



Flight Light Inc.
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4KW and 7.5KW Constant Current Ferro-Resonant Dry-Type Regulators Low and Medium Intensity

Applications

Flight Light's 4KW and 7.5KW ferro-resonant dry-type constant current regulators provide precision control of runway lighting series circuits in low and medium intensity applications. Because they use **SOLA/Hevi-Duty's** extremely **reliable design** and **durable magnetic** components, our regulators are not susceptible to extraneous signals that cause competing solid state electronic designs to fail. In fact, our units are tested to assure zero interference with radio communications.

Please note that this version is not FAA certified because it has manually adjustable input taps rather than automatic input adjustment. We feel that manual adjustments are superior for long-term performance.

The regulator maintains a constant current by using a **resonant network circuit**. The voltage from the input transformer is transmitted to the resonant network through the brightness step relays. Current from the output transformer is variable as a factor of the voltage fed into the resonant network. Output current is variable in direct proportion to the selected input voltage, which is increased or decreased through the brightness step relays.

Why Our CCR's are Better

- **Five year limited warranty** - the best warranty in the world.
- Magnetic components are not susceptible to extraneous signals and do not create interference with radio communications.
- Simple design makes it easy to install and virtually maintenance free.
- Excellent current regulation. Output current stable within 0.1 amps at any output.



4KW or 7.5KW Ferro-Resonant Dry-Type Regulator

Specifications

- Continuous indoor operation at a temperature range of -40°F to +131°F (-40°C to +55°C).
- Floor mounted, dry-type ventilated enclosure with power components isolated from control functions.
- Taps for 250, 240, 230, 220, and 208 volts to accommodate various supply voltages.
- Integral primary switch.
- Standard 120VAC internally supplied control power for local control.
- Remote control by internal or external sources.
- Direct read output ammeter.
- Output distribution class lightning arrestors.

- Input circuit electronically isolated from output circuit.
- Withstands input overvoltage of 120% nominal for 50 milliseconds within one minute intervals.
- Power factor exceeds industry standards: more efficient than required by FAA.
- Not activated by load switching or transients. Positive open-circuit protection automatically trips regulator off-line within 2 seconds, manually resets in less than 1 second.
- Resumes original brightness mode within 1 second of lost input power.
- Easy access to remote/local control switch.
- No solid state components in series circuit.

**Formerly
SOLA/Hevi-Duty**

KW	H	W	D	Lb.
4	32"	22.5"	18.5"	375
7.5	48"	24"	22.5"	720

Visit our web site: www.flightlight.com



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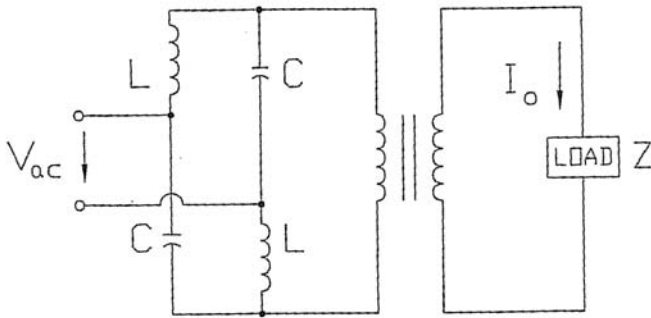
Ordering Code

Qty.	KW Size	Designation	Code:		Control Power	Type	Hertz	Accessory Codes	
			Volts/Steps/Amps						
	4KW = 4 7.5KW = 7	Std. Reg. = L828F Unit w/Monitor = L829F Please note that this version is not FAA certified because it has manually adjustable input taps rather than automatic input adjustment.	V/S/A	Code	48V Grounded DC Internal	3	Dry = D	60 Hertz = 6 50 Hertz = 5	Elapsed Time Meter* ETM Input Arrestors IA Output Volt Meter* OVM Input Volt Meter* IVM Input Amp Meter* IAM Extra Contacts** EC Outdoor Enclosure 3R Fixed One Step FOS Cold Circuit Selector Switch A
			208/3/6.6	Z	48V Ungrounded DC External	4			
			208/5/6.6	ZA	120VAC Int./Ext.	5			
			220/3/6.6	N	48V Grounded DC Int./Ext.	6			
			220/5/6.6	O	24V Grounded DC Internal	7			
			230/3/6.6	Q	24V Ungrounded DC External	8			
			230/5/6.6	R	24V Grounded DC Int./Ext.	9			
			240/3/6.6	A					
			240/5/6.6	C					
			277/3/6.6	BA					
			277/5/6.6	BB					
			380/3/6.6	T					
			380/5/6.6	U					
			415/3/6.6	W					
			415/5/6.6	X					
			480/3/6.6	H					
			480/5/6.6	I					
							D		
							D		

* All meters are analog only!
 ** Specify the contact's function (i.e., output current monitoring).

Resonant Network CCR

The resonant circuit is formed by two reactor coils on a common core and two capacitor banks. When the capacitive reactance equals the inductive reactance, the output current remains constant from full load to a short circuit.



Resonant Network Circuit

**For technical information
 and renewal parts
 call 1-800-806-3548**

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