R3G400-8317077154

EC centrifugal fan

backward-curved, single-intake



ebm-papst ventilator (Shanghai)Co.,Ltd.
No.418, Hua jing Road, Wai Gao qiao Free Trade Zone, Pudong
Tel: +86(0)21-50460183
www.ebmpapst.com

Nominal data

Type	**R3G400-8317077154**
Motor	**M3G084-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1325
Power consumption	W	291
Current draw	A	1.27
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	35

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

ebmpapst

EC centrifugal fan

backward-curved, single-intake

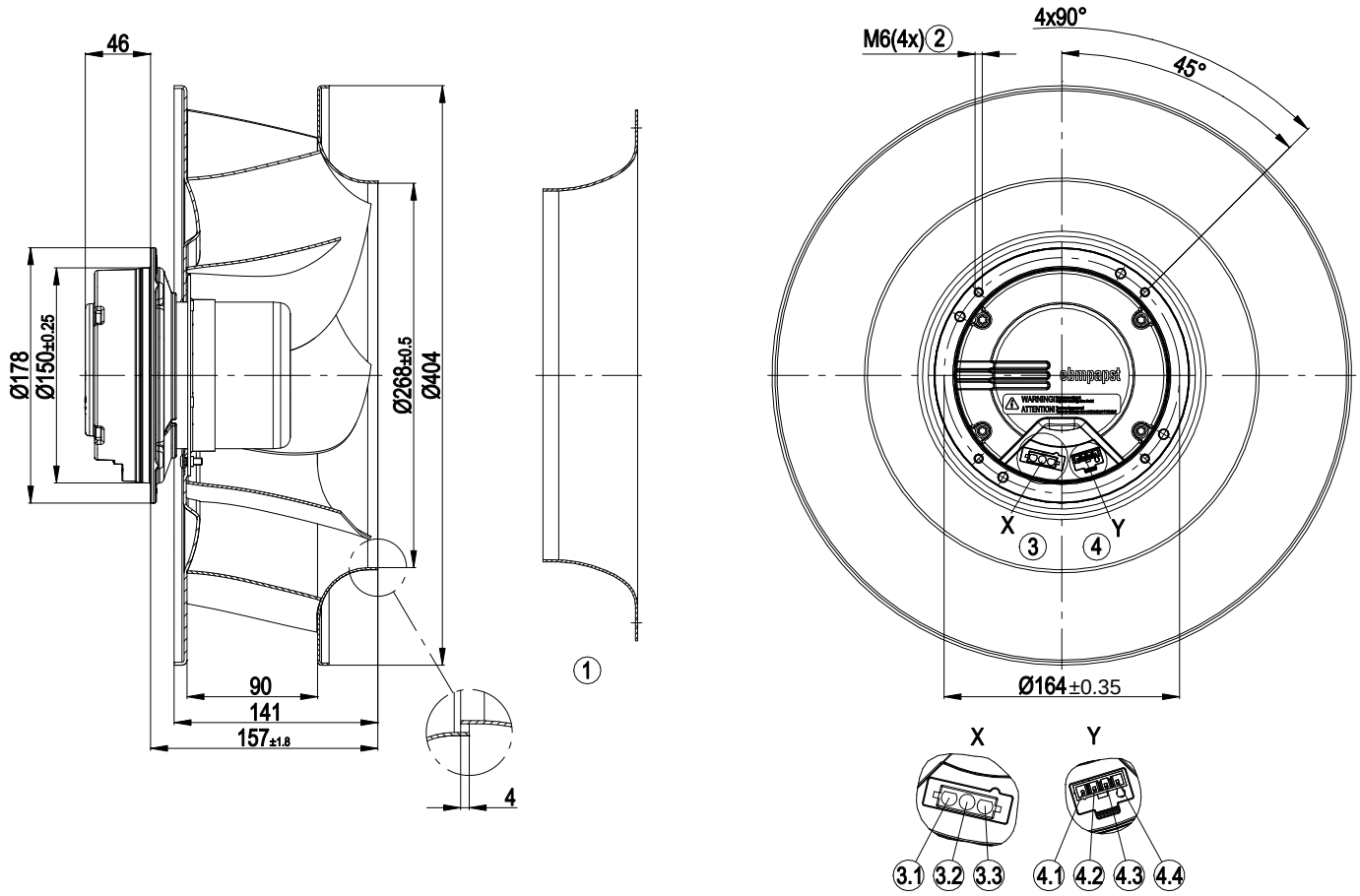
Technical description

Weight	5 Kg
Fan size	400 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Operation and alarm display: reversible voltage output 0 V / +15 V - Integrated PID controller - Motor current limitation - PFC, active - RS-485 ebmBUS - Soft start - Control interface with SELV potential safely disconnected from supply - Thermal overload protection for electronics/motor - Line undervoltage / phase failure detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	With plug
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Approval	CCC

EC centrifugal fan

backward-curved, single-intake

Product drawing

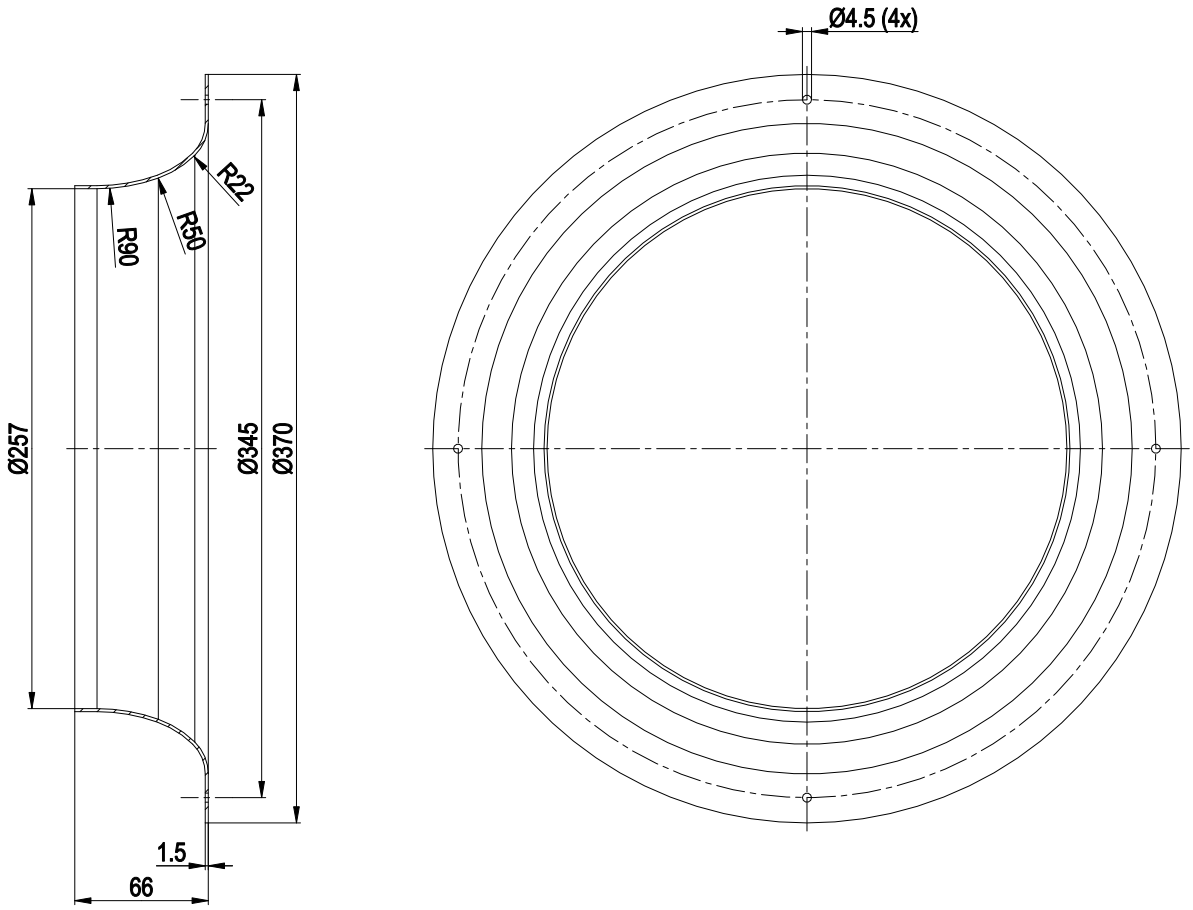


1	Accessory part: inlet ring 54476-2-4013 not included in scope of delivery
2	Max. clearance for screw 10 mm
3	Header Lonco no. C63502-3A, mating connectors with sockets not included in scope of delivery
3.1	PE
3.2	N
3.3	L
4	4-pole header Molex 39-30-2040, mating connector with sockets not included in scope of delivery
4.1	RSB
4.2	RSA
4.3	+15 V; in case of fault: 0 V
4.4	0 V; in case of fault: +15 V

EC centrifugal fan

backward-curved, single-intake

Accessory part

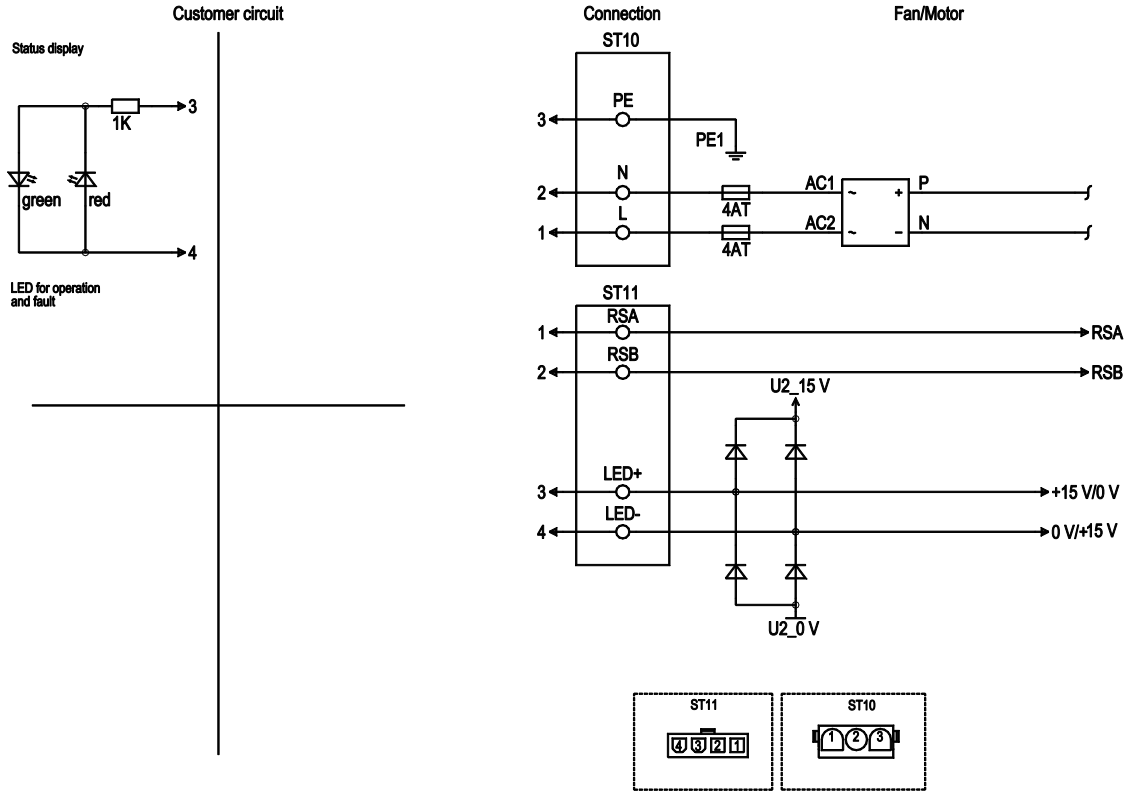


Inlet ring 54476-2-4013 not included in scope of delivery

EC centrifugal fan

backward-curved, single-intake

Connection diagram



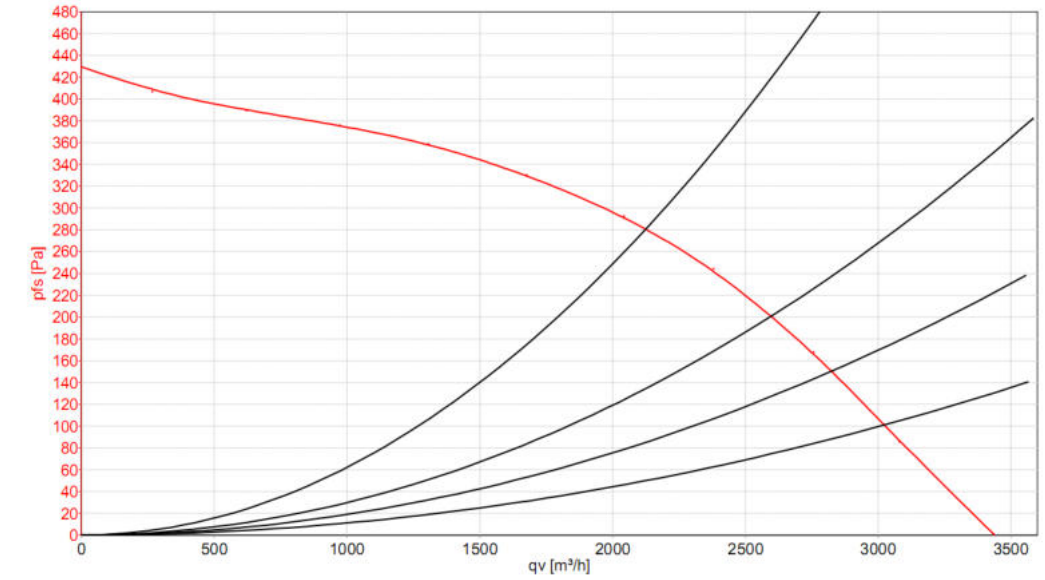
No.	Conn.	Designation	Color	Function/assignment
10	1	L		Power supply, phase, 50/60 Hz
10	2	N		Power supply, neutral conductor, 50/60 Hz
10	3	PE		Protective earth
11	1	RSA		RS485 interface for ebmBUS, RSA, SELV
11	2	RSB		RS485 interface for ebmBUS, RSB, SELV
11	3	LED +		Voltage output 15 V (+15%/-10%), max. 30 mA, power supply for external devices (e.g. status display for LED), SELV
11	4	LED -		Reference ground for control interface, SELV

EC centrifugal fan

backward-curved, single-intake

Curves: Air performance 50 Hz

Line	Idno	Type	Idx.	U [V]	f [Hz]	C [uF]	Ust [V]	Layout	Inst. cat.	Remark
	10701	R3G400-8317077154	01P	230	50				A	



Measurement:10701

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	I	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	1325	200	0.88	3400	0
2	230	50	1325	240	1.05	3015	100
3	230	50	1325	258	1.13	2800	150
4	230	50	1325	278	1.21	2570	200
5	230	50	1325	299	1.31	2090	280

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

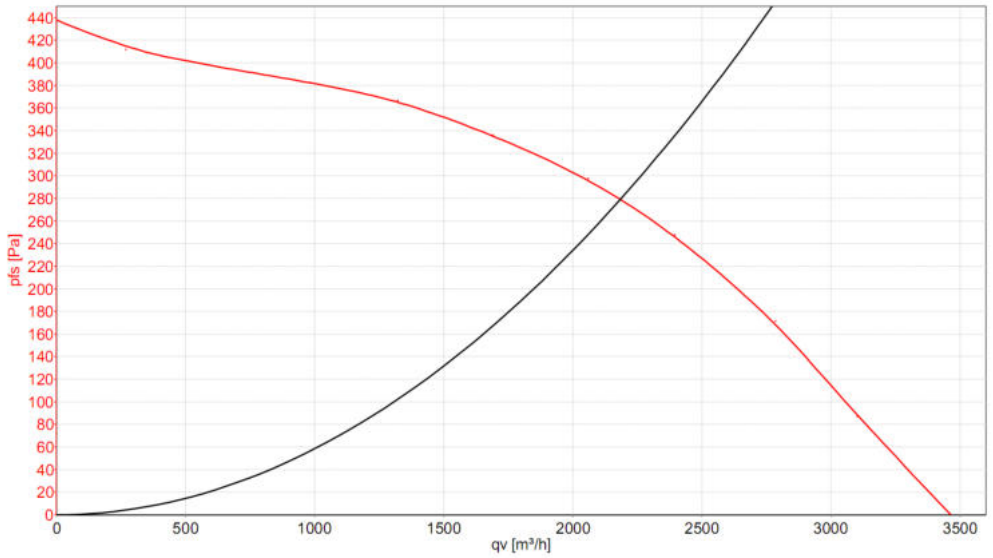
ebmpapst

EC centrifugal fan

backward-curved, single-intake

Curves: Air performance 50 Hz

Line	Idno	Type	Idx.	U [V]	f [Hz]	C [uF]	Ust [V]	Layout	Inst. cat.	Remark
	10701	R3G400-8317077154	01P	230	50				A	n=1350;



Measurement:10701

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	I	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	1350	200	0.90	3470	0
2	230	50	1350	315	1.37	2200	280

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