GE Series 90-30 Series Service Manual

IC693TCM303

1. Description

The IC693TCM303 module is a temperature control module (TCM) designed by GE Fanuc. This module is part of Series 90-30 of the GE PLCs and accessories. The module has a maximum thermocouple impedance of 35 Ohms and an output voltage range of 18 to 30 Volts DC. In addition to that, the IC693TCM303 module supports an external power supply with a voltage range of 18 to 36 Volts DC and 2.5 Amps of inrush current.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-30**
Part	**Number IC693TCM303**
Output	**voltage range 18 to 30 Volts DC**
External	**power supply 18 to 36 Volts DC (2.5 Amps inrush)**
Off-state	**leakage (maximum) 0.1 milliAmps**
Load	**current 100 milliAmps**
Internal	**power used 150 milliAmps at 5 Volts DC**
Number	**of channels 8 inputs / 8 outputs**
Overload	**threshold current 700 milliAmps typical, 2 milliseconds minimum**
Thermocouple	**impedance 35 Ohms (maximum)**
Operating	**temperature 0 to 55 degrees Celsius (32 to 131 degrees Fahrenheit)**
Storage	**temperature -40 to 85 degrees Celsius (-40 to 185 degrees Fahrenheit)**
Product	**Lifecycle Status* Discontinued/Obsolete**
The	**IC693TCM303 temperature control module is designed and manufactured by GE Fanuc and it is available through the GE Fanuc Series 90-30 extended range of PLCs and PLC components. The temperature control module is intended for special application purposes and it is used with programmable control products like the GE RX3i PAC systems. The IC693TCM303 module is made fo**

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Technical specifications for IC693TCM303

Brand GE Fanuc

Series Series 90-30

Part Number IC693TCM303

Output voltage range 18 to 30 Volts DC

External power supply 18 to 36 Volts DC (2.5 Amps inrush)

Off-state leakage (maximum) 0.1 milliAmps

Load current 100 milliAmps

Internal power used 150 milliAmps at 5 Volts DC

Number of channels 8 inputs / 8 outputs

Overload threshold current 700 milliAmps typical, 2 milliseconds minimum

Thermocouple impedance 35 Ohms (maximum)

Operating temperature 0 to 55 degrees Celsius (32 to 131 degrees Fahrenheit)

Storage temperature -40 to 85 degrees Celsius (-40 to 185 degrees Fahrenheit)

Product Lifecycle Status* Discontinued/Obsolete

The IC693TCM303 temperature control module is designed and manufactured by GE Fanuc and it is available through the GE Fanuc Series 90-30 extended range of PLCs and PLC components. The temperature control module is intended for special application purposes and it is used with programmable control products like the GE RX3i PAC systems. The IC693TCM303 module is made for harsh industrial environments and it allows for vibrations of up to 3.5 millimeters at 5 to 9 Hertz (or 1 G of vibration at 9 to 150 Hertz) along with 15 G of maximum shock for 11 milliseconds (3-axis positive and negative). The IC693TCM303 module provides exceptional temperature control for 8 channels and it is programmed to operate in either a closed-loop or open-loop mode. The unit has 8 input channels and 8 DC output channels.

The IC693TCM303 temperature control module has a thermocouple type of input and it has an output voltage rating of 18 to 30 Volts DC. The unit uses an internal power of 150 milliAmps at 5 Volts DC and it is built for operation on DC power. The IC693TCM303 module has a load current of 100 milliAmps per point and an off-state leakage rating of 0.1 milliAmps maximum. The module also features an overload threshold current of 700 milliAmps typical with 2 milliseconds minimum and a thermocouple impedance of 35 Ohms maximum. The unit comes with a pair of plug-in connectors for connecting the external power source for the different devices that are supported. The RTD rating of the module is 100 Ohms at 0 degrees Celsius (32 degrees Fahrenheit). Also, it is important to mention that the module has 1000 Volts of isolation from the PLC backplane.