

MONITORING RELAYS

1
2
3
4



These relays are best suitable for monitoring balanced or unbalanced supplies, either of single phase, 3-phase 3-wire or 3-phase 4-wire loads powered by generators, UPS, stabilizers, inverters, or Mains (by Electricity Boards / Utilities); in AMF panels, PCCs, distribution boards and for power monitoring of individual loads / motors / pumps.

MODELS

D1 VCR1,
VCT D2, VCF D2, D2 VCT1, D1 VCT1,
S2 VMR 4, S2 VMR 5,
D2 EFR1, F3 EFR 1, OCS D1,
S2 CMR2, S2 CMR3, S2 CMR4, S2 CMR5,
OFS D1, S2 FMR1,
RPT D2, RPF D2, CBCT, CT, F3 ELR 1, F3 FFR 2



FEATURES

- Fixed/adjustable under/Over trip settings for parameters.
- Fixed/adjustable trip delays and Power On delays
- Built-in or external power supply
- Resetting – Auto or Manual
- Output contacts : 1 CO or 2 CO
- Choice of enclosures (DIN-Rail, Flush)
- Models with Micro-Controller based design
- Use of SMD Technology
- User-friendly LED indications

PROTECTIONS / FUNCTIONS

- Under/over Voltage
- Under/Over Current
- Under/Over Frequency
- Reverse Power
- Earth Fault/Ground Fault
- Earth leakage

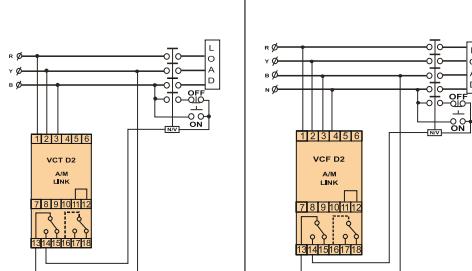
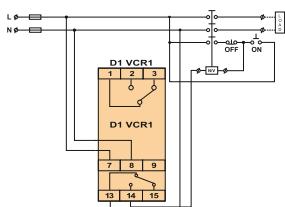
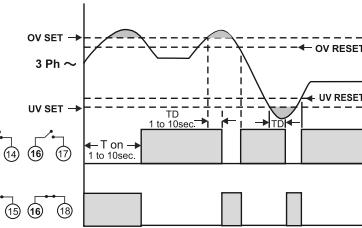
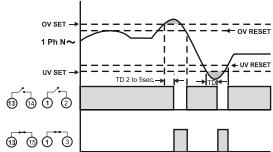
Ordering Instructions

- Product Family Name
- Model Name
- System Supply Voltage & frequency
- Aux. Supply/Control supply voltage
- Current input (1A or 5A)

VOLTAGE MONITORING RELAYS

D1 VCR1 1 Phase Voltage Monitoring Relay	VCT D2 Voltage Monitoring Relay, 3Ø-3W	VCF D2 Voltage Monitoring Relay, 3Ø-4W
	 <p>Single Phase Under & Over voltage, Auto Reset, Adjustable under / over voltage settings, 2 CO output relay.</p>	 <p>3-Phase 3-Wire Under & Over voltage Auto/Manual Reset, Adjustable under/over voltage settings, adjustable trip delay & ON delay, 2 CO output relay</p>
<small>Note: Mention specific voltage (Fixed/wide range) in order</small>	System Supply 110/220/230/240 V AC (+ 20%-25%), 50/60 Hz ± 3%	110/240/380/415/440 V AC +20%, -25% 50/60Hz
Output Relay Contact 2 CO	2 CO	2 CO
Trip Setting Under Voltage 75 - 95% [Variable] of set value	75% - 95% (adjustable)	75% - 95% (adjustable)
Over Voltage 105 - 120% [Variable] of set value	105% -120% (adjustable)	105% -120% (adjustable)
Trip Time Delay 2- 5 Sec (Fixed) (UV/OV)	1-10 secs. (adjustable)	1-10 secs. (adjustable)
Power on Delay	1-10 secs. (adjustable)	1-10 secs. (adjustable)
Reset	Auto Reset	Auto / Manual
Weight 180 gms.	450 gms.	450 gms.
Dimensions (mm) Overall (L x W x D) 76 x 30.5 x 117.5	76 x 56.5 x 117.5	76 x 56.5 x 117.5
Mounting 68 mm centre to centre / 35 mm rail mounting	67 x 46 / 35 mm rail mounting	67 x 46 / 35 mm rail mounting

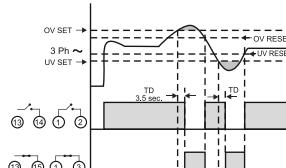
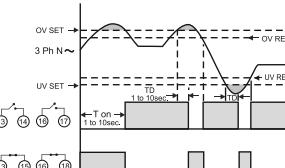
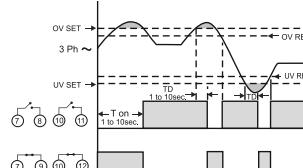
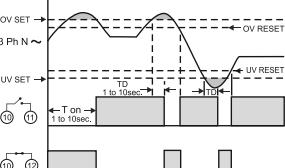
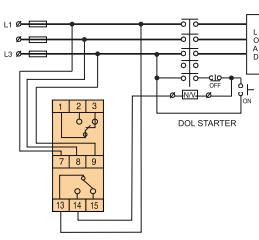
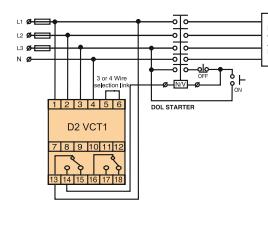
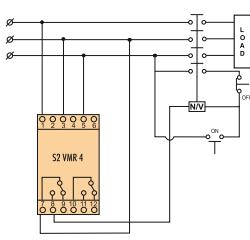
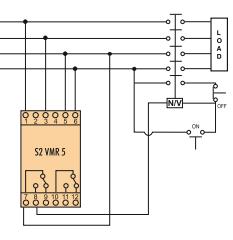
- Wherever not specified Contact Rating : 5A @ 230 V AC [resistive]



Relay contact position shown in 'Power off' condition

VOLTAGE MONITORING RELAYS

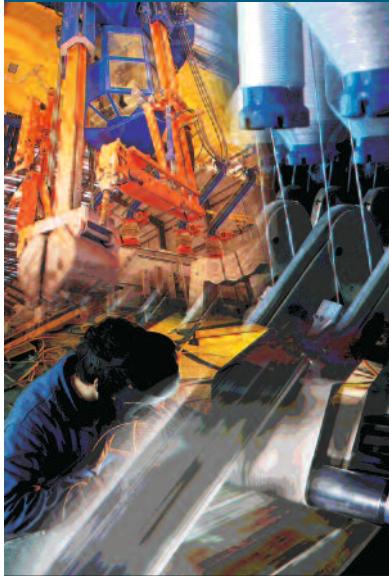
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D1 VCT1 Voltage Monitoring Relay, 3Ø-3W	D2 VCT1 Voltage Monitoring Relay	S2 VMR4 Voltage Monitoring Relay, 3Ø-3W	S2 VMR5 Voltage Monitoring Relay, 3Ø-4W
			
3-Phase 3-Wire Under & Over Voltage, Auto reset, Adjustable UV/OV settings, fixed trip delay, 2 CO output relay.	3-Phase 3-Wire and 3-Phase 4-Wire [selectable] Under & Over voltage, Microcontroller based design, Auto/Manual Reset, Adjustable under/over voltage settings, Absolute values for UV/OV, adjustable trip delay & ON delay, 2 CO output relay (or selectable 1CO for UV, 1CO for OV) Failsafe-non-failsafe selectable	3-Phase 3-Wire Under & Over voltage, Microcontroller based design, SMD Technology Auto/Manual Reset, Adjustable under/over voltage settings, Absolute values for UV/OV, adjustable trip delay & ON delay, 2 CO output relay (or selectable 1CO for UV, 1CO for OV) Failsafe-non-failsafe selectable	3-Phase 4-Wire Under & Over voltage, Microcontroller based design, SMD Technology, Auto / Manual Reset, Adjustable under/over voltage settings, Absolute values for UV/OV, adjustable trip delay & ON delay, 2 CO output relay (or selectable 1CO for UV, 1CO for OV) Failsafe-non-failsafe selectable
100-120/220-240/380-440 V AC ± 20%, 48-63 Hz	100-120/220-240/380-440V AC -25%+20%,48-63 Hz	100-120/220-240/380-440V AC -25%+20%,48-63 Hz	100-120/220-240/380-440V AC -25%+20%,48-63 Hz
2 CO	1 CO + 1 CO / 2 CO	1 CO + 1 CO / 2 CO	1 CO + 1 CO / 2 CO
75-115 Unit of 100-120 V AC 165-225 Unit of 220-240 V AC 285-425 Unit of 380-440 V AC	Ph Ph Setting: For 380-440V AC 285-425V AC (Variable) For 220-240V AC 165-225V AC (Variable) For 100-120V AC 75-115V AC (Variable) Ph N Sensing: For 380-440V AC 165-245V AC (Variable) For 220-240V AC 95-135V AC (Variable) For 100-120V AC 45-65V AC (Variable) Ph Ph Sensing: For 380-440V AC 400-520V AC (Variable) For 220-240V AC 230-290V AC (Variable) For 100-120V AC 105-145V AC (Variable) Ph N Sensing: For 380-440V AC 230-310V AC (Variable) For 220-240V AC 130-170V AC (Variable) For 100-120V AC 60-80V AC (Variable)	285 - 425V AC (Variable) 165-225V AC (Variable) 75-115V AC (Variable) 165-245V AC (Variable) 95-135V AC (Variable) 45-65V AC (Variable) 400-520V AC (Variable) 230-290V AC (Variable) 105-145V AC (Variable) 230-310V AC (Variable) 130-170V AC (Variable) 60-80V AC (Variable)	
3.5±1.5 Sec (UV/OV)	1-10 Sec (Variable) UV/OV/NF	1-10 Sec. (Variable)	1-10 Sec. (Variable)
Auto Reset	1-10 Sec (Variable)	1-10 Sec (Variable)	1-10 Sec (Variable)
200 gms. (Approx.)	Auto/ Manual Reset	Auto / Manual Reset	Auto / Manual Reset
200 gms. (Approx.)	300 gms (Approx.)	110 gms (Approx.)	110 gms (Approx.)
76 x 30.5 x 117.5	105-145 Unit of 100-120 V AC 230-290 Unit of 220-240 V AC 400-520 Unit of 380-440 V AC	105-145V AC (Variable)	105-145V AC (Variable)
68 centre to centre / 35 mm rail mounting	76 X 56.5 X 117.5	90 X 35 X 60	90 X 35 X 60
68 centre to centre / 35 mm rail mounting	67 x 46 □ / 35 mm rail mounting	35 mm Rail Mounting	35 mm Rail Mounting
			
			

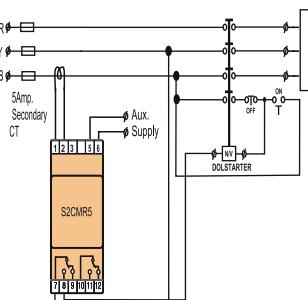
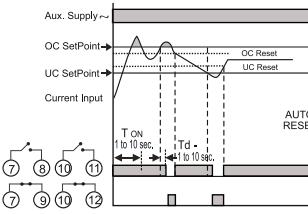
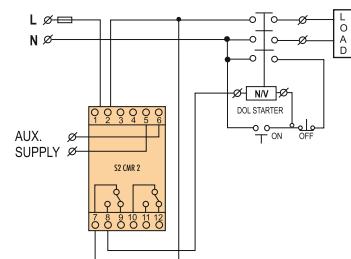
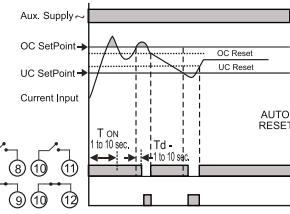
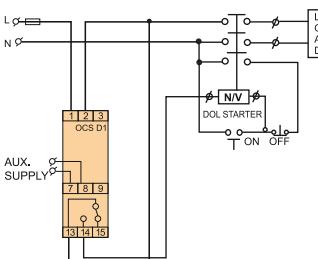
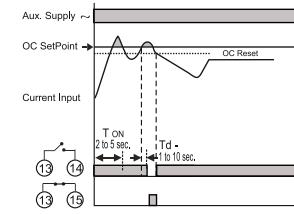
Relay position shown in 'Power off' condition

Note: S2 Series - RoHS Product available on request.

CURRENT MONITORING RELAYS

OCS D1 1 Phase Over Current Relay	S2 CMR2 1 Phase Current Monitoring Relay	S2 CMR5 1 Phase Current Monitoring Relay																																																				
	 <p>Single phase over current Auto reset, Input 1A or 5 A through CT, Adjustable over current trip settings, Adjustable trip delay, 1 CO output relay</p>	 <p>Single phase under & over current Microcontroller based design, SMD technology, Auto/Manual reset, Input 1A or 5 A through CT, Adjustable under / over current trip settings, adjustable trip delay & ON delay, 2 CO output relay (or selectable 1CO for UC, 1CO for OC) Failsafe-non-failsafe mode selectable</p>																																																				
<small>Note: Mention specific voltage (Fixed/wide range) in order</small> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Supply Voltage System</td><td>110-120/220-240/380-440 V AC ±20%, 12 V DC/24/30 V DC±10%</td></tr> <tr> <td>Auxiliary</td><td>24 V DC ±10%</td></tr> <tr> <td>Ext. Input</td><td>1 Amp / 5 Amp (Secondary) CT or 250/500 mA</td></tr> <tr> <td>Output contact</td><td>1 CO</td></tr> </table>	Supply Voltage System	110-120/220-240/380-440 V AC ±20%, 12 V DC/24/30 V DC±10%	Auxiliary	24 V DC ±10%	Ext. Input	1 Amp / 5 Amp (Secondary) CT or 250/500 mA	Output contact	1 CO	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Trip setting</td><td></td></tr> <tr> <td>EF Trip Setting</td><td>—</td></tr> <tr> <td>Under Current</td><td>N.A.</td></tr> <tr> <td>Over Current</td><td>50% -140% (adjustable) of CT sec</td></tr> <tr> <td>Power On Delay</td><td>3.5 secs ± 1.5 sec (fixed)</td></tr> <tr> <td>Trip Time Delay</td><td>1 - 10 secs (adjustable)</td></tr> <tr> <td>Resetting</td><td>Auto</td></tr> <tr> <td>Weight</td><td>250 gms.</td></tr> <tr> <td>Dimensions (mm)</td><td></td></tr> <tr> <td>Overall (L x W x D)</td><td>76 x 30.5 x 117.5</td></tr> <tr> <td>Mounting (L x W)</td><td>68mm centre to centre / 35mm rail Mounting</td></tr> </table>	Trip setting		EF Trip Setting	—	Under Current	N.A.	Over Current	50% -140% (adjustable) of CT sec	Power On Delay	3.5 secs ± 1.5 sec (fixed)	Trip Time Delay	1 - 10 secs (adjustable)	Resetting	Auto	Weight	250 gms.	Dimensions (mm)		Overall (L x W x D)	76 x 30.5 x 117.5	Mounting (L x W)	68mm centre to centre / 35mm rail Mounting	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Trip setting</td><td></td></tr> <tr> <td>EF Trip Setting</td><td>—</td></tr> <tr> <td>Under Current</td><td>10% - 100% (Variable) of Input</td></tr> <tr> <td>Over Current</td><td>50% - 140% (Variable) of Input</td></tr> <tr> <td>Power On Delay</td><td>1-10 Sec. (Adjustable) ± 1 Sec.</td></tr> <tr> <td>Trip Time Delay</td><td>1-10 Sec. (Adjustable) ± 1 Sec.</td></tr> <tr> <td>Resetting</td><td>Auto / Manual</td></tr> <tr> <td>Weight</td><td>140 gms</td></tr> <tr> <td>Dimensions (mm)</td><td></td></tr> <tr> <td>Overall (L x W x D)</td><td>90 X 35 X 60</td></tr> <tr> <td>Mounting (L x W)</td><td>35 mm Rail Mounting</td></tr> </table>	Trip setting		EF Trip Setting	—	Under Current	10% - 100% (Variable) of Input	Over Current	50% - 140% (Variable) of Input	Power On Delay	1-10 Sec. (Adjustable) ± 1 Sec.	Trip Time Delay	1-10 Sec. (Adjustable) ± 1 Sec.	Resetting	Auto / Manual	Weight	140 gms	Dimensions (mm)		Overall (L x W x D)	90 X 35 X 60	Mounting (L x W)	35 mm Rail Mounting
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- Wherever not specified Contact Rating : 5A @ 230 V AC (resistive)



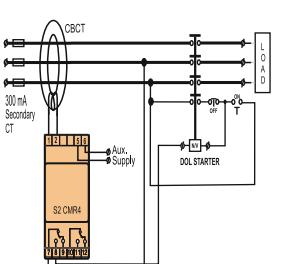
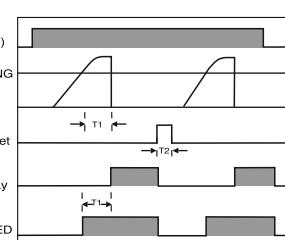
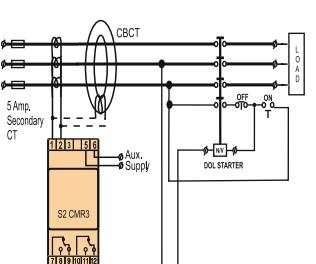
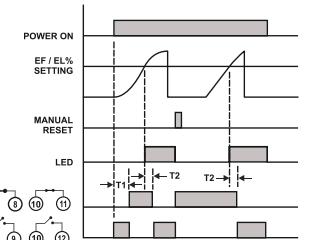
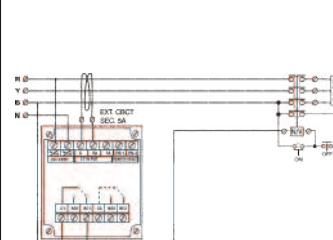
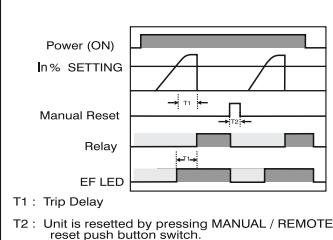
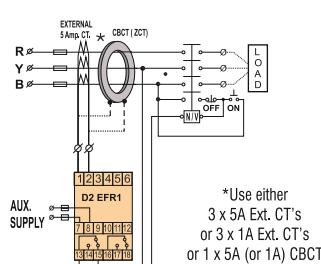
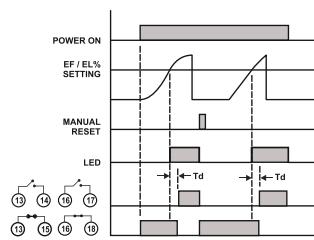
Relay contact position shown in 'Power off' condition

Note: S2 Series - RoHS Product available on request.
CCS D2 Model Available on request.

GROUND FAULT MONITORING RELAYS

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D2 EFR1/F3 EFR1 Earth Fault Relay	F3 EFR2 Earth Fault Relay	S2 CMR3 Ground Fault Relay	S2 CMR4/F3 ELR 1 Earth Leakage Relay
			
Earth fault/Ground fault monitoring of 3 phase systems Manual Reset, Input 1A or 5A through CBCT, Adjustable earth fault trip setting, adjustable trip delay, 2 CO relay output	Earth fault/Ground fault monitoring of 3 phase systems Manual Reset, Input 1A or 5A through CBCT, Adjustable earth fault trip setting, adjustable trip delay, 2 CO relay output	Earth fault/Ground fault monitoring of 3 phase systems, Microcontroller based design, SMD technology, Manual Reset, Input 1A or 5A through CBCT, Adjustable earth fault trip setting, Adjustable trip delay & ON delay, 2 CO relay output Failsafe-non-failsafe selectable	Earth leakage monitoring of 3 phase systems, Microcontroller based design, SMD technology, Manual Reset, Input through CBCT, Adjustable trip setting, Adjustable trip delay & ON delay, 2 CO relay output Failsafe-non-failsafe selectable
24-30 VDC / 110-240 V AC / DC / 380-440 V AC ± 20%	24 / 30VDC ±10%, 110-240VAC/DC ±20% 380 / 415 / 440VAC ±20%, 50Hz	100-120/220-240/380-440 V AC ± 20%, 48-63 Hz 100-120/220 -240 / 415 V AC / 24V DC ± 20%	100-120/220-240/380-440 V AC ± 20%, 48-63 Hz 100-110/240 / 415 V AC / 24V DC ± 20%
1 A or 5 A (Selectable) CBCT Secondary	1 A / 5 A (Selectable) CBCT Secondary	1 A or 5 A (Selectable) CBCT Secondary	300mA CBCT Secondary
1 CO (2 CO) (Pick up on Fault)	2 CO	2 CO	2 CO
10% - 100 % (adjustable) of CT sec	5 % - 80% (adjustable) of Rated Current Input	10% - 100% of Rated Current Input (Variable)	10% - 100% of Rated Current Input (Variable)
N.A.	N.A.	N.A.	N.A.
N.A.	N.A.	N.A.	N.A.
N.A.	N.A.	1 -10 Sec.(Adjustable)	1 -10 Sec.(Adjustable)
0.1-1.0 / 1-10 Sec. (Adjustable)	0.025 - 10 Sec.	0.1 - 1 Sec.(Adjustable)	0.1 Sec to 1 Sec.(Adjustable)
Manual / Remote (Selectable)	Manual / Remote	Manual	Manual
550gms.	300 gms.	140 gms	140 gms
76 x 56.5 x 117.5	96 x 96 x 80	90 X 35 X 60	90 X 35 X 60
67 x 46 [] / 35 mm rail Mounting	90 x 90	35 mm Rail Mounting	35 mm Rail Mounting



Contact us for F3ELR1
Connection Diagram.

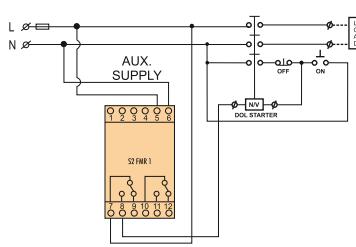
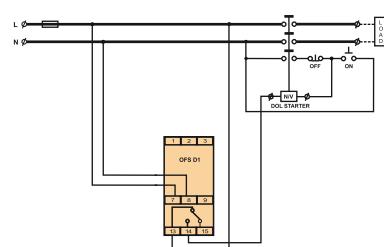
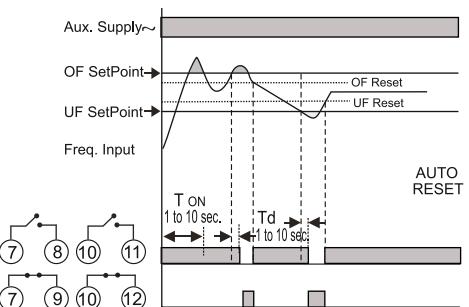
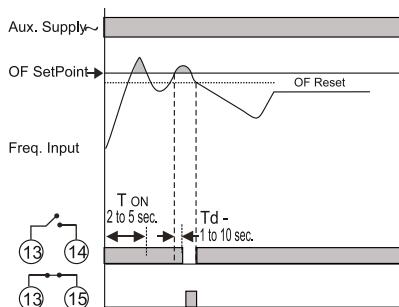
Relay contact position shown in 'Power off' condition

Note: S2 Series - RoHS Product available on request.

FREQUENCY MONITORING RELAYS

OFS D1 Over Frequency Relay		S2 FMR1 Frequency Monitoring Relay
		
	<p>Single phase over frequency, Auto reset, Adjustable over frequency trip settings,' Adjustable trip delay, 1 CO output relay</p>	<p>Single phase under & over frequency, Microcontroller based design, SMD technology, Auto reset, Adjustable under/over frequency trip settings, Adjustable trip delay & ON delay, 2 CO output relay Failsafe-non- failsafe mode selectable</p>
Supply Voltage		
Note: Mention specific voltage (Fixed/wide range) in order	100-120 / 220-240 / 380-440 V AC ±20%, 50-60Hz	100-120/220-240/380-440 V AC ± 20%, 38-72 Hz
System	12 / 24 V DC or Built in	In Built
Auxiliary		
Ext. Input		
Output contact	1 CO	1 CO + 1 CO / 2 CO
Trip setting		
Under Frequency	N.A.	40 Hz - 60 Hz (Variable)
Over Frequency	50 Hz - 70 Hz	50 Hz - 70 Hz (Variable)
Reverse Power	—	—
Power On Delay	3.5 secs. ± 1.5 sec (fixed)	1 - 10 Sec.(Adjustable) ± 1 Sec.
Trip Time Delay	1 - 10 secs. (adjustable)	1 - 10 Sec.(Adjustable) ± 1 Sec.
Resetting	Auto	Auto / Manual
Weight	450 gms.	130 gms
Dimensions (mm)		
Overall (L x W x D)	76 x 30.5 x 117.5	90 X 35 X 60
Mounting (L x W)	68 centre to centre / 35 mm Rail Mounting	35 mm Rail Mounting

- Wherever not specified
Contact Rating :
5A @ 230 V AC
(resistive)



Relay contact position shown in 'Power off' condition

Note: S2 Series - RoHS Product available on request.

POWER MONITORING RELAYS

minilec®

RPT D2

Reverse Power Relay,(3Ø-3W)



3-phase 3-wire generators reverse power monitoring
Auto/Manual reset,
Reverse power (current) trip settings adjustable,
ON delay and trip delay adjustable,
2 CO output relay

RPF D2

Reverse Power Relay,(3Ø-4W)



Single phase or 3-phase 4-wire generators reverse power monitoring
Auto/Manual reset,
Reverse power (current) trip settings adjustable,
for 3 Ph- Neutral monitoring use three relays,
2 CO output relay

100-120 / 220-240 / 380-440 V AC ±20%

100-120 / 220-240 / 380-440 V AC ±20%

Built-in

Built-in

5A CT Secondary & R,Y,B

5A CT Secondary & B, Neutral

2 CO

2 CO

2% - 20% (adjustable)

2% - 20% (adjustable)

1 - 10 secs. (adjustable)

1 - 10 secs. (adjustable)

1 - 10 secs. (adjustable.)

1 - 10 secs. (adjustable)

Auto / Manual

Auto / Manual

460 gms.

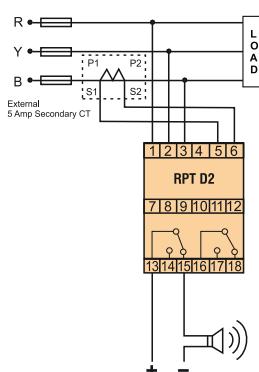
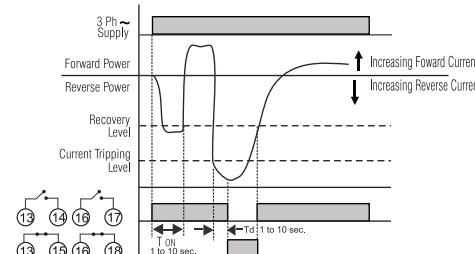
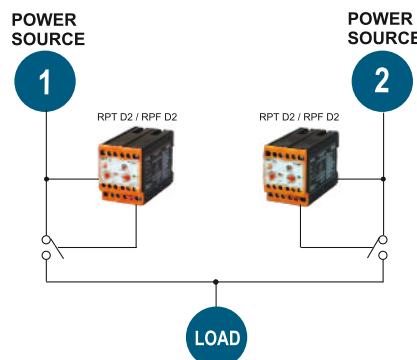
460 gms.

76 x 56.5 x 117.5

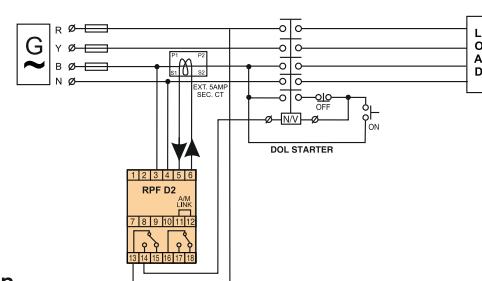
76 x 56.5 x 117.5

67 x 46 $\frac{3}{4}$ / 35 mm Rail Mounting

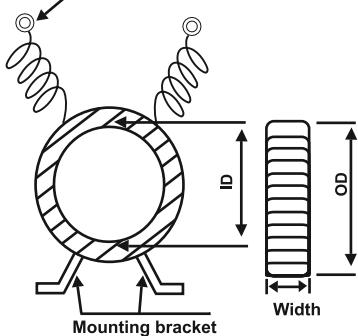
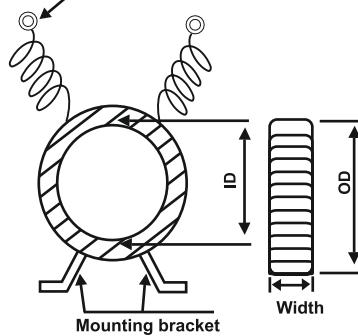
67 x 46 $\frac{3}{4}$ / 35 mm Rail Mounting



Relay contact position
shown in 'Power off' condition



CURRENT TRANSFORMERS

ABS Encapsulated Ring / Square Type CBCT	Tape Insulated Ring Type CBCT	Tape Insulated Ring Type Current Transformers	Tape Insulated Ring Type Economy Current Transformers																																																																																																																																																																																																																																																																																																																																																																								
																																																																																																																																																																																																																																																																																																																																																																											
<p>Introduction & Application</p> <p>CORE BALANCE CURRENT TRANSFORMERS (CBCT) is a sensor to sense earth fault current in conjunction with an EARTH FAULT RELAY to protect the system when an EARTH FAULT occurs on one or more phases. The CBCT is mounted externally & load carrying conductors are passed through CBCT. The CBCT inner diameter is large enough to pass all the three bus-bars or the three phase cables, unlike a metering CT where only one bus-bar or cable passes through the CT. As the VECTOR SUM of the three currents at any given time is ZERO, the resultant magnetic field through the core of the CT is zero. This is the healthy situation of the system. If required Neutral also can be passed through CBCT in case of 3 phases, 4 wire system. Ideally Vector Sum will remain zero in case of fault free systems.</p> <p>In the event of an Earth Fault occurring in any of the phases, the current in that phase rises, inducing a resultant magnetic flux in the CT secondary, energizing the relay & tripping the system.</p> <p>The current at CBCT secondary will depend on the actual earth fault current level & hence unbalanced loading does not affect the functioning of Earth fault relay.</p> <p>Salient Features</p> <ul style="list-style-type: none"> All current ratio's are available to match Minilec EFR/ELR. Light Weight. Compact in size. Cost Effective. 	<p>General Specifications</p> <ol style="list-style-type: none"> 1. System Voltage- up to 440 V AC 2. System Frequency -50 Hz 3. Operating Temperature -0 - 60°C. 4. Humidity - Up to 95% R.H. 5. Rated Burden - < 3 VA 6. Inner Diameter - 50 / 100 / 120 / 150 / 200 / 220 / 250 / 300 mm or any other customize size as per the requirement. 7. Outer Diameter - As per the relay requirement (Primary/ Fault & secondary current) & ID. 8. Mounting - for smaller range clamps can be provided for CBCT up to 50 mm ID & for higher range ID of CBCT, external arrangement needs to be done. <p>Ordering Information</p> <ol style="list-style-type: none"> 1) CT ratio (Primary & Secondary Current). 2) Inner Diameter. 3) Outer Diameter. 4) Type of CBCT - Resin cast or Tape wound or Moulded. 5) Minilec Relay Model Name. 	<p>Copper Lugs M5 with protective Sleeve. Secondary termination</p>  <p>Range and Specifications</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Ratio (A)</th> <th>Burden (VA)</th> <th>Class</th> <th>Dim in (mm)</th> </tr> <tr> <th></th> <th></th> <th></th> <th>ID</th> <th>OD Width</th> </tr> </thead> <tbody> <tr><td>1</td><td>50/5</td><td>5</td><td>5</td><td>30 85 50</td></tr> <tr><td>2</td><td>60/5</td><td>5</td><td>5</td><td>30 85 50</td></tr> <tr><td>3</td><td>75/5</td><td>5</td><td>5</td><td>30 85 50</td></tr> <tr><td>4</td><td>100/5</td><td>5</td><td>1</td><td>30 85 50</td></tr> <tr><td>5</td><td>150/5</td><td>5</td><td>1</td><td>30 85 50</td></tr> <tr><td>6</td><td>200/5</td><td>10</td><td>1</td><td>50 100 45</td></tr> <tr><td>7</td><td>250/5</td><td>10</td><td>1</td><td>50 100 45</td></tr> <tr><td>8</td><td>300/5</td><td>10</td><td>1</td><td>50 100 35</td></tr> <tr><td>9</td><td>400/5</td><td>15</td><td>1</td><td>60 105 35</td></tr> <tr><td>10</td><td>500/5</td><td>15</td><td>1</td><td>60 105 35</td></tr> <tr><td>11</td><td>600/5</td><td>15</td><td>1</td><td>60 105 35</td></tr> <tr><td>12</td><td>800/5</td><td>15</td><td>1</td><td>104 138 34</td></tr> <tr><td>13</td><td>1000/5</td><td>15</td><td>1</td><td>104 138 34</td></tr> <tr><td>14</td><td>1200/5</td><td>15</td><td>1</td><td>104 138 34</td></tr> <tr><td>15</td><td>1500/5</td><td>15</td><td>1</td><td>115 160 34</td></tr> <tr><td>16</td><td>1600/5</td><td>15</td><td>1</td><td>115 160 34</td></tr> <tr><td>17</td><td>2000/5</td><td>15</td><td>1</td><td>115 160 34</td></tr> <tr><td>18</td><td>2500/5</td><td>15</td><td>1</td><td>140 185 34</td></tr> <tr><td>19</td><td>3000/5</td><td>15</td><td>1</td><td>140 185 34</td></tr> <tr><td>20</td><td>4000/5</td><td>15</td><td>1</td><td>140 185 34</td></tr> </tbody> </table> <p>Range and Specifications</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Ratio (A)</th> <th>Burden (VA)</th> <th>Class</th> <th>Dim in (mm)</th> </tr> <tr> <th></th> <th></th> <th></th> <th>ID</th> <th>OD Width</th> </tr> </thead> <tbody> <tr><td>1</td><td>50/5</td><td>5</td><td>5</td><td>35 75 35</td></tr> <tr><td>2</td><td>60/5</td><td>5</td><td>5</td><td>35 75 35</td></tr> <tr><td>3</td><td>75/5</td><td>5</td><td>5</td><td>35 75 35</td></tr> <tr><td>4</td><td>100/5</td><td>1</td><td>38</td><td>70 35</td></tr> <tr><td>5</td><td>150/5</td><td>1</td><td>38</td><td>70 35</td></tr> <tr><td>6</td><td>200/5</td><td>1</td><td>38</td><td>100 32</td></tr> <tr><td>7</td><td>250/5</td><td>1</td><td>38</td><td>70 32</td></tr> <tr><td>8</td><td>300/5</td><td>1</td><td>60</td><td>87 30</td></tr> <tr><td>9</td><td>400/5</td><td>1</td><td>60</td><td>87 30</td></tr> <tr><td>10</td><td>500/5</td><td>1</td><td>70</td><td>100 35</td></tr> <tr><td>11</td><td>600/5</td><td>1</td><td>70</td><td>100 35</td></tr> <tr><td>12</td><td>800/5</td><td>1</td><td>70</td><td>100 35</td></tr> </tbody> </table>	Sr. No	Ratio (A)	Burden (VA)	Class	Dim in (mm)				ID	OD Width	1	50/5	5	5	30 85 50	2	60/5	5	5	30 85 50	3	75/5	5	5	30 85 50	4	100/5	5	1	30 85 50	5	150/5	5	1	30 85 50	6	200/5	10	1	50 100 45	7	250/5	10	1	50 100 45	8	300/5	10	1	50 100 35	9	400/5	15	1	60 105 35	10	500/5	15	1	60 105 35	11	600/5	15	1	60 105 35	12	800/5	15	1	104 138 34	13	1000/5	15	1	104 138 34	14	1200/5	15	1	104 138 34	15	1500/5	15	1	115 160 34	16	1600/5	15	1	115 160 34	17	2000/5	15	1	115 160 34	18	2500/5	15	1	140 185 34	19	3000/5	15	1	140 185 34	20	4000/5	15	1	140 185 34	Sr. No	Ratio (A)	Burden (VA)	Class	Dim in (mm)				ID	OD Width	1	50/5	5	5	35 75 35	2	60/5	5	5	35 75 35	3	75/5	5	5	35 75 35	4	100/5	1	38	70 35	5	150/5	1	38	70 35	6	200/5	1	38	100 32	7	250/5	1	38	70 32	8	300/5	1	60	87 30	9	400/5	1	60	87 30	10	500/5	1	70	100 35	11	600/5	1	70	100 35	12	800/5	1	70	100 35	<p>Copper Lugs M5 with protective Sleeve. 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