



GUST BLOWERS Instruction Manual & Directions

We appreciate your recent purchase of a Showa Denki Gust Blower.

This Instruction Manual & Directions provides the specifications of Gust Blower U2S Type. To ensure safe and efficient operation of the Blower, please thoroughly read this Instruction Manual & Directions, with particular attention to the parts marked with  icons.

Please keep this Instruction Manual & Directions for future reference.



Use application

LK041

Gust Blowers are suitable for handling air and other non-flammable, non-corrosive, and non-explosive gasses. The product is designed to withstand continuous operation; however, please note that in cases where the application involves frequent and repeated interruption during operation, or high ambient temperatures, the temperature may reach the allowable maximum temperature. Please contact us for further details. Remove solids and impurities to keep them from entering the Gust Blower.



Intake and compression pressures

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When using the Blower near a closed area, the temperature will rise due to motor overload and heat compression. Install a pressure-regulating valve on the intake side or discharge side, or make a bypass hole to release air.



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Temperature

The allowable maximum ambient temperature and gas temperature at the intake is 40°C.

The temperature of the casing will be very high during operation. Be careful not to touch the casing; otherwise, you may suffer burns.



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Installation

Gust Blowers can be installed in any axial direction; however, be careful not to install the product in a direction that prevents its cooling effect. Keep the air grating and opening clean. Direction of air flow is shown with an arrow.

When installing Gust Blower close to a wall, the minimum clearance between the wall and Gust Blower should be:

U2S-40T/70T/150:	20 mm
U2S-220/750:	30 mm

The Blower is equipped with a built-in silencer to reduce flow noise during operation. To further reduce the noise generated when taking in or discharging free gases, install a silencer (option). Do not attach components to the Gust Blower that conduct or radiate noise (e.g. thin wall, metal plate). If necessary, install a sound absorbing layer in the middle. The piping should be arranged so that it will not cause stress deformation of the Blower.



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Wiring

Make sure to turn off the power before starting the wiring work.

Wiring of the Blower should be performed by a qualified electrical contractor. The power supply voltage and frequency should be equal to the nameplate values. Refer to Figure 1 and arrange and connect the three leads attached in the terminal box according to the power supply voltage and frequency to be used.

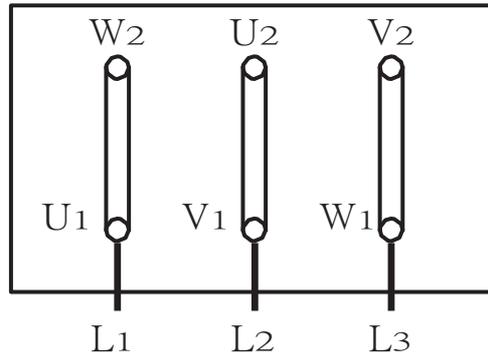


Figure 1 Wiring diagram

Range of allowable voltage is $\pm 5\%$. Rated motor current is effective when the inlet gas temperature and ambient temperature is 40°C . Motor current will rise by 6% when inlet gas temperature and ambient temperature is 20°C . Set the motor protection circuit breaker at the rated current value.



Be sure to connect ground wires properly to prevent electrical shock.



Current value

Use the product within the following current values corresponding to the model.

	Discharge side		Intake side	
	50Hz	60Hz	50Hz	60Hz
Frequency	50Hz	60Hz	50Hz	60Hz
Voltage	200V	200/220V	200V	200/220V
U2S-40T	1.8 A	2.5/2.3 A	1.8 A	2.5/2.3 A
U2S-70T	3.0 A	4.0/3.8 A	3.0 A	4.0/3.8 A
U2S-150	7.0 A	8.8/8.5 A	7.0 A	8.8/8.5 A
U2S-220	10.5 A	14.0/13.0 A	9.0 A	14.0/13.0 A
U2S-370	18.0 A	18.0/18.0 A	18.0 A	18.0/18.0 A
U2S-750	26.0 A	33.0/30.0 A	22.0 A	27.0/26.5 A



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Points to be checked during trial operation

(1) Power supply source	(1) Electromagnetic switch capacity (2) Installation (3) Power supply connection (4) Switch contact failure	When a wire is not turned on electrically due to power wire interruption or poor switch contact, etc., the motor will operate in single-phase, resulting in motor burnout.
(2) Rotational direction	Check whether the rotational direction matches the rotation arrow on the nameplate.	If the rotation is in the opposite direction, replace two power wires.
(3) Operating static pressure and electric current	Use a pressure meter and ammeter to check if the operating static pressure and electric current are below the maximum operating static pressure and current.	When the operating static pressure exceeds the maximum value, create a bypass hole to release the air.
(4) Operating status	Check whether the Blower generates abnormal vibrations or noise.	Please contact Showa Denki.



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Maintenance and inspection

It is recommended that the product be checked for any abnormal vibrations, noises, and proper insulation every three months.

Bearing lubrication is not required, as sealed type ball bearing is used for the motor bearing. Grease life is generally one year, although it varies depending on the operating environment.

Contact

Please contact us at the numbers below for any inquiries about the product or other blowers from Showa Denki.

(1) For specifications of the product or any technical inquiries:

- Design Group, Engineering Department, Daito Factory, Showa Denki Co., Ltd.

Phone: 072-871-1069

Fax: 072-875-3874

(2) In case of malfunctions of the product or any complaints, please contact

- Your nearest branch or sales office as listed in the Instruction Manual & Directions.

- Quality Assurance Department, Daito Factory, Showa Denki Co., Ltd.

Phone: 072-870-5707

Fax: 072-870-5709