

DIESEL FIRE PUMP CONTROLLER

SKU: FCA-DP-12V-MK2 & FCA-DP-24V-MK2

Built for Protection. Engineered for Compliance. Trusted When It Matters.

The Guardian range of Diesel Fire Pump Controllers delivers enhanced protection, reliability, and ease of operation for critical fire pump systems, ensuring compliance with **AS 2941:2013** and **AS/NZS 3000:2018**.

The latest MK2 design incorporates **dual PLCs operating in a master-slave configuration**, providing an additional layer of redundancy across both control and monitoring functions. This architecture is further reinforced by a SIL-designed start circuit utilising IEC-certified safety relays, with dual-layer redundancy and **continuous self-monitoring** to ensure system availability.

In the event of controller failure, the **system falls back to automatic hardwired pressure switch control**, ensuring continued pump operation independent of the PLC platform.

Integrated anti-surge protection, EMC filtering, and an advanced dual PLC-based control platform position the Guardian as the most robust and technically advanced diesel fire pump controller available in its class.



SPECIFICATIONS

MECHANICAL

- IP65-rated 2 mm galvanised steel enclosure, powder-coated RAL3020 (Traffic Red)
- Removable solenoid shroud for ease of access and wiring
- Dimensions – 565W × 640H × 200D mm

ELECTRICAL

- Required incoming supply – 240 VAC, 16 A (RCBO not permitted)
- 12 V or 24 V DC battery input (model dependent)
- 12 V or 24 V DC output for external bell and strobe circuits
- 24 V DC powered outputs for Power On, Pump Run, and Fault
- 7 × volt-free outputs as standard (3 assignable)

KEY FEATURES

- Integrated functionality for Soft Start and VSD systems, enabled via single-touch activation
- Dual PLC architecture (master-slave configuration) providing redundant control and continuous monitoring
 - Fallback to automatic hardwired pressure switch control in the event of complete controller failure
- SIL-designed start circuit utilising IEC-certified safety relays. The controller performs continuous self-diagnostic checks and can detect start system faults, including pressure switch disconnection or start circuit failure, providing both alarm indication and on-screen notification
- Integrated anti-surge protection and EMC filtering as standard, protecting critical control circuits from transient spikes and electrical interference
- High-quality Mean Well battery chargers and power supply providing protection against short circuit, overload, over-voltage, and reverse polarity, while delivering 4 kV galvanic isolation between control and battery circuits
- Large 7" permanently illuminated HMI displaying all required operational information on a single screen in accordance with AS 2941:2013
- Integrated VNC capability for both local and full remote monitoring (requires local network connection)
- Advanced trend logging and downloadable event logs
- Modbus TCP/IP and Ethernet/IP communication for site connection