GE Rx7i PACsystem Series Service Manual

IC698RMX016

1. Description

The IC698RMX016 is a Redundant Memory Exchange Module. It is part of the PACSystem RX7i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module is mainly used in redundant CPU configuration or as reflective memory module that can be accessed over the network. It comes with 16MB SDRAM with operating voltage of +5VDC provided by the power supply and current requirement of 1.8

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Rx7i PACsystem**
Manufacturer	**GE Intelligent Platforms (Former); Emerson Automation (Current)**
Part	**Number IC698RMX016**
Series	**PACSystem RX7i**
Description	**Communication module**
Part	**Number IC698RMX016**
Current	**1.8 Amperes**
Product	**Description Redundancy Memory Exchange Module**
Voltage	**5 Volts DC**
User	**Memory 16 MB SDRAM**
Memory	**16 MB SDRAM**
Packet	**Size Dynamic, automatically controlled by Memory Xchange module**
Operating	**voltage +5VDC (from power supply)**
Insertion	**Loss 0.35 dB**
Current	**requirements 1.8A**
Return	**Loss -30dB**
Connectors	**Fiber optic LC type, conforms to IEC 61754-20**
Insertion	**Loss Insertion loss: 0.35 dB (maximum)**
Temperature	**range -20°C to +85°C**
Physical	**size 6.299” (W) x 9.187” (H)**
The	**IC698RMX016 is a Redundancy Memory Exchange Module (RMX) that is used with the PACSystem RX7i Programmable Automation Controller Series. This module mainly functions as a node on the reflective memory or as memory link between partner Central Processing Unit (CPU) modules that form a**

3. Product Information

The IC698RMX016 is a Redundant Memory Exchange Module. It is part of the PACSystem RX7i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module is mainly used in redundant CPU configuration or as reflective memory module that can be accessed over the network. It comes with 16MB SDRAM with operating voltage of +5VDC provided by the power supply and current requirement of 1.8

Technical specifications for IC698RMX016

Brand GE Fanuc

Series Rx7i PACsystem

Manufacturer GE Intelligent Platforms (Former); Emerson Automation (Current)

Part Number IC698RMX016

Series PACSystem RX7i

Description Communication module

Part Number IC698RMX016

Current 1.8 Amperes

Product Description Redundancy Memory Exchange Module

Voltage 5 Volts DC

User Memory 16 MB SDRAM

Memory 16 MB SDRAM

Packet Size Dynamic, automatically controlled by Memory Xchange module

Operating voltage +5VDC (from power supply)

Insertion Loss 0.35 dB

Current requirements 1.8A

Return Loss -30dB

Connectors Fiber optic LC type, conforms to IEC 61754-20

Insertion Loss Insertion loss: 0.35 dB (maximum)

Temperature range -20°C to +85°C

Physical size 6.299” (W) x 9.187” (H)

The IC698RMX016 is a Redundancy Memory Exchange Module (RMX) that is used with the PACSystem RX7i Programmable Automation Controller Series. This module mainly functions as a node on the reflective memory or as memory link between partner Central Processing Unit (CPU) modules that form a redundant pair in high critical applications. This module is mounted to the main rack of an RX7i backplane, recommended to be installed in Rack 3 or 4 to enable interrupt priority however, other slots in the main rack are also supported by this module. The IC698RMX016 comes with 16 MB Static Dynamic Random Access Memory (SDRAM). This module is powered by the 5 VDC voltage, 1.8 Amperes that is sourced from the backplane. This module measures 6.299” (W) x 9.187” (H). Available connector to the Redundancy Memory Exchange Module is an LC Type Fiber Connector that conforms to IEC 61754-20. Connector material is Zirconium Ceramic Ferrule with maximum insertion loss of 0.35 DB and return loss of -30 DB. This module has operating temperature range of -20 Degree Celsius to 85 Degree Celsius. During power up, the module has an unconfigured state. The IC698RMX016 operates until the host RX7i CPU module has sent the appropriate hardware configuration to the module. For general purpose reflective operation, the hardware configuration can be configured with a variety of parameters such as Node ID, Redundant Transfer Mode, Rogue Master, Network Memory Offset, and Interrupt enable however, in redundant operation, the mentioned parameters are automatically set by the CPU and cannot be configured.

The Rx7i PACsystem IC698RMX016 module is a GE Fanuc manufactured redundancy memory Xchange module or RMX module. It operates as a node on the reflective memory of the link between the RX7i system and the CPU. It has an operating voltage rating of 5 Volts DC and has a current rating of 1.8 Amps. It comes with a 16 MB SDRAM user memory. It is compact in size with dimensions of 6.299 inches in width and 9.187 inches in height. The module uses up to 256 nodes per network. The IC698RMX016 communication module uses dynamic packet sizes ranging from 4 to 64 bytes that are controlled by using the Xchange module. The IC698RMX016 communication module uses a high speed fiber optic network for data exchange. The front section of the module comes with 8 different LED indicators and with a toggle switch that can be used to authorize a role switch. The role switch is used to changes roles for the module and it helps to prevent accidental activation. It has 2 on and off positions. It has a spring loading mechanism that is in the off state by default. The IC698RMX016 module requires a PacSystem with firmware version 2.00 for installation. It uses the logic developer PC software for programming. The connector of the communication module is manufactured by using zirconium ceramic ferrule and it has an insertion loss of 0.35 dB maximum. It has a return loss of -30 dB. An optical transceiver is present in the module and it has 2 LC optic ports. There is a TX port for a transmitter and an RX port for a receiver.