GE GE □□□ Series Service Manual

IS200TRLYH1BGG

1. Description

IS200TRLYH1BGG - Coil Sensing Terminal Board

3. Product Information

IS200TRLYH1BGG - Coil Sensing Terminal Board

Specifications

* Part Number: IS200TRLYH1BGG
* Manufacturer: General Electric
* Country of Manufacture: United States of America (USA)
* Series: Mark VIe
* Product Type: Coil Sensing Terminal Board
* Availability: In Stock
* Maximum Response Time ON: 25 ms typical
* Maximum Response Time OFF: 25 ms typical
* Maximum Inrush Current: 10 A
* Contact Material: Silver cad-oxide
* Board Dimensions: 17.8 cm wide × 33.02 cm high
* Operating Temperature: -30°C to +65°C

Functional Description

* IS200TRLYH1BGG is a coil sensing terminal board developed by GE.
* The board is part of the Mark VIe control system platform.
* The terminal board supports relay-based control and signaling applications.
* The design provides flexible configuration and stable industrial operation.
* The TRLY_1B terminal board supports reliable relay management functions.

Relay Configuration

* Supports 12 plug-in magnetic relays.
* The first six relay circuits are configurable through jumpers.
* The first six relays support dry Form-C contacts or external solenoid driving.
* The board supports standard 125 VDC and 115/230 VAC field solenoid power.
* An optional 24 VDC source is also supported.
* Individual jumper-selectable fuses are included.
* Integrated suppression circuits improve field solenoid protection.
* Relays 7 through 11 provide isolated unpowered Form-C contacts.
* Relay 12 is dedicated for special applications such as ignition transformers.
* The board includes a total of 12 relay channels.

Relay Channel Structure

* 6 relays support optional solenoid driver voltages.
* 5 relays provide dry contacts only.
* 1 relay includes a 7 A rating for higher current applications.

Caution and Safety Considerations

* In 240 VAC systems, avoid accidental AC and DC cross-connections.
* Improper voltage connection may exceed Transorb protection ratings.
* Most AC supplies operate with grounded neutral configurations.
* Incorrect 125 VDC and AC voltage mixing may stress Transorb circuits.
* 120 VAC operation can tolerate peak voltage without immediate failure.
* Additional safety margin improves operational reliability.

Maximum Load Current

* 0.6 A for 125 VDC operation
* 3.0 A for 24 VDC operation
* 3.0 A for 115/230 VAC, 50/60 Hz operation
* 6 A at 115 VAC for Relay 12 only

Relay Contact Rating

* 24 VDC Rating: 10 A resistive current
* 24 VDC Rating: 2 A inductive current (L/R = 7 ms) without suppression
* 125 VDC Rating: 0.5 A resistive current
* 125 VDC Rating: 0.2 A inductive current (L/R = 7 ms) without suppression
* 125 VDC Rating: 0.5 A resistive current with suppression
* 125 VDC Rating: 0.65 A inductive current (L/R = 150 ms) with MOV suppression across load

Fault Detection Functions

* The system detects loss of relay solenoid excitation current.
* The monitoring system identifies interruptions in solenoid excitation circuits.
* The board continuously monitors relay coil current behavior.
* The system detects disagreement between commanded current and actual coil current.

* The control logic identifies unplugged cables or communication loss with I/O boards.
* Relay outputs automatically de-energize during communication failure conditions.
* Proactive monitoring improves operational reliability.
* The system supports real-time fault identification and response.
* Automated recovery functions help restore normal operation.
* The monitoring system minimizes unplanned downtime risk.