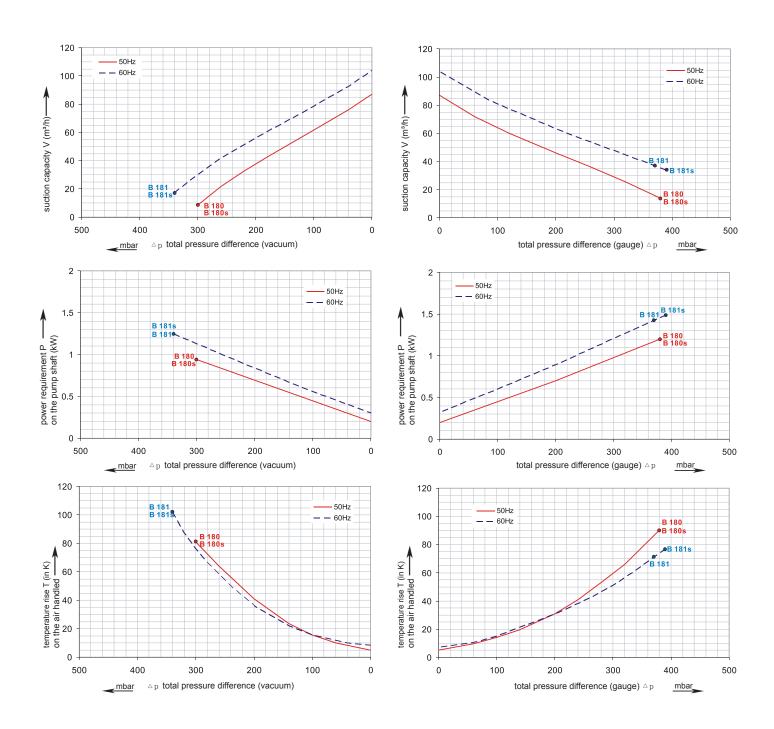


PUMP: ORB4 41

## **Performance Curve for Vacuum**

## **Performance Curve for Compressor**



The performance curves are based on air at a temperature of 15  $^{\circ}C$  and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %. The total pressure differences are valid for suction and ambient temperatures up to 25  $^{\circ}C$ .

For other conditions please confer with us.

Each ORB type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as approbated for UL and CSA.

Type OF	RB4 41										
Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure <sup>2</sup> )		Sound pressure level <sup>3</sup> )	Weight ca.
		Hz	kW	V		A		Vacuum mbar	Compressor mbar	dB(A)	kg
3~ 50/6	0 Hz IP55 isulation	n materia	l class F 1)			-					-
B 180 B 181	ORB4 41-1.1-3 ORB4 41-1.1-3	50 60	1.1 1.3	200D 240D 220D 275D	345Y415Y 380Y480Y	5.4D 5.4D	3.1Y 3.1Y	-300 -340	380 370	58 62	23 23
1~ 50/6	0 Hz IP55 with atta	ched cor	ndenser for co	ntinuous operati	on						
B 180s	ORB4 41-1.1-1	50	1.1	230		10.0		-300	380	58	23



Other voltage ranges								
	ORB4 41 □ □							
50Hz	60Hz	<b>↑ ↑</b>						
3~								
185225 V D/320390 V Y 200240 V D/345415 V Y 345415 V D	200240 V D/345415 V Y 200275 V D/380480 V Y 380480 V D	H 1 H 6 H 7						
500 V D	575VD	C 5						
Machines according to the ATEX norm 94/4 EG are available for the whole performance range. Following types available: Category 3 G, 3/2 G, 3 D and 3/2 D.								
1~								
230V		A 1						
	115 V	B 6						

Further voltage range on request; please quote in plain text.

All ORB achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2/-3/-4/-6.

- 1) For standard UL for ELECTRIC MOTOR UL 1004-1.
- 2) Relief-valve are available for limiting differential pressure.
- 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured
- at a distance of 1 m. The pump is throttled to an average suction pressure,
- a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.

For the three phase machines the tolerances are +/- 10 % for fixed voltage and +/- 5 % for voltage range.

The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maxium allowed pressure will be used for the continuousoperating then the allowed voltage range add to +/- 10 %.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp.

The frequency tolerance is maximum +/- 2 %.