

Earth Leakage Relay Series CMR

- Flush Mounting Version 96x96 mm with Digital Seven Segment Display
- Monitors, Detects and Protects Power systems from Earth Leakage Fault (Type 'A' & 'AC')
- Wide range of selectable Earth Leakage Current: 30 mA - 30 A
- Configurable Earth Leakage Trip time: 0 - 10 s
- Wide Auxiliary Supply Range: 110 - 240 VAC / DC
- Nano Crystalline CBCT measures the leakage current to the highest accuracy
- Instantaneous Trip for 5 times of set value of Leakage current
- Test feature to check complete product functionality
- LED Indication for Relay Status, Earth Leakage Fault & Alarm Condition
- Manual / Remote Reset feature
- Continuous Scrolling display for Set Current and Set time
- 1 C/O (Alarm Relay) + 1 C/O (Fault Relay)
- RS 485 Communication



Ordering Information

Cat. No.	Description
17K716QF4N	110-240V AC / DC, Current Range 30 mA - 30 A, 2 C/O
17K716QF4M	110-240V AC / DC, Current Range 30 mA - 30 A, 2 C/O with RS 485
17K726QF4N	220-415V AC / 220 V DC, Current Range 30 mA - 30 A, 2 C/O
17K726QF4M	220-415V AC / 220 V DC, Current Range 30 mA - 30 A, 2 C/O with RS 485
17H7NNHN3	CBCT 38 mm, 30 mA - 30 A
17H7NNIN3	CBCT 57 mm, 30 mA - 30 A
17H7NNQN3	CBCT 70 mm, 30 mA - 30 A
17H7NNJN3	CBCT 92 mm, 30 mA - 30 A
17H7NNLN3	CBCT 120 mm, 30 mA - 30 A
17H7NNKN3	CBCT 210 mm, 30 mA - 30 A
17H7NNRN3	CBCT 38 mm, 30 mA - 1 A
17H7NNSN3	CBCT 70 mm, 30 mA - 1 A
17H7NNTN3	CBCT 92 mm, 30 mA - 1 A
17H7NNUN3	CBCT 120 mm, 30 mA - 1 A

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Cat. No.	17K716QF4N	17K716QF4M	17K726QF4N	17K726QF4M
Parameters				
Supply Voltage (\pm)	110 - 240 V AC / DC		220 - 415 V AC / 220 V DC	
Supply Variation	-20 to +10%			
Frequency	50/60Hz			
Power Consumption (Max.)	6 VA			
Leakage Current Range ($I_{\Delta n}$)	30 mA to 30 A			
Threshold $I_{\Delta n}$ (A)	$I_{\Delta n} \times 1$	0.03 - 0.05 - 0.075 - 0.1 - 0.15 - 0.2-0.3 (A)		
	$I_{\Delta n} \times 10$	0.03 - 0.5 - 0.75 - 1.0 - 1.5 - 2.0 - 3.0 (A)		
	$I_{\Delta n} \times 100$	0.03 - 5 - 7.5 - 10.0 - 15.0 - 20.0 - 30.0 (A)		
Type Class	'A' True RMS measurement (As per IEC 60947-2 appendix M) up to $I_{\Delta N} = 3A$			
Max. Crest Factor	4 (for 30 mA to 30 A)			
Reset Mode	Manual / Auto Reset			
No. of Resets	4 (Auto Mode)			
Clear Auto Reset	After 1 hour of healthy condition or supply interruption			
Reset Enable	Below 50% of set current threshold in presence of CBCT			
Trip Time (Δt in sec)	0 - 0.06 - 0.15 - 0.25 - 0.5 - 0.8 - 1 - 2.5 - 5 - 10			
Test / Reset	Local & Remote (Non Potential free contacts, upto 10 m)			
Setting Accuracy	-20% (Including CBCT Accuracy)			
Repeat Accuracy	$\pm 2\%$			
Output	Relay Output	1 C/O (Alarm Relay) + 1 C/O (Fault relay)		
	Contact Rating	5A (Resistive) @ 240 VAC / 30 VDC		
	Electrical Life	1×10^5		
	Mechanical Life	1×10^7		
Utilization Category	AC - 15	Rated Voltage (U_e): 120/240 V, Rated Current (I_e): 3.0/1.5 A		
	DC - 13	Rated Voltage (U_e): 24/125/250 V, Rated Current (I_e): 2.0/0.22/0.1 A		
Display	Trip Current Hold	Enable / Disable		
	Scrolling Display	Enable / Disable		
LED	Power	Green LED (ON) \rightarrow Power ON		
Indication	EL / CT	Red LED (ON) \rightarrow Relay Trip, Yellow (ON) \rightarrow Alarm Relay		
RS 485 Communication	NA	Available	NA	Available
Operating Temperature	- 20° C to +55° C			
Storage Temperature	- 20° C to +80° C			
Humidity (Non Condensing)	95% (Rh)			
Enclosure	Flame Retardant UL94-V0			
Dimension (W x H x D) (in mm)	96 X 96 X 83.7			
Weight (unpacked) Approx.	275 g			
Mounting	Panel / Flush Mountable			
Certification				
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure			

EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11
Conducted Emission	CISPR 11
Radiated Emission	CISPR 11

Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

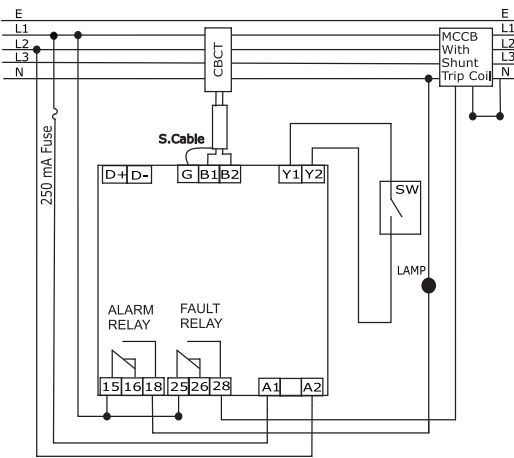
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CONNECTION DIAGRAM

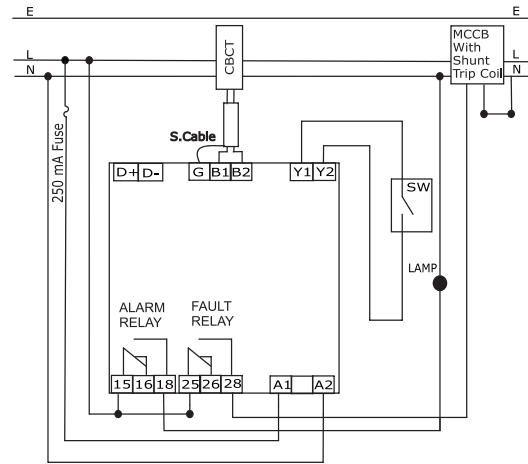
NON-FAIL SAFE MODE
(SHUNT TRIP COIL/UV TRIP COIL)

THREE PHASE APPLICATION



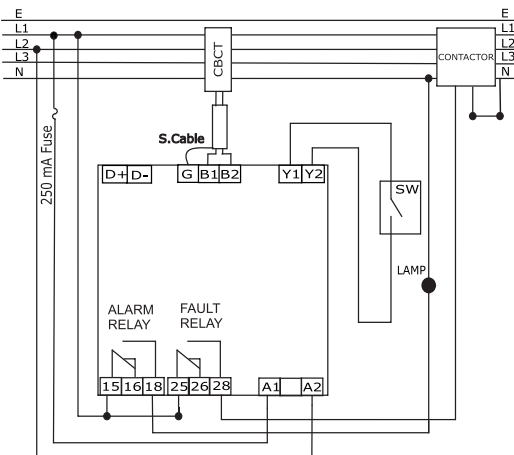
NON-FAIL SAFE MODE
(SHUNT TRIP COIL/UV TRIP COIL)

SINGLE PHASE APPLICATION



FAIL SAFE MODE (CONTACTOR)

THREE PHASE APPLICATION



FAIL SAFE MODE (CONTACTOR)

SINGLE PHASE APPLICATION

