

Auxiliary contactors Ith = 16A

- Control circuit: Alternating current up to 600V
Direct current up to 250V
- Terminal numbering in accordance with EN 50011
- Fixing system for rapid and simple mounting by clamping onto standard 35 mm DIN rail (EN 50022).
- Screw and push-on terminals protected against accidental contacts in accordance with VDE 0106 T.100 and VBG4.
- Printed circuit version.
- Ring terminal version.
- Facility to mount instant or timed auxiliary contact blocks and voltage suppressor blocks.
- Maximum number of auxiliary contacts to add: 6
- Degree of protection IP20 (EN 60529).
- According to IEC/EN 60947-1.

Standards

IEC/EN 60947-5-1	BS 4794
IEC/EN 60947-1	CENELEC HD 420
EN 50002	NFC 63-110
EN 50005	NFC 63-140
EN 50011	CSA C22.2/14
UL 508	VDE 0660

General data

Maximum number of contacts (MCR...)	4							
Rated thermal current (Ith) θ ≤ 60°	(A) 16							
Rated operational voltage (Ue) acc. IEC 60947-1	(V) 690							
Insulation voltage (Ui) acc. IEC 60947-1	(V) 750							
Utilisation category:								
AC-15	V	110	220/240	380/400	415	440	500	660/690
	A	6	6	4	4	3	2.5	1.5

DC-13	V	24	48	110	220
	A	5	3.5	1.2	0.6

Approvals



Lloyd's Register

Bureau Veritas

RINA

Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit.

Alternating current (V). Bifrequency coil

♦	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								

Voltage operating limits of dual-frequency coil:

at 60Hz = 0.85 a 1.1 × Us

at 50Hz = 0.8 a 1.1 × Us for uninterrupted duty (ED=100%), temperature = 40°C

Alternating current (V)

♦	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)

♦	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


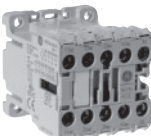



Direct current (V) - Wide voltage range

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

- Order codes ● pg. B.9
- Auxiliary contacts blocks ● pg. B.10
- Accessories ● pg. B.12
- Technical data ● pg. B.26
- Dimensions ● pg. B.34





Auxiliary contactors

	Contacts acc. EN 50011		Control circuit: alternating current			Control circuit: direct current							
	•3	•1	Cat. no. ⁽¹⁾	Ref. no. see bottom	Pack	Cat. no. ⁽¹⁾	Ref. no. see bottom	Pack					
	•4	•2											
	Screw terminal												
	40E	4 0	MCRA040AT	◆	5	MCRC040AT	◆	10					
	31E	3 1	MCRA031AT	◆	5	MCRC031AT	◆	10					
	22E	2 2	MCRA022AT	◆	5	MCRC022AT	◆	10					
	13E	1 3	MCRA013AT	◆	5								
	04E	0 4	MCRA004AT	◆	5								
	Ring terminal												
	40E	4 0	MCRA040AR	◆	5	MCRC040AR	◆	10					
	31E	3 1	MCRA031AR	◆	5	MCRC031AR	◆	10					
	22E	2 2	MCRA022AR	◆	5	MCRC022AR	◆	10					
	13E	1 3	MCRA013AR	◆	5								
	04E	0 4	MCRA004AR	◆	5								
	Terminal: faston 2x2,8 insulated (2)												
	40E	4 0	MCRA040AF	◆	5	MCRC040AF	◆	10					
	31E	3 1	MCRA031AF	◆	5	MCRC031AF	◆	10					
	22E	2 2	MCRA022AF	◆	5	MCRC022AF	◆	10					
	13E	1 3	MCRA013AF	◆	5								
	04E	0 4	MCRA004AF	◆	5								
	Terminal: printed circuit												
	40E	4 0	MCRA040AI	◆	5	MCRC040AI	◆	10					
	31E	3 1	MCRA031AI	◆	5	MCRC031AI	◆	10					
	22E	2 2	MCRA022AI	◆	5	MCRC022AI	◆	10					
	13E	1 3	MCRA013AI	◆	5								
	04E	0 4	MCRA004AI	◆	5								
	Spare coil		MB0A			◆	10		MBOC		◆	10	

(1) To complete the catalogue number, replace the symbol ◆ by the code corresponding to the voltage and frequency of the control circuit. (see pg.A.16).

(2) Terminal: - with wire 1.5 mm²: I_e = 16A - with wire 1 mm²: I_e = 10A
 Insulated terminal type B2.8x0.8 with wire 1 mm²: I_e = 8A to DIN 46247
 Faston terminal 1 x 6.3 on request, replace the letter **F** by **H** in the catalogue number

Auxiliary contactors interface

	Contacts acc. to EN 50011		Control circuit: direct current 24V / 1.2W ⁽³⁾			Control circuit: direct current 24V / 2W ⁽⁴⁾							
	•3	•1	Operating limits from 19 to 30V (0.8-1.25xUs)			Operating limits from 17 to 30V (0.7-1.25xUs)							
	•4	•2	Cat. no.	Ref. no.	Pack	Cat. no.	Ref. no.	Pack					
	Screw terminal												
	40E	4 0	MCRI040ATD	100530	10	MCRK040ATD	100533	10					
	31E	3 1	MCRI031ATD	100531	10	MCRK031ATD	100534	10					
	22E	2 2	MCRI022ATD	100532	10	MCRK022ATD	100535	10					
	Spare coil		MB0ID			100470	10		MBOKD		100471	10	

(3) No possibility of adding instantaneous auxiliary blocks.

(4) Facility to mount instantaneous auxiliary contact block of two contacts (MARN2..) or two instantaneous auxiliary contact blocks of one contact (MARL1..).

For reference numbers, see chapter X, pg. X.6

