D3G454-AA07-03

EC centrifugal fan

forward curved, dual inlet

with housing (large flange)



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Nominal data

Type	**D3G454-AA07-03**	
Motor	**M3G150-NA**	
Phase		3~
Nominal voltage	[VAC]	400
Frequency	[Hz]	50/60
Type of data definition		ml
State		prelim.
Speed	[min^{-1}]	660
Power input	[W]	2900
Current draw	[A]	4.5
Min. back pressure	[Pa]	150
Min. ambient temperature	[°C]	-25
Max. ambient temperature	[°C]	+40

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

Size	454 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal
Electrical leads	Via terminal box
EMC interference emission	Acc. to EN 61000-6-4 (industrial 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	None
Bearing motor	Ball bearing
Mass	54.4 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 both sides
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 and 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

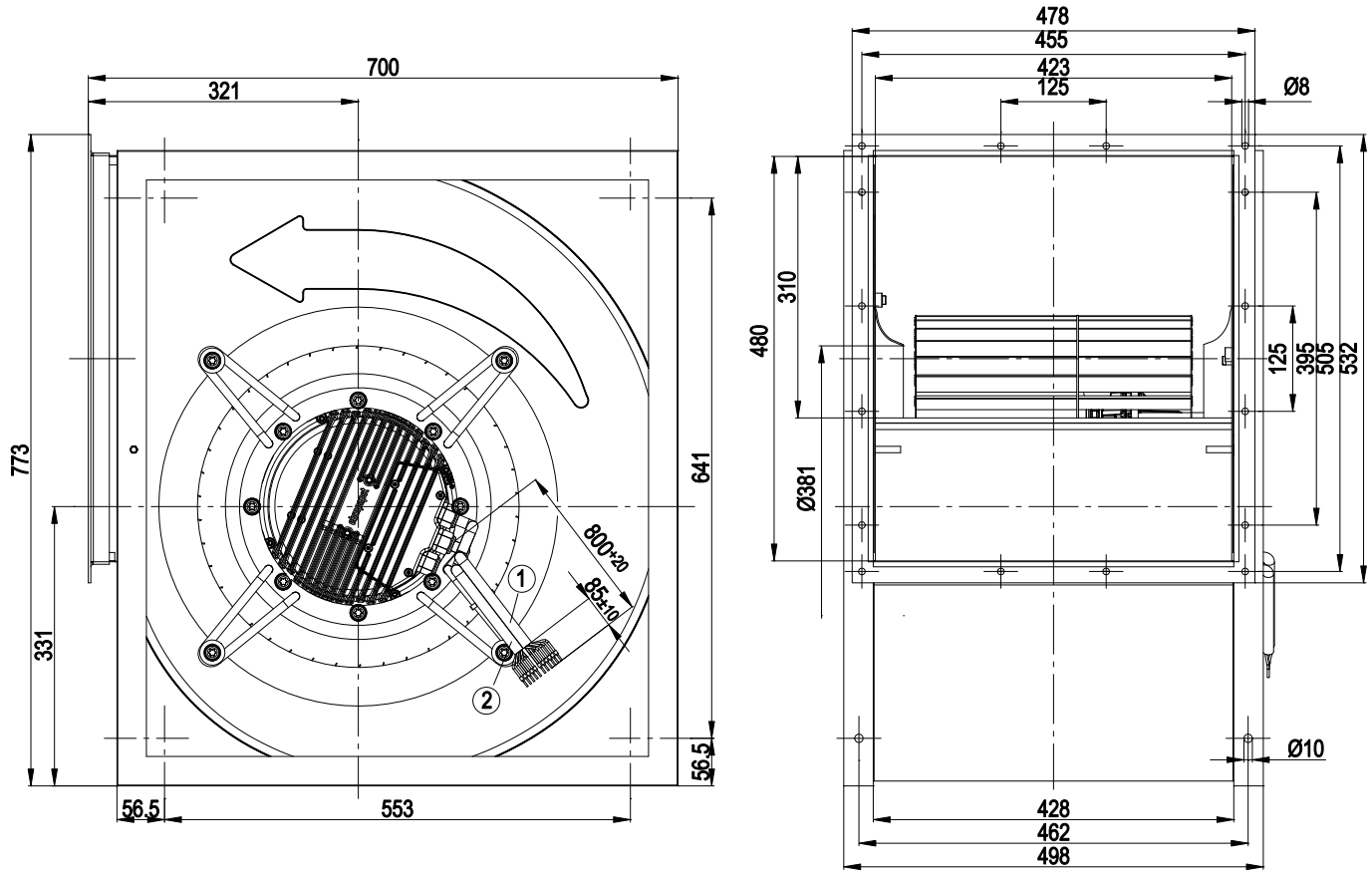
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Product drawing



Cable length from electronics enclosure: 800+20 mm

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

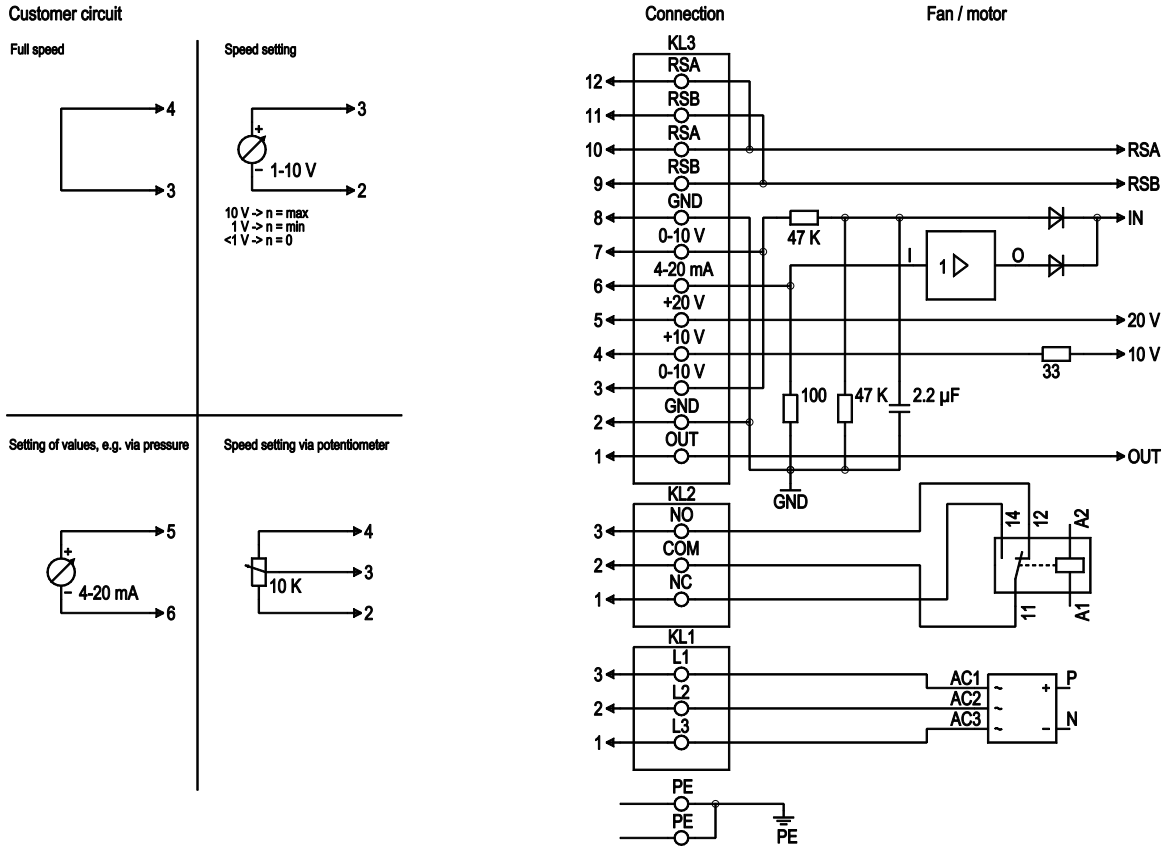
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Connection screen



No.	Pin	Signal	Function / assignment
PE		PE	Protective earth connection
KL1	1, 2, 3	L1, L2, L3	Supply voltage, 50/60 Hz
KL2	1	NC	Floating status message contact, normally closed connection
KL2	2	COM	Floating status message contact, changeover contact, common connection (2 A, max. 250 VAC, min. 10 mA, AC1)
KL2	3	NO	Floating status message contact, normally open connection
KL3	1	OUT	Analog output, 0-10 VDC, max. 3 mA, SELV, output of the current level control coefficient: 1 V equates to 10 % level control coefficient. 10 V equate to 100 % level control coefficient.
KL3	2, 8	GND	Reference mass for control interface, SELV
KL3	3, 7	0-10 V	Use control / actual value input 0-10 VDC, impedance 100 kΩ only as alternative to 4-20 mA input, SELV
KL3	4	+10 V	Voltage output 10 VDC (+/-3 %), max. 10 mA, supply voltage for ext. devices (e.g. potentiometers), SELV
KL3	5	+20 V	Voltage output 20 VDC (+25 %/-10 %), max. 50 mA, supply voltage for ext. devices (e.g. sensors), SELV
KL3	6	4-20 mA	Use control / actual value input 4-20 mA, impedance 100 Ω, only as alternative to 0-10 V input, SELV
KL3	9, 11	RSB	RS485 interface for ebmBus, RSB, SELV
KL3	10, 12	RSA	RS485 interface for ebmBus, RSA, SELV

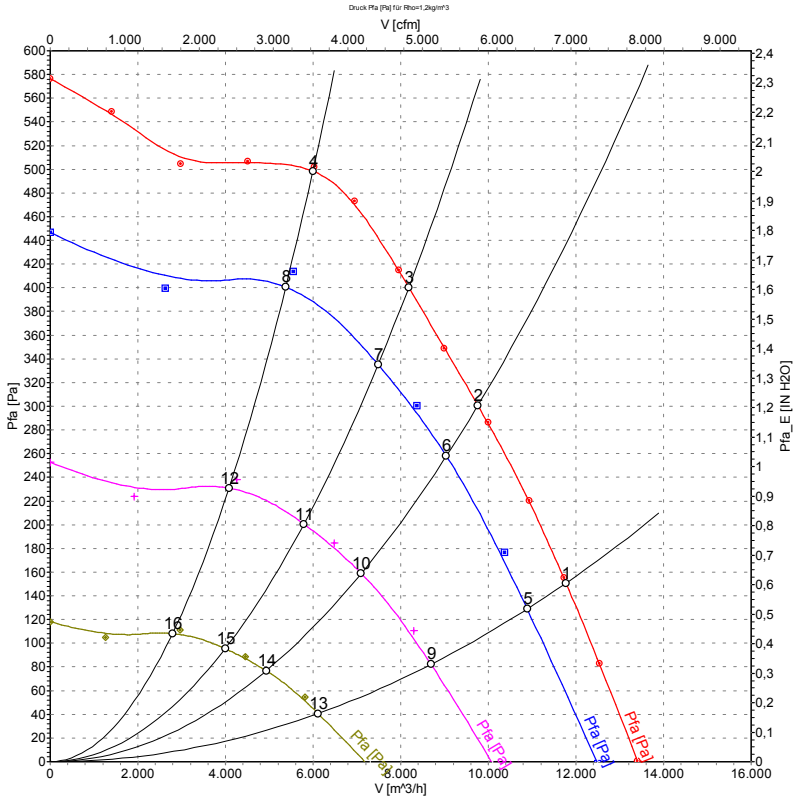
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Charts: Air flow 50 Hz



Measurement: LU-107926
Measurement: LU-107988
Measurement: LU-107989
Measurement: LU-107990

Measured values

	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	LwA_{ds}	$\dot{V}$	p_{fa}
	[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	400	50	660	2900	4.50	80	79	89	90	11770	150
2	400	50	715	2425	3.66	77	71	85	87	9765	300
3	400	50	760	2025	3.06	74	70	82	84	8185	400
4	400	50	810	1552	2.37	71	69	80	83	5995	500
5	400	50	615	2224	3.38	77	78	86	88	10890	133
6	400	50	665	1821	2.77	74	71	83	85	9040	259
7	400	50	700	1499	2.28	71	68	80	82	7485	336
8	400	50	740	1074	1.65	67	66	77	79	5375	413
9	400	50	500	1123	1.73	72	69	81	82	8695	86
10	400	50	525	880	1.38	68	65	77	78	7100	159
11	400	50	540	700	1.13	65	62	74	76	5790	201
12	400	50	560	489	0.84	61	59	70	72	4080	237
13	400	50	355	400	0.74	63	60	72	72	6115	43
14	400	50	365	309	0.60	58	54	67	68	4930	77
15	400	50	375	248	0.50	55	51	64	65	3995	96
16	400	50	390	183	0.39	51	48	61	61	2790	110

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