

# Protection components

Switch-disconnector-fuses, 32 to 1250 A  
for use with NF C and DIN fuses

Type			GS1-DD	GS1-F	GS1-G	GS1-J
<b>Environment</b>						
Conforming to standards	Switch-disconnector-fuses Circuit breakers		IEC 60947-3 and 5, NF C 63-130, VDE 0660, NBN 63408 IEC 269-1 and 2, NFC 63-210 and 63-211, VDE 0636-1, DIN 43620			
Product certifications			ASEFA/LOVAG, KEMA, pending: LROS, CEBEC			
Protective treatment			"TH"			
Fire resistance conforming to IEC 695-2-1	Body	°C	960	960		
	Fuse cover	°C	–	850		

## Pole characteristics

Rated thermal current at 40 °C (I <sub>th</sub> )		A	32	50	63	100	
Fuse size			10 x 38	14 x 51	T000	22 x 58	
Rated insulation voltage (U <sub>i</sub> )		V	690	750	750	750	
Rated impulse withstand voltage (U <sub>imp</sub> )		kV	8	8	8	8	
Rated operational power	Cat. AC-23A/B (1)	~ 400 V	kW	15	25	33	55
		500 V	kW	18,5 (2)	33	45	75
		690 V	kW	25 (2)	45	55	90
Rated operational current (I <sub>e</sub> )	Cat. AC-23A/B (1)	~ 400 V	A	32	50	63	100
		500 V	A	32 (2)	50	63	100
		690 V	A	32 (2)	50	63	100
	Cat. DC-23A/B (1)	≡ 500 V (3)	A	20	40	40	80
Short-circuit withstand	I rms with protection by gG (gl) fuses	kA	100	100	100	100	
Short-circuit making capacity	I rms with protection by gG (gl) fuses	kA	100	100	100	100	
Fuse ratings		A	32	50	63	100	
Rated breaking capacity making capacity	I rms at 400 V Cat. AC-23B	A	256	400	500	800	
		A	320	500	630	1000	
Mechanical durability	Number of operating cycles		30 000	10 000	10 000	10 000	
Electrical durability	Number of op. cycles Cat. AC/DC-23A/B (1)		1500/300	1500	1500	1500	
Cabling	Cable c.s.a. min/max	mm <sup>2</sup>	2,5/16	6/25	10/25	25/95	
	Bars min c.s.a. / max width	mm	–	–	–	–	
Tightening torque		N.m	3	3.2	3.2	12	

## GS1-AMS●11 and GS1-AM1 to AM4 early break and signalling contact characteristics

Rated thermal current at 40 °C (I <sub>th</sub> )		A	16
Rated operational current (I <sub>e</sub> )	Cat. AC-15	A	127 V : 5; 230 V : 4; 400 /415 V : 3; 440 V : 2
	Cat. DC-13	A	24 V : 12; 48 V : 2; 110 V : 0.6; 220 V : 0.4
Durability	Number of operating cycles		Mechanical : 1 000 000; electrical Cat. AC-15 : 30 000
Fuse protection	gG	A	6 A max
Cabling		mm	Faston connector : 1 x 6.35 or 2 x 2.8

## GS1-AN and GS1-ANT signalling contact characteristics (4)

Rated thermal current at 40 °C (I <sub>th</sub> )		A	20
Rated operational voltage (I <sub>e</sub> )	Cat. AC-15	A	230 V : 10; 400/415 V : 8; 440 V : 6
	Cat. DC-13	A	48 V : 4; 110 V : 1.2; 220 V : 1
Durability	Number of operating cycles		Mechanical : 30 000; electrical Cat. AC-15 : 10 000
Fuse protection	gG		16 A max
Cabling	Cable c.s.a. min/max	mm <sup>2</sup>	Min : 1.5; max : 16

- (1) Category "A" frequent operating cycles, category "B" infrequent operating cycles.  
(2) With tubular links  
(3) 2 poles in series per phase.  
(4) Non utilisables sur GS1-DD.

GS1-K	GS1-KK	GS1-L	GS1-LL	GS1-N	GS1-QQ	GS1-S	GS1-V
IEC 947-3 and 5, NF C 63-130, VDE 0660, NBN 63408							
IEC 269-1 and 2, NFC 63-210 and 63-211, VDE 0636-1, DIN 43620							
ASEFA/LOVAG, KEMA, pending: LROS, CEPEC							
"TH"							
960							
850							
125	125	160	160	250	400	630	1250
22 x 58	T00	T0	T00	T1	T2	T3	T4
750	750	750	750	750	750	1000	1000
8	8	8	8	8	8	12	12
63	63	90	90	132	220	355	710
90	90	110	110	160	220	355	670/710
90	90	110	110	220	220/295	295/400	600/750
125	125	160	160	250	400	630	1250
125	125	160	160	250	315/315	500	900/1000
100	100	125	125	250	250/315	315/400	630/800
100	100	125/80	125/80	160	200/315	400/630	800/1000
100	100	100	100	100	100/50	100	100
100	100	100	100	100	100/50	100	100
125	125	160	160	250	315/400	630	1250
1000	1000	1280	1280	2000	3200	5040	10 000
1250	1250	1600	1600	2500	4000	6300	12 500
10 000	10 000	10 000	10 000	10 000	10 000	5000	5000
1000	1000	1000/200	1000/200	1000/200	1000/200	1000/200	500/100
35/95	35/95	50/95	50/95	95/240	185/240	2 x 150 / 2 x 300	- / 4 x 185
-	-	-	-	-	- / 45	2 x 30 x 5 / 63	2 x 60 x 5 / 100
12	12	12	12	25	25	44	44
16							
127 V : 5; 230 V : 4; 400 /415 V : 3; 440 V : 2							
24 V : 12; 48 V : 2; 110 V : 0.6; 220 V : 0.4							
Mechanical : 1 000 000; electrical Cat. AC-15 : 30 000							
6 A max							
Faston connectors : 1 x 6.35 or 2 x 2.8							
20							
230 V : 10; 400 /415 V : 8; 440 V : 6							
48 V : 4; 110 V : 1.2; 220 V : 1							
Mechanical : 30 000; electrical Cat. AC-15 : 10 000							
16 A max							
Min : 1.5; max : 16							

# Protection components

Switch-disconnector-fuses, 32 to 1250 A  
for use with BS fuses

Type			GS1-DDB	GS1-GB	GS1-JB
<b>Environment</b>					
Conforming to standards	Switch-disconnector-fuses Circuit breakers		IEC 947-3 and 5, NF C 63-130, VDE 0660, NBN 63408 IEC 269-1 and 2, NFC 63-210 and 63-211, VDE 0636-1, DIN 43620		
Product certifications			ASEFA/LOVAG, KEMA, pending: LROS		
Protective treatment			"TH"		
Fire resistance conforming to IEC 695-2-1	Body	°C	960		
	Fuse cover	°C	-		850

## Pole characteristics

Rated thermal current at 40 °C (I <sub>th</sub> )		A	32	63	100	
Fuse size			A1	A2-A3	A4 Ø ≤ 31 mm	
Rated insulation voltage (U <sub>i</sub> )		V	690	750	750	
Rated impulse withstand voltage (U <sub>imp</sub> )		kV	8	8	8	
Rated operational power	Cat. AC-23A/B (1)	~ 400 V	kW	15	30	51
		500 V	kW	18,5	40	63
		690 V	kW	25	55	90
Rated operational current (I <sub>e</sub> )	Cat. AC-23A/B (1)	~ 400 V	A	32	63	100
		500 V	A	32	63	100
		690 V	A	32	63	100
	Cat. DC-23A/B (1)	≡ 500 V (2)	A	20	40	100
Short-circuit withstand	I rms with protection by gG (gl) fuses BS	kA	80	100	100	
Short-circuit making capacity	I rms with protection by gG (gl) fuses BS	kA	80	100	100	
Fuse ratings		A	32	63	100	
Rated breaking capacity making capacity	I rms at 400 V Cat. AC-23B	A	256	500	800	
		A	320	630	1000	
Mechanical durability	Number of operating cycles		30 000	10 000	10 000	
Electrical durability	Number of op. cycles Cat. AC/DC-23A/B (1)		1500/300	1500/300	1500/300	
Cabling	Cable c.s.a. min/max	mm <sup>2</sup>	2,5/16	10/25	25/95	
	Bars min c.s.a. / max width	mm	-	-	-	
Tightening torque		N.m	3	3,2	12	

## GS1-AM●11 and GS1-AM1 to AM4 early break and signalling contact characteristics

Rated thermal current at 40 °C (I <sub>th</sub> )		A	16		
Rated operational current (I <sub>e</sub> )	Cat. AC-15	A	127 V : 5; 230 V : 4; 400 /415 V : 3; 440 V : 2		
	Cat. DC-13	A	24 V : 12; 48 V : 2; 110 V : 0,6; 220 V : 0,4		
Durability	Number of operating cycles		Mechanical : 1 000 000; electrical Cat. AC-15 : 30 000		
Fuse protection	gG		6A max		
Cabling		mm	Faston connectors : 1 x 6.35 or 2 x 2.8		

## GS1-AN and GS1-ANT signalling contact characteristics

Rated thermal current at 40 °C (I <sub>th</sub> )		A	20		
Rated operational current (I <sub>e</sub> )	Cat. AC-15	A	230 V : 10; 400/415 V : 8; 440 V : 6		
	Cat. DC-13	A	48 V : 4; 110 V : 1,2; 220 V : 1		
Durability	Number of operating cycles		Mechanical : 30 000; electrical Cat. AC-15 : 10 000		
Fuse protection	gG		16 A max		
Cabling	Cable c.s.a. min / max	mm <sup>2</sup>	Min : 1,5; max : 6		

(1) Category "A" frequent operating cycles, category "B" infrequent operating cycles.  
(2) 2 poles in series per phase.

GS1-LB/LLB (1)	GS1-MMB	GS1-NB	GS1-PB	GS1-QQB	GS1-SB	GS1-TB	GS1-VB
IEC 947-3 and 5, NF C 63-130, VDE 0660, NBN 63408							
IEC 269-1 and 2, NFC 63-210 and 63-211, VDE 0636-1, DIN 43620							
ASEFA/LOVAG, KEMA, pending: LROS							
"TH"							
960							
850							
160	200	250	315	400	630	800	1250
A4, B1-B2 (3)	B1-B2	B1...B3	B1...B3	B1...B4	C1-C2	C1...C3	D1
750	750	750	750	1000	1000	1000	1000
8	8	8	8	12	12	12	12
80	100	132	132	220	355	450	560
110	140	160	160	400	355	450	560
110	150	220	220	220/295	295/400	600/750	600
160	200	250	250	400	630	800	1000
160	200	250	250	315	500	630	800
125	160	250	250	250/315	315/400	630/800	630
125	125	160	160	200/315	400/630	800	800/1000
80	80	80	80	80	-	-	-
80	80	80	55	80/50	100	100	100
160	200	250	315	400	630	800	1250
1280	1600	2000	2000	3200	5040	6400	10 000
1600	2000	2500	2500	4000	6300	8000	8000
10 000	10 000	10 000	10 000	8000	6000	6000	6000
1000/200	1000/200	1000/200	1000/200	1000/200	1000/200	500/100	500/100
50/95	50/95	95/240	95/240	185/240	2 x 150 / 2 x 300	-	- / 4 x 185
-	-	-	-	- / 40	2 x 30 x 5 / 63	2 x 60 x 5 / 63	2 x 60 x 5 / 100
12	12	25	25	25	44	44	44
16							
127 V : 5; 230 V : 4; 400 /415 V : 3; 440 V : 2							
24 V : 12; 48 V : 2; 110 V : 0.6; 220 V : 0.4							
Mechanical : 1 000 000; electrical Cat. AC-15 : 30 000							
6 A max							
Faston connectors : 1 x 6.35 or 2 x 2.8							
20							
230 V : 10; 400 /415 V : 8; 440 V : 6							
48 V : 4; 110 V : 1.2; 220 V : 1							
Mechanical : 30 000; electrical Cat. AC-15 : 10 000							
16 A max							
Min : 1.5; max : 16							

(3) Fit switch-disconnector-fuses with B1 or B2 type fuses for GS1-LB and A4 type fuses for GS1-LLB.