

## Current clamp set 5 A/50 A 1-, 3-phase and 3-phase+N

### Technical Data

These current clamp sets have been designed for applications with Fluke 1735 and Fluke 1740 series products for accurate non-intrusive measurement of ac currents. Using latest technologies (integrated memory for calibration data) provides current ranges from 0.125 A up to 50 A in a frequency range of 40 Hz to 5 kHz. The clamps are approved for the required installation category.



### Electrical specifications

|   |                              |
|---|------------------------------|
| <b>Nominal current I<sub>n</sub></b>        | 5/50 A ac r.m.s.             |
| <b>Overload</b>                             | Up to 65 A ac r.m.s.         |
| <b>Max. non-destructive current</b>         | 200 A ac r.m.s.              |
| <b>Conductor position influence</b>         | < 0.5 % of range at 50/60 Hz |
| <b>Error due to adjacent conductor</b>      | ≤ 15 mA/A at 50 Hz           |
| <b>Phase shift at 2 kHz at 200 A</b>        | < ± 1 degree                 |
| <b>Frequency range</b>                      | 40 Hz to 5 kHz (- 3 dB)      |
| <b>Temperature coefficient</b>              | 0.015 % of range/°C          |
| <b>Working voltage (see section safety)</b> | 600 V ac r.m.s. or dc        |

### Accuracy (at 50 Hz)

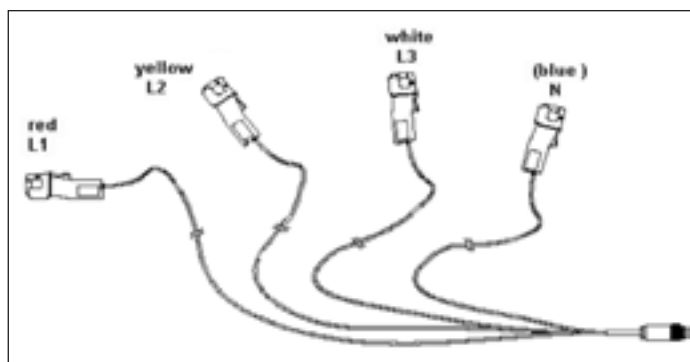
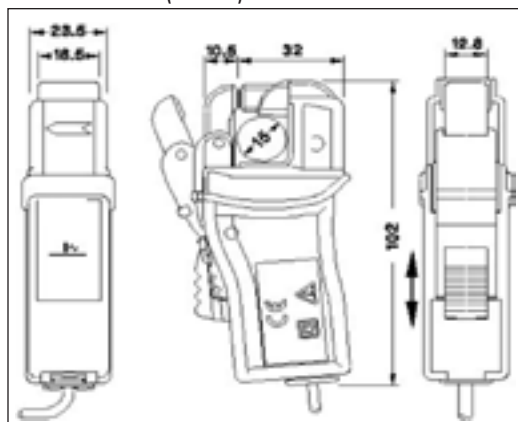
|  |                  |                 |                |              |
|--|------------------|-----------------|----------------|--------------|
| <b>Primary current</b>                 | 0.125 A to 2.5 A | 2.5 A to 12.5 A | 12.5 A to 25 A | 25 A to 50 A |
| <b>Operating error in % of reading</b> | ± 2.5 %          | ± 1.5 %         | ± 0.5 %        | ± 0.5 %      |
| <b>Phase shift</b>                     | Not specified    | < 2°            | < 0.5°         | < 1°         |

## General specifications

|                                      |  |
|--------------------------------------|--|
| <b>Maximum conductor size</b>        | 15 mm diameter, bus bar 15 mm x 17mm   |
| <b>Cable length</b>                  | 2 m  |
| <b>Operating temperature range</b>   | -10 °C to +55 °C   |
| <b>Storage temperature range</b>     | -20 °C to +70 °C   |
| <b>Operating humidity</b>            | 15 % to 85 % r.h. (non-condensing)   |
| <b>Weight (per clamp)</b>            | 175 g  |
| <b>Environment temperature range</b> | +18 °C to +26 °C   |
| <b>Humidity</b>                      | 20 % to 75 % r.h.  |
| <b>Current</b>                       | Sinusoidal waveform, 48 Hz to 65 Hz, distortion factor: < 1 %, no dc component |
| <b>Safety standards</b>              | IEC/EN61010-1: 2001<br>IEC/EN61010-2-032:2002<br>IEC/EN61010-031:2002          |
| <b>EMC standards</b>                 | IEC/EN 61326-1:2006  |
| <b>Safety</b>                        | 600 V CAT III, pollution degree 2  |

The current clamps are designed for use on **insulated conductors**. For using it with **uninsulated conductors** you have to switch off before attaching the clamp. The application of the clamps on **uninsulated conductors** is limited to 600 V ac r.m.s. or dc to ground and frequencies below 1 kHz.

## Dimensions (in mm)



## Symbols

|  |   |
|--|---|
|  | Do not apply around or remove from HAZARDOUS LIVE conductors.   |
|  | Product is protected by double insulation.  |
|  | Risk of Danger. Important information. See Instruction Sheet.   |
|  | Risk of Electric Shock.   |
|  | Canadian Standards Association has certified that the product meets applicable U.S. and Canadian Standards. |
|  | Conforms to relevant European Union directives.   |

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## Ordering information

**3-phase: 3024436** 15A/50A Clamp PQ3  
**3-phase+N: 3024449** 15A/50A Clamp PQ4