

# 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 31 mm, 10 x 38 mm, 14 x 51 mm 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)
	SCREW MOUNT	RAIL MOUNT	
1	23002-G	23102-G	1
N*	23000-G	23100-G	1
1 + N*	23010-G	23110-G	2
2	23012-G	23112-G	2
3	23014-G	23114-G	3
3 + N*	23018-G	23118-G	4

\* with neutral incorporated

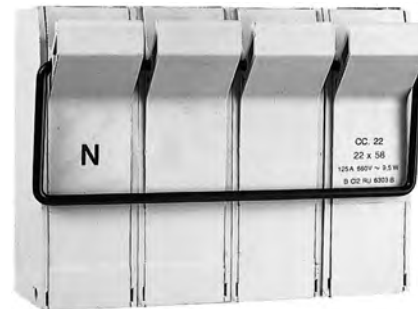
**CC.10 – 32A, 690V AC**

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

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



**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)
	SCREW MOUNT	RAIL MOUNT	
1	23402-G	23502-G	1.5
N*	23400-G	23500-G	1.5
1 + N*	23410-G	23510-G	3
2	23412-G	23512-G	3
3	23414-G	23514-G	4.5
3 + N*	23418-G	23518-G	6

\* with neutral incorporated

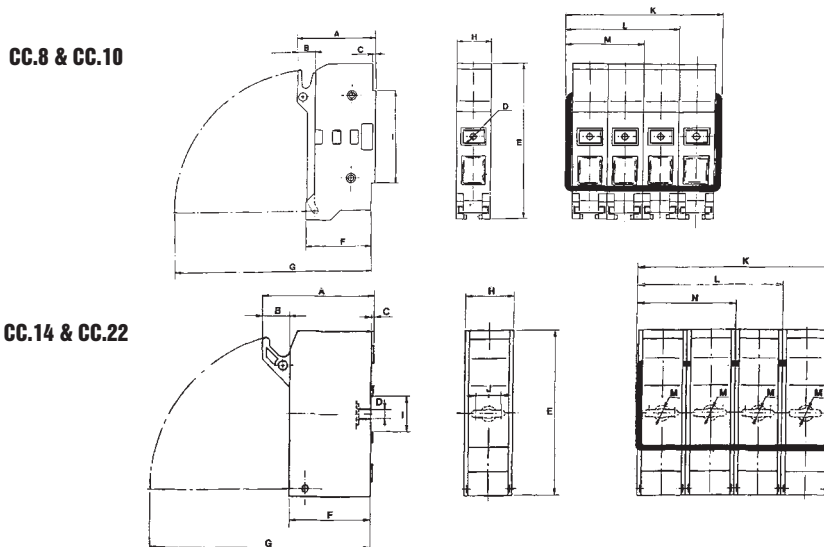
**CC.22 – 125A, 690VAC, Fits 22 x 58mm Fuse-links**

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



# 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
HANDLE TIE	2	23934-G	23934-G	23941-G	23948-G
	3	23935-G	23935-G	23942-G	23949-G
	4	23936-G	23936-G	23943-G	23950-G
SYMMETRICAL RAIL ADAPTOR		23937-G	23937-G	23951-G	23951-G



Handle Tie  
23936-G



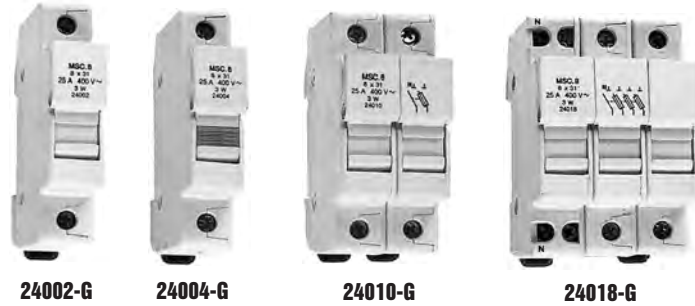
Symmetrical Rail Adaptor  
23937-G

# 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)
1	24002-G	1
1 + N*	24006-G	1
1 + N*	24010-G	2
2	24012-G	2
3	24014-G	3
3 + N*	24018-G	3
3 + N*	24016-G	4
4	24019-G	4
N*	24000-G	1



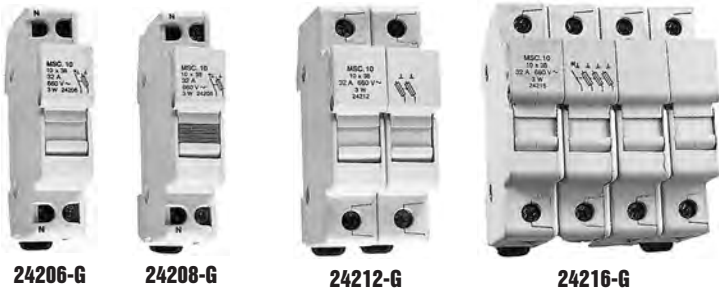
#### With Built-in Indicator Light

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

\* with neutral incorporated

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

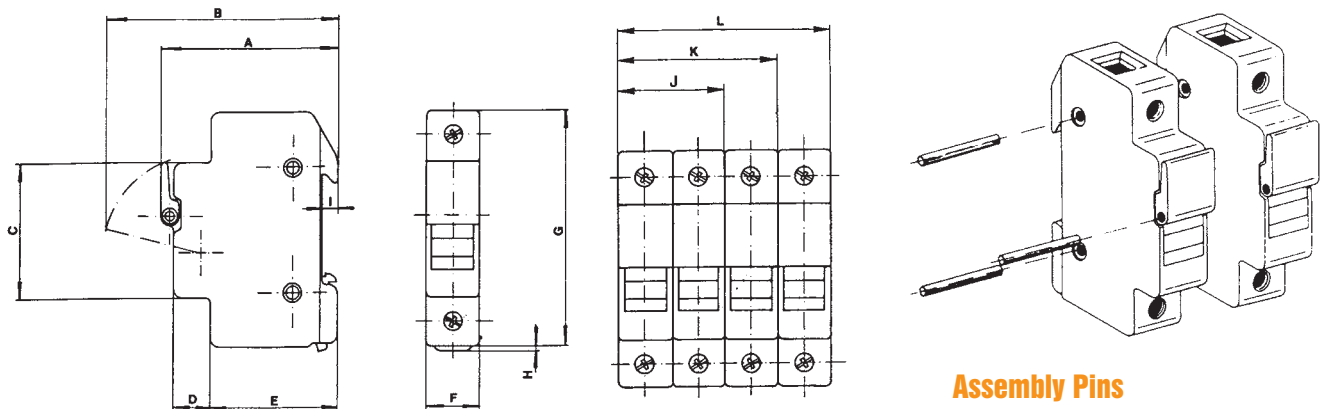
POLES	NUMBER	Width CATALOG (No. of 17.5mm MODULES)
1	24202-G	1
1 + N*	24206-G	1
1 + N*	24210-G	2
2	24212-G	2
3	24214-G	3
3 + N*	24218-G	3
3 + N*	24216-G	4
4	24219-G	4



#### With Built-in Indicator Light

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

\* with neutral incorporated



#### Dimensions – mm (Inches)

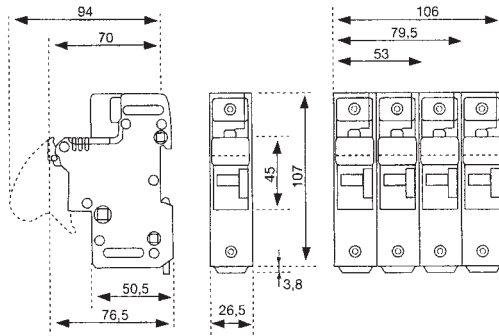
A	B	C	D	E	F	G	H	J	K	L
59	78	45	12.5	42.5	17.5	78	2.5	35	52.5	70
(2.32)	(3.07)	(1.77)	(.49)	(1.67)	(.69)	(3.07)	(.098)	(1.38)	(2.07)	(2.76)

#### Assembly Pins

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

# 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 mm<sup>2</sup>
- Provision for locking
- IP 20

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

POLES	CATALOG NUMBER				In MAX			Torque	No. of 17.5mm Modules
	Standard	+ indicator	+ Microswitch	Micro + Ind.	400V	500V	690V	Max N-m	
N	29000-G								1,5
1	29002-G								1,5
1+N	29010-G	29004-G	29020-G	29120-G					3
2	29012-G	29013-G	29021-G	29121-G	50A	32A	25A	3.5	3
3	29014-G	29015-G	29024-G	29124-G					4,5
3*			29025-G*	29125-G*					6
3+N	29016-G	29017-G	29026-G	29126-G					6
4	29019-G								6

\*2 microswitches

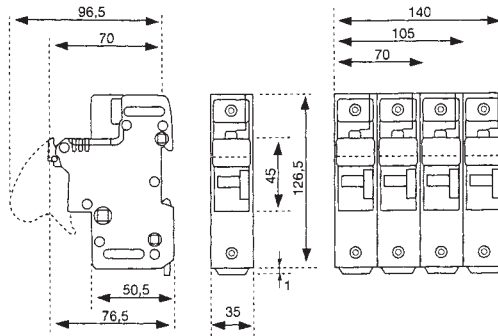
**Accessories(\*\*\*)**

Description	CATALOG NUMBER	No. of 17.5mm Modules
Micro Kit 1P	29051-G	1,5
Micro Block 3P	29052-G	4,5
Block 2 Micro 3P	29053-G	4,5
Fuse holder assembly pins	29050-G	
Lock	29057-G	

(\*\*\*) 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 mm<sup>2</sup>
- Provision for locking
- IP 20

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

POLES	CATALOG NUMBER				In MAX			Torque	No. of 17.5mm Modules
	Standard	+ indicator	+ Microswitch	Micro + Ind.	400V	500V	690V	Max N-m	
N	29200-G								1,5
1	29202-G	29204-G	29220-G	29320-G					1,5
1+N	29210-G	29211-G							3
2	29212-G	29213-G	29221-G	29321-G	125A	100A	80A	4.5	3
3	29214-G	29215-G	29224-G	29324-G					4,5
3*			29225-G*	29325-G*					6
3+N	29216-G	29217-G	29226-G	29326-G					6
4	29219-G								6

\*2 microswitches

### Accessories(\*\*\*)

Description	CATALOG NUMBER	No. of 17.5mm Modules
Micro Kit 1P	29251-G	1,5
Micro Block 3P	29252-G	4,5
Block 2 Micro 3P	29253-G	4,5
Fuse holder assembly pins	29250-G	
Lock	29057-G	

(\*\*\*) See technical features for mounting information



# CMS

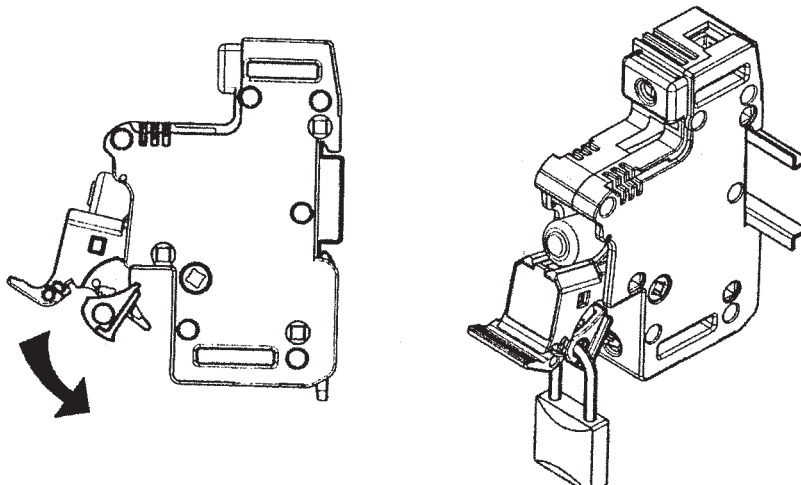
## MODULAR FUSE BASES

Table of electrical characteristics

	Rating Un(V)	Uimp	Fuse Current rating In(A)	Maimum fuse operating current (A)				Recom- mended copper wire size (mm2)	Max Torque N-m		
				gG	aM	gRC	UR				
CMS 14	690	8	0,25	0,25	0,25			2,5	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	40	30	6							
50	50	50	38	10							
CMS 22	690	8	1	↓	1			4	4		
			2								
			4								
			6								
			8								
			10								
			12								
			16								
			20				20			20	4
			25				25			25	6
			32				32			42	10
			40				40			40	10
			50				50			50	10
			63				51			63	16
			80				64			60	25
100		74	70	35							
125	100	100		35							

**Lock installation**

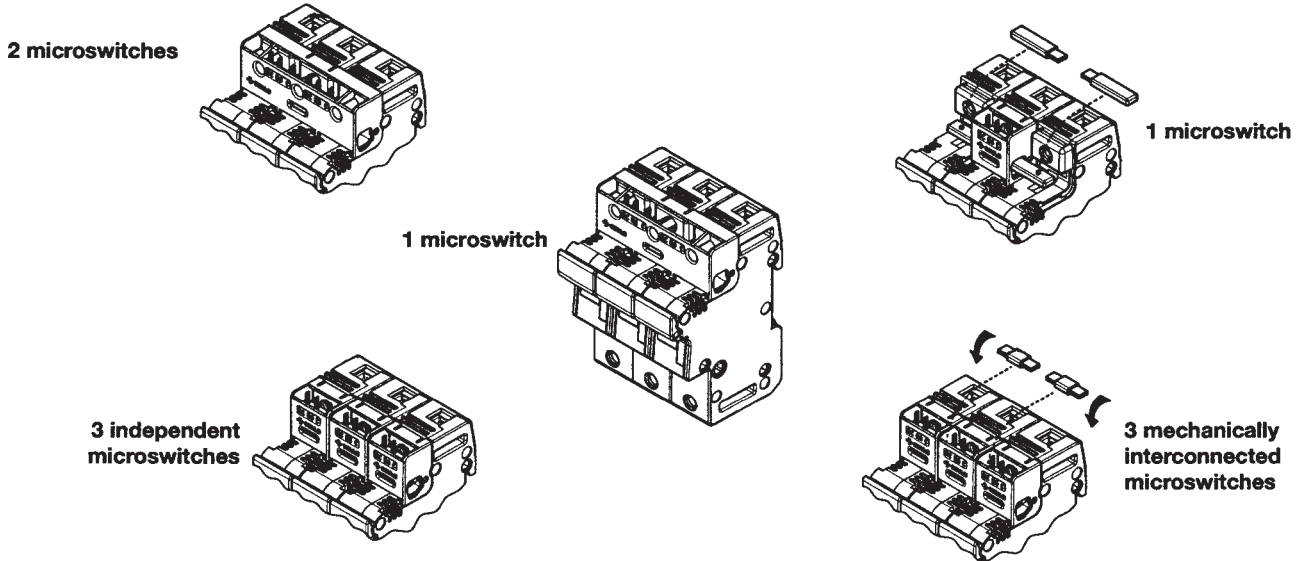
Padlock Catalog Number 29057-G



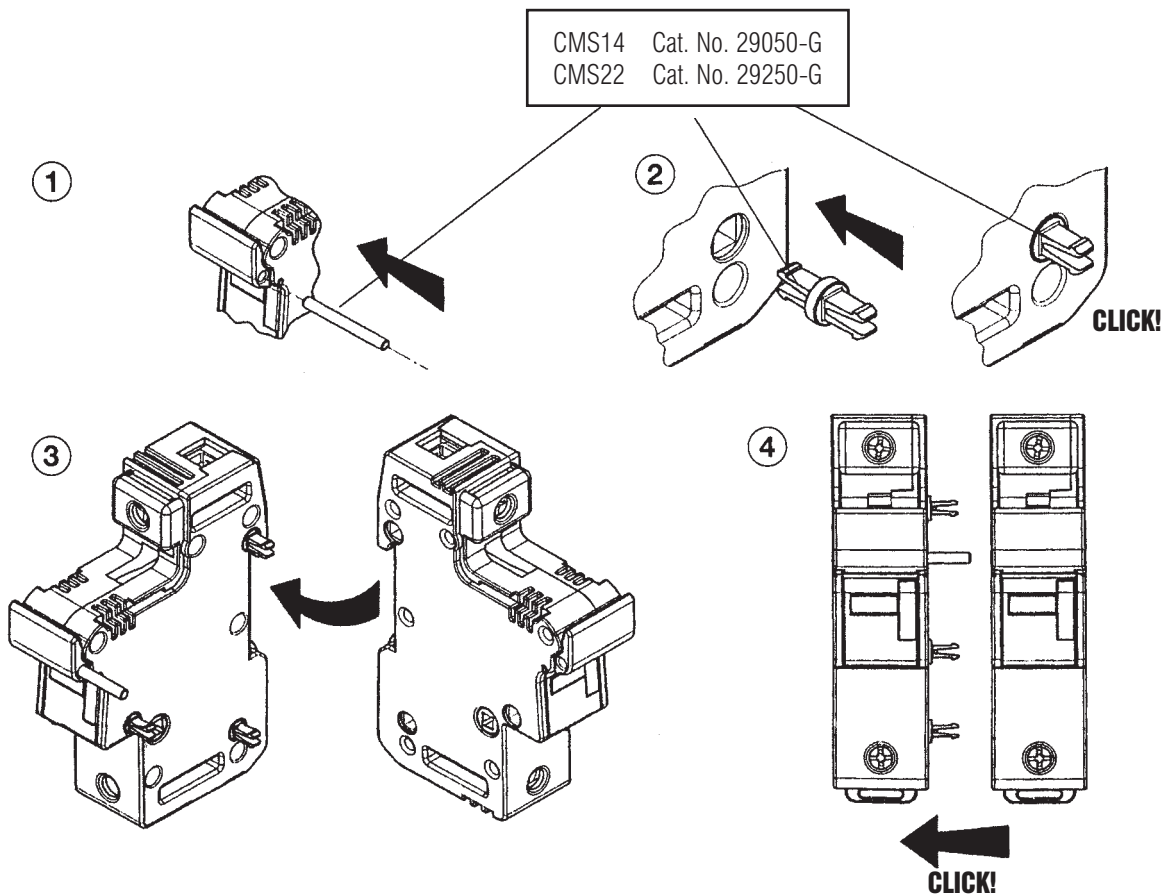
# CMS

## MODULAR FUSE BASES

### Microswitch options



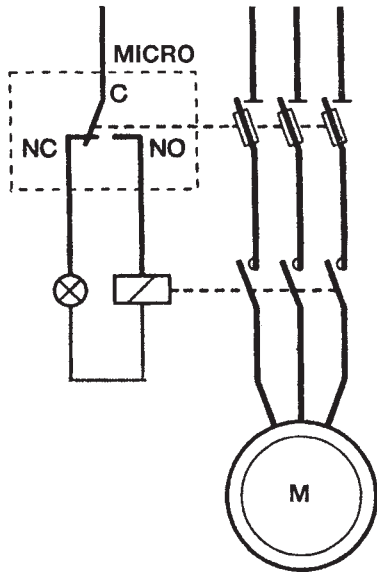
### Fuse holder assembly



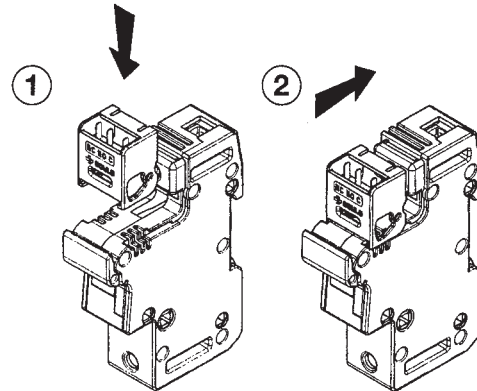
# CMS

## MODULAR FUSE BASES

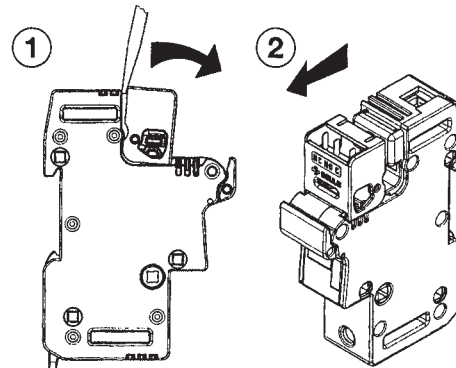
### Microswitch mounting instructions(\*)



#### Assembly



#### Disassembly



### Auxilliary microswitch characteristics

#### (\*) Microswitch functions

**Blown fuse:** Fuse holder containing fuse with striker sends message when fuse blown

**Prebreaking:** When fuse holder opens

**Presence:** Sends message or not depending on fuse presence

Nominal current and interrupting rating(1) at 250V	6A	AC12
	3A	AC13
	0,3A	AC14
	0,1A	DC12/13/14
Nominal current and interrupting rating(1) at 12 V and 24 V	6A	DC12/DC13
	5A	AC13
	2A	AC14/DC13
	0,6A	DC14

(1) According IEC947-5 Standard