

# Earth Leakage Relay Series CMR



- Monitors, Detects and Protects Power systems from Earth Leakage Faults
- 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, 220 - 415 VAC
- Instantaneous Trip for 5 times of set value of Leakage current
- Test feature to check complete product functionality
- LED Indication for Relay status, CT open, Earth Leakage fault & Test/Reset switch short
- Manual / Remote Reset feature
- 1 C/O + 1 NO Relay Output

Cat. No.	17G715GF2	17G715KF2	17G745GF2	17G745KF2
<b>Parameters</b>				
Supply Voltage ( $\phi$ )	110 - 240 VAC		220 - 415 VAC	
Supply Variation	-20 to +20%			
Frequency	50/60Hz			
Power Consumption (Max.)	5 VA		10 VA	
Leakage Current Range ( $\Delta I_n$ )	30 mA to 30 A			
Threshold $I_{\Delta n}$ (A)	0.03 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 - 10 - 20 - 30			
Type Class	'A' True RMS measurement (As per IEC 60947-2 appendix M)			
Max. Crest Factor	5 (for 30 mA to 30 A)			
Reset Mode	Manual Reset	Auto Reset	Manual Reset	Auto Reset
No. of Resets	N A	4	N A	4
Clear Auto Reset	After 1 hour of healthy condition or supply interruption			
Reset Enable & Reset Time	Below 50% on current threshold set by potentiometer & in presence of CBCT (< 1s)			
Trip Time ( $\Delta t$ in sec)	0.03 - 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 + 1 NO		
	Contact Rating	5A (Resistive) @ 240 VAC / 30 VDC		
	Electrical Life	$1 \times 10^5$		
	Mechanical Life	$1 \times 10^7$		
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		
LED Indication	Power	Green LED (ON)		
	EL / CT	Red LED (ON) $\rightarrow$ Relay Trip / Red LED (Blinking) $\rightarrow$ CT Open		
	Leakage Current / TST	By Bar Graph: 30% (Green), 45% (Green), 60% (Yellow), 75% (Red), Blink Test / Reset Switch is pressed		
Operating Temperature	- 15° C to +60° C			
Storage Temperature	- 25° C to +80° C			
Humidity (Non Condensing)	95% (Rh)			
Enclosure	Flame Retardant UL94-V0			
Dimension (W x H x D) (in mm)	36 X 90 X 65			
Weight (unpacked)	110 g			
Mounting	Base / DIN rail			
Certification				
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure			
<b>EMI / EMC</b>				
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.0 (2005-11) Class A		
ESD	IEC 61000-4-2	Ed. 1.2 (2001-04) Level II		
Radiated Susceptibility	IEC 61000-4-3	Ed. 3.0 (2006-02) Level III		
Electrical Fast Transients	IEC 61000-4-4	Ed. 2.0 (2004-07) Level IV		
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level IV		
Conducted Susceptibility	IEC 61000-4-6	Ed. 2.2 (2006-05) Level III		
Voltage Dips & Interruptions (AC)	IEC 61000-4-11	Ed. 2.0 (2004-03) Class A for Level I to V & Class B for Level VI & VII		
Conducted Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A		
Radiated Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A		
<b>Environmental</b>				
Cold Heat	IEC 60068-2-1	Ed. 6.0 (2007-03)		
Dry Heat	IEC 60068-2-2	Ed. 5.0 (2007-07)		
Vibration	IEC 60068-2-6	Ed. 7.0 (2007-12) 5g		
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms		
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms		
<b>CBCT</b>				
Dimensions in mm with Enclosure W X H X D	CBCT 1	20 X 71 X 91, Inner Diameter: 38mm		
	CBCT 2	20 X 97 X 107, Inner Diameter: 57mm		
	CBCT 3	20 X 132 X 155, Inner Diameter: 92mm		

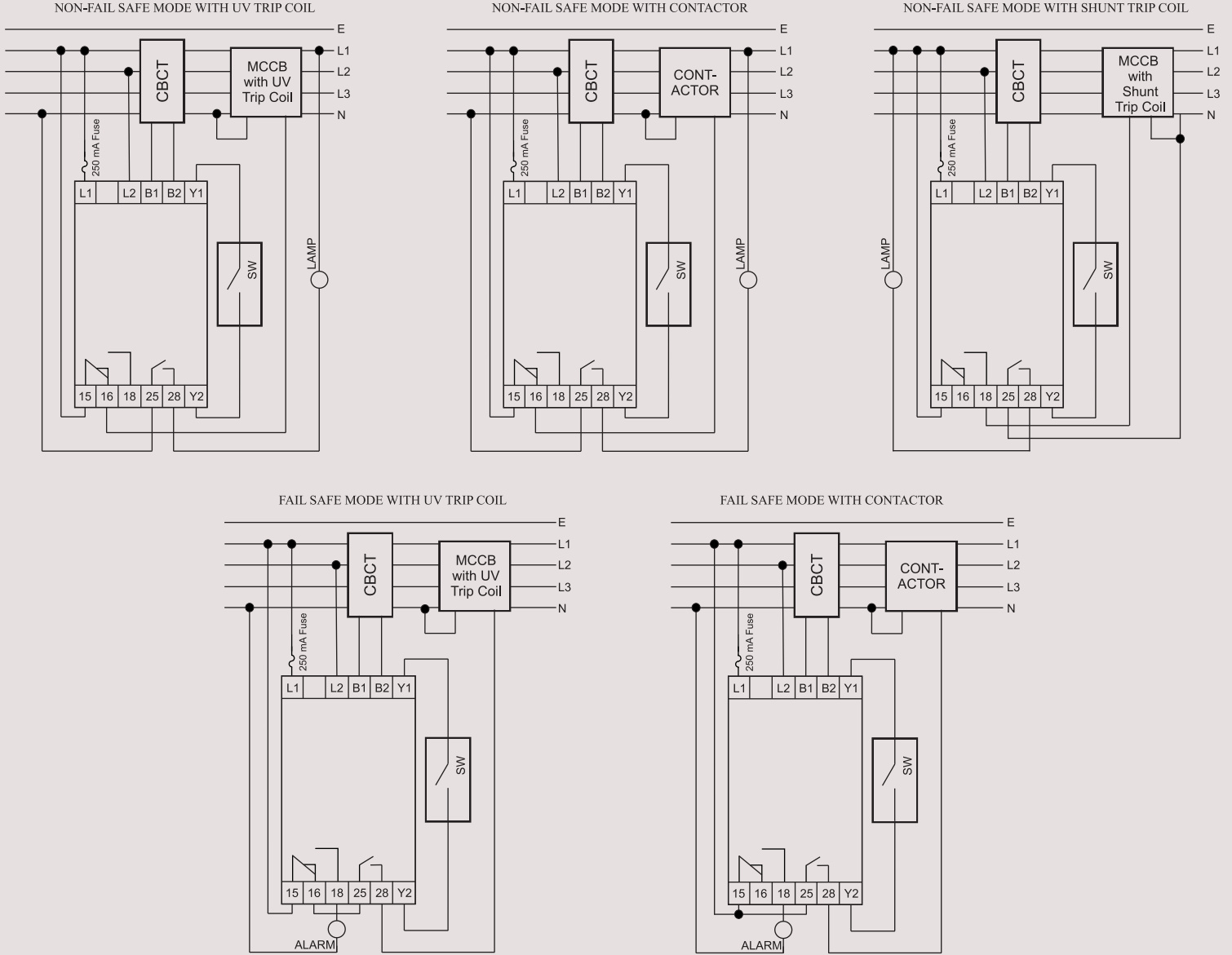
## ORDERING INFORMATION

Cat. No.	Description
17G715GF2	110-240V AC, Current Range 30 mA - 30 A, 1 C/O + 1 NO, Manual Reset
17G715KF2	110-240V AC, Current Range 30 mA - 30 A, 1 C/O + 1 NO, Auto Reset
17G745GF2	220-415V AC, Current Range 30 mA - 30 A, 1 C/O + 1 NO, Manual Reset
17G745KF2	220-415V AC, Current Range 30 mA - 30 A, 1 C/O + 1 NO, Auto Reset
17H7NNHN3	CBCT 1, 30 mA - 30A
17H7NNIN3	CBCT 2, 30 mA - 30A
17H7NNJN3	CBCT 3, 30 mA - 30A

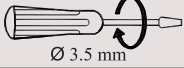

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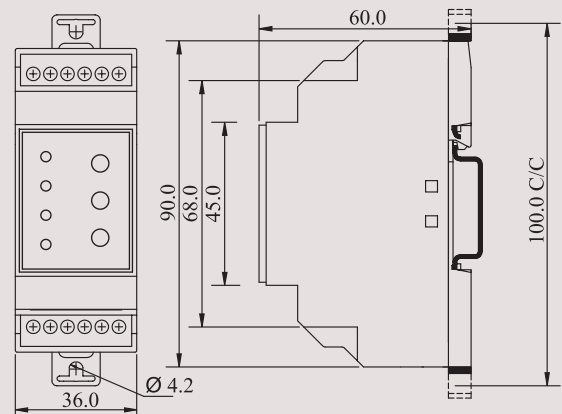
## CONNECTION DIAGRAM



## TERMINAL TORQUE & CAPACITY

	Torque - 0.54 N.m (5 Lb.in) Terminal screw - M2.6
	Solid Wire - 1 X 0.2...3.3 mm <sup>2</sup>
AWG	1 X 24 to 12

## MOUNTING DIMENSIONS



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