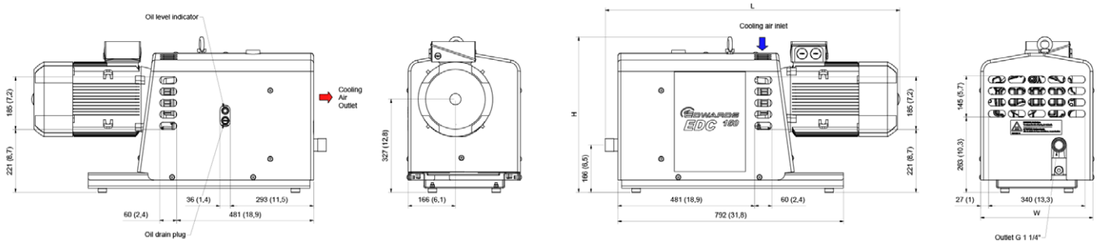


DIMENSIONS

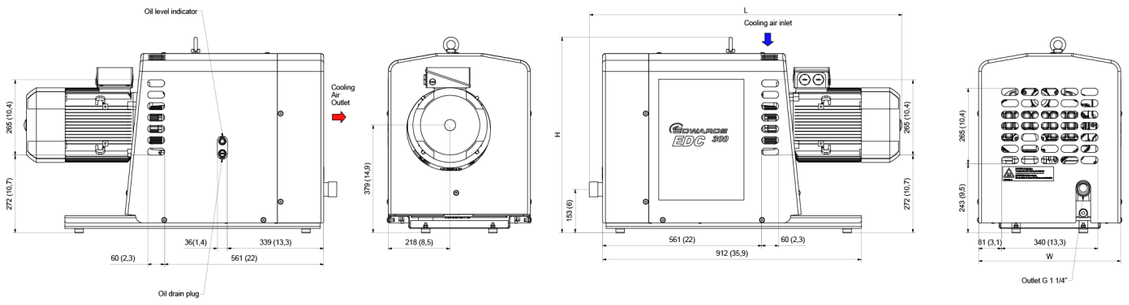
	Length		Width		Height		Inlet connection size	Outlet connection size
	mm	in	mm	in	mm	in	BSP*	BSP*
EDC65	920	36.2	394	15.5	545	21.4	G1 ¼”	G1 ¼"
EDC150	934	36.7	394	15.5	545	21.4	G1 ¼”	G1 ¼”
EDC300	1110	43.7	500	19.6	688	27.0	G2”	G1 ¼”
EDC500 - Bareshaft 50Hz	811	31.9	586	23.0	845	33.2	G3”	G2 ½”
EDC500 - Bareshaft 60Hz	822	32.3	586	23.0	845	33.2	G3”	G2 ½”
EDC1000 - Bareshaft 50Hz	1169	46.0	680	26.7	1274	50.1	DN100 PN6	DN100 PN6
EDC1000 - Bareshaft 60Hz	1169	46.0	680	26.7	1274	50.1	DN100 PN6	DN100 PN6
EDC500 - 400V 50Hz 3Ph IEC	1250	49.2	586	23.0	845	33.2	G3”	G2 ½”
EDC500 - 380V 60Hz 3Ph IEC	1302	51.2	586	23.0	845	33.2	G3”	G2 ½”
EDC500 - 460V 60Hz 3Ph IEC UL	1302	51.2	586	23.0	845	33.2	G3”	G2 ½”
EDC1000 - 400V 50Hz 3Ph IEC	1468	57.7	680	26.7	1240	48.8	DN100 PN6	DN100 PN10
EDC1000 - 380V 60Hz 3Ph IEC	1424	56.0	680	26.7	1274	50.1	DN100 PN6	DN100 PN10
EDC1000 - 460V 60Hz 3Ph IEC UL	1424	56.0	680	26.7	1274	50.1	DN100 PN6	DN100 PN10

NPT adapters available on 60Hz USA specification machines.

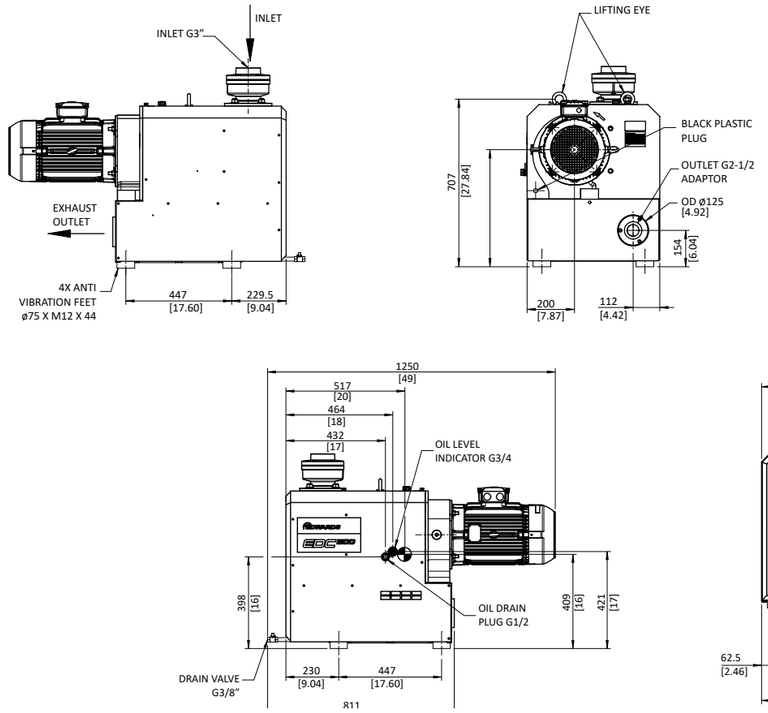
EDC65-150



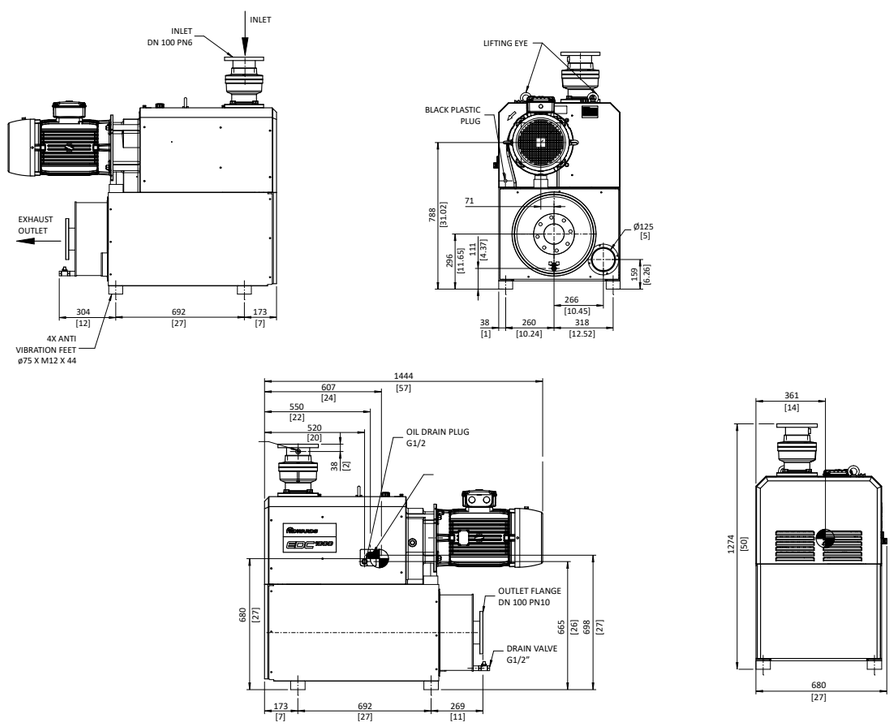
EDC300



EDC500



EDC1000



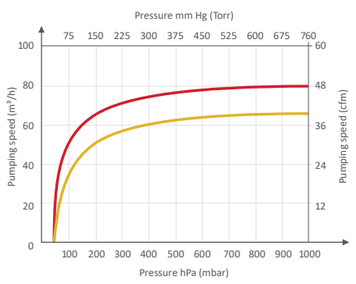
TECHNICAL SPECIFICATIONS

	Nominal displacement		Ultimate vacuum		Noise level	Permissible ambient temperature range		Nominal motor rating	
	m³/h	cfm	mbar(a)	Torr	dB(A)	°C	°F	kW	Hp
EDC65 50 Hz	65	38	50	37.5	66	0 to 40	32 to 104	1.8	2.4
EDC65 60 Hz	78	46	50	37.5	66	0 to 40	32 to 104	2.2	2.9
EDC150 50 Hz	150	88	50	37.5	75	0 to 40	32 to 104	3.7	5
EDC150 60 Hz	180	106	50	37.5	78	0 to 40	32 to 104	3.7	6
EDC300 50 Hz	300	176	140	105	77	0 to 40	32 to 104	6.2	8.3
EDC300 60 Hz	360	212	140	105	84	0 to 40	32 to 104	7.5	10
EDC500 50 Hz	500	294	200	150	76	5 to 40	41 to 104	9.2	12.3
EDC500 60 Hz	600	353	200	150	78	5 to 40	41 to 104	11	14.7
EDC1000 50 Hz	950	559	200	150	82	5 to 40	41 to 104	18.5	24.8
EDC1000 60 Hz	1140	671	200	150	85	5 to 40	41 to 104	22	29.5

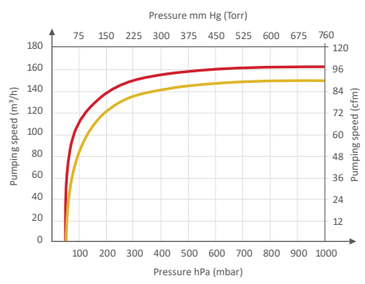
Pumping speed based on air at 20°C/70°F. Tolerance +/-10%.

PERFORMANCE CURVES

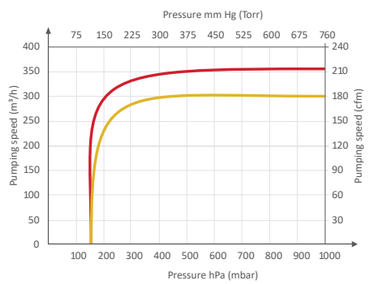
EDC65



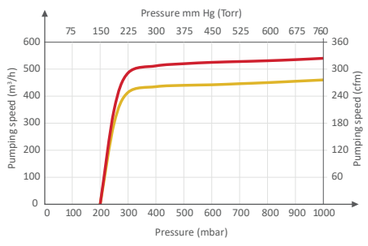
EDC150



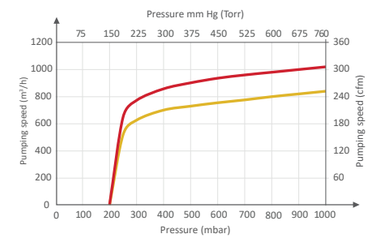
EDC300



EDC500



EDC1000



ORDERING INFORMATION

Frequency	Voltage	ED65	EDC150	EDC300	EDC500	EDC1000
50 Hz	200	A50875700	A50876700	A50877700		
	230	A50875000	A50876000	A50877000		
	400	A50875200	A50876200	A50877200	A50873110	A50873210
	500	A50875900	A50876900	A50877900		
60 Hz	200	A50875400	A50876400	A50877400		
	230	A50875800	A50876800	A50877800		
	380	A50875100	A50876100	A50877100	A50873120	A50873220
	460	A50875500	A50876500	A50877500	A50873130	A50873230
	575	A50875300	A50876300	A50877300		
	230/460	A50875600	A50876600	A50877600		

ACCESSORIES

A50875711	Outlet Silencer G1-¼”
1905199910	Air Inlet Filter & Elbow G3”
1905199911	Air Inlet Filter & Elbow DN100

1905199912	Outlet Silencer DN100
1905199915	Outlet Silencer G2-1/2”

SERVICE AND SUPPORT

Our expertise is in vacuum technology. We have been in the business since 1919 and our knowledge runs deep. We design, develop and manufacture vacuum equipment to the highest standards.

But it’s not just the technology. With a global installed base of 750,000 pumps, we understand how vacuum pumps and systems perform in real life. We know how to get the best from our products, whatever the application. We know how to look after them. That’s why a large section of our expert workforce is dedicated to service and support.

Our service solutions include; on-site service, repairs and exchange, and quality spares. All built on our world-class technical know-how and backed by our sophisticated logistics and supply chain infrastructure.

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