

ELECTRONIC OVERLOAD - WITH INNER DOOR

MATElec Australia's highly popular Standard Range of pump controllers are designed to control one or two pumps, featuring a keypad interface and control module with dipswitches for configuring the controller to suit various level and pressure control applications. Housed in robust powder coated metal enclosures, the Electronic Overload version utilises a control module with built in electronic overload to suit a wider range of single phase pump sizes. With the controls mounted on an inner door, the inner door version is suited to outdoor applications where the controller will be exposed to the weather.



HARDWARE FEATURES

Enclosure:

- IP56 rated, powder coated mild steel enclosure with inner door and removable gland plate

Protection:

- Pad-lockable mains power isolator switch
- Low voltage control and input circuitry
- Individual pump isolation
- Wide range electronic overload protection of pumps, built into PCB
- Electronic short and overload protection of strobe & buzzer
- Din rail mounted terminal connections

Control & interface:

- Single or dual pump keypad interface:
 - Indicator lights for power on, level alarm, pump run and fault
 - Push buttons for alarm mute/reset, pump auto/off/manual control
- PCB control module with dipswitches for adjusting configuration
- Visual (strobe) and mutable audible (buzzer) alarms

Inputs:

- Single phase (230Vac) power supply
- 4x digital 12Vdc inputs for float or pressure switches, optional low flow switch
- Digital 12Vdc input for additional external mute button
- Standard terminal setup: Low level, pump stop, pump start and high level float switches

Outputs:

- 1 or 2x pump supply outputs
- BMS volt free output for common fault

COMMON APPLICATIONS

- Submersible sewage
- Submersible stormwater
- Pressure boosting

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FUNCTION FEATURES

- **High level alarm delay** - Avoids nuisance alarms caused by water level oscillation
- **Smart chirp mode alarms** - Alarms automatically silence after 5 minutes if not muted, then chirp every 5 minutes
- **Manual control** - Manual pump mode with optional 5 minute timeout to revert back to auto mode
- **Duty sharing and alternation** - Duty pump alternates on pump start and after 30 minutes of continuous running in alternation mode, or after 6 hours of accumulated running in circulation mode (dual pump versions)
- **Pump staging and destaging** - Second pump is staged into operation on high level float or lag pump pressure switch closing and destaged when no longer required (dual pump versions)
- **Staggered pump start** - Prevents excessive current draw and reduces water surge (dual pump versions)
- **Level control mode** - Pump out operation controlled by pump stop, pump start and high level float switches
- **Maintain minimum level** - Ensures minimum tank level is maintained if pump does not run for 4 hours, and pump stop input is closed
- **Pressure control mode** - Pressure boost operation controlled by lead pump, lag pump (dual pump versions) and low pressure switches

FAULT PROTECTION

- **Pump overload protection** - Shuts down pumps on overload, with automatic duty alternation (dual pump versions)
- **Pump anti-seize protection** - Runs pumps periodically during low use to prevent seizing
- **High level alarm** - Can be configured with 15 minute delay and auto reset for stormwater applications, or 5 minute delay and manual alarm reset only for sewage applications
- **Low level alarm** - Locks out pumps until manually reset, to prevent dry running
- **Low flow/prime loss protection** - Activates if a pump is running but there is no flow for 2 minutes (if using flow switch in input 1 instead of low level float switch)
- **Low pressure alarm** - Shuts down pumps if low pressure input closes for 60 seconds

STANDARD PUMP CONTROLLERS - ELECTRONIC OVERLOAD - WITH INNER DOOR

Code	No of Pumps	Phase / Voltage	Overload Rating	Enclosure Size
FPC-15005-LR	1	1 Phase / 230Vac	0.1 - 6 Amp	400x300x200mm
FPC-15005-HR	1	1 Phase / 230Vac	5 - 16 Amp	400x300x200mm
FPC-30024	2	1 Phase / 230Vac	0.1 - 6 Amp	400x300x200mm
FPC-30026	2	1 Phase / 230Vac	5 - 16 Amp	400x300x200mm

OPTIONAL MODIFICATIONS

- Max pump run time protection
- 316 stainless steel enclosure