

MCB Miniature Circuit Breakers series BMS0-DC, ME



BMS015110ME



BMS014206M

Schrack-Info

For use in DC power systems and calibrated for an ambient temperature 40°C.

- According IEC/EN 60947-2
- Insulated terminal guide for secure connection
- Lift and clamp terminals on both sides
- Window with positively-driven contact position indicator for each pole
- Terminal cross-section 1 – 25mm²

NOTE

Observe polarity when connecting!

ACCESSORIES

Auxiliary contact

Signal contact

Remote release

Busbar

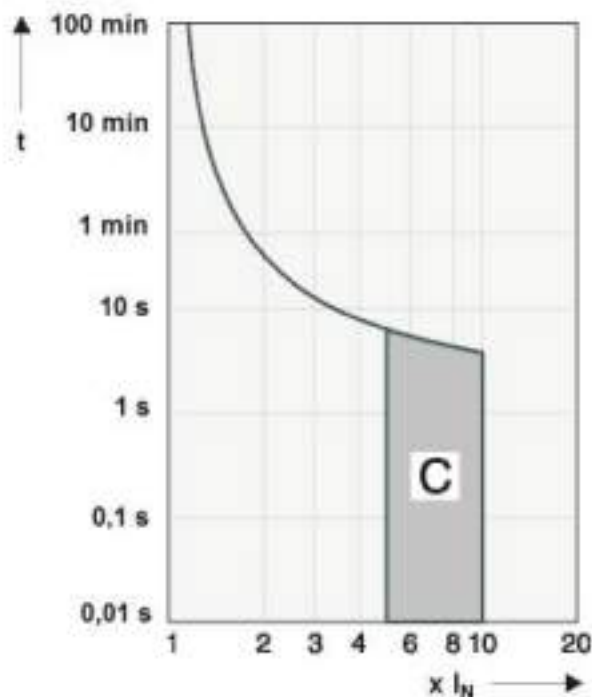
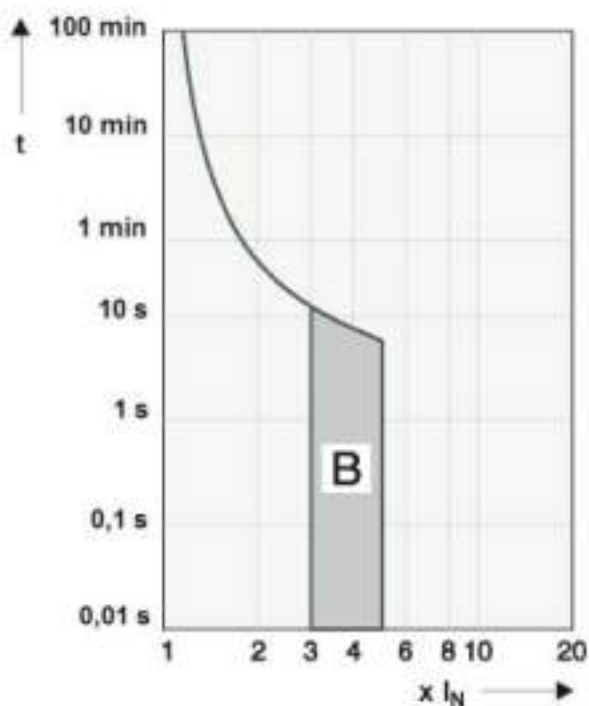
Automatic remote switching unit (FSA)

Standards:	EN 60947-2
Poles:	1 or 2 pole
Rated voltage:	250V-DC (1 pole), 500V-DC (2 pole)
Rated isolation voltage:	500 V-DC
Rated current:	2 - 50A
Tripping characteristic:	B, C according IEC/EN 60898
Rated tripping characteristic: no tripping current:	I _{nt} = 1,13 In
tripping current:	I _t = 1,45 In
Undelayed tripping current:	Characteristic B, 3 In < I _{nt} ≤ 5 In; t (I _{nt}) < 0,1 sec Characteristic C, 7 In < I _{nt} ≤ 15 In; t (I _{nt}) < 0,1 sec
Rated short-circuit capacity I _{cn} :	6 kA according EN 60898
Energy limiting class:	according class 3
Max. back up fuse:	max. 100A gG
Rated impulse withstand voltage U _{imp} :	4000 V (1,2 / 50) μsec
Rated tripping temperature:	-5 °C up to +40 °C
Operating temperature:	-40 °C up to +75 °C
Calibrated for ambient temperature:	30 °C
Factor of temperature:	0,5% / K
Degree of protection:	IP 20 (covered IP40)
Endurance:	< 1.500 operating cycles (mechanical < 8500)
Finger and hand touch safe:	acc. to BGV A3
Terminals:	Double clamp / lift terminal
Terminal cross-section:	1 - 25mm ²
Terminal width 1 MW:	17,8mm
Terminal tightening torque:	2 - 2,4Nm
Mounting:	on DIN rail by latching snap-on mounting

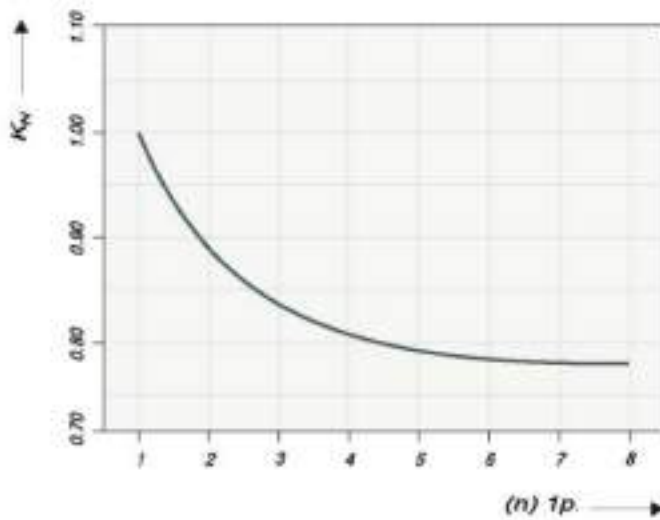
Ambient temperature

temperature (°C) current (A)	-10	0	10	20	30	40	50	60
2	2.4	2.3	2.2	2.2	2.1	2.0	1.9	1.9
4	4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.7
6	7.2	7.0	6.7	6.5	6.3	6.0	5.8	5.6
10	12	12	11	11	10	10	9.7	9.3
13	16	15	15	14	14	13	13	12
16	19	19	18	17	17	16	15	15
20	24	23	22	22	21	20	19	19
25	30	29	28	27	26	25	24	23
32	38	37	36	35	33	32	31	30
40	48	47	45	43	42	40	39	37
50	60	58	56	54	52	50	48	47
63	76	73	71	68	66	63	61	58

Tripping characteristic curves according to IEC 60898 / EN 60898



Capacity with block mounting



Conductor cross section [mm ²]	Number of single conductors, rigid, single-wire Cu conductors					
	1	2	3	4	5	6
1,5	+	+	+	+	+	-
2,5	+	+	+	-	-	-
4	+	+	+	-	-	-
6	+	+	+	-	-	-
10	+	+	-	-	-	-
16	+	-	-	-	-	-
25	+	-	-	-	-	-

Conductor cross section [mm ²]	Number of single conductors, rigid, multi-wire Cu conductors					
	1	2	3	4	5	6
10	+	+	-	-	-	-
16	+	-	-	-	-	-
25	+	-	-	-	-	-

Conductor cross section [mm ²]	Number of single conductors, flexible Cu conductors without sleeves					
	1*	2*	3*	4*	5*	6*
1,5	-	-	-	+	+	-
2,5	-	-	+	+	-	-
4	-	+	+	-	-	-
6	-	+	+	-	-	-
10	-	+	-	-	-	-
16	-	-	-	-	-	-
25	-	-	-	-	-	-

*): Only without wire end and sleeve

+ permissible
- Not permissible

Conductor cross section [mm ²]	Combinations of different profiles of flexible Cu conductors						
	1,5	2,5	4	6	10	16	25
1,5	/	+	-	-	-	-	-
2,5	+	/	-	-	+	-	-
4	-	+	/	-	-	+	-
6	-	-	+	/	+	-	+
10	-	-	-	+	/	+	-
16	-	-	-	-	-	/	+
25	-	-	-	-	-	-	/

+ permissible

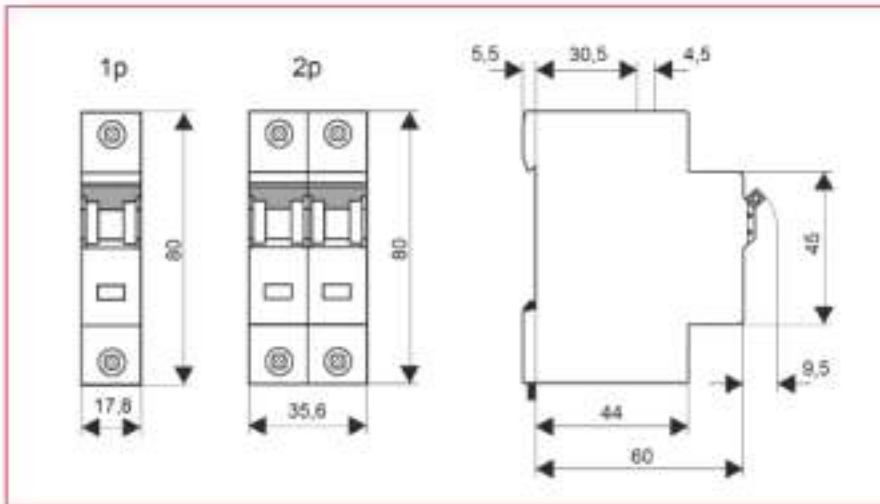
- Not permissible

No combinations are permissible for rigid single- and multi-wire Cu conductors!

Conductor cross section [mm ²]	Number of single conductors, flexible Cu conductors with sleeve					
	1**	2	3	4	5	6
1,5	+	-	-	-	-	-
2,5	+	-	-	-	-	-
4	+	-	-	-	-	-
6	+	-	-	-	-	-
10	+	-	-	-	-	-
16	+	-	-	-	-	-
25	+	-	-	-	-	-

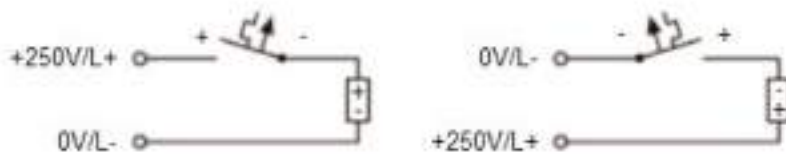
**): Only with wire end and sleeve

Dimensions



Wiring diagram

250V-DC, 1-p



500V-DC, 2-p



MCB Miniature Circuit Breakers series BM50-DC, ME, 1-pole



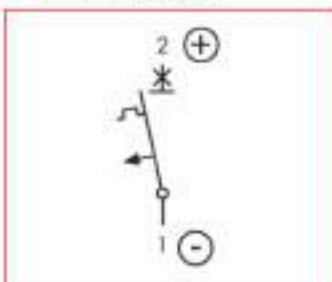
BM015110M

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Most common accessories:

- Auxiliary contact 1 NO / 1 NC BM900001
- Busbar 10 mm²/1-pole B5900140

Wiring diagram



DESCRIPTION	AVAILABLE	ORDER NO.
Characteristic B		
2A		BM014102ME
4A		BM014104ME
6A		BM014106ME
10A		BM014110ME
16A		BM014116ME
20A		BM014120ME
25A		BM014125ME
32A		BM014132ME
40A		BM014140ME
50A		BM014150ME
Characteristic C		
2A		BM015102ME
4A		BM015104ME
6A		BM015106ME
10A		BM015110ME
16A		BM015116ME
20A		BM015120ME
25A		BM015125ME
32A		BM015132ME
40A		BM015140ME
50A		BM015150ME

MCB Miniature Circuit Breakers series BMS0-DC, ME, 2-pole



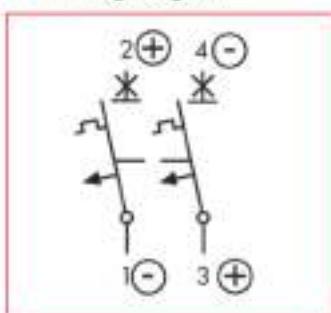
BMD14206M

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Most common accessories:

- Auxiliary contact 1 NO / 1 NC BM900001
- Busbar 10 mm²/2-pole BS900111

Wiring diagram



DESCRIPTION	AVAILABLE	ORDER NO.
Characteristic B		
2A		BMD14202ME
4A		BMD14204ME
6A		BMD14206ME
10A		BMD14210ME
16A		BMD14216ME
20A		BMD14220ME
25A		BMD14225ME
32A		BMD14232ME
40A		BMD14240ME
50A		BMD14250ME
Characteristic C		
2A		BMD15202ME
4A		BMD15204ME
6A		BMD15206ME
10A		BMD15210ME
16A		BMD15216ME
20A		BMD15220ME
25A		BMD15225ME
32A		BMD15232ME
40A		BMD15240ME
50A		BMD15250ME