D4D180-CB01-02

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**D4D180-CB01-02**
Motor	**M4D068-GA**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	1050	1030	1050	1030
Power input	W	290	360	290	360
Current draw	A	0.92	1.04	0.53	0.6
Min. back pressure	Pa	0	0	0	0
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	55	30	55	30

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_e	%	37.1	37.1
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		49	49
05 Variable speed drive		No	

09 Power input P_e	kW	0.13
09 Air flow q_v	m^3/h	900
09 Pressure increase p_f	Pa	198
10 Speed (rpm) n	min^{-1}	1330
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

* Specific ratio = 1 + p_f / 100 000 Pa

LU-105049

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

Technical features

Mass	9.5 kg
Size	180 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1, motor does not have factory-installed overheating protection; CE
Approval	CCC

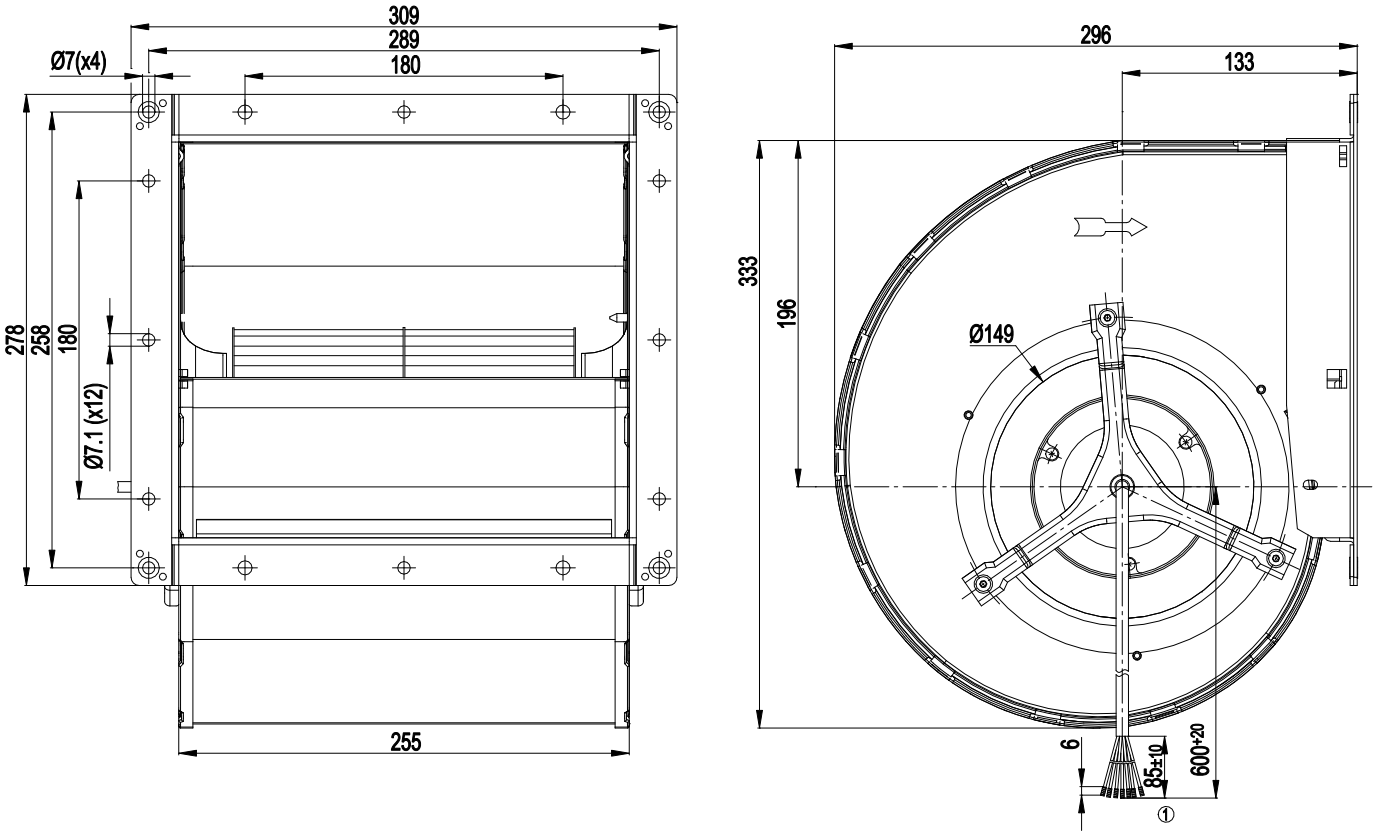
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

Product drawing



1	Connection line halogen- and silicone-free AWG20; 7x brass lead tips crimped

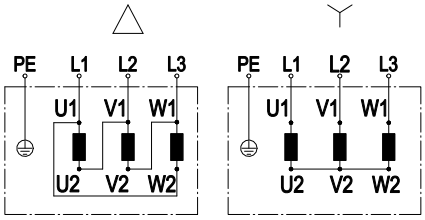
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

Connection screen



Change direction of rotation 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				

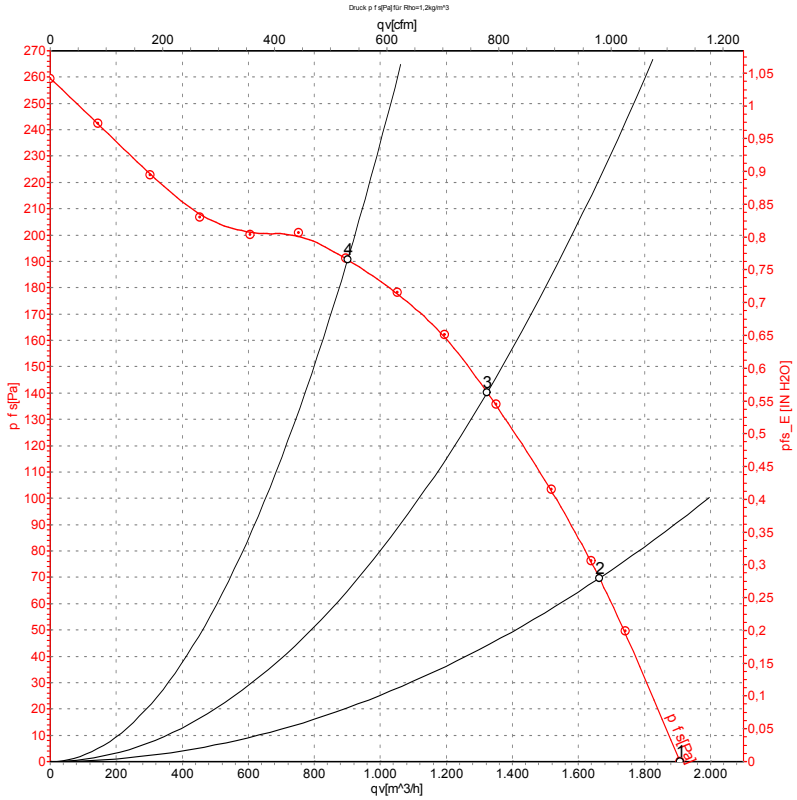
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

Charts: Air flow 50 Hz



Measurement: LU-105049-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	Y	400	50	1050	290	0.53	1910	0	1125	0.00
2	Y	400	50	1150	238	0.47	1665	70	980	0.28
3	Y	400	50	1240	190	0.42	1325	140	780	0.56
4	Y	400	50	1330	138	0.37	900	190	530	0.76

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

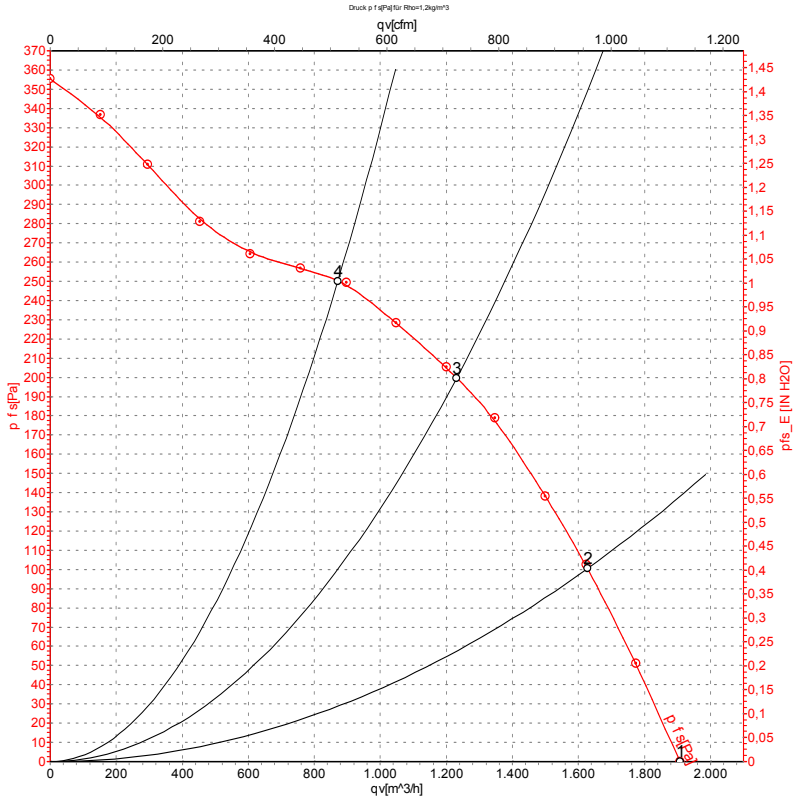
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

Charts: Air flow 60 Hz



Measurement: LU-105050-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	Y	400	60	1030	360	0.60	1910	0	1125	0.00
2	Y	400	60	1230	280	0.50	1625	100	960	0.40
3	Y	400	60	1390	219	0.41	1230	200	725	0.80
4	Y	400	60	1515	166	0.34	870	250	515	1.00

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com