

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



SCHRACK-INFO

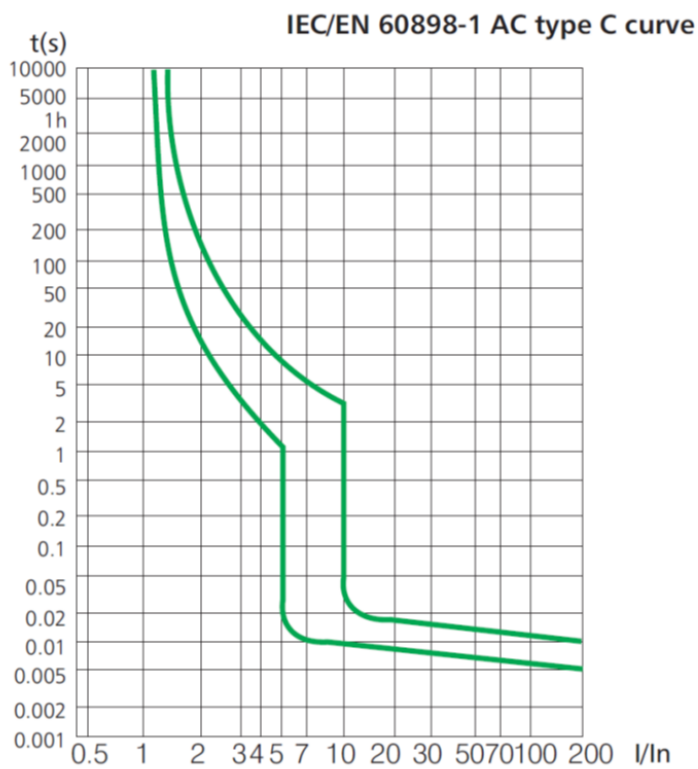
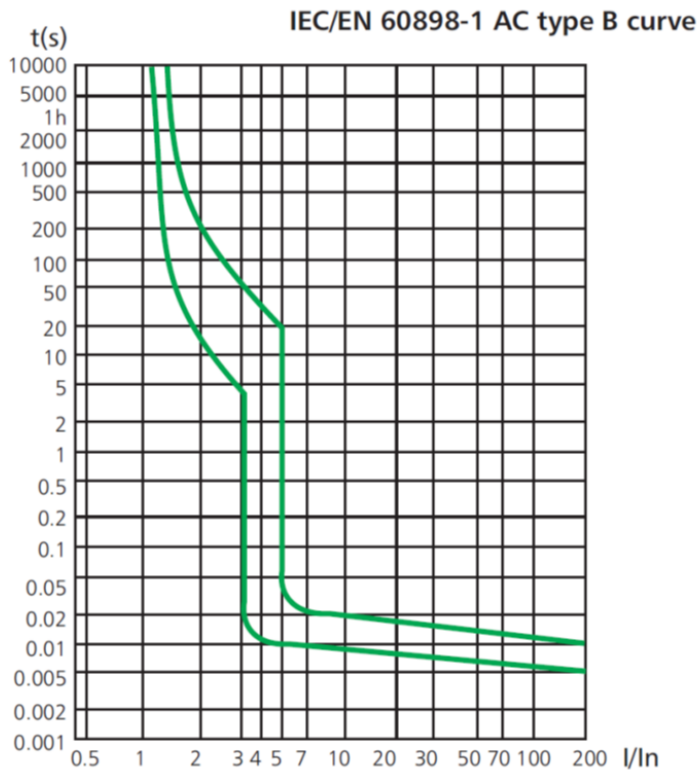
- Contact position indicator
- Terminal guide for secure connection
- Terminal cross-section: 1-25mm²
- Snap-on mounting for DIN rail EN 50 022

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 _n	6A, 10A, 13A, 16A, 20A, 25A
Tripping characteristics:	B, C
Rated sensitivity I _{Δn}	0,03A
Breaking time under I _{Δn}	≤ 0,1s
Rated breaking capacity:	6 kA
Energy limiting class	2
Rated residual making and breaking capacity	500A
Breaking capacity I _{Δm}	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 protec-	63A gG	
Tripping time	undelayed I Δ n	≤ 300ms
	2 x I Δ n	≤ 150ms
	≥ 5 x I Δ n	≤ 40ms
No tripping residual current I Δ no	≤ 0,5 I Δ n	
Power loss	≤ 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 bot-	Cable/U-type busbar / Pin-type busbar	
Connection	From top and bottom	
Terminal cross-section:	1 - 25mm ²	
Terminal tightening torque:	2Nm	
Terminal size for busbar	10mm ²	
Mounting:	on DIN rail EN 60715 (35mm)	
	by means of fast clip device	

TRIPPING CURVES:



■ 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	160A
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

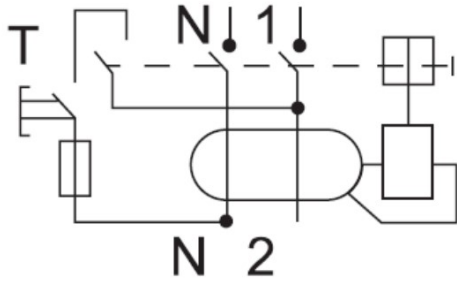
		Power supply side: MCCB series MC1				
		I_N	40 A	50 A	63 A	80 A
Load side: RCBO, series AMPARO characteristic C	6A	1,2 kA	2 kA	2,5 kA	3 kA	5 kA
	10A	1,2 kA	1,5 kA	2 kA	2 kA	4 kA
	16A	1 kA	1,2 kA	1,5 kA	2 kA	3 kA
	20A	0,8 kA	1,2 kA	1,5 kA	1,5 kA	3 kA
	25A	0,7 kA	1,2 kA	1,5 kA	1,5 kA	3 kA

Selectivity to MCCB type MC2

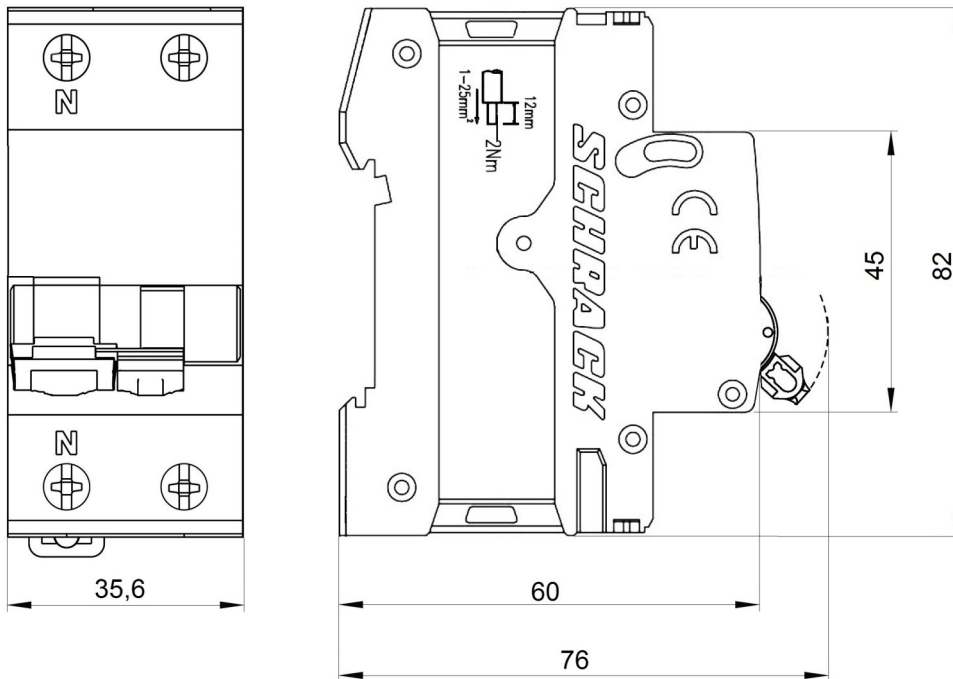
		Power supply side: MCCB series MC2				
		I_N	40 A	50 A	63 A	80 A
Load side: RCBO, series AMPARO characteristic B	6A	1,2 kA	1,5 kA	2,5 kA	3 kA	6 kA
	10A	1 kA	1,5 kA	2,5 kA	3 kA	6 kA
	13A	1 kA	1,2 kA	2 kA	3 kA	6 kA
	16A	1 kA	1,2 kA	1,5 kA	2,5 kA	6 kA
	20A	1 kA	1,2 kA	1,5 kA	2 kA	6 kA
	25A	0,8 kA	1 kA	1,5 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.
Characteristic B	
6A	AK668606--
10A	AK668610--
13A	AK668613--
16A	AK668616--
20A	AK668620--
25A	AK668625--
Characteristic C	
6A	AK667606--
10A	AK667610--
13A	AK667613--
16A	AK667616--
20A	AK667620--
25A	AK667625--