R3G355-AN04-77

EC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R3G355-AN04-77**
Motor	**M3G084-FA**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1710
Power input	W	450
Current draw	A	2.9
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_{es}	%	60.8	47.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		75	62
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.44
09 Air flow q_v	m^3/h	2185
09 Pressure increase p_{fs}	Pa	400
10 Speed (rpm) n	min^{-1}	1715
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-66839

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Technical features

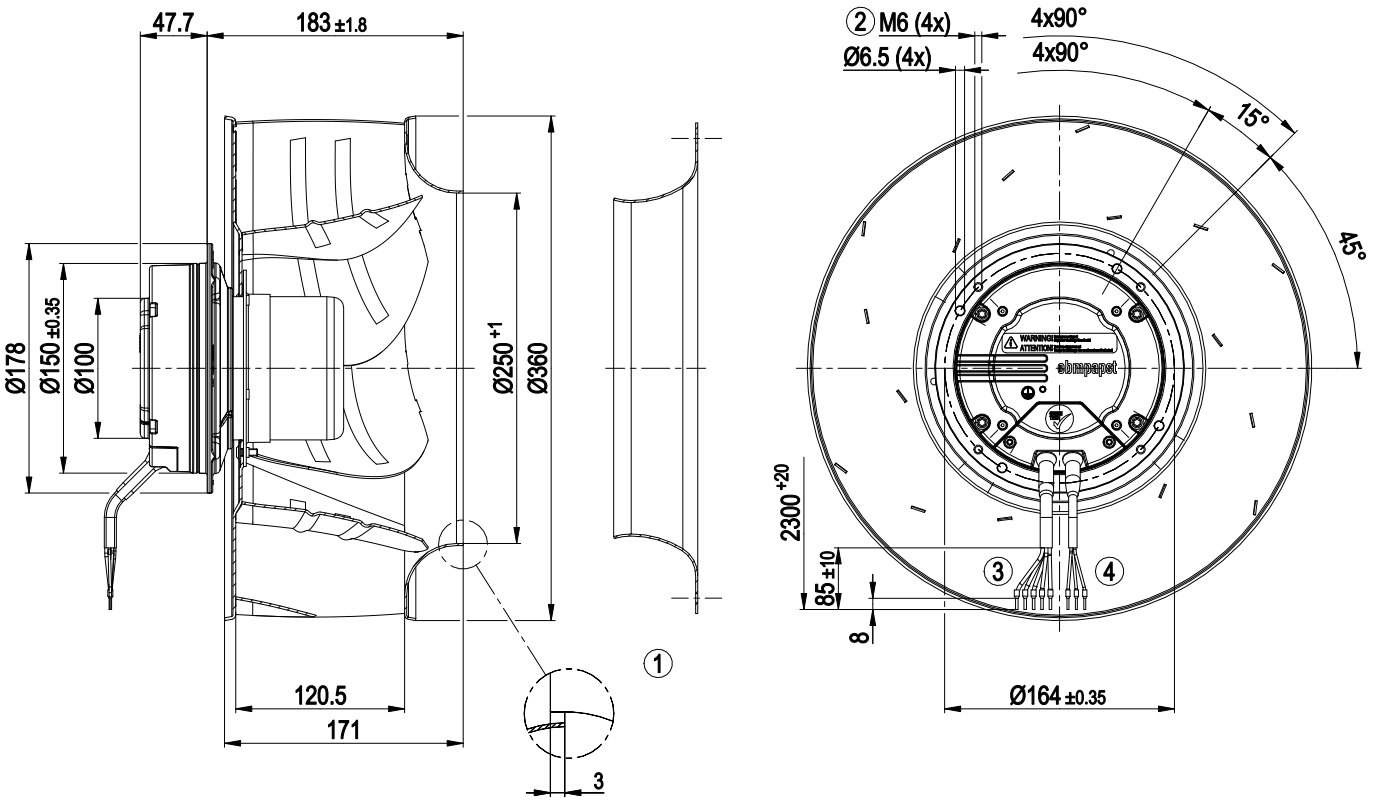
Mass	5.7 kg
Size	355 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limit - PFC, passive - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	C22.2 Nr.77 + CAN/CSA-E60730-1; EAC; CCC; UL1004-3 +60730

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Product drawing



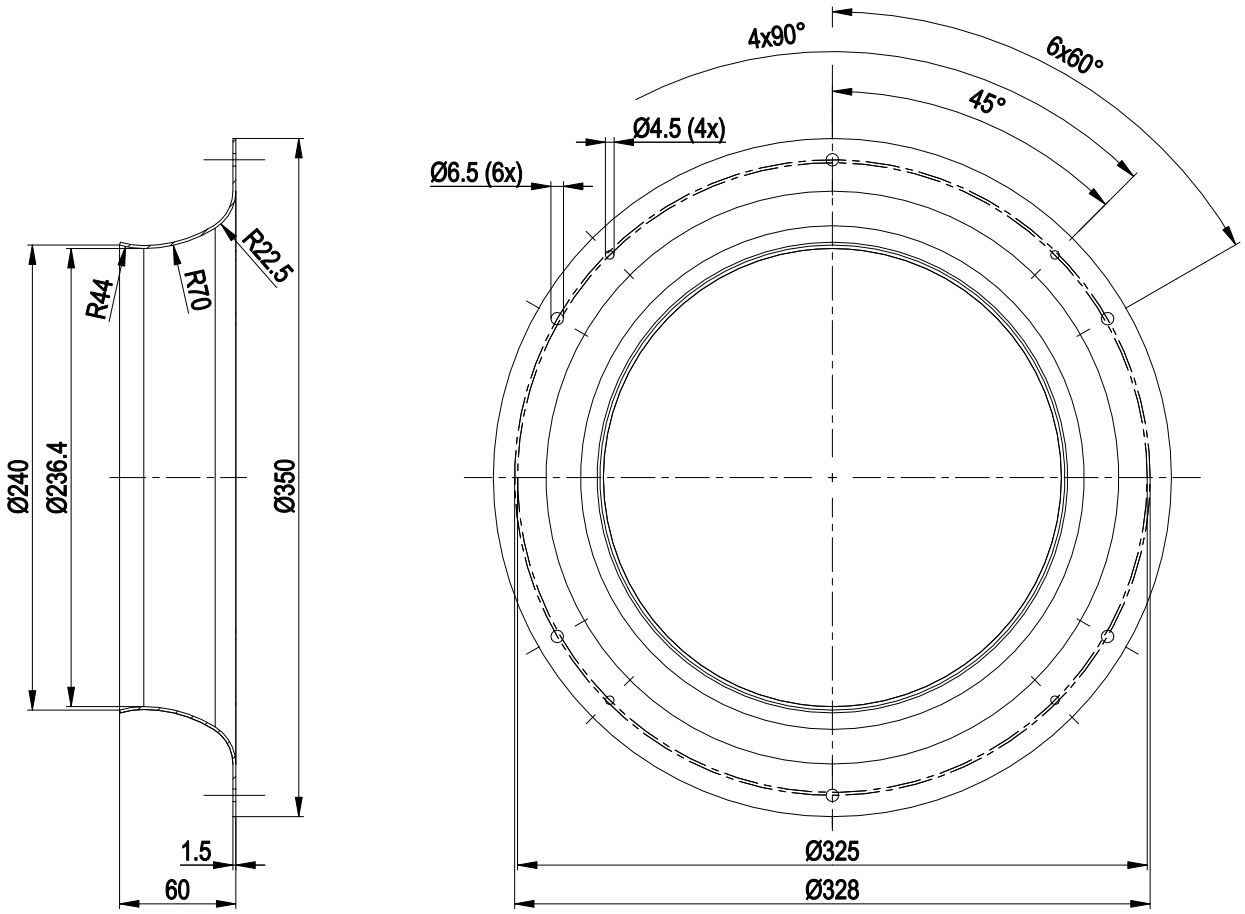
1	Accessory part: Inlet nozzle 35560-2-4013 not included in scope of delivery
2	Thread reach 8 - 10 mm
3	Connection line PVC AWG18, 5x crimped core-end sleeves
4	Connection line PVC AWG22, 3x crimped core-end sleeves

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Accessory part

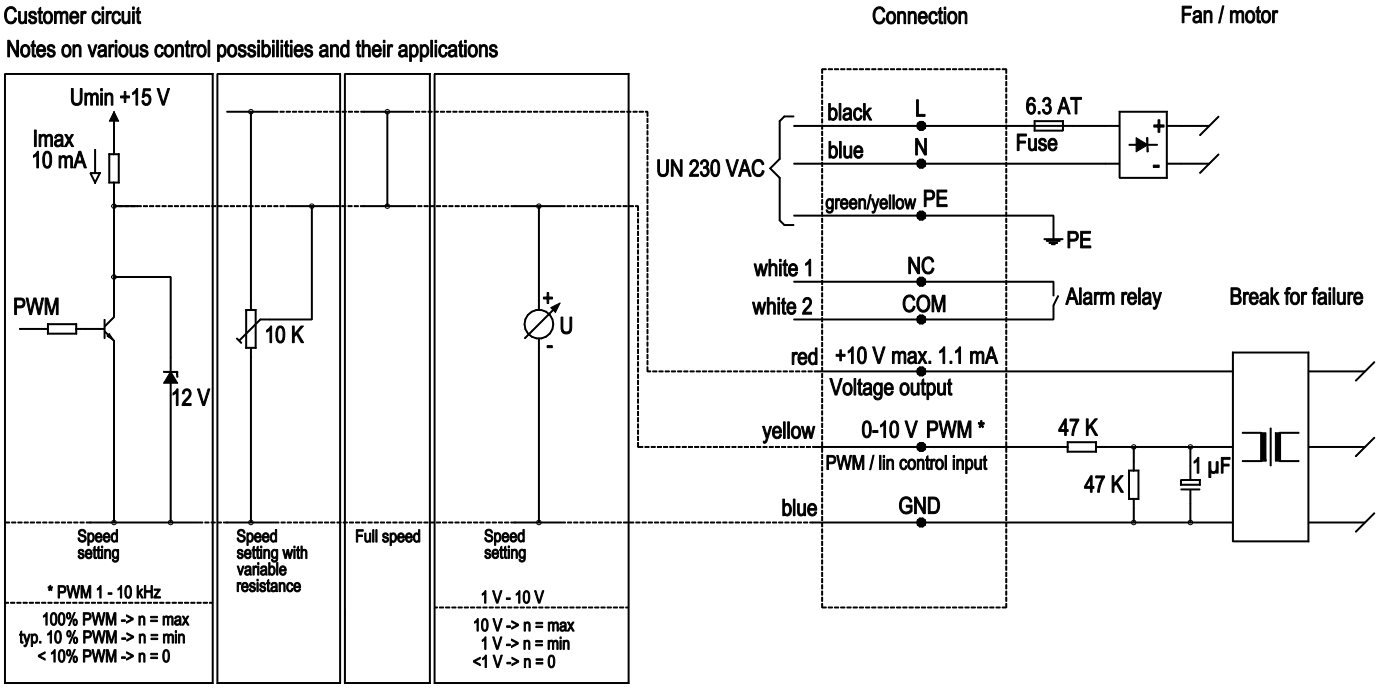


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Connection screen

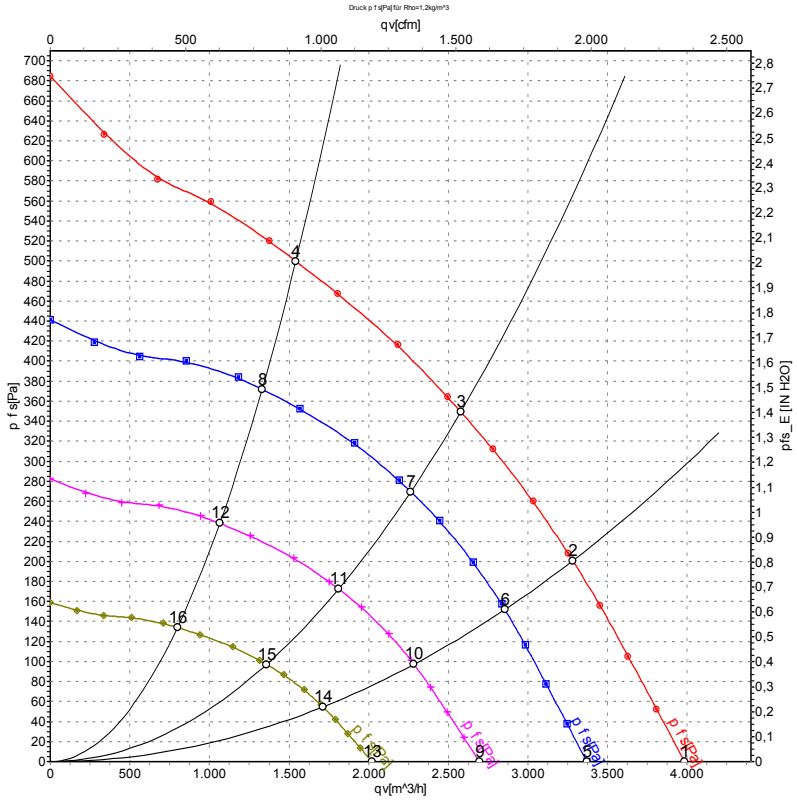


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Charts: Air flow 50 Hz



Measurement: LU-66839-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	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	inH2O
1	230	50	1775	362	2.31	3985	0	2345	0.00
2	230	50	1725	429	2.73	3280	200	1930	0.80
3	230	50	1710	450	2.90	2580	350	1515	1.41
4	230	50	1740	418	2.65	1545	500	910	2.01
5	230	50	1500	219	1.40	3370	0	1985	0.00
6	230	50	1500	283	1.80	2855	152	1680	0.61
7	230	50	1500	306	1.95	2265	270	1335	1.08
8	230	50	1500	268	1.70	1330	372	785	1.49
9	230	50	1200	112	0.72	2695	0	1585	0.00
10	230	50	1200	145	0.92	2285	98	1345	0.39
11	230	50	1200	157	1.00	1810	172	1065	0.69
12	230	50	1200	137	0.87	1065	238	625	0.96
13	230	50	900	47	0.30	2020	0	1190	0.00
14	230	50	900	61	0.39	1715	55	1010	0.22
15	230	50	900	66	0.42	1360	97	800	0.39
16	230	50	900	58	0.37	800	134	470	0.54

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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