

MDEx and MCEx

MDEX 511 - CIRCUIT BREAKER MODULE AND MCEX 512 - CONTROL MODULE FOR EXPLOSIVE ATMOSPHERES

PROTECTION: Ex d e

ZONES: 1 and 2

GROUPS: IIC ($-20\text{ °C} < T_a < +60\text{ °C}$)

IIB ($-40\text{ °C} < T_a < +60\text{ °C}$)

EPL: Gb

APPLICABLE STANDARDIZING:

ABNT NBR IEC 60079-0

ABNT NBR IEC 60079-1

ABNT NBR IEC 60079-7



MDEx 511



MCEx 512

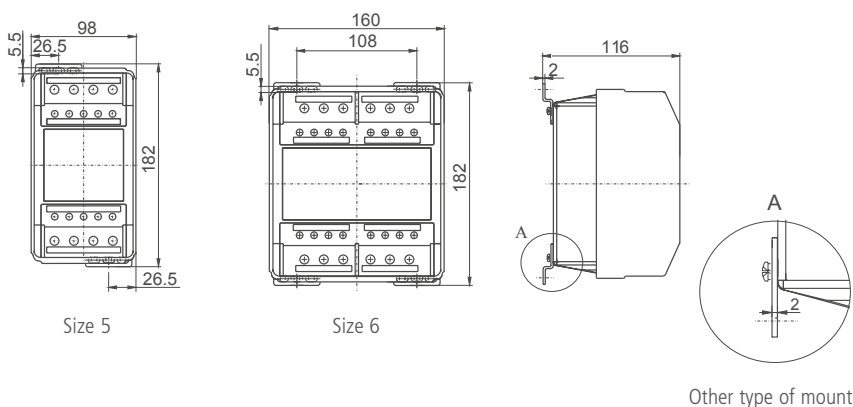
MCEx

MCEX 512 BDI -CONTACTOR AND MCEX 512 BDIN - REVERSIBLE CONTACTOR

MAXIMUM CURRENT	VOLTAGE	INTERRUPTION CAPACITY	COIL VOLTAGE	ASSISTANT CONTACT NOMINAL	ASSISTANT CONTACT NOMINAL CURRENT	TERMINALS
38A	690V	Up to 18,5 KW	Up to 440V	690V	10A	Main contacts at 1 to 10 mm ² (6 to 10 mm used together with eye terminal) Assistant contact 1 to 2.5 mm ²

ELECTRIC DIAGRAM	WEIGHT (KG)	CODE	IMAGE
	1,75	MCEx 512 BDI / 12 _ - 0	<p>MCEx 512 BDI Contactor</p>
		MCEx 512 BDI / 25 _ - 0	
		MCEx 512 BDI / 38 _ - 0	
<p>01 - 24V 02 - 36V 03 - 48V 04 - 110V 05 - 220~230V 06 - 380~400V</p> <p>Coil voltage (AC)</p> <p>Assistant contact 1NA + 1NF Assistant contact 2NA + 2NF</p>			
	2,8	MCEx 512 BDIN / 12 _ - 2	<p>MCEx 512 BDIN Reversible contactor</p>
		MCEx 512 BDIN / 25 _ - 2	
		MCEx 512 BDIN / 38 _ - 2	


EXTERNAL DIMENSIONS



MCEx

MCEX 512 BZCI - CONTACTOR + THERMAL RELAY

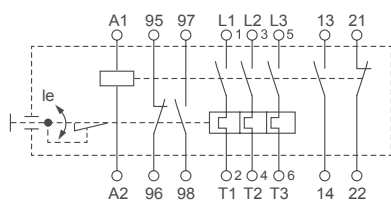
MAXIMUM CURRENT	OVERLOAD DISARM ADJUSTMENT RANGE	VOLTAGE	INTERRUPTION CAPACITY	COIL VOLTAGE	ASSISTANT CONTACT NOMINAL VOLTAGE	ASSISTANT CONTACT NOMINAL CURRENT	TERMINALS
Up to 38A	Up to 38A	690V	Up to 18,5 KW	Up to 440V	690V	95/96 NF 97/98 NA : 5A 13/14 NA 21/22 NF : 10A	Main contacts at 1 to 10 mm ² (6 to 10 mm used together with eye terminal) Assistant contact 1 to 2.5 mm ²

CONTACTOR CURRENT AC (A)	THERMAL RELAY ADJUSTING RANGE	CODE	IMAGE
12	0,1 - 0,16	MCEx 512 BZCI / 0,16 / _	
	0,16 - 0,25	MCEx 512 BZCI / 0,25 / _	
	0,24 - 0,4	MCEx 512 BZCI / 0,4 / _	
	0,4 - 0,63	MCEx 512 BZCI / 0,63 / _	
	0,63 - 1	MCEx 512 BZCI / 0,1 / _	
	1 - 1,6	MCEx 512 BZCI / 1,6 / _	
	1,6 - 2,5	MCEx 512 BZCI / 2,5 / _	
	2,4 - 4	MCEx 512 BZCI / 4 / _	
	4 - 6	MCEx 512 BZCI / 6 / _	
25	5,5 - 8	MCEx 512 BZCI / 8 / _	
	7 - 10	MCEx 512 BZCI / 10 / _	
	9- 13	MCEx 512 BZCI / 13 / _	
38	12 - 18	MCEx 512 BZCI / 18 / _	
	16 - 24	MCEx 512 BZCI / 24 / _	
	23 - 32	MCEx 512 BZCI / 32 / _	
	30 - 38	MCEx 512 BZCI / 38 / _	

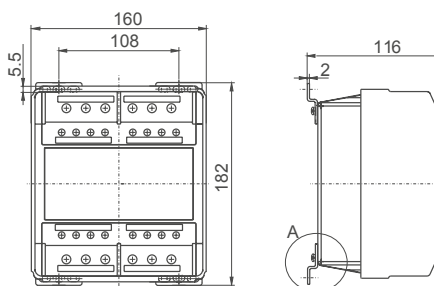
- 01 - 24V
- 02 - 36V
- 03 - 48V
- 04 - 110V
- 05 - 220~230V
- 06 - 380~400V

Coil voltage (AC)

ELECTRIC DIAGRAM



EXTERNAL DIMENSIONS




Size 6

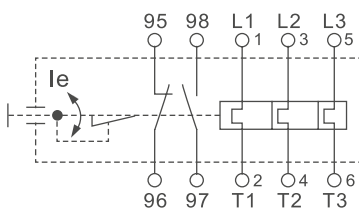
MCEx

MCEX 512 BZC - THERMAL RELAY

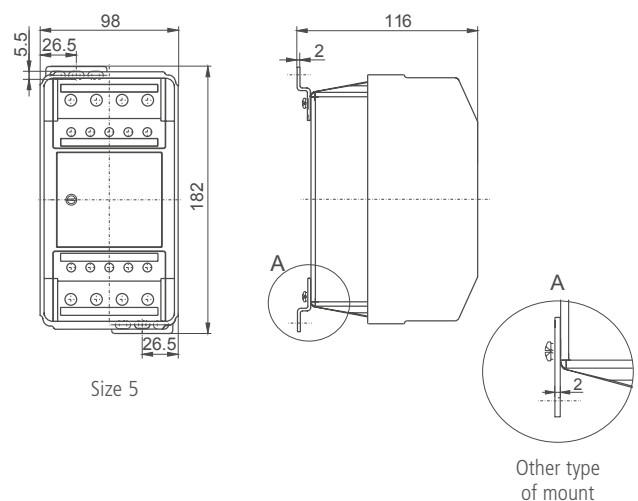
MAXIMUM CURRENT	VOLTAGE	THERMAL RELAY	WEIGHT (kg)	ASSISTANT CONTACT NOMINAL VOLTAGE	NOMINAL CURRENT	TERMINALS
Up to 38A	690V	Up to 38A	1,5	690V	5A	Main contacts at 1 to 10 mm ² (6 to 10 mm used together with eye terminal) Assistant contact 1 to 2.5 mm ²

ADJUSTING RANGE	CODE	IMAGE
0,1 - 0,16	MCEx 512 BZC / 0,16	
0,16 - 0,25	MCEx 512 BZC / 0,25	
0,24 - 0,4	MCEx 512 BZC / 0,4	
0,4 - 0,63	MCEx 512 BZC / 0,63	
0,63 - 1	MCEx 512 BZC / 1	
1 - 1,6	MCEx 512 BZC / 1,6	
1,6 - 2,5	MCEx 512 BZC / 2.5	
2,4 - 4	MCEx 512 BZC / 4	
4 - 6	MCEx 512 BZC / 6	
5,5 - 8	MCEx 512 BZC / 8	
7 - 10	MCEx 512 BZC / 10	
9 - 13	MCEx 512 BZC / 13	
12 - 18	MCEx 512 BZC / 18	
16 - 24	MCEx 512 BZC / 24	
23 - 32	MCEx 512 BZC / 32	
30 - 38	MCEx 512 BZC / 38	

ELECTRIC DIAGRAM



EXTERNAL DIMENSIONS



MCEx

MCEX 512 BH3 - TIMER RELAY

SUPPLY VOLTAGE	TIME RANGE	WEIGHT (kg)	CONTACT CAPACITY	CONNECTION
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230V
(may be offered
with CC supply)

0,04s to 10h

0,8

220V AC 5A
(resistive load)

2 x from 1 to 2,5 mm²

TIME SPECIFICATION

MAXIMUM TIME SCALE	0,5s	1s	5s	10s	30s	60s	120s	3min	5min	10min	30min	60min	3h
TIME ADJUSTMENT RANGE	0,04 ~0,5 s	0,1 ~1s	0,2 ~5s	0,5 ~10s	1,0 ~30s	2,0 ~60s	5,0 ~120s	0,1 ~3min	0,2 ~5min	0,5 ~10min	1,0 ~30min	2,0 ~60min	0,01 ~3h

SUPPLY VOLTAGE	CODE	IMAGE
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AC100 ~ 120 V

MCEx 512 BH3 / 04 / _

AC200 ~ 230V

MCEx 512 BH3 / 05 / _

DC 12V

MCEx 512 BH3 / 10 / _

DC 24V

MCEx 512 BH3 / 11 / _

DC 48V

MCEx 512 BH3 / 13 / _

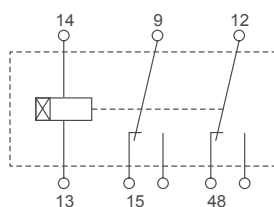
DC 100V / 110V

MCEx 512 BH3 / 14 / _

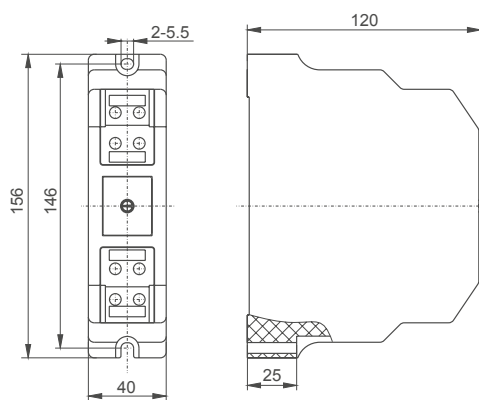


Timer time range: 0,04s ~ 3h

ELECTRIC DIAGRAM



EXTERNAL DIMENSIONS




Size 1

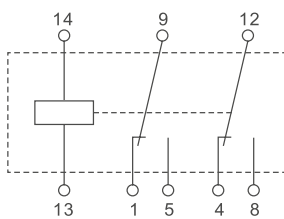
MCEx

MCEX 512 BMY - MINIATURE RELAY

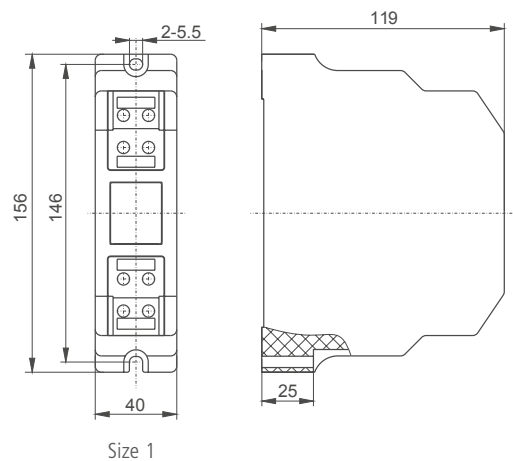
SUPPLY VOLTAGE	WEIGHT (KG)	CONTACT CAPACITY	CONNECTION
240V (may be offered with CC supply)	0,8	220V AC 5A <hr/> 24V CC 5A	2 x from 1 to 2.5mm ²

SUPPLY VOLTAGE	CODE	IMAGE
AC24V	MCEx 512 BMY / 01	
AC100 / 110V	MCEx 512 BMY / 04	
AC220 / 240V	MCEx 512 BMY / 05	
DC12V	MCEx 512 BMY / 10	
DC24V	MCEx 512 BMY / 11	
DC100V / 110V	MCEx 512 BMY / 14	

ELECTRIC DIAGRAM




EXTERNAL DIMENSIONS



MCEx

MCEX 512 BPK - ENGINE PROTECTION CIRCUIT BREAKER

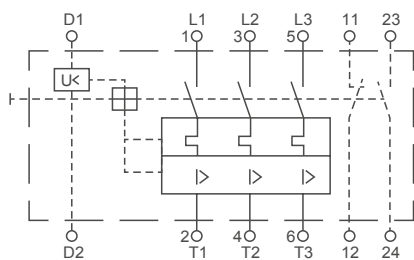
VOLTAGE	THERMAL RELAY	WEIGHT (kg)	MAXIMUM VOLTAGE	SHORT CIRCUIT CURRENT	ASSISTANT CONTACT AT AC15	DISARM VOLTAGE	TERMINALS
440V	0,1 to 25A	1,65	Up to 440V - 25A	65kA	1A - 230V	230V - 50Hz	Main contacts at 1 to 10 mm ² (6 to 10 mm used together with eye terminal) Assistant contact 1 to 2.5 mm ²

SHORT CIRCUIT CURRENT CAPACITY (kA)	OVERLOAD DISARM ADJUSTMENT RANGE (A)	CODE	IMAGE
65	0,1 - 0,16	MCEx 512 BPK / 0,16 / _ - _	
65	0,16 - 0,25	MCEx 512 BPK / 0,25 / _ - _	
65	0,25 - 0,4	MCEx 512 BPK / 0,4 / _ - _	
65	0,4 - 0,63	MCEx 512 BPK / 0,63 / _ - _	
65	0,63 - 1	MCEx 512 BPK / 0,1 / _ - _	
65	1 - 1,6	MCEx 512 BPK / 1,6 / _ - _	
65	1,6 - 2,5	MCEx 512 BPK / 2,5 / _ - _	
16	2,5 - 4	MCEx 512 BPK / 4 / _ - _	
16	4 - 6,3	MCEx 512 BPK / 6,3 / _ - _	
16	6,3 - 10	MCEx 512 BPK / 10 / _ - _	
16	10 - 16	MCEx 512 BPK / 16 / _ - _	
12	16 - 20	MCEx 512 BPK / 20 / _ - _	
12	20 - 25	MCEx 512 BPK / 25 / _ - _	

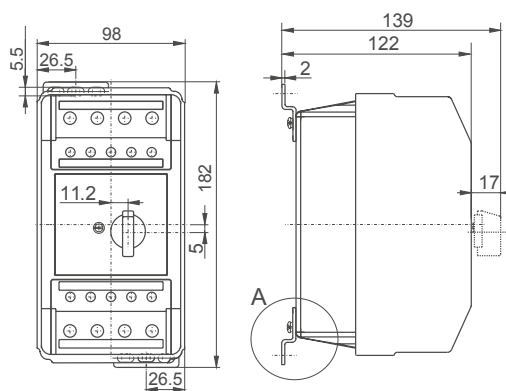
U: with AUTO-TRIP function (blank, nonapplicable)

0: assistant contact 1NA + 1NF (blank, nonapplicable)

ELECTRIC DIAGRAM



EXTERNAL DIMENSIONS



Size 5