GE Field Control Series Service Manual

IC670MDL331

1. Description

120VAC 2A Output, 8 Point, Isolated MDL331 GE Fanuc Field Control IC670M IC670MD IC670MDL The IC670MDL331 is a Field Control I/O module that is manufactured by GE Fanuc. This module is a discrete output module featuring Eight (8) channels inf Four (4) groups of Two (2) channels each. It delivers 85-132 VAC output voltage range with nominal output of 120 VAC and maximum output current per channel of 2 A. This module has backplane current draw of 154 mA. Technical specifications for IC670MDL331

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Field Control**
Manufacturer	**GE Fanuc**
Part	**Number IC670MDL331**
Series	**Field I/O control**
Rated	**Voltage 120 Volts DC**
Part	**Number IC670MDL331**
Output	**Voltage Range 85 to 132 Volts AC**
Product	**Description Discrete output module**
Frequency	**47 to 63 Hertz**
No	**of Channels Eight (8)**
Output	**Current 2 Amps (maximum) per point / 6 to 8 Amps (maximum) per module**
No.	**of groups Four (4) groups of Two (2) output channels**
Outputs	**per Module 8**
Output	**signal range 85 VAC-132 VAC**
Isolation	**Voltage 250 Volts AC (continuous) / 1500 Volts AC for 1 minute**
Output	**Frequency 47-63 Hz**
Input	**Impedance 3K typical**
Output	**current per channel, max 2:00 AM**
Inrush	**Current 20 Amps (maximum) for one cycle**
Output	**current per group, max 2:00 AM**
Resistive	**Load Current (Maximum) 2 Amps for 93 to 132 Volts AC**
Output	**current per module, max 6 A - 8 A**
Maximum	**Load Current 10 milli Amps per point**
Current	**draw from BIU 154 mA**
Output	**Voltage Drop 3 Volts (maximum)**
Response	**Time-On, max 1 ms (max)**
Response	**Time (On)**

3. Product Information

120VAC 2A Output, 8 Point, Isolated MDL331 GE Fanuc Field Control IC670M IC670MD IC670MDL The IC670MDL331 is a Field Control I/O module that is manufactured by GE Fanuc. This module is a discrete output module featuring Eight (8) channels inf Four (4) groups of Two (2) channels each. It delivers 85-132 VAC output voltage range with nominal output of 120 VAC and maximum output current per channel of 2 A. This module has backplane current draw of 154 mA. Technical specifications for IC670MDL331

Brand GE Fanuc

Series Field Control

Manufacturer GE Fanuc

Part Number IC670MDL331

Series Field I/O control

Rated Voltage 120 Volts DC

Part Number IC670MDL331

Output Voltage Range 85 to 132 Volts AC

Product Description Discrete output module

Frequency 47 to 63 Hertz

No of Channels Eight (8)

Output Current 2 Amps (maximum) per point / 6 to 8 Amps (maximum) per module

No. of groups Four (4) groups of Two (2) output channels

Outputs per Module 8

Output signal range 85 VAC-132 VAC

Isolation Voltage 250 Volts AC (continuous) / 1500 Volts AC for 1 minute

Output Frequency 47-63 Hz

Input Impedance 3K typical

Output current per channel, max 2:00 AM

Inrush Current 20 Amps (maximum) for one cycle

Output current per group, max 2:00 AM

Resistive Load Current (Maximum) 2 Amps for 93 to 132 Volts AC

Output current per module, max 6 A - 8 A

Maximum Load Current 10 milli Amps per point

Current draw from BIU 154 mA

Output Voltage Drop 3 Volts (maximum)

Response Time-On, max 1 ms (max)

Response Time (On) 1 millisecond (maximum)

Response Time-Off, max 1/2 cycle (max)

Response Time (Off) Â½ cycle (maximum)

Protection (each output) Fuse: Metric 5 x 20 mm – 3 Amp, 250 V, Slow Acting Snubber: (R=47.5 ohms, C=0.022 µfd)

Product Lifecycle Status Discontinued/Obsolete Description

The IC670MDL331 is manufactured by GE Fanuc that is part of the Field Control series. This module is an I/O module, specifically, a discrete output module featuring Eight (8) output channels, grouped into Four (4) with Two (2) channels each. It delivers an output voltage of 85-132 VAC, 47-63 Hz with nominal output level of 120 VAC. Each channel of the module is designed to deliver a maximum output current of 2 Amperes, making the module compatible for use with inductive loads. Though each channel of the IC670MDL331 rated output is 2 A, the maximum output per group can only reach up to a maximum of 2 A. Additionally, the maximum output per module can only reach up to 6A - 8 A. This module is provided with LED status indicators such as Logic side indicators, depicting On and Off state of each channel and Fuse OK LED, indicating the status of the internally installed fuse per channel group. The IC670MDL331 is used with a Bus Interface Unit (BIU). This BIU sends individual channel status to the host controller residing over the supported protocol of the BIU. Additionally, diagnostic status of the IC670MDL331 can be accessed by the controller through the BIU. The IC670MDL331 has response time of 1 ms maximum delay and Off response time of ½ cycle, maximum delay. The integral fuse installed internally to this module is Metric 5 x 20 mm fuse with current rating of 3 Amp, 250 V, Slow blow fuse. It also has a snubber circuit rated (R=47.5 ohms, C=0.022 µfd).

The IC670MDL331 is an output module that is designed and manufactured by GE Fanuc that operates on output voltage range of 85 to 132 Volts AC. This isolated GE Fanuc Field Control module with a rated voltage of 120 Volts DC is compatible with the following modules: the IC670M, the IC670MD, and the IC670MDL. The unit has 8 output points and it features an output current of a maximum of 2 Amps per point. The outputs of the module are distributed in 4 groups. In addition to that, the IC670MDL331 output module has a current rating of 6 to 8 Amps per module. The typical isolation voltage is 250 Volts AC (continuous) and 1500 Volts AC for 1 minute. The GE Fanuc IC670MDL331 output module has an inrush current of a maximum of 20 Amps for one cycle and a maximum voltage drop of 3 Volts. The maximum load current of the unit is 10 milliamps per point and the maximum resistive load current is 2 Amps for 93 to 132 Volts AC voltage. The input impedance of the unit is 3K (typical) and the response time is 1 millisecond for the on-state. The response time for the off-state is 1/2 cycle maximum. The IC670MDL331 discrete output module has a bus interface power supply current draw of 154 milliamps maximum and an output leakage current of 2 milliamps at 120 Volts AC. The IC670MDL331 module features logic side LED indicators for every output and a Fuse OK LED indicator for the output groups. This output module includes a fuse and snubber for protection.