

CC, MSC, CMS

MODULAR FUSE BASES

MODULAR FUSE-LINK BASES FOR CARTRIDGE FUSE-LINKS

Ferraz Shawmut CC, MSC and CMS modular fuse bases accommodate industrial cylindrical fuse-links 8 x 31mm, 10 x 38mm, 14 x 51mm, and 22 x 58 mm, North American Class CC and Midget (1-1/2" x 13/32") fuses. They have operating handles for non load-break disconnecting and electrical isolation for fuse-link replacement without tools. All contacts are silver-plated. 2, 3 or 4-pole units can be made up with assembly pins and operating handle ties.



CC Series

- **4 Size Ranges:**
 - CC.8** accepts 8 x 31mm fuse-links
 - CC.10** accepts Class CC, Midget and 10 x 38mm fuse-links
 - CC.14** accepts 30A/250V Class H/K/R & 14 x 51mm fuse-links
 - CC.22** accepts 22 x 58mm fuse-links
- Screw mount or symmetrical DIN rail mount (with adaptor)
- Steel bail handle tie
- Thermoplastic base

MSC Series

- **2 Size Ranges:**
 - MSC.8** accepts 8 x 31mm fuse-links
 - MSC.10** accepts Class CC, Midget and 10 x 38mm fuse-links
- Symmetrical DIN rail mount
- Optional neutral incorporated
- Optional indicator light in 1-pole unit shows open fuse when lit
- Steel pin handle tie
- Thermoplastic base

CMS Series

- **2 Size Ranges:**
 - CMS.14** accepts 30A/250V Class H/K/R & 14 X 51mm fuse-links
 - CMS.22** accepts 22 x 58mm fuse-links
- Optional neutral incorporated
- Optional indicator light shows open fuse when lit
- Optional microswitch on 1-pole & 3-pole
- Thermoplastic base



CC.8, CC.10, CC.14, CC.22

MODULAR FUSE BASES



23002-G



23210-G

CC.8 – 25A, 400VAC, Fits 8mm x 31mm Fuse-links

POLES	CATALOG NUMBER		Width (No. of 17.5mm MODULES)	STANDARD PACK
	SCREW MOUNT	RAIL MOUNT		
1	23002-G	23102-G	1	12
N*	23000-G	23100-G	1	12
1 + N*	23010-G	23110-G	2	6
2	23012-G	23112-G	2	6
3	23014-G	23114-G	3	4
3 + N*	23018-G	23118-G	4	3

* with neutral incorporated

CC.10 – 32A, 690V AC

Fits Class CC, 1-1/2" x 13/32" and 10 x 38mm Fuse-links

POLES	CATALOG NUMBER		Width (No. of 17.5mm MODULES)	STANDARD PACK
	SCREW MOUNT	RAIL MOUNT		
1	23202-G	23302-G	1	12
N*	23200-G	23300-G	1	12
1 + N*	23210-G	23310-G	2	6
2	23212-G	23312-G	2	6
3	23214-G	23314-G	3	4
3 + N*	23218-G	23318-G	4	3



23414-G



23618-G

CC.14 – 50A, 690VAC

Fits 30A, 250V Class H, K, R and 14 x 51mm Fuse-links

POLES	CATALOG NUMBER		Width (No. of 17.5mm MODULES)	STANDARD PACK
	SCREW MOUNT	RAIL MOUNT		
1	23402-G	23502-G	1.5	12
N*	23400-G	23500-G	1.5	12
1 + N*	23410-G	23510-G	3	6
2	23412-G	23512-G	3	6
3	23414-G	23514-G	4.5	4
3 + N*	23418-G	23518-G	6	3

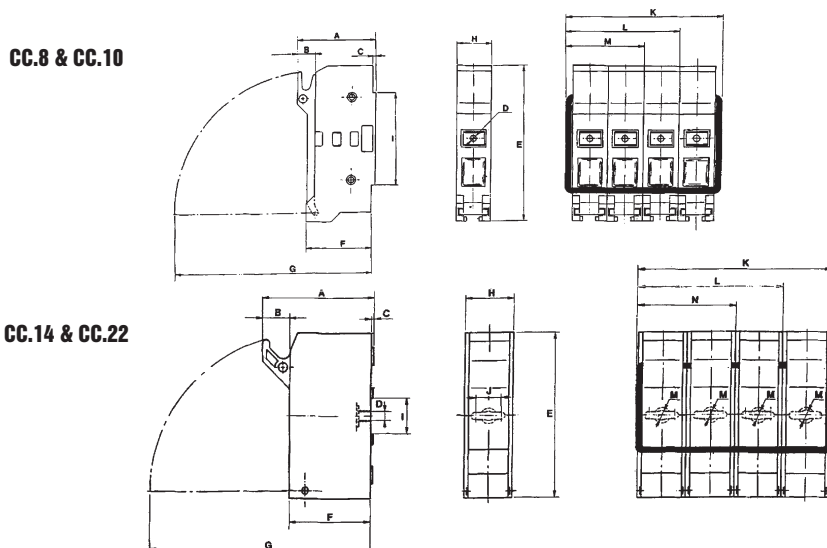
* with neutral incorporated

CC.22 – 125A, 690VAC, Fits 22 x 58mm Fuse-links

POLES	CATALOG NUMBER		Width (No. of 17.5mm MODULES)	STANDARD PACK
	SCREW MOUNT	RAIL MOUNT		
1	23602-G	23702-G	2	6
N*	23600-G	23700-G	2	6
1 + N*	23610-G	23710-G	4	3
2	23612-G	23712-G	4	3
3	23614-G	23714-G	6	2
3 + N*	23618-G	23718-G	8	1

CC.8, CC.10, CC.14, CC.22

MODULAR FUSE BASES



Dimensions

	A	B	C	D	E	F	G	H	I	K	L	M
CC.8 & CC.10	40 (1.58)	9 (.35)	2 (.079)	5.5 (.22)	77.5 (3.05)	33 (1.30)	100 (3.94)	17.5 (.069)	46 (1.81)	35 (1.38)	60 (2.36)	42.5 (1.67)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
CC.14	62 (2.44)	15.5 (.61)	1 (.04)	7.25 (.29)	94 (3.70)	45.5 (1.79)	127 (5.00)	27 (1.06)	20.3 (.80)	15.2 (.60)	112 (4.41)	85 (3.35)	6 (.24)	58 (2.29)
CC.22	71 (2.80)	16 (0.63)	1 (0.04)	7.25 (0.29)	106 (4.17)	55 (2.17)	148 (5.83)	34 (1.34)	20.3 (0.80)	18 (0.71)	139 (5.47)	105 (4.14)	6 (.24)	71 (2.80)



Accessories

	POLES	CC.8 CATALOG NO.	CC.10 CATALOG NO.	CC.14 CATALOG NO.	CC.22 CATALOG NO.	STANDARD PACK
HANDLE TIE	2	23934-G	23934-G	23941-G	23948-G	10
	3	23935-G	23935-G	23942-G	23949-G	10
	4	23936-G	23936-G	23943-G	23950-G	10
SYMMETRICAL RAIL ADAPTOR		23937-G	23937-G	23951-G	23951-G	10



Handle Tie
23936-G



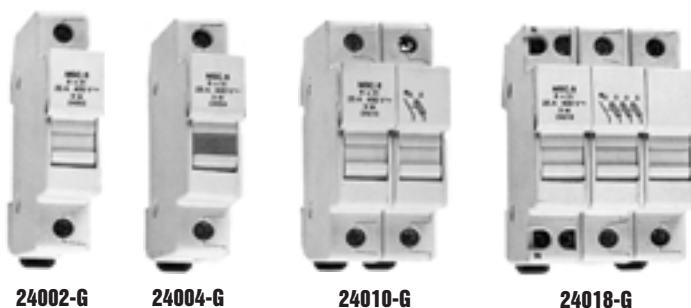
Symmetrical Rail Adaptor
23937-G

MSC.8, MSC.10

MODULAR FUSE BASES

MSC.8 – 25A, 400VAC, Fits 8 X 31mm Fuse-links

CATALOG POLES	No. of NUMBER	Width (No. of 17.5mm MODULES)	PACK
1	24002-G	1	12
1 + N*	24006-G	1	12
1 + N*	24010-G	2	6
2	24012-G	2	6
3	24014-G	3	4
3 + N*	24018-G	3	4
3 + N*	24016-G	4	3
4	24019-G	4	3
N*	24000-G	1	12



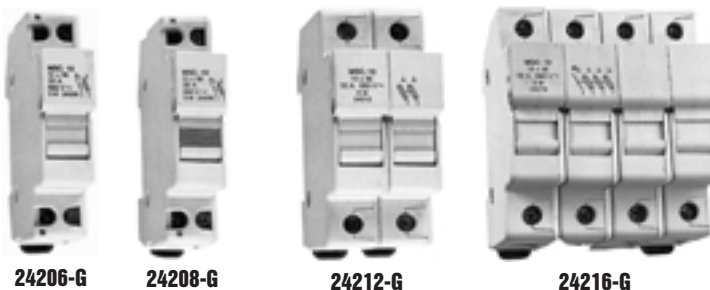
With Built-in Indicator Light

1	24004-G	1	12
1 + N*	24008-G	1	12

* with neutral incorporated

MSC.10 – 32A, 690VAC, Fits Class CC, 1-1/2" x 13/32" and 10 x 38mm Fuse-links

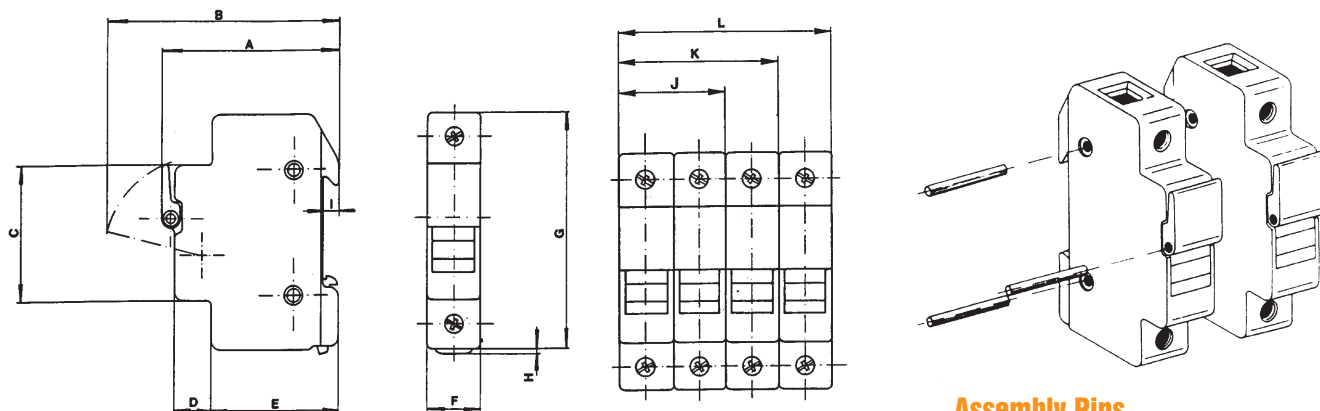
POLES	CATALOG NUMBER	Width (No. of 17.5mm MODULES)	STANDARD PACK
1	24202-G	1	12
1 + N*	24206-G	1	12
1 + N*	24210-G	2	6
2	24212-G	2	6
3	24214-G	3	4
3 + N*	24218-G	3	4
3 + N*	24216-G	4	3
4	24219-G	4	3
N*	24200-G	1	12



With Built-in Indicator Light

1	24204-G	1	12
1 + N*	24208-G	1	12

* with neutral incorporated



Dimensions – mm (Inches)

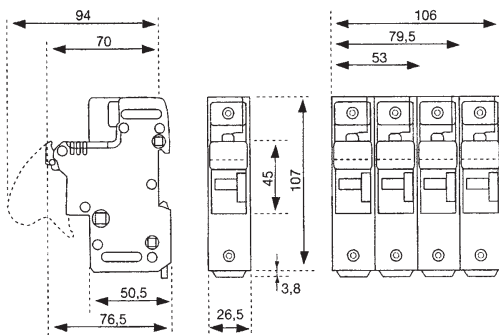
A	B	C	D	E	F	G	H	J	K	L
59 (2.32)	78 (3.07)	45 (1.77)	12.5 (.49)	42.5 (1.67)	17.5 (.69)	78 (3.07)	2.5 (.098)	35 (1.38)	52.5 (2.07)	70 (2.76)

Assembly Pins

No. of POLES	CATALOG NUMBER	STANDARD PACKAGE
2	14030-G	10
3	14031-G	10
4	14032-G	10

CMS.14

MODULAR FUSE BASES



- Indicator for fuse melts and/or stricker (120/690V)
- Clip for rail mounting in two positions
- Cable size max. 35 mm²
- Provision for locking
- IP 20

CMS 14: Fuse 14x51
In max: 50A; Vn max: 690V

POLES	CATALOG NUMBER				IN MAX			Torque	N° Mod. (17.5 mm)	Packaging
	Standard	+ indicator	+ Microswitch	Micro + Ind.	400V	500V	690V	Max N-m		
N	29000-G								1,5	6
1	29002-G	29004-G	29020-G	29120-G					1,5	6
1+N	29010-G	29011-G							3	3
2	29012-G	29013-G	29021-G	29121-G	50A	32A	25A	3.5	3	3
3	29014-G	29015-G	29024-G	29124-G					4,5	2
3*			29025-G*	29125-G*					6	1
3+N	29016-G	29017-G	29026-G	29126-G					6	1
4	29019-G								6	1

*2 microswitches

Accessories(***)

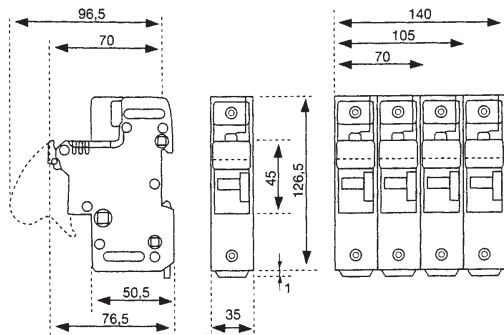
Description	CATALOG NUMBER	REFERENCE NUMBER	N° Mod (17.5 mm)	Packaging
Micro Kit 1P	29051-G	M218741	1,5	1
Micro Block 3P	29052-G	C219261	4,5	1
Block 2 Micro 3P	29053-G	D219791	4,5	1
Fuse holder assembly pins	29050-G	Z218223		10
Lock	29057-G	M223525		1

(***) See technical features for mounting information



CMS.22

MODULAR FUSE BASES



- Indicator for fuse melts and/or stricker (120/690V)
- Clip for rail mounting in two positions
- Cable size max. 50 mm²
- Provision for locking
- IP 20

CMS 22: Fuse 22x58
In max: 125A; Vn max: 690V

POLES	CATALOG NUMBER				IN MAX			Torque	N° Mod. (17.5 mm)	Packaging
	Standard	+ indicator	+ Microswitch	Micro + Ind.	400V	500V	690V	Max N-m		
N	29200-G								1,5	6
1	29202-G	29204-G	29220-G	29320-G					1,5	6
1+N	29210-G	29211-G							3	3
2	29212-G	29213-G	29221-G	29321-G	125A	100A	80A	4.5	3	3
3	29214-G	29215-G	29224-G	29324-G					4,5	2
3*			29225-G*	29325-G*					6	1
3+N	29216-G	29217-G	29226-G	29326-G					6	1
4	29219-G								6	1

*2 microswitches

Accessories(***)

Description	CATALOG NUMBER	N° Mod (17.5 mm)	Packaging
Micro Kit 1P	29251-G	1,5	1
Micro Block 3P	29252-G	4,5	1
Block 2 Micro 3P	29253-G	4,5	1
Fuse holder assembly pins	29250-G		10
Lock	29057-G		1

(***) See technical features for mounting information

CMS

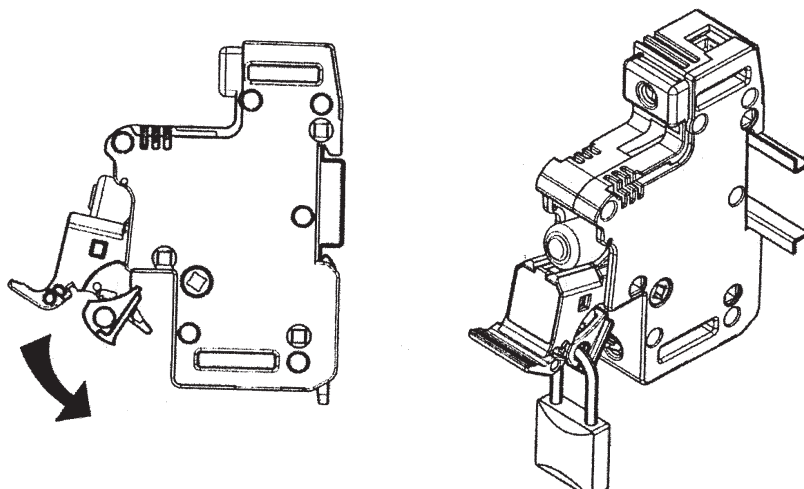
MODULAR FUSE BASES

Table of electrical characteristics

	Rating UN(V)	Uimp	Fuse Current rating IN(A)	Maimum fuse operating current (A)				Recom-mended copper wire size (mm2)	Torque Max Nm.			
				gG	aM	gRC	UR					
CMS 14	690	8	0,25	0,25	0,25				3,5			
			0,5									
			1									
			2									
			4									
			6									
			8									
			10							10	10	
			12							12	12	
			16							16	16	2,5
			20							20	20	2,5
			25							25	20	4
32	32	25	6									
40	40	30	6									
50	50	38	10									
CMS 22	690	8	0,25	↓	1				4			
			0,5									
			1									
			2									
			4									
			6									
			8									
			10							20	20	4
			12							25	25	6
			16							32	42	10
			20							40	40	10
			25							50	50	10
			32							51	63	16
			40							64	60	25
			50							74	70	35
										100		35
	100		35									



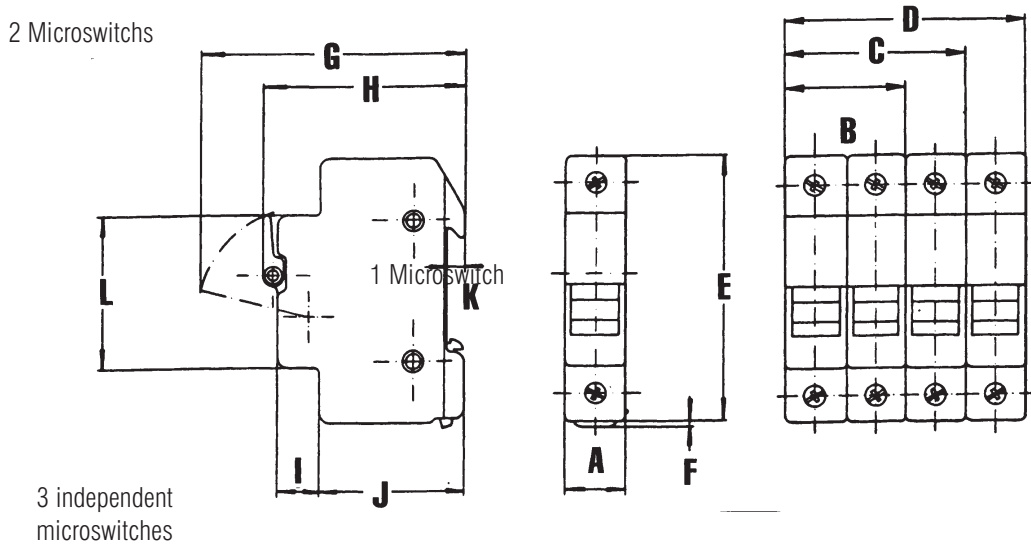
Lock installation
Padlock Catalog Number 29057-G



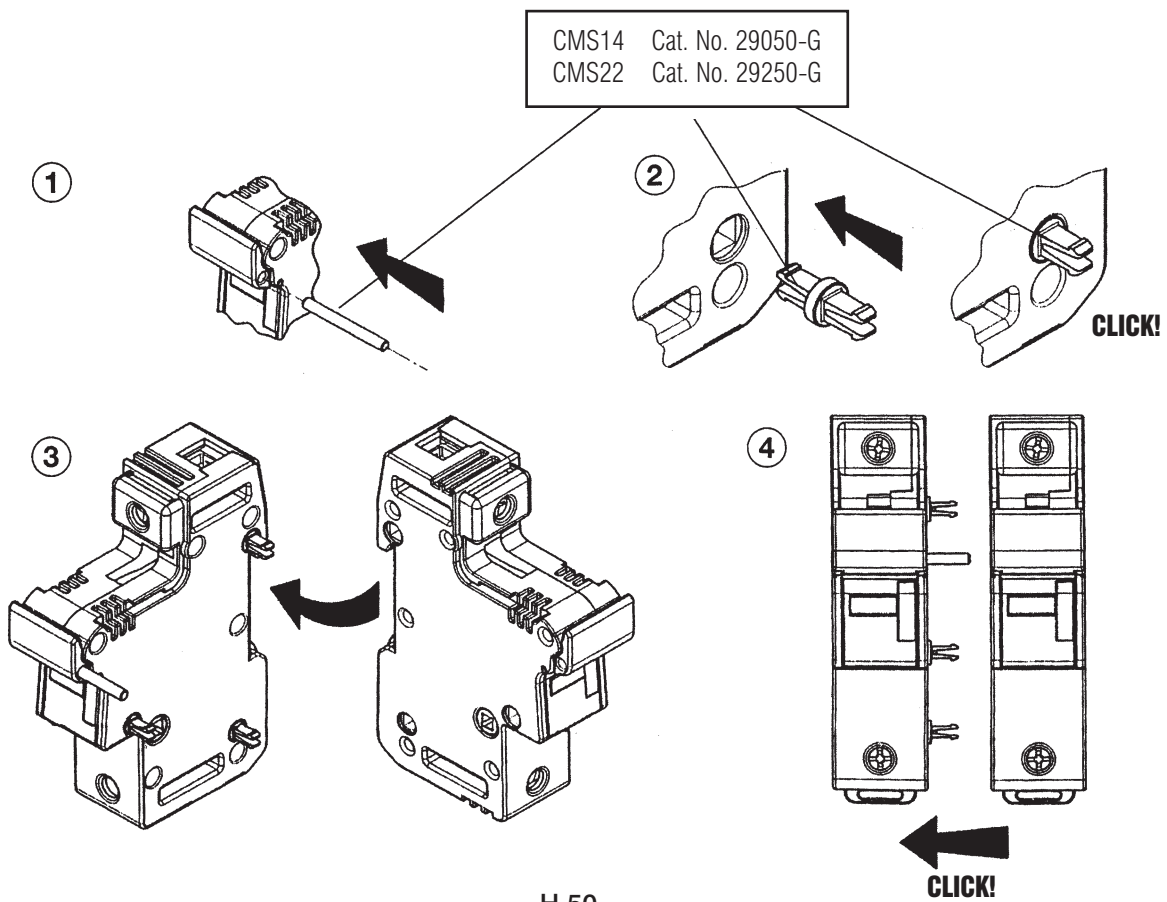
CMS

MODULAR FUSE BASES

Microswitch options



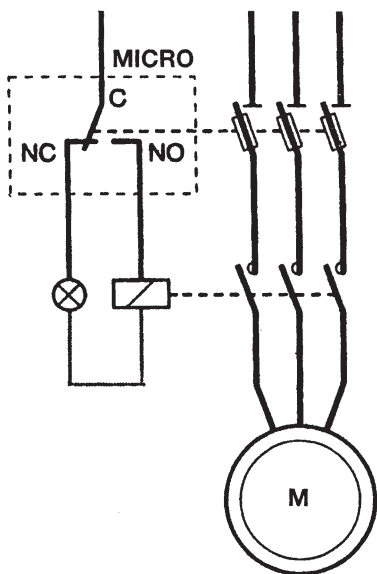
Fuse holder assembly



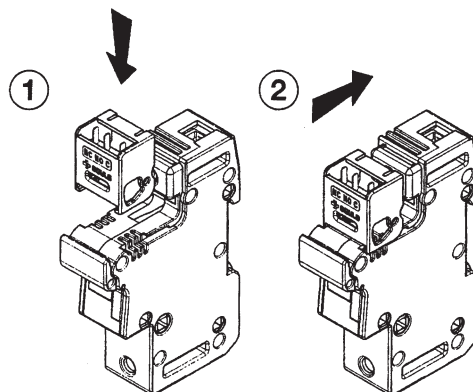
CMS

MODULAR FUSE BASES

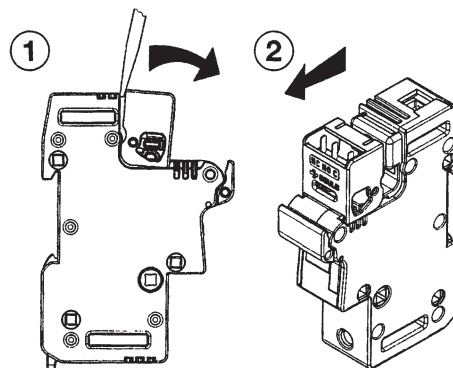
Microswitch mounting instructions(*)



Assembly



Disassembly



Auxiliary microswitch characteristics

(*) **Microswitch functions**

Blown fuse:	Fuse holder containing fuse with stricker sends message when fuse blown	Nominal current and interrupting rating(1) at 250V	6A	AC12
			3A	AC13
Prebreaking:	When fuse holder opens	Nominal current and interrupting rating(1) at 2 and 24 V	0,3A	AC14
			0,1A	DC12/13/14
Presence:	Sends message or not depending on fuse presence		6A	DC12/DC13
			5A	AC13
			2A	AC14/DC13
			0,6A	DC14

(1) According IEC947-5 Standard