

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 feature
- Manual / Remote Reset feature
- 1 C/O + 1 NO Relay Output



Cat. No.	17G715GF2	17G715KF2	17G745GF2	17G745KF2
Parameters				
Supply Voltage (ϕ)	110 - 240 VAC		220 - 415 VAC	
Supply Variation	-20 to +20%			
Frequency	50/60Hz			
Power Consumption (Max.)	5 VA		10 VA	
Leakage Current Range (ΔI_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	NA	4	NA	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 (Δt in sec)	0.04 - 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	1×10^5		
	Mechanical Life	1×10^7		
Utilization Category	AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A		
	DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 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) Approx.	150 g			
Mounting	Base / DIN rail			
Certification				
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure			
EMI / EMC				
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.2 (2009-04) Class A		
ESD	IEC 61000-4-2	Ed. 2.0 (2008-12) Level II		
Radiated Susceptibility	IEC 61000-4-3	Ed. 3.2 (2010-04) Level III		
Electrical Fast Transients	IEC 61000-4-4	Ed. 3.0 (2012-04) Level IV		
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level IV		
Conducted Susceptibility	IEC 61000-4-6	Ed. 3.0 (2008-10) 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. 5.2 (20011-11) Class A		
Radiated Emission	CISPR 14-1	Ed. 5.2 (20011-11) Class A		
Environmental				
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		

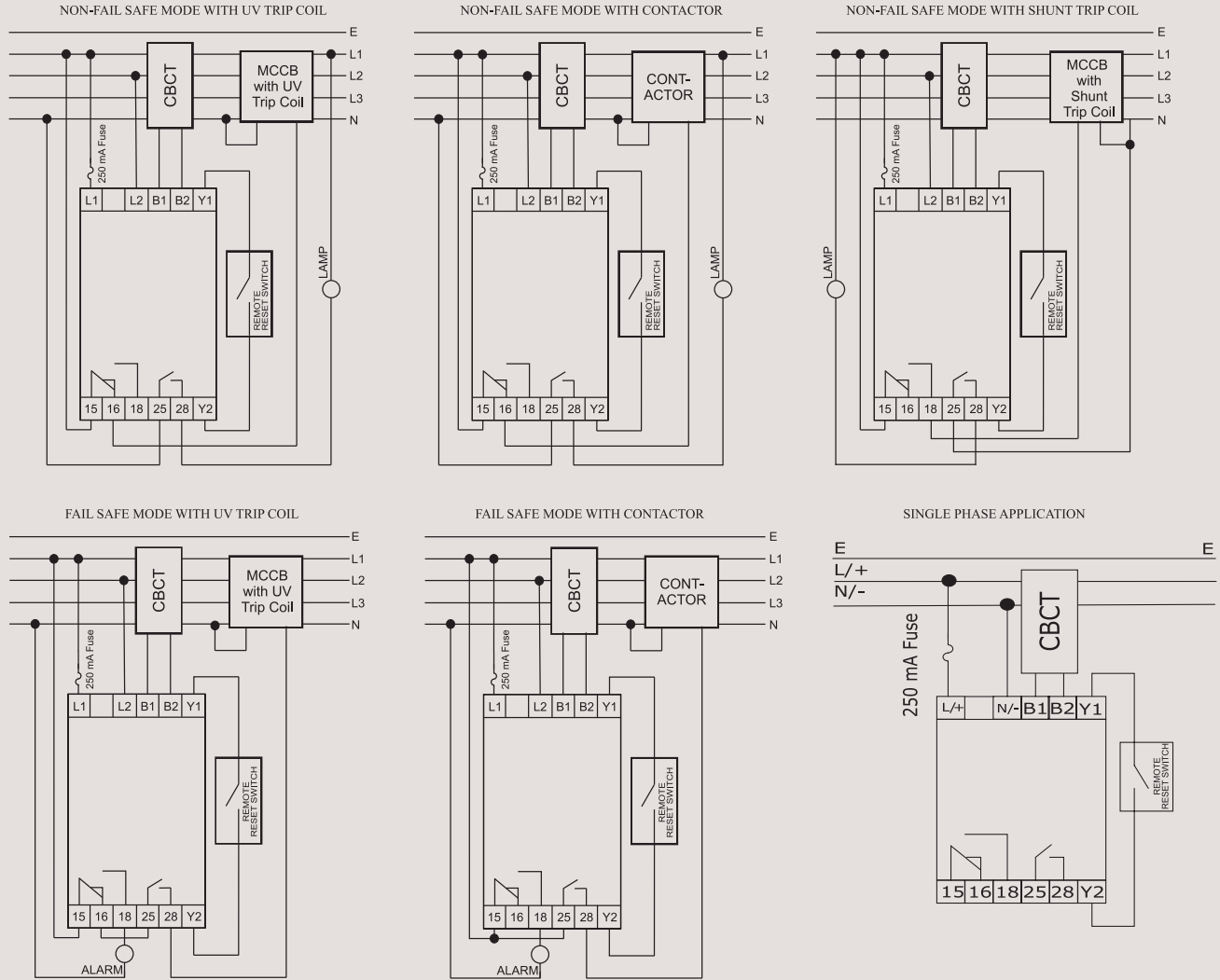
ORDERING INFORMATION

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
17G755GF2	15V DC, Current Range 30 mA - 30 A, 1 C/O + 1 NO, Manual Reset
17G755KF2	15V DC, Current Range 30 mA - 30 A, 1 C/O + 1 NO, Auto Reset
17H7NNHN3	CBCT 38mm, 30 mA - 30A
17H7NNIN3	CBCT 57mm, 30 mA - 30A
17H7NNJN3	CBCT 92mm, 30 mA - 30A
17H7NNKN3	CBCT 215mm, 30 mA - 30A (Tape wound, 17 x 215 x 244 mm)

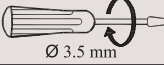

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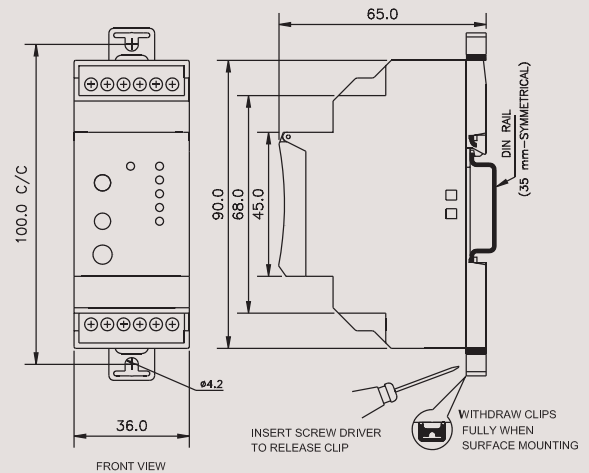
CONNECTION DIAGRAM



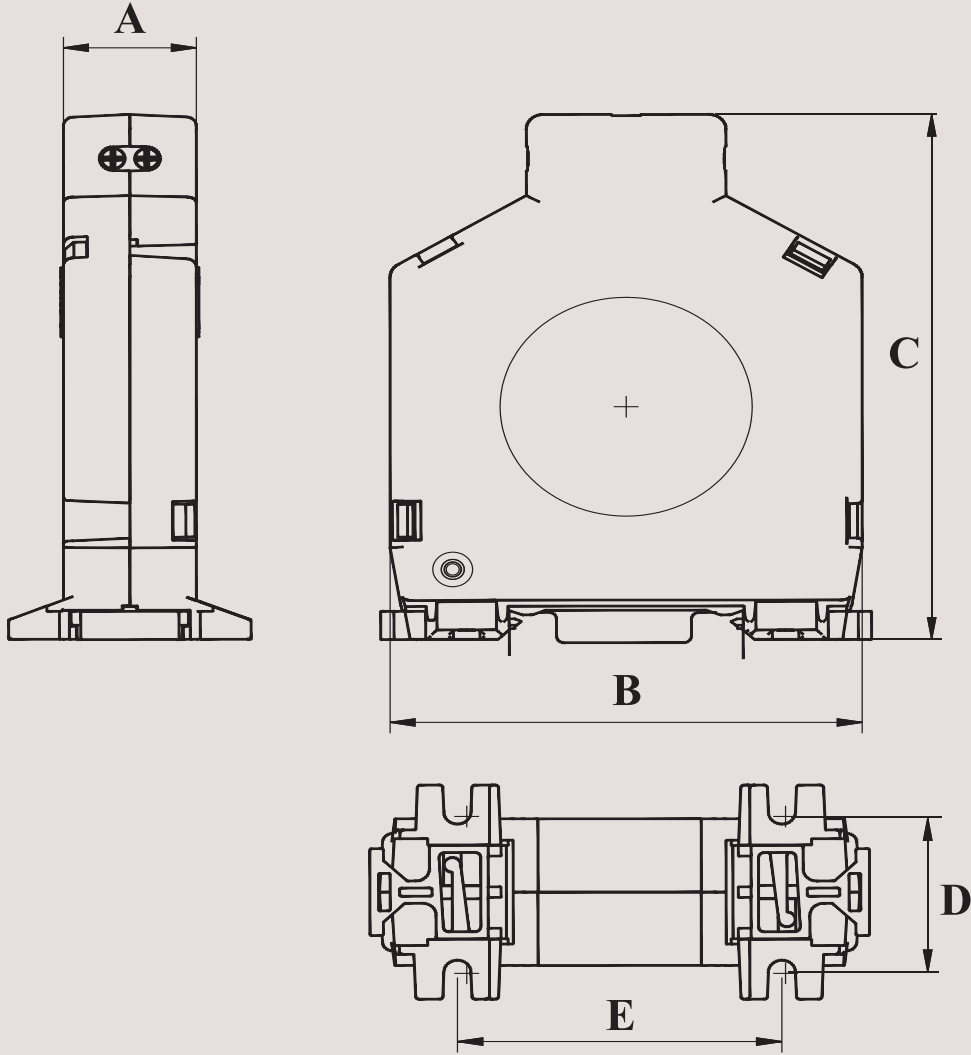
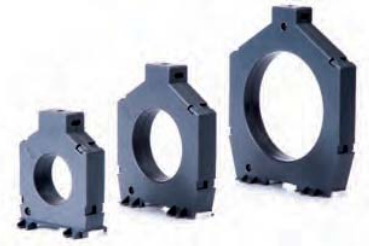
TERMINAL TORQUE & CAPACITY

 Ø 3.5 mm	Torque - 0.54 N.m (5 Lb.in) Terminal screw - M2.6
	Solid Wire - 1 X 0.2...3.3 mm ²
AWG	1 X 24 to 12

MOUNTING DIMENSIONS



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CBCT	SIZE	WEIGHT (in gms)	A	B	C	D	E
17H7NNHN3	38	110	20	71	91	27	48
17H7NNIN3	57	185	20	97	117	27	55
17H7NNJN3	92	250	20	132	155	27	73
17H7NNKN3	215	260	-	-	-	-	-

Dimensions in mm