

# ITX-A

## Series Circuit Isolation Transformer



### Compliance with Standards

FAA	AC 150/5345-47 (Current Edition) ETL Certified
IEC	IEC 61823:2002

### Uses

Designed for use in airfield lighting systems to isolate low voltage light fixtures from the high voltages in airfield series lighting circuits. The primary winding of the transformer is connected to a 6.6 A high voltage series circuit supplied by a constant current regulator. The secondary winding of the transformer delivers an isolated 6.6 A low voltage to the light.

The isolation transformer electrically isolates the high voltage primary and low voltage secondary winding to ensure continuity of the series circuit even if a light has been disconnected or has failed (commonly due to lamp failure).

Series circuit components and connectors must be installed as per the recommendations shown in FAA AC 150/5340-30 (latest revision) or local regulatory requirements. There are many installation variables outside the control of ADB Safegate that may affect the overall circuit insulation resistance.

### Features

- High voltage isolation between the primary/secondary windings
- Insulation voltage rating 5000 Vac
- Waterproof encapsulated body with molded on cable leads
- Factory-molded L-823 plugs and receptacles provide quick and easy connections
- Molded on secondary FAA L-823 style 8, two-socket contact receptacle lead for frangible mounting, 12 AWG 600 Vac
- Molded primary FAA L-823 Style 2 plug and Style 9 receptacle leads, 8 AWG (minimum 6 mm<sup>2</sup>) 5,000 Vac
- Reinforced construction to withstand the rugged airfield conditions
- Fully encapsulated design can be safely immersed in water and suitable for direct bury use
- Chemical resistance: Acid, alkali, and oil-resistant design is safe for deicing fluids and other common fluids found on an airfield
- UV-resistant design is safe for exposure to sunlight
- Temperature-resistant design is safe for use at -67 to +149 °F (-55 to +65 °C)
- Made in Columbus Ohio, USA and meets the requirements for Buy American Preference

### Ordering Code

	Rated Watts	Primary Current	Secondary Current	Frequency	Earthing	Secondary Lead	
1ST	□□□	□□	□□	□□	□□	□□	001

#### Rated Watts

- 010 = 10/15 W
- 020 = 20/25 W
- 045 = 30/45 W
- 065 = 65 W
- 100 = 100 W
- 150 = 150 W
- 200 = 200 W
- 300 = 300 W
- 500 = 500 W

#### Primary Current

- 6 = 6.6 A
- 2 = 20 A<sup>1</sup>

#### Secondary Current

- 6 = 6.6 A
- 2 = 20 A<sup>1</sup>

#### Frequency

- 5 = 50 Hz<sup>1</sup>
- 6 = 60 Hz

#### Earthing

- 0 = Without earth connection
- G = IEC ground/earth connection<sup>2</sup>

#### Secondary Lead

- 1 = 48 in (1219 mm) Style 8

### Ordering Code Notes

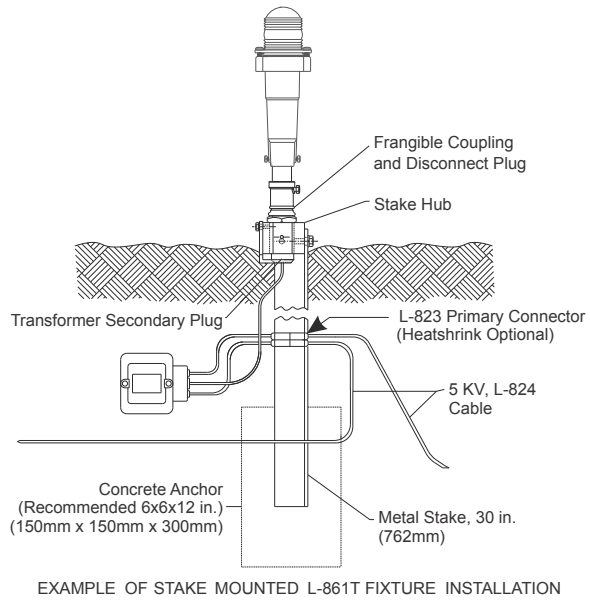
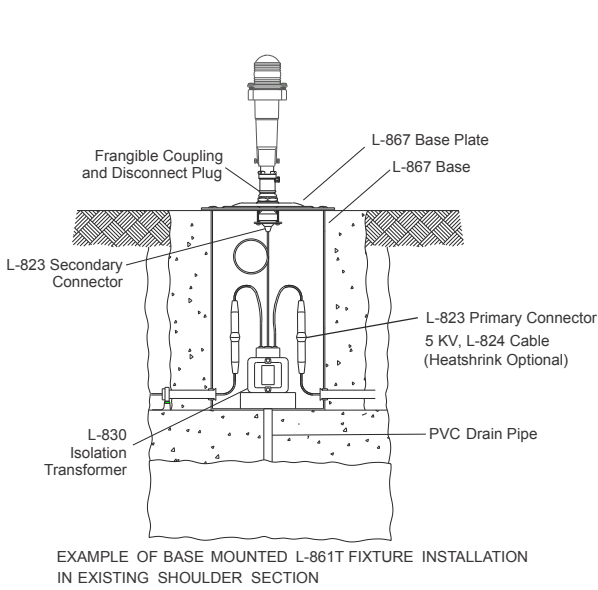
<sup>1</sup> Not ETL certified, other certification is available.

<sup>2</sup> Only available for 50 Hz isolation transformers.

### General Notes

ADB Safegate is not responsible for series circuit insulation resistance requirements above the limits defined in FAA AC 150/5340-30 or AC 150/5340-26 (latest revisions).

## Installation Examples



## Characteristics

Wattage	FAA Type 60Hz	Primary current (A)	Secondary current (A)	Minimum Efficiency (%) <sup>1</sup>	Secondary Maximum Open-Circuit Voltage - VRMS	Weight 60Hz - lb (kg)	Weight 50Hz - lb (kg)
10/15	L-830-16	6.6	6.6	70	8.0	2.6 (1.2)	2.8 (1.3)
20/25	L-830-17	6.6	6.6	70	8.0	3.2 (1.4)	3.3 (1.5)
30/45	L-830-1	6.6	6.6	80	25	4.6 (2.1)	4.7 (2.1)
65	L-830-3	6.6	6.6	80	30	4.8 (2.2)	5.1 (2.3)
100	L-830-4	6.6	6.6	85	70	6.7 (3.0)	6.7 (3.0)
150	L-830-18	6.6	6.6	85	70	6.8 (3.1)	10.0 (4.5)
200	L-830-6	6.6	6.6	90	100	10.4 (4.7)	11.8 (5.4)
300	L-830-10	6.6	6.6	90	135	15.1 (6.9)	17.5 (7.9)
500	L-830-14	6.6	6.6	90	230	15.4 (7.0)	17.7 (8.0)
30/45	L-830-2	20	6.6	80	25	4.7 (2.1)	-
65	N/A	20	6.6	80	30	4.6 (2.1)	-
100	L-830-5	20	6.6	85	70	6.6 (3.0)	-
150	L-830-19	20	6.6	85	70	9.7 (4.4)	-
200	L-830-7	20	6.6	90	100	10.1 (4.6)	-
300	L-830-8	6.6	20	90	70	14.5 (6.6)	-
300	L-830-9	20	20	90	70	15.1 (6.8)	-
300	L-830-11	20	6.6	90	135	14.6 (6.6)	-
500	L-830-12	6.6	20	90	70	15.2 (6.9)	-
500	L-830-13	20	20	90	70	18.4 (8.3)	-
500	L-830-15	20	6.6	90	230	14.8 (6.7)	-

<sup>1</sup> Minimum power factor is 0.95 and minimum efficiency is as stated at 6.6 A input, at rated resistive load.