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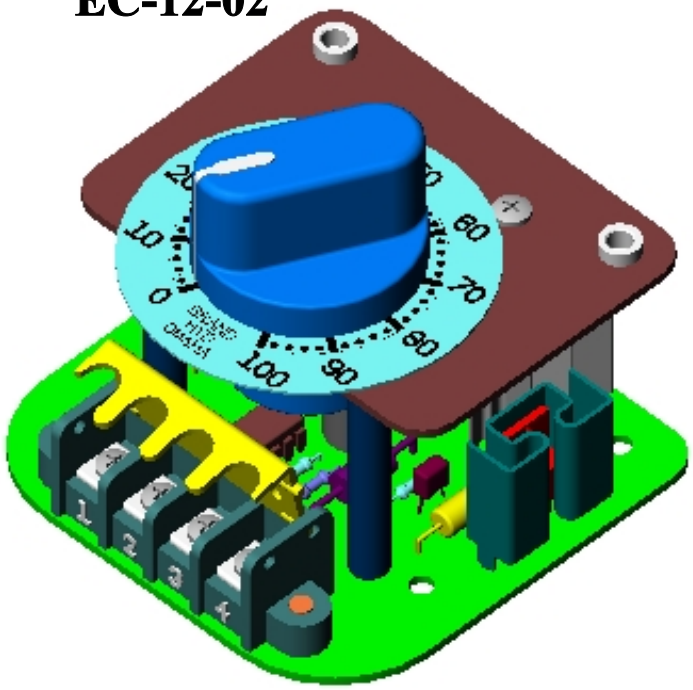
ISO 9001:2000 WITH DESIGN
Certificate #02.002.1

ELECTRONIC PANEL MOUNT CONTROL
EC-12-02



FEATURES:

- **L**IGHTWEIGHT IN **D**ESIGN to minimize panel fatigue.
- **S**MALL IN **S**IZE to minimize space requirements.
- **P**ULSE **W**IDTH **M**ODULATION **O**UTPUT to reduce the effects of hysteresis.
- **S**HORT **C**IRCUIT **P**ROTECTION to guard against over current conditions. (When wired to factory instructions)
- **S**MOOTH **R**AMP **T**HERMAL **O**VERLOAD **S**HUTDOWN to help protect against overheating. Input protection for transients, load dumps, 2-battery jumps, and reverse polarity hook-ups.
- **T**ERMINAL **B**LOCK **H**AS **P**RINTED **N**UMBERS AND A **H**INGE **C**OVER for easy wiring and accidental short circuit prevention.
- **O**PTIONAL **P**OWER **S**WITCH AND **F**USE can be installed separate from the control.
- **T**HE **C**IRCUIT **B**OARD IS **C**OATED WITH A **S**PECIAL **C**ONFORMAL **C**OATING to guard against moisture, dust and other contaminates.
- **O**NLY **T**HREE **S**MALL **H**OLES are required for mounting to panel.
- **F**OUR **P**REDRILLED **H**OLES may be used to surface mount to panel.

SPECIFICATIONS:

- **Supply Voltage: 12.70-18.00 VDC.**
- **Approximate Weight: 6.25 oz (178 g).**
- **Output Current: 1.5 amp Max. 1.0 amp Nominal.**
- **PWM Frequency: 100 hz Average.**
- **Efficiency: 92% @ 1.0 amp.**
- **Operating Temperature: -40° to 176°F (-40° to 80°C)**
- **Storage Temperature: -85° to 194°F (-65° to 90°C)**
- **Output Voltage: 12 VDC, regardless of input supply voltage between 12.70-18.00 VDC.**
- **Approximate volume required behind panel: 16 in^3**

MATERIALS:

- **All metal parts are stainless steel, anodized aluminum and zinc plated steel to help prevent corrosion.**
- **The control knob is a unique thermal plastic rubber that provides a soft grip with a contemporary look.**

EC – GENERAL INFORMATION:

The Brand, electronic panel mount control is designed to proportionally adjust the Brand EFC-Series valves and other proportional valves that meet the appropriate solenoid specifications. The panel mount control is designed to mount behind a control panel in an industrial setting, behind the dash panel of mobile equipment, or in any other mounting location.

The main control knob is used to linearly adjust the current going through the solenoid on the valve. A large knob and a single turn potentiometer with a large degree of rotation gives smooth and precise adjustments. The controller is Pulse Width Modulated (PWM), which helps reduce the effects of hysterisis.

Each controller produced is burned-in for 24 hours to assure the controller is operating properly and meets all specifications. There are also many other quality assurance procedures that our controllers go through before they are shipped. All tests are performed with up to date, state of the art test equipment that is calibrated to NIST standards by an independent laboratory on a yearly basis.

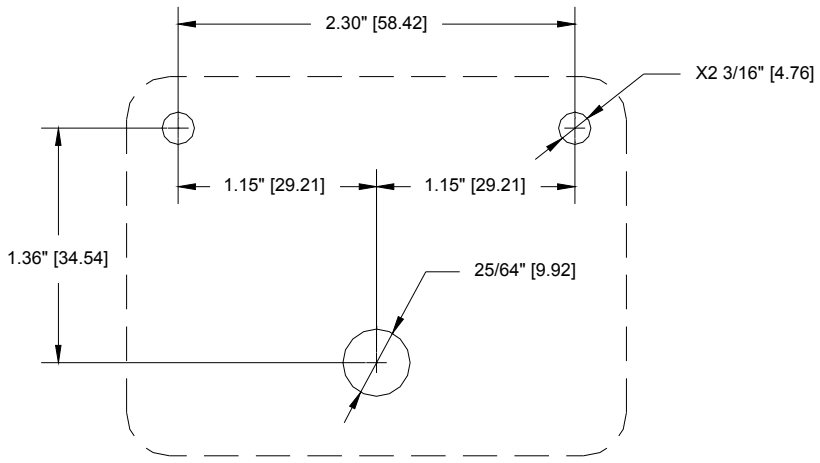
EC – COMPLETE LIST OF COMMON MODEL CODES:

EC-12-02…… Electronic panel mount.
EC-12-02S……..Electronic panel mount control with E1071 and E1130 installed

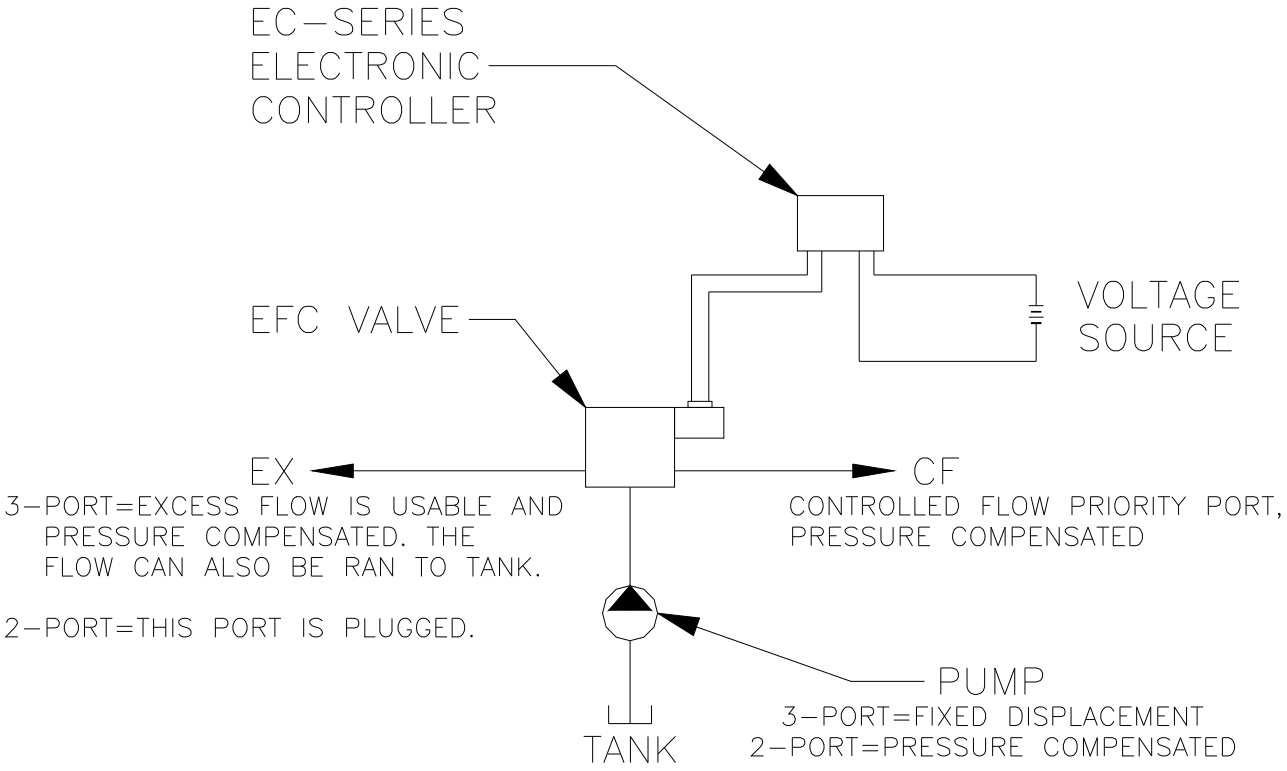
EC – COMPLETE LIST OF OPTIONS AND ACCESSORIES:

E1726…….. Fuse 1.5 amp.
E1758…….. Switch boot seal.
E1028…….. Surface mount standoff.
E1130……..…... Seal screw.
E1049…….. Panel mount fuse holder.
E1053…….. Red wire (16 awg).
E1054…….. Black wire (16 awg).
E1055…….. Blue wire (16 awg).
E1056…….. Power switch.
E1071…….. Potentiometer shaft seal.
EWP0018…….. Wall-mount power supply with 6 ft. cord.
E1130……..…. Pan head phillips seal screw 10-32 x 3/8”
WP001…….Female weather-pack (Packard part no. 12015792).
WP002…….Male weather-pack (Packard part no. 12010973).

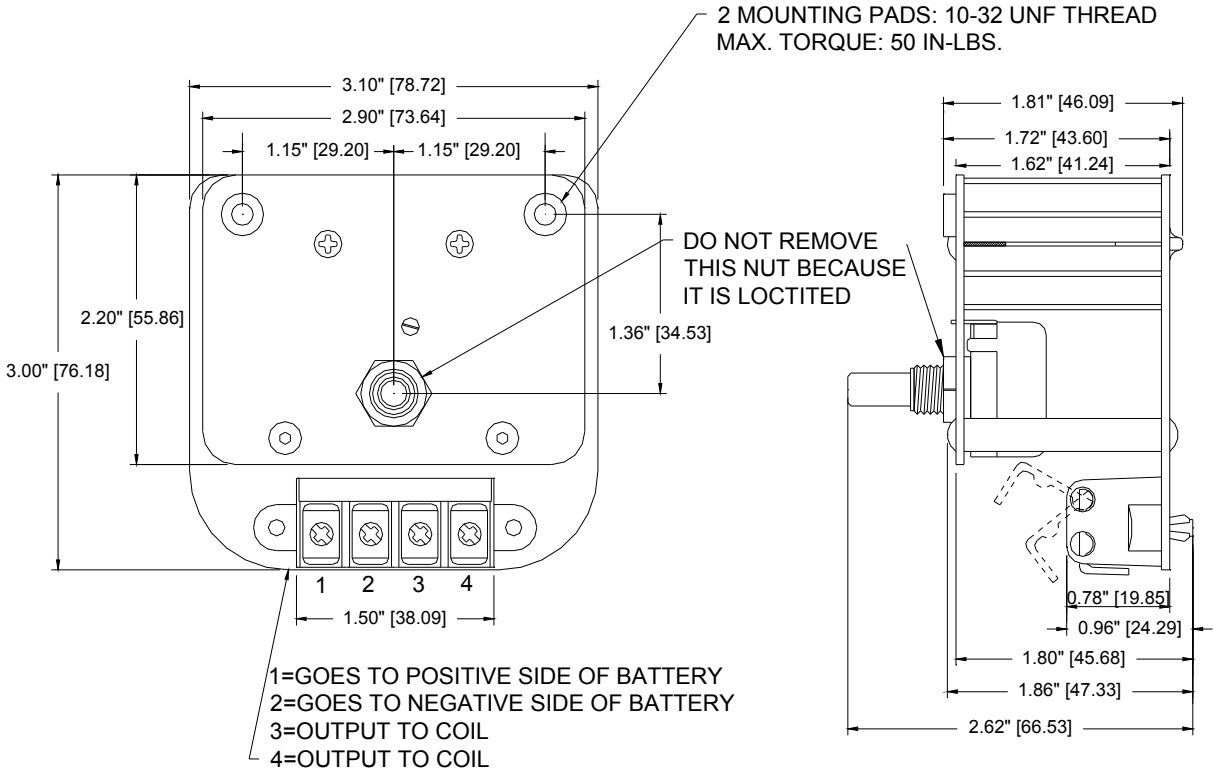
EC – MOUNTING HOLES TEMPLATE: inches & [millimeters]



EC/EFC – SERIES SCHEMATIC DRAWING:



DIMENSIONAL DATA: inches & [millimeters]



EC-12-02 WIRING DIAGRAM: