

GFK-2724

September 2011

The PACSystems^{*} RX3i Energy Pack is intended for use with an RX3i CPE305 or CPE310 controller CPU. In the event of loss of system power, the Energy Pack maintains power long enough for the CPU to write its user memory contents to non-volatile storage (flash) memory.

The Energy Pack can be mounted on the left side of an RX3i module and is connected to the CPU using cable IC695CBL001. The Energy Pack charges from the RX3i 24 VDC from the CPE3xxx, via the IC695CBL001 cable that connects the CPE to the Energy Pack, while the system is powered up.

The Energy Pack is compliant with EU RoHS Directive 2002/95/EC using the following exemptions identified in the Annex: 7(a), 7(c)-I and III.

Related Documents

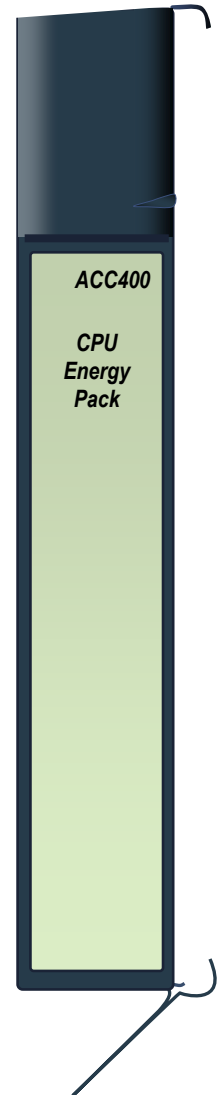
PACSystems CPU Reference Manual, GFK-2222

PACSystems RX3i System Manual, GFK-2314

Additional documentation for PACSystems RX3i products is available on the Support website: www.ge-ip.com/support.

Ordering Information

Description	Catalog Number
RX3i CPU Energy Pack	IC695ACC400
Energy Pack Cable, 3 ft. (0.91m)	IC695CBL001



Energy Pack Specifications

Dimensions, including mounting brackets and latch	140mm (5.5") H x 124mm (4.87") D x 25.4mm (1") W
Operating temperature	0 to 60°C (32°F to 140°F)

For cable specifications, see page 3.

For product standards, general operating specifications, and installation requirements for the RX3i system, refer to the *PACSystems RX3i Hardware and Installation Manual*, GFK-2314.

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Installation

The Energy Pack is mounted on the left side of an RX3i module. To avoid taking up a backplane slot, it should be mounted on the module (usually a power supply) in slot 0 of the rack. It is connected to the CPU by cable IC695CBL001.

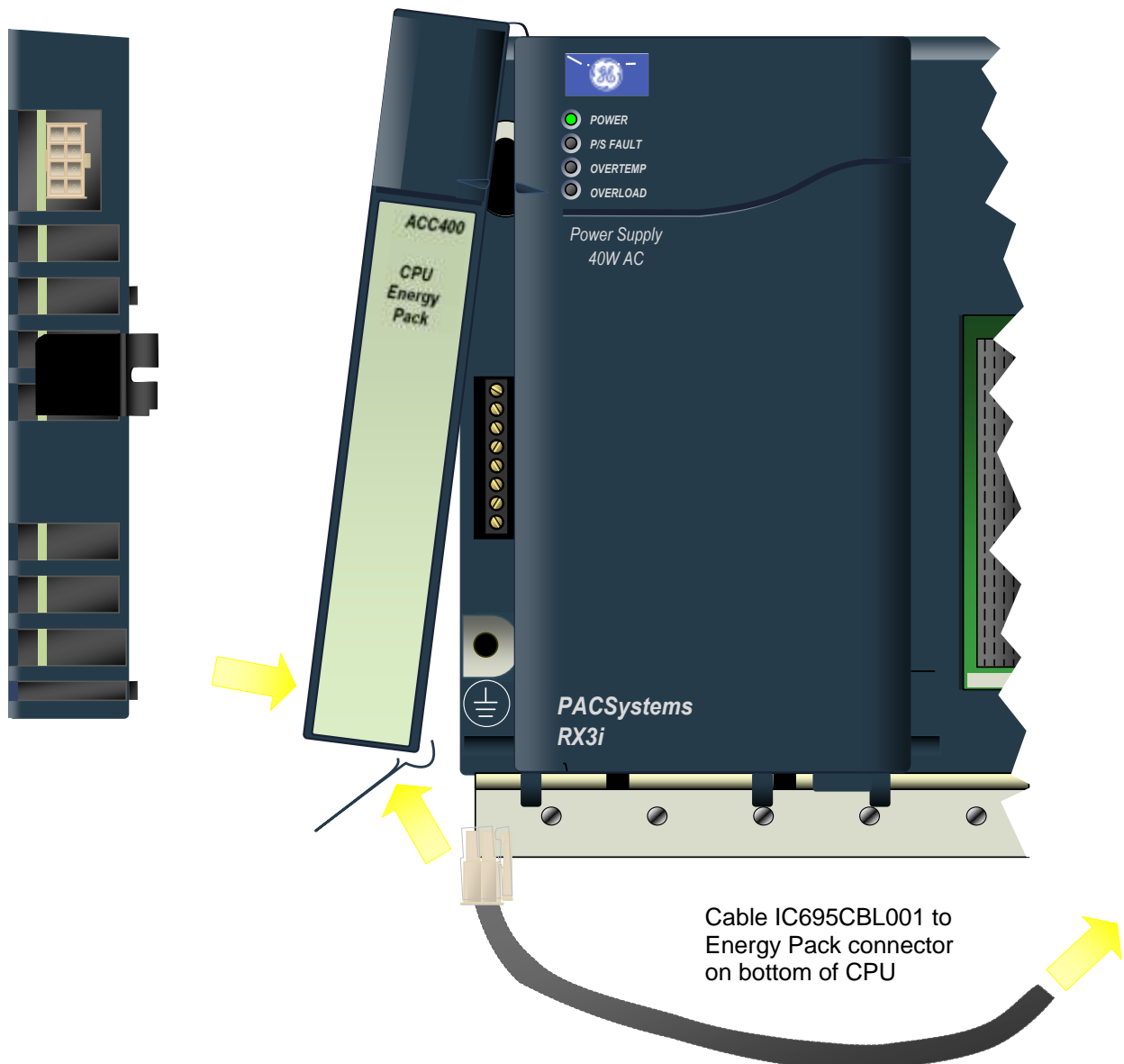
Note that, when mounted on a module in slot 0, the Energy Pack will extend approximately 13mm (0.5") beyond the left side of the backplane.

To install the Energy Pack:

1. Engage the Energy Pack's mounting hooks on the frame of the module as shown in the figure below.
2. Rotate the bottom of the Energy Pack into place, engaging the bottom hooks. The latch will snap into place.
3. Connect the IC695CBL001 cable from the connector on the bottom of the Energy Pack to the corresponding connector on the bottom of the CPU.

Energy Pack Bottom View

Energy Pack Front View, Installation



Operation

Note: When the Energy Pack is powered up for the first time, or is in a system that has been powered down long enough to completely discharge the Energy Pack, it may require a few seconds for it to charge to its operating level. The Energy Pack will report a Charging state to the CPU during this time.

The Energy Pack provides the following status information to the CPU, which the CPU uses to generate LED indications and fault messages. For details on these indications and faults, refer to the CPU user documentation.

- Charging:** The Energy Pack is charging; not yet charged above the minimum operating voltage.
- Fault:** A hardware fault exists in the Energy Pack.
- Low capacitance:** The Energy Pack is near its end of life and should be replaced.
- Charged:** The Energy Pack is charged above its minimum operating voltage and is ready to support CPU operation.

Replacement Schedule

Replacement schedules for Energy Pack modules can be based on the following estimates.

Energy Pack Typical Life Expectancy

<i>Surrounding Air Temperature</i>	<i>Typical Life Expectancy</i>
0°C	10+ years
10°C	10+ years
20°C	10+ years
30°C	10+ years
40°C	10+ years
50°C	10+ years
60°C	4.5 years

Diagnostics

Note: Any testing of this unit should be performed only by qualified personnel who are trained in electrical safety practices and procedures. This unit is not user-serviceable.

IC695CBL001 Cable Specifications

This cable uses straight-through end-to-end wiring (pin 1 to pin 1, etc.).

Crimp housing	Material: Nylon 66 Or Equivalent
	UL rating: UL 94V-0
	Material: Phosphorous bronze
Crimp contact	Current rating: 3.8 AMPS AT 95°C
	Plating: 10μ inches minimum gold on contact area and 150μ inches minimum tin over on solder area and 50μ inches nickel under plating on entire material
	Gauge: 24AWG
Cables	Insulation: PVC
	Conductors: TINNED COPPER
	Voltage Rating: 300 VAC
Connector type	Samtec IPD1-04-D-K

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General Conditions of Safe Use

This product is intended for use with the RX3i system. Its components are considered to be open equipment [having live electrical parts that may be accessible to users] and must be installed in a protective enclosure or incorporated into an assembly that is manufactured to provide safety. As a minimum, the enclosure or assembly shall provide a degree of protection against solid objects up to 12mm (e.g. fingers). This equates to a NEMA/UL Type 1 enclosure or an IP20 rating (IEC60529) providing at least a pollution degree 2 environment.

Installation in Hazardous Areas

The following information is for products installed in Class 1 Division/Zone 2 environments:

- THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS 1, DIVISION 2 GROUPS A B C D OR IN ZONE 2 AREAS WHEN INSTALLED IN A MINIMUM IP54 RATED ENCLOSURE.
- WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.
- WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES.
- WARNING - EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.