

D4-RHM / P49-RHM1 Running hour meter – 1 setpoint

Operating instructions and Guarantee Certificate

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Description:

This device is used to monitor the amount of time that power is applied to it. Timing starts as soon as power is applied. During a power failure the time is saved to non-volatile memory. When power is re-applied the timer continues where it left off. The power may be disconnected indefinitely without loss of data. The relay functionality may be reversed. The display may be set to indicate lapsed or remaining time. The lapsed time may be cleared by shorting the "CLR" pins, or via the menu. A separate total counter is also included. When the lapsed / remaining time is less than 1 hour, the device will indicate the number of minutes and seconds. When the time is greater than 1 hour, the minutes and seconds may be viewed by pressing the "SELECT" button. Please see description of the different functions for further details. Menu functionality and relay specifications are listed on the back page.

Menu options:

• Set point ("SEt") (default:0 hours)

Once the number of hours in this setting is reached, the relay will change state until the counter is cleared (via software, or by shorting the "CLR" pins).

• Clear counters ("CLr")

If "SELECT" is pressed while "Conf" (Confirm) is being displayed, the counter is cleared.

• Total number of hours ("tot") (not adjustable)

Select this setting to view the total number of hours the device has run. This counter is only reset during a full device reset. See "rest" setting. When the value exceeds 4 digits, the display alternates between the first 3 digits of the value (displayed in position 1,2 and 3 on the display), and the second 3 digits (displayed in position 2,3 and 4 on the display).

Relay functionality ("r.Fun") (default: CLOSE)

Once the pre-set number of hours is reached, the relay will either "CLOSE" or "OPEN"

• Display format ("diSP") (Default: Lapsed hours)

Set the display to indicate lapsed time ("LA t"), or remaining time ("rE t").

Reset ("rESt)

By selecting this option, all values are reset to default. (the total register is also reset to zero).

Example: Set the device to de-energise the relay after 150 hours.

Press "MENU" to display "Set". Press "SELECT". Use the "+" and "-" buttons to change the value to "150". Press "ENTER" to return to the menu. "CLr" is displayed. Press "MENU" twice. "r.Fun" is displayed. Use "+" and "-" to change the value to "OPEn". Press "ENTER. Press "BACK".

Please Note:

- As a power saving feature, the display dims when settings are not being made.
- If the display is configured to indicate remaining time, and the lapsed hours is greater than the set point value, the display will indicate zero.
- Once 9999 hours have lapsed, the counter will NOT roll over to zero. (It will remain at 9999 until cleared.)

Specifications:

Set point:	0 – 9999 hours
Accuracy:	±0.05%
Display Resolution:	1 hour (minutes and seconds if "SELECT" is pressed, or time < 1hour)
Input voltage:	$\pm 15\%$ of rated voltage
Led indication:	Relay status
Reset time:	0.5 sec (power supply reset), 0.05 sec (reset pulse)

Menu functionality:

All adjustments are made via the three front mounted buttons. Press the "MENU" button repeatedly until the desired setting is reached, press "SELECT" to display the current value of the selected setting, or sub menu (if applicable). The "+" and "-" buttons are used to change the value. "ENTER" will return the device to the menu. The "BACK" button will exit the menu.

Lock adjustment & full / reduced menu: (these settings are not changed via the menu)

When NOT in a menu or sub-menu, press and hold "+" and "-". After 3 seconds the display will show "----". If the keys are released at this point, the lock settings feature will be activated (settings may be viewed, but not changed). If the keys are held for an additional 2 seconds, the display will show "_____". The full menu will be activated. To toggle the lock feature, or full / reduced menu, repeat the above procedure.

Relay specifications:

Contact rating:	10A 250 VAC 2500VA (Resistive)
Mechanical life:	30 million operations
Electrical life:	250 000 operations (at maximum load)

Note:

If the input voltage is below the minimum operating voltage, the relay may not energize. Even though the device's display is on.

12 Month guarantee:

Our product is guaranteed for a 12 (twelve) month period from date of purchase. This guarantee is valid for defects arising from failure during specified conditions. This guarantee does not cover damage due to abuse, tampering or improper installation. Our company does not accept liability for any consequential damage or loss arising from product malfunction. Should this product prove to be defective, kindly return for inspection or repair. For further information contact your nearest distributor.

