

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GENERAL ELECTRIC

IC694MDL645D

16-POINT DC INPUT MODULE

Used with the applicable PACSystems RX3i configuration.

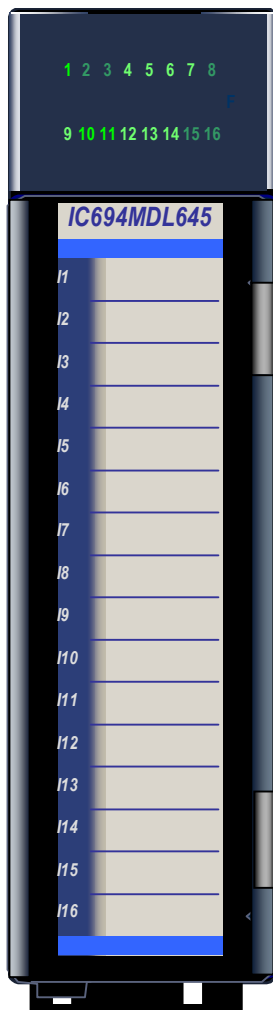
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OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Emerson GFK-2314T, MDL645 input specifications

6.10 Input Module, 24Vdc Pos/Neg, 16-Point IC694MDL645



The 24Vdc Positive/Negative Logic Input module, IC694MDL645, provides sixteen input points in one group with a common power input terminal. This input module can be wired for either positive logic or negative logic. Input characteristics are compatible with a wide range of input devices, such as pushbuttons, limit switches, and electronic proximity switches. Current passing into an input point results in a logic 1 in the input status table (%I).

Field devices can be powered from an external supply. Depending on their requirements, some input devices can be powered from the +24 V OUT and 0 V OUT terminals of the module.

Sixteen green LEDs indicate the ON/OFF status of points 1 through 16. The blue bands on the label show that MDL645 is a low-voltage module.

This module can be installed in any I/O slot in an RX3i system.

Module supports insertion into and removal from an RX3i Universal Backplane which is under power. Refer to *Hot Insertion and Removal*, Section 2.6.4.1. Note that field side terminal block must be removed from the module during such a procedure.

Figure 148: IC694MDL645

6.10.1 Specifications: MDL645

Rated Voltage	24 Vdc
Input Voltage Range	0 to +30 Vdc
Inputs per Module	16 (one group with a single common)
Isolation: Field to Backplane (optical) and to frame ground	250 Vac continuous; 1500 Vac for one minute
Input Current	7 mA (typical) at rated voltage
Input Characteristics	
On-state Voltage	11.5 to 30 Vdc
Off-state Voltage	0 to +5 Vdc
On-state Current	3.2 mA minimum
Off-state Current	1.1 mA maximum
On response Time	7 ms typical
Off response Time	7 ms typical
Power Consumption: 5Vdc	80 mA (all inputs on) from 5Vdc bus on backplane
Power Consumption: 24Vdc ¹⁹	125 mA from the Isolated 24Vdc backplane bus or from user supplied power

For product standards and general specifications, refer to *Appendix A*.

¹⁹ If terminals 18 & 19 are employed, the following applies:

If the module is located in an RX3i Universal Backplane, an external source of Isolated +24 Vdc is required. The external source must be connected via the TB1 connector located on the left side of the backplane.

If this module is located in an RX3i Expansion Backplane or Series 90-30 backplane, the backplane power supply provides the isolated +24 Vdc for the module.

6.10.2 Field Wiring: MDL645

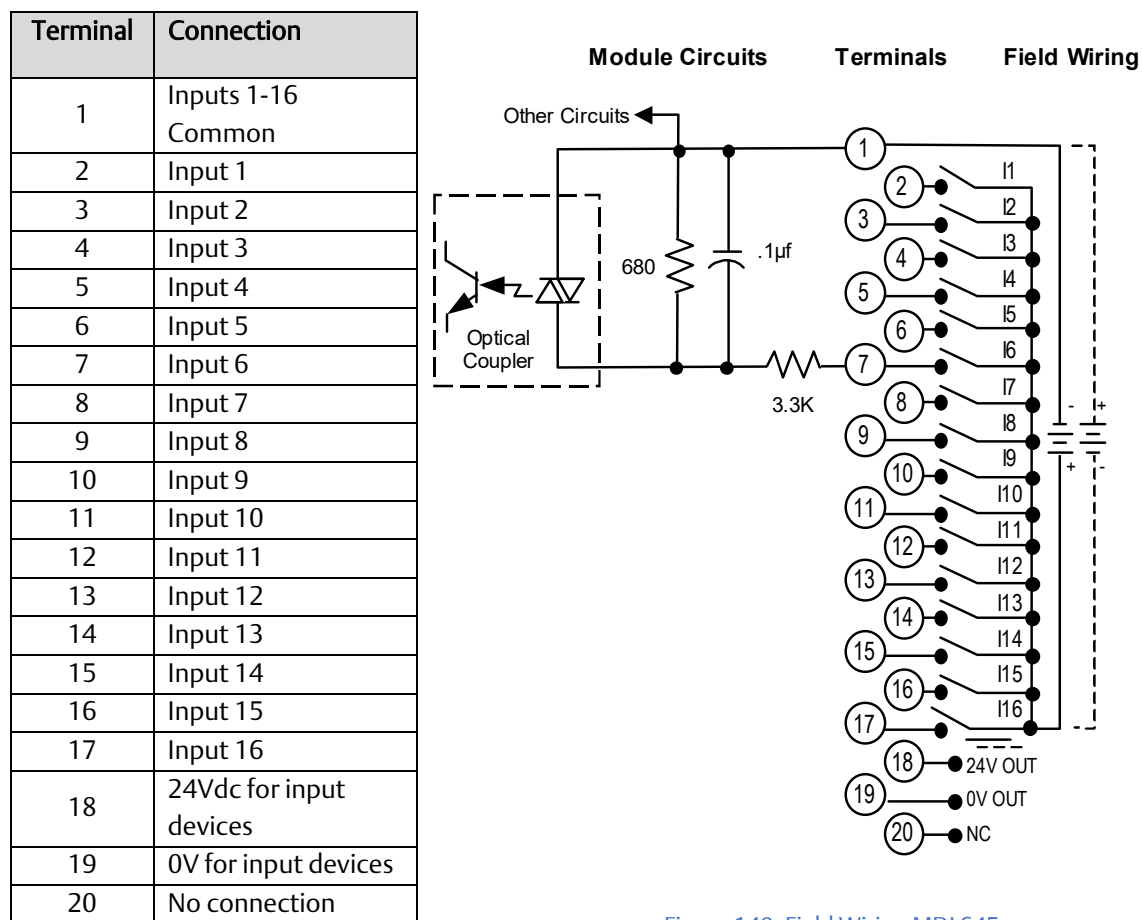


Figure 149: Field Wiring MDL645

Note: If the 24V OUT pin is used to connect to input devices in the field, the isolation specification for this module changes to:

Field to Backplane (optical) and to frame ground: 50 Vac continuous; 500 Vac for 1 minute