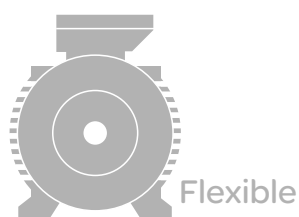


TeSys

Fuse carriers



Motor
starters

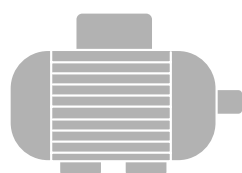


Circuit



Thermal overload relays

Fuse switch-
disconnectors



Reliable



Motor
controllers



Fuse carriers - TeSys DF, LS, GK		
Type of product	Range	Pages
For protection of control circuits or transformer TeSys DF and accessories	Up to 25, 32, 50 or 125 A	  B4/2
For protection of control circuits or transformer TeSys DF – For North American market	Up to 30 A	  B4/4
For protection of motors or transformers TeSys LS, GK and accessories	Up to 25, 32, 50 or 125 A	  B4/5

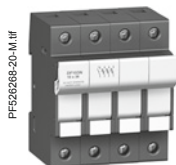
Fuse carriers

For protection of control circuits or transformers

TeSys DF



DF10 1



DF10 3N



DF14 1



DF14 3NC



DF22 1



DF22 3NC



DF10 1NV



DF10 3V



DF14 1NV



DF14 3VC



DF22 1NV



DF22 3VC

Fuse carriers ⁽¹⁾

Conventional thermal current (Ith)	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
A	mm			
25	8.5 x 31.5	1 P	12	DF81
		N	12	DF10N
		1 P + N ⁽²⁾	6	DF81N
		2 P	6	DF82
		3 P	4	DF83
		3 P + N ⁽²⁾	3	DF83N
32	10 x 38	1 P	12	DF101
		N	12	DF10N
		1 P + N ⁽²⁾	6	DF101N
		2 P	6	DF102
		3 P	4	DF103
		3 P + N ⁽²⁾	3	DF103N
50	14 x 51	1 P	6	DF141
		N	6	DF14N
		1 P + N ⁽²⁾	3	DF141N
		2 P	3	DF142
		3 P	2	DF143C ⁽³⁾
		3 P + N ⁽²⁾	1	DF143NC ⁽³⁾
125	22 x 58	1 P	6	DF221
		N	6	DF22N
		1 P + N ⁽²⁾	3	DF221N
		2 P	3	DF222
		3 P	2	DF223C ⁽³⁾
		3 P + N ⁽²⁾	1	DF223NC ⁽³⁾

Fuse carriers with "blown fuse" indicators (neon) ^{(1) (4)}

Conventional thermal current (Ith)	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
A	mm			
25	8.5 x 31.5	1 P	12	DF81V
		1 P + N ⁽²⁾	6	DF81NV
		2 P	6	DF82V
		3 P	4	DF83V
		3 P + N ⁽²⁾	3	DF83NV
32	10 x 38	1 P	12	DF101V
		1 P + N ⁽²⁾	6	DF101NV
		2 P	6	DF102V
		3 P	4	DF103V
		3 P + N ⁽²⁾	3	DF103NV
50	14 x 51	1 P	6	DF141V
		1 P + N ⁽²⁾	3	DF141NV
		2 P	3	DF142V
		3 P	2	DF143VC ⁽³⁾
		3 P + N ⁽²⁾	1	DF143NVC ⁽³⁾
125	22 x 58	1 P	6	DF221V
		1 P + N ⁽²⁾	3	DF221NV
		2 P	3	DF222V
		3 P	2	DF223VC ⁽³⁾
		3 P + N ⁽²⁾	1	DF223NVC ⁽³⁾

⁽¹⁾ Each pole can be marked. A clip-in marker holder is provided for this purpose. Clip-in markers type AB1 R● or AB1 G● can also be used.

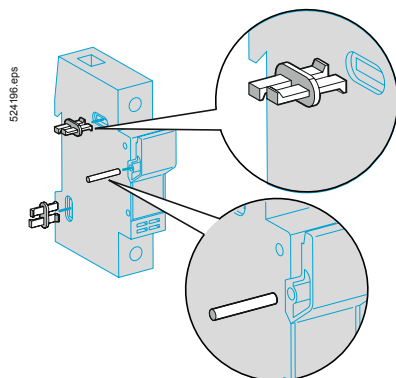
⁽²⁾ N: neutral pole fitted with a locked tubular link as standard.

⁽³⁾ A letter "C" in the reference indicates that the fuse carrier can be fitted with auxiliary early break, "blown fuse" signalling and "fuse present" signalling contacts.

⁽⁴⁾ Operational voltage of the blown fuse indicator: 110 V...690 V.

Fuse carriers

For protection of control circuits or transformers



Detail of assembly clip and pin mounting

Accessories

Auxiliary early break and "blown fuse" signalling contacts ⁽¹⁾

Fuse carriers to be equipped	Size of cartridge fuse or link	Number of contacts	Sold in lots of	Unit reference
DF14 (3 P or 3 P + N)	14 x 51	1	1	DF14AM1
		2	1	DF14AM2
DF22 (3 P or 3 P + N)	22 X 58	1	1	DF22AM1
		2	1	DF22AM2

Fuse carrier assembly kits ⁽²⁾

Fuse carriers to be assembled	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
DF8	8.5 x 31.5	1 pin, 2 clips	12	DF10AP
DF10	10 x 38			
DF14	14 x 51	1 pin, 3 clips	10	DF14AP
DF22	22 x 58	1 pin, 3 clips	10	DF22AP

Marking accessories

Description	Composition	Marking	Sold in lots of	Unit reference
Clip-in markers	Strip of 10 identical numbers or letters	0...9	25	AB1R● ⁽³⁾
		A...Z	25	AB1G● ⁽³⁾

Substitution

Fuse carriers

Old range			New range	
Reference	Size of cartridge fuse or link	Composition	Reference w/o indicator	Reference with indicator
DF6 AB08	8.5 x 31.5	1 P	DF81	DF81V
DF6 AB10	10 x 38	1 P	DF101	DF101V
DF6 N10	8.5 x 31.5 or 10 x 38	1 N	DF10N	—
GK1 CC	8.5 x 31.5	1 P + N	DF81N	DF81NV
GK1 CD	8.5 x 31.5	2 P	DF82	DF82V
GK1 CF	8.5 x 31.5	3 P	DF83	DF83V
GK1 CH	8.5 x 31.5	3 P + N	DF83N	DF83NV
GK1 DC	10 x 38	1 P + N	DF101N	DF101NV
GK1 DD	10 x 38	2 P	DF102	DF102V
GK1 DF	10 x 38	3 P	DF103	DF103V
GK1 DH	10 x 38	3 P + N	DF103N	DF103NV
GK1 EB	14 x 51	1 P	DF141	DF141V
GK1 EN	14 x 51	1 N	DF14N	—
GK1 EC	14 x 51	1 P + N	DF141N	DF141NV
GK1 ED	14 x 51	2 P	DF142	DF142V
GK1 EF	14 x 51	3 P	DF143C	DF143VC
GK1 EH	14 x 51	3 P + N	DF143NC	DF143NVC
GK1 FB	22 x 58	1 P	DF221	DF221V
GK1 FN	22 x 58	1 N	DF22N	—
GK1 FC	22 x 58	1 P + N	DF221N	DF221NV
GK1 FD	22 x 58	2 P	DF222	DF222V
GK1 FF	22 x 58	3 P	DF223C	DF223VC
GK1 FH	22 x 58	3 P + N	DF223NC	DF223NVC

Fuse carrier assembly kits

Old range		New range
Reference	Size of cartridge fuse or link	Reference
GK1 AP2	8.5 x 31.5 or 10 x 38	DF10AP
GK1 AP3	8.5 x 31.5 or 10 x 38	DF10AP
	14 x 51	DF14AP
GK1 AP4	8.5 x 31.5 or 10 x 38	DF10AP
	22 x 58	DF22AP
GK1 AP5	14 x 51	DF14AP
GK1 AP6	14 x 51	DF14AP
	22 x 58	DF22AP
GK1 AP9	22 x 58	DF22AP

⁽¹⁾ These auxiliary contacts provide the following functions: early break, "blown fuse" signalling (if the fuse carrier is fitted with striker fuses) and "fuse present" signalling.

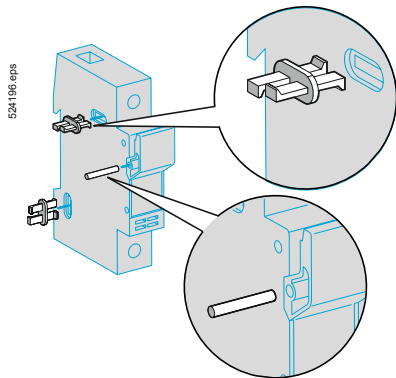
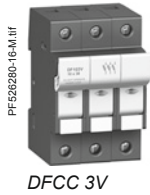
⁽²⁾ 1 pin and 2 clips are required to assemble two DF8 or DF10 fuse carriers together.
1 pin and 3 clips are required to assemble two DF14 or DF22 fuse carriers together.

⁽³⁾ When ordering, replace the ● in the reference with the number or letter required. Example: AB1-R1 or AB1-GA.

Fuse carriers for the North American market

For protection of control circuits or transformers

References



Detail of assembly clip and pin mounting

Fuse carriers ⁽¹⁾				
Conventional thermal current (Ith)	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
A				
30	Class CC	1 P	12	DFCC1
		2 P	12	DFCC2
		3 P	6	DFCC3
Fuse carriers with “blown fuse” indicators (neon) ^{(1) (2)}				
Conventional thermal current (Ith)	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
A				
30	Class CC	1 P	12	DFCC1V
		2 P	6	DFCC2V
		3 P	6	DFCC3V
Fuse carrier assembly kits ⁽³⁾				
Fuse carriers to be assembled	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
DFCC	Class CC	1 pin, 2 clips	12	DF10AP
Marking accessories				
Description	Composition	Marking	Sold in lots of	Unit reference
Clip-in markers	Strip of 10 identical numbers or letter	0...9	25	AB1R● ⁽⁴⁾
		A...Z	25	AB1G● ⁽⁴⁾

- ⁽¹⁾ Each pole can be marked. A clip-in marker holder is provided for this purpose. Clip-in markers type AB1 R● or AB1 G● can also be used.
- ⁽²⁾ Operational voltage of the blown fuse indicator: 230 V...690 V.
- ⁽³⁾ 1 pin and 2 clips are required to assemble two DFCC fuse carriers together.
- ⁽⁴⁾ When ordering, replace the p in the reference with the number or letter required. Example: AB1 R1 or AB1 GA.

Fuse carriers

For protection of motors or transformers

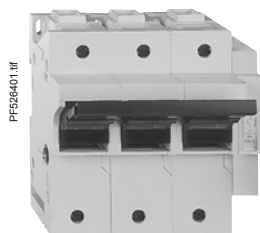
TeSys LS, GK



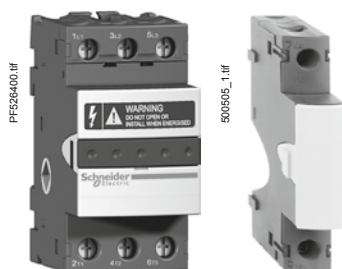
LS1 D323



LS1 D32



GK1 FK



LS1 D32

+ LA8 D324

3-pole basic blocks

Connection by spring terminals

Rating	Cartridge fuse size	Number of early break contacts ⁽¹⁾	Single-phase protection device ⁽²⁾	Reference ⁽³⁾	Weight kg
25 A	10 x 38	– ⁽⁴⁾	Without	LS1D323	0.270

Connection by screw clamp terminals or connectors

32 A	10 x 38	– ⁽⁴⁾	Without	LS1D32	0.300
50 A	14 x 51	1	Without	GK1EK	0.430
			With	GK1EV	0.470
		2	Without	GK1ES	0.470
			With	GK1EW	0.510
125 A	22 x 58	1	Without	GK1FK	0.860
			With	GK1FV	0.900
		2	Without	GK1FS	0.900
			With	GK1FW	0.940

4-pole basic blocks

Connection by screw clamp terminals or connectors

32 A	10 x 38	– ⁽⁴⁾	Without	LS1D32 + LA8D324 ⁽⁵⁾	0.300
50 A	14 x 51	1	Without	GK1EM	0.570
			With	GK1EY	0.600
		2	Without	GK1ET	0.610
			With	GK1EX	0.650
125 A	22 x 58	1	Without	GK1FM	1.090
			With	GK1FY	1.130
		2	Without	GK1FT	1.130
			With	GK1FX	1.160

Fuse carriers for the North American market

25 and 30 A basic blocks: please consult your Regional Sales Office.

⁽¹⁾ With 1 or 2 early break contacts to be inserted in the contactor control circuit.

⁽²⁾ Fuse carriers with single-phase protection device must be fitted with striker fuses.

⁽³⁾ LS1 D: clips directly onto a 35 mm rail or screw fixing.

GK1: clips directly onto a 35 mm rail or Telequick mounting plate.

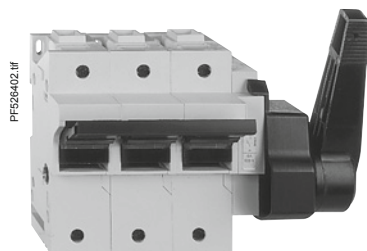
⁽⁴⁾ Addition of add-on contact block, see page B4/6.

⁽⁵⁾ Can be mounted on left-hand or right-hand side of the basic block.

Fuse carriers

Operators and accessories

TeSys LS, GK



GK1 FK + GK1 AP07

Add-on contact blocks

Description	For use on	Mounting	Maximum number	Type of contacts	Sold in lots of	Unit reference
Instantaneous auxiliary contacts (early break contacts)	LS1D32	Front	1	N/O + N/C	10	GVAE11
				N/O + N/O	10	GVAE20
	LS1D323	Front	1	N/O + N/C	10	GVAE113
				N/O + N/O	10	GVAE203

Operators

For fuse carrier		For mounting on	Reference
Rating	Number of poles		
Side handles			
125 A	3 or 4	Right-hand side	GK1AP07
		Left-hand side	GK1AP08

Front handles ⁽¹⁾

32 - 50 - 125 A	Fitted as standard
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External handles

32 A	3 or 4	Right-hand side (IP54)	LS1D32005 ⁽²⁾
		Left-hand side (IP54)	LS1D32006
50 A	3 or 4	Right-hand side	GK1AP05
		Left-hand side	GK1AP06
125 A	3 or 4	Right-hand side	GK1AP07
		Left-hand side	GK1AP08

Padlocking devices ⁽³⁾

For fuse carrier			Reference
Rating	Number of poles	Single-phase protection device	
32 A	3 or 4	Without	integral
50 A	3	Without	GK1AV07
		With	GK1AV08
	4	Without	GK1AV08
		With	GK1AV09

Links

Tubular links

For fuse carrier		Sold in lots of	Unit reference
Rating	Number of poles		
32 A	3 or 4	10	DK1CB92 ⁽⁴⁾
50 A	3 or 4	10	DK1EB92 ⁽⁵⁾
125 A	3 or 4	10	DK1FA92 ⁽⁵⁾

⁽¹⁾ Fitted as standard on 32, 50 and 125 A fuse carriers type GK1.

⁽²⁾ Reference LS1D32005 replaces reference DK1FB005.

⁽³⁾ For the 125 A rating, use side handles GK1AP07 or GK1AP08.

⁽⁴⁾ For use on a neutral circuit, the tubular link can be interlocked with special device LA8D25906 (sold in lots of 10).

⁽⁵⁾ 50 and 125 A fuse carriers type GK1 are fitted with an interlocked neutral tubular link as standard.

Accessories for LS1 D32 (screw clamp terminals)

Description	Application	Sold in lots of	Unit reference
Plate for mounting	LS1 D32 and contactor LC1 D09...D38 with front faces aligned	1	LAD311
Combination blocks	Between LS1 D32 and contactor LC1 K or LP1 K	10	GV2AF01
	Between LS1 D32 and contactor LC1 D09...D38	10	GV2AF3
	Between LS1 D32 mounted on LAD 311 and contactor LC1 D09...D38	10	GV2AF4

Description	Application	Pitch mm	Reference
Sets of 3-pole 63 A busbars	2 tap-offs	45	GV2G245
		54	GV2G254
		72	GV2G272
	3 tap-offs	45	GV2G345
		54	GV2G354
	4 tap-offs	45	GV2G445
		54	GV2G454
		72	GV2G472
	5 tap-offs	54	GV2G554

Description	Application	Sold in lots of	Unit reference
Protective end cover	For unused busbar outlets	5	GV1G10
Terminal block Connection from the top	For supply to one or more GV2 G busbar sets	1	GV1G09
Cover for terminal block	For mounting in modular panels	10	LA9E07
Padlocking device	For use with up to 4 padlocks (not supplied) Ø6 mm shank max	1	GV2V03

Accessories for LS1 D323 (spring terminals)

Description	Application	Reference
Plate for mounting	LS1 D323 and contactor LC1 D09...D38 with front faces aligned	LAD311

Description	Extension by	Number of starters	Reference
Power splitter box, 63 A	LAD 32●	2	LAD322
		4	LAD324

Description	Kit contents	Reference
Assembly and power connection kit for LS1 D323 and LC1 D093...D323	1 LAD 311 plate for mounting LS1 D323 2 LAD 341 power connection modules - between LS1 D323 and power splitter box - between LS1 D323 and contactor	LAD352

Description	Maximum capacity	Application	Sold in lots of	Unit reference
Upstream terminal block	16 mm ²	Power supply to 1 or 2 power splitter boxes	1	LAD3B1
Downstream terminal block	16 mm ²	Connection of motor cables	1	LAD331
Cable end reducer	—	For connection of conductors from 1 to 1.5 mm ²	20	LAD99

