

Cable Identifier CI/LCI

Reliable cable selection for de-energised and energised (live) cables

Megger[®]



- Identification and selection of cables
- Well-proven system in the market
- Suitable for MV and LV cables
- Easy to use
- Safe to operate
- Very small and lightweight

DESCRIPTION

The absolutely clear and unambiguous identification of a power cable before cutting or jointing is of great importance for safety. Any mistakes can result in significant property damage, personal injury or even death of the cable technician. Additionally, an incident will often cause unplanned in-service outages for connected customers. The CI/LCI system has been developed to make the task of cable identification and selection considerably safer and easier.

The system consists of a generator unit that sends defined impulses, and a receiver unit. This receiver CI RX is connected via a flex clamp (AZF 150-CI or AZF 250-CI) in order to decouple the transmitter signal sent by the generator into the cable that is supposed to be identified. This generator CI TX-2 transmits single pulses with a peak current of up to 100 A. The current flow of the impulses causes an electromagnetic field with a well-defined polarity around the connected power cable, which gets picked up by the flex coupler of the receiver CI RX, and which is automatically synchronised and displayed on the LED indicator scale. The only adjustment is the displayed signal sensitivity.

The following parameters are evaluated to distinguish the useful signal from interference:

- Impulse shape
- Polarity
- Amplitude
- Frequency (interval of 2 s)

The combination of using a directional clamp and the impulse parameter monitoring provides a safe and consistent cable identification and selection, regardless of any interferences.

The user only has to check the displayed signals for plausibility, i.e. typically only one of the conductors or cores has got the correct polarity while all other cables have the opposite polarity (search for the "odd one out" or for "no signal").

Any deviations from this situation must be addressed immediately by checking the whole setup.

CABLE IDENTIFIER CI/LCI

Reliable cable selection for de-energised and energised (live) cables

TECHNICAL DATA

Transmitter for identification on de-energised cables CI TX-2

Pulse voltage	55 VDC
Pulse current	max. 100 A
Pulse sequence	30 min ⁻¹
Pulse width	72 ms
Power supply	100 ... 240 VAC; 50/60 Hz; 12 VDC rechargeable battery
Operating time	4 h (Li-ion rech. battery)
Charging time	6 h
Weight	1,6 kg
Dimensions (W x H x D)	201 x 120 x 80 mm
Protection class	IP 54
Operating temperature range	- 10 °C ... + 60 °C
Storage temperature range	- 10 °C ... + 60 °C
Relative humidity	93 % at 30 °C (non-condensing)

Transmitter for identification on energised cables LCI TX-2 (100-440 V)

Operating voltage	100 ... 440 VAC; 50/60 Hz
Pulse current	80 A
Pulse sequence	30 min ⁻¹
Pulse width	1,5 ms
Weight	0,5 kg
Dimensions (W x H x D)	151 x 101 x 60 mm
Protection class	IP 54
Operating temperature range	- 10 °C ... + 60 °C
Storage temperature range	- 10 °C ... + 60 °C
Relative humidity	93 % at 30 °C (non-condensing)

Universal-receiver CI RX

Sensor	Flex coupler dia. approx. 150 or 250 mm
Amplifier setting	3 ... 24 dB in 10 steps
Power supply	2 x 1,5 V AA batteries
Operating time	> 50 h
Weight	0,4 kg
Dimensions (W x H x D)	150 x 65 x 35 mm
Protection class	IP 54
Operating temperature range	- 10 °C ... + 60 °C
Storage temperature range	- 10 °C ... + 60 °C
Relative humidity	93 % at 30 °C (non-condensing)

CABLE IDENTIFIER CI/LCI

Reliable cable selection for de-energised and energised (live) cables



CI TX-2 – transmitter for de-energised cables



LCI TX-2 – transmitter for energised cables (100-440 V)



CI RX – universal receiver



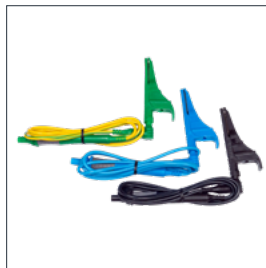
Complete set CI/LCI



TFS CI – twisted field sensor



Lead kit for CI TX-2



Lead kit for LCI TX-2



Flexible clamps AZF 150-CI,
AZF 250-CI



Transport case

There are different sets available offering various combinations of CI TX-2 and LCI TX-2. There is also a free choice of flexible clamps and for the type of mains plug. The scope of delivery includes CI RX receiver, TFS CI twisted field sensor, and lead kit in a transport case.

Optional accessories



SZ-80 set
Transmitter clamp for CI TX-2
generator



PAS CI
Phase identification sensor



MK 37 (EU, UK, US, AUS/CN)
Test lead for connection of
LCI TX-2 to power outlet



MK 55
Test lead with NH-tap (00-03)
for LCI TX-2

CABLE IDENTIFIER CI/LCI

Reliable cable selection for de-energised and energised (live) cables

ORDERING INFORMATION		
	Product (please select one set)	Order no.
	CI-VS-2, Sales set Consisting of: CI TX-2 transmitter, CI RX receiver, twisted field sensor TFS CI, fused lead kit for CI TX-2, mains cable and transport case	1017399
	LCI 440-VS-2, Sales set Consisting of: LCI TX-2 transmitter 100-240 V, CI RX receiver, twisted field sensor TFS CI, fused lead kit for LCI TX-2 and transport case	1017400
	CI / LCI-SET-440-VS-1, Sales set Consisting of: CI TX-2 transmitter and LCI TX-2 transmitter 100-440 V, CI RX receiver, twisted field sensor TFS CI, fused lead kit for CI TX-2 and LCI TX-2, transport case	1017401

	 Flexible clamp (please select at least one flex converter per set)	Order no.
	Flexible clamp AZF 150-CI, 120 mm	820013106
	Flexible clamp AZF 250-CI, 230 mm	820013107

	 Mains cable (only needed for sets containing CI) (please select only one)	Order no.
	Mains cable EU (plug)	90020175
	Mains cable UK (plug)	2008761
	Mains cable US (plug)	2008762

ORDERING INFORMATION		
	Optional accessories	Order no.
	Transmitter clamp for CI TX-2 transmitter, SZ-80 set	2007615
	Phase identification sensor PAS CI	820014535
	Test lead for connection of LCI TX-2 to power outlet, EU version, MK 37-EU	118304682
	Test lead for connection of LCI TX-2 to power outlet, UK version, MK 37-UK	90020744
	Test lead for connection of LCI TX-2 to power outlet, US version, MK 37-US	90020743
	Test lead for connection of LCI TX-2 to power outlet, AUS/CN version, MK 37-AUS/CN	2011453
	Test lead with NH-tap (00-03) for LCI TX-2, MK 55	820025178

The information in this document is subject to change without notice and should not be construed as a commitment by Megger Germany. Megger Germany assumes no responsibility for any errors that may appear in this document.