Disconnect switches

OT Non-fusible disconnects

Disconnect switches are typically used in isolating individual strings of PV arrays and battery banks or as the main switch for the PV system, AC and DC. ABB's solar switches are compact, have exceptional DC voltage ratings and are available in both open and enclosed configurations.

This offering includes DC rated switches 16-630 A IEC and 28-400 A UL. For the AC side of solar circuits, ABB's standard UL fusible and non-fusible OS/OT disconnects provide a perfect solution.

DC Photovoltaic range — Open style

	Part Number	No. of poles	Standards rating	Amps	DC voltage	Physical characteristics		
						H	W	D
UL 250 VDC	OT200U02	2	UL 98	200	250	4.44	4.13	3.28
	OT400U02	2	UL 98	400	250	5.85	5.46	4.17
	OT600U02	2	UL 98	600	250	7.8	7.68	5.51
UL 600 VDC	OT40FD9N2	9	UL 508	28	600	2.36	4.29	2.65
	OT80FD8	8	UL 508	55	600	3.25	5.52	3.34
	OT100FD8	8	UL 508	75	600	3.54	7.6	3.38
	OT100UDS04	4	UL 98	100	600	4.44	6.86	3.28
	OT200UDS04	4	UL 98	200	600	5.85	8.89	4.17
IEC	OT25F8	8	IEC	25	750	2.36	3.74	2.65
	OT40F8	8	IEC	32	750	2.36	3.74	2.65
	OT16FF8	8	IEC	16	800	2.36	3.74	2.65
	OT200E23	5	IEC	200	800	4.76	8.6	3.28
	OT250E23	5	IEC	250	800	4.76	8.6	3.28
	OT315E23	5	IEC	315	800	5.85	11.08	4.17
	OT400E23	5	IEC	400	800	5.85	11.08	4.17
	OT630E23	5	IEC	600	800	7.8	15.59	5.51
	OT200E33	6	IEC	200	1000	4.76	9.96	3.28
	OT250E33	6	IEC	250	1000	4.76	9.96	3.28
	OT315E33	6	IEC	315	1000	5.85	12.79	4.17
	OT400E33	6	IEC	400	1000	5.85	12.79	4.17
	OT630E33	6	IEC	630	1000	7.8	18.15	5.51

Basic photovoltaic applications
Breaker & switch selection table

The following tables are not all inclusive and do not necessarily represent all PV application requirements. These tables should only be used for basic reference for the most common applications of ABB Breaker & Switch products. For assistance in selecting product for your specific application, contact our technical support team.

String disconnects / field combiner

Type	Product	Interrupting rating kA	Number of poles	Voltage DC	Amperage A	Standard
Disconnect	OT40FD9N2	-	8+1	600	28	cULus, IEC
Disconnect	OT80FD8	-	8	600	55	cULus, IEC
Disconnect	OT100FD8	-	8	600	75	cULus, IEC
Disconnect	OT100UDS04	-	4	600	100	cULus, IEC

Combiner box

Type	Product	Interrupting rating kA	Number of poles	Voltage DC	Amperage A	Standard
Disconnect	OT200E33	-	6	1000	200	IEC
Disconnect	OT200UDS04	-	4	600	200	cULus, IEC
Disconnect	OT250E33	-	6	1000	250	IEC
Disconnect	OT315E33	-	6	1000	315	IEC
MCCB	Ts3 frame	20, 35, 50	2,3,4	600	15-150	UL
MCCB	T4 frame	16, 25, 35, 50, 65	2,3,4	600	125-250	UL, IEC

Inverter DC side

Type	Product	Interrupting rating kA	Number of poles	Voltage DC	Amperage A	Standard
Disconnect	OT200E33	-	6	1000	200	IEC
Disconnect	OT200UDS04	-	4	600	200	cULus, IEC
Disconnect	OT250E33	-	6	1000	250	IEC
Disconnect	OT315E33	-	6	1000	315	IEC
Disconnect	OT400E33	-	6	1000	400	IEC
Disconnect	OT630E33	-	6	1000	600	IEC
MCS	1SDA066881R1	-	4	1100	160	IEC
MCS	1SDA066882R1	-	4	1100	200	IEC
MCS	Ts3H150DW	-	3	600	150	UL
MCS	Ts3H225DW	-	3	500	225	UL
MCS	1SDA066883R1	-	4	1100	250	IEC
MCS	T4N250DW	-	3	600	250	UL, IEC
MCS	T4H250DW	-	3	600	250	UL, IEC
MCS	T4V250DW	-	3	600	250	UL, IEC
MCS	1SDA066884R1	-	4	1100	500	IEC
MCS	T5N400DW	-	3	600	400	UL, IEC
MCS	T5H400DW	-	3	600	400	UL, IEC
MCS	T5V400DW	-	3	600	400	UL, IEC
MCS	T5N600DW	-	3	600	600	UL, IEC
MCS	T5H600DW	-	3	600	600	UL, IEC
MCS	T5V600DW	-	3	600	600	UL, IEC
MCS	1SDA066885R1	-	4	1100	800	IEC
MCS	T6H800DW	-	3	600	800	UL, IEC
MCS	1SDA066886R1	-	4	1100	1600	IEC
MCS	1SDA066887R1	-	4	1100	1600	IEC

[1] Molded case switch

For the purpose of the charts on pages 14 & 15, the product type terminology is defined as follows:

Disconnect = Non-fusible, open style disconnect switch (OT range)
Fusible Sw = Fusible, open style disconnect switch (OS range)
MCS = Molded Case Switch (Tmax range)
MCCB = Molded Case Circuit Breaker (Tmax range)
PCB = Power Circuit Breaker (Emax range)