

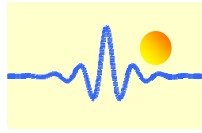
High Accurate AC Current Sensor CYCS412D41

The **CYCS412D41** AC current Sensor/Transducer works according to electromagnetic induction principle and is designed for applications to measurement and monitoring of single phase AC current. The output signal (DC voltage) of this transducer is proportional to the average effective value (RMS) of input AC current. They are suitable for general applications such as fixed frequency voltage supplies etc.

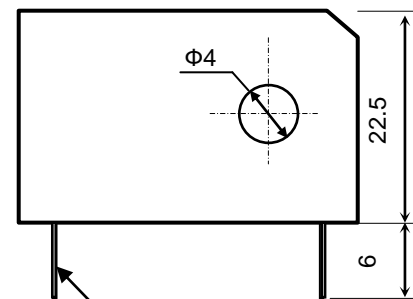
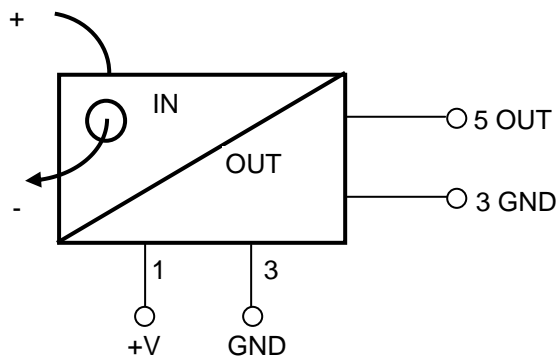
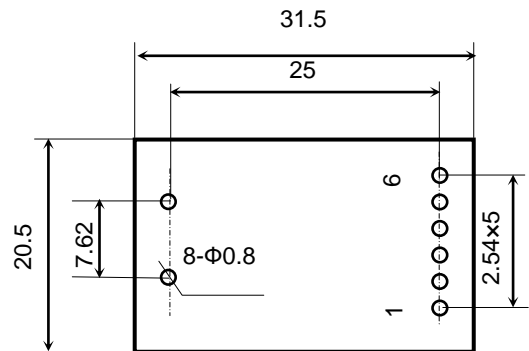
The sensor has the advantages of high measuring accuracy, high reliability, low thermal drift, low current consumption, small size, PCB mounting etc.

Specifications

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|---|--|
| Part number | CYCS412D41-m-X, (X depends on power supply) |
| Rated input current range | m=0.5A, 1A, 2A, 3A, 5A, 8A |
| Linear measuring range | 0 ~ 1.2 time of rated input current |
| Overload capacity | 30 times |
| Frequency range | 25Hz ~ 5 kHz |
| Output signal | 0-5V DC (rectified average value) |
| Measuring accuracy | 0.2% |
| Load capacity | 5mA |
| Response time | ≤300ms |
| Thermal drift | 150ppm/°C |
| Power supply | X=2 for +12V DC, X=4 for +24VDC |
| Static current | 5mA |
| Isolation | Isolation between input und output, power supply at output |
| Isolation withstanding voltage | 2.5 kV DC, 1min |
| Operating temperature | -10°C ~ +60°C |
| Storage temperature | -25°C ~ + 70°C |
| Relative humidity | 10% ~ 90% |
| Isolation Capacity between input and outout | 5pF (<1kHz) |
| CMRR | 60dB (50Hz) |
| Protection of Case | IP20 |
| Material of Case | ABS (according to UL94V-0) |
| Mounting | PCB |
| Window size | Ø4mm |
| MTBF | 50000 h |
| Unit weight | 30g |



DIMENSIONS (mm)



Dimensions: 31.5mm x 20.5mm x 22.5mm
Aperture: Ø4mm

Application:

- Multi-point current sensing and control panels
- Monitor lighting elements
- Monitor heating elements
- Remote current sensing
- Monitor motor faults

Notice:

1. The conductor carrying the input current should pass through the center of the aperture as perpendicularly as possible.
2. Make sure that the polarities are in right connection. The output and the power supply must be common grounded at terminal 3.
3. If a meter is used to calibrate the output of the transducer, please make sure that the accuracy of the meter is higher than the transducer.