D2E146-HS29-90

AC centrifugal fan

forward curved, dual inlet

with housing (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	**D2E146-HS29-90**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	240
Nominal voltage range	VAC	220 .. 240
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	1850
Power input	W	260
Current draw	A	1.14
Motor capacitor	µF	6
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-20
Max. ambient temperature	°C	40

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

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

Technical features

Mass	2.9 kg
Size	146 mm
Material of impeller	PP plastic
Housing material	PP plastic, black
Motor suspension	Motor mounted vibration-free on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
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, open rotor
Operation mode	S1
Motor bearing	Calotte bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	With plug; Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 60335-1; CE
Approval	VDE

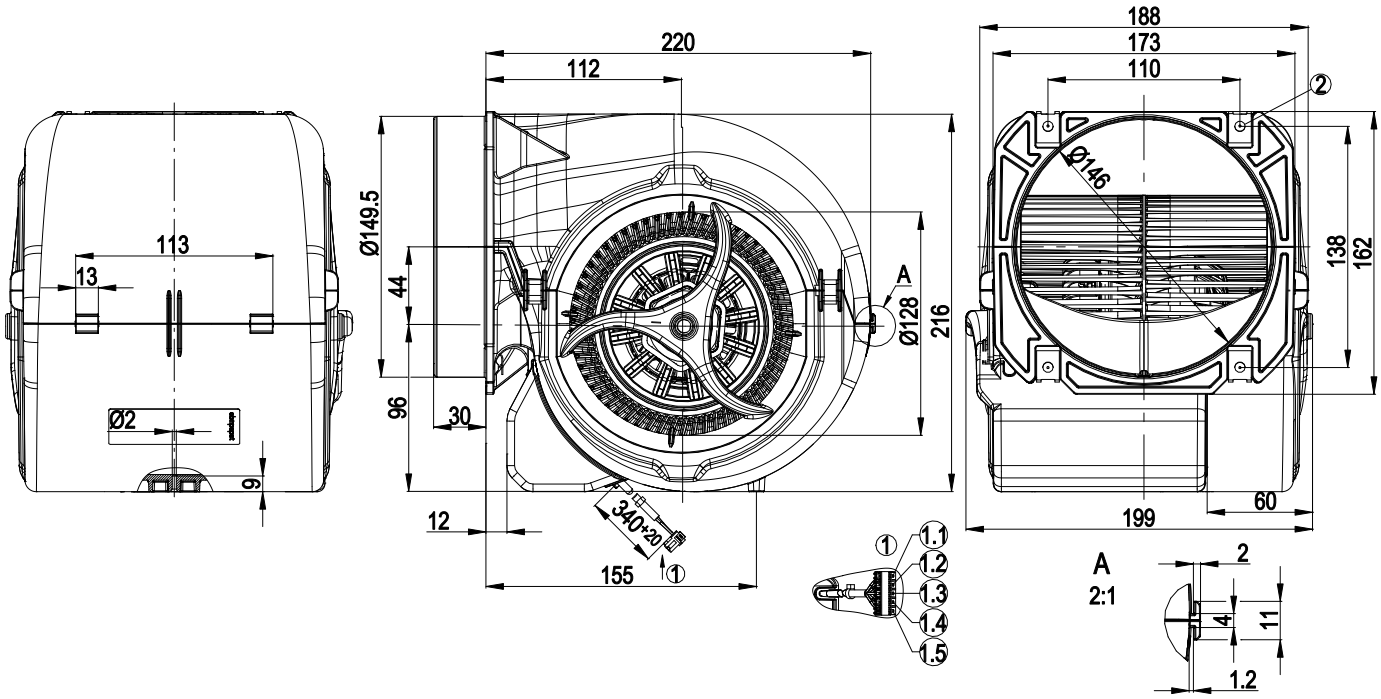
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

Product drawing



1	Connection line ETFE AWG22, Stocko spring housing MFMP 7262-005-008-960-000-00-G
1.1	N (blue)
1.2	L = step 4 (black)
1.3	L = step 3 (grey)
1.4	L = step 2 (red)
1.5	L = step 1 (white)
2	4 x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

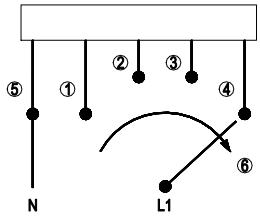
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

Connection screen



When changing speeds, switch must break the circuit

1	Stage 1(min.), white
2	Stage 2, red
3	Stage 3, grey
4	Stage 4 (max.), black
5	N, blue
6	Speed increase

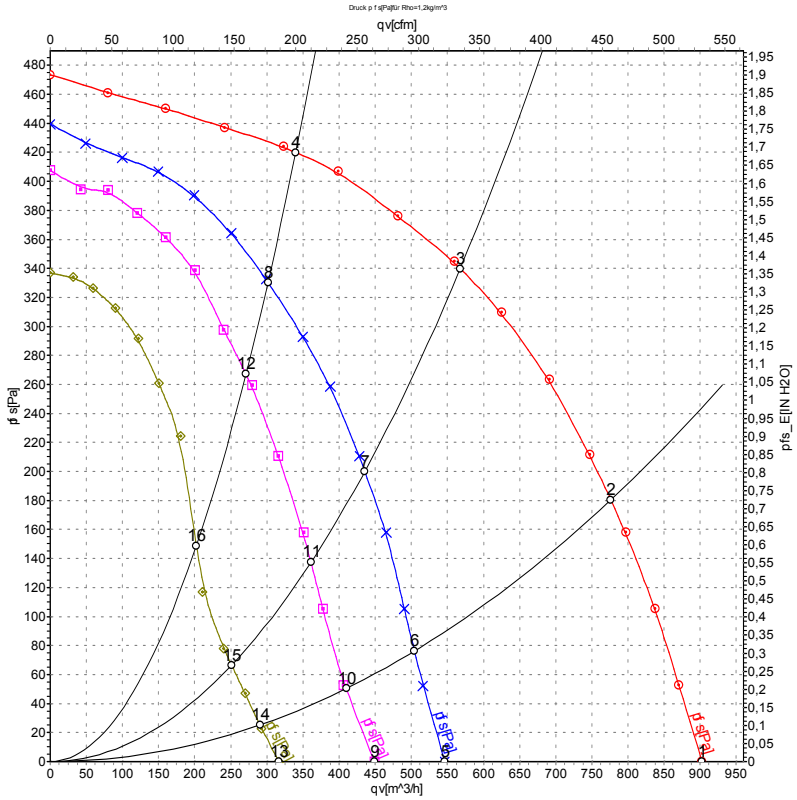
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

Charts: Air flow 50 Hz



Measurement: LU-122280-1
Measurement: LU-122281-1
Measurement: LU-122286-1
Measurement: LU-122287-1

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

	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1535	260	1.14	905	0	530	0.00
2	230	50	1975	245	1.06	775	180	455	0.72
3	230	50	2355	213	0.93	570	340	335	1.36
4	230	50	2580	184	0.81	340	420	200	1.69
5	230	50	945	169	0.79	545	0	320	0.00
6	230	50	1300	162	0.77	505	76	295	0.31
7	230	50	1825	146	0.72	435	200	255	0.80
8	230	50	2320	118	0.64	300	331	180	1.33
9	230	50	780	149	0.70	450	0	265	0.00
10	230	50	1050	146	0.69	410	48	240	0.19
11	230	50	1515	135	0.66	360	137	210	0.55
12	230	50	2105	112	0.60	270	268	160	1.08
13	230	50	565	126	0.61	315	0	185	0.00
14	230	50	765	124	0.60	290	25	170	0.10
15	230	50	1080	120	0.59	250	66	150	0.26
16	230	50	1585	109	0.56	200	147	120	0.59

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · qv = 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