

**SERIES:** CFM-92S | **DESCRIPTION:** DC AXIAL FAN**FEATURES**

- 92 x 92 mm frame
- multiple speed options for different cooling needs
- auto restart protection standard on all models
- 12 Vdc and 24 Vdc models available
- sleeve bearing construction



MODEL	input voltage		input current <sup>1</sup>	input power <sup>1</sup>	rated speed <sup>1</sup>	airflow <sup>2</sup>	static pressure <sup>3</sup>	noise <sup>4</sup>
	rated (Vdc)	range (Vdc)	max (A)	max (W)	typ (RPM±10%)	(CFM)	(inch H <sub>2</sub> O)	typ (dBA)
CFM-9232S-130-398	12	10.8~13.2	0.34	4.08	3,000	61.67	0.22	39.9
CFM-9238S-130-410	12	10.8~13.2	0.30	3.60	3,000	57.65	0.25	41.1
CFM-9232S-140-461	12	10.8~13.2	0.54	6.48	4,000	82.23	0.40	46.2
CFM-9238S-140-473	12	10.8~13.2	0.54	6.48	4,000	76.86	0.44	47.3
CFM-9238S-148-523	12	10.8~13.2	0.95	11.40	4,800	92.24	0.63	52.3
CFM-9232S-150-509	12	10.8~13.2	0.91	10.90	5,000	102.79	0.62	51.0
CFM-9232S-230-398	24	21.6~26.4	0.18	4.32	3,000	61.67	0.22	39.9
CFM-9238S-230-410	24	21.6~26.4	0.17	4.08	3,000	57.65	0.25	41.1
CFM-9232S-240-461	24	21.6~26.4	0.39	9.36	4,000	82.23	0.40	46.2
CFM-9238S-240-473	24	21.6~26.4	0.40	9.60	4,000	76.86	0.44	47.3
CFM-9238S-250-532	24	21.6~26.4	0.52	12.48	4,800	92.24	0.63	52.3
CFM-9232S-250-509	24	21.6~26.4	0.55	13.20	5,000	102.79	0.62	51.0

- Notes:
1. At rated voltage, after 3 minutes.
  2. At rated voltage, room temperature, 65% humidity, 0 inch H<sub>2</sub>O static pressure.
  3. At rated voltage, 0 CFM airflow.
  4. Measured in an anechoic chamber as per ISO3745/GB4214-84 at rated voltage, with background noise 20±2 dBA at 1 m from the fan intake.
  5. All specifications are measured at 25°C, 65% relative humidity unless otherwise specified.

## INPUT

parameter	conditions/description	min	typ	max	units
operating input voltage <sup>6</sup>	12 Vdc input models	10.8	12	13.2	Vdc
	24 Vdc input models	21.6	24	26.4	Vdc
starting voltage	12 Vdc input models		7.0		Vdc
	24 Vdc input models		14.0		Vdc

Note: 6. See Model section on page 1 for specific input voltage ranges.

## PERFORMANCE<sup>7</sup>

parameter	conditions/description	min	typ	max	units
rated speed	at rated voltage, 25°C, after 3 minutes	3,000		5,000	RPM
air flow	at 0 inch H <sub>2</sub> O, see performance curves	57.65		102.79	CFM
static pressure	at 0 CFM, see performance curves	0.22		0.63	inch H <sub>2</sub> O
noise	at 1 m, rated speed	39.9		52.3	dBa

Note: 7. See Model section on page 1 for specific values.

## PROTECTIONS / FEATURES

parameter	conditions/description	min	typ	max	units
auto restart	on all models				

## SAFETY & COMPLIANCE

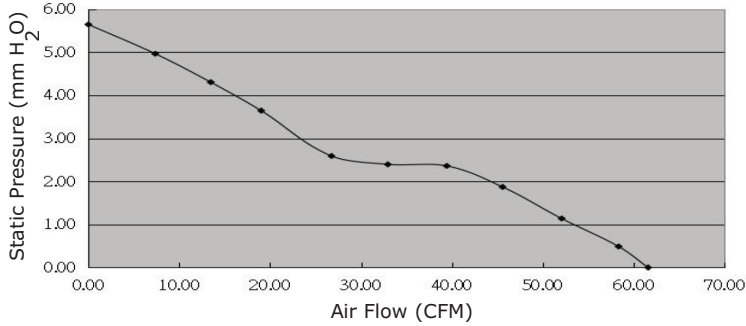
parameter	conditions/description	min	typ	max	units
insulation resistance	at 500 Vdc between frame and positive terminal	10			MΩ
dielectric strength	at 500 Vac, 60 Hz, 1 minute between housing and positive terminal			5	mA
safety approvals	UL/cUL 507, TUV (EN 60950-1:2006+A11+A1+A12+A2)				
EMI/EMC	EN 55032:2015, EN 55024:2010+A1				
life expectancy	at 25°C, 65% RH, 90% confidence level		30,000		hours
RoHS	yes				

## ENVIRONMENTAL

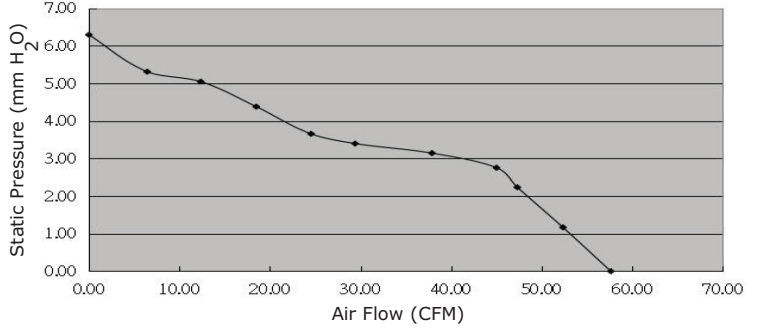
parameter	conditions/description	min	typ	max	units
operating temperature		-10		70	°C
storage temperature		-40		75	°C
operating humidity	non-condensing	35		85	%
storage humidity	non-condensing	35		85	%

## PERFORMANCE CURVES

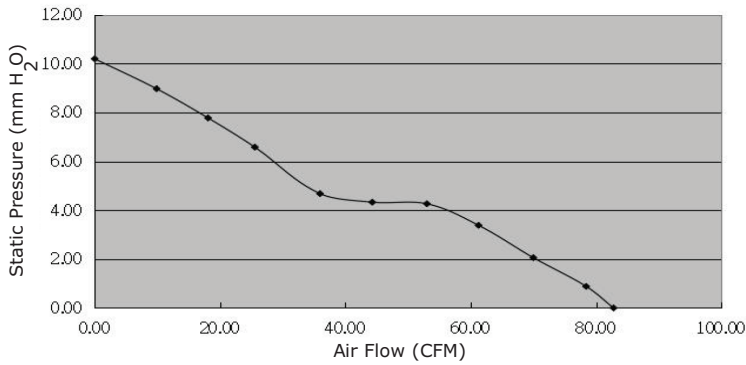
**CFM-9232S-130-398**



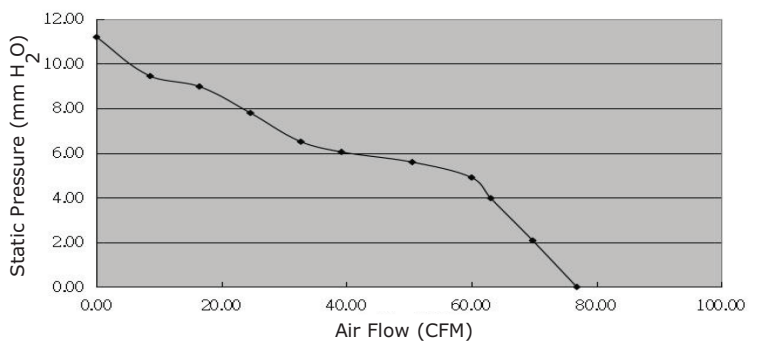
**CFM-9238S-130-410**



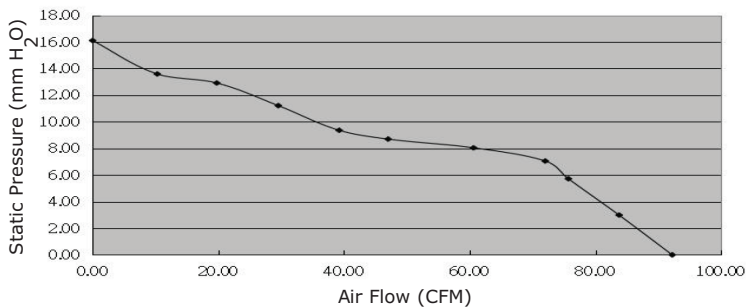
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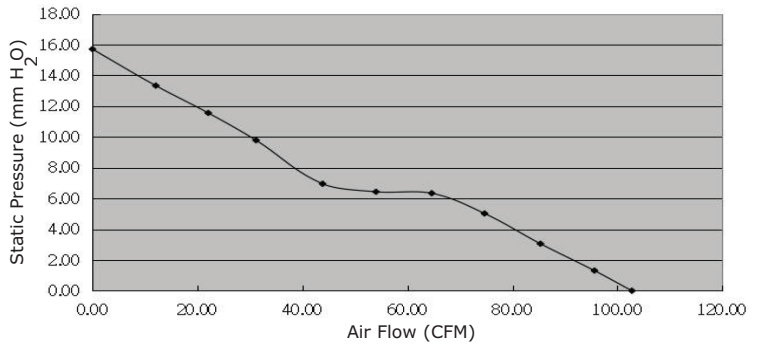
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**CFM-9238S-148-523**

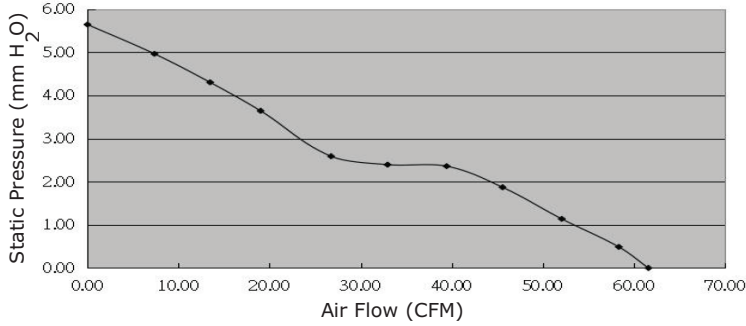


**CFM-9232S-150-509**

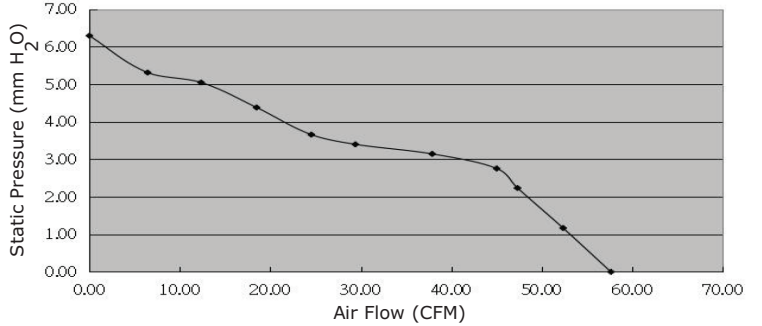


## PERFORMANCE CURVES

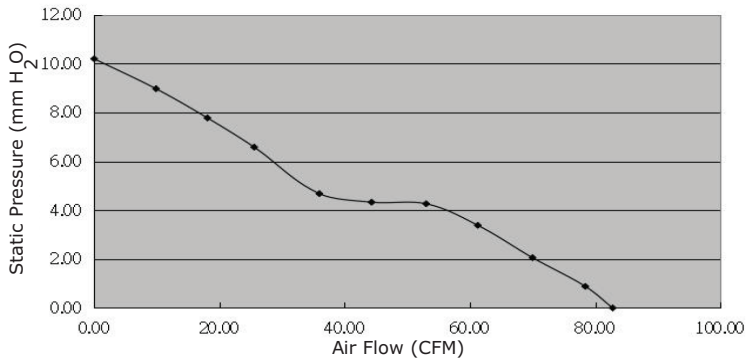
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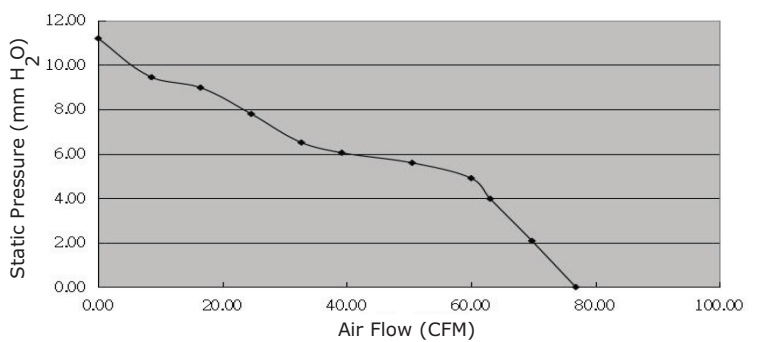
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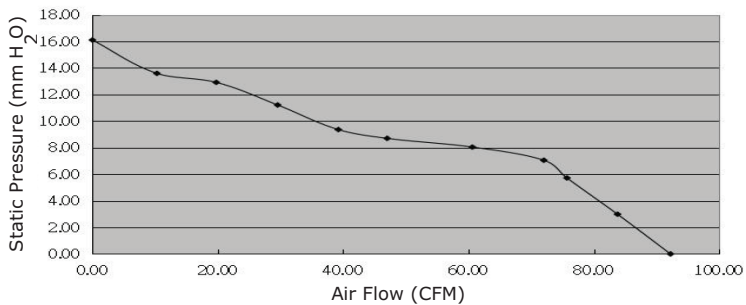
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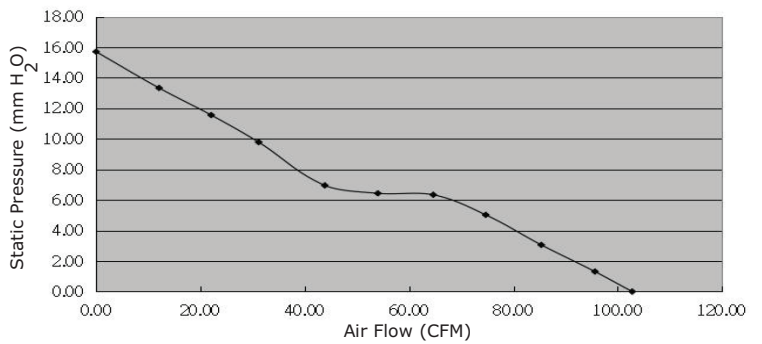
**CFM-9238S-240-473**



**CFM-9238S-250-532**



**CFM-9232S-250-509**



## MECHANICAL

parameter	conditions/description	min	typ	max	units
motor	4 pole DC brushless				
bearing system	sleeve bearing				
direction of rotation	counter-clockwise viewed from front of fan blade				
dimensions	CFM-9232S models: 92.2 x 92.2 x 32 CFM-9238S models: 92 x 92 x 37.5				mm mm
material	PBT (UL94V-0)				
weight	CFM-9232S models CFM-9238S models		181.2 200		g g

## MECHANICAL DRAWING

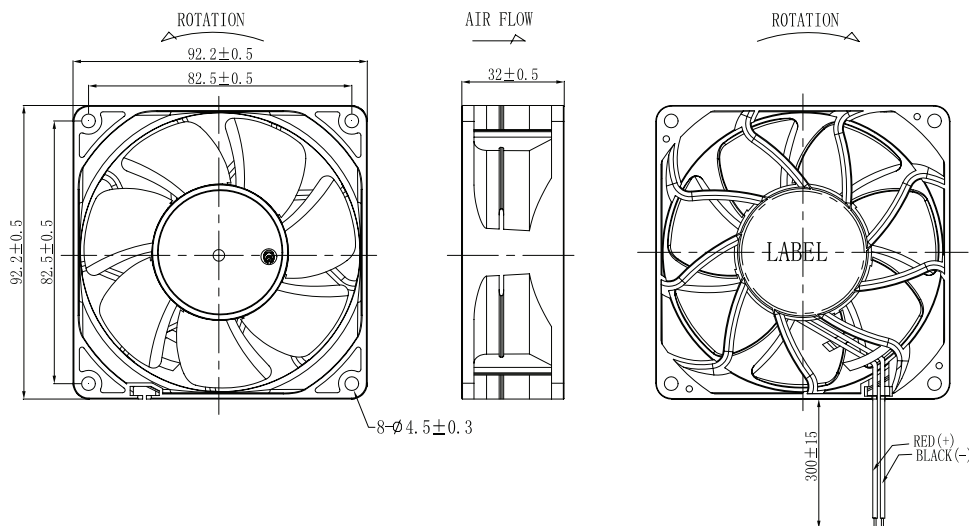
units: mm

wire: UL 1007, 24 AWG

MOUNTING SCREW (Pan Head)			
Screw Type	Size	Standard	Torque
Machine Screw	M4	JIS B1111-1974	5.5 kgf-cm
Self-tapping Screw	M5	JIS B1122 Type 2	5.5 kgf-cm

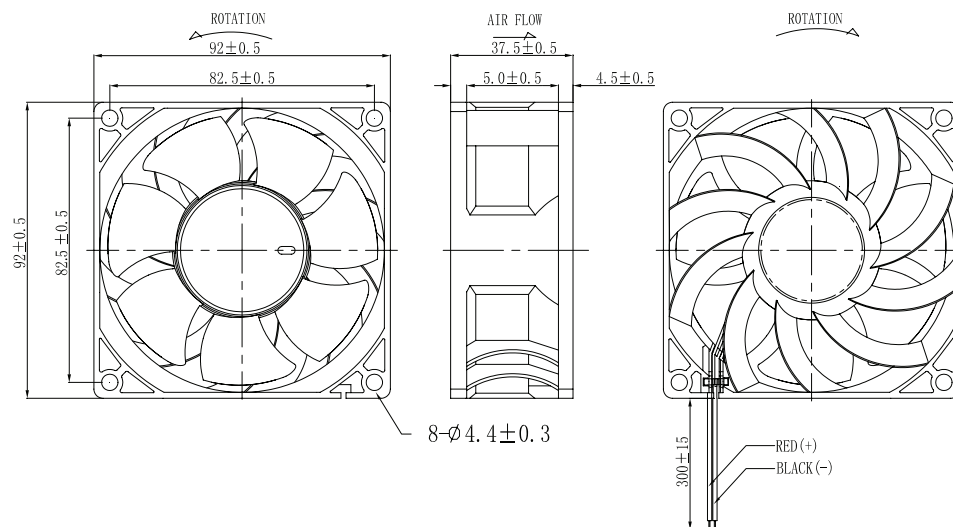
### CFM-9232S

WIRE CONNECTIONS	
Wire Color	Function
Red	+Vin
Black	-Vin



### CFM-9238S

WIRE CONNECTIONS	
Wire Color	Function
Red	+Vin
Black	-Vin



## REVISION HISTORY

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rev.	description	date
1.0	initial release	04/14/2020

The revision history provided is for informational purposes only and is believed to be accurate.

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# CUI DEVICES

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