Product Performance Tests - To be performed by suitably qualified personnel only.

Note: All products are tested prior to leaving the factory. Testing is only recommended if the UTB is suspected of receiving surge damage. Field testing can be performed on any of the UTB models with a multimeter set to resistance mode.

The UTB can be tested using a multi meter, however these tests will not indicate the clamping performance of the device. To test the clamping performance, the use of multimeter and the Critec MOV and Gas Arrester Tester is recommended. Ensure that all cabling is disconnected from the UTB prior to performing any tests on the UTB.

The tables below show the results that should be expected for each of the UTB models.

Multimeter Testing

	L_1 (in)	L_1 (out)	L_2 (in)	L_2 (out)	GND
L_1 (in)		<0.6Ω[a]	>1MΩ	>1MΩ	>1MΩ
L_1 (out)	<0.6Ω[a]		>1MΩ	>1MΩ	>1MΩ
L_2 (in)	>1MΩ	>1MΩ		<0.6Ω[a]	>1MΩ
L_2 (out)	>1MΩ	>1MΩ	<0.6Ω[a]		>1MΩ
GND	>1MΩ	>1MΩ	>1MΩ	>1MΩ	

(a) Model dependent :

<0.6Ω for UTB-9, -18, and -36

≈21Ω for UTB-72,-100, -140, and -200

≈8-12Ω for UTB-S (matched ±1Ω)

Critec MOV and Gas Arrester Tester Testing[d]

	L_1 (in)	L_1 (out)	L_2 (in)	L_2 (out)	GND
L_1 (in)			≈36V[b]	≈36V[b]	≈82V[c]
L_1 (out)			≈36V[b]	≈36V[b]	≈82V[c]
L_2 (in)	≈36V[b]	≈36V[b]			≈82V[c]
L_2 (out)	≈36V[b]	≈36V[b]			≈82V[c]
GND	≈82V[c]	≈82V[c]	≈82V[c]	≈82V[c]	

(b) Model dependent :
Clamp voltage dependent on model number
≈230V for UTB-S

(c) Model dependent :
≈82V for UTB-9, -18, -36, and -72

≈230V for UTB-100, -140, -200, and -S

(d) Set tester to MOV mode except when testing the UTB-S model from each Line-GND

Special Note

The UTB you have installed provides protection to your equipment from the damaging effects of surges on communications and low voltage secondary power cables. Damage to equipment can also occur due to surges entering your equipment via mains voltage power cabling. ERICO Lightning Technologies recommend the installation of mains power surge diverters (such as the Critec DINLINE series) to further reduce the risk of damage. This is particularly necessary where building point of entry surge reduction filters (such as the PROLINE series) are not installed.

Consideration should be given to installing suitable building point of entry protection (Critec Proline Series of filters) or, installing mains power protection close to the power feed to you equipment. Please consult your Critec representative for advice.

Manufactured by

ERICO LIGHTNING TECHNOLOGIES PTY LTD

Technopark, Dowsings Point, Tasmania Australia.
GPO Box 536, Hobart 7001, Australia
Telephone: 61 (0) 3 6237 3200 • Fax: 61 (0) 3 6273 0399

The Erico Lightning Technologies Pty Ltd group of companies, has attained international certification to ISO 9002

HB-HBCR-098

CRITEC UTB
Universal Transient Barrier
INSTALLATION GUIDE

Note: It is most important that the UTB is installed by suitably qualified personnel. If the UTB is installed without a suitable earth, or the "Line Side" and "Equipment Side" are reversed, damage may result to the UTB under surge conditions.

UTB INSTALLATION INSTRUCTIONS

CRITEC **UTB**

1. If necessary, remove Critec Rail Mounting Adaptor (see figure1) from the UTB by using figure 3 as a guide.

2a. Attach the UTB directly to the dinrail TS35 (Top Hat) mounting rail (see fig.4).

OR,

2b. If necessary attach the UTB to the Critec Rail Mounting Adaptor (see figure 1) by using figure 3 as a guide. Attach the UTB and the Critec Mounting Rail Adaptor to either -
TS32 (G Profile) TS15 (Miniature Top Hat)

OR,

2c. Attach the Critec Screw Mounting Adaptor (see figure 2) to either TAS20 or Critec Proprietary mounting rail.

OR,

2d. Fix the Critec Screw Terminal Adaptor (see figure 2) to a suitable solid surface, then attach the UTB using figure 5 as a guide.

3. Identify the earth connection indicated by ( ) on the UTB. Connect suitable 4mm cable (see fig. 6) to an earth point installed as per recommended Lightning Protection Standards. Please contact your local Critec representative if guidance is required.

Figure 1.
Critec Rail Mount Adaptor

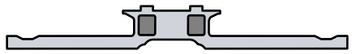

Figure 2.
Critec Screw Mount Adaptor

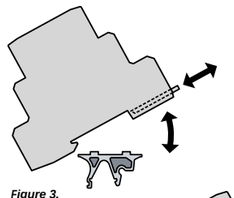

Figure 3.

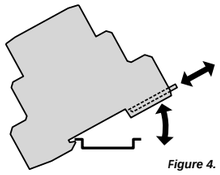

Figure 4.

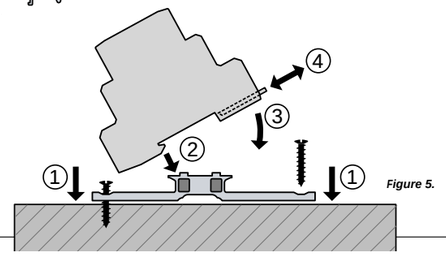

Figure 5.

4. For multiple product installations, loop the 4mm wire from product to product as shown in figure 7.

5. Identify the "Line Side" ( ) of the UTB. Connect the "Line Side" of the UTB to the 'exposed' incoming cabling, that is, toward the direction from which a surge is likely travel. (see figure 6).

6. Identify the "Equipment Side" of the UTB. Connect the cabling from the equipment to be protected to the "Equipment Side" of the UTB (see figure 6)

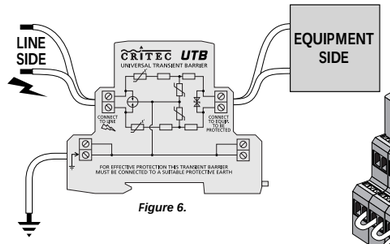

Figure 6.

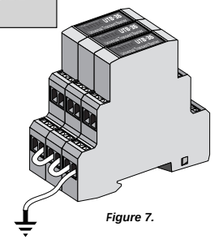

Figure 7.