D3G404-AA02-03

EC centrifugal fan

forward curved, dual inlet

with housing (large flange)



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Nominal data

Type	**D3G404-AA02-03**	
Motor	**M3G150-NA**	
Phase		3~
Nominal voltage	[VAC]	400
Frequency	[Hz]	50/60
Type of data definition		ml
State		prelim.
Speed	[min^{-1}]	1000
Power input	[W]	3000
Current draw	[A]	4,8
Min. back pressure	[Pa]	300

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Leackage current	<= 3,5 mA
Size	404 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F4-1
Insulation class	"F"
Cable exit	Variable
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	52.4 kg
Material of electronics housing	Die-cast aluminium
Housing material	Sheet steel, galvanised
Material of impeller	Sheet steel, galvanised
Motor suspension	Motor anti-vibration mounted on one side via brackets
Motor protection	Reverse polarity and locked-rotor protection
Surface of rotor	Coated in black
Type of protection	IP 54
Protection class	I
Technical features	- PFC, passive - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor - Alarm relay - Integrated PID controller - Input for sensor 0-10 V or 4-20 mA - Output for slave 0-10 V - RS485 ebmBUS - Motor current limit - Soft start - Line undervoltage / phase failure detection - Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	UL 2111

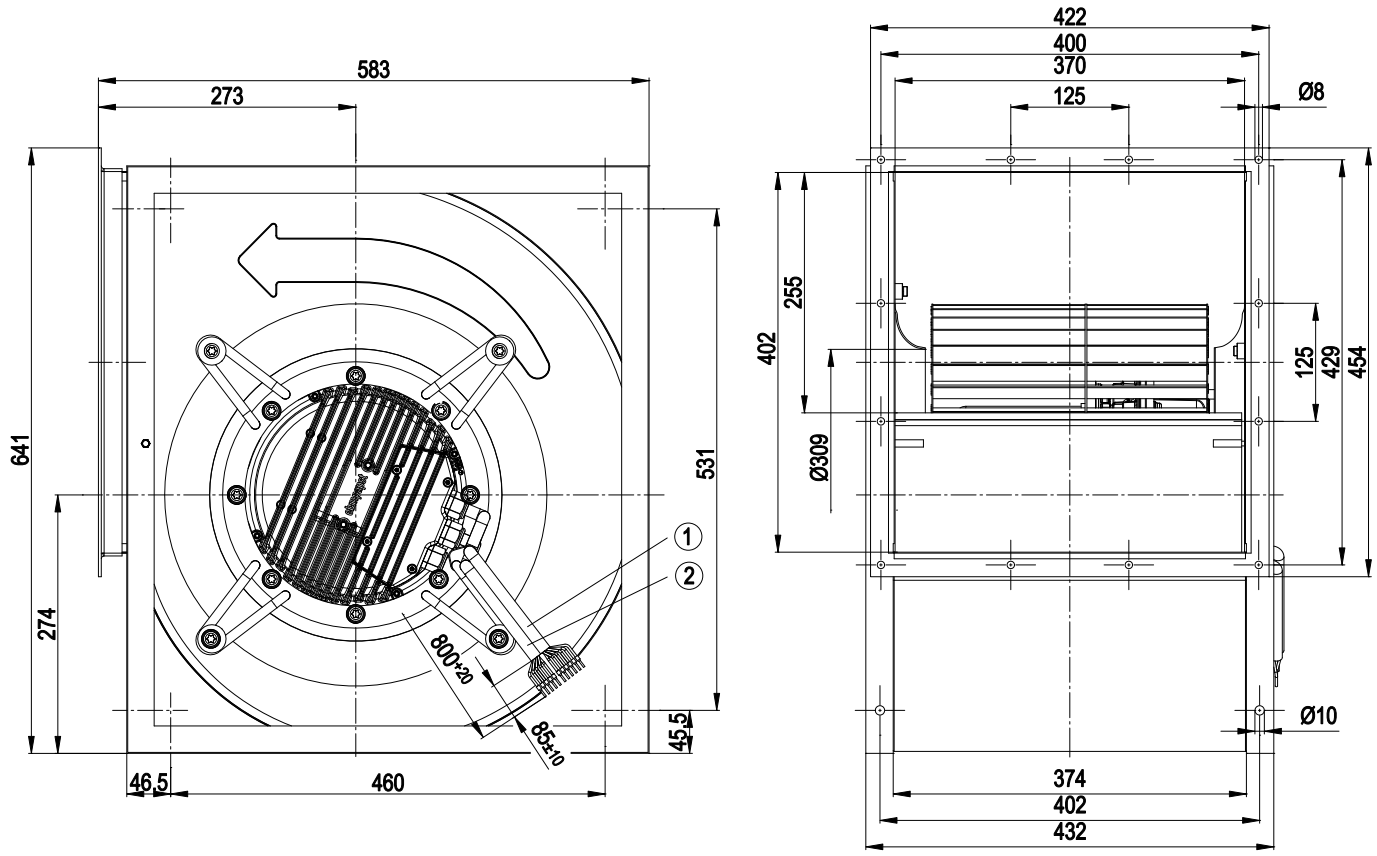
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Product drawing



1	Connecting line AWG16, 6 x crimped core-end sleeves
2	Connection line AWG20, 5 x crimped core-end sleeves

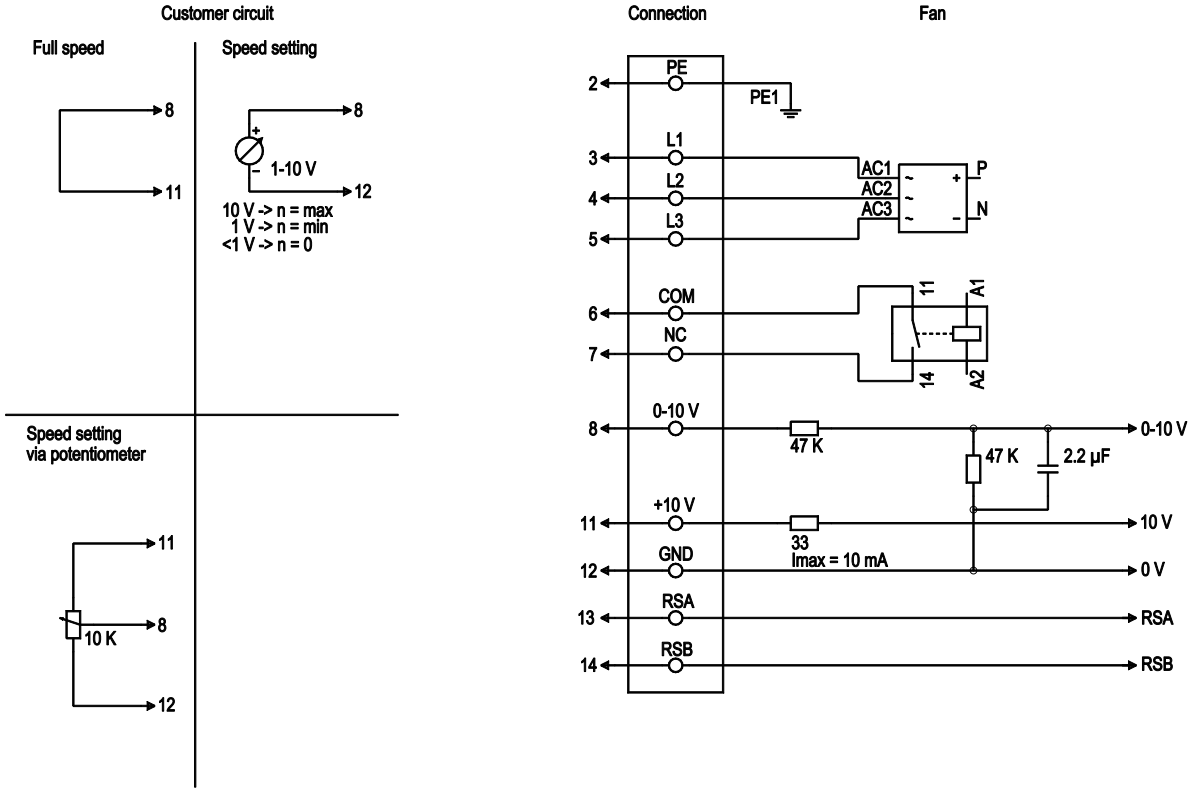
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Connection screen



Line	No.	Signal	Colour	Function / assignment
1	2	PE	green/yellow	Protective earth
1	3, 4, 5	L1, L2, L3	black	Supply voltage, 50/60 Hz
1	6	COM	weiß1	Floating status message contact, normally closed for error (2 A, max. 250 VAC, min. 10 mA, AC1)
1	7	NC	weiß2	Floating status message contact, normally closed for error
2	8	0-10 V	yellow	Control input, set value 0-10 VDC, impedance 100 kΩ, SELV
2	11	+10 V	red	Voltage output 10 VDC (+/-3%), max. 10 mA, supply voltage for external devices (e.g. potentiometer), SELV
2	12	GND	blue	Reference mass for control interface, SELV
2	13	RSA	orange	RS485 interface for ebmBUS; RSA, SELV
2	14	RSB	black	RS485 interface for ebmBUS, RSB, SELV

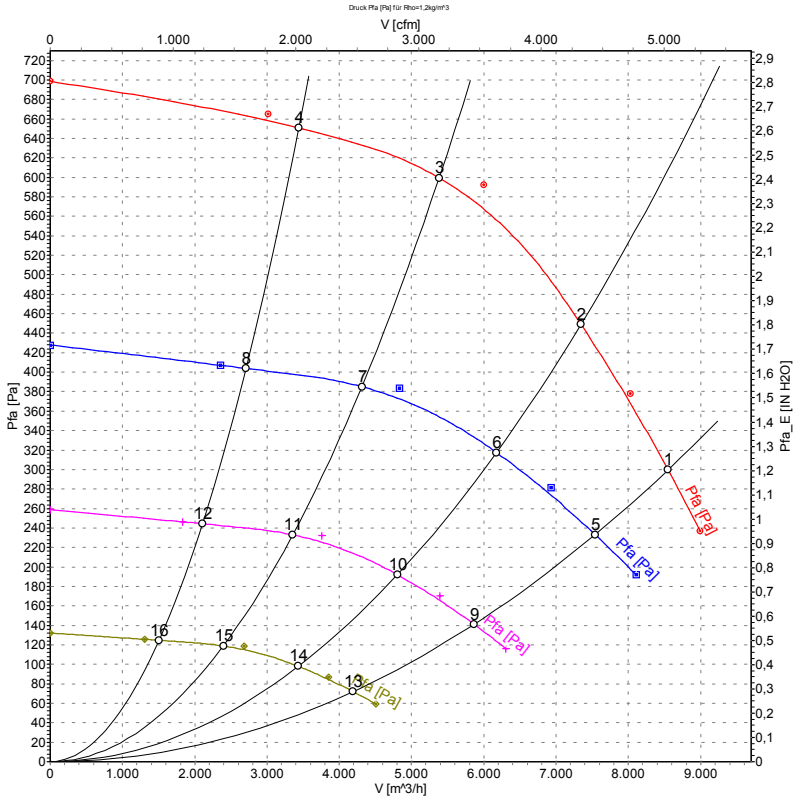
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Charts: Air flow 50 Hz



Measurement: LU-121967

Measured values

	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	LwA_{ds}	$\hat{V}$	p_{fa}
	[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	400	50	1000	3000	4.80	83	79	91	94	8550	300
2	400	50	1070	2619	3.96	81	78	88	92	7345	450
3	400	50	1125	1937	2.95	78	76	85	89	5380	600
4	400	50	1145	1264	1.95	75	74	83	86	3435	650
5	400	50	900	2095	3.17	81	76	88	91	7540	235
6	400	50	900	1580	2.39	78	74	85	88	6175	318
7	400	50	900	999	1.52	73	71	80	85	4315	389
8	400	50	900	619	0.95	70	69	77	81	2705	404
9	400	50	700	986	1.49	75	70	82	86	5865	142
10	400	50	700	743	1.12	72	69	79	83	4805	192
11	400	50	700	470	0.72	68	66	75	79	3355	235
12	400	50	700	291	0.45	65	63	72	76	2105	244
13	400	50	500	359	0.54	68	63	75	78	4190	72
14	400	50	500	271	0.41	65	61	72	76	3430	98
15	400	50	500	171	0.26	60	58	68	72	2395	120
16	400	50	500	106	0.16	57	56	65	68	1505	125

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