

HERF Series Array Level Rapid Shutdown

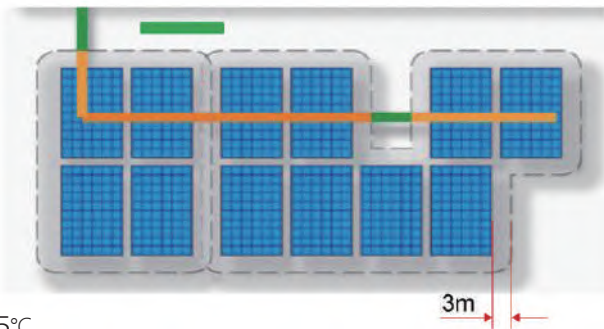


HERF Series Array Level Rapid Shutdown is a photovoltaic DC side fast shutdown device, which meets the requirements for fast shutdown of photovoltaic power station in NEC2014 690.12. The specification requires that the photovoltaic system on all buildings and the circuit 10 feet (i.e. 3 meters) away from the photovoltaic module array must fall below 30V within 10 seconds of inverter power failure.

HERF Series Array Level Rapid Shutdown has the functions of automatic power off and reclosing. On the basis of meeting the requirements of fast shutdown function required by NEC2014 690.12, it can ensure the power generation of photovoltaic power generation system to the greatest extent and improve the power generation rate. When the mains power is cut off, the HERF series array level rapid shutdown will automatically cut off the photovoltaic DC power, so that the circuit of the photovoltaic power generation system 10 feet (i.e. 3 meters) away from the photovoltaic array will fall below 30V in 10 seconds; When the mains power is restored to normal, the cascade Rapid shutdown of HERF series group will automatically reclose to restore the power generation of photovoltaic system.

Highlights

- Meet the requirements of NEC2014 690.12
- Adapt to global grid voltage 100~270vac
- High dust-proof and moisture-proof IP65 design
- Wide operating temperature adaptability -20~+55℃
- Convenience of long-distance observation with operation status light
- Smart working status indicator, dry contact access support



Solution



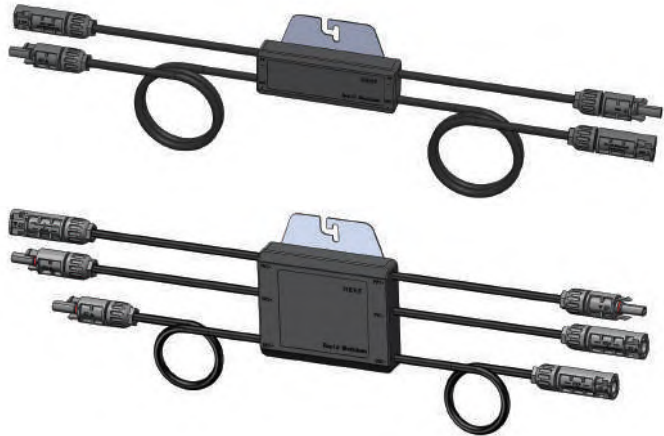
- ① HERF Array Level Rapid Shutdown: installed within 3M from the photovoltaic array
- ② PV inverter

Index	Parameter
AC input voltage range (Vac)	100-270
AC input frequency range (Hz)	45-65
Dry contact load capacity (MA)	<300
Dry contact withstand voltage capacity (V)	<24
Operating temperature (°C)	-20~55
Storage temperature (°C)	-40~85
Degree of protection	IP65
Cooling mode	natural cooling
String access voltage (VDC)	<1000Vdc or <1500Vdc
Maximum access current of string	16A、 32A、 40A etc.
Maximum number of access strings	1、 2、 3、 4、 5、 6、 7、 8、 9、 10

Model	Voltage level	Current level	Reference adaptation model
HERF-1	M、 H	16、 32、 40	1-way PV input inverter
HERF-2	M、 H	16、 32、 40	2-way PV input inverter
HERF-3	M、 H	16、 32、 40	3-way PV input inverter
HERF-4	M、 H	16、 32、 40	4-way PV input inverter
HERF-5	M、 H	16、 32、 40	5-way PV input inverter
HERF-6	M、 H	16、 32、 40	6-way PV input inverter
HERF-7	M、 H	16、 32、 40	7-way PV input inverter
HERF-8	M、 H	16、 32、 40	8-way PV input inverter
HERF-9	M、 H	16、 32、 40	9-way PV input inverter
HERF-10	M、 H	16、 32、 40	10-way PV input inverter

* Note: the shape or technical parameters of the above products are subject to change without notice.

HERF Series Module Level Rapid Shutdown

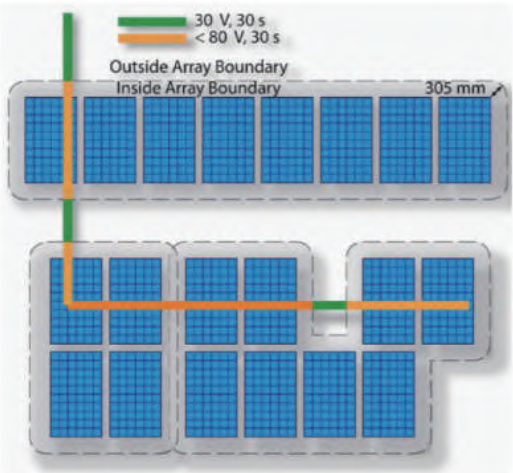


HERF series module level rapid shutdown is a photovoltaic DC side rapid shutdown device, which meets the demands of the national electrical code NEC217 & NEC2020 690.12. The specification requires that the photovoltaic system on all buildings and the circuit 1 foot (i.e. 305mm) away from the photovoltaic module array must fall below 30V within 30 seconds after fast shutdown begin; The circuit within 1 foot (i.e. 305mm) from the photovoltaic module array must fall below 80V within 30 seconds after the quick shutdown start.

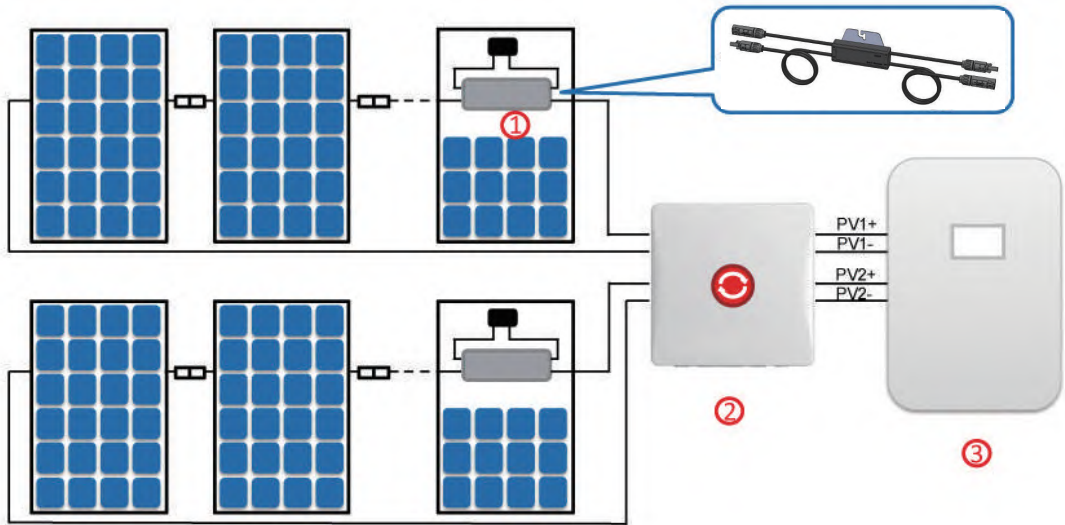
HERF series module level rapid shutdown has automatic power-off and reclosing functions. On the basis of meeting the fast shutdown function requirements of nec217 & nec2020 690.12, it can ensure the power generation of photovoltaic power generation system to the greatest extent and improve the power generation rate. When the mains power is cut off or the emergency stop is started, the HERF series module level rapid shutdown will automatically disconnect the photovoltaic DC power, so that the circuit of the photovoltaic power generation system beyond 1 foot (i.e. 305mm) from the photovoltaic array will fall below 30V in 10 seconds, and the circuit within 1 foot (i.e. 305mm) from the photovoltaic module array must fall below 80V in 30 seconds after the quick shutdown start; When the mains power is restored to normal or the emergency stop is restored, the HERF series module level rapid shutdown will automatically reclose to restore the power generation of the photovoltaic system.

Highlights

- Meet the requirements of NEC217 & NEC2020 690.12
- Power line carrier communication without independent communication control line
- High dust-proof and moisture-proof IP68 design
- Wide operating temperature adaptability -40~+85℃
- Compatible with SUNSPEC fast shutdown protocol
- Support PSRSS fast shutdown protocol



Solution



① HERF series module level rapid shutdown ② Rapid shutdown controller ③ PV inverter

Index	Parameter			
Model	HERF-L-16-S	HERF-L-21-S	HERF-L-16-D	HERF-L-21-D
Maximum input current (A)	16	21	16	21
Input voltage range (V)	14~80			
Maximum system voltage (V)	1500			
Operating temperature (°C)	-40~85			
Degree of protection	IP68			
Input / output line length (mm)	Input 150mm/Output 1200mm		Input 150mm/Output 1800mm	
Input / output wire diameter (mm) ²	4mm ² /12AWG			
Connection terminal type	MC4			
Communication type	PLC			
Over temperature protection function	yes			

Type	Voltage level	Current level	Input/output channels
HERF-L-16-S	PV input voltage<80V	PV input current<16A	Single PV input and single output
HERF-L-16-D	PV input voltage<80V	PV input current<16A	Dual PV input and single output
HERF-L-21-S	PV input voltage<80V	PV input current<21A	Single PV input and single output
HERF-L-21-D	PV input voltage<80V	PV input current<21A	Dual PV input and single output

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