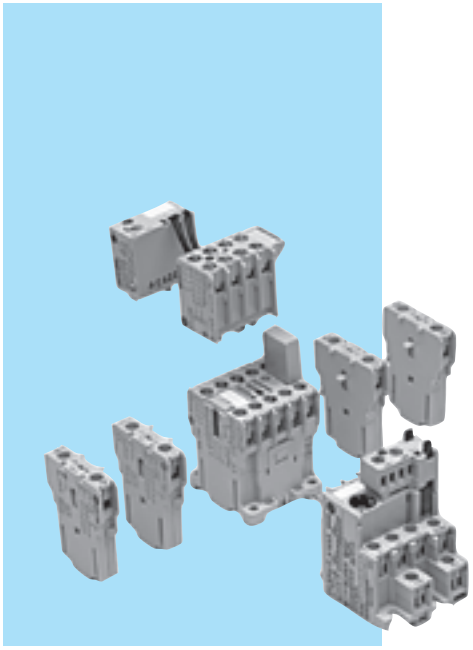

Three and four pole minicontactors 6, 9 and 12A (AC3) 20A (AC1)

- 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

Approvals

cULus, DEMKO, NEMKO, SEMKO, SETI, IMQ, Lloyd's Register, Bureau Veritas, RINA, CE

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

General data

		MC0...	MC1...	MC2...
Maximum number of poles		4	4	4
Rated thermal current (Ith) θ ≤ 60° (1)	(A)	20	20	20
Rated operational current Ie (2)	(A)	6	9	12
(3x440V, 50/60Hz, AC3)				
Rated insulation current Ui	(V)	750	750	750
Rated operational current Ue	(V)	690	690	690

Standard voltages

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)

Alternating current (V). Bifrequency coil

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

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).

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

Direct current (V)

♦	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*

♦	WD	WE	WG	WI	WJ	WN
DC	24	33	48	72	110	220

Three pole minicontactors

Max.operat.current		Admissible power AC3					Aux. contacts		Control circuit: Alternating current		Control circuit: Direct current	
Non-inductive loads	Motors <440V, 3 ~ 50/60Hz	1-phase		3-phase								
		115V	220V	220V 230V	380V 400V	500V						
AC1 [2]	AC3 [3]	kW	kW	kW	kW	kW	•3	•1	Cat. no. [1]	Pack	Cat. no. [1]	Pack
A	A	*HP*	*HP*	*HP*	*HP*	*HP*	•4	•2	*Ref. no. see bottom*		*Ref. no. see bottom*	
Terminal: screw												
20	6	0.37	0.75	1.5	2.2	3	1	0	**MC0A310AT ♦**	20	**MC0C310AT ♦**	10
		0.5	*1*	*2*	*3*	*4*	0	1	**MC0A301AT ♦**	20	**MC0C301AT ♦**	10
20	9	0.56	1.12	2.2	4	4	1	0	**MC1A310AT ♦**	20	**MC1C310AT ♦**	10
		0.75	*1.5*	*3*	*5.5*	*5.5*	0	1	**MC1A301AT ♦**	20	**MC1C301AT ♦**	10
20	12	0.75	2	3	5.5	5.5	1	0	**MC2A310AT ♦**	20	**MC2C310AT ♦**	10
		1	*2.6*	*4*	*7.3*	*7.3*	0	1	**MC2A301AT ♦**	20	**MC2C301AT ♦**	10
Terminal: ring terminal												
20	6	0.37	0.75	1.5	2.2	3	1	0	**MC0A310AR ♦**	20	**MC0C310AR ♦**	10
		0.5	*1*	*2*	*3*	*4*	0	1	**MC0A301AR ♦**	20	**MC0C301AR ♦**	10
20	9	0.56	1.12	2.2	4	4	1	0	**MC1A310AR ♦**	20	**MC1C310AR ♦**	10
		0.75	*1.5*	*3*	*5.5*	*5.5*	0	1	**MC1A301AR ♦**	20	**MC1C301AR ♦**	10
20	12	0.75	2	3	5.5	5.5	1	0	**MC2A310AR ♦**	20	**MC2C310AR ♦**	10
		1	*2.6*	*4*	*7.3*	*7.3*	0	1	**MC2A301AR ♦**	20	**MC2C301AR ♦**	10
Terminal: faston 2x2.8 insulated (5)												
16 [4]	6	0.37	0.75	1.5	2.2	3	1	0	**MC0A310AF ♦**	20	**MC0C310AF ♦**	10
		0.5	*1*	*2*	*3*	*4*	0	1	**MC0A301AF ♦**	20	**MC0C301AF ♦**	10
16 [4]	9	0.56	1.12	2.2	4	4	1	0	**MC1A310AF ♦**	20	**MC1C310AF ♦**	10
		0.75	*1.5*	*3*	*5.5*	*5.5*	0	1	**MC1A301AF ♦**	20	**MC1C301AF ♦**	10
Terminal: printed circuit												
20	6	0.37	0.75	1.5	2.2	3	1	0	**MC0A310AI ♦**	20	**MC0C310AI ♦**	10
		0.5	*1*	*2*	*3*	*4*	0	1	**MC0A301AI ♦**	20	**MC0C301AI ♦**	10
20	9	0.56	1.12	2.2	4	4	1	0	**MC1A310AI ♦**	20	**MC1C310AI ♦**	10
		0.75	*1.5*	*3*	*5.5*	*5.5*	0	1	**MC1A301AI ♦**	20	**MC1C301AI ♦**	10
20	12	0.75	2	3	5.5	5.5	1	0	**MC2A310AI ♦**	20	**MC2C310AI ♦**	10
		1	*2.6*	*4*	*7.3*	*7.3*	0	1	**MC2A301AI ♦**	20	**MC2C301AI ♦**	10
Spare coil									**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 x 10^6 operations
MC1... 0.3 x 10^6 operations
MC2... 0.35 x 10^6 operations

(3) Electrical endurance AC-3: MC0... (6A) = 1.2 x 10^6 operations
MC1... (9A) = 0.85 x 10^6 operations
MC2... (12A)= 0.6 x 10^6 operations

(4) Terminal with wire 1.5 mm^2: Ie = 16A
with wire 1 mm^2: Ie = 10A
Insulated terminal type B 2.8 x 0.8 and wire 1 mm^2 Ie = 8A in accordance with DIN 46247.

(5) Fast-on 1 x 6.3 terminals on request (replace letter **F** by **H** in the catalogue number)

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