

CCRO

Constant Current Regulator Options- For REGD & REGW Units



Applications

The options described below apply to the Crouse-Hinds REGD and REGW constant current regulators (CCR's) listed in the catalog. Many options may be combined in one CCR. However, contact Crouse-Hinds when specifying multiple options to insure compatibility.

| Option Number | Description |
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| 11 | 48 VDC Control Voltage (Remote Source) The regulator control voltage is 48 VDC supplied by the user from a remote source. The source is typically a DC power supply but it may also be batteries. This option replaces the standard internal 120 VAC supply. |
| 16 | 48 VDC Control Voltage (Internal Source) The regulator control voltage is 48 VDC supplied by a built-in power supply. No separate power supply in the tower is required. Using individual power supplies for each regulator lessens the possibility of control system failure than when using a single central source. This option replaces the standard internal 120 VAC supply. |
| 21 | On/Off Output Current Monitor Also called simple remote back indication, this option supplies a set of dry contacts for remote monitoring of the output current. It provides a positive signal to the tower that the constant current regulator is really "on", that is, there is current output to the circuit. |
| 22 | Individual Step Output Current Monitor This option is remote back indication for the individual brightness steps of the constant current regulator. It provides a positive signal to the tower that the constant current regulator is really "on" at the commanded step, that is, there is current output to the circuit. There are five (5) normally open contacts for brightness step indication and one (1) normally open contact that monitors two fault conditions: overcurrent and open circuit. |
| 23T | Computer Interface This option is used only for FAA L-828 regulators and provides sets of dry contacts for remote status monitoring. There are two (2) normally open / normally closed Form C contacts to monitor: local or remote status; and regulator input power indication. (This option provides potential and current transformers and related items for a CROUSE-HINDS computerized control system). |
| 31 | Lamp Failure Detector (829X0 only) This option is used only for FAA L-829 regulators and provides additional eight (8) dry contacts for remote indication from zero to eight (8) individual failed airfield lighting lamps. |
| 33 | Earth Leakage / Ground Fault Detector Cable insulation resistance is based on soil conditions, cable length and age, and other variables. This option will display a relative percentage leakage value. This option may also substitute for periodic circuit megger readings and provides programmable ground fault detection with two (2) levels of remote alarm via dry contacts. Readings are requested using the keypad and appear on the CCR digital display. The installer calibrates the CCR to the 100% value (zero ohms) by shorting one output terminal to ground. When first connected to the circuit, the initial reading represents the existing leakage (typically less than 20%). Record that initial percentage value P1 as the baseline and measure future percentage P2 readings relative to it. Megger the circuit the first time and record that value as M1. Future megger readings M2 are performed by reading P2 and using the following formula: |

$$M2 = M1 (P1 \div P2) \quad 100\% = 0 \text{ ohms}$$

$$P1 = \text{Initial \% reading} \quad M1 = \text{Initial megger} \quad P2 = \text{Today's \% reading} \quad M2 = \text{Today's megger}$$

The user determines and sets the two (2) percentage alarm levels.

| Option Number | Description |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 41 | Digital Display of Line Voltage & Current Displays on one (1) meter the regulator's input line volts and amps. |
| 42 | Digital Display of Line Voltage, Line Current & Load Voltage Combines the functions of options 41 and 44 using two (2) meters. |
| 43 | Digital Display of Line Voltage Displays on one (1) meter the regulator's input line volts. |
| 44 | Digital Display of Load Voltage Displays on one (1) meter the regulator's output series circuit volts. |
| 62 | Discrete Status Indication (829X0 only) This option is used only for FAA L-829 regulators and provides seven (7) dry contacts for remote status monitoring of the L-829 functions. Without this option, the L-829 alarms are indicated only by a single global alarm signal locally at the regulator. |
| 63T | Digitrac Computer Interface Integrated Digitrac Unit that provides full CCR control and L-827/L-829 monitoring, as described below, to a Crouse-Hinds Airfield Lighting Control System. <ul style="list-style-type: none"> 1) Loss of input power to the CCR. 2) CCR shutdown by open-circuit/over-current protective devices. 3) Drop of more than 10% in the CCR VA load. 4) Failure of the CCR to deliver the selected output current. 5) The number of burnt-out lamps in each series circuit. 6) CCR status (local or remote control). 7) The actual CCR output current. 8) The actual CCR output voltage. 9) The actual CCR output load (wattage). 10) The status of the computer-controlled interposing relays that activate the CCR (commanded brightness acknowledge). |
| 94 | Primary Switch. 2 Poles The standard primary switch for 2400V input power is made for a Wye configuration, which consists of (1) 2400V line and (1) neutral. This Option provides a primary switch for a Delta configuration, which consists of (2) 1200V lines. |
| S-486 | Integrated Megatrac – REGD Large Dry (pages 4.16 & 4.17) Integrated Megatrac Unit that monitors and displays the insulation resistance to ground of the airfield lighting series circuit. The Megatrac Unit also provides a warning and/or alarm when the cable's insulation resistance measurement falls below customer selectable thresholds |
| S-548 | Integrated Megatrac – REGD Small Dry (pages 4.14 & 4.15) Integrated Megatrac Unit that monitors and displays the insulation resistance to ground of the airfield lighting series circuit. The Megatrac Unit also provides a warning and/or alarm when the cable's insulation resistance measurement falls below customer selectable thresholds |

Note: Where applicable, the contacts provided for external remote indication are limited to two (2) amps resistive load. The external wiring and indicators are not supplied by Crouse-Hinds. Improper external wiring voids the regulator warranty.

