3489

RadiPac EC Plenum Fan

with support bracket

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Nominal Data

Model	3489	
Motor	M3G084-DF	
Phase		3~
Nominal voltage	VAC	400
Nominal voltage range	VAC	380-480
Frequency	Hz	50/60
Method of obtaining data		ml
Speed	rpm	4000
Power consumption	W	1212
Current draw	A	1.86
Min. ambient temp	°F (°C)	-13 (-25)
Max. ambient temp	°F (°C)	140 (60)

ml = Max. load (maximum fan input power over the range cataloged)
Subject to change

Speed (rpm) shown is nominal.
Performance is based on actual speed of test.

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Technical Description	
Weight	21 lb (9.7 kg)
Nominal Impeller Size	9.8 in (250 mm)
Motor size	84
Rotor surface	Painted black
Impeller Material	PA plastic
Support bracket material	Steel, painted black
Inlet plate material	Sheet steel, galvanized
Inlet nozzle material	Sheet steel, galvanized
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	F
Environmental class	H1
Ambient temp. note	Occasional startup between -40 °F & -13 °F (-40 °C & -25 °C) is permitted. For continuous operation below -13 °F (-25 °C), use a fan design with special low-temp bearings.
Max. ambient temp.	176 °F (+80 °C) (for motor transport/storage)
Min. ambient temp.	-40 °F (-40 °C) (for motor transport/storage)
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drain holes	On rotor side
Mode	S1
Motor bearing	Ball bearings
Technical features	- Operation and alarm display with LED - Control input 0-10VDC / PWM - Alarm relay - Integrated PID controller - Power Limiter - PFC, passive - Motor current limitation - RS-485 MODBUS-RTU - Soft start, EEPROM write cycles: 100,000 max - Voltage output 10VDC, max 10mA - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage / phase failure detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-3 (household environment), except EN 61000-3-2 for professionally used equipment with a total rated power greater than 1 kW
Touch current	≤ 3.5 mA (according to IEC60990; measuring circuit Fig.4, TN system)
Electrical hookup	Variable (With cable)
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; EN 61800-5-1; CE
Approvals	UL 1004-7 + 60730-1; EAC; CSA C22.2 No. 77 + CAN/CSA-E60730-1

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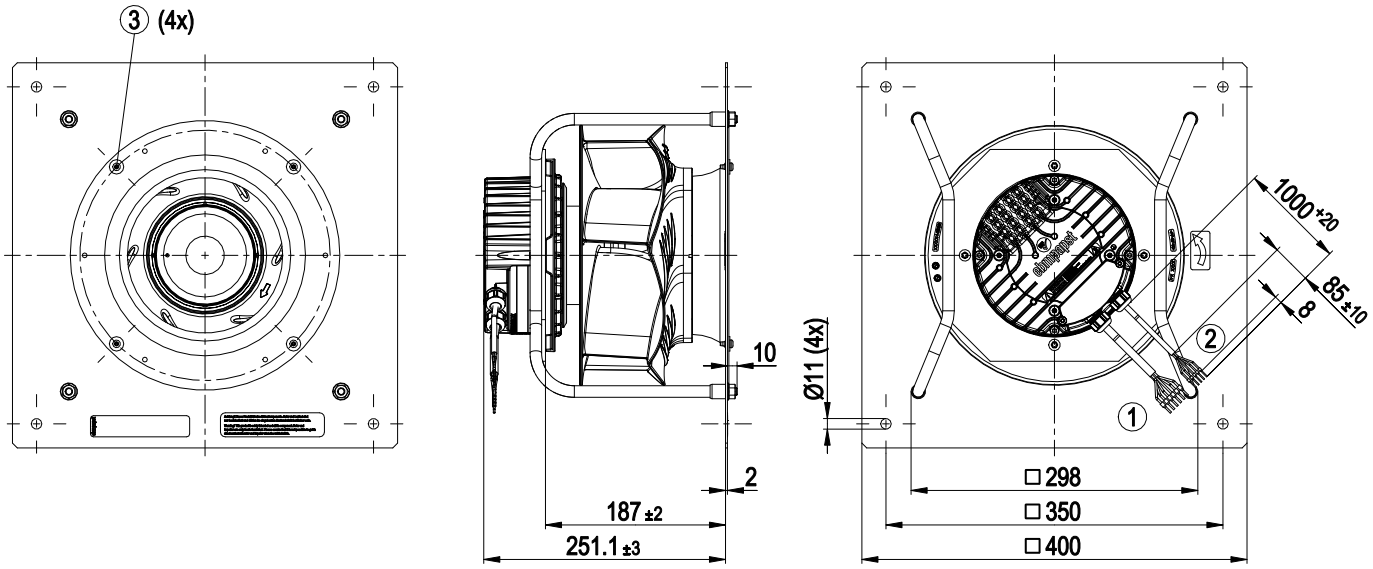
RadiPac - Modular EC Plenum Fan

with support bracket

Product drawing

Dimensions in millimeters



1	Cable PVC AWG18
	6x wire-end ferrule
2	Cable PVC AWG22
	5x wire-end ferrule
3	Attachment for inlet ring and FlowGrid (20280-2-2957 not included in scope of delivery)

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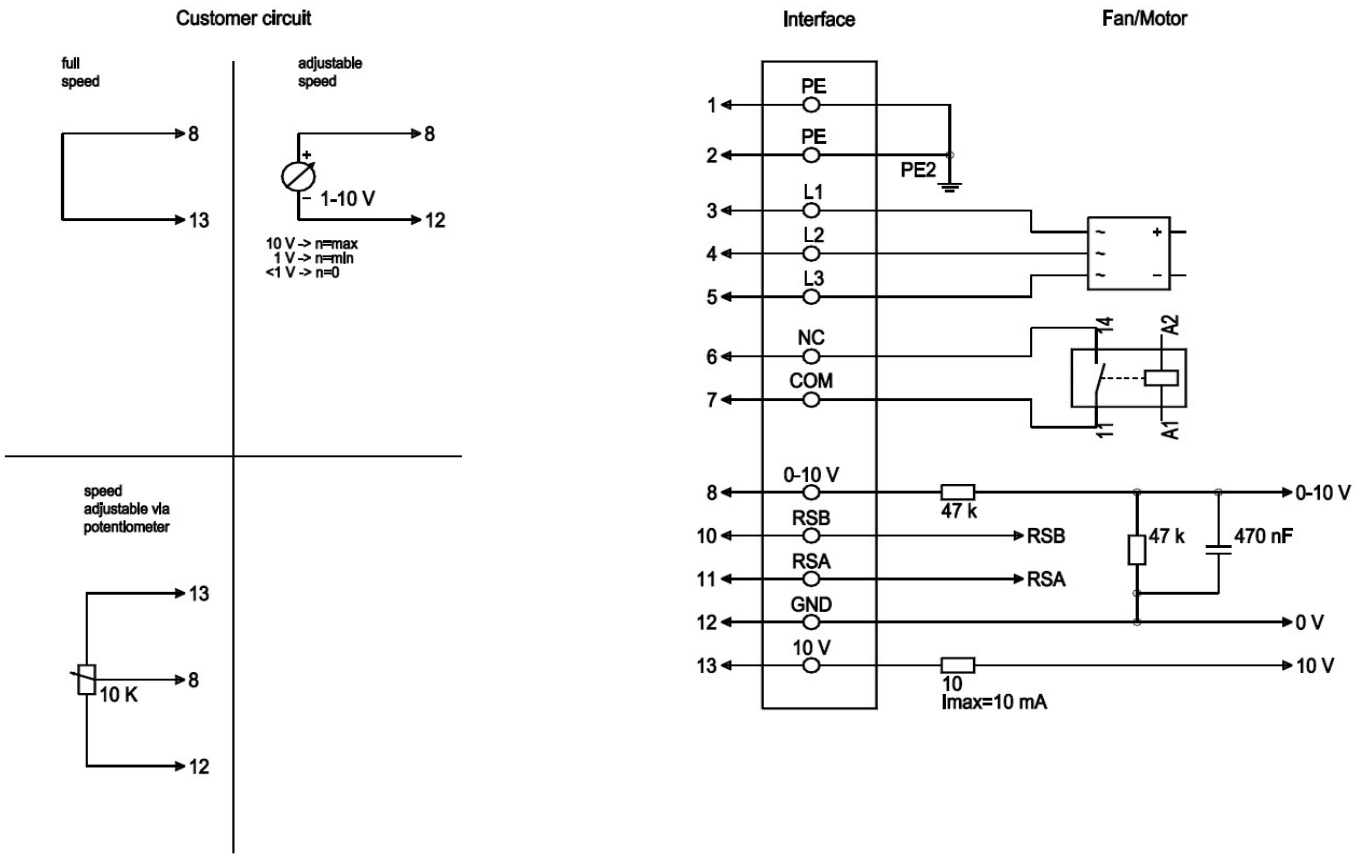
Electrical Interface



No.	Conn.	Desig.	Color	Function/ Assignment
1	1, 2	PE	green/yellow	Protective earth
1	3, 4, 5	L1, L2, L3	black	Power supply, phase, 50/60 Hz
1	6	NC	white 1	Status relay, floating status contact, break for failure, contact rating 250 VAC/30 VDC 5 A minimum contact gap 10 mA/5 VDC, reinforced insulation on control interface side, functional insulation on supply side
1	7	COM	white 2	Status relay, floating status contact, common connection, contact rating 250 VAC/30 VDC 5 A minimum contact gap 10 mA/5 VDC, reinforced insulation on control interface side, functional insulation on supply side
2	8	0-10V	yellow	Analog input (set value) SELV, 0-10 V, Ri = 100 kΩ, adjustable curve
2	10	RSB	brown	RS485 interface for MODBUS, RSB; SELV
2	11	RSA	white	RS485 interface for MODBUS, RSB; SELV
2	12	GND	blue	Reference ground for control interface, SELV
2	13	"+10V"	red	Fixed voltage output 10 VDC, SELV, +10 V +/-3%, max. 10 mA, short-circuit-proof, power supply for external devices (e.g. potentiometers)

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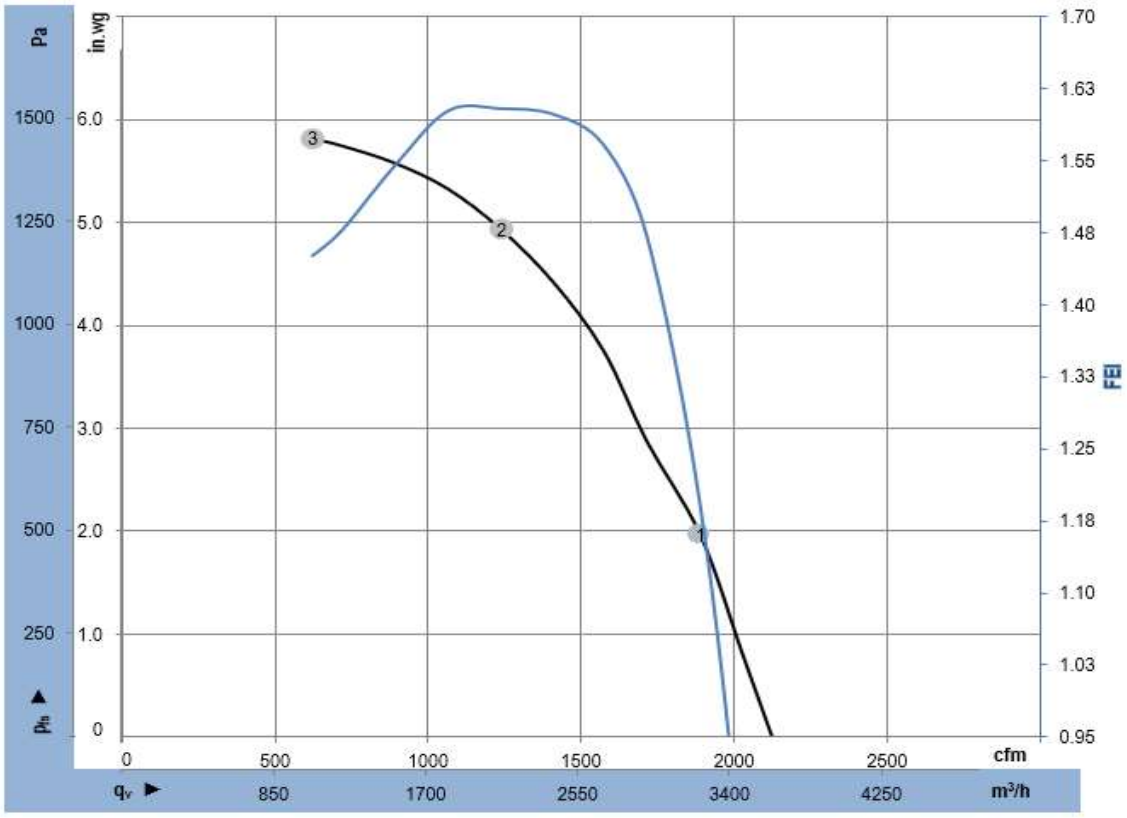

ρ = 0.075 lbm/ft³

Measurement: LU-3489

ebm-papst Motor (Shanghai) Co., Ltd. certifies that the RadiPac - Modular EC Plenum Fan shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Performance Ratings

		U	f	n	P_{ed}	I	q_v	p_{fs}	FEI
		V	Hz	rpm	W	A	cfm	in. wg	
1	3~	400	50	3998	1069	1.6	1891	2.0	1.19
2	3~	400	50	4002	1199	1.8	1240	4.9	1.60
3	3~	400	50	4000	934	1.4	624	5.8	1.45

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Electrical power · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

Performance certified is for installation type A - Free inlet, Free outlet with partition.
Rating Method "E" (Direct Drive, As Run Speed)
Performance ratings include the effects of support brackets.

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