GE RX3i PacSystem Series Service Manual

IC695ACC402

1. Description

The IC695ACC402 is an Energy pack unit that is part of the PACSystem RX3i, formerly by GE Intelligent Platforms (GE IP), now under Emerson Automation. This module is designed for use with RX3i CPUs such as CPE330. This module provides enough power for the CPU to transfer memory from the RAM to the non-volatile storage in the event of power loss. This energy has typical life

2. Specifications

Specification	Value
Manufacturer	GE Fanuc
Series	PACSystem RX3i
Product	Description Energy pack
Manufacturer	GE Intelligent Platforms (GE IP); Emerson Automation (Current)
Part	Number IC695ACC402
Compatible	Series PACSystem RX3i
Series	PACSystem RX3i
Product	Type CPU Energy Pack
Compatible	controllers CPE330
Part	Number IC695ACC402
Compatible	CPU RX3i CPE330 CPU
Mounting	DIN rail / Panel
Compatible	controller CPE 330
Power	Source PLC Backplane
LED	indicators IN; STAT; OUT
Voltage	rating 18-30 VDC
Dedicated	Cable IC695CBL002 Cable
Cable	IC695CBL002
Maximum	input power 24 watts
Purpose	To Save the CPU Data During Power Failures
Input	voltage range 20–30 Vdc
Output	voltage range 18-30 VDC
Ground	Strap Included
Input	power, maximum 36 W + connected device power requirement
Maximum	output power 45 W
Base	Included
Output	voltage range 18–30Vdc
Maximum	output current 2.25 A
Output	power maximum 45 W
Compatible	controller Compatible controller
Output	current maximum 2.25 A
Compatible	cable IC695CBL002
Backup	trip

3. Product Information

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Technical specifications for IC695ACC402

Manufacturer GE Fanuc

Series PACSystem RX3i

Product Description Energy pack

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

Part Number IC695ACC402

Compatible Series PACSystem RX3i

Series PACSystem RX3i

Product Type CPU Energy Pack

Compatible controllers CPE330

Part Number IC695ACC402

Compatible CPU RX3i CPE330 CPU

Mounting DIN rail / Panel

Compatible controller CPE 330

Power Source PLC Backplane

LED indicators IN; STAT; OUT

Voltage rating 18-30 VDC

Dedicated Cable IC695CBL002 Cable

Cable IC695CBL002

Maximum input power 24 watts

Purpose To Save the CPU Data During Power Failures

Input voltage range 20–30 Vdc

Output voltage range 18-30 VDC

Ground Strap Included

Input power, maximum 36 W + connected device power requirement

Maximum output power 45 W

Base Included

Output voltage range 18–30Vdc

Maximum output current 2.25 A

Output power maximum 45 W

Compatible controller Compatible controller

Output current maximum 2.25 A

Compatible cable IC695CBL002

Backup trip voltage 19 Vdc ±4%

Cable length 36” (1 m)

Capacitor Pack life expectancy 5 years

Replacement Cap Pack module IC695ACC412

Dimensions 114.05 mm (4.49”) H x 77.47 mm (3.05”) D x 63.75 mm (2.51”) W

Operating temperature -25 to 60°C (32°F to 140°F)

Life expectancy 5 Years

Product Lifecycle Active

The IC695ACC402 is an energy pack module that is exclusively used with PACSystem RX3i’s CPE 330 controller. This energy pack is primarily used to provide controller power sufficient to allow execution of memory content transfer from the Random Access Memory (RAM) to the non-volatile memory or Flash memory. This energy pack is a DIN rail-mounted version and connects to the partner controller via the IC695CBL002that measures 36” (1 m). This energy pack is charged by an external power supply voltage of 18-30 VDC with a maximum power of 36 Watts. It delivers an output voltage range of 18-30 VDC, output current of 2.25 Amperes, and maximum output power of 45 Watts. This energy pack has a backup trip voltage of 16.7 VDC, +/- 4% with a capacitor backup operating life of 5 years. When connecting this module to the controller, ensure that power is not actively supplied to the CPE330. To secure connection, use the pre-supplied captive screws. The IC695ACC402 has an operating temperature of -25 to 60°C (32°F to 140°F) and storage temperature of -40 to 85°C (-40°F to 185°F) with a relative humidity of 5% to 95%, non-condensing. During operation, this energy pack provides status information forwarded to the controller. Such status information includes Charging, fault, Low capacitance, and Fully Charged. Local LED status indicators installed to this energy pack include IN, STAT, and OUT. The IC695ACC402 comes with upgradeable firmware. The firmware is received by the energy pack from the partner controller. During firmware update mode, All LED indicators of this module are lit Green whereas, during a failed update, all LEDs are lit Green.

The IC695ACC402 CPU energy pack is a specialized PLC component for the RX3i PACSystems PLCs and PLC components that are manufactured by GE Fanuc. The GE IC695ACC402 CPU energy pack is specially made to operate with only 1 RX3i CPU module which is the RX3i CPE330 CPU, and it operates by preserving the energy in the PLC during a power failure. When the power to the PLC is lost for any reason, the IC695ACC402 CPU energy pack will kick in and maintain backup power long enough for the RX3i CPE330 CPU to save the data in its user memory. The CPU saves this data by writing it all from the user memory to the non-volatile memory. This CPU can also be configured to power up from the RAM, and if it is configured in this manner, then its user memory will be restored when power to the PLC is restored. The GE Fanuc RX3I PacSystems IC695ACC402 CPU energy pack is installed with

the RX3i CPE330 CPU with a special dedicated cable that is known as the GE IC695CBL002 cable. Using this dedicated cable allows the IC695ACC402 CPU energy pack to charge its circuitry with power from the PLC backplane and it also allows the CPU to monitor the status of its energy pack. When the backplane power is lost, the CPU will switch to the energy pack's power source automatically to ensure that there is a smooth and orderly power-down sequence in the system. The IC695ACC402 CPU energy pack ships with a base, a ground strap, a CPU connector cable, and a cap pack module.