GE Field Control Series Service Manual

IC670MDL240

1. Description

120VAC Input, 16 Point, Grouped GE Fanuc Field Control MDL240 GE IC670M IC670MD IC670MDL The IC670MDL240 is a 16-Point discrete input module from the Field control series of GE Fanuc. This module has Sixteen (16) input channels that accepts input signal voltage of 120 VAC at signal range of 0-132 VAC, 47-63 Hz and user input current of 15 mA per point. This module has a current draw of 77mA from the Bus Interface Unit (BIU) power supply. Technical specifications for IC670MDL240

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc**
Series	**Field Control**
Manufacturer	**GE Fanuc**
No.	**of channels Sixteen (16)**
Part	**Number IC670MDL240**
Series	**Field I/O control**
Input	**signal, nominal 120 VAC**
Product	**Type Input Module**
Part	**Number IC670MDL240**
Input	**signal, range 0-132 VAC**
Number	**of Inputs 16**
Product	**Description Discrete Input Module**
Input	**current 15 mA at 120 VAC**
Voltage	**Type AC**
No	**of Channels Sixteen (16)**
External	**Power supply 120 VAC**
Input	**Voltage 0 to 132 Volts AC**
Input	**signal range 0-132 VAC**
Current	**Drawn from BIU power supply 77 mA, maximum**
Frequency	**47 to 63 Hertz**
Input	**Frequency 47-63 Hz**
Ground	**to Logic Isolation 1500 VAC for 1 minute; 250 VAC, continuous**
Discrete	**Input Data 16 Bits (2 Bytes)**
Input	**current 15 mA per channel**
Input	**grouping Single group**
Continuous	**Isolation Voltage 250 Volts AC**
15	**mA per channel 77 mA**
ON	**state voltage 70-132 VAC**
Nominal	**input voltage 115 VAC**
On	**State Voltage 70 VAC to 120 VAC**
Off	**state voltage 0-20 VAC**
On	**state current 5 mA - 15 mA**
Off	**state current 0 mA - 2.5 mA**
On	

3. Product Information

120VAC Input, 16 Point, Grouped GE Fanuc Field Control MDL240 GE IC670M IC670MD IC670MDL The IC670MDL240 is a 16-Point discrete input module from the Field control series of GE Fanuc. This module has Sixteen (16) input channels that accepts input signal voltage of 120 VAC at signal range of 0-132 VAC, 47-63 Hz and user input current of 15 mA per point. This module has a current draw of 77mA from the Bus Interface Unit (BIU) power supply. Technical specifications for IC670MDL240

Manufacturer GE Fanuc

Series Field Control

Manufacturer GE Fanuc

No. of channels Sixteen (16)

Part Number IC670MDL240

Series Field I/O control

Input signal, nominal 120 VAC

Product Type Input Module

Part Number IC670MDL240

Input signal, range 0-132 VAC

Number of Inputs 16

Product Description Discrete Input Module

Input current 15 mA at 120 VAC

Voltage Type AC

No of Channels Sixteen (16)

External Power supply 120 VAC

Input Voltage 0 to 132 Volts AC

Input signal range 0-132 VAC

Current Drawn from BIU power supply 77 mA, maximum

Frequency 47 to 63 Hertz

Input Frequency 47-63 Hz

Ground to Logic Isolation 1500 VAC for 1 minute; 250 VAC, continuous

Discrete Input Data 16 Bits (2 Bytes)

Input current 15 mA per channel

Input grouping Single group

Continuous Isolation Voltage 250 Volts AC

15 mA per channel 77 mA

ON state voltage 70-132 VAC

Nominal input voltage 115 VAC

On State Voltage 70 VAC to 120 VAC

Off state voltage 0-20 VAC

On state current 5 mA - 15 mA

Off state current 0 mA - 2.5 mA

On response time, typical 12 ms

On response time, maximum 20 ms

Off response time, typical 25 ms

Off response time, maximum 40 ms

Product Lifecycle Status Discontinued/Obsolete Description

The IC670MDL240 is a Sixteen (16) channel discrete input module from the Field control I/O module. This module is used to interface signaling devices that has Two (2) states or binary operation such as pushbutton devices, limit switches, auxiliary contacts, proximity sensors and other similarly operating devices. This module operates as an expansion module, installed along a Bus Interface Unit (BIU) where it draws a maximum of 77 mA of current. The IC670MDL240 input channels accepts nominal signal voltage of 120 VAC at an input range of 0-132 VAC, input current of 15 mA per point along an input frequency 47-63 Hz. The module’s typical input impedance is 8.6 KOhms, On state voltage of 70 VAC to 120 VAC, Off state voltage of 0-20 VAC; On state current of 5-15 mA and Off state current of 0 mA to 2.5 mA. The module’s On response time is 12ms, typical with maximum of 20 ms while the Off response time is 25 ms typical and maximum response time of 40 ms. An external 120 VAC supply voltage must be provided to the module to power the input devices connected to the IC670MDL240 discrete input module. The IC670MDL240 is provided with individual LED status indicator that depict the Logic 0 and Logic 1 state of the input channel. At Logic 0, the input point is receiving an Off-state level of voltage and current while at Logic 1, the input channel is actively receiving On-state levels of voltage and current which leads to the LED indicator being activated. In addition, a dedicated PWR LED indicator is also provided to depict power being received from the backplane.

The Field Control IC670MDL240 module from GE Fanuc is an input module with 16 grouped input points. It runs on 120 Volts AC and receives power from the host system’s BIU, but the input devices need to get their power from an external power source that is rated at 120 Volts AC. The top of the IC670MDL240 module has LEDs that are housed underneath a pane of clear material. There is a PWR LED that indicates backplane power and individual LEDs for each input to show if the inputs are on or off. The BIU or Bus Interface Unit that provides the power to the GE Field Control IC670MDL240 input module also handles the intelligent processing duties for it. The intelligent processing duties includes the configuration of the fault reporting and the input default settings and providing the module’s 16 bits or 2 bytes of discrete input data to the host processor and/or to the local processor. The IC670MDL240 input module receives its input filtering from the input thresholds that are created by a network of capacitors and resistors. The input voltage range for this input module is from 0 to 132 Volts AC at a frequency of 47 to 63 Hertz. There is no isolation between the individual input points, but the isolation between the inputs and logic and input and frame ground is 250 Volts AC continuous and 1500 Volts AC for 1 minute.