

# Energy meters

| Dual function counters | Energy and time (AC) | HW66M |
|------------------------|----------------------|-------|
|------------------------|----------------------|-------|



MID  
approved



The HW66M combination meter consists of an hour meter and an energy meter.

This panel-mounted device requires only a limited installation depth and can be used in a wide variety of application areas. The count pulses can be read out via the S0 output.

|                                           |                                       |                                  |                                   |                                |                          |                         |           |
|-------------------------------------------|---------------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|-------------------------|-----------|
| <b>AC</b><br>115...230V<br>Supply voltage | <br>-20°...+55°C<br>Temperature range | <br>DIN 48x48<br>DIN front bezel | <br>IP65<br>High protection level | <br>12345<br>12345<br>No reset | <br>2 x 6<br>2 x 6 digit | <br>kWh<br>Energy meter | <br>Timer |
|-------------------------------------------|---------------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------|-------------------------|-----------|

## Product features

- Metering of hours run and energy consumption in one compact device – panel mounting.
- Wide temperature range.
- Remote readout via S0 outputs on request.
- Shows both values in parallel.
- Easy-to-read display – can also be read if no voltage present.

## Benefits

- Tamper-proof fixed installation with high degree of protection.
- High measuring accuracy.
- Can be officially calibrated (MID).

## Applications

Dehumidifiers, hire equipment and machinery, air-conditioning, production equipment, current generators.

## Order specifications

| Type  | Voltage  | Order no.            | Delivery includes                                                                                                                         | Type plate                                                                                                                                                                                                                                                      |
|-------|----------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HW66M | 230 V AC | <b>3.56M.201.075</b> | <ul style="list-style-type: none"> <li>• Counter</li> <li>• Flat gasket</li> <li>• Mounting clip</li> <li>• Instruction manual</li> </ul> | If the type plate on the side of the HW66M is no longer legible after the installation, the provided additional type plate can be affixed on the front panel of the device in order to comply if necessary with the legal requirements relating to calibration. |

## Accessories

|                   |  | Type / size                 | Description                                                                                                                                     |           | Order no.      |
|-------------------|--|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------|
| Mounting frame    |  |                             | with cut-out 50 x 50 [2.36 x 2.36]<br>via separate adapter also for 45 x 45 [1.77 x 1.77]<br>for snap-on mounting on 35 [1.38] top-hat DIN rail | chromated | <b>G300003</b> |
| Gasket counter    |  | 48 x 48 mm<br>[1.89 x 1.89] |                                                                                                                                                 |           | <b>N511018</b> |
| incl. in delivery |  |                             |                                                                                                                                                 |           |                |

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## Technical data

| General technical data                  |                                                           |                                  |
|-----------------------------------------|-----------------------------------------------------------|----------------------------------|
| Supply voltage                          | 230 V AC, -20 % / +15 %                                   | 50 Hz                            |
| Digits                                  | 2 x 6 digit (decimale places red)                         |                                  |
| Height of figures (optical)             | 4 x 1.7 mm [0.16 x 0.067"]                                |                                  |
| Colour of figures                       | white and red on black                                    |                                  |
| Operating temperature                   | 10 °C ... +55 °C [+14 °F ... +131 °F]<br>(non-condensing) |                                  |
| Storage temperature                     | -25 °C ... +65 °C [-13 °F ... +149 °F]                    |                                  |
| Relative humidity<br>at +30 °C [+86 °F] | ≤ 80 % (non-condensing)                                   |                                  |
| Altitude                                | up to 2000 m [6562']                                      |                                  |
| Housing                                 | DIN panel-mount<br>48 x 48 mm [1.89 x 1.89"]              |                                  |
| Depth                                   | 55 mm [2.17"]                                             |                                  |
| Protection                              | IP65, EN 60529 (front side)<br>IP20 (rear side)           |                                  |
| Max. core<br>cross-section              | inputs/outputs                                            | 2.5 mm <sup>2</sup> [AWG 13]     |
|                                         | S0 output                                                 | 2.5 mm <sup>2</sup> [AWG 13]     |
| LED function                            | LED on                                                    | when supply voltage is connected |
|                                         | LED blinks                                                | when energy is being measured    |

| Approvals                       |                                 |            |
|---------------------------------|---------------------------------|------------|
| CE compliant in accordance with |                                 |            |
|                                 | EMC Directive                   | 2014/30/EU |
|                                 | Measuring Instruments Directive | 2014/32/EU |
|                                 | Low Voltage Directive           | 2014/35/EU |
|                                 | RoHS Directive                  | 2011/65/EU |

| Energy meter   |                                                             |
|----------------|-------------------------------------------------------------|
| Display        | 99999.9 kWh                                                 |
| Accuracy       | class B, acc. to MID                                        |
| Current        | I <sub>B</sub> = 5 A, I <sub>max</sub> = 16 A               |
| Current limits | ≥ 20 mA up to 16 A                                          |
| Start current  | ≥ 20 mA                                                     |
| S0 output      | 1000 pulses/kWh, 5 ... 30 V DC,<br>I <sub>max</sub> = 20 mA |
| Pulse duration | 50 ms                                                       |

| Hour meter             |                                                      |
|------------------------|------------------------------------------------------|
| Display                | 99999.9 h (0.1 h = 6 min)                            |
| Accuracy               | ± 2 %                                                |
| S0 output              | 10 imp/h, 5 ... 30 V DC,<br>I <sub>max</sub> = 20 mA |
| Pulse duration         | 50 ms                                                |
| Start (Operating time) | with voltage applied to L <sub>in</sub>              |

The counter is intended for recording the operating hours and electrical energy of mobile devices and must not be used for recording and billing the electrical energy of permanently installed consumers.

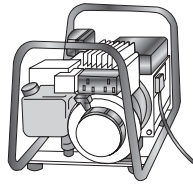
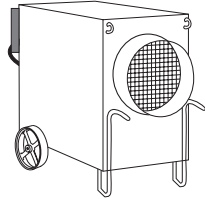
# Energy meters

## Dual function counters

## Energy and time (AC)

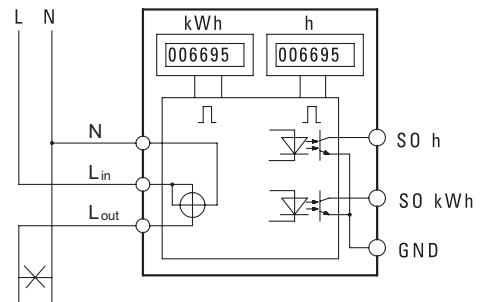
## HW66M

### Applications



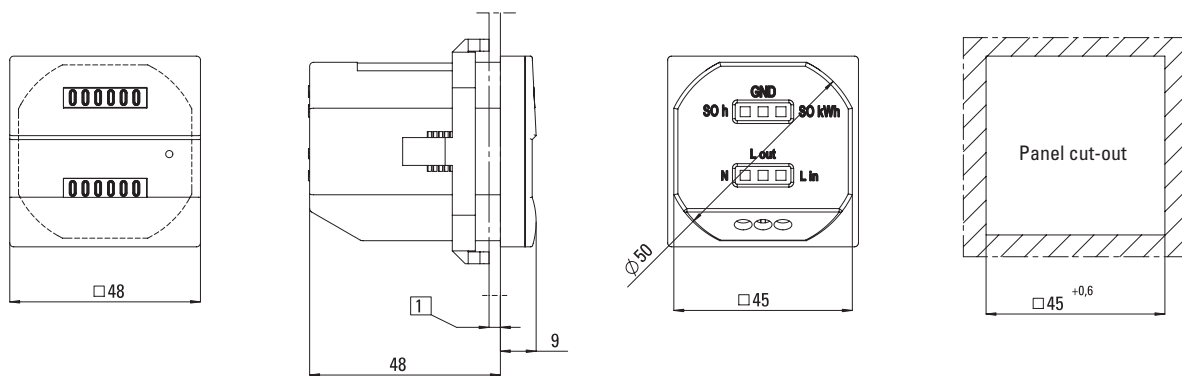
Retro- or standard fitting in dehumidifiers, current generators, air-conditioning, production equipment etc. for the accurate, traceable billing of operating and energy costs – especially also for hire equipment.

### Terminal assignment



### Dimensions

Dimensions in mm



1 max. 6.5