

ASIA PACIFIC SHENGRUI LIMITED

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Nominal data

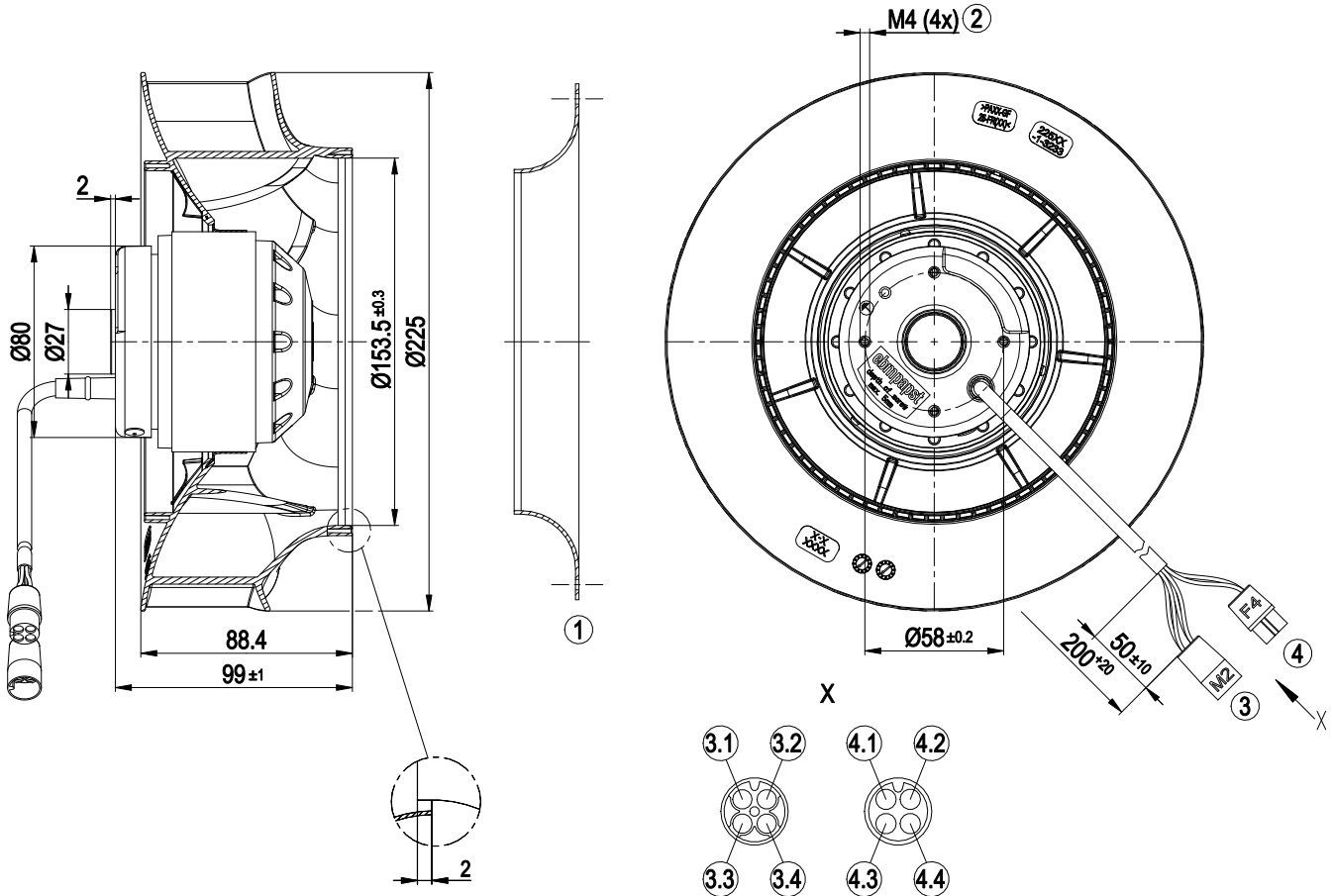
Type	R2D225-RA31-19			
Motor	M2D068-DF			
Phase		3~	3~	3~
Nominal voltage	VAC	400	400	460
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min ⁻¹	2100	2100	2300
Power consumption	W	100	125	150
Current draw	A	0.16	0.19	0.2
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	75	75

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Technical description

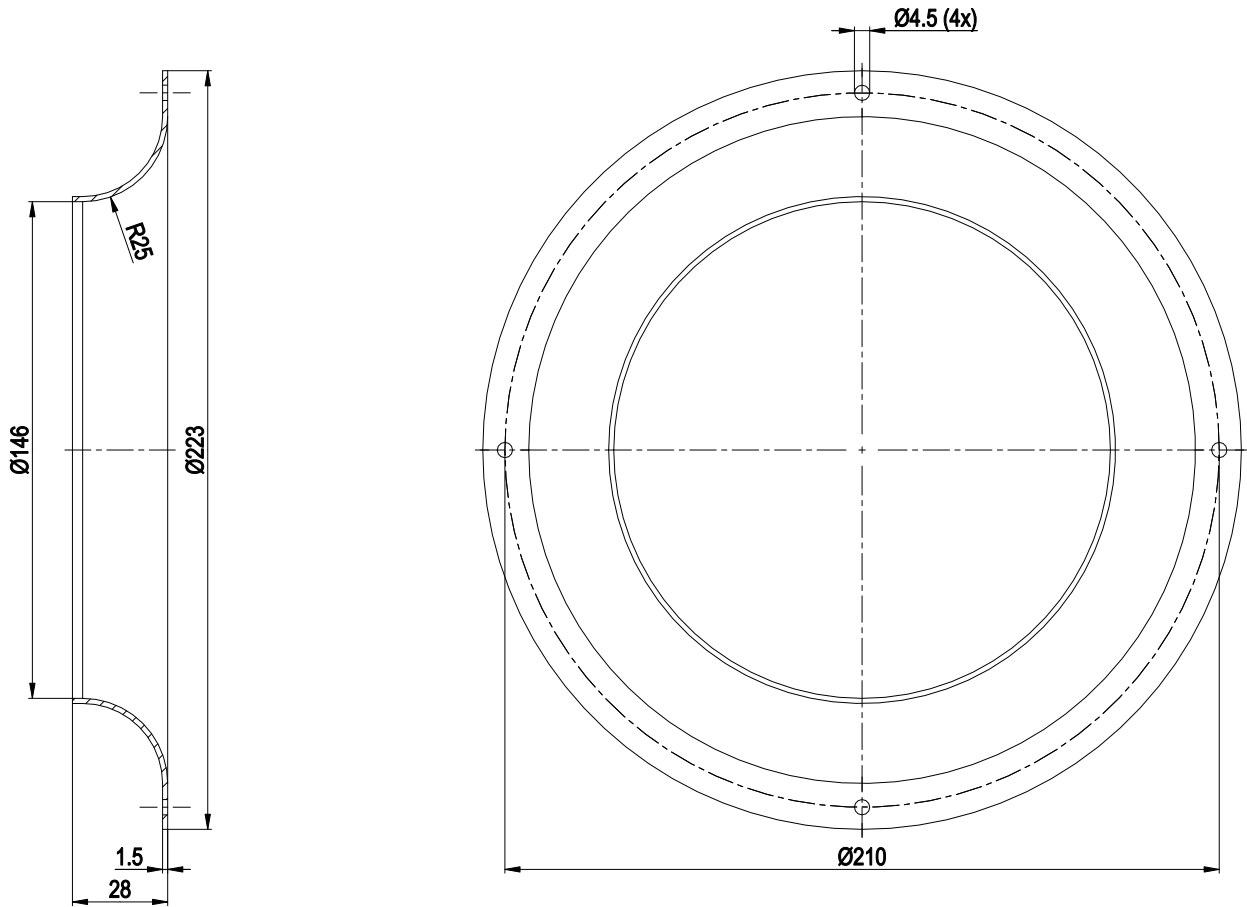
Weight	2.14 kg
Size	225 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; UL 1004-3; CSA C22.2 No. 77

Product drawing



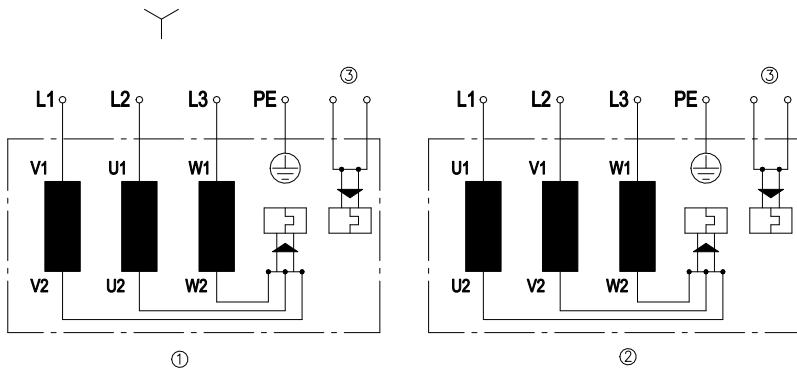
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20, 4-pole connector housing tyco 925075-7, 4x plug pin tyco 163555-6
3.1	PE (green/yellow)
3.2	L1 (black)
3.3	L3 (brown)
3.4	L2 (blue)
4	Cable PFA AWG20, 4-pole connector housing tyco 925076-7, 4x socket tyco 163300-8
4.1	not used
4.2	TOP (gray)
4.3	not used
4.4	TOP (gray)

Accessory part



Inlet ring 96358-2-4013 not included in scope of delivery

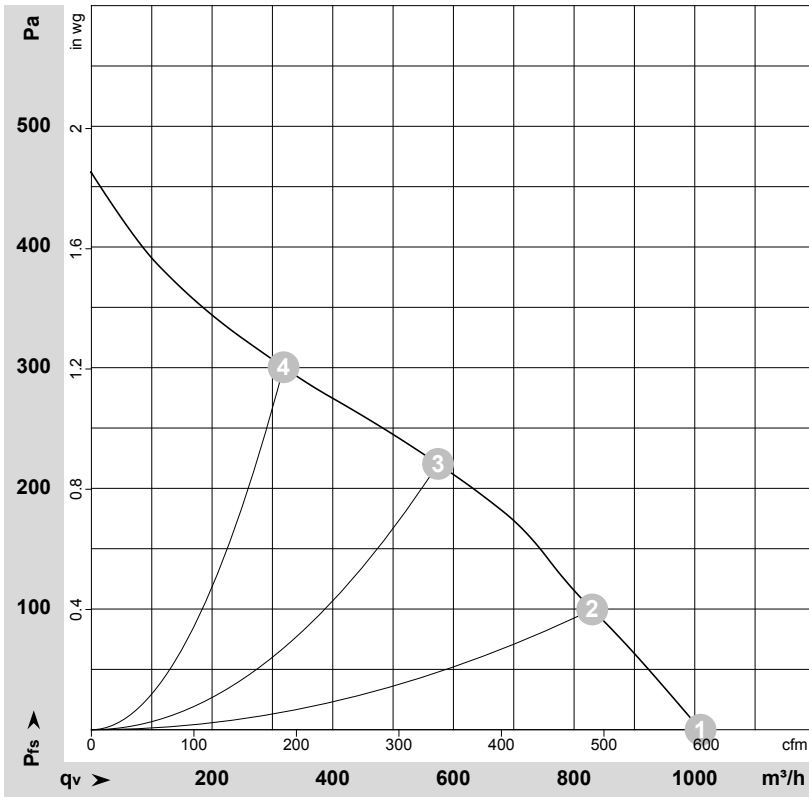
Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	=U1=black
L2	=V1=blue
L3	=W1=brown
PE	green/yellow
3	TOP signal, 2x gray

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-167181-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

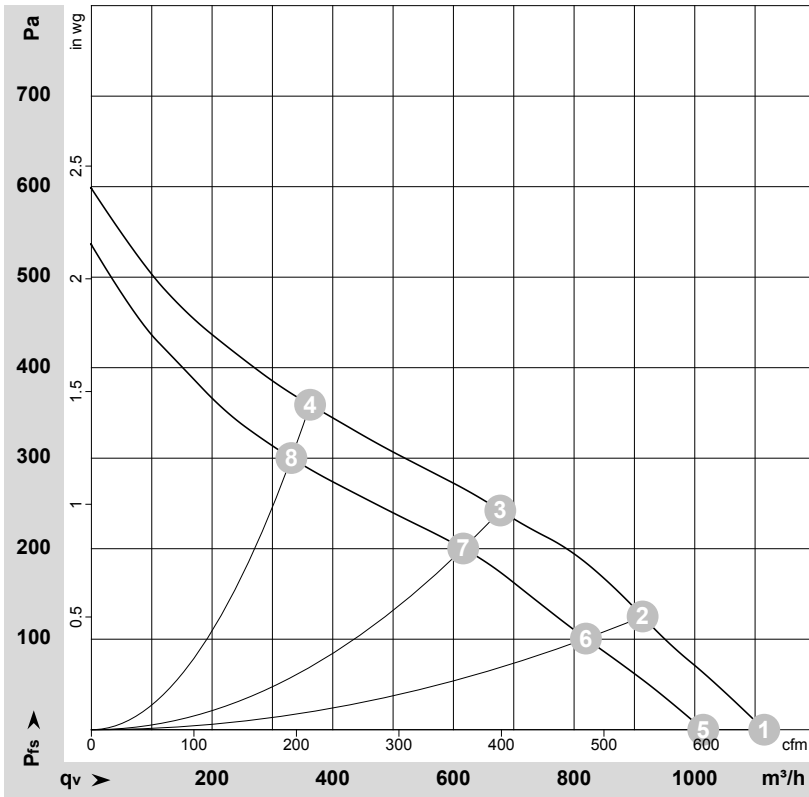
Measured values

	Wired	U	f	n	P _e	I	LpA _{in}	LwA _{in}	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	Y	400	50	2280	88	0.14	62	70	1010	0	595	0.00
2	Y	400	50	2150	100	0.16	58	65	830	100	490	0.40
3	Y	400	50	2100	100	0.16	52	59	575	220	340	0.88
4	Y	400	50	2230	91	0.15	58	66	320	300	190	1.20

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
 q_v = Air flow · p_{fs} = Pressure increase



Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-167210-1
Measurement: LU-167209-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	Pe	I	LpA _{in}	LwA _{in}	qv	Pfs	qv	Pfs
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	Y	460	60	2520	131	0.18	65	72	1115	0	655	0.00
2	Y	460	60	2375	143	0.19	59	67	915	125	540	0.50
3	Y	460	60	2300	150	0.20	54	62	680	242	400	0.97
4	Y	460	60	2455	135	0.18	60	68	360	359	215	1.44
5	Y	400	60	2300	114	0.18	62	70	1015	0	595	0.00
6	Y	400	60	2135	123	0.19	58	66	820	100	485	0.40
7	Y	400	60	2100	125	0.19	53	60	615	200	365	0.80
8	Y	400	60	2250	116	0.18	58	66	330	300	195	1.20

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · Pe = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · Pfs = Pressure increase

