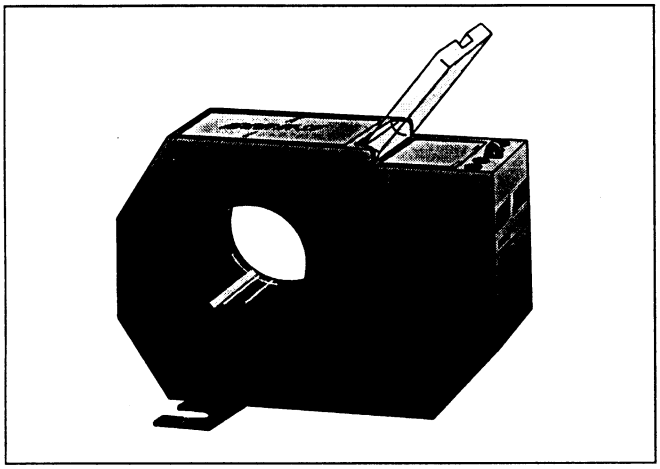
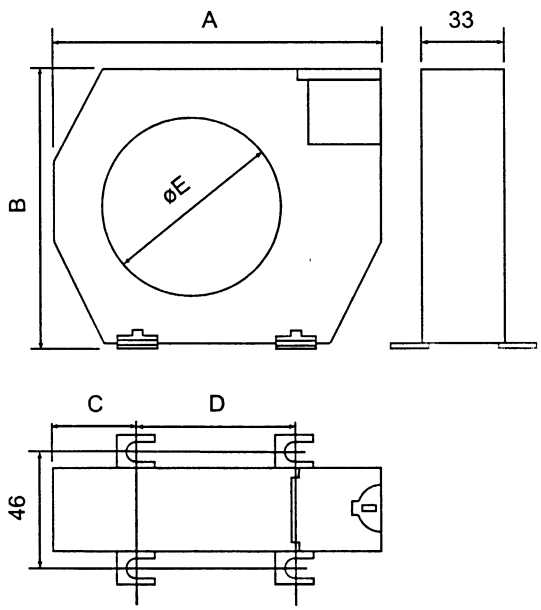
CURRENT TRANSFORMERS
for use with BENDER RCM and EDS Series

W1-S..W5-S

ISO 9001 CE UL LISTED c UL LISTED **VDE IEC**



Dimension Diagram (mm)



Dimensions (mm)

Type	A	B	C	D	øE	kg
W1-S35	100	79	26	48,5	35	0.25
W2-S70	130	110	32	66	70	0.38
W3-S105	170	146	38	94	105	0.70
W4-S140	220	196	48,5	123	140	1.50
W5-S210	229	184	69	161	210	2.50

Product Description

The measuring current transformers (CT) W1-S35 ... W5-S210 are suitable for use with RCM and EDS-based products to locate ground faults in grounded, high-resistance grounded and ungrounded systems.

In combination with RCM and RCMS-based products, the current transformers have a sensitivity extending over the range of 10mA...20A.

The W1-S35..W5-S210 are made from a high density Mu metal which has unique and repeatable output characteristics.

The measuring current transformers W1-S35 ... W5-S210 are designed with different openings to accommodate a wide range of cable sizes. They incorporate special core material completely encapsulated in a plastic material. 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.

Operational Information

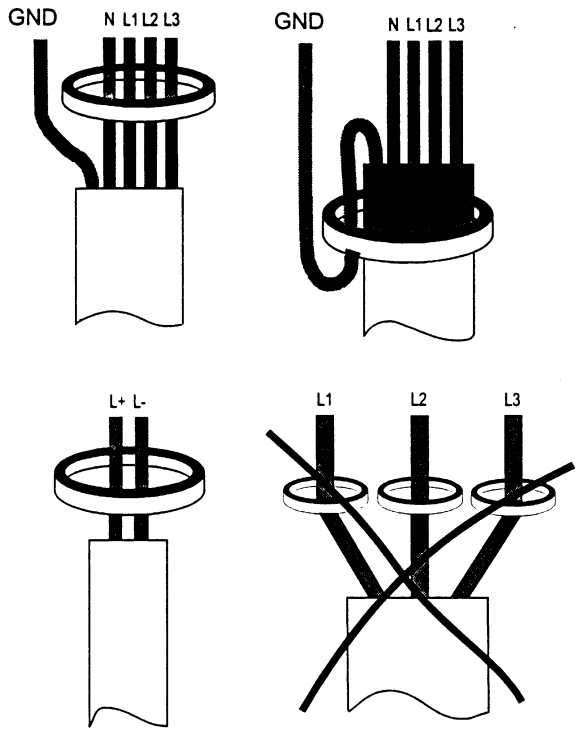
The measuring current transformers W1-S35 ... W5-S210 are highly sensitive and accurate current transformers which convert ground fault leakage currents into a signal that can be processed by either a RCM or EDS based product. Connection to the appropriate device is by two wires [K] and [L] terminals. Depending on the selected type of cable, up to 25 m (80 ft)distance between the current transformer and ground fault evauluator is allowed. It is essential that all circuit conductors of the appropriate electrical system to be monitored be guided through the current transformer. This would be for example, L1 and N for single phase, L1, L2, L3 and N (if connected) for three-phase systems.

The equipment grounding conductor must always bypass the current transformer when wiring the system conductors through the CT.

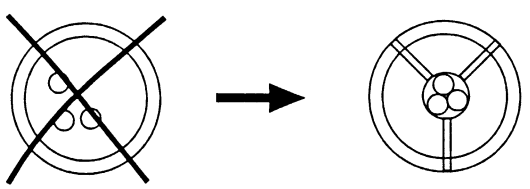
In certain special cases, you may pass just the ground wire through the CT and the system conductors would bypass the current transformer when using the CTs in an RCM application. This should only be considered if the system conductors are too large for the CT.

Bender Inc. - 15 E. Uwchlan Avenue, Bldg. 430 - Exton, PA 19341 - Toll-free: (800) 356-4266 - Fax: (610) 594-8576

Cable routing through the measuring transformer



Avoiding interferences in case of high inrush currents



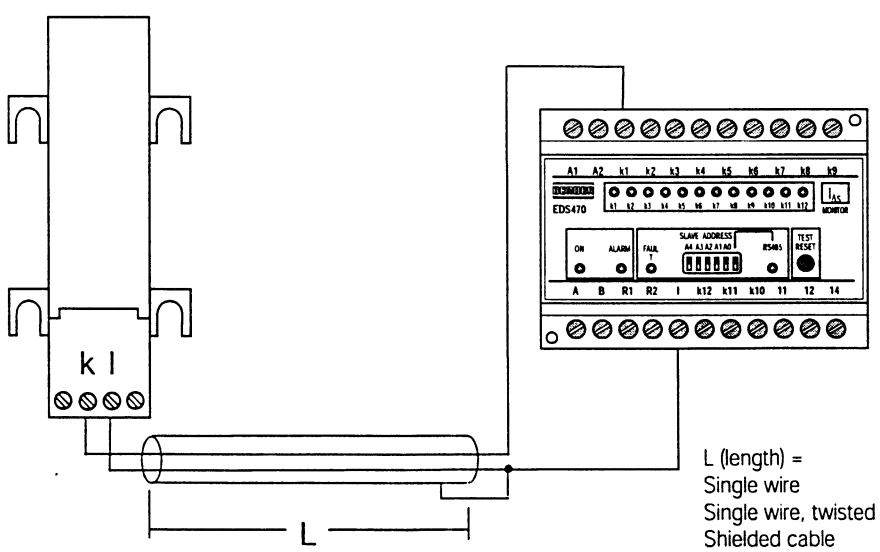
Technical Data W1-S35...W5-S210

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

Ordering Guide

Model	Internal Diameter mm (inches)	Article Number
W1-S35	35mm (1-3/8")	911710
W2-S70	70mm (2-3/4")	911726
W3-S105	105mm (4-1/8")	911727
W4-S140	140mm (5-1/2")	911728
W5-S210	210mm (8-1/4")	911729

Split-core & rectangular current transformers also available



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