



DC DISCONNECTOR 1000V DC

**For Rooftop & Ground-Mount
Solar PV Application**



Highlights

- High performance switching in a compact frame
- Safe and reliable operation
- Provide safe electrical isolation even at low voltages and up to 1000V DC
- Double positive break position indications
- Quick make and quick break mechanism ensures safe and independent manual operation
- Symmetric pole design for making connections independent of polarity
- Low power losses resulting in enhanced efficiency
- High temperature withstand capacity
- Reference standard IEC 60947-3

Specification (100A to 630A, 2 Pole, 1000VDC)

Reference standard									
Reference standard:	IEC 60947-3								
Technical data									
Rated Operational current (I _n)	100A	125A	160A	200A	250A	315A	400A	500A	630A
Conventional free air Thermal current (I _{th}) @ 40°C	100A	125A	160A	200A	250A	315A	400A	500A	630A
Conventional Thermal current (I _{th}) Enclosed	100A	125A	160A	200A	250A	315A	400A	500A	630A
Number of poles	2								
Rated impulse withstand voltage U _{imp} (kV)	12								
Rated Insulation voltage U _i (Vdc)	1500	1500	1500	1500	1500	1500	1500	1500	1500
Rated Operational voltage U _e (Vdc)	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated short time withstand capacity 1 sec kA	5	5	5	5	5	10	10	10	10
Power Loss W	8	13	17	26	40	12	16	25	40
Utilization category	DC-21B								
Pollution degree	3								
Mechanical durability (operating cycles without load)	10000								
Electrical durability (operating cycles with load)	300	300	300	300	300	200	200	200	200
Handle type	Front operated								
Operating Torque (N-m)	12	12	12	12	12	15	15	15	15
Operating temperature	-25°C to 55°C								
Operating Mechanism	One hand operated with Quick make & quick break type mechanism								
Maximum Copper cable cross-section (mm ²)	35	50	70	95	120	185	240	2x150	2x185
Terminal width (mm)	25	25	25	25	25	45	45	45	45
Terminal Bolt (mm)	M10x35	M10x35	M10x35	M10x35	M10x35	M12x40	M12x40	M14x40	M14x40
Terminal Bolt tightening torque (N-m max.)	50	50	50	50	50	85	85	140	140
Weight / unit (Kgs)	2.1	2.1	2.1	2.1	2.1	4.8	4.8	4.8	4.8

DC DISCONNECTOR 1500V DC

For Rooftop & Ground-Mount
Solar PV Application



Highlights

- High performance switching in a compact frame
- Safe and reliable operation
- Provide safe electrical isolation even at low voltages and up to 1500VDC
- Double positive break position indications
- Quick make and quick break mechanism ensures safe and independent manual operation
- Symmetric pole design for making connections independent of polarity
- Low power losses resulting in enhanced efficiency
- High temperature withstand capacity
- Reference standard IEC 60947-3

Specification (100A to 630A, 2 Pole & 3 Pole, 1500VDC)

Reference standard										
Reference standard:	IEC 60947-3									
Technical data										
Rated Operational current (In)	100A	125A	160A	200A	250A	315A	400A	500A	630A	
Conventional free air Thermal current (Ith) @ 40°C	100A	125A	160A	200A	250A	315A	400A	500A	630A	
Conventional Thermal current (Ithe) Enclosed	100A	125A	160A	200A	250A	315A	400A	500A	630A	
Number of poles	2 & 3									
Rated impulse withstand voltage Uimp (kV)	12									
Rated Insulation voltage Ui (Vdc)	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Rated Operational voltage Ue (Vdc)	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Rated short time withstand capacity 1 sec kA	2P	10	10	10	10	10	15	15	15	15
	3P	5	5	5	5	5	10	10	10	10
Power Loss W	2P	5	6	8	12	16	15	24	28	40
	3P	8	13	17	26	40	12	16	25	40
Utilization category	DC-21B									
Pollution degree	3									
Mechanical durability (operating cycles without load)	2P	10000	10000	10000	10000	10000	8000	8000	5000	5000
	3P	10000	10000	10000	10000	10000	10000	10000	10000	10000
Electrical durability (operating cycles with load)	2P	1500	1500	1500	1500	1500	1200	1200	1000	1000
	3P	300	300	300	300	300	200	200	200	200
Handle type	Front operated									
Operating Torque (N-m)	2P	9.5	9.5	9.5	9.5	9.5	11	11	17	17
	3P	12	12	12	12	12	15	15	15	15
Operating temperature	-25°C to 55°C									
Operating Mechanism	One hand operated with Quick make & quick break type mechanism									
Maximum Copper cable cross-section (mm ²)	35	50	70	95	120	185	240	2x150	2x185	
Terminal width (mm)	2P	66	66	66	73	73	96	96	135	135
	3P	25	25	25	25	25	45	45	45	45
Terminal Bolt (mm)	M10x35	M10x35	M10x35	M10x35	M10x35	M12x40	M12x40	M14x40	M14x40	
Terminal Bolt tightening torque (N-m max.)	50	50	50	50	50	85	85	140	140	
Weight / unit (Kgs)	2P	2.4	2.4	2.4	2.6	2.6	4.1	4.1	8.8	8.8
	3P	2.2	2.2	2.2	2.2	2.2	5.2	5.2	5.2	5.2
Phase Barriers & Terminal shrouds	Available as standard									
Auxiliary contact (1NO+1NC)	Optional									



Load Break Switch 800V AC

For Rooftop & Ground-Mount
Solar PV Application



Highlights

- High performance switching in a compact frame
- Safe and reliable operation
- Provide safe electrical isolation even at low voltages and up to 800V AC
- Double positive break position indications
- Quick make and quick break mechanism ensures safe and independent manual operation
- Symmetric pole design for making connections independent of polarity
- Low power losses resulting in enhanced efficiency
- High temperature withstand capacity
- Products for 800V AC & 440V AC application
- Reference standard IEC 60947-3

Specification (100A to 630A, 3 Pole & 4 Pole, 800VAC)

Reference standard								
Reference standard:	IEC 60947-3							
Technical data	FRAME-1			FRAME-2		FRAME-3		FRAME-4
Rated Operational current (In)	100A	125A	160A	200A	250A	320A	400A	630A
Conventional Thermal current (Ith) @ 40°C	100A	125A	160A	200A	250A	320A	400A	630A
Conventional Enclosed Thermal current (Ithe)@ 40°C	100A	125A	160A	200A	250A	320A	400A	630A
Rated Impulse withstand voltage (Uimp)	6 kV	6 kV	6 kV	8 kV	8 kV	12 kV	12 kV	12 kV
Rated Insulation voltage (Ui)	1000 Vac	1000 Vac	1000 Vac	1000 Vac	1000 Vac	1000 Vac	1000 Vac	1000 Vac
Dielectric strength (50 Hz 1 minute)	5 kV	5 kV	5 kV	5 kV	5 kV	8 kV	8 kV	8 kV
Rated Operational voltage (Ue)	800Vac	800Vac	800Vac	800Vac	800Vac	800Vac	800Vac	800Vac
Rated Short circuit Making capacity(Icm) (peak RMS value)	7.65 kA	7.65 kA	7.65 kA	13.6 kA	13.6 kA	13.6 kA	17 kA	32 kA
Rated Short Time withstand current (Icw) for 1 sec.	5 kA	5 kA	5 kA	10 kA	10 kA	10 kA	12 kA	20 kA
Conditional short circuit current (RMS value)	80 kA	80 kA	80 kA	80 kA	80 kA	80 kA	80 kA	80 kA
Power Loss	5W	6W	8W	12W	17W	21W	42W	87W
Pollution degree	3	3	3	3	3	3	3	3
Utilization category	AC-22A	AC-22A	AC-22A	AC-22A	AC-22A	AC-22A	AC-22A	AC-22A
Rated Making capacity	300A	375A	480A	600A	750A	960A	1200A	1890A
Rated Breaking capacity	300A	375A	480A	600A	750A	960A	1200A	1890A
Mechanical Life (No. of operations w/o current)	8500	7000	7000	7000	7000	4000	4000	4000
Electrical Life (No. of operations with current)	1500	1000	1000	1000	1000	1000	1000	1000
Switch operating torque (N-m)	9.5	9.5	9.5	11	11	17	17	40
Terminal width (mm)	25	25	25	32	32	40	55	50
Terminal thickness (mm)	4	4	4	4.5	4.5	5	5	6
Min. Copper Cable/Busbar size (sq.mm)	35	50	70	95	120	185	30x5x2	50x4x2
Min. Aluminum Cable/Busbar size (sq.mm)	50	70	95	150	185	240	32x8x2	50x6.5x2
Switch operating mechanism	Quick Make & break	Quick Make & break	Quick Make & break	Quick Make & break	Quick Make & break	Quick Make & break	Quick Make & break	Quick Make & break
Operating mode	Front operated	Front operated	Front operated	Front operated	Front operated	Front operated	Front operated	Front operated
Handle type	Single handle	Single handle	Single handle	Single handle	Single handle	Single handle	Single handle	Double handle
Terminal type	Lug/ Busbar type	Lug/ Busbar type	Lug/ Busbar type	Lug/ Busbar type	Lug/ Busbar type	Lug/ Busbar type	Lug/ Busbar type	Lug/ Busbar type