

TRANSFORMERS & CABLES

ITX

L-830/L-831 Series Circuit Isolation Transformers



Compliance with Standards

- FAA:** L-830 and L-831 AC 150/5345-47 (Current Edition)
- ICAO:** Aerodrome Design Manual, Part 5 para. 3.2.1.7a
- MIL:** MIL-T-27535A
- CSA:** C 22.2 No. 180

Uses

Designed for use in airfield lighting systems to isolate low-voltage lamps from the high operating voltages present on airfield series lighting circuits.

Features

- Quick and easy connection by means of factory-molded L-823 plugs and receptacles. Canadian transformers are designed to also accept Amerace 54Super type primary kits.
- Two single-conductor primary cables (8 AWG, 5,000 V) with a molded Style 2 plug on one lead and a molded Style 9 receptacle on the other lead; one two-conductor secondary cable (12 AWG 600 V) with Style 8 two-pin receptacle
- Complete water tightness – Cables are an integral part of the transformer and their sheath is molded in the transformer body
- May be buried directly in the ground, exposed to the sun, immersed in water, and exposed to other weather elements
- The outer molded jacket is acid-, alkali-, and oil-resistant and also resists deicing fluids, ozone, and UV radiation

Electrical Supply

- Operates at 60 Hz (L-830) or 50 Hz (L-831) on series circuits rated up to 5,000 VAC

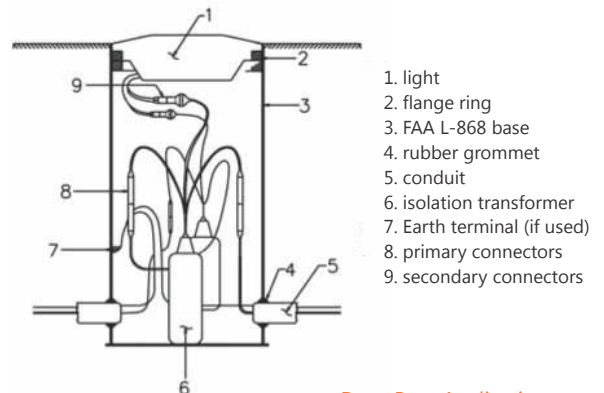
The primary windings of the transformer are connected in a 6.6 A or 20 A series circuit supplied by a constant current regulator. The continuity of the series lighting loop is maintained even if one or more lamps supplied by individual isolation transformer secondaries are open-circuited due to lamp failures. In addition, there is a complete separation of the high-voltage primary and low-voltage secondary windings.

Additional Isolation Transformers

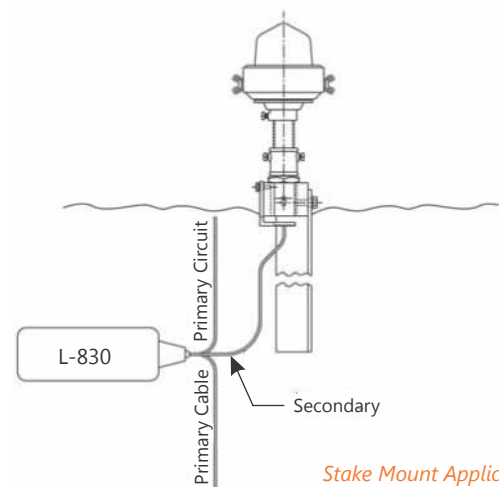
ADB Safegate is an approved OEM supplier of Amerace and Integro Isolation Transformers. If you would like information on transformers

not described in this data sheet, please contact the ADB Safegate Sales Department.

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



Deep Base Application



Stake Mount Application

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L-830 Isolation Transformers Ordering Codes

Style*	Rated Watts	Hz	Prim. Amps	Sec. Amps	Eff. Min. at 20°C	Part No.
L-830-16	10/15	60	6.6	6.6	70%	35A0578
L-830-17	20/25	60	6.6	6.6	70%	35A0617
L-830-1	30/45	60	6.6	6.6	80%	35C0077
L-830-2	30/45	60	20	6.6	80%	35C0078
L-830-3	65	60	6.6	6.6	80%	35C0092
L-830-4	100	60	6.6	6.6	85%	35C0080
L-830-5	100	60	20	6.6	85%	35C0081
L-830-18	150	60	6.6	6.6	85%	35A0650
L-830-19	150	60	20	6.6	85%	35A0651
L-830-6	200	60	6.6	6.6	90%	35C0082
L-830-7	200	60	20	6.6	90%	35C0083
L-830-8	300	60	6.6	20	90%	35C0084
L-830-9	300	60	20	20	90%	35C0085
L-830-10	300	60	6.6	6.6	90%	35C0086
L-830-11	300	60	20	6.6	90%	35C0087
L-830-12	500	60	6.6	20	90%	35C0088
L-830-13	500	60	20	20	90%	35C0089
L-830-14	500	60	6.6	6.6	90%	35A0224
L-830-15	500	60	20	6.6	90%	35A0228

Notes

* All FAA-recognized L-830 isolation transformers listed are ETL Certified

L-831 Isolation Transformers Ordering Codes

Style*	Rated Watts	Hz	Prim. Amps	Sec. Amps	Eff. Min. at 20°C	Part No.
L-831-16	10/15	50	6.6	6.6	70%	35A0667
L-831-17	20/25	50	6.6	6.6	70%	35A0668
L-831-1	30/45	50	6.6	6.6	80%	35C0077/1
L-831-2	30/45	50	20	6.6	80%	35C0078/1
L-831-3	65	50	6.6	6.6	80%	35C0079/1
L-831-4	100	50	6.6	6.6	85%	35C0080/1
L-831-5	100	50	20	6.6	85%	35C0081/1
L-831-18	150	50	6.6	6.6	85%	35A0652
L-831-19	150	50	20	6.6	85%	35A0653
L-831-6	200	50	6.6	6.6	90%	35C0082/1
L-831-7	200	50	20	6.6	90%	35C0083/1
L-831-8	300	50	6.6	20	90%	35C0084/1
L-831-9	300	50	20	20	90%	35C0085/1
L-831-10	300	50	6.6	6.6	90%	35C0086/1
L-831-11	300	50	20	6.6	90%	35C0087/1
L-831-12	500	50	6.6	20	90%	35C0088/1
L-831-14	500	50	6.6	6.6	90%	35A0224/1

Notes

* All FAA-recognized L-831 isolation transformers listed are ETL Certified

Canadian Isolation Transformers Ordering Code

Certification	Rated Watts	Hz	Prim. Amps	Sec. Amps	Part No.
CSA	10/15	60	6.6	6.6	CTAG010666-01 ¹
CSA	25	60	6.6	6.6	CTAG025666-01 ¹
CSA	30/45	60	6.6	6.6	CTAG045666-01
	45	60	6.6	6.6	STAG045666-01 ^{1, 2}
CSA	65	60	6.6	6.6	CTAG065666-01
CSA	100	60	6.6	6.6	CTAG100666-01
	100	60	6.6	6.6	STAG100666-01 ^{1, 2}
CSA	150	60	6.6	6.6	CTAG150666-01
CSA	200	60	6.6	6.6	CTAG200666-01
CSA	250	60	6.6	20	CTAG250626-01
CSA	300	60	6.6	6.6	CTAG300666-01 ¹
	500	60	6.6	6.6	TAG500666-01CS058 ¹

Notes

¹ With CSA type ground

² Saturation-type isolating transformers

Packaging

Style	Part No.	Avg Wgt lb(kg)	Package Size in (cm)
L-830-16 L-831-16	35A0578 35A0667	4.8 (2.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-17 L-831-17	35A0617 35A0668	4.8 (2.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-1 L-831-1	35C0077 35C0077-1	7.0 (3.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-2 L-831-2	35C0078 35C0078-1	7.0 (3.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-3 L-831-3	35C0092 35C0079-1	10.0 (4.6)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-4 L-831-4	35C0080 35C0080-1	11.5 (5.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-5 L-831-5	35C0081 35C0081-1	11.5 (5.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-18 L-831-18	35A0650 35A0652	13.5 (5.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-19 L-831-19	35A0651 35A0653	13.5 (5.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-6 L-831-6	35C0082 35C0082-1	13.5 (6.1)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-7 L-831-7	35C0083 35C0083-1	13.5 (6.1)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-8 L-831-8	35C0084 35C0084-1	23.5 (10.7)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-9 L-831-9	35C0085 35C0085-1	23.5 (10.7)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-10 L-831-10	35C0086 35C0086-1	23.5 (10.7)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-11 L-831-11	35C0087 35C0087-1	23.5 (10.7)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-12 L-831-12	35C0088 35C0088-1	28.0 (12.7)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-13	35C0089	28.0 (12.7)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-14 L-831-14	35A0224 35A0224-1	18.0 (8.2)	12 × 10 × 10 (30.5 × 25.4 × 25.4)
L-830-15	35A0228	18.0 (8.4)	12 × 10 × 10 (30.5 × 25.4 × 25.4)

Note: Actual shipping weight may vary by specific manufacturer's transformer. Some orders are bulk shipped in a single container.