

Ø250×99 mm

San Ace 250AD 9ADW1TV type



General Specifications

- Material Motor case: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life See the table below. (L10 life: 90% survival rate for continuous operation in indoor free air at 60°C, rated voltage)
Expected life at 40°C is for reference only.
- Motor protection function Locked rotor burnout protection
For details, please refer to p. 616.
- Dielectric strength 50/60 Hz, 1500 VAC, for 1 minute (between lead wire conductors and motor case)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and motor case)
- Sound pressure level (SPL) A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
- Storage temperature -30 to +70°C (Non-condensing)
- Lead wire

AC power input	L: Orange	N: Gray	Ground	Yellow / Green
+10 VDC output	Red	Black	Sensor	Yellow
			Control	Brown
- Mass 2020 g
- Ingress protection IP56 For more information on IP rating, refer to p. 625.

Specifications When the optional inlet nozzle (109-1151H) is mounted.

The models listed below **have a pulse sensor with PWM control.**

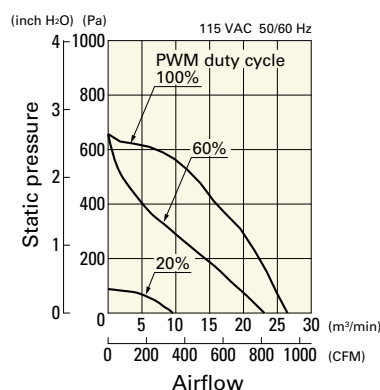
Model no.	Rated voltage [V]	Operating voltage range [V]	Frequency [Hz]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m³/min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9ADW1TV11P0G001	115	90 to 132	50/60	100	2.3	140	2700	26.5 936	650 2.61	71	-25 to +60	40000/60°C (70000/40°C)
20				0.3	10	1000	9.6 339	88 0.35	57			
9ADW1TV23P0G001	230	180 to 264		100	1.2	140	2700	26.5 936	650 2.61	71		
				20	0.2	10	1000	9.6 339	88 0.35	57		

* PWM frequency is 1 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

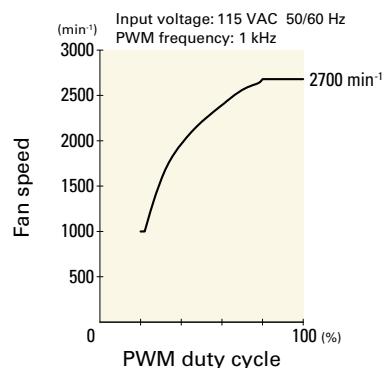
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9ADW1TV11P0G001 With pulse sensor with PWM control

PWM duty cycle

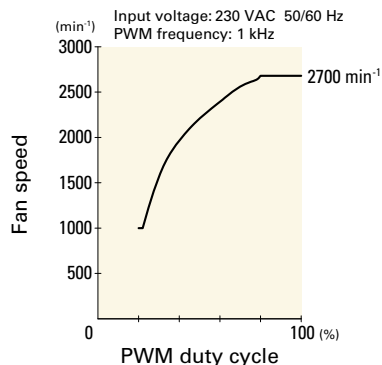


PWM duty - Speed characteristics example



9ADW1TV23P0G001 With pulse sensor with PWM control

PWM duty - Speed characteristics example



Technical drawing of the 1000W 24VDC brushless motor, showing side and end views with dimensions.

Side View Dimensions:

- Total height: 99 ± 1.5
- Base height: 86.9 ± 1.5
- Airflow direction: Indicated by arrows pointing outwards from the top and bottom of the motor housing.
- Shaft diameter: $\phi 17.3 \pm 1$
- Shaft length: 250 ± 1.5

End View Dimensions:

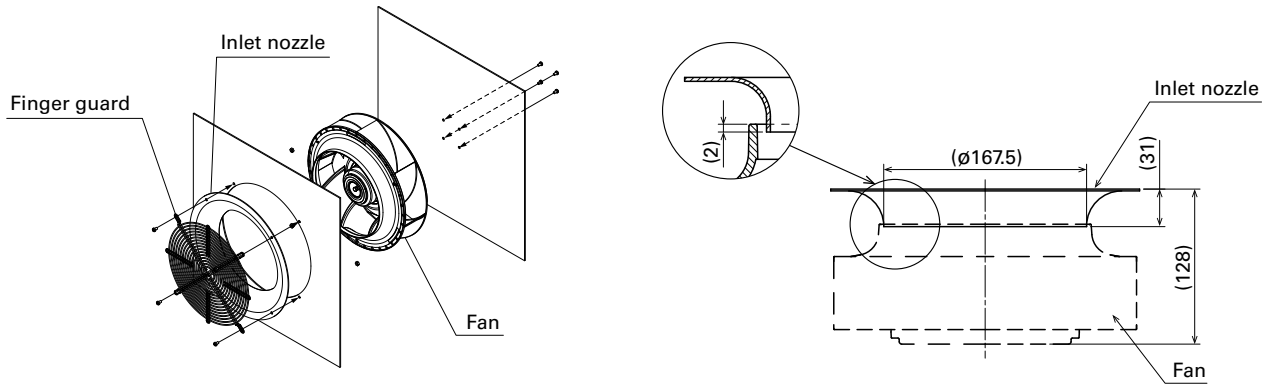
- Outer diameter: $\phi 142 \pm 1$
- Inner diameter: $\phi 58 \pm 0.3$
- Mounting holes: 4-M4x0.7 Depth 6
- Rotating direction: Indicated by a curved arrow.
- Lead wire exit angle: 90°
- Lead wire bundle diameter: $\phi 10$
- Lead wire length: 400 (mm)
- Lead wire bundle diameter: $\phi 340$

Lead Wire Specifications:

- Power lead wire: AWG 20, UL 1430
- Other lead wire: AWG 24, UL 1430

The image contains two technical drawings of a circular component. The left drawing, labeled "Fan side", shows a circular cross-section with a central hub and eight radial spokes. The outer diameter is dimensioned as $\varnothing 58 \pm 0.5$. There are four small holes, each with a diameter of $\varnothing 4.5$, arranged in a circle. A 45-degree angle is indicated between one of the spokes and the horizontal centerline. The right drawing, labeled "Inlet nozzle side", shows a circular cross-section with a central hub and eight radial spokes. The outer diameter is dimensioned as $\varnothing 230 \pm 0.5$. There are four small holes, each with a diameter of $\varnothing 4.5$, arranged in a circle. A 45-degree angle is indicated between one of the spokes and the horizontal centerline.

Reference Diagram for Mounting (unit: mm)



Options

Finger guards

page: p. 602

Model no.: 109-1152, 109-1152H

Inlet nozzle

page: p. 603

Model no.: 109-1151, 109-1151H