# Disconnect switches Photovoltaic applications





ABB's growing portfolio of solar-specific disconnect switches can be applied in residential, commercial and industrial photovoltaic systems in a variety of applications.

String Disconnects/Field Combiner Boxes: A disconnecting means is required on each string of the PV installation for maintenance purposes.

**Combiner Boxes:** ABB non-fusible switches can be integrated with trailing fuse blocks for installation in combiner boxes for overcurrent protection and maintenance on individual sub-arrays.

Inverter Disconnects: PV inverters convert the obtained direct current (DC) into alternating current (AC). Disconnect switches can provide a means for disconnecting the inverter on the AC or the DC side.

**Tracking System Motor Disconnects:** Tracking Systems align the panels according to the position of the sun. Outdoor rated enclosed switches can be applied for the NEC required disconnect within sight of the motor.

Main Electrical Panels/Switchboards/
Switchgear: Fusible switches can be used as main power disconnecting means and/or overcurrent protection. ABB's standard fusible offering can be applied on the AC electrical panel.



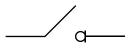
#### **Photovoltaic OEM Solutions:**

## ABB's Disconnect Switch offering designed specifically for photovoltaic systems up to 1000 VDC

#### Basic PV circuit



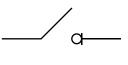




Means for disconnecting the PV DC source



converts DC to AC



Means for disconnecting the inverter from the AC grid



Power metering for generated energy

### Non-fusible open style disconnect switches

	Part Number	# of Poles	Standards Rating	Amps	DC Voltage	Physical Characteristics		
						Ι	W	D
UL 250 VDC	OT200U02	2	UL98	200	250	4.44	4.13	3.28
	OT400U02	2	UL98	400	250	5.85	5.46	4.17
	OT600U02	2	UL98	600	250	7.8	7.68	5.51
UL 600 VDC	OT40FD9N2	9	UL508	28	600	2.36	4.29	2.65
	OT80FD8	8	UL508	55	600	3.25	5.52	3.34
	OT100FD8	8	UL508	75	600	3.54	7.6	3.38
	OT100UDS04	4	UL98	100	600	4.44	6.86	3.28
	OT200UDS04	4	UL98	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
	OT16F8	8	IEC	16	800	2.36	3.74	2.65
	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

NOTE: Switches must be wired in series to obtain DC ratings noted. Please refer to 1SXU301197B0201 for wiring schematics and further technical and application information.

#### Handles & shafts

Switch		Recommended	Maximum	Sugg	gested part number	part numbers	
	Shaft diameter	standard pistol	recom-	Ha	Shaft		
	Shart diameter	handle length	mended shaft length	1//3R/12	4/4X	series	
OT16 - 100	6x6mm (.24x24")	45 - 65mm	290mm	OHB65J6	OHB65L6	OXP6X_	
OT200	6x6mm (.24x24")	65 - 80mm	290mm	OHB65J6	OHB65L6	OXP6X_	
OT400 - 600	12x12mm (.47x47")	125 - 175mm	595mm	OHB125J12	OHB125J12	OXP12X_	
OT800	12x12mm (.47x47")	125 - 175mm	595mm	OHB200J12P	OHB200L12P	OXP12X_	
	ng of available standard ab						







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