

■ RCCB Residual Current Circuit Breaker series BCF0, 10kA, type A, frequency converter proof



BC094130

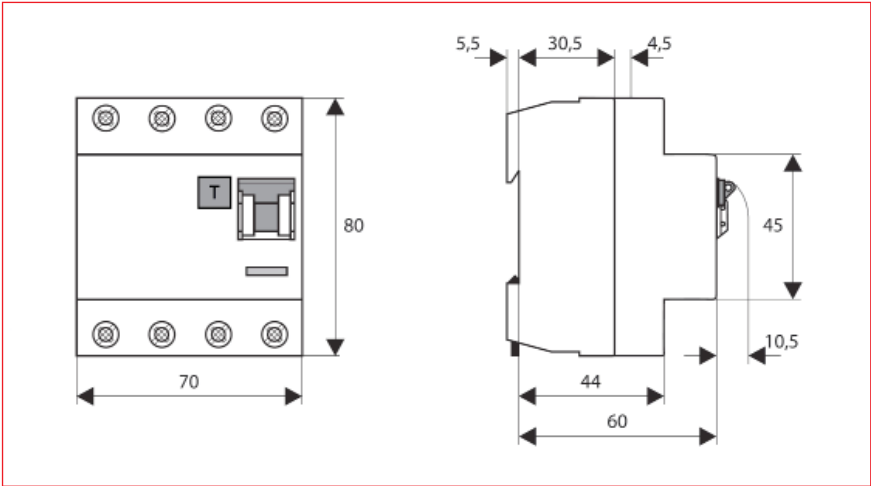
■ Schrack-Info

- Special tripping curve for applications with frequency converters
- Sensitivity: pulse current sensitive (type A)
- Type S, selective, delayed at least 40ms
- Tripping independent of line voltage
- Contact position color indicator (red/green)
- Most common accessories: auxiliary contact 1 NO / 1 NC BD900002

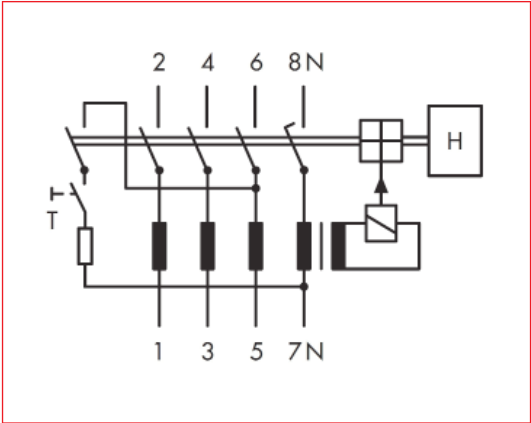
Standards:	IEC 61008 / EN 61008	
Pole	4-pole	
Rated voltage U_s :	230/400 and 240/415V-AC	
4-pole		
Rated frequency:	50/60Hz	
Rated current I_n :	40A, 63A, 80A, 100A	
Tripping-type:	A (pulse current sensitive)	
Tripping curve:	frequency converter proof	
Rated current $I\Delta n$:	30mA, 100mA, 300mA	
Delay-type:	G (ÖVE/ÖNORM E 8601), at least 10ms	
30mA		
100mA, 300mA	S (IEC/EN 61008), selective	
Surge current proof:		
30mA	>3kA (8/20 μ s) Type G	
100mA, 300mA	>5kA (8/20 μ s) Type S	
Tripping:	line voltage-independent	
Rated insulation voltage U_i :	440V	
Rated impulse withstand voltage U_{imp} :	4kV (1.2/50 μ s)	
Rated breaking capacity I_m and rated residual making $I\Delta m$:		
$I_n = 40A$	500A	
$I_n = 63A$	630A	
$I_n = 80A$	800A	
$I_n = 100A$	1000A	
Rated short-circuit capacity I_{cn} :	10kA according EN 61008	
Max. back up fuse:	overload (OPCD):	short circuit (SCPD):
$I_n = 40A$	25A gG/gL	63A gG/gL
$I_n = 63A$	40A gG/gL	63A gG/gL
$I_n = 80A$	50A gG/gL	80A gG/gL
$I_n = 100A$	63A gG/gL	100A gG/gL
back up fuse proof $I_n = 63A$ vsf.	63A gG/gL	80A gG/gL
Operating voltage test-circuit:	195,5 - 440V-AC	
Endurance:	> 4.000 operating cycles (mechanical > 20.000)	
Lamp strength:	max. 20 electronic ballasts per phase, max. 60 per RCCB (typical, commercially available)	
Contact position indicator:	red / green	
Rated tripping temperature:	-25°C up to +40°C	
Max. ambient temperature:	-35°C up to +60°C	
Climatic proofing:	according to IEC/EN 61008	
Finger and hand touch safe:	according to BGV A3	
Degree of protection:	IP 20 (covered IP40)	
Operating position:	in any position	
Terminals:	Double clamp / lift terminal	
Terminal cross-section:	1-35 mm ² solid, 2x16 mm ² stranded	
Terminal screws:	Pozidriv PZ2	
Terminal tightening torque:	2 - 2,4 Nm	
Mounting:	on DIN rail by latching snap-on mounting	
Test interval:	Operate test button of RCCB 1 x every 6 months. The system operator is responsible for this test! Under non-household-type conditions (e.g. humid or dusty environment), it is recommended to carry out the test in monthly intervals. Pressing the test button "T" only tests the function of the residual current (RC) circuit breaker. This test does not replace the earthing resistance measurement (RE) nor the proper protective conductor test that must be performed separately.	

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Dimensions



Wiring diagram



Ambient temperature	Type											
	16A 2-pole	16A 4-pole	25A 2-pole	25A 4-pole	40A 2-pole	40A 4-pole	63A 2-pole	63A 4-pole	80A 2-pole	80A 4-pole	100A 2-pole	100A 4-pole
40°	16	16	25	25	40	40	63	63	80	80	100	100
45°	14	14	22	22	37	37	59	59	76	76	95	95
50°	11	1	19	19	33	34	55	55	72	72	90	90
55°	9	9	16	16	30	31	50	50	68	68	85	85
60°	-	-	-	-	26	27	45	45	64	64	80	80

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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	+	-	-	-	-	-
35	+	-	-	-	-	-

Conductor cross section [mm ²]	Number of single conductors, rigid, multi-wire Cu conductors					
	1	2	3	4	5	6
10	+	+	+	-	-	-
16	+	+	-	-	-	-
25	+	-	-	-	-	-
35	+	-	-	-	-	-

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	-	-	-	-	-	-
35	-	-	-	-	-	-

Conductor cross section [mm ²]	Number of single conductors, flexible Cu conductors with sleeves					
	1	2	3	4	5	6
1,5	+	-	-	-	-	-
2,5	+	-	-	-	-	-
4	+	-	-	-	-	-
6	+	-	-	-	-	-
10	+	-	-	-	-	-
16	+	-	-	-	-	-
25	+	-	-	-	-	-
35	+	-	-	-	-	-

Conductor cross section [mm ²]	Number of single conductors, flexible Cu conductors with different cross-sections, without sleeves								
	1	2	3	4	5	6	7	8	9
1,5	+	-	-	-	-	-	-	-	-
2,5	+	+	-	-	-	+	-	-	-
4	-	+	+	-	-	-	+	-	-
6	-	-	+	+	-	+	-	+	-
10	-	-	-	+	+	-	+	-	+
16	-	-	-	-	+	-	-	+	-
25	-	-	-	-	-	-	-	-	+
35	-	-	-	-	-	-	-	-	-

RCCB Residual Current Circuit Breaker 10kA, type A, version G, frequency converter proof 30mA



BC094103

DESCRIPTION	AVAILABLE	ORDER NO.
4-pole		
40A / 4 / 0,03A		BC094103
63A / 4 / 0,03A		BC096103

RCCB Residual Current Circuit Breaker 10kA, type A, S, frequency converter proof, 100mA



BC096110

DESCRIPTION	AVAILABLE	ORDER NO.
4-pole		
40A / 4 / 0,1A		BC094110
63A / 4 / 0,1A		BC096110
63A / 4 / 0,1A back-up fuse proof		BC096610

RCCB Residual Current Circuit Breaker 10kA, type A, S, frequency converter proof, 300mA



BC096130

DESCRIPTION	AVAILABLE	ORDER NO.
4-pole		
40A / 4 / 0,3A		BC094130
63A / 4 / 0,3A		BC096130
63A / 4 / 0,3A back-up fuse proof		BC096630
80A / 4 / 0,3A		BC098130
100A / 4 / 0,3A		BC090130