

L-828/L-829 Hevi-Duty Replacement Constant Current Regulators



Compliance

- Certified L-828/L-829: FAA AC 150/5345-10H
- Monitoring according to FAA AC 150/5345-10H

Applications

Our state-of-the-art constant current regulators (CCRs) are a drop-in replacement for aged out Hevi-Duty CCRs. Our cabinets are built for an exact replacement of existing Hevi-Duty CCRs. No modifications are needed; just pull out the old CCR, install the new one, and power up the airfield lighting. The conduit entrance of the new CCR matches the old CCR, so existing cables are easily connected.

Our CCRs are designed and manufactured in accordance with FAA AC 150/5345-10H. The CCRs are built and evaluated by a company with over 60 years of manufacturing experience in the airport and heliport lighting field.

Features

- Microprocessor control for reliable current regulation
- Proven technology for airfield lighting
- Reliable for long life with low life cycle cost
- Exceeds FAA performance requirements
- Durable for various electrical vault environments
- Versatile for medium and/or high intensity lighting
- Self-protected from overloads and shorts of loads
- Noise emission free
- Air cooled (dry type) - no hazardous oil cooling materials
- No harmful harmonics
- No SCRs in series power circuits
- Option rich for remote control, megger meter, etc.
- Easily maintained - only one control board
- Control circuit for remote operation of #19 AWG 10,000 ft. round-trip
- Control circuits protected by circuit breakers; no spare fuses needed
- Compatible with existing and new control systems
- Warranty for 2 years from date of shipment or 1 year from date of installation (first occurring)



Microprocessor control for reliable current regulation

Constant Current Regulator Catalog Numbers FAA AC150/5345-10H CERTIFIED

FAA L-828 Regulators

Description	Catalog No.	KW	Class	Style
Ferromagnetic Reactor	MG02L8283B-HD	2	1	1
Saturable Type	MG02L8285B-HD	2	1	2
(Air Cooled)	MG04L8283B-HD	4	1	1
	MG04L8285B-HD	4	1	2
	MG07L8283B-HD	7.5	1	1
	MG07L8285B-HD	7.5	1	2
	MG10L8283B-HD	10	1	1
	MG10L8285B-HD	10	1	2
	MG15L8283B-HD	15	1	1
	MG15L8285B-HD	15	1	2
	MG20L8283B-HD	20	1	1
	MG20L8285B-HD	20	1	2
	MG25L8283B-HD	25	1	1
	MG25L8285B-HD	25	1	2
	MG30L8283B-HD	30	1	1
	MG30L8285B-HD	30	1	2
	MG30L82820-HD	30	2	2
	MG50L82820-HD	50	2	2

** = 01 for 208 volt 60 hertz input
 ** = 02 for 240 volt 60 hertz input
 ** = 03 for 480 volt 60 hertz input
 ** = 04V for 2400 volt 60 hertz input

Class 1 = 6.6 Amp
 Class 2 = 20 Amp
 Style 1 = 3 step
 Style 2 = 5 step

First two digits of supply volts for special input voltage followed by first digit of hertz. Example: 380volt 50 hertz = suffix-385

HD = Hevi-Duty Replacement
 FAA L-829 Regulators with L-827 Monitor change Catalog No. "L828" to "L829"

FAA L-827 MONITOR

Description	Catalog No.*	Class	Style*
For 2 & 4KW Regulator	MGML8273B-01	1	1
For 7.5KW Regulator	MGML8273B-02	1	1
For 10KW Regulator	MGML8273B-03	1	1
For 15KW Regulator	MGML8273B-04	1	1
For 20KW Regulator	MGML8273B-05	1	1
For 25 & 30KW Regulator	MGML8273B-06	1	1
For 25 & 30KW Regulator	MGML8275B-07	2	2
For 50KW Regulator	MGML8275B-08	2	2

REMARKS - For adding to 3 step regulator
 *For Style 2, 5 Step Regulator, change 3B to 5B in Catalog No.

CONSTANT CURRENT REGULATOR OPTIONAL EQUIPMENT:
 FAA L-827 Monitor with regulator change catalog L-828 to L-829

Suffix Adder	Description	Suffix Adder	Description
24 VDC	Special Control Voltage 24 VDC (10,000 ft. one way control)	WM	Input Wattmeter (with C.T. and P.T. as need)
48VDC	Special Control Voltage 48VDC (10,000 ft. one way control)	OC1	Output Current Indicator with relay dry contacts (for remote indicator)
ALCMS	Dry Contacts for ALCMS connections	OCL	Output Current Indications with Light Indicator (local indicator)
ETMT	Elapsed Time Meter in Hours for Total Time On	OSI	Internal Series Plug Cut-out
ETMM	Elapsed Time Meter in Hours for Time on Maximum Brightness	OSCK	Output Short Circuit Jumper Kit
IAM	Input Ammeter (with current transformer)	OVM	Output Voltmeter (with potential transformer)
IRMS	Insulation Resistance Monitor (Megger) System	OWT	Output Watts Transducer
IPOL	Input Power on Light Indicator (dual lights for failure back-up)	OWM	Output Wattmeter, Amps, Volts, VA, & Power Factor (with current and potential transformers)
IVM	Input Voltmeter (with potential transformer if needed)	SCO	Internal SCO Cut-Out
R	For operation with L-849 REIL's, on runway circuit. Not required for stand alone or dedicated REIL's.	ODM	Output Digital Meter Amps, Volts, VA, Watts

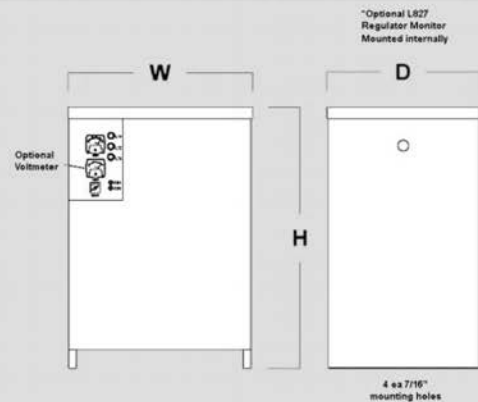
Other specific site requirements and options available upon request.

STANDARD EQUIPMENT FOR ALL REGULATORS

- User connections readily accessible
- Floor mounted stand alone enclosure for ease of replacement parts
- Stackable kits optional
- Primary surge arresters
- Primary switch for regulator control
- Control switch for "Remote" (tower) control and "Local" (direct) control
- Internally provided 120 VAC control and equipped for external supply connection
- Control circuit protection by circuit breaker with visual indicator
- Reliable custom transformer design with microprocessor control for output current
- Efficiency and power factor exceed FAA requirements
- Performance comparable to Ferroresonant Type
- Tapped Output for 50% and 75% load (Standard) for improved efficiency and power factor
- Other output taps available upon request
- Precisely controls output current for loads of short circuit to full load and for varying input voltages for -5% to +10% of nominal input with 30% lamps outage
- Regulator shuts down for open circuit or overcurrent in the load
- Output distribution type lightning arresters
- Output electrically isolated from primary
- Microcontroller board interchangeable for different KW sizes and different output currents and steps. Easily change 3 step or 5 step

Long life LED indicators for:

1. Input Power ON
2. Regulator ON
3. Fault for Open circuit or Over current
4. Diagnostic LED's on the Control Board



REGULATOR DIMENSIONS

Dimensions will vary dependant upon the HD unit being replaced.

Will match existing HD enclosure as close to HD part number as possible, per CCR enclosure drawing.

Input, Output, and Control knock-outs will not be provided unless an approved drawing is supplied with location and size.

REGULATOR WEIGHTS (APPROX.)

2KW	400 LBS
4KW	450 LBS
7.5KW	750 LBS
10KW	800 LBS
15KW	900 LBS
20KW	1050 LBS
30KW	1350 LBS
50KW	2300 LBS

* Status Monitor (L827) Mounted in CCR control cabinet
 ** 30KW 208,240, and 2400VAC Units, Add 300 Lbs