

■ Datasheet: Miniature Circuit Breaker (MCB), series AMPARO, 1+N on 1MW



■ SCHRACK-INFO

- Terminal guide for secure connection
- Terminal cross-section: 1-1.6mm²
- Snap-on mounting for DIN rail EN 50022

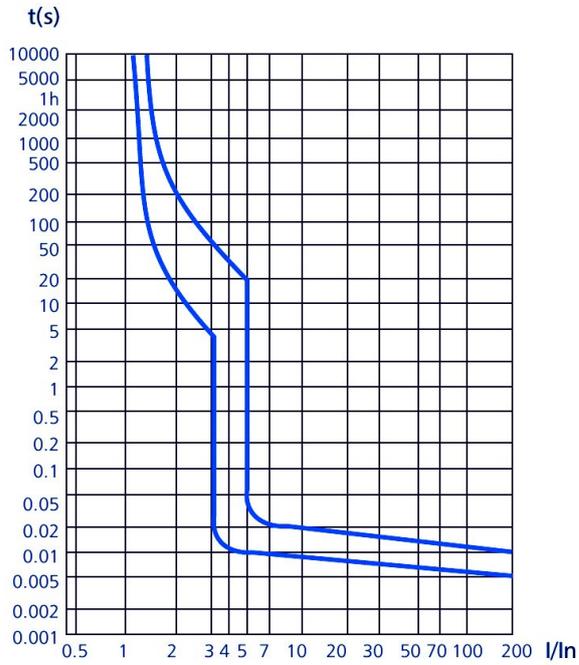
■ Technical datas

Standards:	IEC/EN 60898-1
Rated voltage (AC):	230/240V -
Rated frequency (AC):	50/60Hz
Insulation voltage U_i	500V
Rated current I_n	6, 10, 13, 16, 20, 25, 32A, 40A
Tripping characteristics:	B, C
Rated breaking capacity:	6 kA acc. to IEC/EN 60898,
Energy limiting class	3
Rated impulse withstand voltage (1,2/50) U_{imp}	4kV
Dielectric test voltage at ind. Freq. For 1 min.	2kV
Polution degree	2

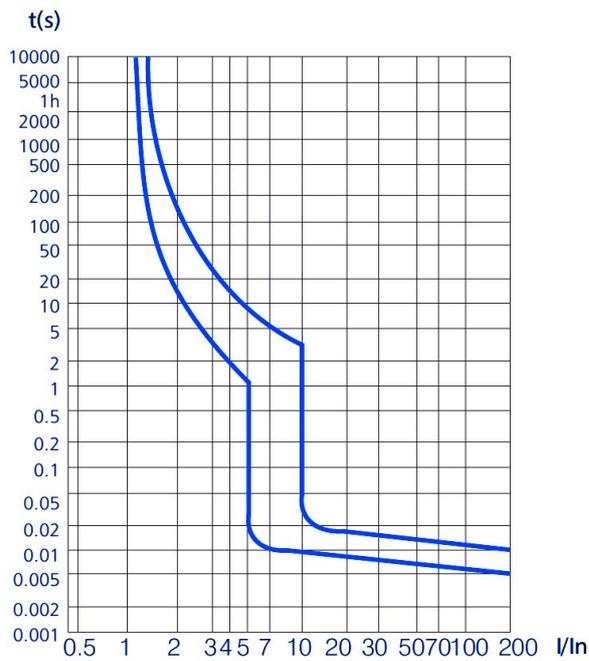
Total powerloss at I_n	6A	4 W
	10A	4 W
	16A	7 W
	20A	7 W
	25A	7 W
	32A	7 W
	40A	7 W
	Inernal resistance	6A
10A		9.989mΩ
16A		6.31mΩ
20A		3.832mΩ
25A		2.671mΩ
32A		2.009mΩ
40A		1.66mΩ
Electrical endurance:		> 8.000 operating cycles
Mechanical endurance:	> 20.000 operating cycles	
Protection degree	IP 20	
Reference temperature:	30°C	
Tripping temperature:	-5 °C to +40 °C	
Operating temperature:	-25 °C to +70 °C	
Terminal connection type	Cable/Pin-type busbar	
Terminal cross-section:	16mm ²	
Terminal tightening torque:	2 Nm	
Mounting:	on DIN rail EN 60715 (35mm)	
	by means of fast clip device	

Tripping characteristics

IEC/EN 60898-1, AC, Characteristic B



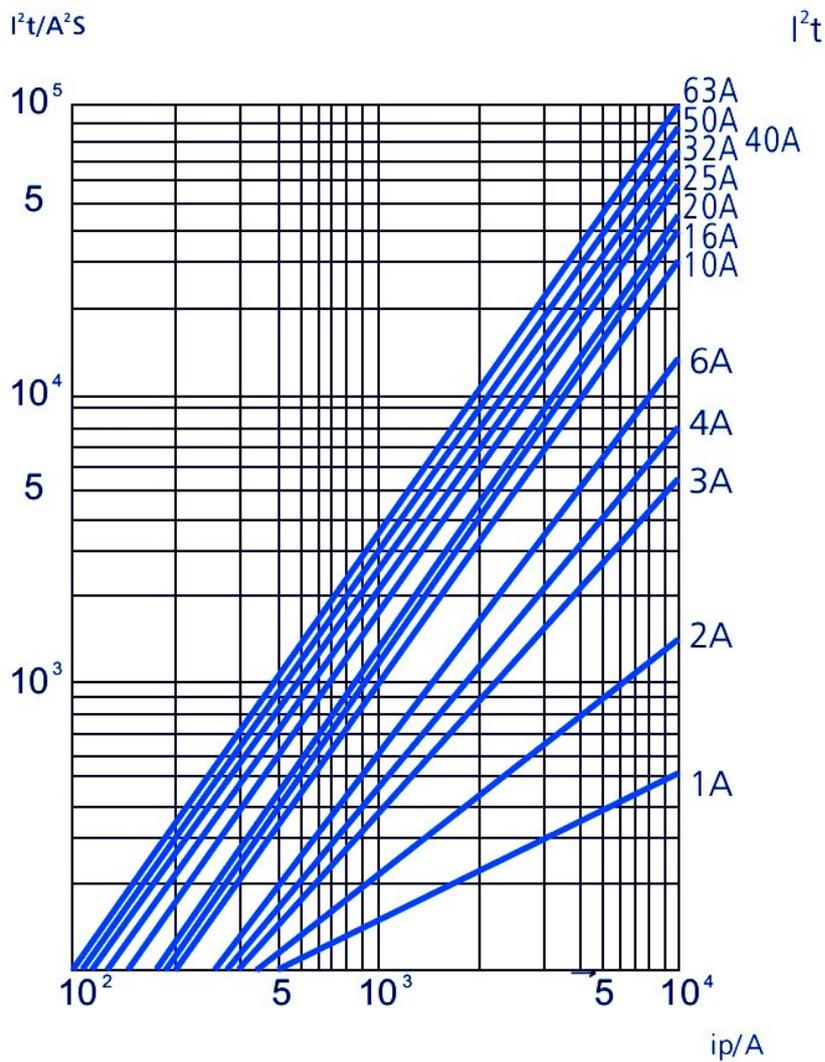
IEC/EN 60898-1, AC, Characteristic C



■ Influence of ambient temperature on tripping current

	-35°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
6A	7,80	7,56	7,38	7,14	6,84	6,60	6,24	6,00	5,76	5,64	5,28	4,98
10A	13,20	12,70	12,50	12,00	11,50	11,10	10,60	10,00	9,60	9,30	8,90	8,40
16A	21,12	20,48	20,00	19,20	18,40	17,76	16,96	16,00	15,36	14,88	14,24	13,44
20A	26,40	25,60	25,00	24,00	23,00	22,20	21,20	20,00	19,20	18,60	17,80	16,80
25A	33,00	32,00	31,25	30,00	28,75	27,75	26,50	25,00	24,00	23,25	22,25	21,00
32A	42,56	41,28	40,00	38,72	37,12	35,52	33,92	32,00	30,72	29,76	28,16	26,88

■ Let through energy



Short-circuit selectivity

Selectivity to Fuses characteristic gG/gL

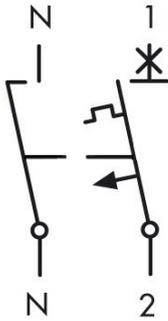
I_N	Power supply side: fuse characteristic gG/gL									
	20A	25A	36A	50A	63A	80A	100A	125A	160A	
Load side: MCB, characteristic B. C	6A	0,5 kA	0,8 kA	1,9 kA	2,5 kA	4,5 kA	5 kA	6 kA	6 kA	6 kA
	10A		0,7 kA	1,4 kA	2,2 kA	3,2 kA	3,6 kA	6 kA	6 kA	6 kA
	16A			1,2 kA	1,8 kA	2,6 kA	3 kA	5,6 kA	6 kA	6 kA
	20A				1,5 kA	2,2 kA	2,5 kA	4,6 kA	6 kA	6 kA
	25A				1,3 kA	2 kA	2,2 kA	4,1 kA	5,5 kA	6 kA
	32A					1,7 kA	1,9 kA	3,8 kA	4,5 kA	6 kA

Selectivity to MCCB series MC1 or MZ1

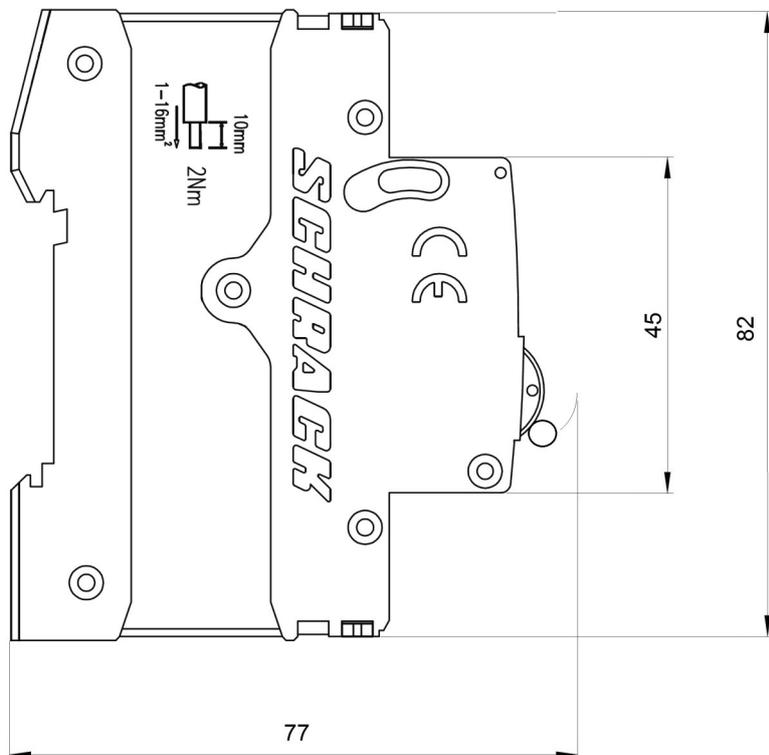
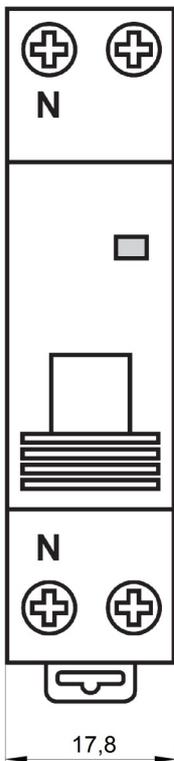
I_N	Power supply side: MCCB series MC1 or MZ1					
	40 A	50 A	63 A	80 A	100 A	
Load side: MCB characteristic B	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA
	32A		1,2 kA	1 kA	1,5 kA	2 kA

I_N	Power supply side: MCCB series MC1 or MZ1					
	40 A	50 A	63 A	80 A	100 A	
Load side: MCB characteristic C	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA
	32A		1,2 kA	1 kA	1,5 kA	2 kA

Wiring diagram



Dimensions



 Articles

Miniature Circuit Breaker (MCB), series AMPARO, 1+N on 1MW

Description	Order no.
Characteristic B	
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 6A, 1+N, 1MW	AM618506--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 10A, 1+N, 1MW	AM618510--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 13A, 1+N, 1MW	AM618513--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 16A, 1+N, 1MW	AM618516--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 20A, 1+N, 1MW	AM618520--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 25A, 1+N, 1MW	AM618525--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 32A, 1+N, 1MW	AM618532--
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 40A, 1+N, 1MW	AM618540--
Characteristic C	
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 6A, 1+N, 1MW	AM617506--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 10A, 1+N, 1MW	AM617510--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 13A, 1+N, 1MW	AM617513--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 16A, 1+N, 1MW	AM617516--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 20A, 1+N, 1MW	AM617520--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 25A, 1+N, 1MW	AM617525--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 32A, 1+N, 1MW	AM617532--
Miniature Circuit Breaker (MCB) AMPARO 6kA, C 40A, 1+N, 1MW	AM617540--