

KELCO

F60 MK3 Pump Controller

SIMPLE TO USE AND VERY POWERFUL
THE ULTIMATE IN VERSATILE & FLEXIBLE PUMP CONTROL

Features

- Very simple to program
- Multi voltage operation
- Displays pressure and set points
- 15 Programmable timers built in
- Powerful 40 Amp solid state drive
- Dedicated alarm relay
- Detachable electrical housing
- 20 Bar 290 psi Pressure rating
- Suits pipes 25mm (1") & Larger
- Accepts remote input
- Weatherproof Housing



The F60 MK3 Digital Pump Controllers monitor system pressure and flow to ensure complete pump protection. It can be set to control a single or dual pump system, with a wide range of functions.

Further information including installation guides, programming guides and videos can be found on our website:
<https://www.kelco.com.au/f60-mk3-advanced-pump-controller/>

3-Phase Pump Motors

The F60 MK3 can be used to control both single and 3-phase pumps provided a 220~240 VAC or 24VAC supply is available at the installation site.

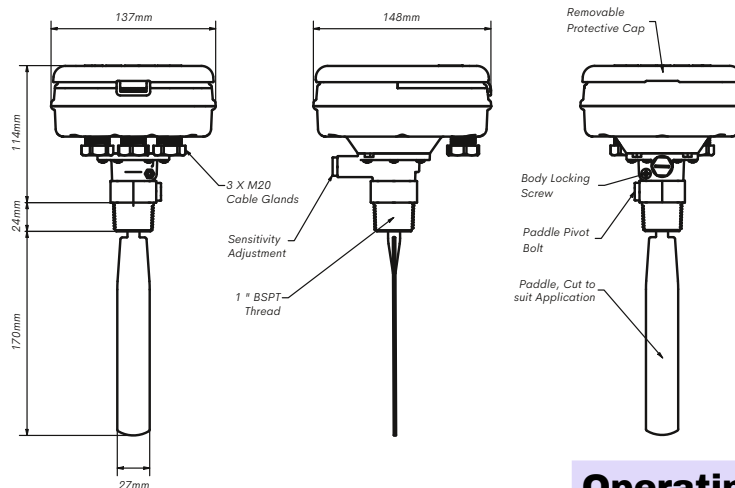
Ordering

The F60 MK3 Digital Pump Controller is available in all thermoplastic construction with a 1" BSP process connection. The standard controller can operate from 220 ~ 240 VAC or from 24 VAC or DC. A dedicated 12 VDC model is also available.

| Model Number | Description |
|--------------|--|
| F60 MK3 | Standard model for 220 ~ 240 VAC and 24V AC or 24V DC operation. |
| F60-12-MK3 | Low voltage model for 12V DC operation only. |

F60 SERIES DATA

Dimensions



Functions

The F60 MK3 includes 5 unique operating modes each with a wide range of options. The table below sets out the functions and the modes they operate under.

| MODES OF OPERATION | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Functions (# Settable) | | | | | |
| # Select pressure units kPa or psi | Y | Y | Y | Y | Y |
| # Pre-start delay timer. | Y | Y | Y | Y | Y |
| # Start-up timer | Y | Y | Y | Y | Y |
| # Pressure Timer (Allows time for the pressure to rise) | | | | Y | |
| # Run-on timer | Y | Y | Y | Y | Y |
| # Pressure dip timer | | | | Y | Y |
| # Delayed restarting timer | Y | Y | Y | Y | Y |
| # Starting pressure | | Y | Y | Y | Y |
| # Stopping pressure | | | Y | Y | Y |
| # Cyclic running and stopping timers | Y | Y | | Y | |
| # Auto restart if run dry. Single or repeatable tries | | Y | Y | Y | |
| # Anti-cycling | Y | Y | Y | | |
| # Burst pipe detection | Y | Y | Y | | |
| # Leak detector | | | Y | | |
| # Dual pump control with or without dual flow sensing | | | | | Y |
| # Starts the pump at a preset low pressure | | Y | Y | | Y |
| # Stops the pump at a preset high pressure | | | Y | Y | Y |
| Stops the pump if flow stops | Y | Y | Y | Y | Y |
| Displays the system pressure in preferred units | Y | Y | Y | Y | Y |
| Displays the high & low pressure set points | | | Y | Y | |
| Can start the pump using an external switch | Y | Y | Y | Y | Y |
| Starts & stops the pump on flow regardless of pressure | Y | | | | |
| Displays the total time the pump ran in minutes | | | | Y | |
| On a fault, displays the reason the pump was shut down | Y | Y | Y | Y | Y |
| Remote stop via an external switch opening its contacts | Y | Y | Y | Y | Y |
| Stops the pump if flow stops. | Y | Y | Y | Y | Y |
| Loss of prime protection for the pump(s). | Y | Y | Y | Y | Y |

Serviceability

The F60 MK3 digital pump controller is not user serviceable. However, spare parts are available from Kelco Engineering or from your distributor.

Operating Limitations

| Operating Range | |
|--|---|
| Ambient Temperature Range | 1°C to 50°C |
| Liquid Temperature Range | 1°C to 60°C |
| Ingress Protection Rating | IP64 |
| Pre-Start Delay Timer (In all modes) | Adjustable from 1 second to 18 hours in 1 second increments |
| Start-Up Timer (In all modes) | Adjustable from 1 second to 15 minutes in 1 second increments |
| Pressure Rise Timer (In Mode 4 only) | Adjustable from 1 second to 15 minutes in 1 second increments |
| Run-On Timer (In all modes) | Adjustable from 1 second to 15 minutes in 1 second increments |
| Pressure Dip Timer (In modes 4 only) | Adjustable from 1 second to 4 minutes in 1 second increments |
| Delayed Restarting (In modes 1 to 3 only) | Adjustable from 1 minute to 99 hours 59 minutes in 1 minute increments |
| Cyclic Running & Stopping (In all modes) | Running and stopping times both adjustable from 2 minutes to 99 hours 59 minutes in 1 minute increments |
| Auto Restart if Run Dry (In all modes) | Adjustable from 1 minute to 99 hours 59 minutes in 1 minute increments |
| Anti Cycling (In modes 1 to 3 only) | Adjustable from 1 motor start per hour to 1800 motor starts per hour |
| Burst Pipe Detector (In mode 3 only) | Adjustable from 1 minute to 99 hours 59 minutes in 1 minute increments |
| Maximum Operating Pressure Static or Dynamic | 20 Bars 290 psi |
| Minimum Burst Pressure | > 25 Bars 360 psi |
| Starting Pressure Range | 0 to 2000 kPa or 0 to 290 psi in steps of 1 kPa or 1 psi |
| Stopping Pressure Range | 0 to 2000 kPa or 0 to 290 psi in steps of 1 kPa or 1 psi |
| Minimum Pressure Differential On to Off, and Off to On | 1 kPa or 1 psi |
| Recommended Pipe Size | 25 mm 1" or larger. (There is no upper limit) |

Electrical Data

| | |
|---|--|
| Supply voltage (Standard model) | 220 to 250 VAC or 18 to 25 VAC or DC (Multi Voltage Input) |
| Supply voltage (12VDC model) | 11 to 14 VDC - 65mA Current Draw |
| Maximum motor load (all models) | Single phase motors up to 2.4kW maximum at 240VAC (P1) 3-phase motors of all sizes via a suitable interposing contactor, no maximum motor size applies when using an interposing contactor |
| Relay 1 Normally Open contact rating when HD terminal is NOT used | 10 Amps at 240 VAC resistive |
| Relay 1 Normally Closed contact rating | 3.5 Amps at 240 VAC resistive |
| Relay 2 Normally Open contacts | 3.5 Amps at 240 VAC resistive |

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