

safety-Enhanced Explosion-Proof Motors].

In order to use the blower 『safely』 and 『efficiently』, please read these instructions and cautions **【particularly those marked ⚠️】** thoroughly.

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1. Explosion-proof motors

The explosion-proof motor has been manufactured according to the Japanese Industrial Standards (JIS) and international standards (IEC 79 related) and has passed technical standards inspections conducted by the Technology Institution of Industrial Safety.

2. Pressure/explosion-proof motor

The pressure/explosion-proof motor is designed to have a totally-enclosed structure so that even if gas or vapor enters the inside of the motor to cause an explosion, the motor can endure the explosion pressure and any flames caused by the explosion will not ignite gas or vapor outside the motor.

3. To use the blower safely

The Safety-Enhanced Explosion-Proof Motor is designed not to generate flames or arc if the motor is operated under normal-use conditions, and not to become so hot as to be an ignition source. It's insulation capacity has been increased and the safety from dangers due to increase in temperature or damage due to external factors has been increased.

4. Standard specifications of explosion-proof motors (groups, temperature classes and use conditions)

Classification of explosion-proof structures	Pressure-proof structure	Safety-enhanced explosion-proof structure
Symbols for explosion-proof structure types	d	e
Symbols indicating each group	II A · II B	II
Temperature groups	T1 · T2 · T3 · T4	T1 · T2 · T3
Use conditions	X	—

Note: The above information shows the atmosphere of the area of installation of the explosion-proof motor but not the tolerance level of suction gas into the blower.

For further details of suction gas, refer to the Instruction Manual and Safety Notice for the blower.

5. Use conditions (Pressure/explosion-proof motor)

Since the fastening screw for the cover of the terminal box is not a locking type, be careful not to open the cover while electric power is applied.

Also, do not remove the clamp on the ground cable while electric power is applied.

6. Motor specifications

The pressure/explosion-proof motor used in blower is designed for indoor use. Be careful not to install it outdoors or where it may be splashed with water.

The safety-enhanced explosion-proof motor is designed for outdoor use.

7. Wiring



Warning

In order to prevent explosion, ignition or burning, make sure that external wiring is performed according to the Electrical Installation Technical Standard, Indoor Wiring Regulation and the Factory Explosion Protection Manual.

8. Protection devices



Caution

No protection devices are included with the motors. In order to prevent explosion, ignition or burning, we recommend installing a suitable protection device (such as an earth leakage breaker) in addition to an overcurrent protection device.

9. Operation of blowers equipped with pressure/explosion-proof/safety-enhanced explosion-proof motors



Caution

Inverters cannot be used.

Never operate motors using an inverter, regardless of the frequency.

10. Maintenance and inspection of pressure/explosion-proof/safety-enhanced explosion-proof motors



Warning

Pressure/explosion-proof/safety-enhanced explosion-proof motors require explosion-proof performance. Make sure that maintenance and inspection of motors are performed only by technicians with the proper knowledge and skills related to explosion-proof structures, installation of electric equipment, related laws and regulations and hazardous area classification.

11. Use of blower

Use blower only as directed in the **【Instruction and Safety Manual BLOWER】**.