



PCM

Pump Control Relay

PRODUCT OVERVIEW

The m-tronix **Pump Control Module (PCM)** provides automatic submersible-pump control using **adaptive snooze/no-load detection**. Designed on proven Bramco engineering, the PCR uses real-time motor current monitoring to determine when a pump is running under load, snoring, or drawing no load — and then automatically stops or starts the pump accordingly.

Its **adaptive control algorithm** continually adjusts run and pause times, delivering highly efficient pumping with reduced dry-run damage and lower maintenance costs. The PCR is designed for mining, tunnelling, construction, dewatering and industrial pump applications where **automated**.

It is designed and manufactured in accordance with ISO9001:2000 certified company standards. It is compliant with AS2081:2011.

APPLICATION

The PCM is used for:

- Submersible dewatering pumps
- Mine sumps, underground headings, longwall areas
- Construction sites and civil pump applications
- Pump starter panels, OEM systems, MCCs
- Any installation requiring **automatic snooze/dry-run protection**

Typical operation:

The PCM monitors the pump's load current via CT → detects snore/no-load → stops the pump → calculates a pause time → restarts automatically using its adaptive algorithm.

FEATURES WITH ENHANCED SNOOZE

Snooze / No-Load Detection

- Adjustable **snooze (no-load) current level**
- Immediate LED indication when current falls below snooze threshold
- Six selectable **snooze curve profiles** for precise dry-run protection

Adaptive Automatic Control

- Intelligent algorithm automatically adjusts **run and pause durations**
- Long/no-snore pump runs → short pause
- Short/snoring pump runs → long pause
- Reduces maintenance & prevents pump burnout

General Module Features

- One CT supports four selectable ranges (200:1 CT supplied)
- LED indications for **Power, Run, Pause, Snooze/No-Load**
- DIN-rail or rear-panel mount
- Output relay for RUN command

Installation Advantages

- No need for external float-switch logic for basic pump protection
- Reduced panel build cost — fewer relays, switches and wiring
- Simple setup via front-panel controls

SPECIFICATIONS

Supply

Model	Min	Type	Max	Unit
A01081	100	110	250	V AC
A01021	20	24	50	V AC/DC

Power Consumption: 3 VA ±20%

Operating Temperature: 0–60°C

Motor Current Ranges (Selectable)

- Range 0: 1–5 A
- Range 1: 5–25 A
- Range 2: 25–100 A
- Range 3: 100–200 A

CT Ratio

- 200:1 (CT supplied)

Relay Contact

- 5 A, 250 V AC (General)
- 5 A, 30 V DC (Resistive)
- 100 VA Max

ENCLOSURE

Dimensions: 75 mm (W) × 100 mm (H) × 109.5 mm (D)

Material:

- High-impact resistant polycarbonate
- IP20 rating

Mounting: DIN rail

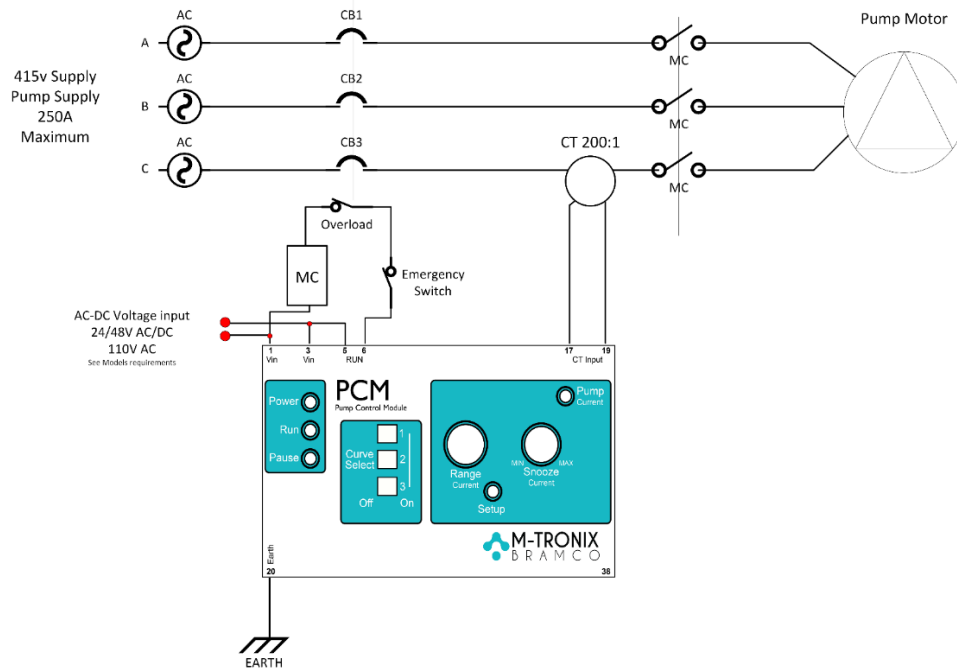
Terminals: Cage screw terminals

Weight: 365 g

ORDERING INFORMATION

Part Number	Description
A01081	PCM Pump Control Module — 100/250 V AC
A01021	PCM Pump Control Module — 24 V AC/DC

TYPICAL WIRING DIAGRAM



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