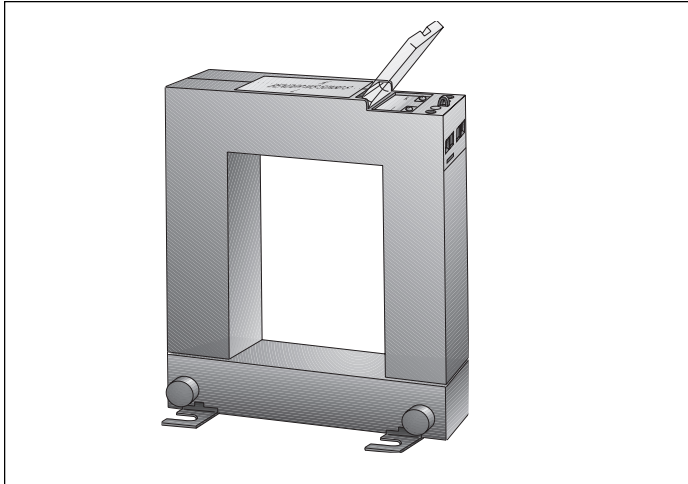




VDE IEC



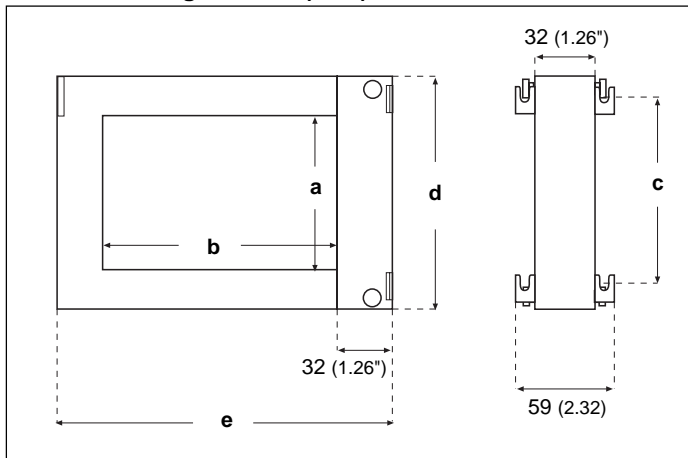
Product Description

The split-core current transformers WS50x80S, WS80x80S, WS80x120S and WS80x160S are suitable for use with RCM and EDS-based products to locate ground faults in grounded, high-resistance and ungrounded systems.

In combination with EDS, RCM and RCMS-based products, the current transformers have a ground fault sensitivity extending over the range of 1mA...20A. Load current is not a factor when selecting the proper current transformer. The current transformer should be selected based on the cable size.

The current transformers WS50x80S, WS80x80S, WS80x120S and WS80x160S are designed with different openings to accommodate a wide range of cable sizes. They are made from a high density Mu metal which has unique and repeatable output characteristics. Connection is by screw terminals. Depending on the application, the current transformers can be mounted either directly on the cable or by using the mounting brackets.

Dimension Diagram mm (inch)



Dimensions mm (inch)

| | WS50x80S | WS80x80S | WS80x120S | WS80x160S |
|----------|-------------|-------------|-------------|-------------|
| a | 50 (1.97") | 80 (3.15") | 80 (3.15") | 80 (3.15") |
| b | 80 (3.15") | 80 (3.15") | 120 (4.72") | 160 (6.30") |
| c | 78 (3.07") | 108 (4.25") | 105 (4.13") | |
| d | 114 (4.49") | 144 (5.67") | 144 (5.67") | |
| e | 145 (5.71") | 145 (5.71") | 185 (7.28") | |

Operational Information

The current transformers WS50x80S, WS80x80S, WS80x120S and WS80x160S are highly sensitive and accurate current transformers which convert ground fault leakage currents into a signal that can be processed by either a RCM- or EDS-based product. Connection to the appropriate device is by two wires to the [K] and [L] terminals. Depending on the selected type of cable, up to 25m (80ft) distance between current transformer and evaluator is allowed. It is essential that all circuit conductors of the appropriate electrical system to be monitored be guided through the current transformer.

The equipment grounding conductor must always bypass the current transformer.

In certain special cases, you may pass just the ground wire through the CT and the system conductors would bypass the current transformer when using the CTs in an RCM application. This should only be considered if the system conductors are too large for the CT.

For Use with

- Ground fault current monitoring relays [RCM]
- Ground fault current monitoring systems [RCMS]
- Ground fault location systems [EDS]

Technical Data WS50x80S ... WS80x160S

General Data:

| | |
|-------------------------------------------|-----------------------|
| Rated burden | 180Ω |
| Rated ground fault sensing current | 10A |
| Continuous ground fault overload capacity | 20A |
| Rated short-time thermal current (1 sec.) | 14 kA |
| Nominal power | 500 mVA |
| Frequency Range | 15Hz...400Hz |
| Accuracy | 99% |
| Ambient temperature | -10°C ... +50°C |
| Flammability class | UL94V-0 |
| Rated transformation ratio | 600:1 |
| CT material | high density Mu metal |

Testing:

| | |
|------------------------------------------------------------|----------|
| Rated insulation voltage acc. DIN VDE 0110 T.1 | AC 630 V |
| Rated impulse withstand voltage/ contamination level | 6 kV/3 |
| BIL Rating | 2 kV |
| Dielectric test voltage acc. DIN VDE 0435 T.303/IEC 255 | AC 3 kV |

Connections & Mounting:

| | |
|-------------------------------------------------|------------------|
| Length of the connecting leads | |
| Type of connection to the measuring transformer | |
| Single wires | up to 3' (1 m) |
| Twisted pair cable | up to 30' (10 m) |
| Shielded twisted pair cable | up to 75' (25 m) |
| Screw mounting | #10 |

Safety Instructions



The ground conductor must always bypass the current transformer !



Electrical equipment shall only be installed by qualified personnel in consideration of the current safety regulations!

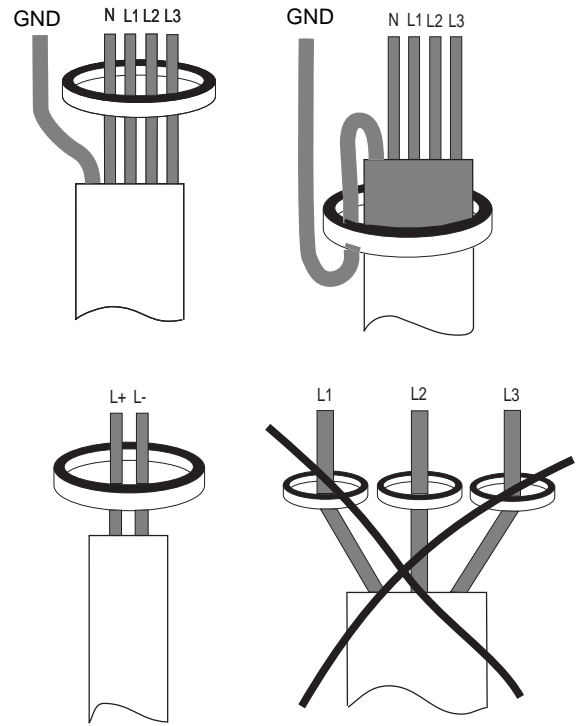
Standards

The current transformers WS50x80S ... WS80x160S correspond to **DIN VDE 0414** and **IEC 185**, and are UL-listed, File #: E173157.

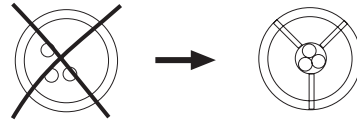
Ordering Information

| Type | Article No. |
|------------|-------------|
| WS 50x80S | 911741 |
| WS 80x80S | 911742 |
| WS 80x120S | 911743 |
| WS 80x160S | 911755 |

Cable routing through the measuring transformer



Avoiding interferences in case of high inrush currents



Wiring Diagram

