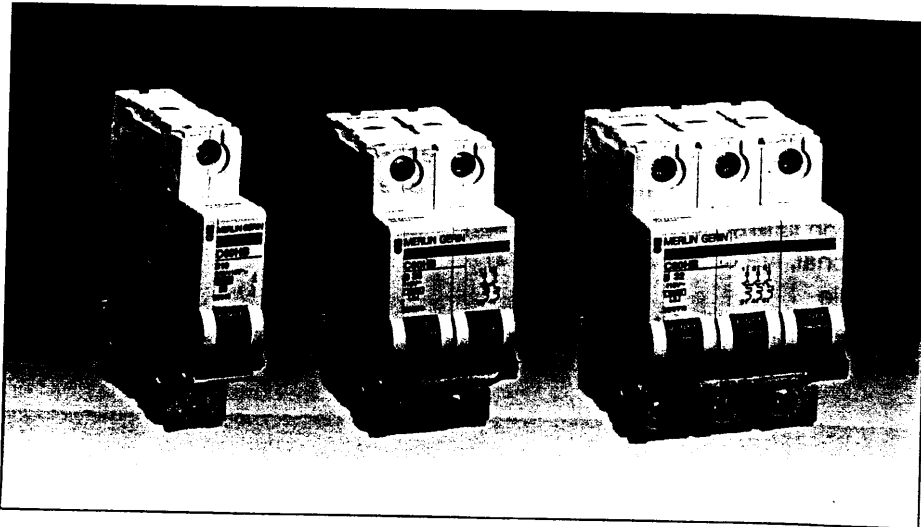


C60HB/C60HC/C60HD
miniature circuit
breakers

Farnell
OIC
716-4282 : C60HC110
716-4555 : C60HC325.
Manu.
Part No:



Technical data

- **current ratings:** BSEN 60 - 898
1A to 63A at 30°C
- **voltage ratings:** 240/415V AC
- **breaking capacity:** BSEN 60 - 898 Icn

rating type (A)	voltage (V AC)	breaking capacity (A)
1-63 1P	240	10,000
1-63 2P, 3P,4P	240/415	10,000

■ **positive contact indication:** in accordance with the 16th Edition of the IEE Wiring Regulations (537-02-04, 537-03)

■ **operating cycles (O-C):**
on load 20,000

■ **operating temperature:**
-30°C to +70°C

■ **width in 9mm modules**

1P	2P	3P	4P
2	4	6	8

■ **weight (g):**

1P	2P	3P	4P
110	220	340	450

■ **auxiliaries**

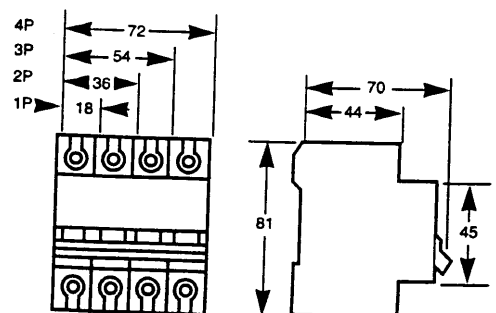
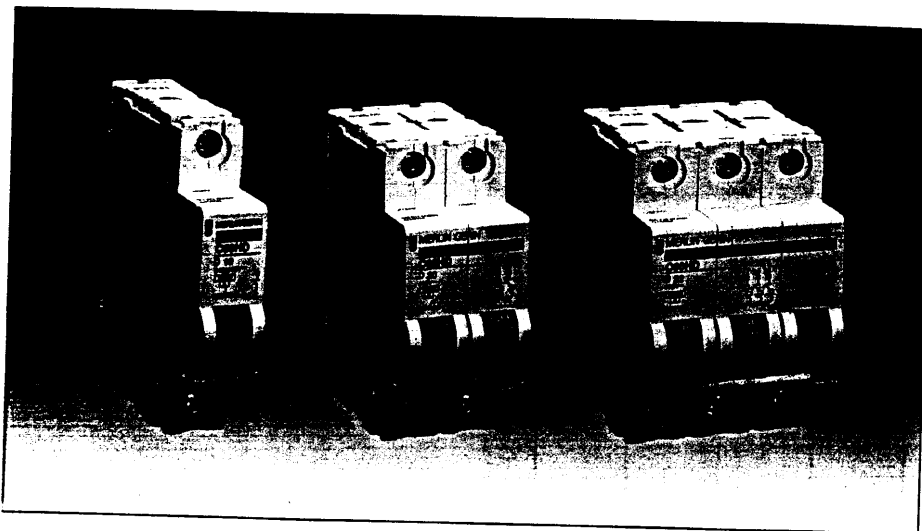
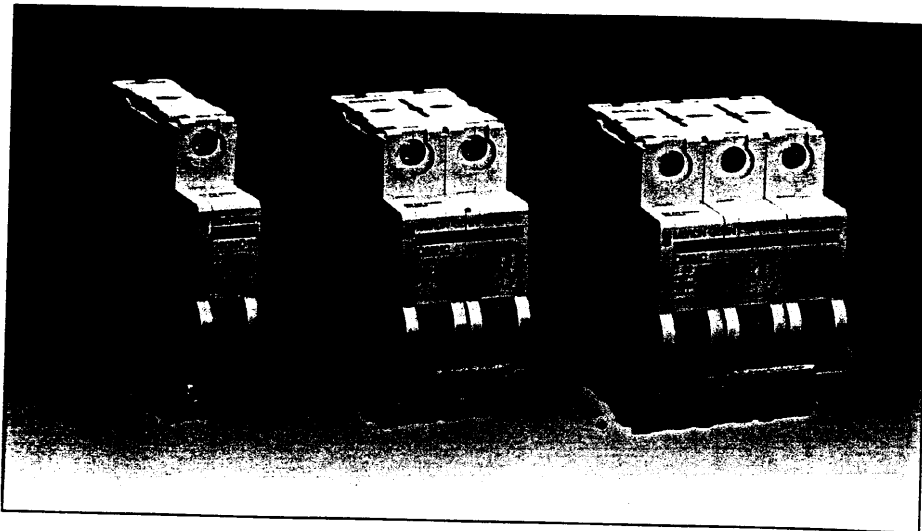
- VIGI residual current devices
- undervoltage trip release MN
- auxiliary switch OF
- alarm switch SD
- shunt trip module MX

Installation

- Direct panel mounting
- Panel mounting on symmetrical DIN rail
- In Merlin Gerin SP&N and TP&N distribution boards (except for 4 pole mcb's) and standard enclosures

■ **Information**

- electrical auxiliaries Page 38
- accessories Page 39
- add on earth leakage (Vigi) Page 51



C60HB/C60HC/C60HD miniature circuit breakers

C60HB type B applications

Protection and control of circuits against overloads and short circuits.

- in commercial and industrial electrical distribution systems.
 - in domestic installations.
 - tripping characteristics: BSEN 60-898
- type B: magnetic setting between 3 and 5 In.
- cable capacity: 1 - 25A = 25mm²
32 - 63A = 35mm²

C60HB miniature circuit breaker Part No's

ratings (A)	1P	2P	3P	4P
1	C60HB 101	C60HB 201	C60HB 301	C60HB 401
2	C60HB 102	C60HB 202	C60HB 302	C60HB 402
4	C60HB 104	C60HB 204	C60HB 304	C60HB 404
6	C60HB 106	C60HB 206	C60HB 306	C60HB 406
10	C60HB 110	C60HB 210	C60HB 310	C60HB 410
16	C60HB 116	C60HB 216	C60HB 316	C60HB 416
20	C60HB 120	C60HB 220	C60HB 320	C60HB 420
25	C60HB 125	C60HB 225	C60HB 325	C60HB 425
32	C60HB 132	C60HB 232	C60HB 332	C60HB 432
40	C60HB 140	C60HB 240	C60HB 340	C60HB 440
50	C60HB 150	C60HB 250	C60HB 350	C60HB 450
63	C60HB 163	C60HB 263	C60HB 363	C60HB 463

C60HC type C applications

Protection and control of circuits against overloads and short circuits.

- in commercial and industrial electrical distribution systems.
 - in applications with moderate inrush currents, such as certain lighting systems.
 - tripping characteristics: BSEN 60-898
- type C: magnetic setting between 5 and 10 In.
- cable capacity: 1 - 25A = 25mm²
32 - 63A = 35mm²

C60HC miniature circuit breaker Part No's

ratings (A)	1P	2P	3P
1	C60HC 101	C60HC 201	C60HC 301
2	C60HC 102	C60HC 202	C60HC 302
4	C60HC 104	C60HC 204	C60HC 304
6	C60HC 106	C60HC 206	C60HC 306
10	C60HC 110	C60HC 210	C60HC 310
16	C60HC 116	C60HC 216	C60HC 316
20	C60HC 120	C60HC 220	C60HC 320
25	C60HC 125	C60HC 225	C60HC 325
32	C60HC 132	C60HC 232	C60HC 332
40	C60HC 140	C60HC 240	C60HC 340
50	C60HC 150	C60HC 250	C60HC 350
63	C60HC 163	C60HC 263	C60HC 363

C60HD type D applications

Protection and control of circuits against overloads and short circuits.

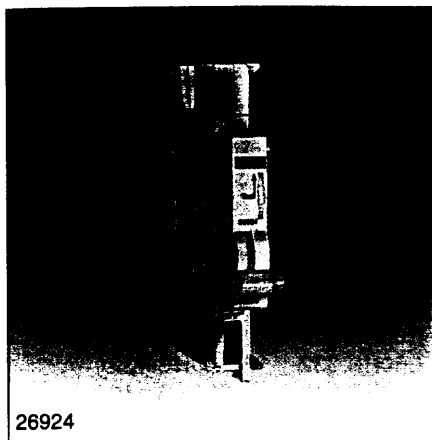
- in commercial and industrial electrical distribution systems.
 - in applications with high inrush currents, such as transformers, motors, certain lighting systems etc..
 - tripping characteristics: BSEN 60-898
- type D: magnetic setting between 10 and 14 In.
- cable capacity: 1 - 25A = 25mm²
32 - 63A = 35mm²

C60HD miniature circuit breakers Part No's

ratings (A)	1P	2P	3P
1	C60HD 101	C60HD 201	C60HD 301
2	C60HD 102	C60HD 202	C60HD 302
4	C60HD 104	C60HD 204	C60HD 304
6	C60HD 106	C60HD 206	C60HD 306
10	C60HD 110	C60HD 210	C60HD 310
16	C60HD 116	C60HD 216	C60HD 316
20	C60HD 120	C60HD 220	C60HD 320
25	C60HD 125	C60HD 225	C60HD 325
32	C60HD 132	C60HD 232	C60HD 332
40	C60HD 140	C60HD 240	C60HD 340
50	C60HD 150	C60HD 250	C60HD 350
63	C60HD 163	C60HD 263	C60HD 363

■ specification information C60H B, C, D, for motor applications, DC applications, de-rating and 400Hz, see technical data section page 129

**electrical auxiliaries for
C60HB, C60HC and C60HD
miniature circuit breakers
and V40H combined mcb/rcd (see page 56)**



26924

auxiliary switch (OF)

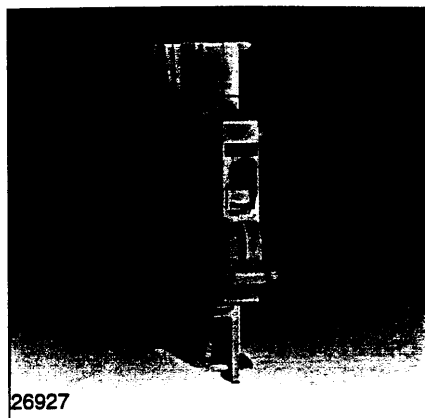
■ a changeover switch which acts as an indicating or control device to monitor the 'ON' or 'OFF' positions of an mcb.

■ test function
■ mounted on the LHS of the mcb or mcb/rcd.

■ max number per mcb = 2
■ connection diagrams: page 142
■ cable capacity

1 cable	2.5mm ²
2 cables	1.5mm ²

No. of SP ways	9mm modules		part no.
1/2	1	OF	26924
		contact rating (V)	(A)
		240 AC	6A
		415 AC	3A
		24 DC	6A
		48 DC	2A
		125 DC	1A



26927

alarm switch (SD)

■ an indicating device which monitors the tripping of an mcb. This device offers the following:

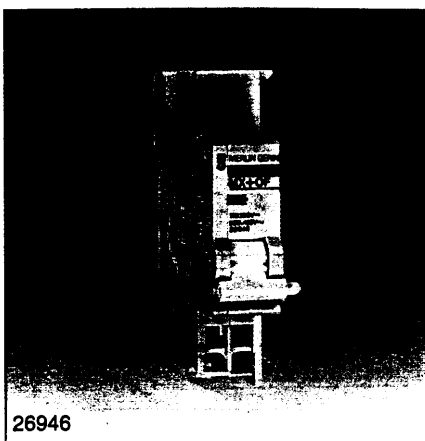
■ a red flag trip indicator
■ ability to reset without closing the mcb

■ test function
■ mounted on the LHS of the mcb or mcb/rcd.

■ connection diagrams: page 142
■ cable capacity

1 cable	2.5mm ²
2 cables	1.5mm ²

No. of SP ways	9mm modules		part no.
1/2	1	SD	26927
		contact rating (V)	(A)
		240 AC	6A
		415 AC	3A
		24 DC	6A
		48 DC	2A
		125 DC	1A



26946

shunt trip release (MX)

■ enables remote tripping
■ allows remote indication of the 'OFF' or 'ON' position of the mcb by using the same voltage as the one feeding the shunt trip (terminals 12 and 14)

■ is equipped with a cut-off switch in series with the coil
■ includes one auxiliary changeover switch (OF)

■ red flag trip indicator.
■ mounted on LHS of the mcb or mcb/rcd.

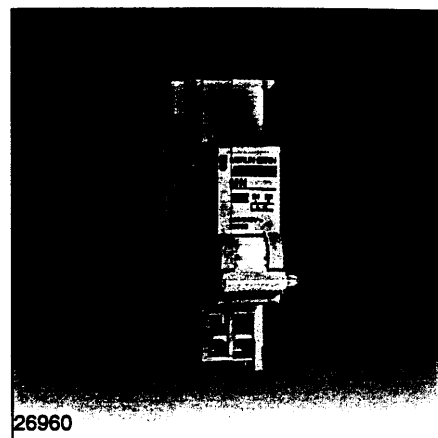
■ connection diagrams: page 142
■ cable capacity

1 cable	2.5mm ²
2 cables	1.5mm ²

No. of SP ways	9mm modules	coil voltage(V)	part no.
1	2	110/130V DC or 220/415 AC	26946
		48V DC or 48-130V AC	26947
		24V AC or DC	26948

Consumption of releases

	(V)		(W or VA)
MX	415 AC	pickup	120
	220.240 AC	pickup	50
	110.130 AC	pickup	200
	110.130 DC	pickup	10
	48 AC - DC	pickup	22
	24 AC - DC	pickup	120



26960

undervoltage release (MN)

■ enables miniature circuit breaker to be tripped either when the auxiliary supply voltage drops or by the opening of a normally closed remote push button

■ prevents the mcb from being switched 'ON' again if the undervoltage release supply is not present

■ red flag trip indicator.
■ mounted on the LHS of the mcb or mcb/rcd.

■ connection diagrams: page 142
■ cable capacity

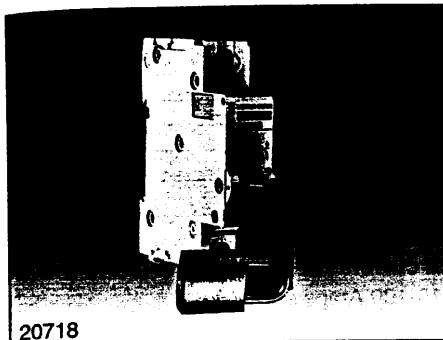
1 cable	2.5mm ²
2 cables	1.5mm ²

No. of SP ways	9mm modules	voltage (V)	part no.
1	2	220/240 AC	26960
		48 AC	26961
		48 DC	26962

Consumption of releases (W or VA)

MN	220.240 V AC	hold -	4.1
	48 V AC	hold -	4.3
	48 V AC	hold -	2.0

accessories for C60HB, C60HC and C60HD miniature circuit breakers



20718

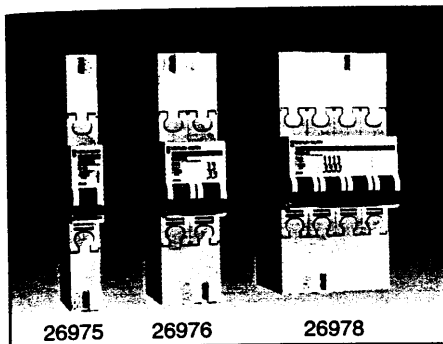
locking attachment

permits padlocking of the mcb in either the 'ON' or 'OFF' position.

	part no.
for C60H mcbs (pack of 5)	MGLA
4mm Hasp padlock for MGLA	MGLAP
for MCB/RCD's	26970
for C60H mcbs (pack of 2)	20718
padlocking with 2 keys	MGPL

MGLA is suitable for use with C60 HB/C/D mcb's in distribution boards.

20718 is suitable for use with C60 H B/C/D mcb's in loose enclosures.



26975

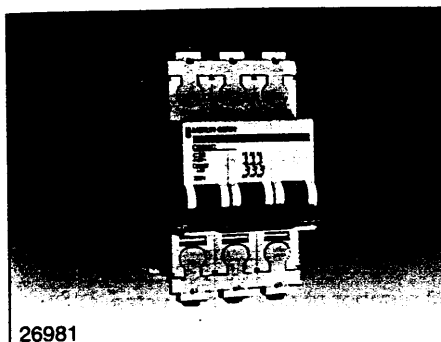
26976

26978

terminal shield

Completely covers terminals and is fixed by a self retaining clip. 1P, 2P, 3P and 4P versions available, all with built-in pole separation.

	part no.
pair of single pole	26975
pair of double pole	26976
pair of four pole	26978
pair of three pole	26975 + 26976

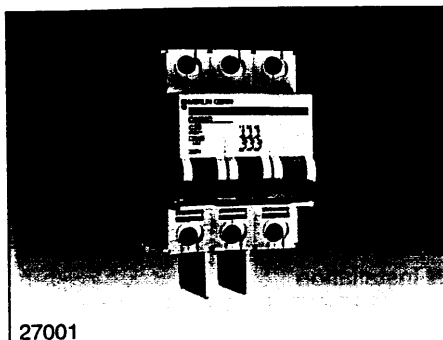


26981

sealable terminal screw shield

Enables total shrouding of the terminal screws of 1P, 2P, 3P and 4P C60HB, C60HC and C60HD mcbs, and combinations of these with VIGI (type C60) residual current devices.

	part no.
for use with C60H mcbs (1 bag of 8 shields)	26981
for use with add-on VIGI residual current devices (1 bag of 20 shields)	26982

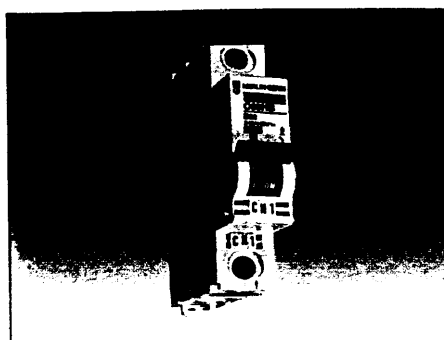


27001

interpole barrier

supplied in quantities of 10, they permit insulation creepage distances to be increased.

	part no.
for C60HB, C60HC and C60HD mcbs	27001



identification system

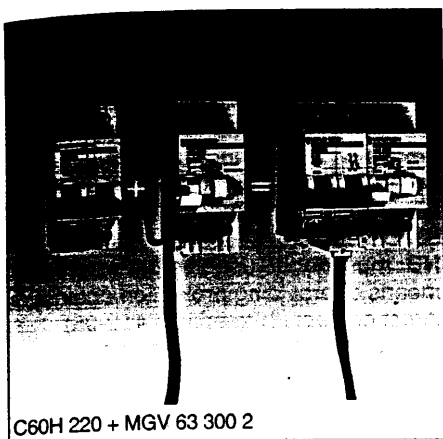
ALL C60HB, C60HC and C60HD mcbs can accept up to a total of 10 marking accessories on each of their poles by fully utilising two separate locations. Refer to Telemecanique 01203 416255

VIGI C60

add-on residual current devices

BS EN61008

10, 30, 100, 300mA



C60H 220 + MGV 63 300 2

Application

The range of VIGI C60 residual current devices simply clip on to the right hand side of any C60HB, C60HC and C60HD mcb, *without adaptors*, to provide a high level of protection against earth leakage faults in addition to the overload and over current protection provided by the mcb alone.

The VIGI rcd has a residual current-operated electro-mechanical release which operates, without any auxiliary source of supply, to open a circuit automatically in the case of an earth leakage fault between phase and earth or neutral and earth greater than or equal to 10, 30, 100 or 300mA.

Suitable for 2, 3 or 4 wire applications the VIGI C60 can be field adapted to operate in one of two modes:

- automatic reset: VIGI is reset by mcb toggle
 - hand reset: VIGI is reset separately
 - the 10, 30, 100 and 300mA units provide protection against indirect contact
 - the 10mA and 30mA units provide complementary protection against direct contact.
- NB:** must not be used as the sole means of providing protection against direct contact (16th edition 412-06)
- all sensitivities protect the installation against insulation faults
 - the breaking capacity, tripping and other performance characteristics of the mcb remain unaltered.

Specifications

- Rcd to BS EN61008

Technical data

- **voltage:**
2P 110/240 50/60 Hz (415V consult us).
4P 240/415V 50/60 Hz
- **sensitivities:** (non-adjustable)
30, 100 and 300 mA for current ratings up to 63A
10mA for current ratings up to 25A.

unwanted tripping

ALL VIGI modules are equipped with a filtering device preventing the risks of unwanted tripping due to transient voltages (lightning, line disturbances on other equipment...) and transient currents (from high capacitive circuits...).

DC sensitive devices: consult us

■ cable capacities:

- 4P devices tunnel terminals for cables up to 35mm²
- 2P devices tunnel terminals for cables up to 25mm²

Installation

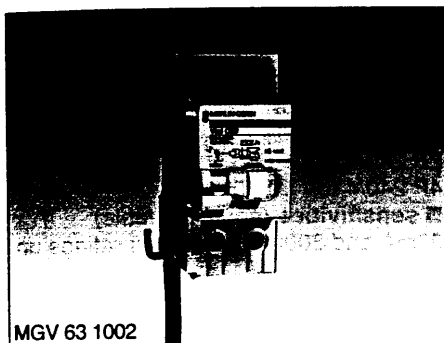
- on symmetrical DIN rail
 - in all distribution boards and standard enclosures.
 - direct panel mounting.
 - ALL VIGI add-on rcd's can accept up to a total of 4 marking accessories on each of their poles.
- The following symbols are available:
Blank, 1-9, +, -, and A-Z.

to order:

Select the appropriate C60HB, C60HC or C60HD mcb, then decide on the sensitivity of the VIGI add-on residual current device - and quote mcb and VIGI rcd references.

example:

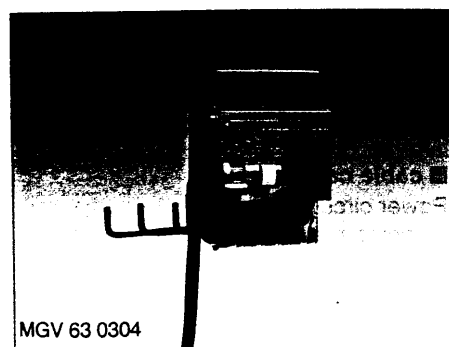
C60HB232 + MGV 63 300 2
= 10000A 2 pole 32A 300mA sensitivity rcd/mcb with overload, short circuit and earth leakage protection .



MGV 63 1002

VIGI modules - two pole for assembly with 1P or 2P mcbs

rating (A)	sensitivity (mA)	part n°.
25	10	MGV 25 010 2
63	30	MGV 63 030 2
63	100	MGV 63 100 2
63	300	MGV 63 300 2

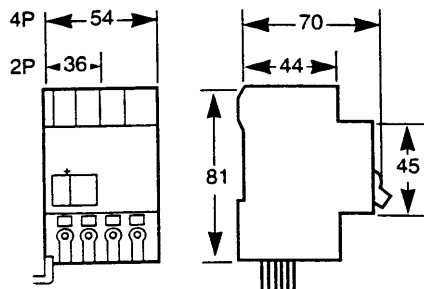


MGV 63 0304

VIGI modules - four pole for assembly with 3P or 4P mcbs

rating (A)	sensitivity (mA)	part n°.
63	30	MGV 63 030 4
63	300	MGV 63 300 4

Terminal screw shields available for VIGI rcd's. Refer to page 39



overall widths mcb + VIGI C60 module C60HB, C60HC AND C60HD mcbs

mcb + VIGI poles	C60 poles	18 mm SP ways	9 mm modules	mm
1	2	3	6	54
2	2	4	8	72
		4	8	72
3	4	6	12	108
4	4	7	14	126