## **ERICO® INTERCEPTOR Terminal Testing** SI25i, SI40i, and SI60i Series

The procedure below is to provide guidance for testing of the ERICO INTERCEPTOR SI25i, SI40i and SI60i air terminals using commonly available test equipment.

Tester unit can either be: "U1731C" or equivalent. Clips must be large enough to grip the 28 mm terminal.

## Procedure to test ERICO INTERCEPTOR Air Terminals SIXXi range:

- A) Connect 2 wiring leads into the positive (+) and negative terminals (-) [B in Figure 1] of the tester unit.
- B) Connect the clips to the air terminal as shown, making sure that:
  - 1. The electrical contact is good between the clips and terminal (no grease or polluting material).
  - 2. Both clips are connected on 2 distinct parts of the air terminal to test, one on the tip section of the air terminal, the other on the housing (see photo below).



- B) Switch ON the tester unit ("POWER" switch) [E in Figure 1]. The default frequency is 1 kHz, in the opposite case; press the "Freq" [D in Figure 1] button until frequency is shown as 1 kHz.
- C) Set the tester unit in the inductance measurement mode pressing "ZLCR" button [C in Figure 1]. Screen must show an L. Read and note the L value on the Table 1. This value named X<sub>L</sub> is usually a number with a comma. H (Henry) is the unit.
- D) Set the tester unit in the capacitance measurement mode pressing "ZLCR" button [C in Figure 1]. Screen must show a C. Read and note the C value on the Table 1. This value named X<sub>C</sub> is usually a number with a comma. nF (nano-Farad, 10<sup>-9</sup> Farad) is the unit.
- E) Switch OFF the tester unit ("POWER" switch).

(Instructions continued on page 2.)

ERICO products shall be installed and used only as indicated in ERICO product instruction sheets and training materials. Instruction sheets are available at <a href="https://www.erico.com">www.erico.com</a> and from your ERICO customer service representative.

2. ERICO products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.

All instructions must be completely followed to ensure proper and safe installation and performance. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury

SAFETY INSTRUCTIONS: All governing codes and regulations and those required by the job site must be observed. Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

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F) Compare the recorded values to the range shown in the table below:

		X <sub>L</sub> (H)			X <sub>C</sub> (ηF)		
	Min	Recorded value	Max	Min	Recorded value	Max	
SIXX	23.0		36.0	0.5		1.5	

Table 1: Range for SIXXi testing

If both  $X_L$  and  $X_C$  are within the range shown in the Table 1, the air terminal tested functioning properly.

If either  $X_L$  and  $X_C$  are not within the range shown in the Table 1, proceed to the following:

- Make sure the air terminal tested is a genuine ERICO INTERCEPTOR of the SIXXi range, any copy or previous model will not register the same characteristics.
- Make sure measurements are done at a temperature of 20°C (± 5°C). The measurements proposed are influenced by the temperature.
- Make sure connections are clean, free of any grease or polluting material, and that no visible damage to the terminal can be detected.

If the above procedures have been done and either  $X_L$  and  $X_C$  are not within the range shown in Table 1, it does not definitively indicate that the air terminal has a dysfunction. There may be an issue from measurement. Contact your ERICO representative for additional information.



Figure 1: U1731C

A: Digital Screen

B: Positive and negative terminals for wire connection

C: Changing measurement button (to move from L to C)

D: Changing frequency button (to change frequency)

E: Power switch

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