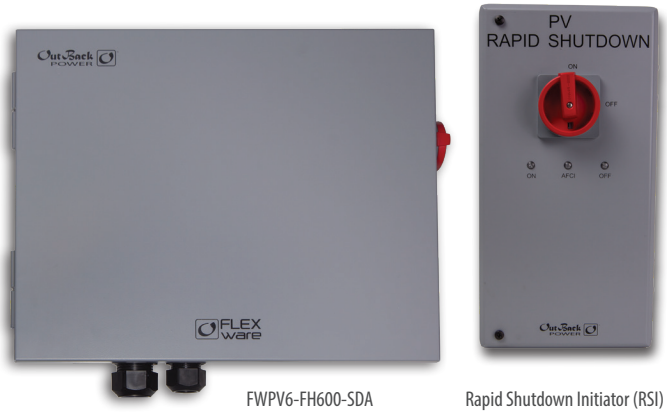
FLEXmax 100 Rapid Shutdown

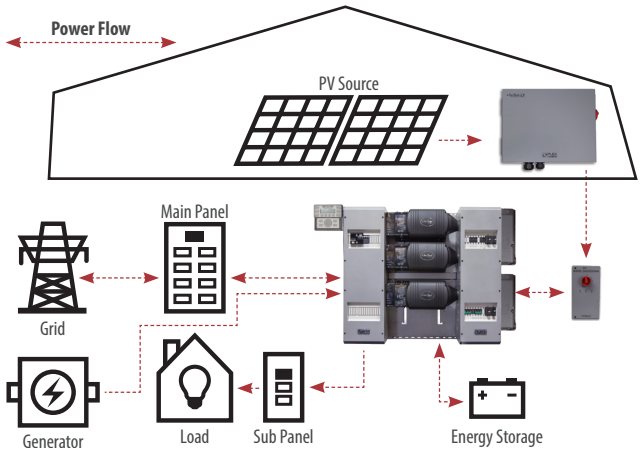
Integrated Combiner Solution for PV Rapid Shutdown and AFCI



FWPV6-FH600-SDA Rapid Shutdown Initiator (RSI)

RSD-AFCI Package for Battery-Based PV Systems

Typical System Integration



Features:

- End-to-end solution listed to UL1741
- Arc fault circuit interrupter (AFCI) listed to UL1699B with local and remote indication
- Type 3R enclosures rated for indoor or outdoor installation
- Flexible design—install the combiner box vertically or horizontally and mount to racking or under an array
- Interoperable with compatible third-party PV rapid shutdown devices (PVRSE with dry contact)

OutBack provides a fully-compliant PV rapid shutdown equipment plus combiner solution with the RSD-AFCI.

The FLEXmax 100 Rapid Shutdown meets the following 2014 National Electric Code (NEC) requirements:

NEC 690.11—Arc fault protection (protects against arc faults due to loose connections, damaged wires or other DC component failures)

NEC 690.12—Rapid shutdown (provides a means for first responders to safely de-energize controlled conductors)

NEC 690.15—DC combiner disconnect (opens all ungrounded circuit conductors from all sources of power)

The RSD-AFCI is rated to 600VDC for integration in a wide range of systems and designed for ease of service and clean wire management. This packaged system includes one combiner box for one FLEXmax 100 charge controller. Simply order one extra combiner box for each additional charge controller, no additional rapid shutdown or AFCI equipment required.

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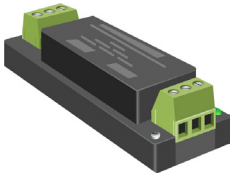
FLEXmax 100 Rapid Shutdown Specifications

01/2019

Packages	**RSD-AFCI**
Description	FLEXware RSD-AFCI package for battery-based PV systems
Compatibility	Six PV strings (one charge controller)
Combiner Box	(1) FWPV6-FH600-SDA
Power Supply	Class 2 DC power supply included
RSI	1
Rapid Shutdown	Yes
External Disconnect	Yes
PV AFCI	Yes

Combiner Box	**FWPV6-FH600-SDA**	**Product Image**
Description	FLEXware RSD-AFCI combiner box with PV rapid shutdown, AFCI and disconnecting means compatible with up to 6 PV strings, opens up controlled conductors within 10ft of PV array	
Enclosure	**Material**: Powder-coated aluminum **Rating**: Outdoor rainproof, UL type 3R **Security**: Lockable	
Mounting Options	Vertical to horizontal, external feet provided for mounting	
Number of String Inputs	6	
Total Maximum Current	96A	
Voltage Rating	600VDC	
Output Terminals	#14 - 2/0	
Input Terminals	Cable glands #14 to 8 AWG (2.08 to 7.7mm²)	
Operating Temperature	-25 to 60°C	
Overcurrent Protection	Includes (6) 600VDC DIN rail fuse holders (fuses sold separately)	
Switch	Can be locked in off position	
Accessories	**FUSE-15-600VDC**: Box of ten, 15A fuses **FUSE-20-600VDC**: Box of ten, 20A fuses	
Dimensions H x W x D (in/cm)	15.5 x 19.5 x 4.5 / 39.4 x 49.5 x 11.4	
Weight (lb/kg)	~12 / 5.4	
Certifications	UL1741 with PVRSE, UL 1699/1699B, CSA 22.2 107.1-01 with PVRSE, FCC Part 15 Class B	

Rapid Shutdown Initiator	**RSI**	**Product Image**
Description	FLEXware RSD-AFCI RSI initiates a PV rapid shutdown event and provides indication for solar status and AFCI	
Enclosure	**Material**: Powder-coated aluminum **Rating**: Outdoor rainproof, UL type 3R	
Mounting Options	Vertical	
Input Terminals	24-16 AWG (.20 to 1.31mm²)	
Compatibility	Can control up to 6 FWPV6-FH600-SDA combiners	
Operating Temperature	-25 to 60°C	
Switch	Can be locked in off position	
LED Indication	Solar on, solar off, AFCI	
Dimensions H x W x D (in/cm)	14.1 x 7.3 x 3.75 / 35.8 x 18.5 x 9.5	
Weight (lb/kg)	~4 / 1.8	
Certifications	UL1741 with PVRSS, UL 1699/1699B, CSA 22.2 107.1-01 with PVRSS, FCC Part 15 Class B	

DC Power Supply	**PWRSPLY-24**	**Product Image**
Description	The RSD-AFCI comes with a class 2 DC power supply. Optional AC power supply or other class 2 power supply may be used instead.