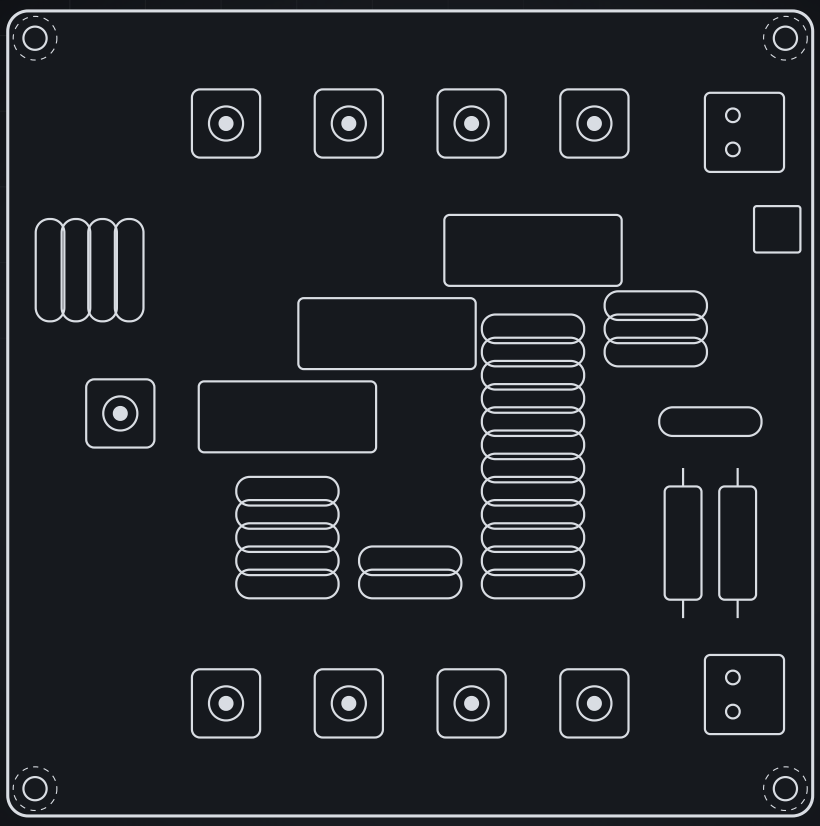
Surge Buster

Lightning Protection Module for the CoolPro



50 kA
Rating, 8/20 µs

500 J
Energy absorption

26 MOVs
4.5 kA each

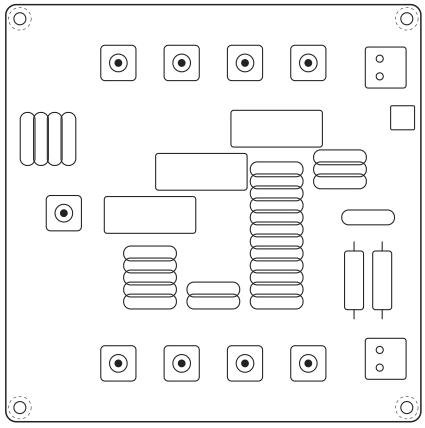
85 V
Max working voltage

Specifications

The Surge Buster is a lightning protection module for the AERL CoolPro cathodic converter. Its twenty-six 4.5 kA metal oxide varistors (MOVs) give common-mode and differential surge protection on the CoolPro's input, output and local cabinet earth, with a rated output capability of 50 kA (8/20 µs). It also protects the interrupt control and reference cell connections.

When it is required

The Surge Buster is required only in lightning-prone applications: pipelines or structures longer than 100 metres or higher than 10 metres. There, install the CoolPro with an AERL Surge Buster to supplement its on-board surge protection; lightning damage to a CoolPro installed in such an application without one is not covered by the warranty. Elsewhere the Surge Buster is optional.



Illustrative top view, not to scale. Safe side at the top, surge side at the bottom.

Surge ratings

Output current, 8/20 µs	**50,000 A**
Energy absorption, 8/20 µs	**500 J**
Energy absorption, 10/1000 µs	**230 J**
Varistors	**26 × 4.5 kA MOVs**
Protection	**Common-mode and differential**
Maximum working voltage	**85 V**

Current and energy ratings are non-repetitive.

Ordering

Part number	**SURGE-BUSTER**
Warranty	**2 years**

Connections

Surge side	**DC supply input, anode (ground bed), cathode (structure)**
Safe side	**CoolPro input and output**
Earth	**To the cabinet chassis**
Power terminals	**M5 screw**
Interrupt input	**Opto-isolated, 8–30 Vdc, to Link On/Off**

Mechanical

Construction	**Bare PCB, mount in an enclosure**

Installation

- Wire as the CoolPro manual's wiring diagram
- Protect the bare board from moisture and vermin
- Output circuit breaker or fuse not recommended
- Connect the earth terminal to the cabinet chassis
- Route cables downwards, away from the board
- Interrupt sequencer: 8–30 Vdc input

AERL reserves the right to change any product, product specifications and data without notice to improve reliability, function, or design or otherwise.

Manufactured by

Australian Energy Research Laboratories
1/75 Bluestone Circuit, Seventeen Mile Rocks
QLD 4073

Origin and warranty

Australian made
2-year warranty

Contact

sales@aerl.com.au
1800 950 865
aerl.com.au