

SERIES: CAF-A2B | **DESCRIPTION:** AC AXIAL FAN

FEATURES

- dual ball bearing
- 120 x 120 mm frame
- 110~125 or 220~240 Vac
- multiple speed options


MODEL

| MODEL | input voltage | input current ¹ | input power ¹ | rated speed ¹ | airflow ² | static pressure ³ | noise ⁴ |
|-------------------|------------------------------|----------------------------|--------------------------|--|----------------------|---------------------------------------|----------------------------|
| | rated (50/60 Hz) (Vac) | max (50/60 Hz) (A) | (50/60 Hz) (W±2) | typ (50/60 Hz) (RPM±10%) | (50/60 Hz) (CFM) | (50/60 Hz) (inch H ₂ O) | typ (50/60 Hz) (dBA) |
| CAF-A225B-118-300 | 110 | 0.16/0.15 | 12.7/10.8 | 1,800 ⁵ /1,700 ⁵ | 44.69/45.50 | 0.08/0.08 | 32.6/35.2 |
| CAF-A225B-120-350 | 110 | 0.19/0.17 | 14.2/10.8 | 2,000 ⁶ /2,000 ⁶ | 51.94/53.87 | 0.11/0.10 | 36.4/37.3 |
| CAF-A225B-218-300 | 220 | 0.09/0.08 | 12.3/9.7 | 1,800 ⁵ /1,700 ⁵ | 44.69/45.50 | 0.08/0.08 | 32.4/32.8 |
| CAF-A225B-220-350 | 220 | 0.12/0.10 | 15.7/11.5 | 2,000 ⁶ /2,000 ⁶ | 51.94/53.87 | 0.11/0.10 | 36.4/37.3 |
| CAF-A238B-120-300 | 110 | 0.17/0.15 | 7.1/7.1 | 2,200 ⁵ /1,800 ⁵ | 68.20/52.41 | 0.15/0.08 | 30.0/29.0 |
| CAF-A238B-124-370 | 110 | 0.15/0.14 | 9.3/8.2 | 2,400 ⁵ /2,100 ⁵ | 72.07/63.52 | 0.19/0.10 | 37.7/35.6 |
| CAF-A238B-126-400 | 110 | 0.30/0.25 | 19.8/17.1 | 2,600/2,900 | 78.04/84.85 | 0.26/0.25 | 39.5/42.6 |
| CAF-A238B-220-300 | 220 | 0.08/0.07 | 7.1/7.1 | 2,200 ⁵ /1,800 ⁵ | 68.20/52.41 | 0.15/0.08 | 36.2/29.9 |
| CAF-A238B-224-370 | 220 | 0.11/0.10 | 11.2/9.7 | 2,400 ⁵ /2,400 ⁵ | 71.38/73.30 | 0.20/0.14 | 37.7/37.7 |
| CAF-A238B-226-400 | 220 | 0.13/0.12 | 16.0/12.7 | 2,600/2,900 | 78.57/88.14 | 0.26/0.28 | 41.0/44.3 |

- Notes:
1. At rated voltage, will reach bottom line of specifications after 5 minutes. Will reach standard specification after 10 minutes continuously running.
 2. At rated voltage, room temperature, 65% humidity, 0 inch H₂O static pressure.
 3. At rated voltage, 0 CFM airflow.
 4. Measured in an anechoic chamber as per ISO3745/GB4214-B4 at rated voltage, with background noise 10±2 dBA at 1 m from the fan intake.
 5. Typical rated speed is measured as RPM±250 at rated voltage.
 6. Typical rated speed is measured as RPM±300 at rated voltage.
 7. All specifications are measured at 25°C, 65% relative humidity unless otherwise specified.

INPUT

| parameter | conditions/description | min | typ | max | units |
|-------------------------|---|-----|-----------|-----|-------|
| operating input voltage | 110 Vac input models | 100 | 110 | 125 | Vac |
| | 220 Vac input models | 220 | | 240 | Vac |
| starting voltage | CAF-A225B-120-350, CAF-A238B-126-400 models | | 85 | | Vac |
| | all other 110 Vac input models | | 90 | | Vac |
| | 220 Vac input models | | 175 | | Vac |
| locked current | CAF-A225B-118-300 (50/60 Hz) | | 0.14/0.13 | | A |
| | CAF-A225B-120-350 (50/60 Hz) | | 0.17/0.15 | | A |
| | CAF-A225B-218-300 (50/60 Hz) | | 0.07/0.07 | | A |
| | CAF-A225B-220-350 (50/60 Hz) | | 0.10/0.08 | | A |
| | CAF-A238B-120-300 (50/60 Hz) | | 0.17/0.15 | | A |
| | CAF-A238B-124-370 (50/60 Hz) | | 0.15/0.14 | | A |
| | CAF-A238B-126-400 (50/60 Hz) | | 0.30/0.27 | | A |
| | CAF-A238B-220-300 (50/60 Hz) | | 0.06/0.05 | | A |
| | CAF-A238B-224-370 (50/60 Hz) | | 0.10/0.08 | | A |
| | CAF-A238B-226-400 (50/60 Hz) | | 0.12/0.10 | | A |

PROTECTIONS / FEATURES

| parameter | conditions/description | min | typ | max | units |
|---------------------------|------------------------|-----|-----|-----|-------|
| impedance protected motor | on all models | | | | |
| insulated type | Class B (130 °C) | | | | |

SAFETY & COMPLIANCE

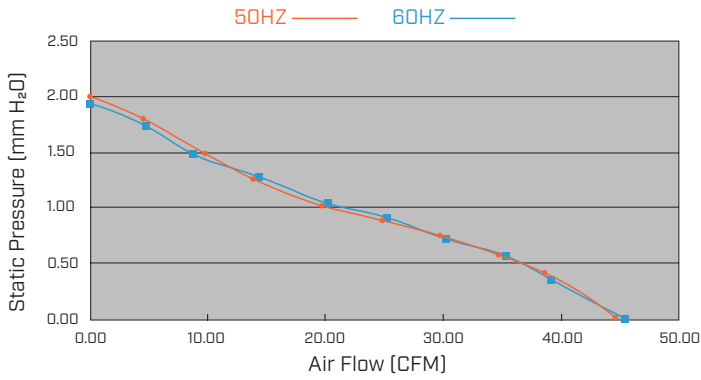
| parameter | conditions/description | min | typ | max | units |
|-----------------------|--|-----|--------|-----|-------|
| insulation resistance | at 500 Vdc between frame and both lead wires | 10 | | | MΩ |
| dielectric strength | for 1 minute at 1 mA between frame and lead wires | | 1500 | | Vac |
| safety approvals | UL/cUL 507, TUV (EN 60335-1:2012+A11+A13+A1+A14+A2+A15, EN 60335-2-80:2003+A1+A2, EN 62233:200*) | | | | |
| EMI/EMC | EN 55014-1:2017+A11, EN/IEC 61000-3-2:2019, EN 61000-3-3:2013+A1, EN 55014-2:2015 | | | | |
| life expectancy | at 25°C, 65% RH, 90% confidence level | | 70,000 | | hours |
| RoHS | yes | | | | |

ENVIRONMENTAL

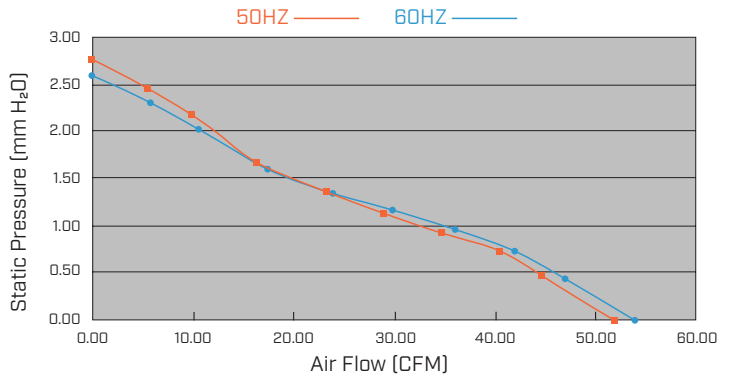
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | -10 | | 70 | °C |
| storage temperature | | -40 | | 80 | °C |

PERFORMANCE CURVES

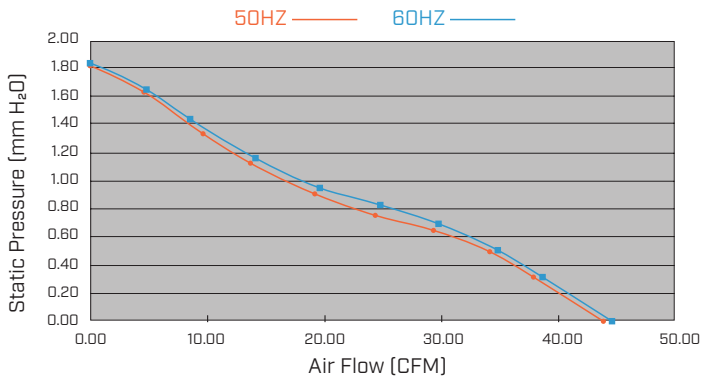
CAF-A225B-118-300



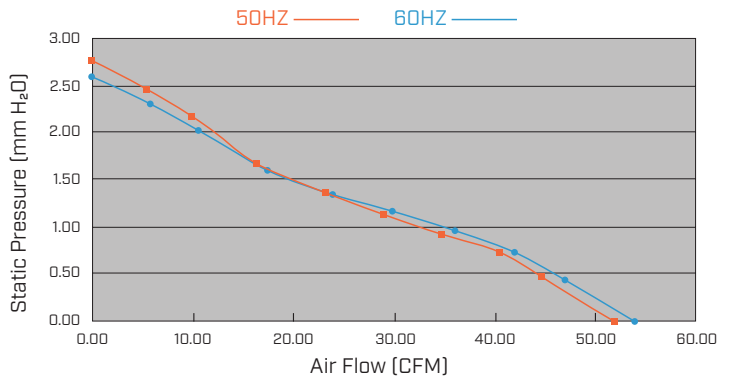
CAF-A225B-120-350



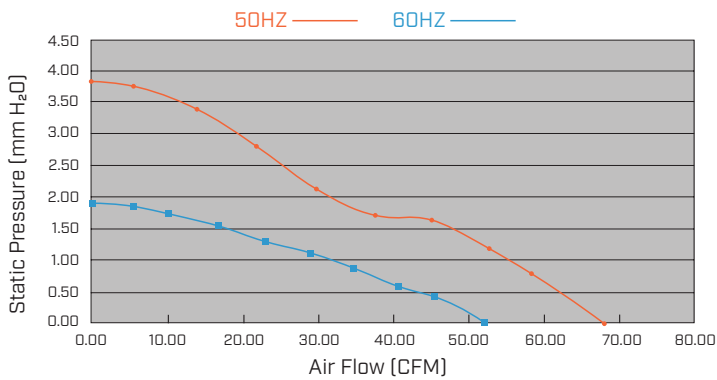
CAF-A225B-218-300



CAF-A225B-220-350

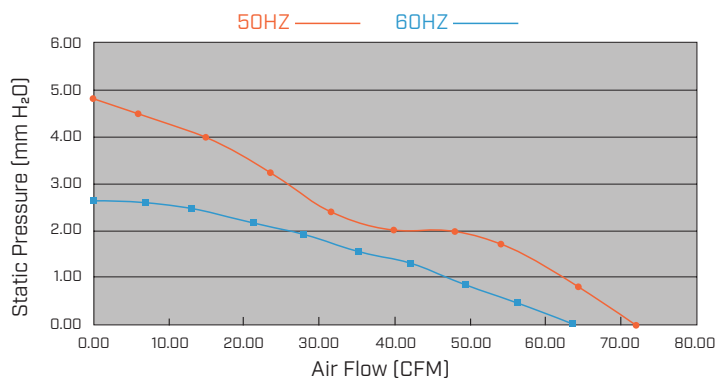


CAF-A238B-120-300

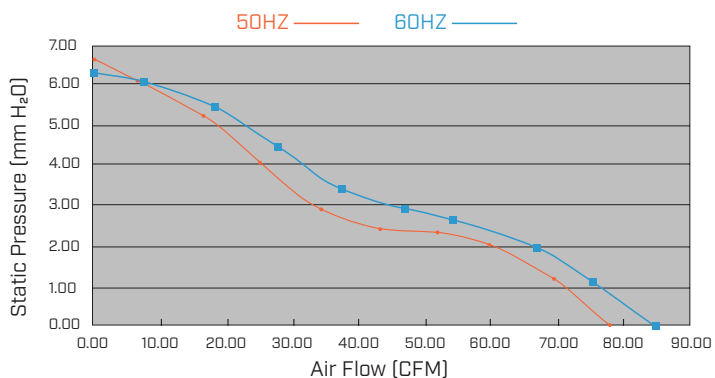


PERFORMANCE CURVES (CONTINUED)

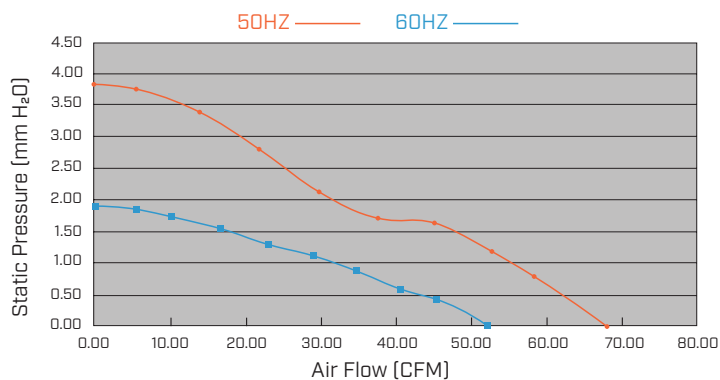
CAF-A238B-124-370



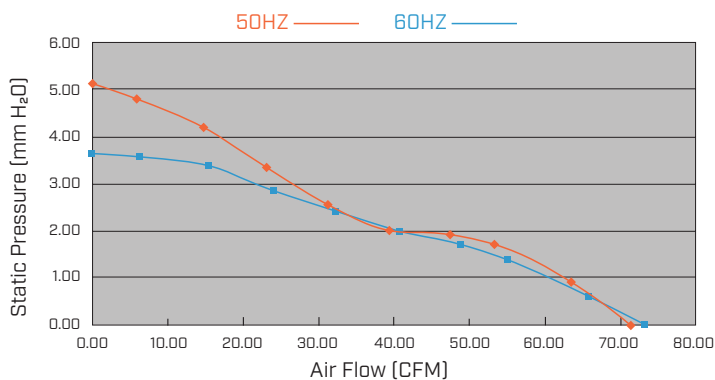
CAF-A238B-126-400



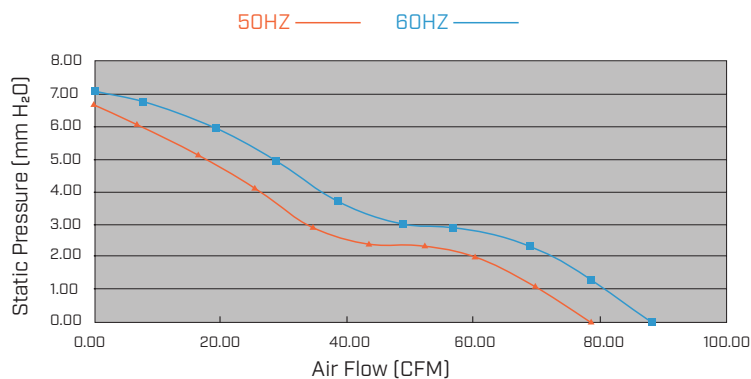
CAF-A238B-220-300



CAF-A238B-224-370



CAF-A238B-226-400



MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|-----------------------|--|------------|-----|------------|----------|
| motor | AC brushless | | | | |
| bearing system | dual ball bearing | | | | |
| direction of rotation | counter-clockwise viewed from front of fan blade | | | | |
| dimensions | CAF-A225B models: 120 x 120 x 25.8 CAF-A238B models: 119.5 x 119.5 x 38.5 | | | | mm mm |
| material | fan frame: aluminum fan impellar: PBT (UL94V-0) | | | | |
| weight | CAF-A225B models: weight varies by model CAF-A238B models: weight varies by model | 285 460 | | 287 475 | g g |

MECHANICAL DRAWING

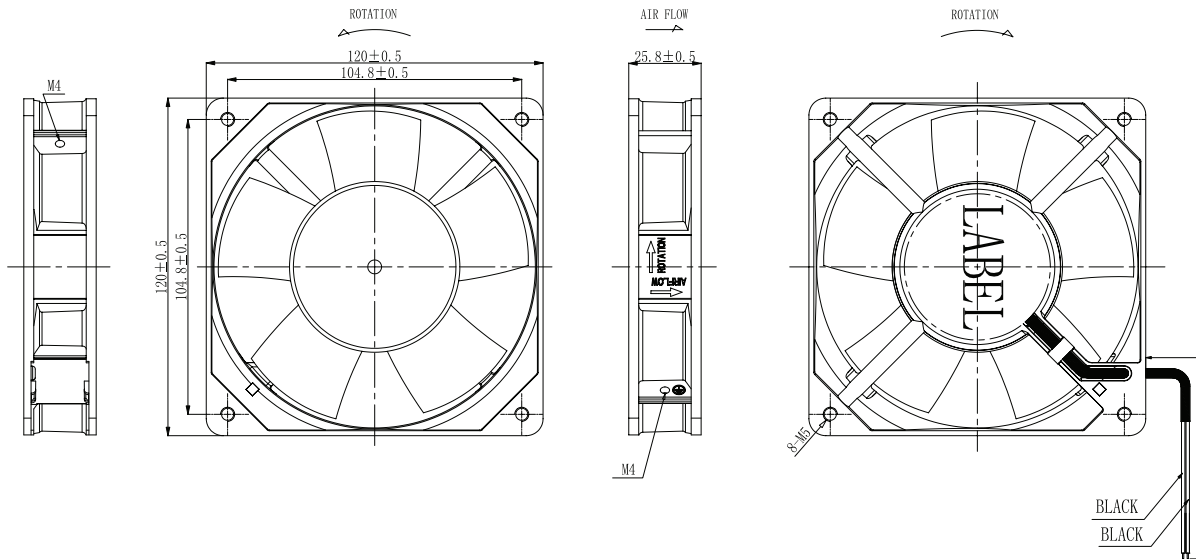
units: mm

wires: UL 1007, 22 AWG

| MOUNTING SCREW (Pan Head) | | | |
|---------------------------|---------------|------------|---------|
| Screw Type | Mounting Hole | Screw Size | Torque |
| Machine Screw | M4X0.7 | M4X0.7 | 1.5 N-m |
| Machine Screw | M5X0.8 | M5X0.8 | 2.0 N-m |

CAF-A225B

| WIRE CONNECTIONS | |
|------------------|----------|
| Wire Color | Function |
| Black | +Vin |
| Black | -Vin |



MECHANICAL DRAWING (CONTINUED)

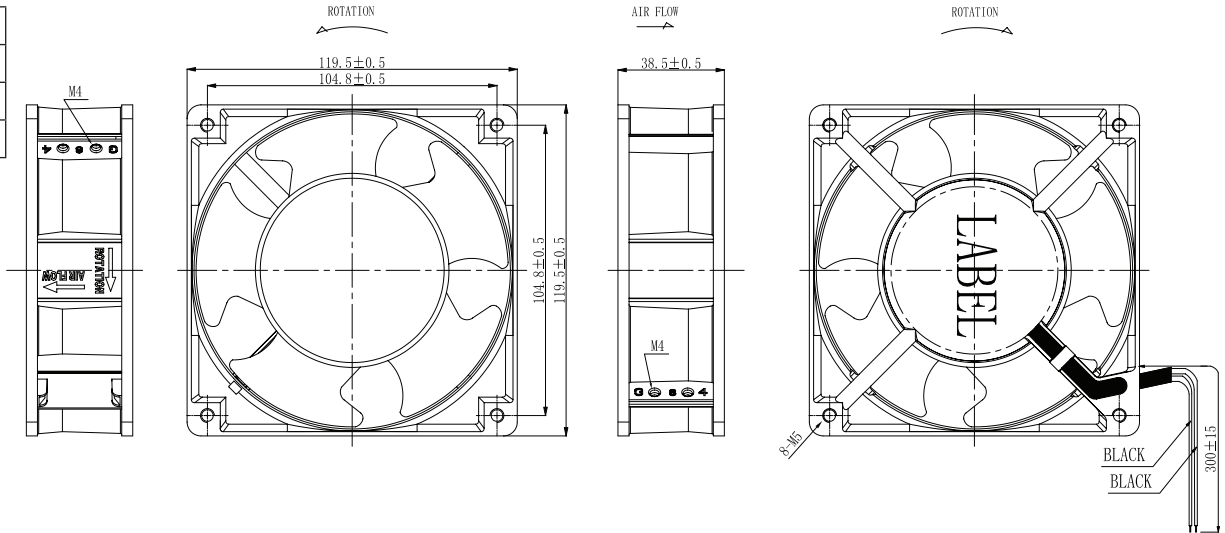
units: mm

wires: UL 1007, 22 AWG

| MOUNTING SCREW (Pan Head) | | | |
|---------------------------|---------------|------------|---------|
| Screw Type | Mounting Hole | Screw Size | Torque |
| Machine Screw | M4X0.7 | M4X0.7 | 1.5 N-m |
| Machine Screw | M5X0.8 | M5X0.8 | 2.0 N-m |

CAF-A238B

| WIRE CONNECTIONS | |
|------------------|----------|
| Wire Color | Function |
| Black | +Vin |
| Black | -Vin |



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 10/17/2023 |

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



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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