D3G225-AA01-01

EC centrifugal fan

forward-curved, dual-intake

with housing (without 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
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D3G225-AA01-01**	
Motor	**M3G084-IA**	
Phase		1
Nominal voltage	VDC	400
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1350
Power consumption	W	635
Current draw	A	2.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	50.9	34.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		60	44
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.36
09 Air flow q_v	m^3/h	1515
09 Pressure increase p_{fs}	Pa	392
10 Speed (rpm) n	min^{-1}	1530
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-63670

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Technical description

Weight	10.42 kg
Fan size	225 mm
Rotor surface	Painted black
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Sheet steel, hot-dip galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"F"
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
Mode	S1
Motor bearing	Ball bearing
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 0.25 mA
Motor protection	PTC thermistor
With cable	Lateral

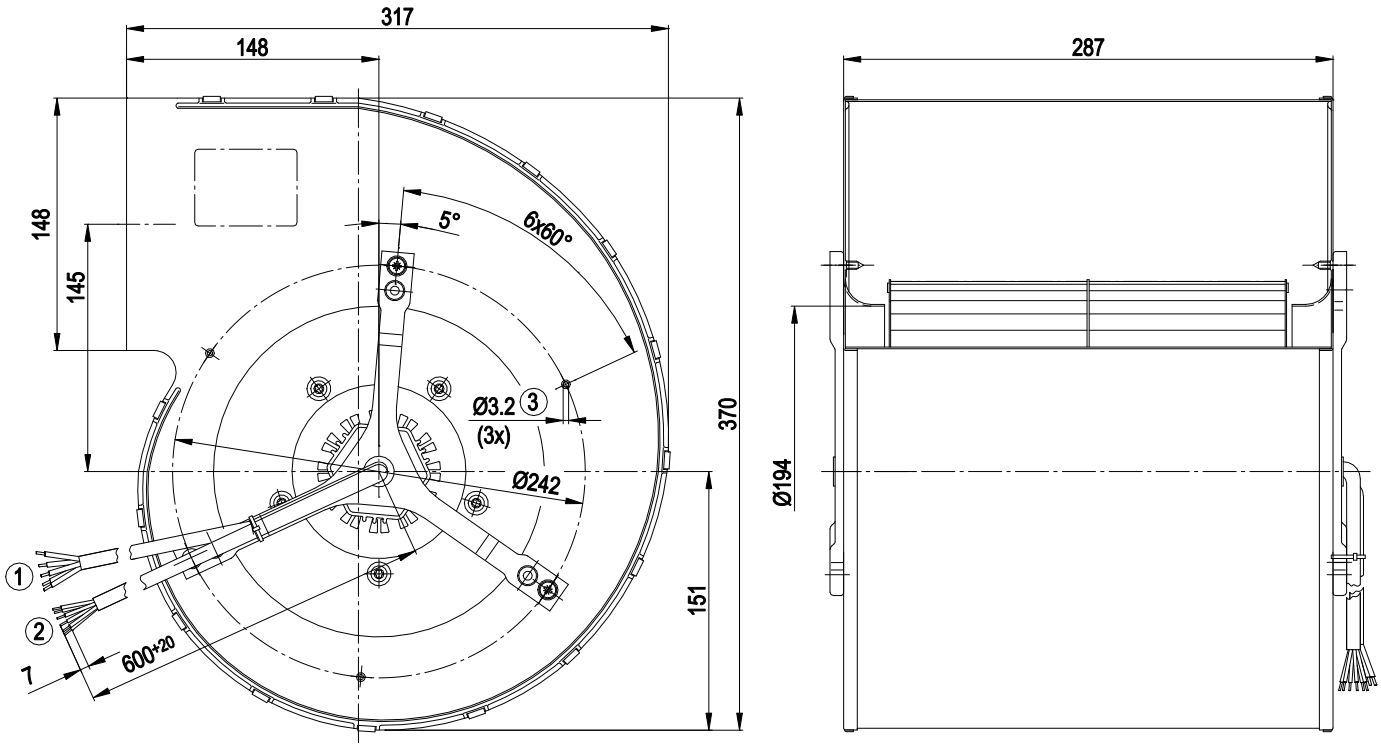
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Product drawing



Type only to be connected with external electronics

1	Cable FEP AWG18 (blue, brown, black) 3x tin-plated wire ends, cable Raychem Spec. 44, AWG18 (2x green/yellow), 2x tin-plated wire ends
2	Cable Raychem Spec. 44, AWG22 (blue, brown, black, yellow, red, orange) 6x tin-plated wire ends
3	Holes in both side parts

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

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Connection diagram

Wire color	Cross-section	Function
orange	AWG22	Hall sensor 1
brown	AWG22	Hall sensor 2
yellow	AWG22	Hall sensor 3
red	AWG22	Supply for Hall sensors +
black	AWG22	Motor temperature monitoring
blue	AWG22	Supply for Hall sensors -
black	AWG18	Coil connection U
blue	AWG18	Coil connection V
brown	AWG18	Coil connection W
green/yellow (2x)	AWG18	Protective earth

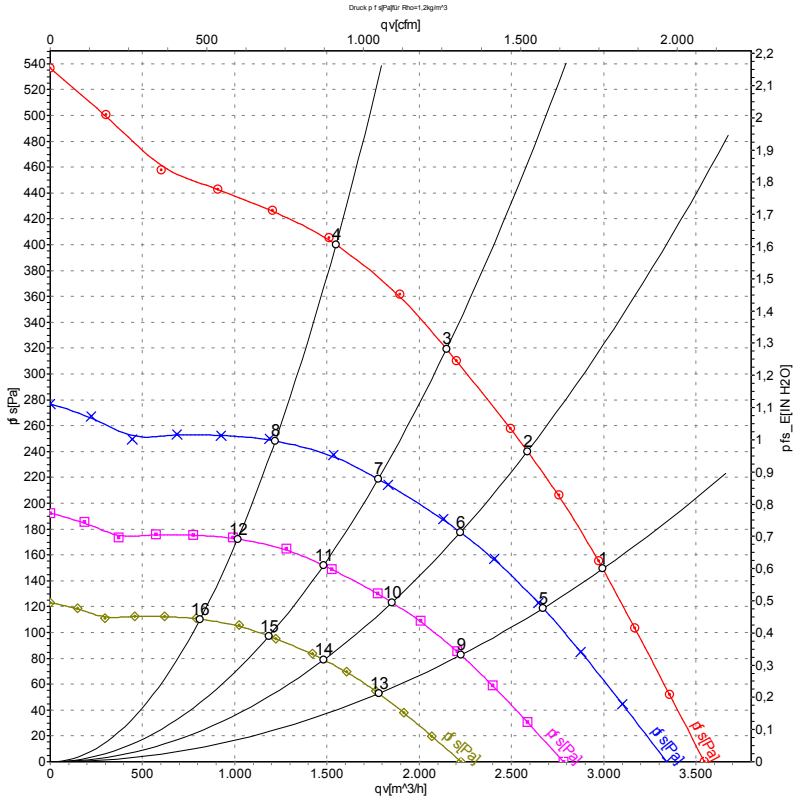
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Curves: Air performance 50 Hz



Measurement: LU-63670-1

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

	U	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1350	635	2.80	2995	150	1765	0.60
2	230	50	1395	556	2.42	2585	240	1525	0.96
3	230	50	1450	473	2.07	2150	320	1265	1.28
4	230	50	1525	368	1.62	1550	400	910	1.61
5	230	50	1200	455	1.98	2670	119	1575	0.48
6	230	50	1200	354	1.54	2225	178	1310	0.71
7	230	50	1200	269	1.17	1775	219	1045	0.88
8	230	50	1200	180	0.79	1220	249	715	1.00
9	230	50	1000	263	1.15	2225	83	1310	0.33
10	230	50	1000	205	0.89	1855	123	1090	0.49
11	230	50	1000	156	0.68	1480	152	870	0.61
12	230	50	1000	104	0.46	1015	173	600	0.69
13	230	50	800	135	0.59	1780	53	1050	0.21
14	230	50	800	105	0.46	1485	79	875	0.32
15	230	50	800	80	0.35	1185	97	695	0.39
16	230	50	800	53	0.24	815	111	480	0.45

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · 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