

Distribution boards type A and type B, technical overview

	Type A	Type B
IP Rating	IP3X (when correctly installed on the wall)	IP4X (when correctly installed on the wall)
Enclosure body type	Steel – welded case end with cable glad plate	Steel – welded case end with cable glad plate
Paint specification	RAL 7004 epoxy polyester	RAL 7004 epoxy polyester
Conditional short circuit rating	15kA to BS EN 61439	25kA to BS EN 61439
Busbar short time withstand (I _{cw})	5kA 0.1s	10kA 0.5s / 17kA 0.25s
Cable Capacities		
125A switch disconnecter	50mm ²	50mm ²
100A RCCB (type A = 90A)	35mm ²	50mm ²
250A switch disconnecter	–	120mm ² (+ M8 lugs)
160A – 250A MCCB incomer	–	250A = 120mm ² (+ M8 lugs)
100A direct connection kit	35mm ²	–
250A direct connection lugs	–	120mm ² (+ M8 lugs)
125A contactor incomer	–	50mm ²
250A contactor incomer	–	120mm ² (+ M8 lugs)
Enclosure earth stud	M6	M8
Incoming earth terminal	25mm ²	125A = 25mm ² , 250A = 70mm ²
Incoming neutral terminal	90/100A = 35mm ² , 125A = 50mm ²	125A = 50mm ² , 250A = 120mm ² (+ M8 lugs)
Outgoing earth terminal	25mm ²	25mm ²
Outgoing neutral terminal	25mm ²	25mm ²

Type 1/type 2 combined lightning/surge arrester, technical data

Electrical		EM3SSK3T12 & EMSSK3T12L	EM3SSK3T12P
Lightning protection system class		III, IV	I, II, III, IV
Responding time (rate of voltage rise 5 kV/μs)	L-N/ N-PE	< 25 ns / < 100 ns	< 25 ns
Voltage protection level U _p	L-N/L-PE / N-PE	< 1.5kV	1.5 kV
Maximum continuous operating voltage U _C	L-N/N-PE	280 VAC/255 VAC	440 VAC / 260 VAC
Temporary overvoltage test value U _T (5 s)	L-N/L-PE	348 VAC/370 VAC	
	N-PE	1200 VAC	200 VAC (200 ms)
Rated frequency		50/60 Hz	50/60 Hz
Discharge current (8/20) μs I _{max} /I _n		–	100 kA
Open circuit voltage U _{oc}		20 kV	–
Nominal discharge current (8/20) μs I _n	L-N/N-PE	3x25 kA/100 kA	–
Maximum discharge current I _{max}	L-N/N-PE	3x50 kA/100 kA	–
Impulse current I _{imp} (10/350) μs:			
	Peak current	L-N/N-PE	3x12.5 kA/100 kA
	Charge Q		50 As
Specific energy		2500 kJ/	2500 kJ/Ω
Follow current interrupt rating I _{fi}	N-PE	100 A _{r.m.s}	–
	at 260 V	L-(PE)N/N-PE	–
	at 440 V	L-(PE)N/N-PE	–
Short-circuit current strength at max. back-up fuse		–	25kA _{rms}
Maximum back-up fuse		160 AgL/gG	125 AgL
Maximum short-circuit current		50 kA _{r.m.s}	–

Type 2 surge arrester technical data

Electrical		EM3SSK1T2	EM3SSK3T2
Responding time (rate of voltage rise 5 kV/μs)	L-N/N-PE/L-PE	< 25ns/< 100ns/< 100ns	< 25ns/< 100ns/< 100ns
Maximum continuous operating voltage U _C	L-N/N-PE	335VAC/260VAC	280VAC/260VAC
Temporary overvoltage test value U _T (5 s)	L-N	415 VAC	350 VAC
	N-PE	1200 VAC	1200 VAC
Rated frequency		50/60 Hz	50/60 Hz
Nominal discharge current I _n	L-N/N-PE/L-PE	20 kA (8/20)μs	20 kA (8/20)μs
Voltage protection level U _p at I _n	L-N/N-PE/L-PE	≤1600V/≤1000V/≤1650V	≤1000V/≤1000V/≤1300V
Maximum discharge current I _{max}	L-N/N-PE/L-PE	40 kA (8/20)μs	40 kA (8/20)μs