

EC218-CB560D-
595WAI-M
EC MOTOR FAN
EXT ROTOR.

DATASHEET-
INSTALLATION GUIDE.

En-GB
METRIC.
M Series



TRANSMONK
simply precise.

1.0 Introduction

The specification describes the standards, operating environment, and technical requirements of the product.

2.0 Requirements of product standards and safety regulations

2.1 Standards and requirements of the product followed

2.1.1 GB12350 (Safety requirements of small power motors)

2.1.2 EN60335-1 (Safety requirements of household and similar electrical appliances)

2.2 The fan is CCC and CE approved.

2.3 All materials are ROHS compliant

3.0 Mechanical requirements

3.1 Motor magnetic materials

QZ-2 180 degree Celsius / High Strength enamelled wire QZ-2 180 degree Celsius

Stator and Rotor permeability magnetic material: Silicon Steel

Rotor: Die-Casting Aluminium

3.2 Balancing: The residual unbalance weight is less than the permit value of G6.3 (balancing precision grade, according to the standard of JB/T9101) when the fan is running at rated voltage and frequency.

3.3 Vibration: Vibration speed virtual value of fans accord with JB/T8689.

3.4 Lifespan: The fan is designed to run for a lifespan of 30,000~40,000 hours when the fan is running at rated voltage, rated load and maximum operating temperature.

4.0 Electrical Protection: The motor is equipped with the overload protection function, cut off temperature is between 150-160 degrees Celsius and reset temperature is between 90-120 degree Celsius

Leakage current: According to GB 12350

Installation mode: Horizontal & Vertical

Mode of speed regulation: Please provide the controller details with which you want to regulate the fan speed

5.0 Quality requirements

Quality requirements in accordance with ISO9001:2000 and inhouse quality standards

6.0 Operating and storing environmental requirements

Operating temperature range: -20 to +60 degree Celsius

Operating humidity range: 30% to 95% RH

Operating altitude: \leq 1000 m

Ambient atmospheric pressure: 80-110 Kpa

Transportation/Storing temperatures range: -25 ~ +60 degree Celsius

Transportation/Storing humidity range: 30% ~ +95% RH

Packaging: Carton / Wooden packing

7.0 Standard of noise test: As per ISO 13347 (Determination of fan sound power levels under standardized laboratory conditions)

Product specification

Nominal data

Fan model	EC218-CB560D-595WAI-M
Motor type	EC external rotor
Power Supply	3~ 400 Volt
Voltage range	380~460
Frequency	50-60Hz
Input power	5955 Watts
Speed	1800 RPM
Current	9.5 Amp
Airflow@0 pa	23896 CMH
Sound power	
Impeller type	Backward curve

Technical data

Protection class	IP54
Thermal class	B(130 degree)
Fan life*	~ 30,000 to 40,000 hours
Weight	49.5Kg
Rotation direction	Clockwise, viewed toward rotor
Certification	CE
Impeller material	Metal
Rotor	Die-casting Aluminium
Bearing	Maintenance free ball bearing

Product specification

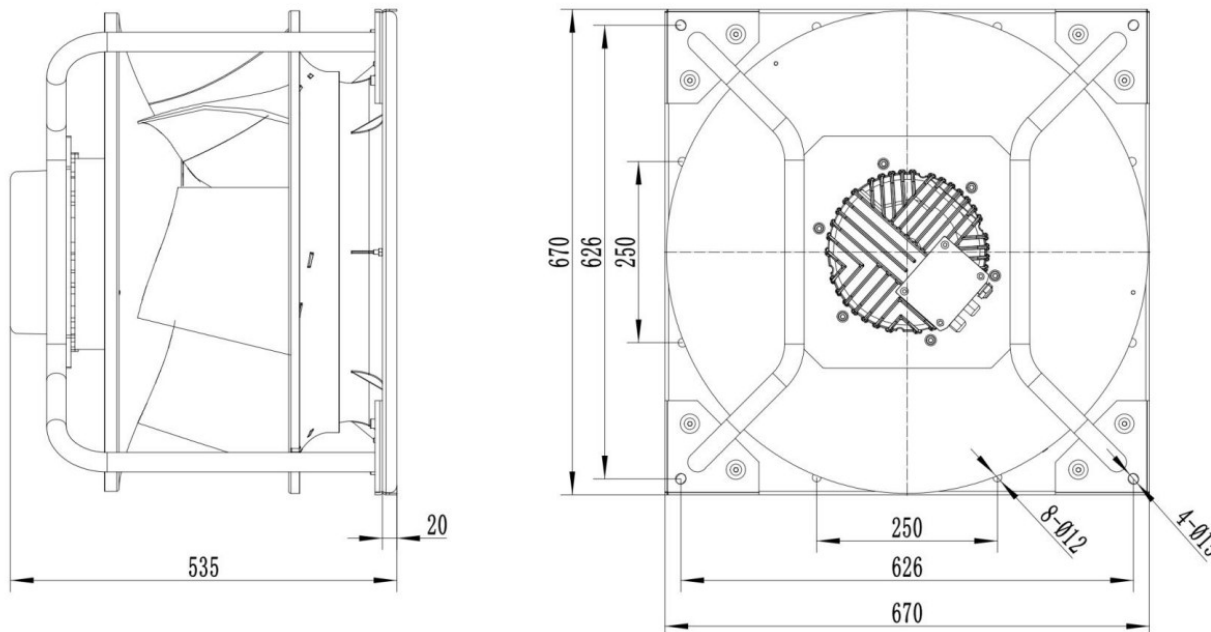
Technical data

Installation mode	Horizontal / Vertical
Control method 1	0 - 10 VDC / PWM
Control method 2	RS485
Power output 1	+ 10 V DC
Power output 2	---
Tech output	5 Pulse/Rotation**
Inbuilt protection	Over/Under temperature, voltage & current Locked rotor

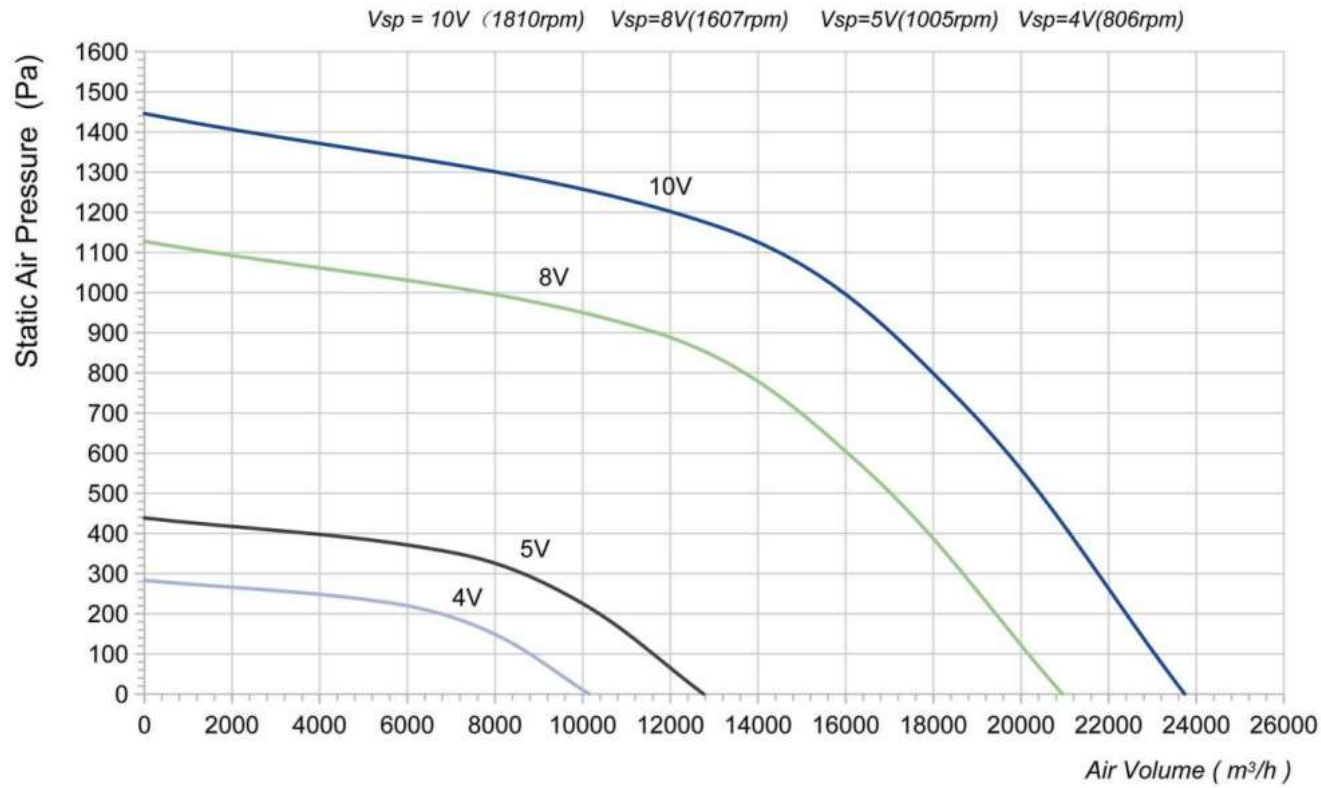
*If the fan is running continuously at rated voltage, rated load and maximum operating temperature

**Needs 10KOhm pull-up resistance between +10V line & tach output line

Drawing (all dimensions are in mm)



Performance curve



Data point table

VSP	Supply	RPM	Power (W)	CMH	Static (Pa)
10V	400V	1810	4604	23736	0
	400V	1810	5522	18443	750
	400V	1810	5955	13157	1162
	400V	1810	4654	0	1446
8V	400V	1607	3193	20946	0
	400V	1607	3812	16234	582
	400V	1607	3895	11616	902
	400V	1607	3361	0	1128
5V	400V	1005	832	12762	0
	400V	1005	935	9898	232
	400V	1005	987	7083	351
	400V	1005	804	0	439
4V	400V	806	452	10151	0
	400V	806	519	7911	153
	400V	806	541	5636	227
	400V	806	454	0	283

Wiring Diagram (Three Phase)

No.	Function	Function Description
PE	PE	Ground lead
P1	L1	Three phase power supply
	L2	
	L3	
P2	NO	Status Relay, normally open; close with error
	COM	Status Relay, common connection
	NC	Status Relay, normally turn -off; break with error
P3	RS485A	Modbus RTU RSA
	RS485B	Modbus RTU RSB
	GND	Ground reference end of control signal
	Ain 1U	Speed regulation signal 0-10V /PWM
	4~20mA	Analog control input
	20V	Fix voltage out 20V DC
	10V	Fix voltage out 10 V DC
FG	Tech output	

Important Note

Cannot be used in coal mines where methane mixed gas and coal dust may cause explosion hazard.

Keep away from rotating parts when the fan is in running condition.

Cannot be placed and used in places where corrosive gas or steam is present.

Do not touch any of the high voltage line when the product is powered on.

The bearings used are ball bearings so please prevent the rotor from direct impact.

In order to avoid the circuit from breakdown OR insulation from damage, do not pull the wire harness while moving the product.

Customer fan unit should connect to ground well.

Do not touch the fan blade in running condition

Please use the fan under the conditions specified in this datasheet and contact us in case of any queries