

KELCO

E30 MK2 Digital Pressure Controller

Features

- 4 pressure switches in 1
- Very Simple to Program
- Multi Voltage Operation
- Displays Pressure and Set Points
- Displays Running Time
- Powerful 40 Amp Solid State Drive
- Dedicated 16 Amp Alarm Relay
- Detachable Electrical Housing
- 20 Bar 290 PSI Pressure Rating
- Wall Mounting Kit Included
- Accepts 2 Remote Inputs
- Weatherproof Housing

Outline

The E30 MK2 Digital pressure switch can be configured to operate in one of 4 ways :

- Loss of Prime Pressure Switch
- Pressure Guard for high and low protection
- Single Point Snap Action Pressure Switch
- Dual Pump Controller



Further Information

Further information including installation guides, programming guides and videos can be found at the following web page:

<http://www.kelco.com.au/e30-digital-pressure-switch>

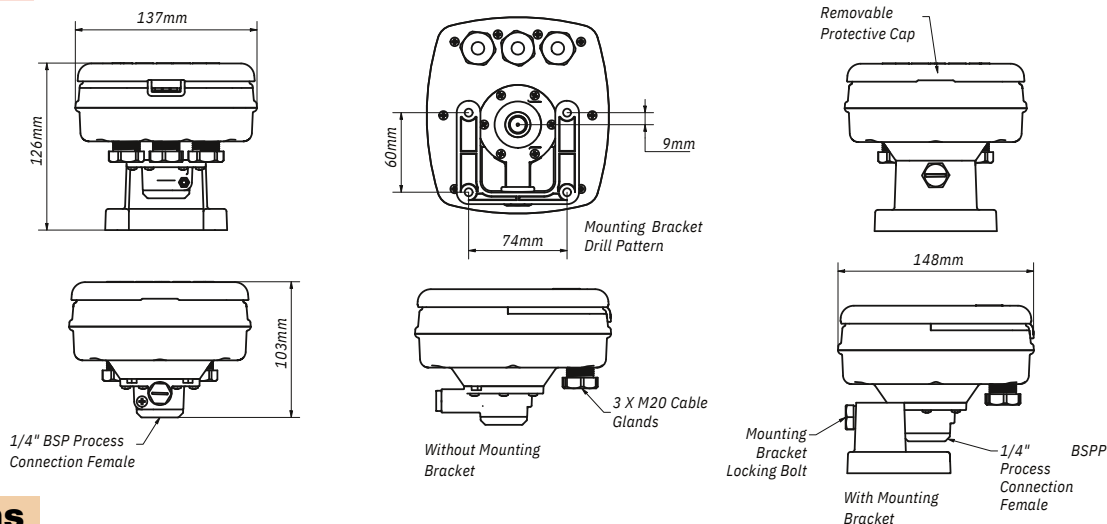
Ordering

| Model Number | Description |
|--------------|--|
| E30-MK2 | Standard model for 220 ~ 240VAC or 24VAC or 24VDC operation. |
| E30-12-MK2 | Low voltage model for 12VDC operation only. |

The E30 MK2 Digital Pressure Switch is available in thermoplastic and DR brass construction with a 1/4" BSPF process connection. The E30-MK2 can operate from 220 ~ 240VAC or from 24VAC or DC. A dedicated 12VDC model is also available.

E30 MK2 DATA

Dimensions



Functions

The E30 MK2 Digital Pressure Switch includes 16 unique functions and 4 operating modes. The table below sets out the functions and the modes they operate under.

| Mode | 1 | 2 | 3 | 4 |
|--|---|---|---|---|
| Functions (# User Settable) | | | | |
| # Selectable pressure units kPa or psi | Y | Y | Y | Y |
| # Start-up timer, fully adjustable and self terminating | Y | Y | Y | Y |
| # Run-on timer, fully adjustable and self terminating | Y | Y | Y | |
| # Delayed re-starting timer, once stopped delays the restart | Y | | | |
| # Batch control, set a specific run time for the pump | Y | | | |
| # Auto restart if run dry, both single and multiple attempts | Y | | | |
| # Trip pressure, fully adjustable and can be turned on or off | Y | Y | | Y |
| # Snap pressure, allows the setting of a single switch point | | | Y | |
| # Snap pressure switching differential (delta pressure) | | | Y | |
| # Starting pressure, fully adjustable and can be turned off | Y | Y | | Y |
| # Stopping pressure, fully adjustable and can be turned off | Y | Y | | Y |
| # Anti-cycling controls the number of motor starts per hour | Y | | Y | |
| # Anti-cycling sensitivity control to avoid nuisance tripping | Y | | | |
| # Start the pump at a preset low pressure | Y | Y | Y | Y |
| # Stop the pump at a preset high pressure | Y | Y | Y | Y |
| # User can configure the E30's output to be relay 1 or relay 2 | | | Y | Y |
| # User can configure the E30's output relay to be NO or NC | | | Y | |
| # Start & stop a pump using an external low voltage switch | Y | Y | Y | Y |
| Displays the system's pressure in preferred units, kPa or psi | Y | Y | Y | Y |
| Displays the high & low pressure set points in preferred units | Y | Y | | |
| Displays the snap pressure point in preferred units | | | Y | |
| Displays a warning if you enter incorrect pressure settings | Y | Y | | Y |
| Displays the reasons for faults and alarms on its LCD screen | Y | Y | Y | Y |
| Over pressure alarm automatically invoked at 22 Bars | Y | Y | Y | Y |
| # Alarm relay can be set to close on 7 selectable normal or fault conditions | Y | Y | Y | |

Serviceability

The E30 MK2 digital pressure switch is not user serviceable. However, spare parts are available from Kelco Engineering or from your distributor.

3 Phase Pumping Systems

The E30 MK2 can be used to control both single and 3-phase pumps provided a 220~240VAC or 24VAC supply is available at the installation site.

Operating Limitations

| | |
|--|--|
| Ambient temperature range | 1°C to 50°C |
| Liquid temperature range | 1°C to 60°C |
| Ingress protection rating | IP64 |
| Start-up timer | Adjustable from 1 second to 4 minutes in 1 second increments |
| Run-on timer | Adjustable from 1 second to 15 minutes in 1 second increments. |
| Batch controller | Adjustable from 1 minute to 99 Hours 59 minutes in 1 minute increments. |
| Delayed restarting | Adjustable from 1 minute to 99 Hours 59 minutes in 1 minute increments. |
| Anti-cycling | Adjustable from 1 motor start per hour to 1800 starts per hour. |
| Anti-cycling sensitivity adjustment | Adjustable from 2 to 50 sequential starts |
| Run dry auto restart settable to single or repeated attempts | Adjustable from 1 minute to 99 Hours and 59 minutes in 1 minute increments. |
| Maximum operating pressure (static or dynamic) | 20 Bars 290 psi. |
| Minimum burst pressure, all models | > 30 Bars 435 psi |
| Trip pressure range | Adjustable from 0 to 2000 kPa or 0 to 290 psi in increments of 1 kPa or 1 psi. |
| Snap pressure range, Mode 3 only | Adjustable from 1 to 2000 kPa or 1 to 290 psi in increments of 1 kPa or 1 psi. |
| Snap pressure differential, Mode 3 only | Adjustable from 7 to 140 kPa or 1 to 20 psi in increments of 7 kPa or 1 psi |
| Starting pressure range | Adjustable from 0 to 2000 kPa or 0 to 290 psi in increments of 1 kPa or 1 psi. |
| Stopping pressure range | Adjustable from 0 to 2000 kPa or 0 to 290 psi in increments of 1 kPa or 1 psi. |
| Minimum pressure differential On to Off or Off to On, Modes 1 & 2 only | 1 kPa or 1 psi. Practical limit is nominally 7 kPa or 1 psi. |

Electrical Data

| | |
|-------------------------------|--|
| Supply Voltage Standard Model | 220 to 250VAC or 18 to 25VAC or DC (Multi Voltage Input) |
| Supply Voltage 12V DC Model | 11 to 14VDC |
| Maximum Motor Load all Models | Single phase motors up to 2.4kW maximum at 240VAC (P1). Three phase motors of all sizes via a suitable interposing contactor, no maximum motor size applies. |
| Relay 1 Contact Rating | 16 Amps at 240VAC resistive |
| Relay 2 Contact Rating | 16 Amps at 240VAC resistive |

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