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# Fireman switch For EnergyHub system 7- 200 kW

# State of the art firefighter safety

- Simultaneous disconnection of all strings
- Circuit breaking close to PV string
- Redundant switches
- Cost effective solution

### The cost-efficient firefighter breaker system

The EnergyHub system with its Solar String Optimizers brings a new cost-effective way to completely disconnect all PV strings in case of a fire hazard. The system utilizes the existing safety relays in the Ferroamp Solar String Optimizers to disconnect as close to the PV strings as possible. No additional expensive DC-breakers are required. The system comprise a single remotely operated fireman switch that interrupts DC bus voltage and also interrupts keep-alive messages from the EnergyHub sent to the Solar String Optimizers that will force their internal safety relays to trip within 10 seconds.



## Fireman switch

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#### System topology



(1) Keep-alive messages to Solar String Optimizers are continuosly sent from the EnergyHub during normal system operation

(2) When the fireman switch is activated, a DC-relay breaks the DC bus connection to the EnergyHub. This also interrupts the keep-alive messages.

③ In absence of keep-alive messages all solar string optimzers will open their internal relays to make all PV strings potential free.

#### Specifications

	FireSW
Fireman switch	7 – 200 kW
Rated DC current	10 – 300 A, specify at order
Rated DC voltage	1000 VDC
Contact form	2 A
Number of operations	100
Trip time, maximum	10 s
Remote control	
Control device	Single pole breaker
Control voltage	230 VAC
Power consumption	30 VA max
Physical	
Dimensions H x W x D	320 x 250 x 180 mm
Weight	5 kg
Color	Grey
Installation	
Ambient temperature	-10°C – 45°C
Degree of protection	IP 65
Remote control connection	Screw terminals
DC bus connection	Screw terminals

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