



The PMC-T402 is Ecoxplore's latest offer for the Temperature (RTD) and Residual Current monitoring for the Commercial and Industrial markets. Housed in a compact form factor measuring only 72(L)×72(H)×87.8(D)mm, the PMC-T402 can be used as a stand-alone device that offers real-time monitoring and alarming of Residual Current and Temperature with its LED display, Front Panel buttons, 1xDO for Alarm Output or General Purpose Control, and a built-in Alarm Buzzer. With the standard RS-485 port and Modbus RTU protocol support, the PMC-T402 becomes a vital component of an intelligent, centralized Condition Monitoring System such as CET's PecStar iEMS Energy Management System.

Features Summary

Ease of use

- Bright 2-line LED display with high visibility for Temperature and Residual Current measurements
- LED Indicators for Run, Fault, Warning, Alarm, Comm. Activities, Measurement Channel and Unit indicators
- Built-in Alarm Buzzer
- Password-protected setup via front panel or free PMC Setup software
- Panel or DIN Rail Mount
- Support Firmware Upgrade over Communications

Temperature Measurement

- 4 channels RTD Input (PT100 sensor not included)
- Two Setpoint Alarm levels between 45°C and 140°C

Residual Current Measurement

- 4 channels Residual Current Input (CT not included)
- Two Setpoint Alarm levels between 20 and 1000mA

SOE Log

- 64 events time-stamped to ±1ms resolution
- Setup changes, Setpoint Alarms, Power Reset, ...etc.

Digital Output

- 1 Form A mechanical DO (3A @ 250VAC or 30VDC)
- Can be used for Alarm Output or General Purpose Control

Communications

- 1xRS-485 port @ 9600bps, 8E1
- Modbus RTU protocol

Accuracy

Parameters	Measurement Range	Accuracy	Resolution
Residual Current	20 - 2000mA	±1%	0.1mA
Temperature	0 - 200°C	±1°C	0.1°C

Technical Specifications

RTD Temperature Inputs (TC1, TC2, TC3, TC4)	
RTD Type	2-Wire PT100 (sensor not included)
PT100	0-200°C
Alarm Range	45-140°C
Residual Current Inputs (IR1, IR2, IR3, IR4)	
Standard (In)	0.5mA
Range	2-200% In
Power Supply (L/+, N/-, GND)	
Standard	95-250VAC/DC, ±10%, 47-440Hz
Burden	<1.5W
Frequency	50Hz/60Hz
Digital Output	
Type	Form A Mechanical Relay
Loading	3A @ 250VAC or 30VDC
Communications	
Type	RS-485
Baud Rate	9600bps
Communication Format	8E1 (8 Data Bits, Even Parity, 1 Stop Bit)
Protocol	Modbus RTU
Setpoint Range	
Residual Current	20-1000mA in 1mA resolution
Temperature	45-140°C in 1°C resolution
Buzzer	
Decibel	70dB (measured at 1m range)
Installation Torque	
Power Supply Terminals	0.6 N.m
Other Terminals	0.4 N.m
Environmental conditions	
Operating Temperature	-25°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	5% to 95% non-condensing
Atmospheric Pressure	70 kPa to 106 kPa
Pollution Degree	II
Mechanical Characteristics	
Mounting	Panel or DIN Rail
Unit Dimensions	72(L)×72(H)×87.8(D) mm
IP Rating	30
Residual Current CT (not included)	
Load Current (Solid Core)	160A (PMC-MIR-48, Ø=48mm) 400A (PMC-MIR-68, Ø=68mm) 630A (PMC-MIR-220x50, 220x50mm) 1000A (PMC-MIR-120, Ø=120mm)
Load Current (Split Core)	160A (CT553203, Ø=48mm) 225A (CT553303, Ø=68mm)
Primary Input (Residual)	1A
Secondary Output	0.5mA
Range	2-200%
Overload Accuracy	44A
Frequency	Class 0.5 (Solid Core), Class 3 (Split Core)
Dielectric Strength	50 / 60Hz
Operating Temperature	3kV rms @ 1 minute
Storage Temperature	-25 ~ +70°C(Solid Core), -12 ~ +45°C(Split Core) -40 ~ +85°C(Solid Core), -25 ~ +70°C(Split Core)
RTD Temperature Sensor (not included)	
Type	2-Wire PT100
Range	-50°C to 200°C
Accuracy	±2°C
Cable Length	3m, 5m or 8m
Protective Tube Length	300mm

