



160×160×51 mm

San Ace 160AD 9AD type   

General Specifications

- Material Frame: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life See the table below. (L10 life: 90% survival rate for continuous operation in 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
(Lead wire model: between lead wire conductors and frame, terminal model: between terminals and frame)
- Insulation resistance 10 MΩ min. at 500 VDC
(Lead wire model: between lead wire conductors and frame, terminal model: between terminals and frame)
- 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  L: Orange N: Gray
 Yellow  Brown  Black
- Mass 880 g

To display CE mark/UKCA mark on system, refer to p. 621.

Specifications

The models listed below **have no sensor**.

Model no.	Rated voltage [V]	Operating voltage range [V]	Frequency [Hz]	Rated current ⁽¹⁾ [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m³/min] [CFM]	Max. static pressure [Pa] [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9AD1601H5002⁽¹⁾	100 to 240	90 to 264	50/60	0.46	22	4150	8.2 290	167 0.66	58	-20 to +70	40000/60°C (70000/40°C)
9AD1601H5T02⁽²⁾				0.46	22	4150	8.2 290	167 0.66	58		

(1) Lead wire model (2) Terminal model (3) Rated current ratings are the values at 100 V.

The models listed below **have a low-speed sensor**.

Model no.	Rated voltage [V]	Operating voltage range [V]	Frequency [Hz]	Rated current ⁽¹⁾ [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m³/min] [CFM]	Max. static pressure [Pa] [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9AD1601H5H001⁽¹⁾	100 to 240	90 to 264	50/60	0.46	22	4150	8.2 290	167 0.66	58	-20 to +70	40000/60°C (70000/40°C)
9AD1601H5HT01⁽²⁾				0.46	22	4150	8.2 290	167 0.66	58		

(1) Lead wire model (2) Terminal model (3) Rated current ratings are the values at 100 V.

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 ⁽³⁾ [%]	Rated current ⁽⁴⁾ [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m³/min] [CFM]		Max. static pressure [Pa] [inchH₂O]		SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9AD1601P5H003⁽¹⁾	100 to 240	90 to 264	50/60	100	0.46	22	4150	8.2	290	167	0.66	58	-20 to +70	40000/60°C (70000/40°C)
0				0.10	4.0	1500	3.07	108	44	0.17	31			
9AD1601P5HT03⁽²⁾				100	0.46	22	4150	8.2	290	167	0.66	58		
				0	0.10	4.0	1500	3.07	108	44	0.17	31		

(1) Lead wire model (2) Terminal model

(3) PWM frequency is 25 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 0% duty cycle.

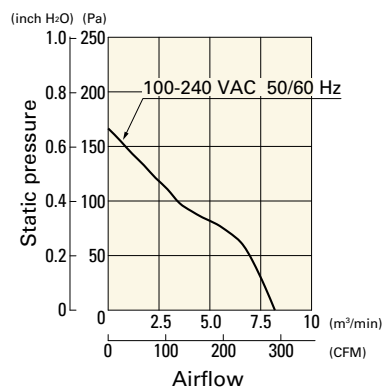
(4) Rated current ratings are the values at 100 V.

Airflow - Static Pressure Characteristics

9AD1601H5002, 9AD1601H5T02

No sensor

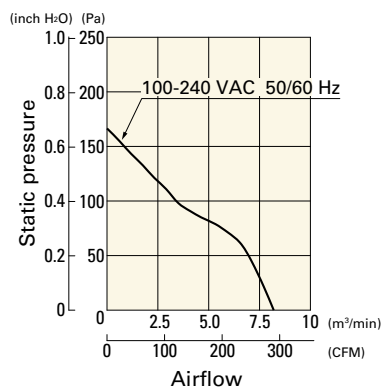
Operating voltage range



9AD1601H5H001, 9AD1601H5HT01

With low-speed sensor

Operating voltage range

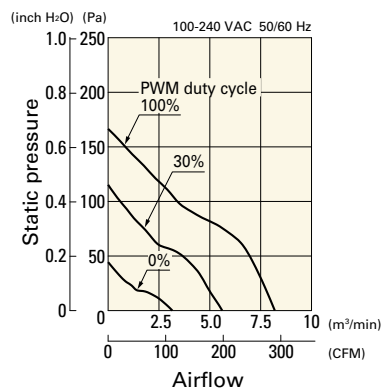


Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

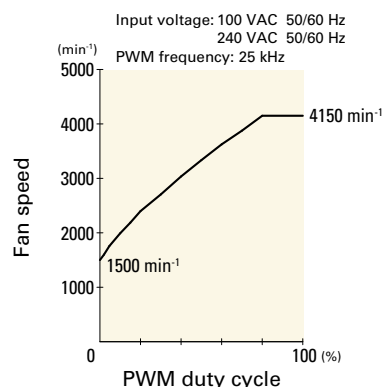
9AD1601P5H003, 9AD1601P5HT03

With pulse sensor with PWM control

PWM duty cycle

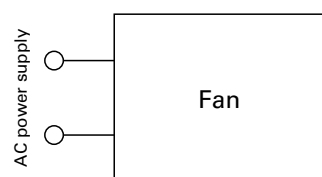


PWM duty - Speed characteristics example

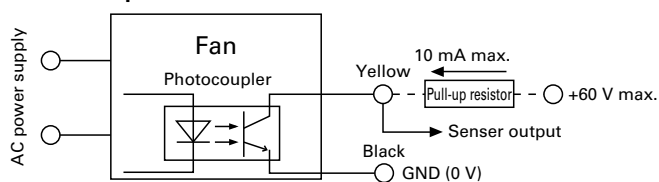


Connection Schematic

without Sensor



with Low-speed sensor



with PWM control and pulse sensor

