

## AM-CL-5

The AM-CL-5 current probe is based on AC transformer technology for use in measurement of AC current.



### Electrical Characteristics

|   |                                 |
|---|---------------------------------|
| Current Range.....                        | : 5A AC <sub>RMS</sub>          |
| Measuring Range.....                      | : 10mA to 12A AC <sub>RMS</sub> |
| Output Sensitivity .....                  | : 100mV/A                       |
| Load Impedance .....                      | : > 1 MΩ                        |
| Frequency Range .....                     | : 40Hz to 5kHz (-3 dB)          |
| Temperature Coefficient.....              | : ± 0.015% of reading per °C    |
| Position Sensitivity .....                | : < 0.5% at 50/60 Hz            |
| External Field Rejection (at 50 Hz) ..... | : 66 : 1                        |

### Accuracy

| Range                    | 5A   |       |        |        |
|--------------------------|------|-------|--------|--------|
|                          | 5mA  | 500mA | 5A     | 12A    |
| Current                  | 5mA  | 500mA | 5A     | 12A    |
| Accuracy (% of rdg.)     | ± 2% | ± 1%  | ± 0.5% | ± 0.5% |
| Phase Shift (guaranteed) | ± 2° | ± 1°  | ± 1°   | ± 1°   |

### General Characteristics

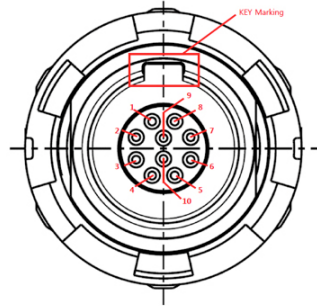
|                                  |                                      |
|----------------------------------|--------------------------------------|
| Maximum Conductor Size .....     | : 15mm diameter; bus bar 15 x 17mm   |
| Output Connection .....          | : 2m cable with BNC safety connector |
| Operating Temperature Range..... | : -10 to +55°C                       |
| Storage Temperature Range.....   | : -20 to +70°C                       |
| Operating Humidity .....         | : 15% to 85% (non condensing)        |
| Weight .....                     | : 190g                               |

**Reference conditions:** Temperature : +18°C to 26 °C, humidity: 20 to 75% RH, sinusoidal current: 48 to 65Hz, distortion factor: < 1%, DC current: none, DC magnetic field: 40 A/m earth's magnetic field, alternative magnetic field: none, proximity of external conductor: none, primary conductor: centred in the aperture, load impedance: ≥1MΩ, <100pF for voltage output.

### Connection Details

### LEMO Redel 1P Series 10 pin

| Pin | Function |
|-----|----------|
| 1   | Output + |
| 2   | Output - |
| 5   | TEDS     |



| pin | channel |
|-----|---------|
| 1   | IN+     |
| 2   | IN-     |
| 3   | FGND    |
| 4   | NC      |
| 5   | TEDS    |
| 6   | GND     |
| 7   | +3.3V   |
| 8   | +12V    |
| 9   | +15V    |
| 10  | -15V    |

### Safety Standards

BS EN 61010-1: 2001  
 BS EN 61010-2-032: 2002  
 BS EN 61010-031: 2002

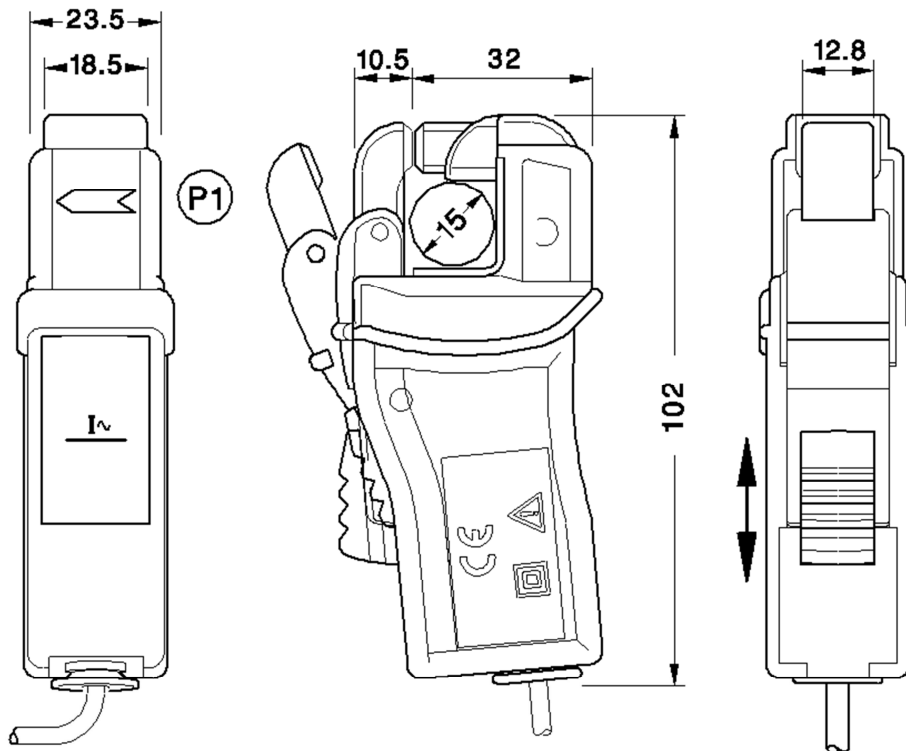
600 V<sub>RMS</sub>, Category III, Pollution Degree 2

Use of the probe on **uninsulated conductors** is limited to 600 V AC<sub>RMS</sub> or DC and frequencies below 1 kHz.

### EMC Standards

BS EN 61326-2-2 :2006

### Dimensions (in mm)



AMS9-001-00090