

■ Datasheet: Miniature circuit breaker (MCB), AMPARO series 10kA



■ SCHRACK-INFO

- Contact position indicator
- Lift and clamp terminals on both sides
- Terminal guide for secure connection
- Terminal cross-section: 1-25mm<sup>2</sup>
- Snap-on mounting for DIN rail EN 50 022

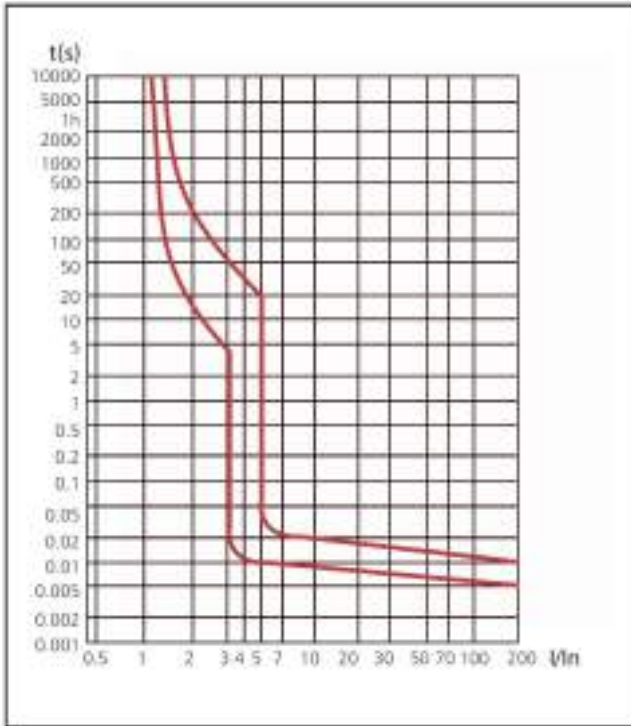
■ Technical data

Standards:	EN 60898-1 / IEC 60898-1
Rated voltage (AC)	230/400 - 240/415V
Rated frequency (AC)	50/60Hz
Rated current I <sub>n</sub>	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63 A
Tripping characteristics:	B, C, D
Rated breaking capacity:	10 kA acc. to IEC/EN 60898
Energy limiting class	3
Rated impulse withstand voltage (1,2/50) U <sub>imp</sub>	6kV
Dielectric test voltage at ind. Freq. For 1 min.	2kV
Polution degree	2

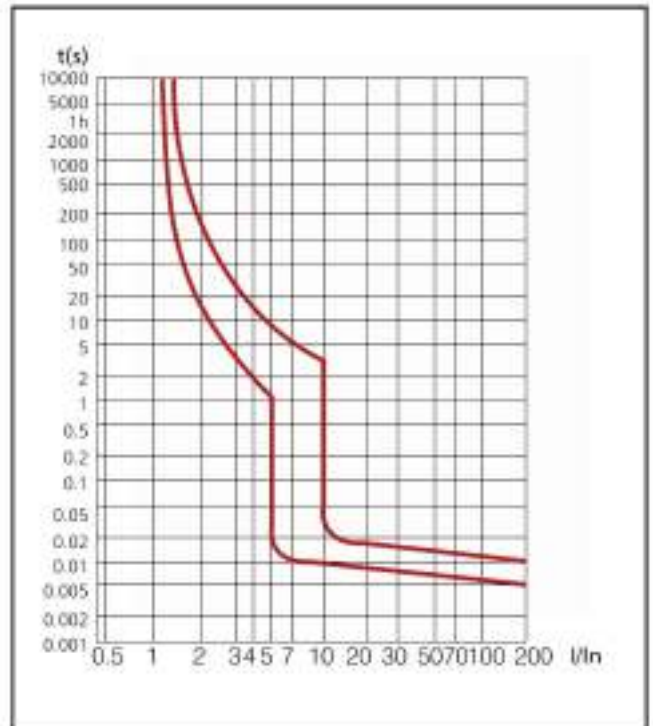
Total powerloss at I <sub>n</sub>					
	1P	1+N	2P	3P	3+N
1A	2.0 W	4.0W	4.0W	6.0W	8.0W
2A	2.0 W	4.0W	4.0W	6.0W	8.0W
3A	2.0 W	4.0W	4.0W	6.0W	8.0W
4A	2.0 W	4.0W	4.0W	6.0W	8.0W
6A	2.0 W	4.0W	4.0W	6.0W	8.0W
10A	2.0 W	4.0W	4.0W	6.0W	8.0W
13A	3.5 W	7.0 W	7.0 W	10.5 W	14.0 W
16A	3.5 W	7.0 W	7.0 W	10.5 W	14.0 W
20A	4.0 W	7.0 W	7.0 W	11.0 W	14.0 W
25A	4.0 W	7.0 W	7.0 W	11.0 W	14.0 W
32A	4.0 W	7.0 W	7.0 W	11.0 W	14.0 W
40A	5.0 W	10.0 W	10.0 W	15.0 W	20.0 W
50A	5.0 W	10.0 W	10.0 W	15.0 W	20.0 W
63A	5.0 W	10.0 W	10.0 W	15.0 W	20.0 W
Internal resistance					
	2A	459.800mΩ			
	4A	94.007mΩ			
	6A	51.787mΩ			
	10A	9.989mΩ			
	16A	6.310mΩ			
	20A	3.832mΩ			
	25A	2.671mΩ			
	32A	2.009mΩ			
	40A	1.660mΩ			
	50A	1.226mΩ			
	63A	1.055mΩ			
Electrical endurance	> 4.000 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/ U-type busbar / Pin-type busbar				
Connection	From top and bottom				
Terminal cross-section	1 - 25 mm <sup>2</sup>				
Terminal tightening torque	2.5 Nm				
Terminal size for busbar	10 mm <sup>2</sup>				
Mounting	on DIN rail EN 60715 (35mm) by means of fast clip device				
Mounting position	Any				

Tripping curves

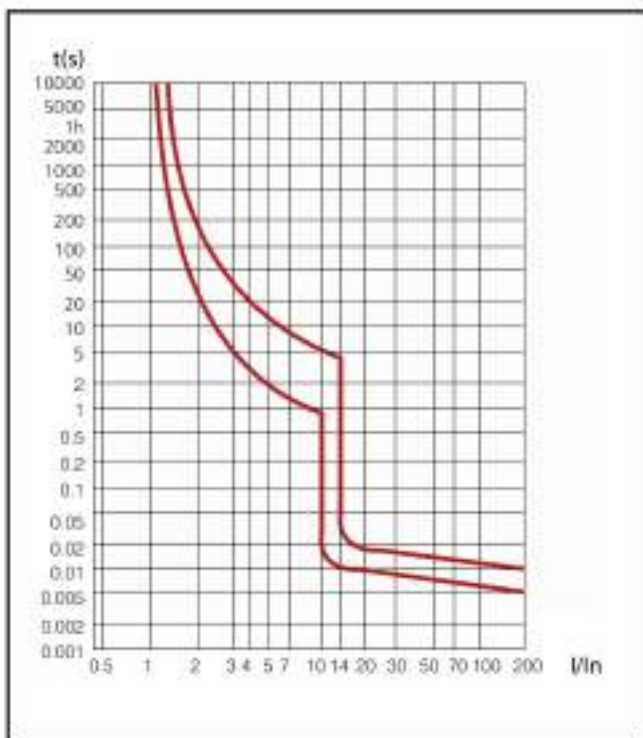
Characteristic B



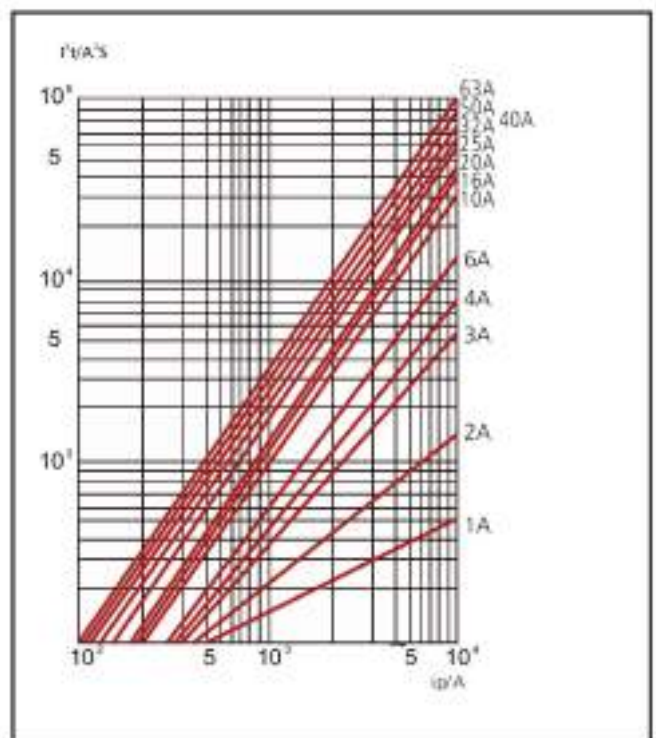
Characteristic C



Characteristic D



$I^2t$



 Influence of ambient temperature on tripping current

	- 35°C	- 30°C	- 20°C	- 10°C	0°C	10°C	20°C	<b>30°C</b>	40°C	50°C	60°C	70°C
<b>1A</b>	1.30	1.26	1.23	1.19	1.15	1.11	1.05	<b>1.00</b>	0.96	0.93	0.88	0.83
<b>2A</b>	2.60	2.52	2.46	2.38	2.28	2.20	2.08	<b>2.00</b>	1.92	1.86	1.76	1.66
<b>3A</b>	3.90	3.78	3.69	3.57	3.42	3.30	3.12	<b>3.00</b>	2.88	2.79	2.64	2.49
<b>4A</b>	5.20	5.04	4.92	4.76	4.56	4.40	4.16	<b>4.00</b>	3.84	3.76	3.52	3.32
<b>6A</b>	7.80	7.56	7.38	7.14	6.84	6.60	6.24	<b>6.00</b>	5.76	5.64	5.28	4.98
<b>10A</b>	13.20	12.70	12.50	12.00	11.50	11.10	10.60	<b>10.00</b>	9.60	9.30	8.90	8.40
<b>16A</b>	21.12	20.48	20.00	19.20	18.40	17.76	16.96	<b>16.00</b>	15.36	14.88	14.24	13.44
<b>20A</b>	26.40	25.60	25.00	24.00	23.00	22.20	21.20	<b>20.00</b>	19.20	18.60	17.80	16.80
<b>25A</b>	33.00	32.00	31.25	30.00	28.75	27.75	26.50	<b>25.00</b>	24.00	23.25	22.25	21.00
<b>32A</b>	42.56	41.28	40.00	38.72	37.12	35.52	33.92	<b>32.00</b>	30.72	29.76	28.16	26.88
<b>40A</b>	53.20	51.20	50.00	48.00	46.40	44.80	42.40	<b>40.00</b>	38.40	37.20	35.60	33.60
<b>50A</b>	67.00	65.50	63.00	60.50	58.00	56.00	53.00	<b>50.00</b>	48.00	46.50	44.00	41.50
<b>63A</b>	83.79	81.90	80.01	76.86	73.71	70.56	66.78	<b>63.00</b>	60.48	58.90	55.44	52.29

Short-Circuit Selectivity D/D0 – Back up fuse Characteristic gG/gL

	I <sub>N</sub>	Supply: Fuse Characteristic gG/gL							
		16A	20A	25A	35A	50A	63A	80A	100A
MCB, AMPARO series Characteristic B	≤2A	0,5 kA	0,8 kA	1,6 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	3A	0,5 kA	0,8 kA	1,4 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	4A	0,5 kA	0,6 kA	1,0 kA	3,6 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	6A	0,5 kA	0,6 kA	0,9 kA	1,8 kA	3,2 kA	7,4 kA	10,0 kA	10,0 kA
	10A	-	0,5 kA	0,8 kA	1,4 kA	2,2 kA	3,9 kA	6,0 kA	10,0 kA
	13A	-	0,5 kA	0,7 kA	1,3 kA	2,0 kA	3,6 kA	5,4 kA	10,0 kA
	16A	-	-	0,6 kA	1,2 kA	1,9 kA	3,2 kA	4,6 kA	8,4 kA
	20A	-	-	-	1,2 kA	1,8 kA	3,1 kA	4,4 kA	4,6 kA
	25A	-	-	-	1,2 kA	1,8 kA	3,0 kA	4,2 kA	4,1 kA
	32A	-	-	-	-	1,7 kA	2,8 kA	3,9 kA	3,8 kA
	40A	-	-	-	-	-	2,7 kA	3,8 kA	3 kA
	50A	-	-	-	-	-	2,5 kA	3,5 kA	2,6 kA
	63A	-	-	-	-	-	-	-	2,4 kA

	I <sub>N</sub>	Supply: Fuse Characteristic gG/gL							
		16A	20A	25A	35A	50A	63A	80A	100A
MCB, AMPARO series Characterisic C	≤2A	0,5 kA	0,8 kA	1,6 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	3A	0,5 kA	0,8 kA	0,9 kA	2,2 kA	4,5 kA	10,0 kA	10,0 kA	10,0 kA
	4A	0,5 kA	0,6 kA	0,8 kA	1,8 kA	3,6 kA	9,7 kA	10,0 kA	10,0 kA
	6A	0,5 kA	0,5 kA	0,6 kA	1,4 kA	2,4 kA	5,5 kA	10,0 kA	10,0 kA
	10A	-	0,5 kA	0,6 kA	1,3 kA	2,0 kA	3,6 kA	5,4 kA	10,0 kA
	13A	-	-	-	1,3 kA	1,9 kA	3,3 kA	5,0 kA	9,4 kA
	16A	-	-	-	1,2 kA	1,8 kA	3,2 kA	4,4 kA	8,0 kA
	20A	-	-	-	1,2 kA	1,8 kA	3,1 kA	4,1 kA	7,0 kA
	25A	-	-	-	-	1,7 kA	2,8 kA	3,8 kA	6,5 kA
	32A	-	-	-	-	-	2,7 kA	3,7 kA	6,2 kA
	40A	-	-	-	-	-	-	3,5 kA	5,9 kA
	50A	-	-	-	-	-	-	-	5,5 kA
	63A	-	-	-	-	-	-	-	-

	I <sub>N</sub>	Supply: Fuse Characteristic gG/gL							
		16A	20A	25A	35A	50A	63A	80A	100A
MCB, AMPARO series Characteristic D	≤2A	0,5 kA	0,6 kA	1,0 kA	2,8 kA	5,8 kA	10,0 kA	10,0 kA	10,0 kA
	3A	0,5 kA	0,6 kA	0,9 kA	2,3 kA	4,3 kA	10,0 kA	10,0 kA	10,0 kA
	4A	0,5 kA	0,6 kA	0,9 kA	2,0 kA	3,8 kA	9,5 kA	10,0 kA	10,0 kA
	6A	-	0,5 kA	0,7 kA	1,5 kA	2,6 kA	5,3 kA	9,1 kA	10,0 kA
	10A	-	-	0,7 kA	1,2 kA	1,9 kA	3,4 kA	5,0 kA	9,5 kA
	13A	-	-	-	1,2 kA	1,8 kA	3,2 kA	4,6 kA	8,6 kA
	16A	-	-	-	-	1,6 kA	3,2 kA	4,4 kA	8,0 kA
	20A	-	-	-	-	1,5 kA	2,5 kA	3,5 kA	6,7 kA
	25A	-	-	-	-	-	2,4 kA	3,4 kA	6,2 kA
	32A	-	-	-	-	-	-	2,8 kA	5,0 kA
	40A	-	-	-	-	-	-	-	4,8 kA
	50A	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-

■ Short-Circuit Selectivity NH – Back up fuse Characteristic gG/gL

	I <sub>N</sub>	Supply: Fuse Characteristic gG/gL										
		16A	20A	25A	35A	40A	50A	63A	80A	100A	125A	160A
MCB, AMPARO series Characteristic B	≤2A	0,5 kA	0,5 kA	1,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	3A	0,5 kA	0,5 kA	0,9 kA	8,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	4A	0,5 kA	0,5 kA	0,8 kA	2,3 kA	4,3 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	6A	0,5 kA	0,5 kA	0,7 kA	1,5 kA	2,0 kA	3,3 kA	4,3 kA	7,6 kA	10,0 kA	10,0 kA	10,0 kA
	10A	-	0,5 kA	0,6 kA	1,2 kA	1,5 kA	2,2 kA	2,7 kA	4,0 kA	9,0 kA	10,0 kA	10,0 kA
	13A	-	0,5 kA	0,6 kA	1,1 kA	1,4 kA	2,1 kA	2,6 kA	3,8 kA	7,9 kA	10,0 kA	10,0 kA
	16A	-	-	0,5 kA	1,0 kA	1,3 kA	1,9 kA	2,4 kA	3,4 kA	6,4 kA	9,3 kA	10,0 kA
	20A	-	-	-	1,0 kA	1,3 kA	1,9 kA	2,4 kA	3,3 kA	6,0 kA	8,7 kA	10,0 kA
	25A	-	-	-	1,0 kA	1,3 kA	1,8 kA	2,3 kA	3,2 kA	5,7 kA	8,0 kA	10,0 kA
	32A	-	-	-	0,9 kA	1,2 kA	1,7 kA	2,2 kA	3,1 kA	5,4 kA	7,6 kA	10,0 kA
	40A	-	-	-	-	-	-	2,1 kA	3,0 kA	5,1 kA	7,2 kA	10,0 kA
	50A	-	-	-	-	-	-	1,9 kA	2,8 kA	4,7 kA	6,6 kA	9,5 kA
	63A	-	-	-	-	-	-	-	-	4,4 kA	6,3 kA	8,6 kA

		Supply: Fuse Characteristic gG/gL										
$I_N$		16A	20A	25A	35A	40A	50A	63A	80A	100A	125A	160A
MCB, AMPARO series Characteristic C	$\leq 2A$	0,5 kA	0,6 kA	1,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	3A	0,5 kA	0,5 kA	0,7 kA	1,8 kA	2,6 kA	4,7 kA	6,6 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	4A	0,5 kA	0,5 kA	0,7 kA	1,5 kA	2,1 kA	3,6 kA	5,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	6A	0,5 kA	0,5 kA	0,5 kA	1,2 kA	1,5 kA	2,5 kA	3,3 kA	5,7 kA	10,0 kA	10,0 kA	10,0 kA
	10A	-	-	0,5 kA	1,0 kA	1,4 kA	2,0 kA	2,5 kA	3,8 kA	8,0 kA	10,0 kA	10,0 kA
	13A	-	-	-	1,0 kA	1,3 kA	1,9 kA	2,4 kA	3,6 kA	7,0 kA	10,0 kA	10,0 kA
	16A	-	-	-	1,0 kA	1,3 kA	1,8 kA	2,3 kA	3,3 kA	6,0 kA	8,8 kA	10,0 kA
	20A	-	-	-	1,0 kA	1,2 kA	1,7 kA	2,2 kA	3,2 kA	5,5 kA	7,7 kA	10,0 kA
	25A	-	-	-	-	-	1,6 kA	2,1 kA	3,0 kA	5,2 kA	7,3 kA	10,0 kA
	32A	-	-	-	-	-	-	2,1 kA	2,9 kA	5,0 kA	7,0 kA	10,0 kA
	40A	-	-	-	-	-	-	-	2,8 kA	4,8 kA	6,7 kA	10,0 kA
	50A	-	-	-	-	-	-	-	-	4,5 kA	6,3 kA	9,5 kA
	63A	-	-	-	-	-	-	-	-	-	5,9 kA	8,4 kA

		Supply: Fuse Characteristic gG/gL										
$I_N$		16A	20A	25A	35A	40A	50A	63A	80A	100A	125A	160A
MCB, AMPARO series Characteristic D	$\leq 2A$	0,5 kA	0,5 kA	0,8 kA	2,1 kA	3,1 kA	6,0 kA	8,6 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	3A	0,5 kA	0,5 kA	0,7 kA	1,7 kA	2,4 kA	4,3 kA	6,0 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	4A	0,5 kA	0,5 kA	0,7 kA	1,6 kA	2,2 kA	3,8 kA	5,2 kA	10,0 kA	10,0 kA	10,0 kA	10,0 kA
	6A	-	0,5 kA	0,5 kA	1,2 kA	1,6 kA	2,6 kA	3,3 kA	5,5 kA	10,0 kA	10,0 kA	10,0 kA
	10A	-	-	0,5 kA	1,0 kA	1,3 kA	1,9 kA	2,5 kA	3,6 kA	7,2 kA	10,0 kA	10,0 kA
	13A	-	-	-	1,0 kA	1,3 kA	1,9 kA	2,3 kA	3,4 kA	6,5 kA	9,5 kA	10,0 kA
	16A	-	-	-	-	1,1 kA	1,6 kA	2,0 kA	3,0 kA	5,5 kA	8,0 kA	10,0 kA
	20A	-	-	-	-	-	1,4 kA	1,8 kA	2,8 kA	5,0 kA	7,5 kA	10,0 kA
	25A	-	-	-	-	-	-	1,8 kA	2,7 kA	4,8 kA	7,0 kA	10,0 kA
	32A	-	-	-	-	-	-	-	2,4 kA	4,1 kA	6,2 kA	9,3 kA
	40A	-	-	-	-	-	-	-	-	4,0 kA	6,0 kA	9,0 kA
	50A	-	-	-	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-	-	-	-

Short-Circuit Selectivity MCCB Framesize 1

$I_{cu} = 25 \text{ kA (50 kA)}$		Supply: MCCB Framesize 1					
		40 A	50 A	63 A	80 A	100 A	125 A
MCB, AMPARO series Characteristic B	1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	2A	2 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	3A	1,2 kA	2 kA	3 kA	3 kA	10 kA	15 kA
	4A	1,2 kA	2 kA	3 kA	3 kA	8 kA	15 kA
	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA	10 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA	10 kA
	13A	1 kA	1,5 kA	2 kA	2 kA	4 kA	10 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA	8 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA	8 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA	7 kA
	32A	-	1,2 kA	1 kA	1,5 kA	2 kA	6 kA
	40A	-	-	1 kA	1,5 kA	2 kA	5 kA
	50A	-	-	-	1,2 kA	1,5 kA	4 kA
	63A	-	-	-	-	1,5 kA	3 kA

$I_{cu} = 25 \text{ kA (50 kA)}$		Supply: MCCB Framesize 1					
		40 A	50 A	63 A	80 A	100 A	125 A
MCB, AMPARO series Characteristic C	1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	2A	2 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	3A	1,2 kA	2 kA	3 kA	3 kA	10 kA	15 kA
	4A	1,2 kA	2 kA	3 kA	3 kA	8 kA	15 kA
	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA	10 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA	10 kA
	13A	1 kA	1,5 kA	2 kA	2 kA	4 kA	10 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA	8 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA	8 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA	7 kA
	32A	-	1,2 kA	1 kA	1,5 kA	2 kA	6 kA
	40A	-	-	1 kA	1,5 kA	2 kA	5 kA
	50A	-	-	-	1,2 kA	1,5 kA	4 kA
	63A	-	-	-	-	1,5 kA	3 kA



$I_{cu} = 25 \text{ kA (50 kA)}$		Supply: MCCB Framesize 1					
		40 A	50 A	63 A	80 A	100 A	125 A
MCB, AMPARO series Characteristic D	1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	2A	2 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	3A	1,2 kA	2 kA	3 kA	3 kA	10 kA	15 kA
	4A	1,2 kA	2 kA	3 kA	3 kA	8 kA	15 kA
	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA	10 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA	10 kA
	13A	1 kA	1,5 kA	2 kA	2 kA	4 kA	10 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA	8 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA	8 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA	7 kA
	32A	-	1,2 kA	1 kA	1,5 kA	2 kA	6 kA
	40A	-	-	1 kA	1,5 kA	2 kA	5 kA
	50A	-	-	-	1,2 kA	1,5 kA	4 kA
	63A	-	-	-	-	1,5 kA	3 kA

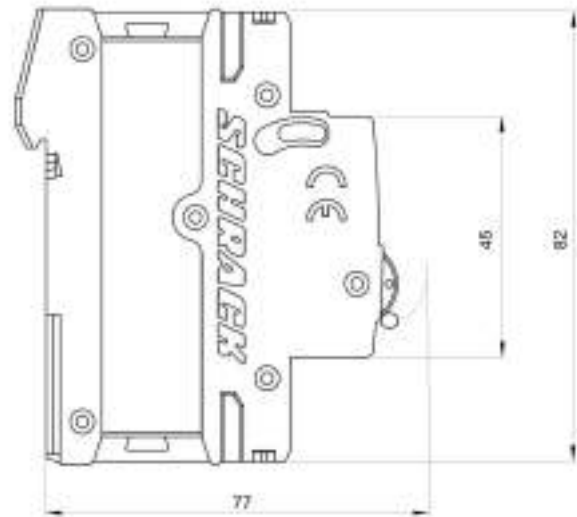
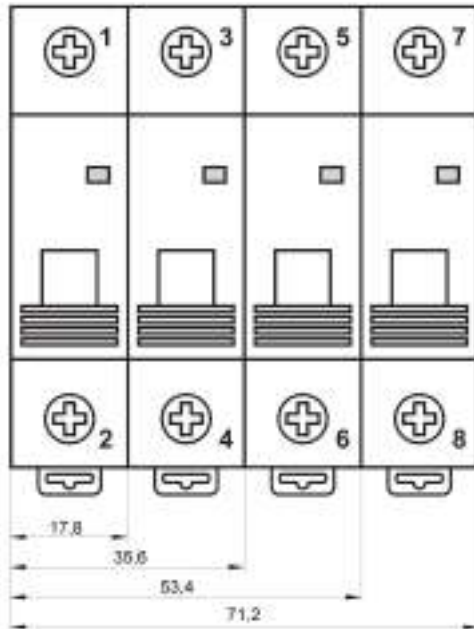
Short-Circuit Selectivity MCCB Framesize 2

$I_{cu} = 25 \text{ kA (50 kA), (100 kA), (150 kA)}$		Supply: MCCB Framesize 2								
		40 A	50 A	63 A	80 A	100 A	125 A	160 A	200 A	250 A
MCB, AMPARO series Characteristic B	1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	2A	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	3A	1,5 kA	1,5 kA	3 kA	5 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	4A	1,2 kA	1,5 kA	3 kA	4 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	6A	1,2 kA	1,5 kA	2,5 kA	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	10A	1 kA	1,5 kA	2,5 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	13A	1 kA	1,2 kA	2 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	16A	1 kA	1,2 kA	1,5 kA	2,5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	20A	1 kA	1,2 kA	1,5 kA	1,5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	25A	0,8 kA	1 kA	1,5 kA	2 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	32A	-	1 kA	1,5 kA	2 kA	8 kA	8 kA	8 kA	8 kA	10 kA
	40A	-	-	1,2 kA	1,5 kA	7 kA	7 kA	7 kA	7 kA	10 kA
	50A	-	-	-	1,5 kA	6 kA	6 kA	6 kA	6 kA	10 kA
	63A	-	-	-	-	6 kA	6 kA	6 kA	6 kA	10 kA

$I_{cu} = 25\text{kA} (50\text{kA}), (100\text{kA}), (150\text{kA})$		Supply: MCCB Framesize 2								
		40 A	50 A	63 A	80 A	100 A	125 A	160 A	200 A	250 A
MCB, AMPARO series Characteristic C	1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	2A	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	3A	1,5 kA	1,5 kA	3 kA	5 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	4A	1,2 kA	1,5 kA	3 kA	4 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	6A	1,2 kA	1,5 kA	2,5 kA	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	10A	1 kA	1,5 kA	2,5 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	13A	1 kA	1,2 kA	2 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	16A	1 kA	1,2 kA	1,5 kA	2,5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	20A	1 kA	1,2 kA	1,5 kA	1,5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	25A	0,8 kA	1 kA	1,5 kA	2 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	32A	-	1 kA	1,5 kA	2 kA	8 kA	8 kA	8 kA	8 kA	10 kA
	40A	-	-	1,2 kA	1,5 kA	7 kA	7 kA	7 kA	7 kA	10 kA
	50A	-	-	-	1,5 kA	6 kA	6 kA	6 kA	6 kA	10 kA
	63A	-	-	-	-	6 kA	6 kA	6 kA	6 kA	10 kA

$I_{cu} = 25\text{kA} (50\text{kA}), (100\text{kA}), (150\text{kA})$		Supply: MCCB Framesize 2								
		40 A	50 A	63 A	80 A	100 A	125 A	160 A	200 A	250 A
MCB, AMPARO series Characteristic D	1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	2A	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	3A	1,5 kA	1,5 kA	3 kA	5 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	4A	1,2 kA	1,5 kA	3 kA	4 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	6A	1,2 kA	1,5 kA	2,5 kA	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA
	10A	1 kA	1,5 kA	2,5 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	13A	1 kA	1,2 kA	2 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	16A	1 kA	1,2 kA	1,5 kA	2,5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	20A	1 kA	1,2 kA	1,5 kA	1,5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	25A	0,8 kA	1 kA	1,5 kA	2 kA	10 kA	10 kA	10 kA	10 kA	10 kA
	32A	-	1 kA	1,5 kA	2 kA	8 kA	8 kA	8 kA	8 kA	10 kA
	40A	-	-	1,2 kA	1,5 kA	7 kA	7 kA	7 kA	7 kA	10 kA
	50A	-	-	-	1,5 kA	6 kA	6 kA	6 kA	6 kA	10 kA
	63A	-	-	-	-	6 kA	6 kA	6 kA	6 kA	10 kA

▀ Dimensions



▀ Articles

MCB, Miniature circuit breaker, AMPARO series, 10kA, 1-pole

Description	Order No.
Characteristic B	
1A	AM018101--
2A	AM018102--
3A	AM018103--
4A	AM018104--
6A	AM018106--
10A	AM018110--
13A	AM018113--
16A	AM018116--
20A	AM018120--
25A	AM018125--
32A	AM018132--
40A	AM018140--
50A	AM018150--
63A	AM018163--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 1-pole

Description	Order No.
Characteristic C	
1A	AM017101--
2A	AM017102--
3A	AM017103--
4A	AM017104--
6A	AM017106--
10A	AM017110--
13A	AM017113--
16A	AM017116--
20A	AM017120--
25A	AM017125--
32A	AM017132--
40A	AM017140--
50A	AM017150--
63A	AM017163--

Characteristic D	
1A	AM019101--
2A	AM019102--
3A	AM019103--
4A	AM019104--
6A	AM019106--
10A	AM019110--
13A	AM019113--
16A	AM019116--
20A	AM019120--
25A	AM019125--
32A	AM019132--
40A	AM019140--
50A	AM019150--
63A	AM019163--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 1+N

Description	Order No.
Characteristic C	
6A	AM617606--
10A	AM617610--
13A	AM617613--
16A	AM617616--
20A	AM617620--
25A	AM617625--
32A	AM617632--
40A	AM617640--
50A	AM617650--
63A	AM617663--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 2-polig

Description	Order No.
Characteristic B	
1A	AM018201--
2A	AM018202--
3A	AM018203--
4A	AM018204--
6A	AM018206--
10A	AM018210--
13A	AM018213--
16A	AM018216--
20A	AM018220--
25A	AM018225--
32A	AM018232--
40A	AM018240--
50A	AM018250--
63A	AM018263--
Characteristic C	
1A	AM017201--
2A	AM017202--
3A	AM017203--
4A	AM017204--
6A	AM017206--
10A	AM017210--
13A	AM017213--
16A	AM017216--
20A	AM017220--
25A	AM017225--
32A	AM017232--
40A	AM017240--
50A	AM017250--
63A	AM017263--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 2-polig

Description	Order No.
Characteristic D	
1A	AM019201--
2A	AM019202--
3A	AM019203--
4A	AM019204--
6A	AM019206--
10A	AM019210--
13A	AM019213--
16A	AM019216--
20A	AM019220--
25A	AM019225--
32A	AM019232--
40A	AM019240--
50A	AM019250--
63A	AM019263--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 3-polig

Description	Order No.
Characteristic B	
1A	AM018301--
2A	AM018302--
3A	AM018303--
4A	AM018304--
6A	AM018306--
10A	AM018310--
13A	AM018313--
16A	AM018316--
20A	AM018320--
25A	AM018325--
32A	AM018332--
40A	AM018340--
50A	AM018350--
63A	AM018363--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 3-polig

Description	Order No.
Characteristic C	
1A	AM017301--
2A	AM017302--
3A	AM017303--
4A	AM017304--
6A	AM017306--
10A	AM017310--
13A	AM017313--
16A	AM017316--
20A	AM017320--
25A	AM017325--
32A	AM017332--
40A	AM017340--
50A	AM017350--
63A	AM017363--

Characteristic D	
1A	AM019301--
2A	AM019302--
3A	AM019303--
4A	AM019304--
6A	AM019306--
10A	AM019310--
13A	AM019313--
16A	AM019316--
20A	AM019320--
25A	AM019325--
32A	AM019332--
40A	AM019340--
50A	AM019350--
63A	AM019363--

MCB, Miniature circuit breaker, AMPARO series, 10kA, 3+N

Description	Order No.
Characteristic C	
6A	AM017806--
10A	AM017810--
13A	AM017813--
16A	AM017816--
20A	AM017820--
25A	AM017825--
32A	AM017832--
40A	AM017840--
50A	AM017850--
63A	AM017863--