GE RX3i PacSystem Series Service Manual

IC694APU305

1. Description

GE Fanuc has designed the RX3i IC694APU305 Pulse I/O Processing Module for the quick processing of pulse train signals without a connection to external PLC or CPU systems. This device is capable of providing DC power for almost any pulse metering electronic device connected into its inputs, but it needs an external power source for powering encoders in motion-controlled systems.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**RX3i PacSystem**
Part	**Number IC694APU305**
Power	**Supply Voltage 5V DC from the backplane**
Power	**Supply Current 360 mA + (10 mA x number of faceplate outputs powered on)**
Field	**I/O to Logic Isolation Peak (1 second): 1500V Steady State: 30 V AC/V DC**
Maximum	**Number of Modules per RX3i system No limit**
Input	**types Positive Logic, optically isolated.**
Output	**Type Positive Logic, optically isolated.**
Maximum	**Supply Voltage 30V DC**
Output	**Fuse 5 A (5 x 20 mm replaceable) common to all outputs**
GE	**Fanuc has designed and manufactured an I/O processing module that is known as the GE Fanuc RX3i IC694APU305 Pulse I/O Processing Module. It is specifically designed for managing pulse train signals from a wide variety of industrial processes such as flow metering, event counters in motion control applications, and encoder and decoder signal applications. The GE Fanuc IC694APU305 Pulse I/O Processing Module is an additional module for the RX3i product series and it needs to receive a 5V DC**

3. Product Information

GE Fanuc has designed the RX3i IC694APU305 Pulse I/O Processing Module for the quick processing of pulse train signals without a connection to external PLC or CPU systems. This device is capable of providing DC power for almost any pulse metering electronic device connected into its inputs, but it needs an external power source for powering encoders in motion-controlled systems.

Technical specifications for IC694APU305

Brand GE Fanuc

Series RX3i PacSystem

Part Number IC694APU305

Power Supply Voltage 5V DC from the backplane

Power Supply Current 360 mA + (10 mA x number of faceplate outputs powered on)

Field I/O to Logic Isolation Peak (1 second): 1500V Steady State: 30 V AC/V DC

Maximum Number of Modules per RX3i system No limit

Input types Positive Logic, optically isolated.

Output Type Positive Logic, optically isolated.

Maximum Supply Voltage 30V DC

Output Fuse 5 A (5 x 20 mm replaceable) common to all outputs

GE Fanuc has designed and manufactured an I/O processing module that is known as the GE Fanuc RX3i IC694APU305 Pulse I/O Processing Module. It is specifically designed for managing pulse train signals from a wide variety of industrial processes such as flow metering, event counters in motion control applications, and encoder and decoder signal applications. The GE Fanuc IC694APU305 Pulse I/O Processing Module is an additional module for the RX3i product series and it needs to receive a 5V DC power supply from the RX3i backplane to operate adequately. Both the input and the output points are designed with positive logic and they are optically isolated to avoid overcurrent or short circuit-related damages in the module.

There is no limit to how many GE Fanuc IC694APU305 Pulse I/O Processing Modules can connect into a single RX3i system, so any number of pulse signals that need to be monitored can be handled simply by inserting additional modules. The voltage needed to supply power to the circuits connected to the input point can be obtained from the GE Fanuc IC694APU305 Pulse I/O Processing Module itself. Only external encoders need an additional power supply from the end users. The typical input impedance is 4300 Ohms, and the hysteresis is 250 mV. The high-speed counter can properly process a maximum count rate of 30 kHz (when using an absolute encoder) and even a rate of 200 kHz (when using a Quad B Encoder). The wiring connecting into the inputs should always be shielded to avoid possible noise and interference and it must have a maximum length of 30 meters.