D3G225-CC14-71

EC centrifugal fan

forward-curved, dual-intake

with housing (large flange)



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D3G225-CC14-71**	
Motor	**M3G084-FA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1200
Power consumption	W	340
Current draw	A	2.2
Min. back pressure	Pa	150
Min. back pressure	inH2O	0.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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}	%	48.9	33.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		59.3	44
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.23
09 Air flow q_v	m^3/h	1505
09 Pressure increase p_{fs}	Pa	244
10 Speed (rpm) n	min^{-1}	1255
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-113437

ebmpapst

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Technical description

Weight	10.8 kg
Fan size	225 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, sendzimir galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted on brackets for one-sided vibration damping
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC max. 1.1 mA - Alarm relay - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	EAC; UL 2111; CSA C22.2 No. 77

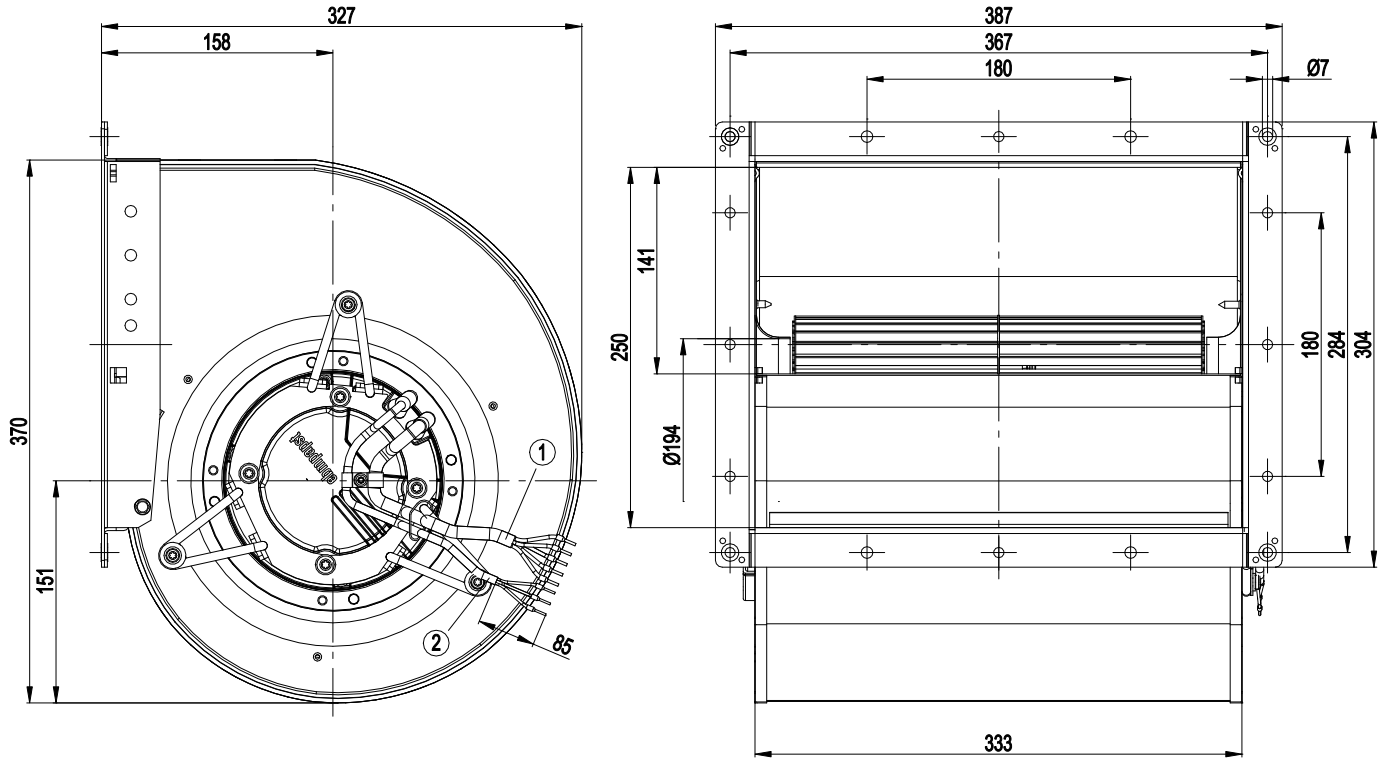
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Product drawing



Cable length measured from electronics housing: 800+20 mm

1	Cable 5x AWG18, 5x crimped ferrules
2	Cable 3x AWG22, 3x crimped ferrules

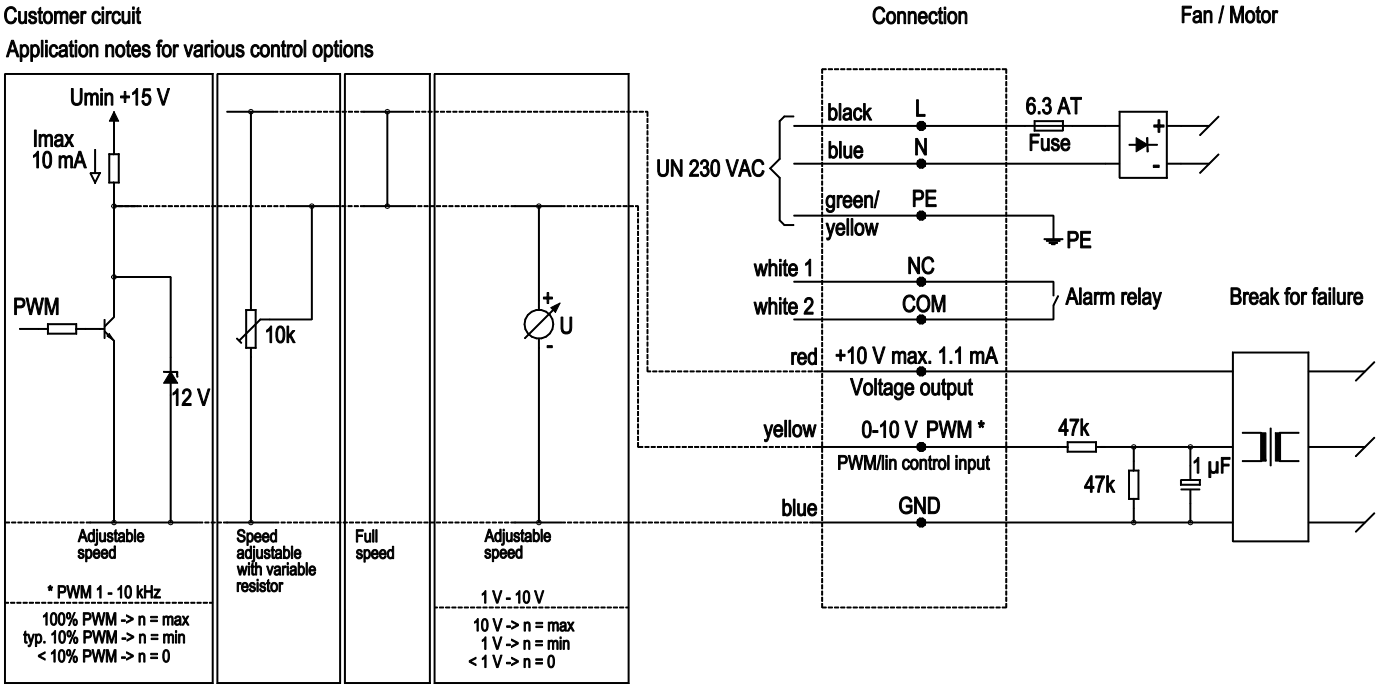
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Connection diagram



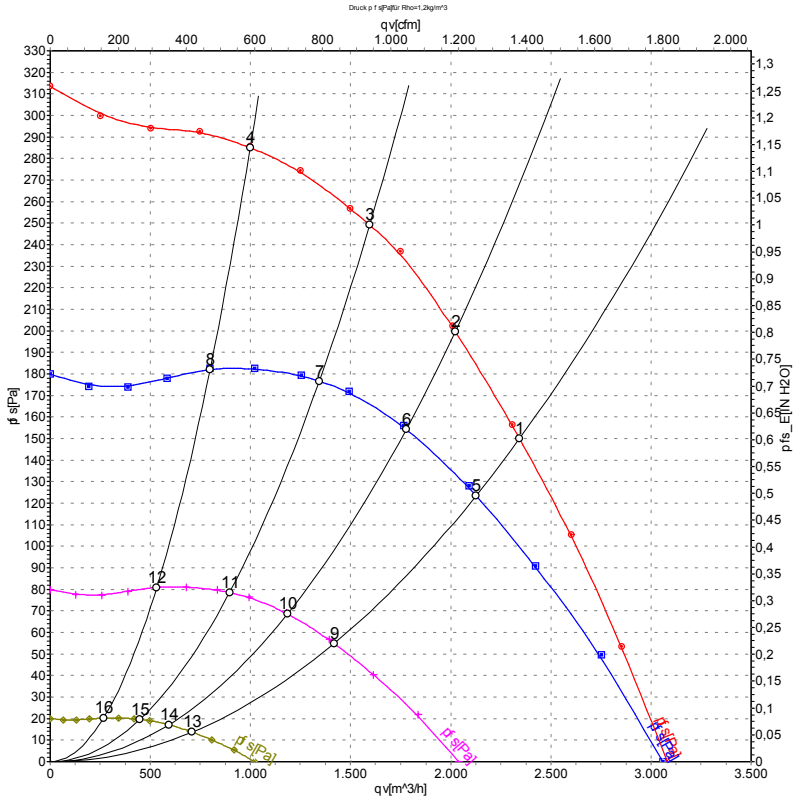
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Curves: Air performance 50 Hz



Measurement: LU-113437-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	1160	340	2.20	66	74	2345	150	1380	0.60
2	230	50	1195	298	1.92	65	73	2020	200	1190	0.80
3	230	50	1245	247	1.60	63	72	1595	249	940	1.00
4	230	50	1315	181	1.19	62	71	1000	286	585	1.15
5	230	50	1050	254	1.63	64	72	2125	124	1250	0.50
6	230	50	1050	203	1.31	62	70	1775	155	1045	0.62
7	230	50	1050	148	0.96	59	68	1345	177	790	0.71
8	230	50	1050	92	0.61	57	66	800	183	470	0.73
9	230	50	700	75	0.48	55	63	1415	55	835	0.22
10	230	50	700	60	0.39	53	61	1185	69	695	0.28
11	230	50	700	44	0.28	50	59	895	78	525	0.31
12	230	50	700	27	0.18	49	57	530	81	315	0.33
13	230	50	350	9.4	0.06	40	48	710	14	415	0.06
14	230	50	350	7.5	0.05	38	46	590	17	350	0.07
15	230	50	350	5.5	0.03	35	44	450	20	265	0.08
16	230	50	350	3.4	0.02	33	42	265	20	155	0.08

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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