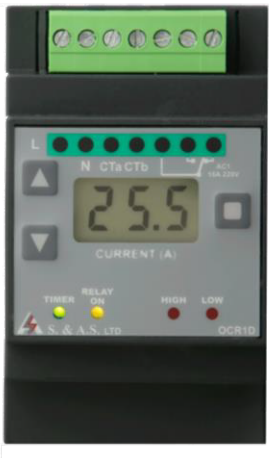
DIGITAL CURRENT RELAY – OCR1D V1.0



FEATURES

Current monitoring for over current or under current
Current transformer terminals are completely isolated from all other terminals
3-Digit numeric display for displaying current and status
True RMS current measurement
Digital presettable thresholds for over current and under current
Presettable response delays to over and under current
Presettable current transformer ratio
Three push buttons for selecting display of current or status and accessing the menu
Colored status indicators
Wide operating voltage range
Wiring through plug in connector
Case conforms to DIN 43 880 of the British Standard
Fits onto 35mm symmetric DIN rail to BS5584 (EN 50 022, DIN 46277-3)
Humidity class, DIN 40040
Environmental protection, DIN 40 050

ABSOLUTE MAXIMUM RATINGS

Supply voltage	330volts
Auxiliary contact	8A ac1
Operating temperature	0 to 70°C

OPERATION

True RMS current is measured and displayed. Current values of less that 100A are shown with one decimal point accuracy. Current values ranging between 100A and 999A are displayed in Amps. Current values equal or exceeding 1000A are displayed in KA. The up and down push buttons are used to scroll between current and status. Following is a description of the operation of the **OCR1D**:

1. **Over current mode selected (rFc = ocr):** red led labeled **HIGH** and green led labeled **TIMER** go on when the current exceeds setting **onS**. The output relay energizes and yellow led goes on after elapse of delay set in **ond**. This condition persists until current drops below **oFS** for a time set by **oFd**. **onS** should be larger than **oFS**, otherwise status pages displays **Err** and relay will not function. Status page shows **ocS** if there is an over current, otherwise it shows **noS**.
2. **Under current mode selected (rFc = ucr):** red led labeled **LOW** and green led labeled **TIMER** go on when the current drops below setting **onS**. The output relay energizes and yellow led goes on after elapse of delay set in **ond**. This condition persists until current exceeds **oFS** for a time set by **oFd**. **onS** should be less than **oFS**, otherwise status pages displays **Err** and relay will not function. Status page shows **ucS** if there is an under current, otherwise it shows **noS**.
3. **Over Under current mode selected (rFc = our):** green led labeled **TIMER** goes on and the output relay energizes and yellow led goes on(Status page shows **noS**). This condition persists until current drops below **oFS** for a time set by **oFd (**red led labeled **LOW** goes on and Status page shows **ucS)**, or when the current exceeds **onS** for a time set by **ond (**red led labeled **HIGH** goes on and Status page shows **ocS**). Once an over/under current status occurs, the relay stays de-energized even if the current value returns between **oFS** and **onS**. **onS** should be larger than **oFS**, otherwise status pages displays **Err** and relay will not function.

SETTING

Press the push button on the right to access the parameters menu. The up and down push buttons are used to scroll up and down respectively in the menu list. Pressing the push button on the right will edit the value of the parameter displayed. Use the up and down push buttons to respectively increase and decrease the value. Press the push button on the right to save new value. Following is a description of the parameters:

Display	Description	Range	Factory setting
Ctr	Current transformer ratio	0 to 9990A[1]	100A
onS	ON threshold setting in Amps	0 to 9990A[1]	25A
ond	ON delay setting	0 to 9m59s[2]	5s
oFS	Off threshold setting in Amps	0 to 9990A[1]	20A
oFd	Off delay setting	0 to 9m59s[2]	10s
rFc	Mode selection	ocr / ucr / our	ocr
FST	Load factory setting	-	-
out	Exit menu	-	-

SPECIFICATION

Operating voltage	90 to 285 volts
Auxiliary contact rating	5A 250V ac1 – 2A 415V ac1

INSTALLATION

Connect terminals 1 and 2 to line and neutral respectively.
Connect terminal 3 and 4 to the current transformer.
Connect terminals 5, 6 and 7 as desired to disconnect the circuit when an abnormal condition is detected.

[1] Setting is in A for currents less than 1000A and in KA for currents equal or exceeding 1000A.
[2] The display shows the minutes and seconds separated by a dot.

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