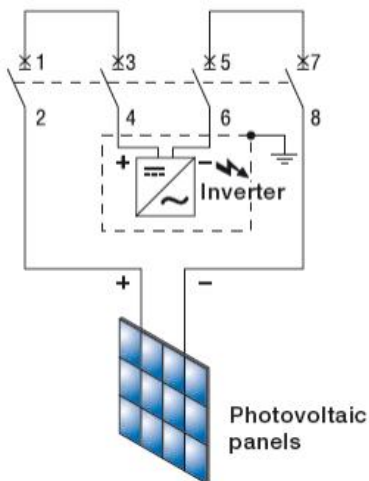


# Products

## Miniature circuit-breakers S280 UC Z



- The S280 UC range of miniature circuit-breakers features permanent magnets on the internal arcing chutes able to extinguish an electric arc of up to 484 V DC with  $I_{cu} = 4.5 \text{ kA}$ . However, use of these components establishes circuit-breaker polarity, thus they must be powered in a certain direction. A diagram showing how the string and inverter must be connected is given alongside.



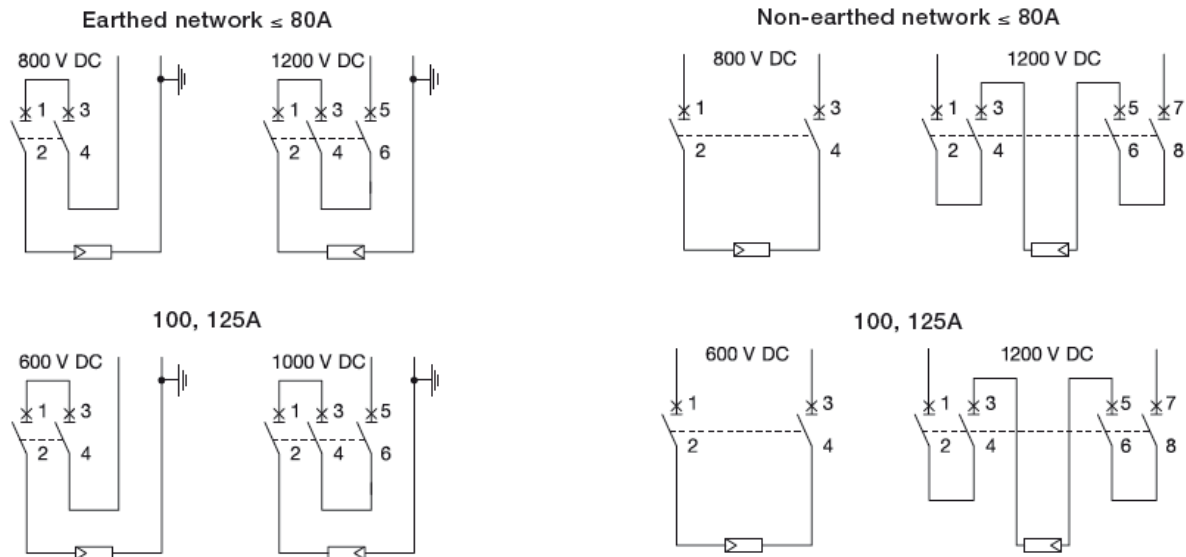
Main technical specifications		S280 UC Z
Reference Standards		IEC EN 60947-2
Rated current $I_n$	A	$6 \leq I_n \leq 63$
Number of poles		2 - 4
Maximum operating voltage (DC) 4P	V	484
Ultimate rated breaking capacity $I_{cu}$ 4P - 484 V DC	kA	4,5
Thermomagnetic release characteristic		Z: $3 I_n \leq I_m \leq 4.5 I_n$
Operating temperature	°C	-25...+55
Mounting		on DIN rail EN 60715 (35 mm) by means of fast clip device

# Products

## Miniature circuit-breakers S800PV-S



- S800PV-S miniature circuit-breakers can be used in networks up to 1200 V DC. S800PV-S was specially designed for use in PV applications as it safely extinguishes dangerous DC arcs even in case of double faults. The main features of S800PV-S circuit breakers are:
  - safe disconnection of all poles
  - polarity independent
  - wide range of accessories
  - remote controllable with S800-RSU remote switching unit



# Products

## Miniature circuit-breakers S800PV-S



Main technical specifications		S800PV-S	
Reference Standards		IEC EN 60947-2	
Rated current	A	10...80	100, 125
Number of poles		2, 3, 4	
Rated voltage Ue			
(DC) 2 poles*	V	800	600
(DC) 3 poles*	V	1200	1000
(DC) 4 poles*	V	1200	1200
Ultimate rated short-circuit breaking capacity Icu			
(DC) 2 poles * 800 V	kA	5	5
(DC) 3 poles * 1200 V	kA	5	5
(DC) 4 poles * 1200 V	kA	5	5
Rated insulation voltage	V	1500	
Thermomagnetic release characteristic		$4 I_n \leq I_m \leq 7 I_n$	
Class of use		A	
Operating temperature	°C	-25...+60	
Mounting		on DIN rail EN 60715 (35 mm) by means of fast clip device	
Accessories		shunt opening releases, undervoltage releases, signal / auxiliary contacts, rotary drive adapter and rotary handle remote switching unit	

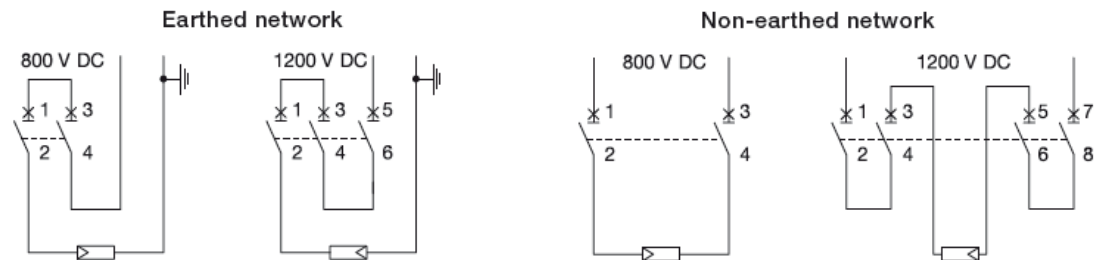
\* Please refer to the wiring diagrams

# Products

## Switch-disconnectors S800PV-M



- S800PV-M switch-disconnectors can be used in networks up to 1200 V DC S800PV-M was specially designed for the use in PV applications as it safely switches DC arcs. Disconnecter features are:
  - compact design
  - derating
  - free up to 60°C
  - safe disconnection of all poles
  - polarity independent
  - wide range of accessories
  - remote controllable with S800-RSU remote switching unit



# Products

## Switch-disconnectors S800PV-M



Main technical specifications		S800PV-M
Reference Standards		IEC EN 60947-3
Rated current	A	32, 63, 125
Number of poles		2, 3, 4
Rated voltage Ue		
(DC) 2 poles*	V	800
(DC) 3 poles*	V	1200
(DC) 4 poles*	V	1200
Rated short-time withstand current Icu		
(DC) 2 poles * 800 V	kA	1.5
(DC) 3 poles * 1200 V	kA	1.5
(DC) 4 poles * 1200 V	kA	1.5
Rated insulation voltage	V	1500
Class of use		DC-21 A
Operating temperature	°C	-25...+60
Mounting		on DIN rail EN 60715 (35 mm) by means of fast clip device
Accessories		shunt opening releases, undervoltage releases, signal / auxiliary contacts, rotary drive adapter and rotary handle remote switching unit

\* Please refer to the wiring diagrams

# Products

## Switch-disconnectors OT



Main technical specifications		OT (16-40)		OT (200-630)	
Reference Standards		IEC EN 60947-3		IEC EN 60947-3	
Rated Current In	A	16*, 25, 32		200, 315, 400, 600	
Number of poles in series		6	8	5	6
Rated voltage Ue	V	550	750	800	1000
Utilization category		DC 21 A		DC 21 B	
Operating temperature	°C	-25...+45		-25...+45	

\* OT16F8 can reach 16 A at 800 V DC

# Products

## Automatic moulded case circuit-breakers Tmax



Main technical specifications		Tmax
Reference Standards		IEC EN 60947-2
Rated Uninterrupted Current I <sub>u</sub>	A	1 – 800
Number of poles		3, 4
Rated voltage U <sub>e</sub>	V DC	
3 poles		250, 500, 750
4 poles		1000
Breaking capacity I <sub>cu</sub> at 750 V DC	kA	up 70
Breaking capacity I <sub>cu</sub> at 1000 V DC	kA	40

# Products

## Surge arresters OVR PV

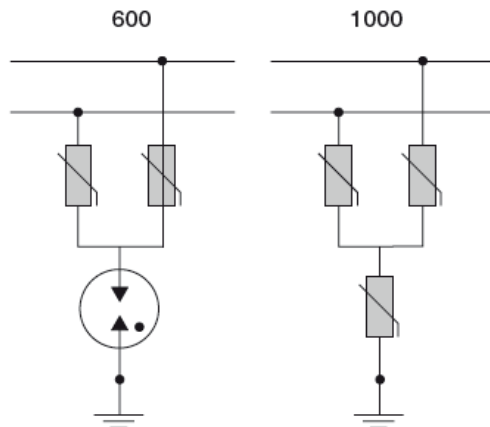


- ABB provides a wide range of surge protection devices that have been specifically designed for photovoltaic systems. With a dedicated thermal disconnection for photovoltaic systems, your equipment are protected in case of end of life of the surge arrester. The main features of the OVR PV surge arresters are:
  - a DC PV current withstand ( $I_{scwmpv}$ ) up to 100 A without any back-up protection
  - pluggable cartridges for easy maintenance
  - auxiliary contact with the “TS” option
  - “Y” configuration for a better protection
  - no risk if the polarity is reversed



# Products

## Surge arresters OVR PV



Main technical specifications		OVR PV
Electrical specifications		
Type of network		photovoltaic systems
Type		2
Maximum discharge current $I_{max}$	kA	40
Response time	ns	25
Residual current	mA	< 1
Protection class		IP20
Short circuit DC current withstand $I_{scwpv}$	A	100 A
Back-up protection current $I_{cc} < 100$ A current $I_{cc} > 100$ A		not required E 90 PV 10 A fuse or S802PV-S10 (OVR PV 600) and S804PV-S10 (OVR PV 1000)
Mechanical specifications		
L/PE terminals		
rigid	mm <sup>2</sup>	2,5...25
flexible	mm <sup>2</sup>	2,5...16
Tightening torque L	Nm	2,80
Status indicator		yes
Remote signal contact		
Type		TS versions
Minimum rating		1 NO/NC
Maximum rating		12 V DC - 10 mA
Cable section	mm <sup>2</sup>	250 V AC - 1 A
Operating temperature	°C	1,5
Storage temperature	°C	-40...+80
Maximum altitude	m	- 40...+80
Housing material		2000
UL94 fire resistance		PC RAL 7035
Reference standards		V0
		IEC 61643-1 / EN 61643-11
		UTE 61 740-51

# Products

## Surge arresters OVR T2



- To provide efficient protection for a photovoltaic system, the alternate current side, on the load side of the inverter, must also be protected against overvoltage. The products in the OVR T2 range are the ideal solution as they guarantee no-break service and safeguard the functionality of the systems. Amongst the main features of the OVR T2 range:
  - installation on the supply side of the residual current protection devices (layouts “3+1” and “1+1”)
  - simplified maintenance with the pluggable cartridges (P option)
  - Increased security with the safety reserved (S option)
  - constant monitoring of the status of the product through the built-in signalling contact (TS versions) All Type 2 OVR surge arresters are coordinated with a distance of at least 1 m between.

Main technical specifications		OVR T2
Reference Standards		IEC 61643-11
Type		2
Maximum discharge current I <sub>max</sub>	kA	40
Operating maximum voltage U <sub>c</sub>	V	275
Remote signal contact		“TS” versions

# Products

## Fuse disconnectors E 90 PV



- The E 90 PV series fuse disconnectors have been designed for up to 1000 V direct current voltage with DC-20B utilization category.
- The E 90 PV series is specifically used for protecting photovoltaic systems against overcurrents and provides a reliable, compact and inexpensive solution since it uses 10.3 x 38 mm cylindrical fuses.

# Products

## Manuel motorstarter MS



Main technical specifications	MS116, MS132
Rated operational voltage	1000 V DC
Current ratings	0,16 - 32 A
Trip class	10
Number of poles	3
Reference standards	IEC60947-1, -2, -4-1, -5-1

# Products

## Contactors

▪ A eller AF kontaktorerna, ett komplett heltäckande sortiment

■ Från 9 till 2050 A

■ Både för AC & DC applikationer

■ Stor spännvidd ger möjlighet att bygga med få komponenter

■ Förbättrade prestanda

■ Spolinterface ger tex Energispar, Bredare Spänningsområde etc



▪ AF 09-16



▪ AF 26-38



▪ A, AF 50-75



▪ A, AF 95-110



▪ A, AF 145-185



▪ A, AF 210-300



▪ AF 400-460



▪ AF 580-750



▪ AF 1300-1650



▪ AF 2050

# Produkt Billaddare



# Produkt Billaddare

