



RESIDUAL CURRENT CIRCUIT BREAKERS TYPE BFI

- **RELEVANT FOR** PROTECTION AGAINST INDIRECT CONTACT, FIRE PROTECTION AND ADDITIONAL PROTECTION AGAINST DIRECT CONTACT.


RESIDUAL CURRENT CIRCUIT BREAKERS

BFI

APPLICATIONS

RESIDUAL CURRENT CIRCUIT BREAKERS WITHOUT OVERCURRENT PROTECTION (RCCBs) ARE USED FOR PROTECTION AGAINST INDIRECT CONTACT, FIRE PROTECTION AND ADDITIONAL PROTECTION AGAINST DIRECT CONTACT.

WIDE PRODUCT SELECTION

- **RATED CURRENTS** UP TO 125 A
- **RATED RESIDUAL OPERATIONAL CURRENTS** 10, 30, 100, 300 AND 500 mA
- BESIDE GENERAL **TYPE A** ALSO SPECIAL TYPES **G, S, F** AND **B** AVAILABLE
- **HIGH IMMUNITY** AGAINST UNWANTED TRIPPING DUE TO SURGE CURRENTS FOR **TYPE G, S, F** AND **B**
- SUITABLE FOR **ISOLATION**
- **FUNCTIONALLY INDEPENDENT OF LINE AND CONTROL VOLTAGE**; FOR **TYPE B** SUPPLY VOLTAGE **GREATER THAN 50 V** IS REQUIRED FOR **EVALUATION OF DC RESIDUAL CURRENTS**
- **SHORT-CIRCUIT CAPACITY** UP TO 10 kA
- **OPTIONAL OPERATING POSITION**
- IN THE APPROPRIATE ENCLOSURE SUITABLE FOR **OUTDOOR INSTALLATION** (UP TO -25 °C), MARKED 
- **TRIP INDICATION**

OTHER BENEFITS

- MOUNTING ON 35 mm RAIL
- **RCCBs WITH N-POLE LEFT** ON REQUEST
- BUSBAR POSITIONING OPTIONALLY ABOVE OR BELOW
- ADDITIONAL **COLOUR DISPLAY OF POSITION OF MAIN CONTACTS** (RED - CONTACT CLOSED, GREEN - CONTACT OPEN)
- SEALING TERMINAL COVERS

RESIDUAL CURRENT CIRCUIT BREAKERS

BFI, BFIK & BFIS

TECHNICAL DATA			
TYPE	A	BFI2	BFI4
	G	BFI2K	BFI4K
	S	BFI2S	BFI4S
STANDARD	IEC/EN 61008, type G ACC. TO ÖVE E 8601		
MODULE WIDTH		2	4
NUMBER OF POLES		2	4
RATED VOLTAGE (U_n)	V	230	400
RATED INSULATION VOLTAGE (U_i)	V	400	
RATED IMPULSE WITHSTAND VOLTAGE (U_{imp})	kV	4	
RATED FREQUENCY (f)	Hz	50	
RATED CURRENT (I_n)	A	16, 25, 32, 40, 63, 80, 100, 125	25, 32, 40, 63, 80, 100, 125
RATED RESIDUAL CURRENT ($I_{\Delta n}$)	mA	10 ($I_n = 16, 25, 32 A$), 30, 100, 300, 500	10 ($I_n = 25, 32 A$), 30, 100, 300, 500
OPERATIONAL RESIDUAL CURRENT (I_{Δ})		0.5 - 1.0 $I_{\Delta n}$	
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (I_{nc})	kA	10	
RATED MAKING AND BREAKING CAPACITY (I_m)		630 ($I_n = 16 - 63 A$)	
RATED RESIDUAL MAKING AND BREAKING CAPACITY ($I_{\Delta m}$)	A	1250 ($I_n = 80 - 125 A$)	
MAX. BACK-UP FUSE FOR SHORT-CIRCUIT CURRENT gL (I_s)	A	63 ($I_n = 16 - 63 A$) 125 ($I_n = 80 - 125 A$)	
SURGE CURRENT WITHSTAND CAPABILITY	A	BFI: 200 (0.5 μs / 100 kHz RING WAVE) BFIK, BFIS: 3000 (8/20 μs SURGE CURRENT)	
MAX. BREAKING TIMES		BFI, BFIK - 1 x $I_{\Delta n}$: < 300 ms; 5 x $I_{\Delta n}$: < 40 ms BFIS - 1 x $I_{\Delta n}$: < 500 ms; 5 x $I_{\Delta n}$: < 150 ms	
MIN. RESPONSE TIME DELAY		BFI: INSTANTANEOUS BFIK: 10 ms BFIS: 40 ms	
MECHANICAL ENDURANCE	op. c.	MIN. 5000	
ELECTRICAL ENDURANCE	op. c.	MIN. 2000	
MIN. DISTANCE OF OPEN CONTACTS	mm	4	
AMBIENT TEMPERATURE	°C	-25 ... +40	
STORAGE TEMPERATURE	°C	-35 ... +60	
RESISTANCE TO CLIMATE		ACC. TO IEC 60068-2-30: 28 CYCLES (55 °C, 95 % RELATIVE HUMIDITY)	
TERMINAL CAPACITY (S)	RIGID (SOLID OR STRANDED) FLEXIBLE	mm ²	1 ... 50 1 ... 50
SCREW		M6	
SCREW HEAD		PZ2	
TIGHTENING TORQUE	Nm	NOMINAL 2.5 / MAXIMAL 5.0	
LENGTH OF REMOVED CONDUCTOR INSULATION	mm	15	
DEGREE OF PROTECTION		IP20 (IP40 AFTER INSTALLATION IN A DISTRIBUTION BOX)	
POLLUTION DEGREE		2	
WEIGHT	g	184	350

RESIDUAL CURRENT CIRCUIT BREAKERS

BFIF

TECHNICAL DATA			
TYPE	F	BFI2F	BFI4F
STANDARD		IEC/EN 61008, IEC/EN 62423	
MODULE WIDTH		2	4
NUMBER OF POLES		2	4
RATED VOLTAGE (U_n)	V	230	400
RATED INSULATION VOLTAGE (U_i)	V	400	
RATED IMPULSE WITHSTAND VOLTAGE (U_{imp})	kV	4	
RATED FREQUENCY (f)	Hz	50	
RATED CURRENT (I_n)	A	16, 25, 32, 40, 63, 80, 100, 125	25, 32, 40, 63, 80, 100, 125
RATED RESIDUAL CURRENT ($I_{\Delta n}$)	mA	30, 100, 300, 500	
OPERATIONAL RESIDUAL CURRENT (I_{Δ})		0.5 - 1.0 $I_{\Delta n}$	
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (I_{nc})	kA	10	
RATED MAKING AND BREAKING CAPACITY (I_m)	A	630 ($I_n = 16 - 63$ A)	
RATED RESIDUAL MAKING AND BREAKING CAPACITY ($I_{\Delta m}$)		1250 ($I_n = 80 - 125$ A)	
MAX. BACK-UP FUSE FOR SHORT-CIRCUIT CURRENT gL (I_s)	A	63 ($I_n = 16 - 63$ A)	
		125 ($I_n = 80 - 125$ A)	
SURGE CURRENT WITHSTAND CAPABILITY	kA	3 (8/20 μ s SURGE CURRENT)	
MAX. BREAKING TIMES		BFI2F, BFI4F - 1 x $I_{\Delta n}$: < 300 ms; 5 x $I_{\Delta n}$: < 40 ms	
MIN. RESPONSE TIME DELAY		BFI2F, BFI4F: 10 ms	
MECHANICAL ENDURANCE	op. c.	MIN. 5000	
ELECTRICAL ENDURANCE	op. c.	MIN. 2000	
MIN. DISTANCE OF OPEN CONTACTS	mm	4	
AMBIENT TEMPERATURE	°C	-25 ... +40	
STORAGE TEMPERATURE	°C	-35 ... +60	
RESISTANCE TO CLIMATE		ACC. TO IEC 60068-2-30: 28 CYCLES (55 °C, 95 % RELATIVE HUMIDITY)	
TERMINAL CAPACITY (S)	RIGID (SOLID OR STRANDED)	mm ²	1 ... 50
	FLEXIBLE		1 ... 50
SCREW		M6	
SCREW HEAD		PZ2	
TIGHTENING TORQUE	Nm	NOMINAL 2.5 / MAXIMAL 5.0	
LENGTH OF REMOVED CONDUCTOR INSULATION	mm	15	
DEGREE OF PROTECTION		IP20 (IP40 AFTER INSTALLATION IN A DISTRIBUTION BOX)	
POLLUTION DEGREE		2	
WEIGHT	g	184	350

RESIDUAL CURRENT CIRCUIT BREAKERS

BFIBK, BFIBS

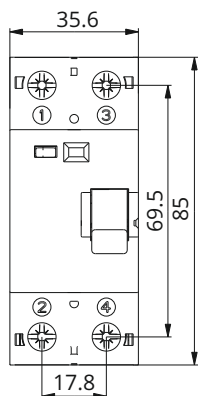
TECHNICAL DATA			
TYPE	B		BFI4BK BFI4BS
STANDARD	IEC/EN 61008, IEC/EN 62423		
MODULE WIDTH	4		
NUMBER OF POLES	4		
RATED VOLTAGE (U_n)	V	400	
RATED INSULATION VOLTAGE (U_i)	V	400	
RATED IMPULSE WITHSTAND VOLTAGE (U_{imp})	kV	4 (1.2 / 50 μ s)	
RATED FREQUENCY (f)	Hz	50/60	
RATED CURRENT (I_n)	A	25, 32, 40, 63, 80, 100, 125	
RATED RESIDUAL CURRENT ($I_{\Delta n}$)	mA	BFI4BK: 30, 100, 300, 500 BFI4BS: 100, 300, 500	
OPERATIONAL RESIDUAL CURRENT (I_{Δ})		AC: 0.5 - 1.0 $I_{\Delta n}$ DC: 0.5 - 2.0 $I_{\Delta n}$	
FREQUENCY RESPONSE RANGE	Hz	0 - 1000	
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (I_{cs})	kA	10	
RATED MAKING AND BREAKING CAPACITY (I_m)	A	630 ($I_n = 16 - 63$ A)	
RATED RESIDUAL MAKING AND BREAKING CAPACITY ($I_{\Delta m}$)	A	1250 ($I_n = 80 - 125$ A)	
MAX. BACK-UP FUSE FOR SHORT-CIRCUIT CURRENT gL (I_s)	A	63 ($I_n = 16 - 63$ A) 125 ($I_n = 80 - 125$ A)	
SURGE CURRENT WITHSTAND CAPABILITY	kA	3 (8/20 μ s SURGE CURRENT)	
MAX. BREAKING TIMES		BFI4BK - 1 x $I_{\Delta n}$: < 300 ms; 5 x $I_{\Delta n}$: < 40 ms BFI4BS - 1 x $I_{\Delta n}$: < 500 ms; 5 x $I_{\Delta n}$: < 150 ms	
MIN. RESPONSE TIME DELAY		BFI4BK: 10 ms BFI4BS: 40 ms	
MECHANICAL ENDURANCE	op. c.	MIN. 5000	
ELECTRICAL ENDURANCE	op. c.	MIN. 2000	
MIN. DISTANCE OF OPEN CONTACTS	mm	4	
AMBIENT TEMPERATURE	°C	-25 ... +40	
STORAGE TEMPERATURE	°C	-35 ... +60	
RESISTANCE TO CLIMATE		ACC. TO IEC 60068-2-30: 28 CYCLES (55 °C, 95 % RELATIVE HUMIDITY)	
TERMINAL CAPACITY (S)	RIGID (SOLID OR STRANDED) FLEXIBLE	mm ²	1 ... 50 1 ... 50
SCREW			M6
SCREW HEAD			PZ2
TIGHTENING TORQUE	Nm	NOMINAL 2.5 / MAXIMAL 5.0	
LENGTH OF REMOVED CONDUCTOR INSULATION	mm	15	
DEGREE OF PROTECTION		IP20 (IP40 AFTER INSTALLATION IN A DISTRIBUTION BOX)	
POLLUTION DEGREE		2	
WEIGHT	g	380	

RESIDUAL CURRENT CIRCUIT BREAKERS

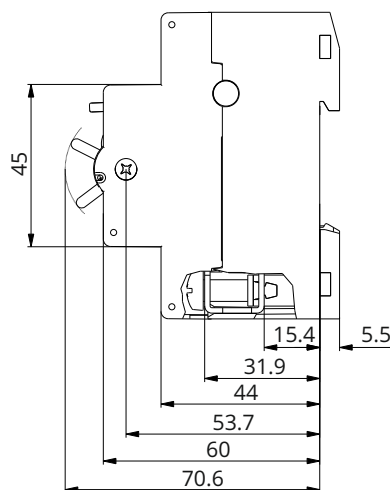
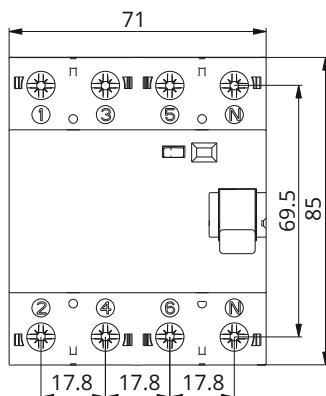
BFI

DIMENSIONS

BFI2, BFI2K
BFI2S, BFI2F



BFI4, BFI4K, BFI4S
BFI4F, BFI4BK, BFI4BS



ORDERING DATA

BFI4S - 25 / 0.03

