

KC-C series long test leads

Wind turbine lightning protection low current test lead sets (2 A)



- Designed to work with DLRO2 series
- Unique lightweight and versatile design ideal for difficult testing tasks
- Cable reels in two lengths KC100C (328 ft) and KC50C (164 ft)
- 50 m extension (KC50E) allows up to 656 ft testing with the DLRO2 long test lead mode
- Allows easy and reliable measurement of lightning protection circuit resistance of tall structures
- Easy to use click-to-lock connectors rated IP68
- Ideal for testing low resistance on wind turbines, railways and long cables

DESCRIPTION

The KC-C test leads are updated versions of the popular KC series test leads that now take advantage of the long test lead mode on the DLRO2. The DLRO2's ability to test with up to 3.2Ω total resistance at 1 A means the KC-C series of leads can be much smaller and lighter, a distinct safety enhancement when working at heights associated with wind turbine towers. The KC100C cable reel weighs in at a low 16.8 lb, compared to the nearly 33 lb weight of the KC100 cable reel.

The KC100C and KC50C lead sets consist of two leads, a short one 9.8 ft long, and a long one on a cable drum. On the end of each test lead there is an IP68 rated (when connected), click locking connector. This allows the terminations to be fitted on either end of the test leads, and the instrument connections are interchangeable with the test connections.



The lead sets are supplied with the following:

- One 164 or 328 ft cable reel fitted with male connectors
- One short 9.8 ft test lead fitted with male connectors
- One Kelvin probe fitted with short female connector
- One large Kelvin clamp fitted with short female connector
- Two right angled 0.15 inch test terminals to fit the DLRO2 series

The KC50E is an extension reel to fit either the KC50C or KC100C lead sets. One end of the test lead is fitted with an IP54 rated male connector and the other is fitted with a female connector. When the two are joined and locked together the connector becomes IP68 rated.



In use, the extension reel would be unwound first, the cable disconnected from the from cable drum, and then connected to either a KC100C or KC50C. The cable can then continue to be paid out in the normal fashion.

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FEATURES AND BENEFITS

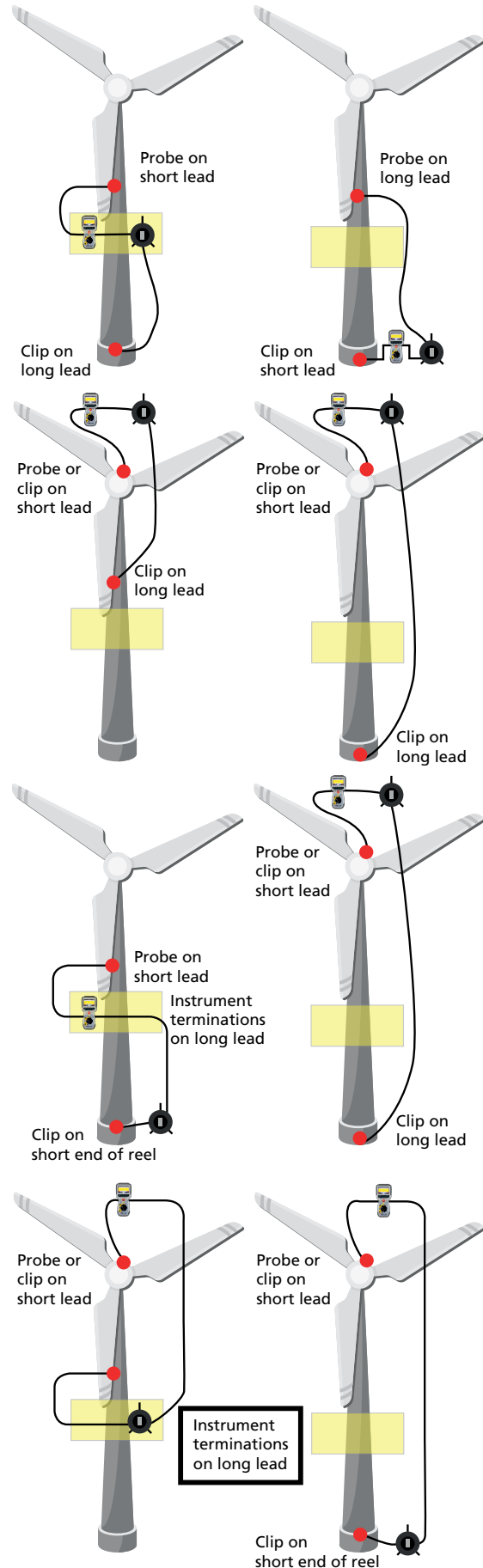
- Designed for use with the DLRO2 that provides an easy to use dedicated long test lead mode
- Instrument terminations coloured red and black to suit DLRO2 terminals
- Lightweight design with thinner cable. Less weight greatly improves safety when working from height
- IP68 for working outdoors (when connectors are locked together)
- Click to lock connectors



To connect simply align and push together until you feel a positive click. Due to the water proofing seals a reasonable amount of force may be required.

To release, pull sleeve back and pull connector apart

- Fully interchangeable instrument connections and test terminations provide complete flexibility. Especially useful when testing wind turbines, with many possible ways of working as illustrated in the following diagrams



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APPLICATIONS

- Testing the lightning protection of a wind turbine
- Testing lightning and static protection on airplanes
- Testing cables on subsea cable laying applications
- Any application measuring low resistance on applications that require very long test leads

SPECIFICATIONS

DIMENSIONS

KC100C lead set

- Cable reel lead length 328 ft
- Short test lead 9.8 ft
- Test cable diameter 1/4 inch
- Kelvin probe distance between tips 0.19 inch
 - Kelvin probe tips are spring loaded, hardened, sharp, gold plated
- Kelvin clamp jaw capacity 1.38 inch
- Right angled shrouded instrument test terminations black and red 0.15 inch

KC50C lead set

- Cable reel lead 164 ft
- Short test lead 9.8 ft
- Test cable diameter 1/4 inch
- Kelvin probe distance between tips 0.19 inch
 - Kelvin probe tips are spring loaded, hardened, sharp, gold plated
- Kelvin clamp jaw capacity 1.38 inch
- Right angled shrouded instrument test terminations black and red 0.15 inch

KC50E Extension lead

- Cable reel lead 164 ft
- Test cable diameter 1/4 inch

WEIGHTS

KIT Name	Weight of Cable Reel	Weight With Accessories
KC50C	9.7 lbs	11.4 lbs
KC100C	16.8 lbs	18.4 lbs
KC50E	9.7 lbs	N/A

TEST LEAD RESISTANCE

Cable Reel	Accessories	Resistance (P)	Resistance (C)
KC50C or KC50E	0.15 in. Terminals / Probe	1.6 Ω	0.6 Ω
	0.15 in. Terminals / Kelvin Clamp	1.6 Ω	0.6 Ω
KC100C	0.15 in. Terminals / Probe	2.1 Ω	1.1 Ω
	0.15 in. Terminals / Kelvin Clamp	2.1 Ω	1.1 Ω
KC100C + KC50E	0.15 in. Terminals / Probe	2.5 Ω	1.5 Ω

Safety

Max <30 V working maximum

Environment

Leads IP68 when connected, IP54 when unconnected

ACCESSORIES

- Hook terminations to allow connection to DLRO10 range (1 A testing only up to 492 ft length)
- Replacement probe tips
- Kelvin clamp termination
- Kelvin probe termination

ORDERING INFORMATION

Description	Part number	Additional Accessories	Part number
KC50C-KIT Kelvin clamp/probe reel (164 ft)	1013-211	KC lead spare Kelvin clamp termination	1013-794
KC100C-KIT Kelvin clamp/probe reel (328 ft)	1013-212	KC lead spare Kelvin probe termination	1013-793
KC50E Extension reel (164 ft)	1013-213	KC spare 9.8 ft test lead female to female terminations	1013-791
		KC spare 0.15 inch plug termination lead (1 off)	1013-792
		Straight hook termination for DLRO10 range	1007-036