

OFFICIAL MODEL-SPECIFIC GUIDE

Installation Instructions

IC200MDL650M

GE · VersaMax discrete I/O · 32-point 24 V DC positive/negative logic input module

01 VERIFIED INSTALLATION DATA

Input points	32 in four groups of 8
Input voltage	0 to 30 V DC; 24 V DC nominal
Input logic	Positive or negative logic
On-state	15 to 30 V DC; 2.0 to 5.5 mA
Input filter	0, 1.0 or 7.0 ms configurable
Backplane current	50 mA maximum at 5 V DC

02 INSTALLATION AND CONNECTION SEQUENCE

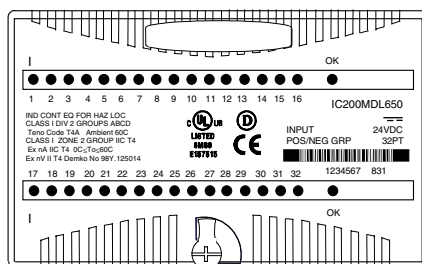
- Remove carrier and field power, confirm the exact IC200MDL650M revision, and inspect the keyed VersaMax carrier position.
- Seat the module on a compatible two-row or three-row terminal carrier without bending the backplane connector.
- Connect inputs 1 to 16 on terminals A1 to A16 and inputs 17 to 32 on terminals B1 to B16.
- Connect group commons at A17, A18, B17 and B18. Wire each group for the selected positive-logic or negative-logic arrangement.
- Configure the input filter, restore power, confirm the OK LED, and test each field input against its individual point LED.

CONTROLLED INSTALLATION CHECK

Confirm the complete article number, revision, field wiring and approved site procedure before energizing.

IC200MDL650 Input Module, 24VDC Pos/Neg Logic 32 Points

Discrete input module IC200MDL650 provides 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 or higher.

Power for module operation comes from the backplane.

Intelligent processing for this module is performed by the CPU or NIU. The module provides 32 bits of discrete input data.

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.

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 CPU software configuration, for total response times of 0.5ms, 1.5ms, and 7.5ms respectively. The default is 1.0ms filter time (total response time is 1.5ms).

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IC200MDL650
Input Module, 24VDC Pos/Neg Logic 32 Points

Module Specifications

Module Characteristics	
Points	32 (4 groups of 8)
Module ID	80088008
Isolation:	
User input to logic (optical) and to 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: 50mA maximum
External power supply	None
Thermal derating	See diagram
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	2.0 to 5.5mA
Off state current	0 to 0.5mA
On response time	0.5ms maximum
Off response time	
Configurable filter time	0 ms, 1.0ms (default), or 7.0ms
Input impedance	10kOhms maximum

IC200MDL650

Input Module, 24VDC Pos/Neg Logic 32 Points

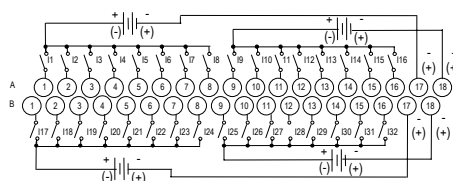
Field Wiring

Terminal	Connection	Terminal	Connection
A1	Input 1	B1	Input 17
A2	Input 2	B2	Input 18
A3	Input 3	B3	Input 19
A4	Input 4	B4	Input 20
A5	Input 5	B5	Input 21
A6	Input 6	B6	Input 22
A7	Input 7	B7	Input 23
A8	Input 8	B8	Input 24
A9	Input 9	B9	Input 25
A10	Input 10	B10	Input 26
A11	Input 11	B11	Input 27
A12	Input 12	B12	Input 28
A13	Input 13	B13	Input 29
A14	Input 14	B14	Input 30
A15	Input 15	B15	Input 31
A16	Input 16	B16	Input 32
A17	Inputs 1-8 Common	B17	Inputs 17-24 Common
A18	Inputs 9-16 Common	B18	Inputs 25-32 Common

The 32 inputs form four groups of 8. Each group has a common connection. Each group may be wired for positive or negative logic inputs. Note: Negative-logic functionality requires version IC200MDL650C or higher.

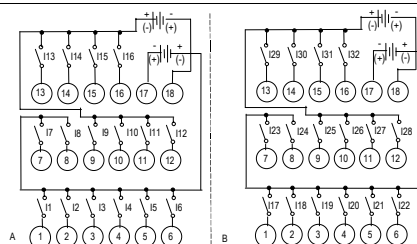
Wiring Connections for Carriers with Two Rows of Terminals

IC200CHS002, 005
IC200CHS012, 015



Wiring Connections for Carriers with Three Rows of Terminals

IC200CHS001, 022, 025
IC200CHS011



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Input Module, 24VDC Pos/Neg Logic 32 Points

Thermal Derating

The number of points that can be on at the same time depends on the ambient temperature, the external voltage, and the orientation of the module and DIN rail.

There is no derating at 24VDC. Deratings at 30VDC are shown below.

