D4D200-BA01-03

AC centrifugal fan

forward-curved, dual-intake

with housing (flange), for rail applications

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Nominal data

Type	**D4D200-BA01-03**
Motor	**M4D068-LA**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	480
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		fa	ml	ml
Valid for approval/standard		CE	CE	CE
Speed (rpm)	min^{-1}	1100	1250	1370
Power consumption	W	405	425	500
Current draw	A	0.75	0.75	0.8
Min. back pressure	Pa	0	125	150
Min. back pressure	in. wg	0	0.5	0.6
Min. ambient temperature	°C	-40	-40	-40
Max. ambient temperature	°C	65	60	60
Starting current	A	1.6	1.5	1.8

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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	36.2	33.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		46.9	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.2
09 Air flow q_v	m^3/h	1130
09 Pressure increase p_{fs}	Pa	236
10 Speed (rpm) n	min^{-1}	1340
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-192153

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Technical description

Weight	11.02 kg
Size	200 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
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	Shaft horizontal
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 15085-1, CPC3; EN 45545-2, HL3; EN 50155; EN 61373, Cat. 1B; CE
Approval	EAC
Comment	Fire protection classification only applies to the specified installation position

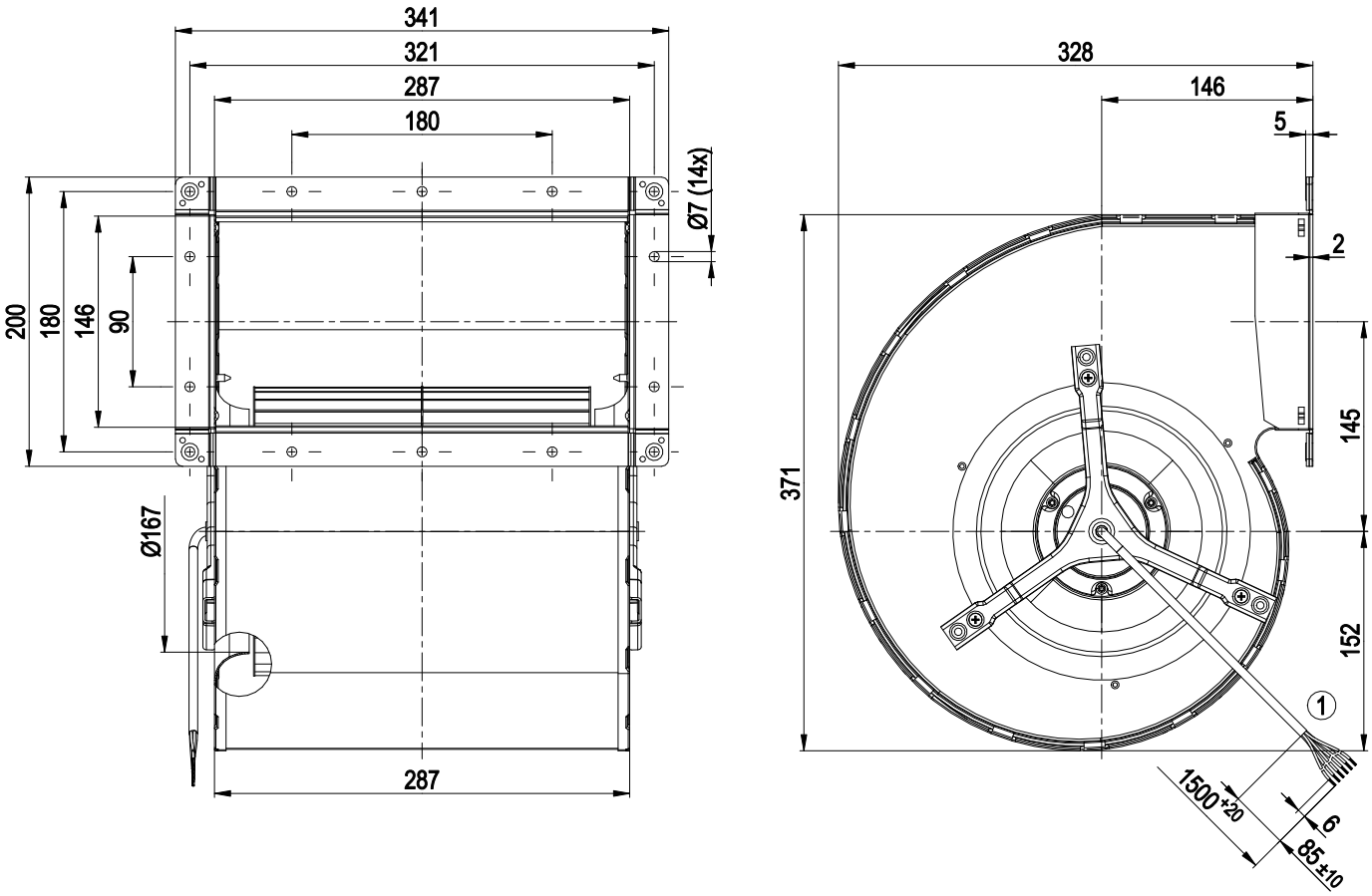
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Product drawing



1	Cable halogen-free, BETAtrans® 3 GKW flex, black 6G 0.5 mm²
	6x splice

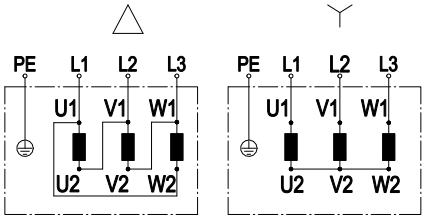
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Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	green/yellow				

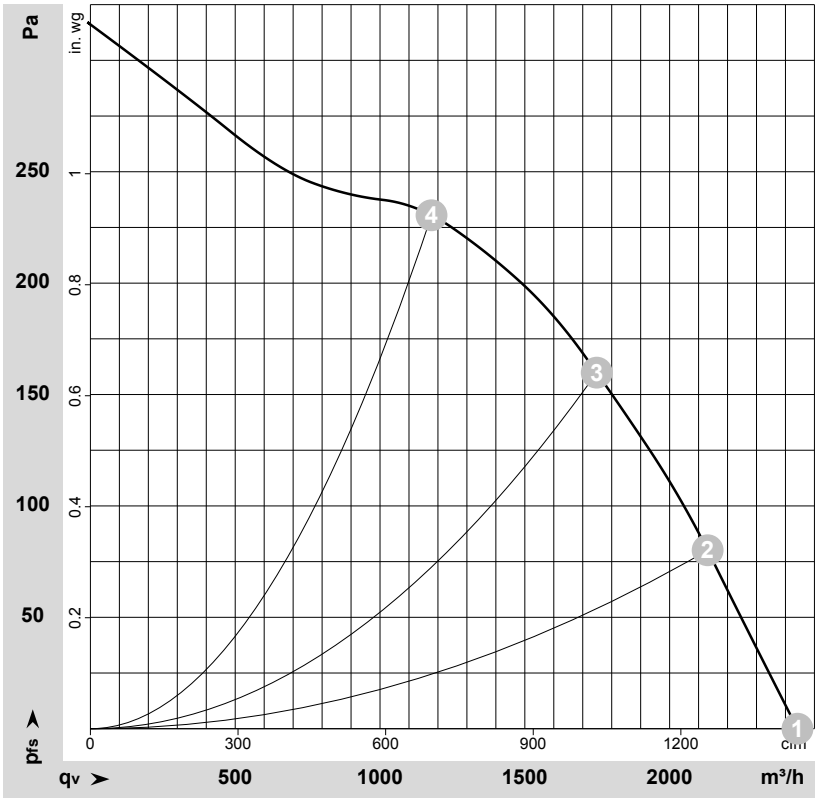
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-192153-1

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	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	1100	405	0.75	63	76	2440	0	1435	0.00
2	Y	400	50	1185	345	0.66	60	73	2130	80	1255	0.32
3	Y	400	50	1250	286	0.59	58	70	1750	160	1030	0.64
4	Y	400	50	1330	211	0.52	55	67	1180	230	695	0.92

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

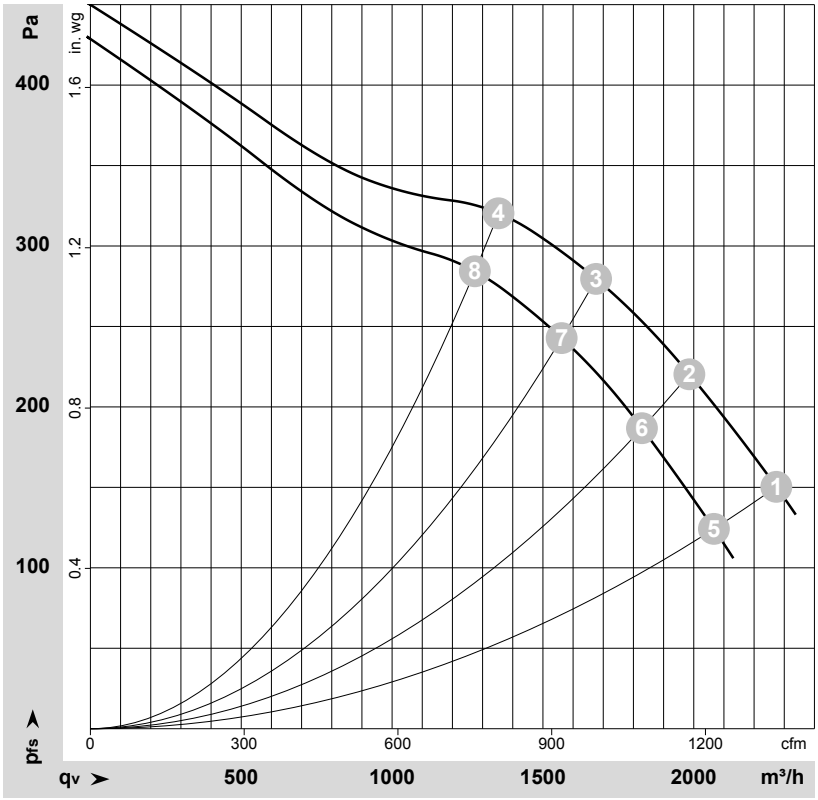
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-192281-1
Measurement: LU-192278-1

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	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	480	60	1370	500	0.80	62	75	2275	150	1340	0.60
2	Y	480	60	1445	445	0.70	61	74	1985	220	1170	0.88
3	Y	480	60	1505	384	0.64	60	73	1675	280	985	1.12
4	Y	480	60	1565	323	0.58	59	71	1355	320	795	1.28
5	Y	400	60	1250	425	0.75			2065	125	1215	0.50
6	Y	400	60	1330	381	0.67			1830	187	1075	0.75
7	Y	400	60	1405	335	0.61			1560	243	920	0.98
8	Y	400	60	1475	286	0.54			1275	286	750	1.15

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

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