

RESIDUAL CURRENT (RCD) RELEASE RELAY, FIR



MC900001



MC900002



MC900003

SCHRACK INFO

Residual current release relay in combination with core-balance transformers. Switch-off can be achieved with undervoltage- and shunt releases or a contactor.

TECHNICAL DATA

Version corresponds to:	IEC 947-2, IEC 755, IEC 1008, IEC 1009			
Sensitivity:	Pulse current sensitive, type A			
Rated control voltage U_s (V):	230 +/- 20% (50/60 Hz)			
Rated operational voltage P_e (W):	3			
Relay contacts:	1 integral C/O			
Rated voltage of the relay contacts:	250 V AC			
	100 V DC			
Rated current of the relay contacts:	6 A			
Rated fault currents:	FIR-003	$I_{\Delta n}$	A	0.03
	FIR-03	$I_{\Delta n}$	A	0.3
	FIR-5	$I_{\Delta n}$	A	0.03 – 0.1 – 0.3 – 0.5 – 1 – 3 – 5
Time delay:	FIR-003	t_v	s	0.02 (non-delayed)
	FIR-03	t_v	s	0.02 (non-delayed)
	FIR-5	t_v	s	0.02 – 0.1 – 0.3 – 0.5 – 1 – 3 – 5
Fault current warning with FIR-5	0.5Hz: 25% – 50% $I_{\Delta n}$			
through flashing red LED:	1Hz: 50% – 75% $I_{\Delta n}$			
	2Hz: 75% – <100% $I_{\Delta n}$			

DESCRIPTION	TYPE	ORDER NO.
Rated fault current $I_{\Delta n}$ = 0.03 A Pulse current sensitive	FIR-003	MC900001
Rated fault current $I_{\Delta n}$ = 0.3 A Pulse current sensitive	FIR-03	MC900002
Rated fault current $I_{\Delta n}$ = 0.03...5 A Pulse current sensitive	FIR-5	MC900003

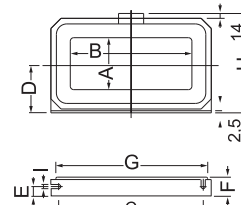
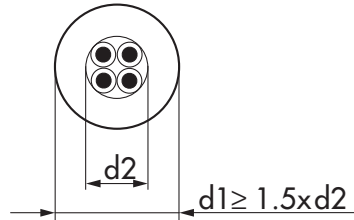
CORE-BALANCE TRANSFORMER FIR-WS, FIR-WR



MC900070



MC910305



SCHRACK INFO

The internal diameter of the transformer $d1$ must be 1,5x wider than the average cross-section $d2$ of the inserted conductors. For load circuits with inrush current $> 4 \times I_n$, magnetic shielding is required (see bottom of this page).

TECHNICAL DATA

Rectangular core-balance transformer

Type	A	B	C	D	E	F	G	H	I
FIR-WR-175	70	175	225	85	22	46	261	176	7,5
FIR-WR-305	115	305	360	116	25	55	402	240	8
FIR-WR-350	150	350	415	140	28	55	460	285	8

Round core-balance transformer

Max. nominal current		Diameter	
Power distribution (A)	Motor/capacitor (A)	Transformer type FIR-W-... d1	Maximum conductor cross-section (mm) d2
50	50	20	13
150	100	30	20
150	100	35	23
400	200	70	47
600	250	105	70
1200	630	140	93
1800	800	210	140

DESCRIPTION	TYPE	ORDER NO.
ROUND CORE-BALANCE TRANSFORMER		
Internal diameter 20 mm	FIR-WS-20	MC900020
Internal diameter 30 mm	FIR-WS-30	MC900030
Internal diameter 35 mm	FIR-W-35	MC900035
Internal diameter 70 mm	FIR-W-70	MC900070
Internal diameter 105 mm	FIR-W-105	MC900105
Internal diameter 140 mm	FIR-W-140	MC900140
Internal diameter 210 mm	FIR-W-210	MC900210

RECTANGULAR CORE-BALANCE TRANSFORMER

70x175 mm	FIR-WR-175	MC910175
115x305 mm	FIR-WR-305	MC910305
150x350 mm	FIR-WR-350	MC910350

MAGNETIC SHIELDING

Shielding for FIR-W-35	TT-35	MC900010
Shielding for FIR-W-70	TT-70	MC900011
Shielding for FIR-W-105	TT-105	MC900012
Shielding for FIR-W-140	TT-140	MC900013
Shielding for FIR-W-210	TT-210	MC900014