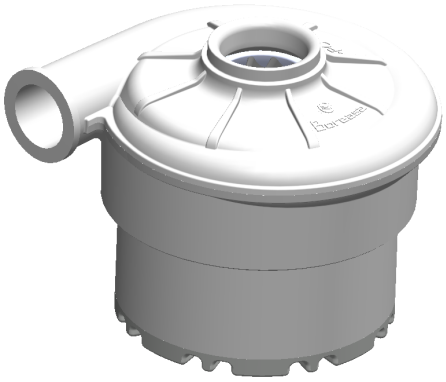
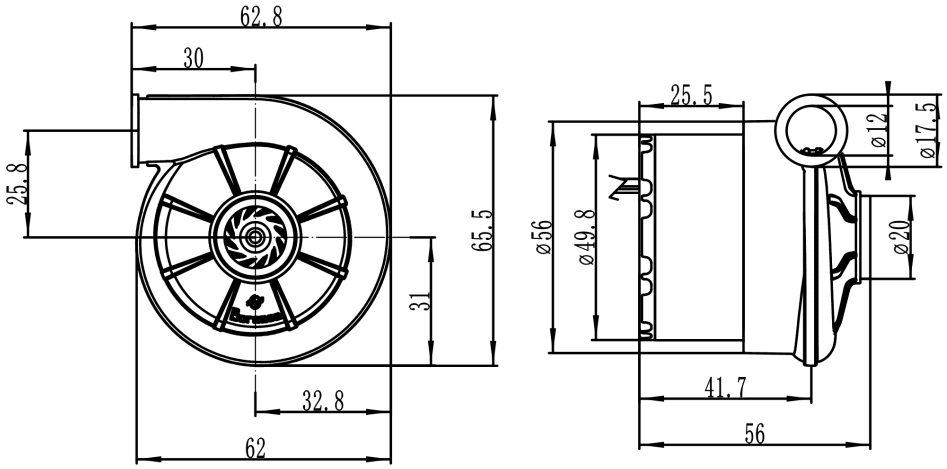
E-mail: sales@boreasa.com, URL : www.boreasa.com

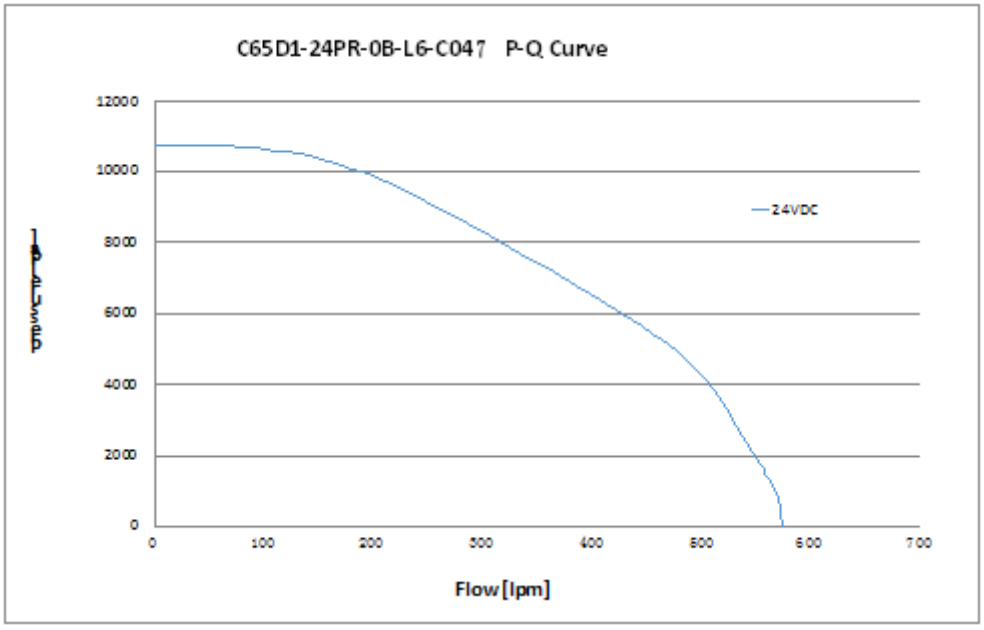


C65D1-24PR-0B-L6-C047

Single stage high pressure radial blower

Housing:	65mm type Medical grade thermo-plastics
Impeller:	Impeller with top Medical grade thermo-plastics
Motor:	Brushless motor with Hall sensors 2 ball bearings
10 Leads:	- 3 phases, AWG20, PVC Insulator - 5 Hall wires, AWG26, PVC Insulator - 2 NTC resistor wires, AWG26, PVC Insulator





NOTES:
- Performances are dependent on the driver used and the test conditions. The data in this spec. sheet was obtained using Boreasa test chamber at 20°C (±2° C) and sea level, and using a Boreasa D30/5/4Q-E2 driver. It may be different than data measured in other conditions or with other drivers.
- Specifications are subject to change without notice.
- Boreasa blowers have been designed and are manufactured to meet the medical device industry requirements. However, it is not possible to test blowers in all conceivable customer application configurations. Consequently, to be used in life support equipment, blowers must be life tested and validated by customers, in their actual application conditions, in a statistically meaningful quantity.

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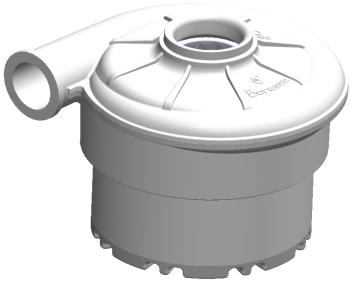

Technical Data

		C65D1-24PR-0B-L6-C047
V_{CC} Nominal Voltage	V	24
V_{CC} Voltage Range	V	12 ~ 28
I_N freeblowing @Nom. Volt.	mA	3'900
I_N work. point @Nom. Volt.	mA	3'210
I_N static @Nom. Volt.	mA	1'610
P_N work. point @Nom. Volt.	W	77
L Inductance	mH	0.131 ±25%
R Phase-Phase	Ohm	0.23 ±8%
n freeblowing @Nom. Volt.	rpm	48'300
n work. point @Nom. Volt.	rpm	50'300
n static @Nom. Volt.	rpm	55'200
V freeblowing @Nom. Volt.	l/min	573
V work. point @Nom. Volt.	l/min	325
P work. point @Nom. Volt.	Pa	7'860
P static @Nom. Volt.	Pa	10'750
MTTF (measured in Bi-level mode)	Hours	>30'000 #1
Pole Pairs		1
I Inertia	$g*mm^2$ / $oz*in^2$	1425 / 0.0778
M Mass	g / oz	356/ 12.77
LpA work. point	dB(A)	51 #2
$T_{Operations}$	°C / °F	-20 … +60 / -4 … +122 (in ice-free conditions)
Leads	mm / inch	285 / 11.2 (AWG20 & AWG26)
Connector		KF2EDGK-3.5-9P
Housing / Impeller Material		Medical Grade Thermo-plastics
Ball Bearing		☑
Internal Temperature Sensor		☑

#1 At given working points and cycle.
#2 Measured at distance of 1 meter from inlet, with open inlet, outlet connected to breathing tube and 4 mm orifice in sound chamber at 1 kPa.

Note: - Working point is an example close to max. efficiency.
- The phase inductance and impedance are measured by LCR at 1kHz, including the connector.
- Tolerances based on specified speed data according to ISO 13348, grade 4: pressure ±10%, power ±16%, speed ±5% and flow rate ±5%.

RoHS

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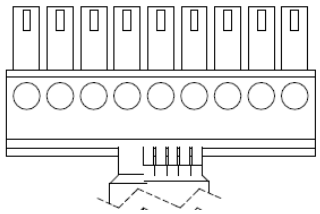
Electrical Connections

PIN 1 PIN9



Wire	Description		Pin
Yellow/Orange	W_3	Motorwinding W	PIN 1
Red	W_2	Motorwinding V	PIN 2
Brown	W_1	Motorwinding U	PIN 3
Grey	H_C	Hall sensor C	PIN 4
Black	H_B	Hall sensor B	PIN 5
Blue	H_A	Hall sensor A	PIN 6
Yellow	V_{Hall}	V_{hall} 5 ... 24 V_{DC}	PIN 7
Green	GND	Ground	PIN 8
White	IT	Internal Temperature	PIN 8
White	IT	Internal Temperature	PIN 9

Blower Limits and Warning

* No Hot-Swap allowed
* Max. allowed temperature on motor NTC: 85º C
* Max. Continuous speed allowed at 25º C: 60’000 rpm
* Blocking the impeller may result in damages or destruction of the blower, unless current is limited to value listed above.
* A minimum air flow is required at V_{CC} higher than Nominal Voltage to avoid the air in the blower to overheat by compressing and mixing.

Manufacturing System

Blowers manufactured by ISO9001-2015 certified manufacturer

Motor Internal Temperature Signal (IT)

The temperature of the inside of the motor is indicated by the resistance of a NTC. The 10 KΩ NTC (MF52A103F3950, B Value: 3950), is connected between the IT outputs (PIN5 & PIN10).

Customer: **AEONMED**

Modification: C047