

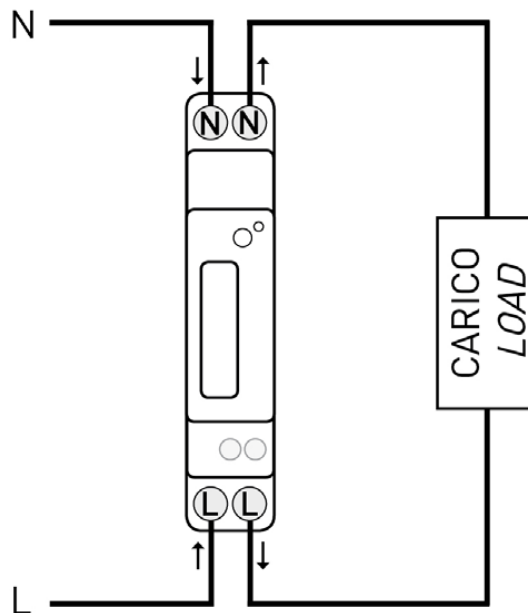
**1. Description.**

The **EC1-40** is a one DIN modules energy meter for energy measurement in industrial and civilian applications, available with MID certification and suitable for billing.



Picture 1 - Product image

**2. Connections layout.**



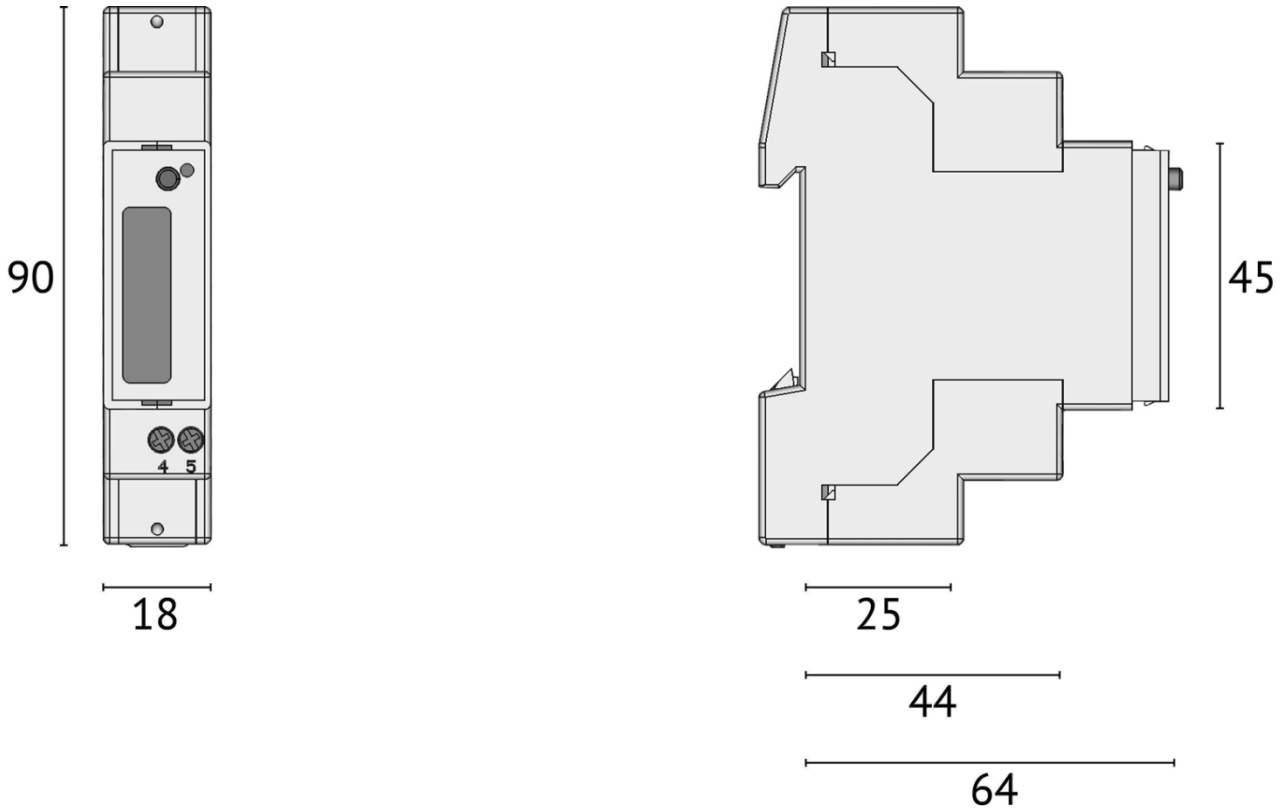
Picture 2 - Connections layout

### 3. Technical information.

<b>Power supply</b>	<ul style="list-style-type: none"> <li>• Power supplied from the voltage circuit</li> <li>• Nominal measurement voltage <math>\pm 20\%</math></li> <li>• Maximum consumption: 1.5VA - 1W</li> <li>• Nominal frequency: 50/60Hz</li> </ul>
<b>Voltage and frequency (Nominal values)</b>	230V 50/60Hz
<b>Current</b>	<ul style="list-style-type: none"> <li>• Maximum value (<math>I_{max}</math>): 40A</li> <li>• Reference value (<math>I_{ref}</math>) (<math>I_b</math>): 5A</li> <li>• Transition value (<math>I_{tr}</math>): 500mA</li> <li>• Minimum value (<math>I_{min}</math>): 250mA</li> <li>• Starting value (<math>I_{st}</math>): 20mA</li> </ul>
<b>Accuracy</b>	<ul style="list-style-type: none"> <li>• Active energy class 1 according to IEC/EN 62053-21 (NO MID)</li> <li>• Active energy class B according to EN50470-3 (MID)</li> <li>• Reactive energy class 2 according to IEC/EN 62053-23</li> </ul>
<b>S0 output</b>	<ul style="list-style-type: none"> <li>• Passive optoisolated</li> <li>• Maximum values: 27Vcc - 27 mA</li> <li>• Meter's constant: 1,000 pulses/kWh <sup>(*)</sup></li> <li>• Pulse length: 100 <math>\pm</math> 0.5ms</li> </ul>
<b>Metrological LED</b>	<ul style="list-style-type: none"> <li>• Meter constant: 5,000 pulse/kWh</li> <li>• Pulse length: 4 <math>\pm</math> 0.1ms</li> </ul>
<b>Working conditions</b>	<ul style="list-style-type: none"> <li>• Operative: -25°C ÷ +55°C</li> <li>• Warehousing: -40°C ÷ +75°C</li> <li>• Relative humidity: 80% maximum without condensation</li> </ul>
<b>Sealing</b>	IP51 frontal - IP20 terminals
<b>Dimensions</b>	90 x 64 x 18mm

<sup>(\*)</sup> unit of measurement (pulses/kWh, pulses/kvarh, pulses/kVAh) changes according to energy meter linked (kWh, kvarh, kVAh)

**4. Mechanical dimensions.**



**Picture 3 - Mechanical dimensions**

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**5. Reference standards.**

EN 61010 -1

For electromagnetic compatibility

EN 61000 - 3 - 2

EN 61000 - 3 - 3

EN 300 220 -2

EN 301 489 - 03

EN 61000 - 6 -1

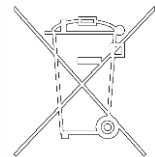
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This symbol indicates that this product is compliant with the European Directive 2011/65/CE that restricts the use of substances in the manufacturing of electronic devices.



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The "WEEE" logo on the label indicates that this product is compliant with the "WEEE" EC Directive. This symbol (valid only in the European Union countries) indicates that the product it is applied to, MUST NOT be discarded with ordinary household or industrial waste, but must be sent to an authorized reception point. The end user should contact the device provider, either the manufacturer or the reseller, in order to agree a collection and disposal process, after having checked the terms and conditions of sale.



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*The features shown may be subject to change without notice.*