

## **ADVANCE GROUND FAULT PROTECTION RELAYS FOR DISTRIBUTION NETWORKS AND MOTORS**



## Ground Fault Protection Relays

- Earth Fault Relays and Earth Leakage Relay
- Wide Setting Range
- DIN Mounting
- LCD Display (Fault Current & Fault History)
- Compatible CBCTs for EFR & ELR
- Two C/O Contacts
- 50-550 V AC/DC Aux Supply



## Earth Fault Relay

### Specifications

PARAMETERS	EARTH FAULT RELAY (MODEL:EFR1080-2C550/ EFR0580-2C550-D)
Design	Microcontroller Based Design
ANSI Code	64
Aux. Voltage	50-550V AC / DC
CT Input	1A
EF Current Setting Range (%)	10%-80% (with out Display Model), (5-80)% (with Display Model)
Trip Delay Setting (Sec)	(0.00-5.00)Sec Steps:0.05Sec
Relay test trip	Yes, Available.
Reset Mode	Manual
Output Contacts	1 change over relay- for -Tripp. ( C2 –NO2-NC2) 1 change over relay-for -Alarm.( C1 –NO1-NC1) (Both the Relay Operates Simultaneously)
Out Put Contact Rating	6A,230V AC 5A,24V DC
Display Type	Back-Lit LCD display, 8Characters, 2 Lines (Shows Set value, Measured Value, Trip value)
Fault Records	Records 10 faults withCurrent values
Keypads	TEST, RESET
Mounting	DIN Mounting

## Earth Leakage Relay



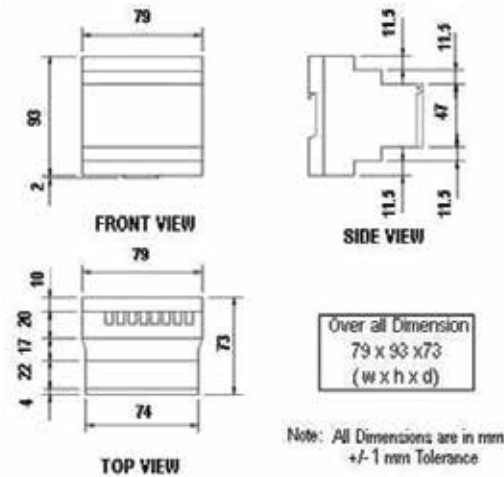
## Specifications

PARAMETERS	EARTH LEAKAGE RELAY MODEL: ELR3003-2C550/ ELR3030-2C550-D
Design	Microcontroller Based Design
ANSI Code	64
Aux. Voltage	50-550 VAC/ DC
CT Input	CBCT with secondary /1A
Current Setting Range	30mA-3A (Without Display) 30mA-30A (with Display) Steps: (30mA,50mA,100mA,150mA,200mA,300mA,500mA,750mA,1.00A,2.00A,3.00A,4.00A,5.00A,10.0A,20.0A,25.0A,30.0A)
Trip Delay Setting Range	(0.00 -5.00) Sec Steps:0.05Sec
Relay Test Trip facility	Yes, Available.
Reset Mode	Manual
Out Put Contacts	1 change over relay- for -Tripp. ( C2 –NO2-NC2) 1 change over relay-for -Alarm.( C1 –NO1-NC1) (Both the Relay Operates Simultaneously)
LCD display	2Line 8Character Back-Lit LCD display Display of set value, measured Value & Trip value. Display of setting parameters.
Fault Records	Records 10 faults with Current values
Password	Pass word protection is available in Display variant (4 digits)
Out Put Contact rating	6A,230V AC 5A,24V DC
Key pads	TEST, RESET
Mounting	DIN

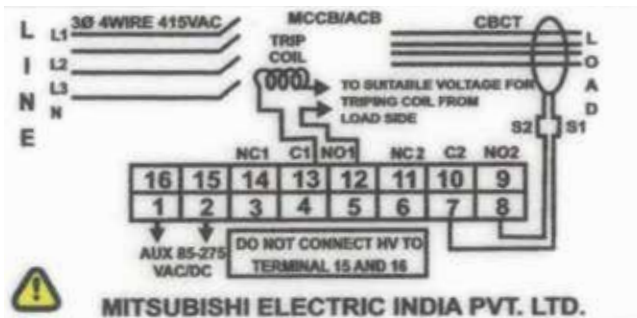
**Note:** For CBCTs with Dia more than 250 mm, leakage sensitivity of 30mA is not available.



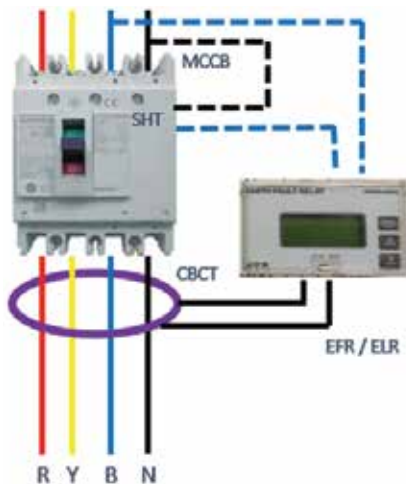
## Dimension (EFR/ELR)



## Connection Diagram (EFR/ELR)



## Connection Scheme (EFR/ELR)



## EFR/ELR Ordering Codes

### Ordering Code: Earth Fault Relay with Round CBCTs

EF0580	D065	T	100
Relay Type	CBCT Dia	CBCT Type	Primary Current (A)
EF0580 (5%-80%, Inbuilt Display)	D040 (40mm)	T -Tape Wound	100
EF1080 (10%-80%, w/o Display)	D065 (65mm)	M - Molded	150
	D100 (100mm)		200
	D150 (150mm)		250
	D200 (200mm)		300
	D250 (250mm)		400
	D300 (300mm)		500
			630
			800

### Ordering Code: Earth Fault Relay with Rectangular CBCTs

EF0580	R250X050	T	500
Relay Type	CBCT iD (L X B)	T -Tape Wound	Primary Current (A)
EF0580 (5%-80%, Inbuilt Display)	100 X 50		100
EF1080 (10%-80%, w/o Display)	150 x 50		150
	200 x 50		200
	250 x 50		250
	200 x 100		300
	250 x 100		400
	300 x 100		500
	400 x 100		630
	500 x 100		800
	600 x 100		
	700 x 100		
	300 x 150		
	400 x 150		
	500 x 150		
	600 x 150		
	700 x 150		

### Ordering Code: Earth Leakage Relay with Round CBCTs

EL3030	D065	T
Relay Type	CBCT Dia	CBCT Type
EL3030 (30mA - 30A, inbuilt Display)	D040 (40mm)	T -Tape Wound
EL3003 ( 30mA - 3A, w/o Display)	D065 (65mm)	M - Molded
	D100 (100mm)	
	D150 (150mm)	
	D200 (200mm)	
	D250 (250mm)	
	D300 (300mm)	

Notes: Contact us for:  
EFR+CBCT for Primary current Ratings more than 800  
AEFR/ELR with CBCT Diameter, other than listed here  
EFR/ELR with resin cast CBCTs