



Control & Protection Module

- CPM1-Plus

WITH DIRECT MODULE CONTROL (DMC)

CPM1-Plus is the most advanced product in the CPM range. Improved features include distributed processor architecture with dedicated cores for individual protection functions, wider range of protection, faster operation, plug in modular features and leading edge technology including:

CPM1-Plus Features:

Features suited to 1KV - 4.16KV systems... also 11KV - 13.8KV with reduced features.

- Overload Protection: 1 - 995A with 25 IEC protection curves.
- Short Circuit protection: 4 - 5000A.
- Motor Start Protection: 4 - 5000A.
- Undercurrent control selectable.
- Earth leakage protection with sensitive EL toroid - 50 - 500mA / 50 - 500mS.*
- Earth Continuity/pilot or remote control 45 ohms.
- Earth Leakage Lockout Protection
- Loss of Vacuum/ Frozen contactor protection.
- Resistive barrier for ELL and FCL.
- Latch functions with individual resets.
- Auto multiple fan interlock control.
- Local or Remote backlit LCD screen.
- Multiple Modules with single LCD screen using token passing.
- Micro Processor control.
- Fault and Event log.
- RS485 Communications Port, RS232 port optional.
- Ethernet interface optional.
- Direct Module Control (DMC) from remote locations.
- Heavy duty switching outputs.
- Power supplies.

Micro Processor Features:

- 120 unit event time date stamped log.
- Highest peak current log per cycle.
- Instantaneous load current continuously displayed.
- Pilot resistance continuously displayed.
- Fault and Trip display.
- Local or remote start operation auto selected.
- Undercurrent for fan or pump control.
- PLC, Mine monitoring system compatibility.
- Remote setting/resetting of module via communications port DMC.
- All Settings visible from the screen continuously.
- Fault diagnostics.
- Security coded program modifications.
- Local and/or remote LCD screen with 5 function buttons.
- Fan interlock selectable feature.
- Module status available at remote locations via the RS485 port.

- All functions plug in and are replaceable.
- Plug in module for ease of replacement.
- Cost effective rugged and very reliable.

- Approved and certified for use in hazardous areas of a coal mine.

* Features are AS2081 compliant.

Ordering Information

CPM1-Plus -	A00531
Remote Display -	A00487



CPM1-Plus

CPM1-Plus Specifications

Earth Leakage

- 50 to 500mA adjustable
- 50 to 500ms adjustable

Earth Continuity

- 45 Ohms max

Remote/Pilot Control

- 0 - 45 Ohm pickup
- 145 Ohm drop out
- Start resistor value 100 Ohm

Earth Fault Lockout

- 10K Ohms for 1000V
- 1M Ohm Smart Barrier systems

Frozen Contactor/Loss of Vacuum

- Less than 25VAC

Overload

- 1 to 995Amps adjustable
- 25 time curves selectable

Short Circuit

- 4 to 5000Amp adjustable
- 7 to 12mSecs @ 300% setting

Motor Start Current

- 4 to 5000Amp adaptive

Power Supply

- Standard 110V AC 40/50 and 50/60Hz
- Optional 240V AC 40/50 and 50/60Hz

Output Current Rating (Standard)

- DR1 1xN/O 5Amp @ 240V AC
 - DR2 1xC/O 5Amp @ 240V AC
 - DR3 1xC/O 5Amp @ 240V AC
 - SSR 1xN/O 5Amp @ 240V AC
- Max contact loading - 100VA

Fault Rating CTs

- 60KA - 1 second
- 20KA - 3 seconds
- 11KA - 11 seconds

Material

- Powder coated steel construction

Module Size

- 240mm x 115mm x 160mm deep
- In base 300mm x 165mm x 160mm deep
- Remote LCD Screen - IP65 with flange gasket.
- Dims: 96mm x 96mm x 100mm deep
70mm behind panel
- Cut out 92mm x 92mm for fascia mount

Accessories

- Module Test Unit to test each function and permit programming changes.
- Pilot Protection Unit guarding against spikes on the pilot wire
- Remote screen

Approvals/Conformances

AUS Ex 3310X

MDA EXib 1842

MDA Exib R11242

QMD 87 6586XU

Compliances:

AS 2081; 12340 1988

Bramco Contacts

25 Metro Court
Gateshead, NSW 2290
AUSTRALIA

Telephone +61 2 4014 4444
Email sales@bramcogroupaustralia.com.au
www.bramcogroupaustralia.com.au

