

### Three and four pole minicontactors 6, 9 and 12A (AC3) 20A (AC1)

- Control circuit: Alternating current up to 600V  
Direct current up to 440V
- Terminal numbering in accordance with EN 50012
- Fixing by clipping onto 35 mm DIN rail (EN 50022-35) or by screws
- Screws and fast-on terminals protected against accidental contact in accordance with VDE 0106 T.100 and VBG4
- Versions: Ring terminal and printed circuit terminals
- Facility to mount instant and timed auxiliary contact blocks and voltage suppressor block
- Degree of protection IP20 (EN 60529).
- Maximum number of auxiliary contacts to be added: 6

#### Standards

IEC/EN 60947-1	BS 4794
IEC/EN 60947-4-1	NFC 63-110
IEC/EN 60947-5-1	CSA C22.2/14
EN 50003	VDE 0660
EN 50005	SEV 10254
EN 50012	JIS C8325
UL 508	JEM 1038
NEMA ICS-1	CENELEC HD 419

#### General data

	MC0...	MC1...	MC2...
<b>Maximum number of poles</b>	4	4	4
<b>Rated thermal current (Ith) <math>\theta \leq 60^{\circ}\text{C}</math></b>	(A) 20	20	20
<b>Rated operational current Ie<sup>(2)</sup></b> <b>(3x440V, 50/60Hz, AC3)</b>	(A) 6	9	12
<b>Rated insulation current Ui</b>	(V) 750	750	750
<b>Rated operational current Ue</b>	(V) 690	690	690

#### Approvals



- Order codes pg. C.3
- Auxiliary contact blocks pg. C.6
- Accessories pg. C.8
- Technical data pg. C.23
- Terminal numbering pg. C.29
- Dimensions pg. C.50

#### Standard voltages

To complete the catalogue number, replace the symbol  $\blacklozenge$  by the code corresponding to the voltage and frequency of the control circuit (other voltages on request)

##### Alternating current (V). Bifrequency coil

$\blacklozenge$	10	1	2	9	3	4	5	6	7	8	12	13
AC	12	24	42	48	110	120	220	230	240	440	380	400
50/60Hz					115							

##### Operating voltages limits with bifrequency coils:

With 60Hz = 0.85 to 1.1 x Us

With 50Hz = 0.8 to 1.1 x Us in continuous service (ED=100%) with a maximum ambient temperature of 40°C

##### Alternating current (V).

$\blacklozenge$	A	E	G	K	M	N	S	U	W	Y
AC			48	115		220	260	380	415	500
50Hz				127		240		400	440	
AC	6	32	60		208	240		440	480	600
60Hz					220	277				

##### Direct current (V)

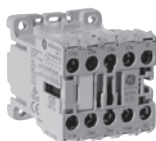
$\blacklozenge$	A	B	C	D	E	F	G	H	I	J	K	L	N	17	R	S	16
DC	6	12	32	24	36	42	48	60	72	110	120	125	220	230	240	250	440

##### Direct current (V) - Wide voltage range

$\blacklozenge$	WD	WE	WG	WI	WJ	WN
DC	24	33	48	72	110	220



### Three pole minicontactors



Max.operat.current Non- inductive loads AC1 <sup>(2)</sup> A	Motors <440V, 3 ~ 50/60Hz AC3 <sup>(3)</sup> A	Admissible power AC3					Aux. contacts		Control circuit: Alternating current		Control circuit: Direct current	
		1-phase 115V 220V		3-phase 220V 380V 500V 230V 400V			.3  .4	.1 .2	Cat. no. <sup>(1)</sup>	Pack	Cat. no. <sup>(1)</sup>	Pack
		kW HP	kW HP	kW HP	kW HP	kW HP			Ref. no. see bottom		Ref. no. see bottom	
<b>Terminal: screw</b>												
20	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AT ♦	20	MC0C310AT ♦	10
20	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AT ♦	20	MC1C310AT ♦	10
20	12	0.75 1	2 2.6	3 4	5.5 7.3	5.5 7.3	1 0	0 1	MC2A310AT ♦	20	MC2C310AT ♦	10
<b>Terminal: ring terminal</b>												
20	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AR ♦	20	MC0C310AR ♦	10
20	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AR ♦	20	MC1C310AR ♦	10
20	12	0.75 1	2 2.6	3 4	5.5 7.3	5.5 7.3	1 0	0 1	MC2A310AR ♦	20	MC2C310AR ♦	10
<b>Terminal: faston 2x2.8 insulated (5)</b>												
16 <sup>(4)</sup>	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AF ♦	20	MC0C310AF ♦	10
16 <sup>(4)</sup>	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AF ♦	20	MC1C310AF ♦	10
<b>Terminal: printed circuit</b>												
20	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AI ♦	20	MC0C310AI ♦	10
20	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AI ♦	20	MC1C310AI ♦	10
20	12	0.75 1	2 2.6	3 4	5.5 7.3	5.5 7.3	1 0	0 1	MC2A310AI ♦	20	MC2C310AI ♦	10
<b>Spare coil</b>									MB0A ♦	10	MB0C ♦	10

- (1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (other voltages on request) (see C.2)
- (2) Electrical endurance AC-1: MC0... 0.2 × 10<sup>6</sup> operations  
MC1... 0.3 × 10<sup>6</sup> operations  
MC2... 0.35 × 10<sup>6</sup> operations
- (3) Electrical endurance AC-3: MC0... (6A) = 1.2 × 10<sup>6</sup> operations  
MC1... (9A) = 0.85 × 10<sup>6</sup> operations  
MC2... (12A) = 0.6 × 10<sup>6</sup> operations
- (4) Terminal with wire 1.5 mm<sup>2</sup>: I<sub>e</sub> = 16A  
with wire 1 mm<sup>2</sup>: I<sub>e</sub> = 10A  
Insulated terminal type B 2.8 × 0.8 and wire 1 mm<sup>2</sup> I<sub>e</sub> = 8A in accordance with DIN 46247.
- (5) Fast-on 1 × 6.3 terminals on request (replace letter F by H in the catalogue number)

For reference numbers, see chapter X, pg. X.4



3P and 4P minicontactors

A

B

C

D

E

F

G

H

I

X