



samlexamerica®

# ACR-160

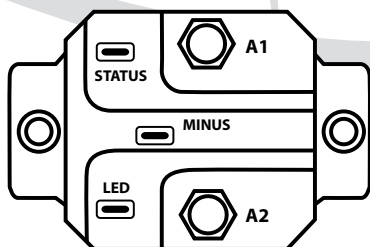


## Automatic Charge Isolator

Model  
ACR-160  
160 Amp

### Design Features

- Microcontroller based for compact, efficient and smart functioning
- Automatic detection of 12V / 24V battery systems
- 160 Amp continuous rated, 480 Amp (250 msec) peak
- Isolation through relay for negligible voltage drop and higher efficiency
- Easy to install – does not require changing of alternator circuit
- Very low self consumption
- Provides priority for charging the starter battery first and then the auxiliary battery
- Protects auxiliary battery and connected devices against over voltage
- Monitoring of relay activation by external LED
- Potted, waterproof, sealed unit – IP65
- Additional capabilities:
  - Start Assist Function during cranking by momentarily paralleling the two battery for higher cranking Amps
  - Forced Disabling Function of the relay during charging to isolate the starter battery when high power DC loads are being powered from the auxiliary battery
  - As a Voltage Dependent Switch for automatic switching on of load after vehicle has started and starter battery has fully charged



## 2 YEAR WARRANTY

		MODEL NO.	ACR-160
ELECTRICAL SPECIFICATIONS	OPERATING VOLTAGE	12 VDC / 24 VDC (Automatic detection)	
	MAXIMUM CURRENT	160A	
	PEAK CURRENT	480A for 250 milliseconds	
	CONSUMPTION OFF	12V = 1.8mA / 24V = 2.0mA	
	CONSUMPTION ON	12V = 340mA / 24V = 170mA	
	MINIMUM CHARGE TIME	60 seconds	
	FAST OPENING	< 11.8V (12V) / 23.6 (24V) after 4 seconds	
	EXTERNAL FUSE FOR BATTERY CONNECTIONS	200A, 32V	
CONNECTIONS	MINIMUM SIZE OF WIRES FOR BATTERY CONNECTION	AWG #1/0 or 50 mm <sup>2</sup>	
	A1 (Stud & Nut, M8)	Connects to Positive terminal of Starter Battery	
	A2 (Stud & Nut, M8)	- Connects to Positive of Auxiliary Battery in normal function - Connects to Positive of Load in "Voltage Dependent Switch" function	
	STATUS (6.3 mm / 1/4" Quick Disconnect / FASTON connector)	- When connected to Positive terminal of Starter Battery in "Start Assistance" function, the relay is energized - No connection - normal operation - When connected to battery Negative through switch, the relay is de-energized	
	MINUS (6.3 mm / 1/4" Quick Disconnect / FASTON connector)	Connects to Starter Battery Negative	
	LED (6.3 mm / 1/4" Quick Disconnect / FASTON connector)	When connected to external LED, will indicate relay energization	
DISPLAY	EXTERNAL LED (OPTIONAL)	Indicates energization of relay	
COMPLIANCE	INGRESS PROTECTION	IP65 (Dust-proof; Water-proof against hose spray)	
	EMC COMPLIANCE	EN61000-6-2: 2005: Immunity Against Industrial Environment . EN61000-6-3: 2007: Conducted and Radiated Emissions for Residential, Commercial and Light Industrial Environment. 2004/104/EC: Automotive Directive.	
ENVIRONMENT	OPERATING TEMPERATURE RANGE	-20°C to 40°C (Linearly de-rate to 80A at 85°C) -4°F to 104°F (Linearly de-rate to 80A at 185°F)	
DIMENSIONS	(L X W X H), MM	106.35 x 73.025 x 57.15	
	(L X W X H), INCHES	4.187 x 2.875 x 2.25	
WEIGHT	KG	.455	
	LBS	1.0	

NOTE: Specifications are subject to change without notice