

Maintenance and Inspection

EU2B switches should be installed in an appropriate control box.

Maintenance and Inspection Method

Perform daily or periodical maintenance and inspection for items such as damage and temperature rise of the EU2B switches listed in the Maintenance and Inspection table below.

Observe laws and regulations set by each country. Do not open the lid when inspecting the EC2B while it is energized. Never disassemble the control box. Do not use tools that cause sparks during maintenance and inspection. When using measuring devices, use explosion-protected types. When the EC2B needs to be disassembled or assembled for maintenance or repair, contact IDEC.

Maintenance and Inspection

Inspection Items	Inspection Method	Inspections	Measures
Enclosure base	Visual	No rusting No damages	Cleaning Rust-resistant treatment
Tightening bolt, screws	Visual, tactile	No loosening No rusting	Tightening Cleaning
Packings	Visual	No cracks No apparent deformation	Replacement
Connecting parts	Visual, tactile	No loosening of screws No dirt on insulation materials	Tightening Cleaning
Temperature rise	Thermometer, tactile	Surface temperature 80°C max.	Investigate the cause

Disposal

Observe laws and regulations set by each country concerning refuse disposal.

Safety Precautions

EU2B Control Units

Use EU2B switches that are applicable for use in hazardous areas (potentially explosive atmosphere where explosive gas or vapor may exist), otherwise explosion or fire hazard may result.

- EU2B switches can be installed only in zones 1 and 2. Do not use in zone 0.
- Turn power off to the EU2B switches before installation, removal, wiring, or maintenance, otherwise explosion, fire hazard, or electric shock may result.
- Do not disassemble, repair, or modify, otherwise damage or accident may result.
- Do not use damaged EU2B switches, otherwise damage or accident may result.
- When connecting external devices, make sure that each cable is connected to the correct terminal, otherwise electric shock, fire hazard, or explosion may result.
- Use wires of a proper size to meet voltage and current requirements. Incorrect wiring may cause abnormal temperature rise and lead to fire hazard and explosion.
- Connect the grounding terminal to a proper ground, otherwise electric shock, fire hazard, or explosion may result.
- Operate the EU2B switches at the rated current and voltage specified in this catalog, otherwise short-circuiting, fire hazard, or explosion may result.
- Stop operation immediately if abnormal operation occurs. Otherwise, a secondary accident may occur.
- Use explosion-proof electrical equipment that are applicable for use in hazardous areas (potentially explosive atmosphere where explosive gas or vapor may exist), otherwise explosion or fire hazard may result.

EC2B Control Boxes

- EC2B control boxes can be installed only in zones 1 and 2. Do not use in zone 0. In North America, the EC2B can be installed in Division 2 areas, but cannot be installed in Division 1 areas.
- Turn power off to the EC2B control box before installation, removal, wiring, or maintenance, otherwise explosion, fire hazard, or electric shock may result.
- Special skills and knowledge of explosion protection, electric system installation, and relevant laws/regulations are required to transport, install, wire, operate, repair, and inspect the EC2B control box. People without such expertise must not use the EC2B control box, otherwise damage or accident may result.
- Do not modify the EC2B, otherwise damage or accident may result.
- Do not use a damaged EC2B control box, otherwise damage or accident may result.
- When connecting external devices, make sure that each cable is connected to the correct terminal, otherwise electric shock, fire hazard, or explosion may result.
- Use wires of a proper size to meet voltage and current requirements. Incorrect wiring may cause abnormal temperature rise and lead to fire hazard and explosion.
- Connect the grounding terminal to a proper ground, otherwise electric shock, fire hazard, or explosion may result.
- Do not sit on or hang from the EC2B control box, otherwise damage, personal injury, or accident may result.
- Do not open the lid of the EC2B control box when it is energized, otherwise electric shock, fire hazard, or explosion may result.
- Operate the EC2B control box at the rated current and voltage specified in this catalog, otherwise short-circuiting, fire hazard, or explosion may result.
- When measuring the insulation resistance of the EC2B control box, make sure that potentially explosive atmosphere of explosive gas or vapor does not exist in the vicinity, otherwise explosion may result. Also, do not touch the terminals without paying attention, otherwise electric shock will result.
- Do not place any obstacles in front of the nameplate.
- Do not remove the nameplate.
- When opening the lid for wiring, maintenance or inspection, make sure that substances such as dust, concrete powder, or metal powder do not enter inside the box, otherwise contact failure or insulation failure may result.
- Do not drop the EC2B control box during transportation.
- Be sure to open the carton the right way up, otherwise damage or personal injury may result.
- Check that the product is what you have ordered. Using an incorrect model might result in malfunction or accident.
- Stop operation immediately if abnormal operation occurs. Otherwise, a secondary accident may occur.
- The surface temperature of the EC2B control box may become extremely hot during operation. Before maintenance or inspection of the EC2B, be sure to wear gloves to prevent burning your hand.