

DATA SHEET: COMBINED MCB/RCD (RCBO) 1+N, SERIES AMPARO 6KA



SCHRACK-INFO

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

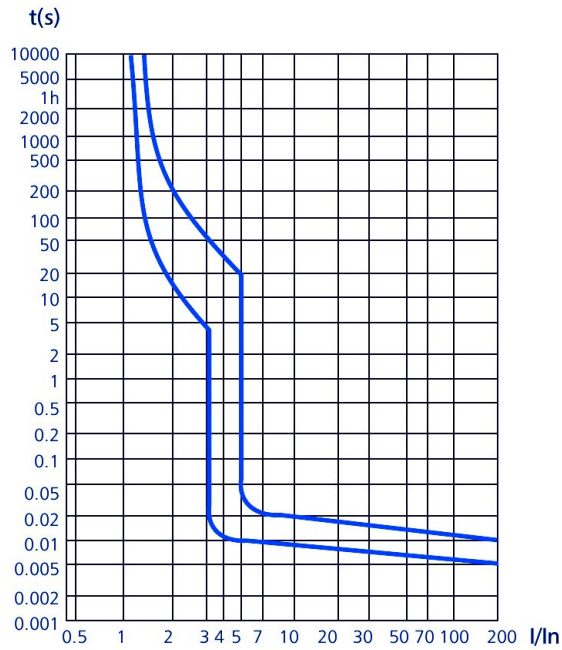
TECHNICAL DATA:

Standards:	IEC/EN 61009-1
Type	A
Poles	1+N
Rated voltage (AC):	230/400V-AC
Rated frequency (AC):	50/60Hz
Rated current I <sub>n</sub>	6A, 10A, 13A, 16A, 20A, 25A
Tripping characteristics:	B, C
Rated sensitivity I <sub>Δn</sub>	0,03A
Breaking time under I <sub>Δn</sub>	≤ 0,1s
Rated breaking capacity:	6 kA
Energy limiting class	2
Rated residual making and breaking capacity	500A
Breaking capacity I <sub>Δm</sub>	6.000A

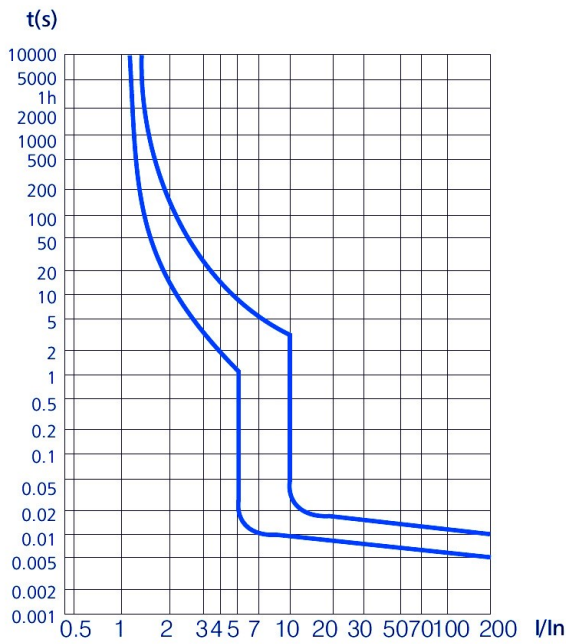
Rated impulse withstand voltage (1,2/50) $U_{imp}$	6kV
Dielectric test voltage at ind.	2kV
Insulation voltage $U_i$	500V
Max. back-up fuse as short circuit protection (SCPD):	63A gG
Tripping time	undelayed $I_{\Delta n}$ $\leq 300ms$
	$2 \times I_{\Delta n}$ $\leq 150ms$
	$\geq 5 \times I_{\Delta n}$ $\leq 40ms$
No tripping residual current $I_{\Delta no}$	$\leq 0,5 I_{\Delta n}$
Power loss	$\leq 6.7W$
Polution degree	2
Electrical endurance:	> 2.000 operating cycles
Mechanical endurance:	> 2.000 operating cycles
Contact position indicator	yes
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 top	Cable/ Pin-type busbar
Terminal connection type bottom	Cable/U-type busbar / Pin-type busbar
Connection	From top and bottom
Terminal cross-section:	1 - 25mm <sup>2</sup>
Terminal tightening torque:	2Nm
Terminal size for busbar	10mm <sup>2</sup>
Mounting:	on DIN rail EN 60715 (35mm)
	by means of fast clip device

TRIPPING CURVES:

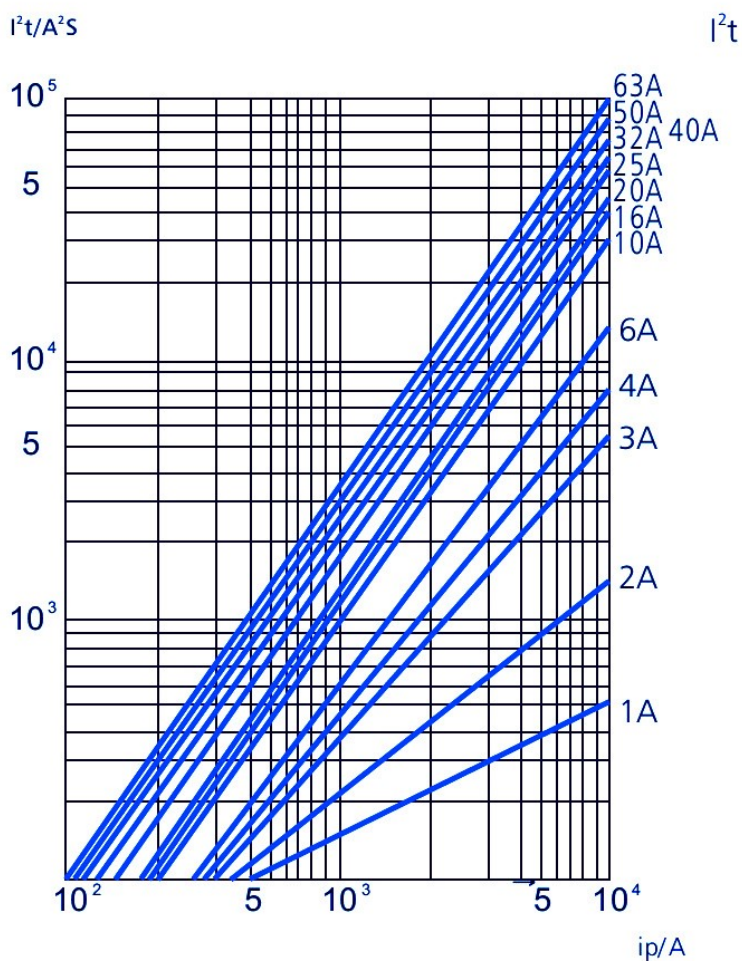
IEC/EN 60898-1, AC, Characteristic B



IEC/EN 60898-1, AC, Characteristic B



**Let-through energy**



■ INFLUENCE OF AMBIENT TEMPERATURE ON TRIPPING CURRENT

	- 10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C
6A	7,2	6,9	6,6	6,3	6,0	5,7	5,4	5,1
10A	12,0	11,5	11,0	10,5	10,0	9,5	9,0	8,5
16A	19,2	18,4	17,6	16,8	16,0	15,2	14,4	13,6
20A	24,0	23,0	22,0	21,0	20,0	19,0	18,0	17,0
25A	30,0	28,8	27,5	26,3	25,0	23,8	22,5	21,3

■ SHORT-CIRCUIT SELECTIVITY

Selectivity to Fuses characteristic gG/gL

		Power supply side: fuse characteristic gG/gL								
		$I_N$	20A	25A	36A	50A	63A	80A	100A	125A
Load side: RCBO, series AMPARO 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

Selectivity to MCCB type MC1

		Power supply side: MCCB series MC1				
		$I_N$	40 A	50 A	63 A	80 A
Load side: RCBO, series AMPARO 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

Selectivity to MCCB type MC1

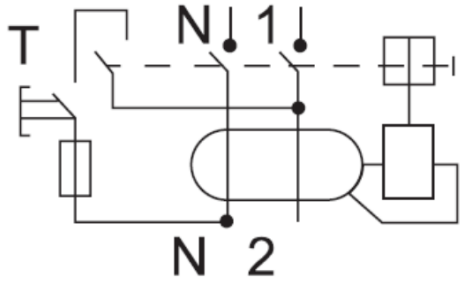
		Power supply side: MCCB series MC1				
		$I_N$	40 A	50 A	63 A	80 A
Load side: RCBO, series AMPARO characteristic C	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA

Selectivity to MCCB type MC2

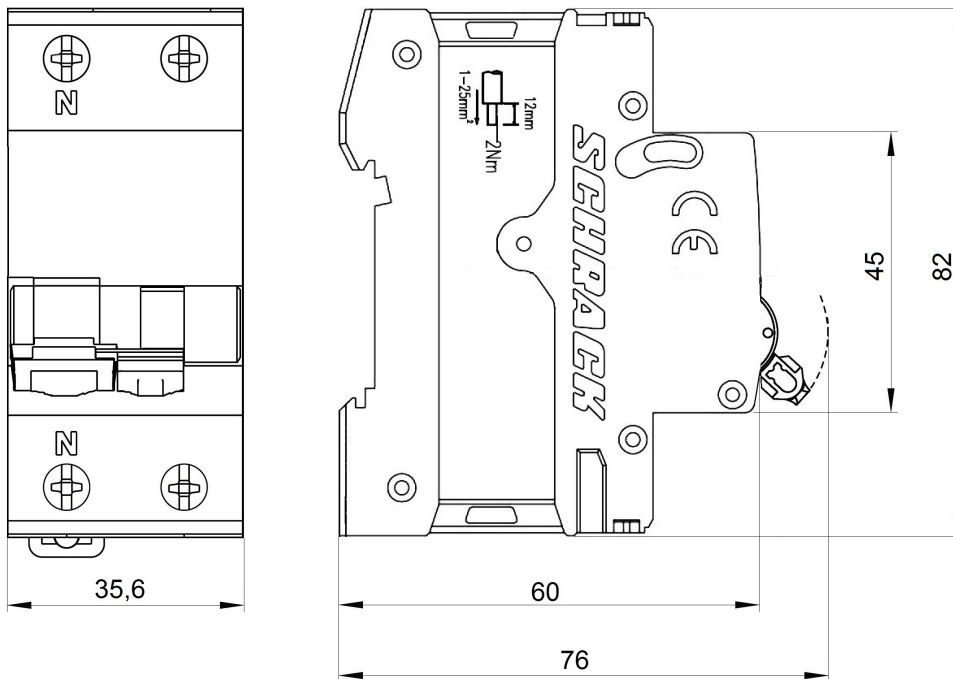
		Power supply side: MCCB series MC2				
		$I_N$	40 A	50 A	63 A	80 A
Load side: RCBO, series AMPARO characteristic B	6A	1,2 kA	1,5 kA	2,5 kA	3 kA	6 kA
	10A	1 kA	1,5 kA	2,5 kA	3 kA	6 kA
	13A	1 kA	1,2 kA	2 kA	3 kA	6 kA
	16A	1 kA	1,2 kA	1,5 kA	2,5 kA	6 kA
	20A	1 kA	1,2 kA	1,5 kA	2 kA	6 kA
	25A	0,8 kA	1 kA	1,5 kA	2 kA	6 kA

		Power supply side: MCCB series MC2				
		$I_N$	40 A	50 A	63 A	80 A
Load side: RCBO, series AMPARO characteristic C	6A	1,2 kA	1,5 kA	2,5 kA	3 kA	6 kA
	10A	1 kA	1,5 kA	2,5 kA	3 kA	6 kA
	13A	1 kA	1,2 kA	2 kA	3 kA	6 kA
	16A	1 kA	1,2 kA	1,5 kA	2,5 kA	6 kA
	20A	1 kA	1,2 kA	1,5 kA	1,5 kA	6 kA
	25A	0,8 kA	1 kA	1,5 kA	2 kA	6 kA

■ WIRING DIAGRAM:



■ DIMENSIONS:



**ARTICLES:**

Combined MCB/RCD (RCBO) 1+N, AMPARO 6kA, 30mA, Typ A

Description	order no.
<b>Characteristic B</b>	
6A	AK668606--
10A	AK668610--
13A	AK668613--
16A	AK668616--
20A	AK668620--
25A	AK668625--
<b>Characteristic C</b>	
6A	AK667606--
10A	AK667610--
13A	AK667613--
16A	AK667616--
20A	AK667620--
25A	AK667625--