

L-828/L-829
Ferroresonant Constant Current Regulator
(CCR)
and
SRA Switchgear Regulator Assembly

Version 2.0





About Airport Lighting Company

Since 1967, Airport Lighting Company has been a world-class manufacturer of high-quality airfield lighting solutions, including runway lights, approach systems, and power and control equipment. We use tech-based design, build, and testing processes that ensure our products consistently meet or exceed industry standards, creating extra value for our customers.

Trusted partners invested in your success

Airport Lighting Company takes pride in serving our customers' airfield lighting and navigational aids needs with high-quality products using the latest technology. We also prioritize creating an exceptional customer service experience that builds long-lasting partnerships.

Our experts take the time to listen to your project requirements, make product and configuration recommendations, and deliver a solution that optimizes construction scheduling. When you need technical advice or installation support, Airport Lighting Company is just a phone call away to ensure you get the most out of our products.



We provide more than exceptional customer service – we simply do what great partners should.



Quality products built by the best people

Our engineers, technicians, production team, and other personnel are among the best in their fields and are always excited about new innovations that will help our customers improve their operations. We hire only the most talented technicians to ensure excellent product quality using the most durable materials, built with care and attention to detail.

The Airport Lighting Company team is also dedicated to connecting you with customized solutions while treating you with the courtesy and respect you deserve at every interaction.

We're proud that many of our staff have been with us for decades, and even prouder of our team's commitment to keeping our customers happy.



An unwavering commitment to sustainability

Airport Lighting Company is committed to global environmental sustainability. We operate with the conservation and preservation of natural resources as one of our primary guiding principles in every facet of product development, manufacturing, and delivery.

Our company remains committed to employing environmentally sustainable practices to help create a more livable world for future generations.









Our CCR is used to provide power to airfield lighting systems. It offers a selectable AC constant current to change the airfield lighting intensity based on weather conditions.

This transformer-based power supply uses nonlinear magnetic properties and a resonant circuit, ensuring constant and reliable output currents even if the input voltage varies due to power instability or other energy disturbances. The safety protections offered by the CCR ensure reliable operation over various circuit loads and input voltages. The regulated output current remains constant even when input voltage deviates from nominal by +10% to -5%.

Compliances

Certified to FAA AC 150/5345-10 (Current Edition) ICAO: NAVAIR 51-50AAA-2; UFC 3-535-02; Annex 14; Areodrome Design Manual Part 5



Specifications of the L-828/L-829 CCR

Shipping & Sizing Information

kW Rating	CCR Ship Weight (No Options)	Shipping Size (with Pallet)	CCR Install Weight (No Options)	Install Size (without Pallet)
1	300	30"W x 31"D x 45"H	280	24"W x 25.25"D x 40"H
2	350	30"W x 31"D x 45"H	330	24"W x 25.25"D x 40"H
4	400	30"W x 31"D x 45"H	380	24"W x 25.25"D x 40"H
5	450	30"W x 31"D x 45"H	420	24"W x 25.25"D x 40"H
7.5	530	30"W x 31"D x 45"H	510	24"W x 25.25"D x 40"H
10	630	30"W x 31"D x 45"H	610	24"W x 25.25"D x 40"H
15	865	40"W x 36"D x 45"H	835	36"W x 31.25"D x 40"H
20	1100	40"W x 36"D x 45"H	1070	36"W x 31.25"D x 40"H
25	1300	40"W x 36"D x 45"H	1270	36"W x 31.25"D x 40"H
30	1450	40"W x 36"D x 45"H	1420	36"W x 31.25"D x 40"H

kW Rating	Enclosure Size		
1kW - 10kW	24"W x 25.25"D x 40"H		
15kW - 30kW	36"W x 31.25"D x 40"H		

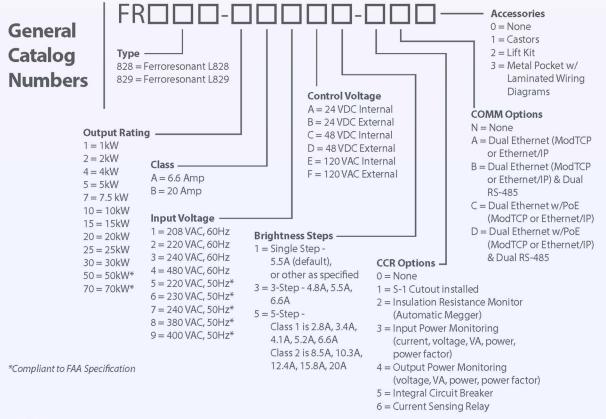
Replacement Parts				
Part Number	Description			
82-88	5A Fuse for FA1, FA2			
82-76	5A Fuse for FA3			
82-77	2.5A Fuse for FA4			
82-78	1A Fuse for FA5			
290-28D1003	Programmed DCMU, Standard			
290-280A05	Firing Card Assembly			
290-280A06	Firing Card with Merger Assembly			
282-10030	Front Panel Display Assembly			
82-45	Display Cable			
55-00201	Door Switch/Safety Interlock			
282-10005	Contactor MOV Assembly			
282-10002	Snubber Assembly			





- Ferroresonant core design for better overvoltage and surge protection
- Minimum 94.5% efficiency rate –high step fully loaded for 30kW ratings. Minimum 90% efficiency rate for smaller ratings
- Safety interlock ensures power is disconnected when the door is opened
- Lightning and transient protection on input and output lines
- High power factor of .96 high step fully loaded

- On-off switching under load
- Open circuit and overcurrent protection
- Full digital display, which includes output current readout, on every CCR regardless of options. No more trying to read dial gauges!
- Powerful microprocessor-controlled regulation minimizes the affects of flashing loads from strobes or runway guard lights
- Stacking capability for easy housing of multiple units in the vault





The switchgear regulator cell fits into a switchgear lineup. Switchgear regulators allow a smaller installation footprint, minimize downtime, and ease the connection to other vital airport systems such as ALCMS.

It supplies three or five precision output currents to power airfield series lighting circuits.

Compliances

Monitoring according to AC 150/5345-10 (Current Edition)

A switchgear regulator lineup allows for greater flexibility in your vault due to their customized nature. Common switchgear cell types include: constant current regulators, circuit selector switches, S-1 cutout cabinets, ALCMS equipment

Key Features

of the L-828/L-829 CCR SRA Switchgear Regulator Assembly

- L-828 or L-829 Switchgear cells available
- Class 1 or Class 2* availability for 6.6A or 20A circuits
- 360° air-cooled design
- Maximum efficiency power factor
- Dedicated raceways for control and power

- Easy installation and operation
- Built-in IRMS availability
- Internal S -1 Cutout availability
- 3 or 4 bus availability, up to 65kAlC
- Support for additional stacking options compared to the FR regulator line



^{*} Not ETL Certified

Benefits of Using Airport Lighting Company's L-828/L-829 CCR Regulators

Reliable, ongoing power output

The CCR allows for high-efficiency, high-power factor sinusoidal constant current output. Its power output is regulated by microprocessor which minimizes the affect of flashing loads from strobes or runway guard lights

Trouble-free recalibration and maintenance

The CCR can be recalibrated in the field, recall previous settings and calibration, change between 3-step and 5-step operation, track recent warnings and faults, and more. Its intuitive, fully digital interface is easy to use and allows fast access to the

Technology that supports external protocols

The regulator supports common communication protocols such as Modbus RTU, Modbus TCP, and Ethernet/IP. Availability of high-level communication enables your airport to perform robust control and monitoring operations such as with an L-890 ALCMS.

Protection from power surges

The ferroresonant CCR is equipped with long-lasting surge protection for the input supply as well as the output field circuit.

Seamless integration with the Airport Lighting Company L-890 ALCMS

The ferroresonant CCR can be integrated with the L-890 ALCMS to support such functions as changing airfield lighting intensity based on real-time weather conditions such as fog, rain, or snow, ensuring safe aircraft movements at all times.

* ALCMS manufacturer equipment may be necessary for integration

Ongoing technical support

Airport Lighting Company has hundreds of global CCR installations based on our regulator design platform. We're here to help you get the most of our products to keep your airport operations running smoothly and efficiently under any circumstances.

Installation and Maintenance

Airport Lighting Company's L-828/L-829 CCRs are designed for fast, seamless, and safe installation and integration with your existing power system.

Your CCR ships with complete instructions on its safe and proper installation, including information on connecting the input power wiring, field circuit wiring, and control wiring. Detailed instructions on configuring the remote control are also provided.

The unit can be placed on the electrical vault floor or on an elevated mounting setup that can support the size and weight of the regulator. Standalone CCRs may be stacked in most cases. For robust stacking availability and other features, contact Airport Lighting Company regarding our Switchgear Regulator Assembly line.

As with any electrical equipment, be sure to follow all local and national electrical codes as well as all site-specific requirements.

Airport Lighting Company offers products that are very easy to maintain and troubleshoot. Ask us how you can ensure the ongoing efficient operation of your equipment with a few simple checks.

Expert Technical Assistance

An Airport Lighting Company expert technician is ready to assist you throughout the lifecycle of your project. When you need help installing, maintaining, or troubleshooting any of our products, call 1-866-212-1060 for professional live support you can count on.





Quality Control and Warranty

Product performance and reliability are non-negotiable when airfield safety is on the line.

Airport Lighting Company products undergo rigorous testing and certification processes to ensure reliability and compliance with international aviation standards set by organizations such as the International Civil Aviation Organization (ICAO) and the Federal Aviation Administration (FAA), delivering the utmost operational precision, efficiency, and safety.

Before shipment, each product is put through a multi-step quality control process, including hours of testing before we place any certification label on the product.

This exhaustive quality control process will ensure that the installer and the end user have the highest level of product reliability and performance.



Comprehensive 2-year warranty

Airport Lighting Company offers a standard warranty under the relevant governing bodies that protects you against defects in material or workmanship for one year after the date of installation or two years from the date of shipment from our plant.

This guarantee applies to all products that were installed and used in accordance with factory, FAA, and ICAO recommendations and have not been damaged due to negligence or force majeure. Please refer to our standard terms and conditions and return policy or ask us for further details.



Other High-Quality Airport Lighting Company Products

Airport Lighting Equipment



L-861 Medium Intensity Light



L-861(L) LED Edge Light



L-862(L) LED High Intensity Runway Edge Lights



L-850(L) LED Runway In-Pavement Lights



L-852(L) LED Taxiway In-Pavement Lights

Approach Aides



L-880(L)/L-881(L) LED Precision Approach Path Indicator (PAPI)



L-849(L) LED Runway End Identification Lights

Power & Control Equipment



L-890 Airport Lighting Controls and Management System (ALCMS)



L-847 Circuit Selector Switch



L-821 Type I Airport Lighting Control Panel



L-821 Type III Airport Lighting Control Panel



S-1 Series Cutout

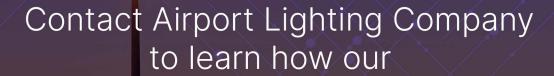
Signs and Markers



L-858 D-LUX Guidance Sign



L-858 I-LUX Guidance Sign



L-828/L-829

Constant Current Regulators

can improve your airport operations

As a global leader in airport lighting solutions, our company has an extensive international distribution network

Call our global headquarters at

315-682-6460 1-866-212-1060 (toll free)

or visit

www.airportlightingcompany.com/contact-us

to connect with an ALC expert near you today.

