

DATA SHEET

**U 5.301**

# ROTARY VANE- VACUUM PUMPS

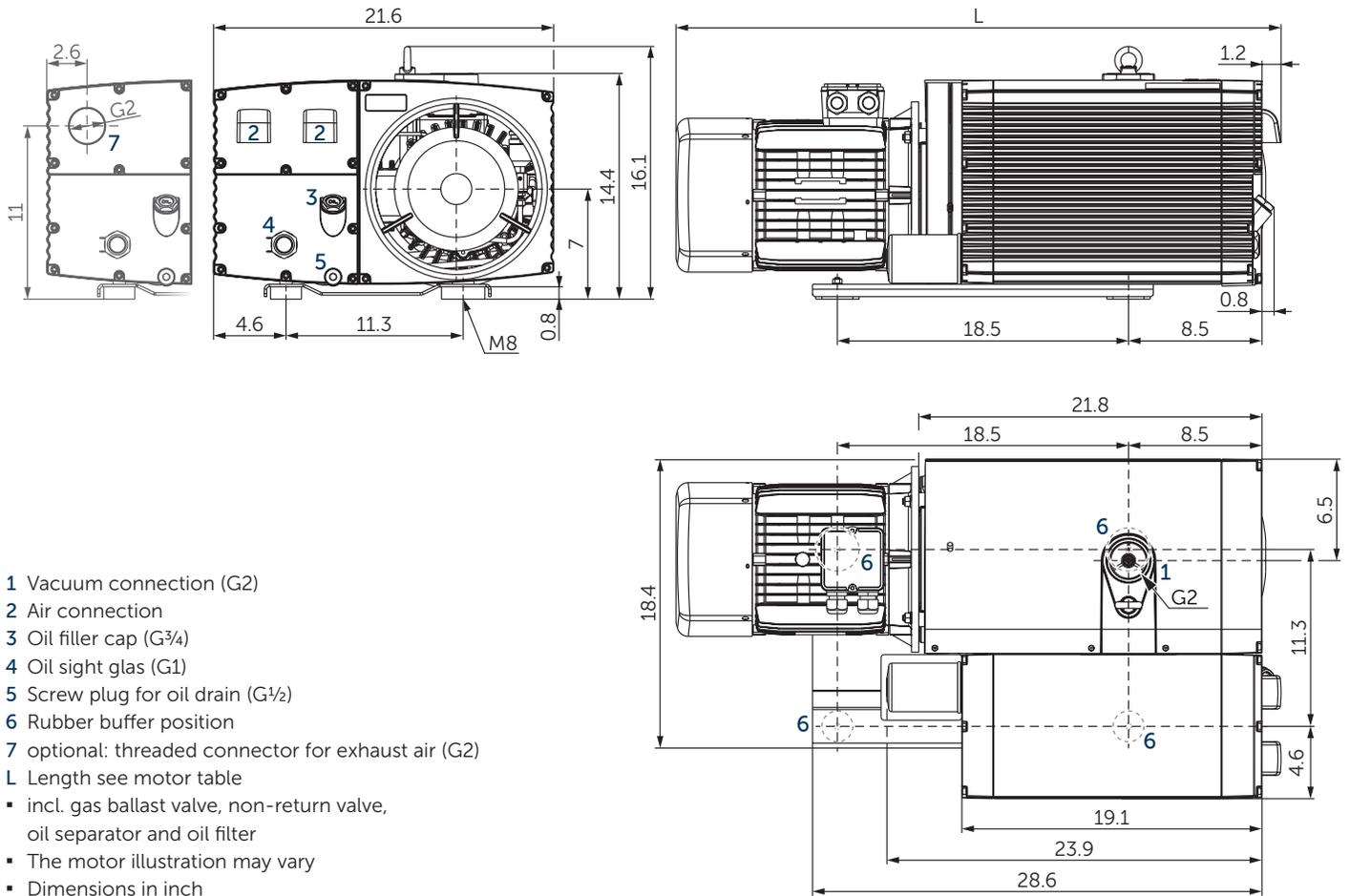
oil-lubricated  
air-cooled

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**MAKE IT BECKER.**



figure U 5.200



- 1 Vacuum connection (G2)
- 2 Air connection
- 3 Oil filler cap (G<sup>3</sup>/<sub>4</sub>)
- 4 Oil sight glass (G1)
- 5 Screw plug for oil drain (G<sup>1</sup>/<sub>2</sub>)
- 6 Rubber buffer position
- 7 optional: threaded connector for exhaust air (G2)
- L Length see motor table
- incl. gas ballast valve, non-return valve, oil separator and oil filter
- The motor illustration may vary
- Dimensions in inch

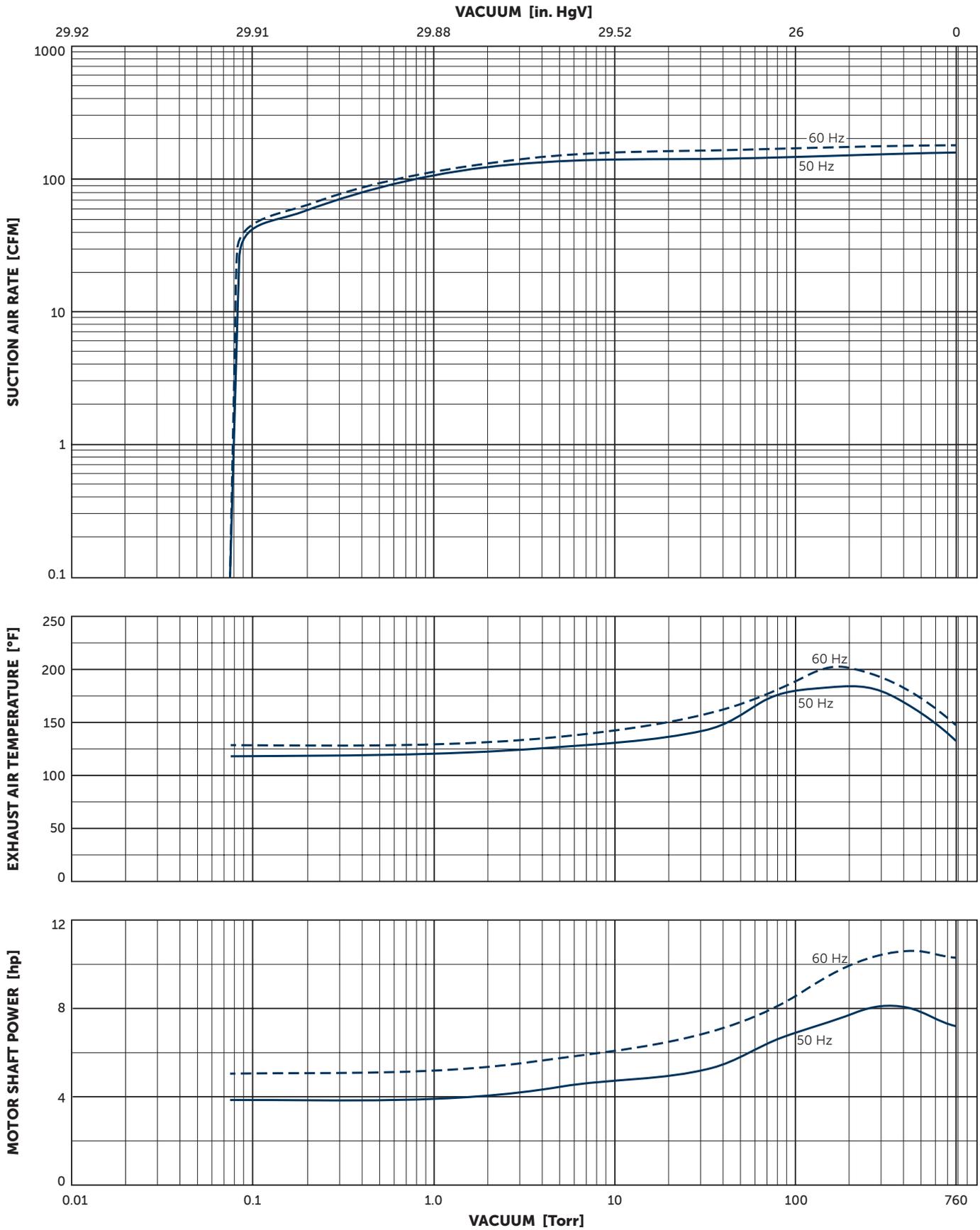
Nominal capacity		Vacuum absolute for continuous operation		Motors		Emission sound pressure level <sup>1)</sup>		Weight w/o motor	Oil <sup>2)</sup>
CFM		Torr		hp		dB(A)		lbs	U.S. gal.
50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz		
176	211	<0.075–75	<0.075–75	7.4	8.9	73	76	198.5	1.6
176	211	<0.075–300	<0.075–300	10.1	12.1	73	76	198.5	1.6

<sup>1)</sup> According to DIN EN ISO 11203, accuracy class of measurement: class 2, extended measurement uncertainty: 3 dB  
39.4 inch distance, at medium load, both connection sides piped

<sup>2)</sup> Becker Lube: Synthetic Oil • Premium Synthetic Oil (PAO) • Food Grade Vacuum Pump Oil  
▪ Gas ballast valve: vacuum 0.75 Torr with opened gas ballast valve; water vapour tolerance max. 30 Torr; water vapour capacity max. 1.32/1.48 U.S.gal./h 50/60 Hz (at 185°F operating temperature)

3~ Motors													L
#	50 Hz					60 Hz					Version	Weight lbs	inch
	hp	V	rpm	A	hp	V	rpm	A					
01	7.4	Δ230/Y400	IE3	1468	20.7/12.0	8.9	Δ265/Y460 Δ230/Y400	IE3 –	1762 1750	20.6/11.9 21.6/12.5	IP 55 • ISO F • bimetal	116.9	37.3
02	7.4	Δ400	IE3	1468	12.3	8.9	Δ460 Δ400	IE3 –	1764 1751	12.0 12.4	IP 55 • ISO F • bimetal	116.9	37.3
03						8.9	YY230/Y460 YY208	IE3 –	1755 1750	22.1/11.1 23.3	UL (E235514) • CSA CC329B IP 55 • ISO F • bimetal	121.3	38.4
04	7.4	Δ200/Y350	IE3	1474	27.4/15.8	8.9	Δ200/Y380–400 Δ200/Y350	IE3 –	1769 1761	24.1/14.5–13.8 25.4/14.65	IP 55 • ISO F • bimetal	140.0	38.8
05						8.9	Δ400	IE3	1765	24.1/14.5–13.8 25.4/14.65	UL (E235514) • CSA CC329B IP 55 • ISO F • bimetal	156.1	38.4
06	10.1	Δ230/Y400	IE3	1445	28.0/16.2	12.1	Δ265/Y460 Δ230/Y400	IE3 –	1735 1720	26.8/15.5 30.9/17.9	IP 55 • ISO F • bimetal	121.3	38.8
07	10.1	Δ400	IE3	1445	16.0	12.1	Δ460 Δ400	IE3 –	1735 1720	15.5 18.0	IP 55 • ISO F • bimetal	121.3	38.8
08						12.1	YY230/Y460 YY208	IE3 –	1763 1760	33.6/16.8 33.8	UL (E235514) • CSA CC329B IP 55 • ISO F • bimetal	149.9	38.4
09	10.1	Δ200/Y350	IE3	1450	31.8/18.3	12.1	Δ200/Y380–400 Δ200/Y350	IE3 –	1760 1745	31.5/18.2–17.3 33.9/19.5	IP 55 • ISO F • bimetal	121.3	38.8
10						12.1	Δ400	IE3	1767	21.1	UL (E235514) • CSA CC329B IP 55 • ISO F • bimetal	157.4	38.4

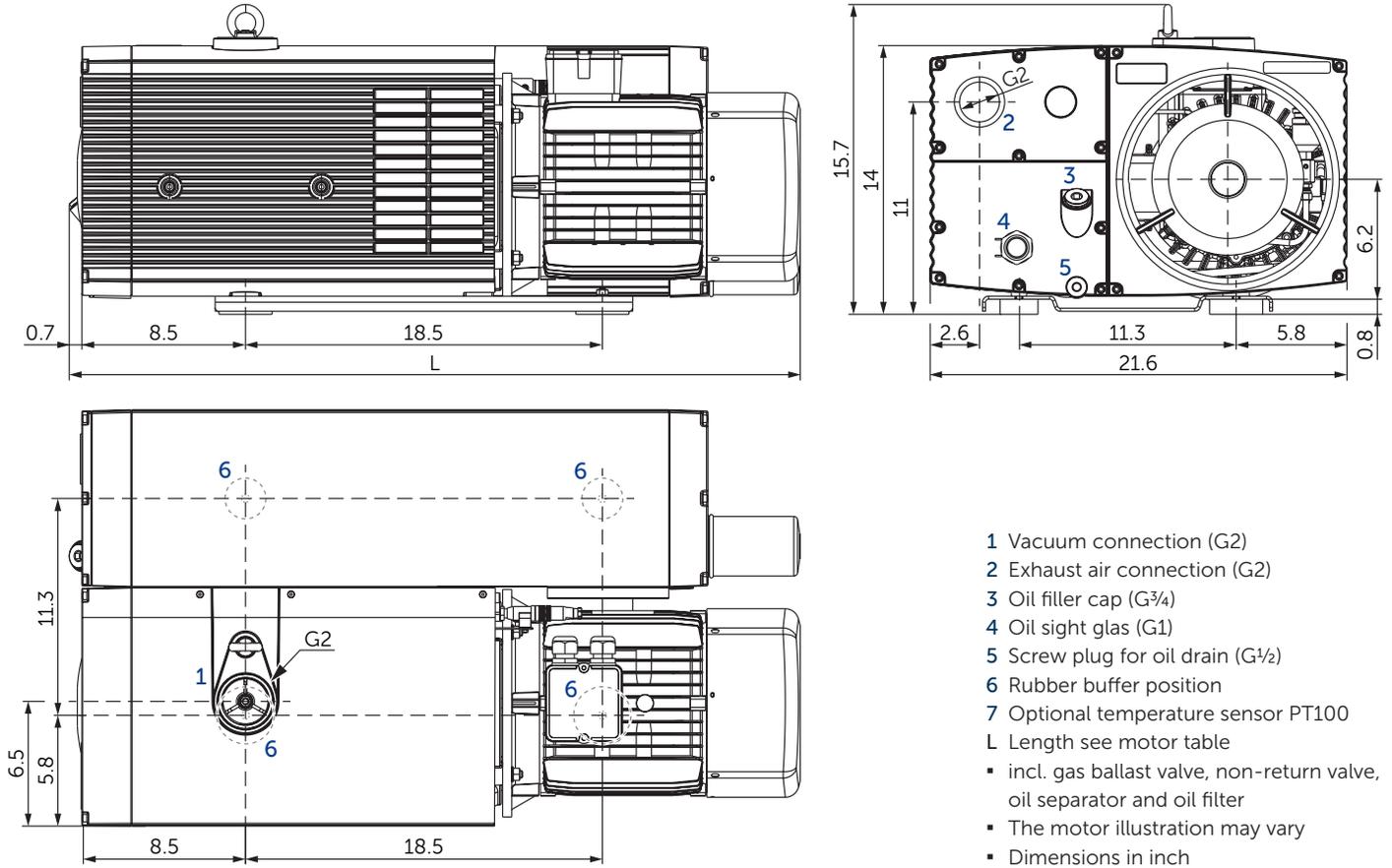
• Current consumption and rotation speed may vary. Tolerance in each case -1.5/+2%



Suction air rate refers to the intake pressure  
 Reference data (atmosphere): 0 In. HgV / 760 Torr, 68°F; Tolerance: ±10%

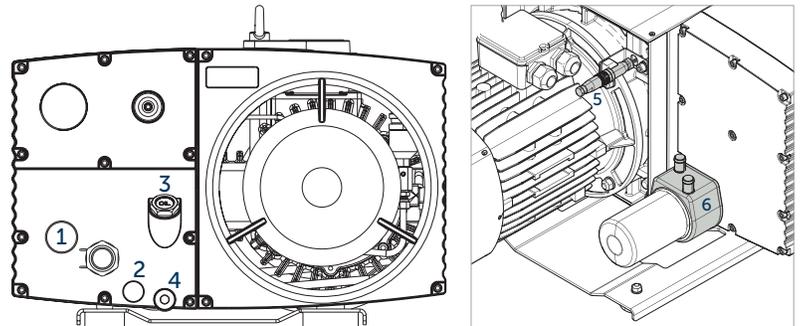
## + VARIANTS AND ACCESSORIES

- Optional **GAS BALLAST VALVE** for increased water vapour tolerance (2.25 Torr)  
water vapour tolerance: max. 2.64/3.43 U.S.gal./h 50/60 Hz (at 185°F operating temperature)
- **THREADED CONNECTOR** for exhaust air (G2)
- **VARIAR U 5.301<sup>1)</sup>** with VARIAIR frequency inverter
- **U 5.301 O2-PACK<sup>1)</sup>** for packaging with an overconcentration of oxygen
- **U 5.301/0-62XL** with enlarged oil tank and high efficient triple stage oil separation,  
weight without motor: 231.5 lbs, oil quantity 3.4 U.S. gal., further technical data, motors and characteristic curves like standard pump



## ACCESSORIES

- 1 Oil level switch<sup>1)</sup> (G1)
- 2 Oil temperature monitor<sup>1)</sup> (G<sup>1</sup>/<sub>2</sub>)
- 3 Maintenance indicator<sup>1)</sup> (G<sup>3</sup>/<sub>4</sub>) for oil separating elements
- 4 Ball valve (G<sup>1</sup>/<sub>2</sub>), with locking and hose connector 0.75 inch
- 5 Temperature sensor PT100
- 6 Water cooler U5.200-0-114.2<sup>1)</sup>
  - External suction filter
  - Oil: Synthetic Oil, Premium Synthetic Oil (PAO) and Food Grade Vacuum Pump Oil



Oil level switch



Oil temperature monitor



Maintenance indicator



Ball valve

<sup>1)</sup> See separate data sheet  
 • Combination options on request



**MAKE IT BECKER.**