

E30 DIGITAL PRESSURE SWITCH FOUR PRESSURE SWITCHES IN ONE

SIMPLE TO USE AND VERY POWERFUL

FEATURES

- 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 Remote Input
- IP67 Rated



OUTLINE

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

- Conventional Differential Pressure Switch
- Loss of Prime Pressure Switch
- Pressure Guard for high and low protection
- Single Point Snap Action Pressure Switch

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>

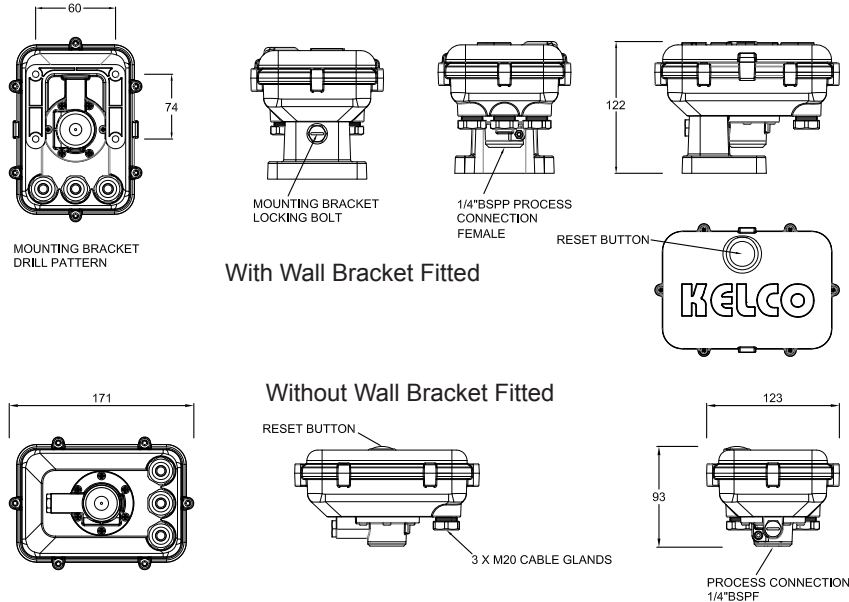
ORDERING

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

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

TECHNICAL DATA

DIMENSIONS



FUNCTIONS

The E30 Digital Pressure Switch includes 16 unique functions and 3 operating modes. The table below sets out the functions and the modes they operate under.

MODE	1	2	3
Functions (# User Settable)			
# Selectable pressure units kPa or psi	Y	Y	Y
# Start-up timer, fully adjustable and self terminating	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	
# 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	
# Stopping pressure, fully adjustable and can be turned off	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
# Stop the pump at a preset high pressure	Y	Y	Y
# User can configure the E30's output to be relay 1 or relay 2			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
Displays the system's pressure in preferred units, kPa or psi	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	
Displays the reasons for faults and alarms on its LCD screen	Y	Y	Y
Over pressure alarm automatically invoked at 22 Bars	Y	Y	Y
# Alarm relay can be set to close on 7 selectable normal or fault conditions	Y	Y	Y

SERVICEABILITY

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

LIMITATIONS

Ambient temperature range	1°C to 50°C
Liquid temperature range	1°C to 60°C
Ingress protection rating	IP67
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 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 and 2 only	1 kPa or 1 psi. Practical limit is nominally 7 kPa or 1 psi.
Automatic over pressure shut down	Fixed setting 2200 kPa 22 Bars 430 psi

ELECTRICAL

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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