



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...
Maximum number of poles	4	4	4
Rated thermal current (Ith) $\theta \leq 60^{\circ}\text{C}$	(A) 20	20	20
Rated operational current Ie⁽²⁾ (3x440V, 50/60Hz, AC3)	(A) 6	9	12
Rated insulation current Ui	(V) 750	750	750
Rated operational current Ue	(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 ⁽²⁾ A	Motors <440V, 3 ~ 50/60Hz AC3 ⁽³⁾ 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. ⁽¹⁾	Pack	Cat. no. ⁽¹⁾	Pack
		kW HP	kW HP	kW HP	kW HP	kW HP			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 × 10⁶ operations
MC1... 0.3 × 10⁶ operations
MC2... 0.35 × 10⁶ operations
- (3) Electrical endurance AC-3: MC0... (6A) = 1.2 × 10⁶ operations
MC1... (9A) = 0.85 × 10⁶ operations
MC2... (12A) = 0.6 × 10⁶ operations
- (4) Terminal with wire 1.5 mm²: I_e = 16A
with wire 1 mm²: I_e = 10A
Insulated terminal type B 2.8 × 0.8 and wire 1 mm² I_e = 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

