D3G225-AA01-10

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D3G225-AA01-10**	
Motor	**M3G084-IA**	
Nominal voltage	VDC	400
Method of obtaining data		ml
External electronics		CHW050AA0170
Speed (rpm)	min^{-1}	1350
Power consumption	W	635
Current draw	A	2.8
Min. back pressure	Pa	150
Min. back pressure	in. wg	0.6
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

With P1 > 500 W, external electronics must be positioned in air flow (cooling)

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

		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	m³/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

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Technical description

Weight	10.3 kg
Size	225 mm
Motor size	84
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	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 0.25 mA
Motor protection	Electronic motor protection
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE

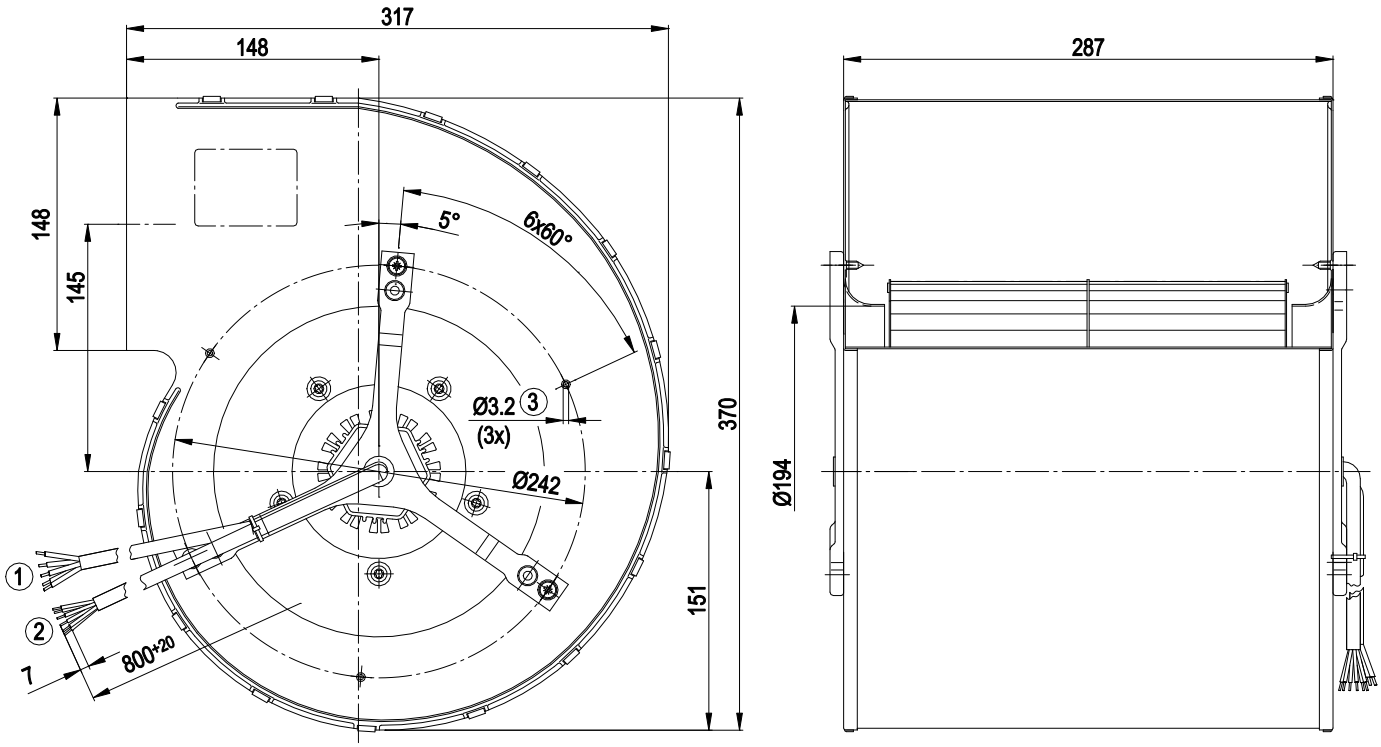
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Product drawing



Type only to be connected with external electronics

1	Cable FEP AWG18
	3x wire end tinned
	Cable Raychem Spec. 44 AWG18
	2x wire end tinned
2	Cable Raychem Spec. 44 AWG22
	6x wire end tinned
3	Holes in both side parts

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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

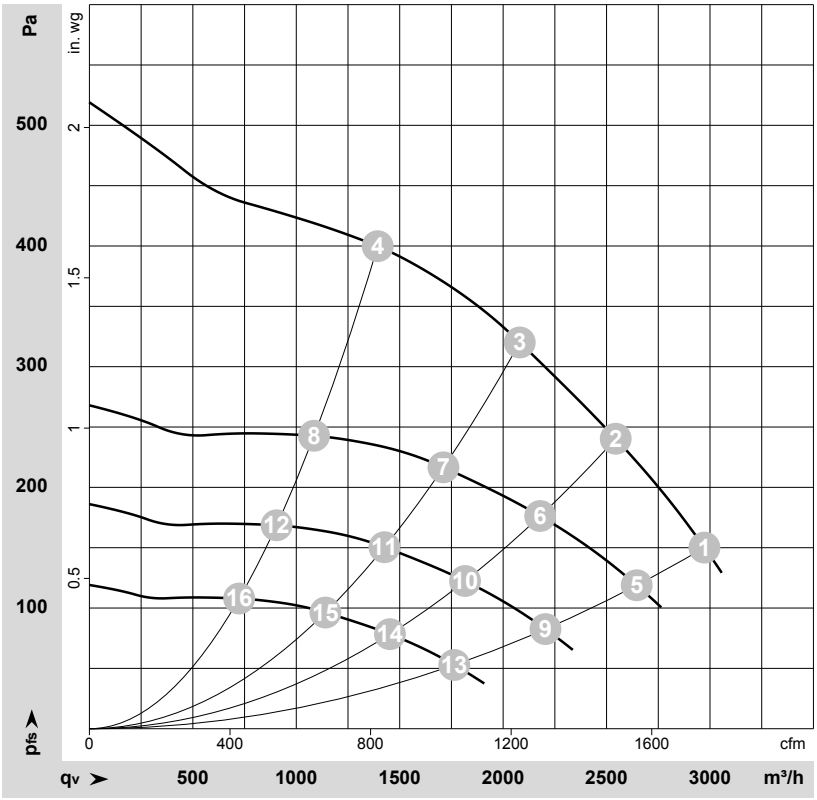
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

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

	Wired	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	50	1350	635	2.80	2975	150	1750	0.60
2	1~	230	50	1400	548	2.39	2545	240	1495	0.96
3	1~	230	50	1460	461	2.01	2080	320	1225	1.28
4	1~	230	50	1540	346	1.53	1395	400	820	1.61
5	1~	230	50	1200	448	1.95	2645	120	1555	0.48
6	1~	230	50	1200	345	1.50	2180	177	1285	0.71
7	1~	230	50	1200	257	1.12	1710	217	1005	0.87
8	1~	230	50	1200	164	0.72	1085	243	640	0.98
9	1~	230	50	1000	259	1.13	2205	83	1300	0.33
10	1~	230	50	1000	200	0.87	1815	123	1070	0.49
11	1~	230	50	1000	149	0.65	1425	150	840	0.60
12	1~	230	50	1000	95	0.42	905	169	535	0.68
13	1~	230	50	800	133	0.58	1765	53	1040	0.21
14	1~	230	50	800	102	0.45	1455	78	855	0.31
15	1~	230	50	800	76	0.33	1140	96	670	0.39
16	1~	230	50	800	49	0.21	725	108	425	0.43

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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