

R1G225-AF07-52

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	R1G225-AF07-52	
Motor	M1G074-BF	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Frequency	[Hz]	-
Type of data definition		rfa
Speed	[min ⁻¹]	2600
Power input	[W]	100
Current draw	[A]	4.6
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

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

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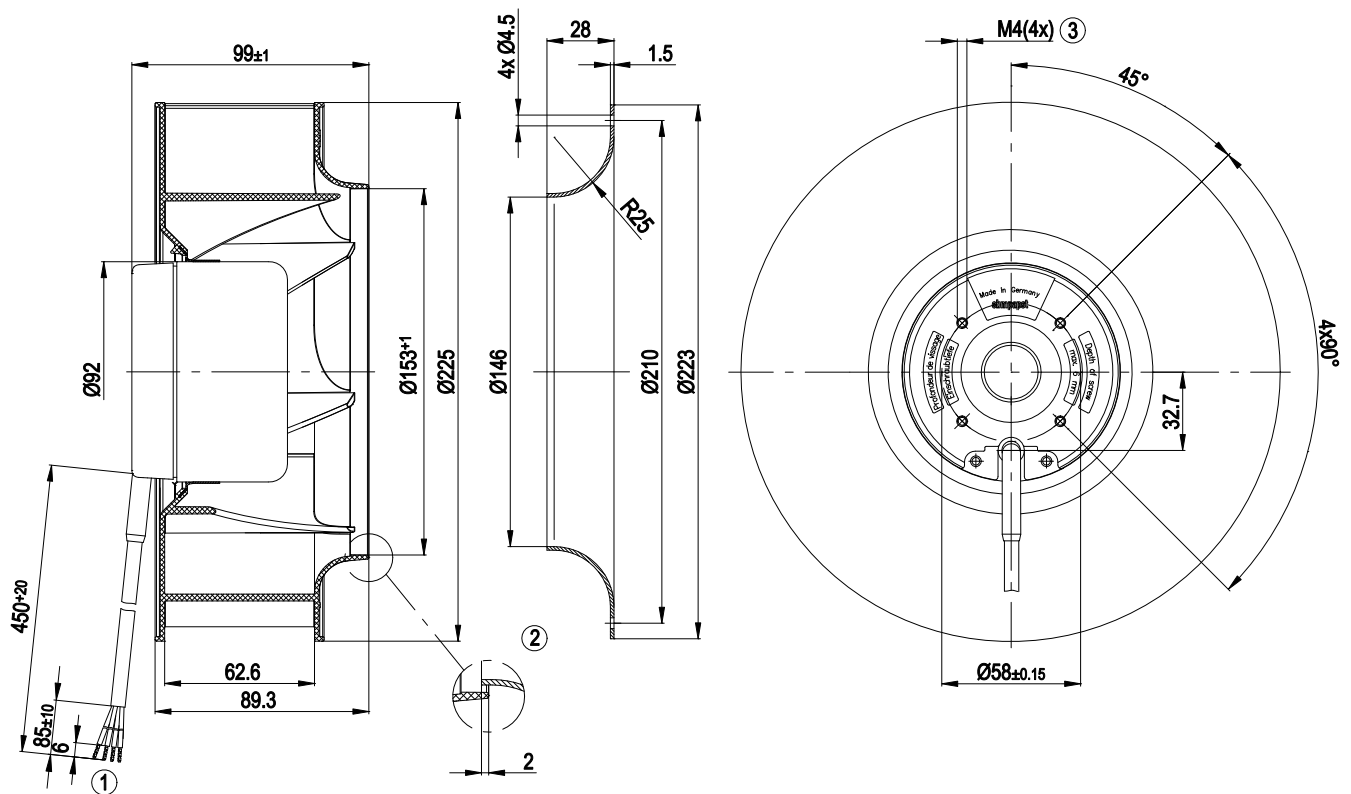
Technical features

Size	225 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 55022 (Class B)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F0
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	1.5 kg
Material of impeller	Plastic PA66, fibreglass-reinforced
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 42
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CSA C22.2 Nr.77; UL 1004-1

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Product drawing



- | | |
|---|---|
| 1 | Connection line AWG20, 4 x brass lead tips crimped |
| 2 | Accessory part: Inlet nozzle 96358-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 6 mm |

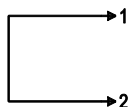
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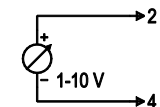
Connection screen

Customer circuit

Full speed

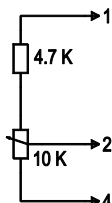


Speed setting

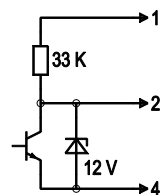


10 V → n = max
1 V → n = min
<1 V → n = 0
Safe start-up at Unom -30 %
from 4 V Ucontr.

Speed setting via potentiometer

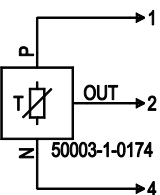


Speed setting via PWM 1-10 kHz



100 % PWM → n = max
10 % PWM → n = min
<10 % PWM → n = 0
Safe start-up at Unom -30 %
from 40 % PWM

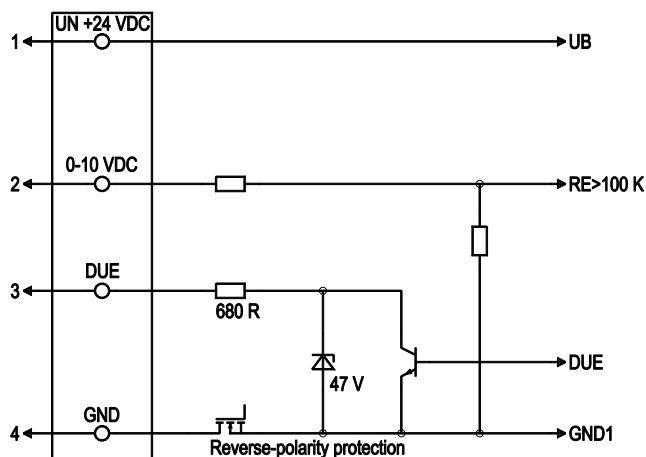
Setting of values via temperature controller



T < 10 °C → n = 0
T > 45 °C → n = max

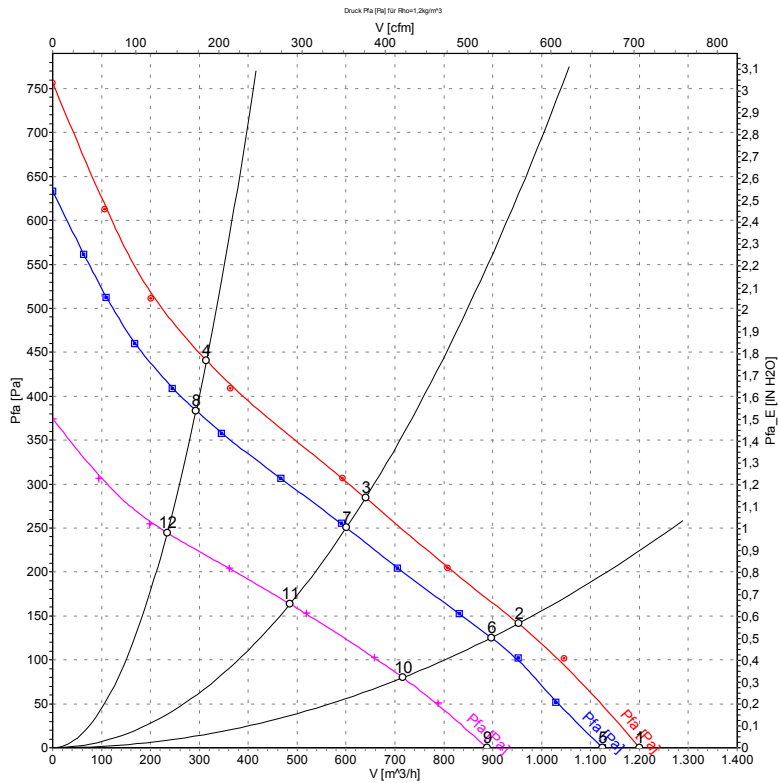
Connection

Fan / motor



Line	No.	Signal	Colour	Function / assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

Charts: Air flow



Measurement: LU-52036
Measurement: LU-52035
Measurement: LU-52037

Measured values

	U	n	P_1	I	$\dot{V}$	P_{fa}
	[V]	[min ⁻¹]	[W]	[A]	[m³/h]	[Pa]
1	28	2795	116	4.87	1200	0
2	28	2630	120	5.14	955	142
3	28	2560	122	5.26	640	284
4	28	2745	118	4.96	315	440
5	24	2600	100	4.60	1125	0
6	24	2480	100	4.76	895	125
7	24	2390	101	4.89	600	250
8	24	2570	98	4.63	295	385
9	16	2065	48	3.35	890	0
10	16	1980	52	3.60	715	80
11	16	1940	54	3.72	485	164
12	16	2050	49	3.42	235	244