MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE VERSAMAX

IC200MDL650

32-POINT POSITIVE-LOGIC DC INPUT MODULE

Used with the applicable VersaMax discrete I/O configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GE official manufacturer documentation

VersaMax 24VDC Input Modules

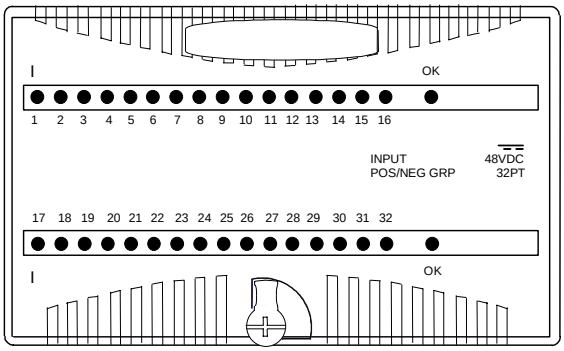
October 2008 GFK-2546

Product Description

Discrete input modules IC200MDL640 and BXIOID1624 provide two groups of 8 discrete inputs.

Discrete input module IC200MDL650 (shown below) and BXIOIX3224 provide four groups of 8 discrete inputs.

Inputs in each group can be either positive logic inputs that receive current from input devices and return the current on the common, or negative-logic inputs that receive current from the common and return current to the input device. Input devices are connected between the input terminals and common terminals.



Note: Negative-logic functionality requires module version IC200MDL650C / BXIOID3225C or higher.

Power for module operation comes from the backplane.

Intelligent processing for the module is performed by the CPU or NIU.

LED Indicators

Individual green LEDs indicate the on/off state of each input point.

The green OK LED is on when backplane power is present to the module.

Preinstallation Check

Carefully inspect all shipping containers for damage. If any equipment is damaged, notify the delivery service immediately. Save the damaged shipping container for inspection by the delivery service. After unpacking the equipment, record all serial numbers. Save the shipping containers and packing material in case it is necessary to transport or ship any part of the system.

(total response time is 1.5ms).

Installation in Hazardous Locations

- EQUIPMENT LABELED WITH REFERENCE TO CLASS I, GROUPS A, B, C & D, DIV. 2 HAZARDOUS LOCATIONS IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C, D OR NON-HAZARDOUS LOCATIONS ONLY
- WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;
- WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES; AND
- WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.

Module Characteristics

Points	IC200MDL640, BXIOIS1624: 16 (2 groups of 8) IC200MDL650, BXIOID3224: 32 (4 groups of 8)
Module ID	IC200MDL640, BXIOIS1624: FFFF8008 IC200MDL650, BXIOID3224: 80088008
Isolation:	User input to logic (optical) and frame ground: 250VAC continuous; 1500VAC for 1 minute
	Group to Group: 250VAC continuous; 1500VAC for 1 minute
	Point to point: None
LED indicators	One LED per point shows individual point ON/OFF status OK LED indicates backplane power is present
Backplane current consumption (5V output)	IC200MDL640, BXIOIS1624: 25mA maximum IC200MDL650, BXIOID3224: 50mA maximum
External power supply	None
Thermal derating	IC200MDL640, BXIOIS1624: No derating IC200MDL650, BXIOID3224: See chart
Configuration parameters	Input response times

Input Characteristics

Input voltage	0 to +30VDC,+24VDC nominal
On state voltage	+15 to +30VDC
Off state voltage	0 to +5VDC
On state current Off state current On response time Off response time	2.0 to 5.5mA 0 to 0.5mA 0.5ms maximum
Configurable filter time	0 ms, 1.0ms (default), or 7.0ms
Input impedance	10kOhms maximum

Product Revision History

Rev	Date	Description
IC200MDL640G / BXIOID1624G IC200MDL650G / BXIOID3224G	October 2008	Updated Power Supply OK signal circuitry.
IC200MDL640F / BXIOID1624F IC200MDL650F / BXIOID3224F	April 2005	Improvement to latching mechanism
IC200MDL640E IC200MDL650E	April 2004	Changed to V0 plastic for module housing.
BXIOID1624E BXIOID3224E	January 2004	Changed to V0 plastic for module housing. ATEX approval for Group 2 Category 3 applications.
IC200MDL640D IC200MDL650D	January 2004	ATEX approval for Group 2 Category 3 applications.
IC200MDL640C / BXIOID1624C IC200MDL650C / BXIOID3224C	November 1999	Added operation with negative logic inputs.
IC200MDL640A / BXIOID1624A IC200MDL650A / BXIOID3224A	September 1998	Original product release

Configuration Parameters

The module's basic input on/off response time is 0.5ms.

For some applications, it may be preferable to add additional filtering to compensate for conditions such as noise spikes or switch bounce. Input filter times of 0ms, 1.0ms, or 7.0ms are selectable via software configuration, for total response times of 0.5ms, 1.5ms, and 7.5ms respectively. The default is 1.0ms filter time