

Amerace[®] Airfield Lighting





Amerace® Airfield Lighting

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Overview

Series Isolating Transformers

Mechanical

Core	Flat laminations (E&I) of high-grade, grain-oriented silicon steel for a long, stable life.
Encapsulant	TPR rubber (also known as TPV, TPE). Much higher dielectric strength and lower water absorption than older materials, such as epoxy, neoprene or polychloroprene. Minimal swelling in the presence of hydrocarbons, unlike neoprene, polychloroprene, etc.
Encapsulation process	Injection molding for maximum consistency of encapsulation, yielding exceptionally low leakage currents. Vacuum drawing prior to injection prevents air pockets inside. A far superior process to compression or transfer molding, or pouring.
Winding	Magnet wire on a plastic bobbin, specifically designed to electrically isolate the primary and secondary windings for maximum safety.
Connector pins and sockets	Tellurium copper, tin plated for corrosion resistance and excellent electrical power transmission.
Primary cables	Cable is AWG #8 (8.3 mm ²) Type C TPR for maximum reliability, 0.6 meter (24") with FAA Style 2 and FAA Style 9 connectors.
Secondary cable	Cable is AWG 2/12 (3.3 mm ²), 1.2 meters (48") with FAA L823 (standard) Style 8 or Style 7 connector.
Material compatibility	Transformer body, cables and connectors are all molded of TPR for perfect bonding.
Water proof	Amerace [®] transformers are designed and manufactured to operate submerged in water indefinitely.

Electrical

Insulation Level	Primary 5000V RMS; Secondary 600V RMS.
Insulation Resistance	 Minimum 7500 Megohms (tested hot with 15kV DC). Typical 150,000 Megohms. Much higher than that required by FAA.
Open Circuit Voltages	Less than three times the full load RMS value in all cases, generally much lower, when tested with sine waves.
Efficiencies	10–25W — min. 70% 45–500W — min. 80% to 95%, depending on the power rating.
Power Factor	> .97 for all.
Ratio	Flat response load curves for constant lamp brilliancy and long life.
Testing	 All units (100%) are hipotted and their ratio confirmed. All ratio testing done with the appropriate frequency, 50 Hz or 60 Hz for precision: no "conversion factors" used

Environmental

Operating Temperature Range	-55° C to +65° C.
Contaminant Resistance	Suitable for areas contaminated with most oils, aircraft fuels, soil acids and alkalis and de-icing fluids; resistant to UV exposure and ozone.
Approvals/ Conformances/ Certification	Accepted in most countries. Formal approvals with FAA, CSA, US Military, STNA (France), etc. Also complies with ICAO and with IEC (a specification being prepared by TC 97). (India Specification IAF: compliance with Spec. No. CRI/ALE/107)
Installation Options	All types, including above ground, in concrete or other non-metallic pits, in metal cans or direct buried.



Thomas&Betts

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Overview

Product Index Guide for Typical Series Lighting Circuit



Lighting — Amerace® Airfield Lighting

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Series Isolating Transformers

Series Isolating Transformers

Amerace manufactures the world's broadest range of series isolating transformers. Many configuration choices are available:

- Nominal Power (watts) 10/15, 20/25, 30/45, 65, 100, 150, 200, 250, 300, 400, 500
- Primary/Secondary Current (A) 4, 4.4, 6.6, 8.3, 12, 20 in many combinations
- Frequency (Hz) 50 or 60 "D" dual rated 50 and 60 Hz

The table **below** shows several available constructions.

Don't see what you want here?

Contact us with your requirements or go to our web site to create your own transformer.





ICAO Style (with Earth Ground)

CONSTRUCTION	EARTHED	SECONDARY CONNECTOR	PRIMARY CONNECTORS
FAA	No	Style 7 or 8	Yes
US Military	No	Style 8	Yes
CSA (Canada)	Yes	Style 8	Yes
ICAO Style	Yes	Style 7 or 8	Yes
UK Style	Yes	Style 7 or 8	No
UK TISE	Yes	Style 7	No
IAF (India)*	No	Style 8	Yes
IEC	No/Yes	Style 7 or 8	Yes

* All molded connector contacts are nickel plated per IAF requirements. Specifications References: FAA-AC No. 150/5345-47 CSA Standard No. C22.2 No. 180 IEC S

1. Secondary Connector configurations: _____-XX

- Suffix -01 denotes FAA Style 8 ("tennis ball")
- Suffix -10 denotes FAA Style 7 (straight)

2. Grounded Transformers:

Unlike the FAA, ICAO recommends that each transformer have an earth (ground) connection for one side of the secondary (large socket, white wire). Any Amerace® transformer can be supplied with an earth stud to meet this recommendation. To specify, add the letter G to the catalog number. For example, a TAO45666-01 would become a TAG045666-01.





FAA Specification L 830 60 Hz

CAT. NO.	FAA Designation	RATED WATTS	PRI/SEC. Amps	FIG. (SEE PAGE I-90)	T DIM. (CM/IN.)	PRIMARY LEAD LENGTH (CM/IN.)	SEC. LEAD Length (m/in.)	WEIGHT (KG)	WEIGHT (LB.)
TA045666-XX	L830-1	30/45	6.6/6.6	2	8.6/3.4	60/24	1.2/48	2.4	5.2
TA045266-XX	L830-2	30/45	20/6.6	2	8.6/3.4	60/24	1.2/48	2.3	5.0
TA065666-XX	L830-3	65	6.6/6.6	2	8.6/3.4	60/24	1.2/48	2.4	5.25
TA10066D-XX	L830-4	100	6.6/6.6	3	8.9/3.5	60/24	1.2/48	3.5	7.7
TA100266-XX	L830-5	100	20/6.6	3	8.9/3.5	60/24	1.2/48	3.6	8.0
TA200666-XX	L830-6	200	6.6/6.6	4	9.1/3.6	60/24	1.2/48	4.9	10.8
TA200266-XX	L830-7	200	20/6.6	4	9.1/3.6	60/24	1.2/48	4.9	108
TA300626-XX	L830-8	300	6.6/20	4	11.4/4.5	60/24	1.2/48	6.9	15.1
TA300226-XX	L830-9	300	20/20	4	11.4/4.5	60/24	1.2/48	7.7	17
TA300666-XX	L830-10	300	6.6/6.6	4	11.4/4.5	60/24	1.2/48	7.2	15.8
TA300266-XX	L830-11	300	20/6.6	4	11.4/4.5	60/24	1.2/48	7.9	17.5
TA500626-XX	L830-12	500	6.6/20	4	12.5/4.9	60/24	1.2/48	8.0	17.6
TA500226-XX	L830-13	500	20/20	4	12.5/4.9	60/24	1.2/48	8.4	18.5
TA500666-XX	L830-14	500	6.6/6.6	4	12.5/4.9	60/24	1.2/48	8.0	17.6
TA500266-XX	L830-15	500	20/6.6	4	12.5/4.9	60/24	1.2/48	8.4	18.5
TA010666-XX	L830-16	10/15	6.6/6.6	1	6.6/2.6	60/24	1.2/48	1.30	2.88
TA025666-XX	L830-17	20/25	6.6/6.6	1	7.8/3.1	60/24	1.2/48	1.45	3.2
TA150666-XX	L830-18	150	6.6/6.6	3	8.9/3.5	60/24	1.2/48	3.6	8.0
TA150266-XX	L830-19	150	20/6.6	4	9.1/3.6	60/24	1.2/48	4.9	10.8

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I-326

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Series Isolating Transformers

Series Isolating Transformers





FAA Specification L 831 50 Hz

TA045665-XX L831-1 30/45 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.4 5 TA045265-XX L831-2 30/45 20/6.6 2 8.6/3.4 60/24 1.2/48 2.3 55 TA065665-XX L831-3 65 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.3 55 TA065665-XX L831-3 65 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.3 55 TA10066D-XX L831-4 100 6.6/6.6 3 8.9/3.5 60/24 1.2/48 3.3 77 TA100265-XX L831-5 100 20/6.6 3 8.9/3.5 60/24 1.2/48 3.6 87 TA200665-XX L831-6 200 6.6/6.6 4 9.9/3.9 60/24 1.2/48 5.9 13 TA300625-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 6.9 13 TA300665-XX	•									
TA045665-XX L831-1 30/45 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.4 5 TA045265-XX L831-2 30/45 20/6.6 2 8.6/3.4 60/24 1.2/48 2.3 55 TA065665-XX L831-3 65 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.3 55 TA065665-XX L831-3 65 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.3 55 TA10066D-XX L831-4 100 6.6/6.6 3 8.9/3.5 60/24 1.2/48 3.3 77 TA100265-XX L831-5 100 20/6.6 3 8.9/3.5 60/24 1.2/48 3.6 87 TA200665-XX L831-6 200 6.6/6.6 4 9.9/3.9 60/24 1.2/48 5.9 13 TA300625-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 6.9 13 TA300665-XX	CAT. NO.		RATED WATTS						WEIGHT (KG)	WEIGHT (LB.)
TA065665-XX L831-3 65 6.6/6.6 2 8.6/3.4 60/24 1.2/48 2.5 5 TA10066D-XX L831-4 100 6.6/6.6 3 8.9/3.5 60/24 1.2/48 3.3 7 TA100265-XX L831-5 100 20/6.6 3 8.9/3.5 60/24 1.2/48 3.6 8 TA200665-XX L831-6 200 6.6/6.6 4 9.9/3.9 60/24 1.2/48 5.6 10 TA200265-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.6 11 TA300265-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.9 11 TA300265-XX L831-8 300 6.6/20 4 11.4/4.5 60/24 1.2/48 6.9 11 TA300265-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 11 TA300265-XX <td< th=""><td>TA045665-XX</td><td>L831-1</td><td>30/45</td><td>6.6/6.6</td><td><u>, , , , , , , , , , , , , , , , , , , </u></td><td><u>, ,</u></td><td>. ,</td><td>. ,</td><td></td><td>5.2</td></td<>	TA045665-XX	L831-1	30/45	6.6/6.6	<u>, , , , , , , , , , , , , , , , , , , </u>	<u>, ,</u>	. ,	. ,		5.2
TA10066D-XX L831-4 100 6.6/6.6 3 8.9/3.5 60/24 1.2/48 3.3 7 TA100265-XX L831-5 100 20/6.6 3 8.9/3.5 60/24 1.2/48 3.6 8 TA200665-XX L831-6 200 6.6/6.6 4 9.9/3.9 60/24 1.2/48 5.6 17 TA200266-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.6 17 TA200266-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.9 17 TA300625-XX L831-8 300 6.6/20 4 11.4/4.5 60/24 1.2/48 6.9 17 TA300255-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 17 TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 17 TA300265-XX	TA045265-XX	L831-2	30/45	20/6.6	2	8.6/3.4	60/24	1.2/48	2.3	5.0
TA100265-XX L831-5 100 20/6.6 3 8.9/3.5 60/24 1.2/48 3.6 8.9 TA200665-XX L831-6 200 6.6/6.6 4 9.9/3.9 60/24 1.2/48 5.6 11 TA200265-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.6 11 TA2002265-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.9 11 TA300225-XX L831-8 300 6.6/20 4 11.4/4.5 60/24 1.2/48 6.9 11 TA300225-XX L831-9 300 20/20 4 11.4/4.5 60/24 1.2/48 7.9 11 TA300265-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 11 TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 11 TA500625-XX	TA065665-XX	L831-3	65	6.6/6.6	2	8.6/3.4	60/24	1.2/48	2.5	5.5
TA200665-XX L831-6 200 6.6/6.6 4 9.9/3.9 60/24 1.2/48 5.6 11 TA200265-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.6 11 TA300255-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.9 11 TA300255-XX L831-8 300 6.6/20 4 11.4/4.5 60/24 1.2/48 6.9 11 TA300255-XX L831-9 300 20/20 4 11.4/4.5 60/24 1.2/48 7.7 11 TA300265-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 11 TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 11 TA500625-XX L831-12 500 6.6/20 4 12.5/4.9 60/24 1.2/48 7.7 11 TA50025-XX	TA10066D-XX	L831-4	100	6.6/6.6	3	8.9/3.5	60/24	1.2/48	3.3	7.7
TA200265-XX L831-7 200 20/6.6 4 9.9/3.9 60/24 1.2/48 5.9 13 TA300625-XX L831-8 300 6.6/20 4 11.4/4.5 60/24 1.2/48 6.9 13 TA30025-XX L831-8 300 20/20 4 11.4/4.5 60/24 1.2/48 6.9 13 TA30025-XX L831-9 300 20/20 4 11.4/4.5 60/24 1.2/48 7.7 7 TA300265-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 11 TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 11 TA500625-XX L831-12 500 6.6/20 4 12.5/4.9 60/24 1.2/48 7.7 11 TA50025-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 11 TA500665-XX <	TA100265-XX	L831-5	100	20/6.6	3	8.9/3.5	60/24	1.2/48	3.6	8.0
TA300625-XX L831-8 300 6.6/20 4 11.4/4.5 60/24 1.2/48 6.9 14 TA300225-XX L831-9 300 20/20 4 11.4/4.5 60/24 1.2/48 7.7 7 <td>TA200665-XX</td> <td>L831-6</td> <td>200</td> <td>6.6/6.6</td> <td>4</td> <td>9.9/3.9</td> <td>60/24</td> <td>1.2/48</td> <td>5.6</td> <td>12.4</td>	TA200665-XX	L831-6	200	6.6/6.6	4	9.9/3.9	60/24	1.2/48	5.6	12.4
TA300225-XX L831-9 300 20/20 4 11.4/4.5 60/24 1.2/48 7.7 7 TA300665-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 11 TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 11 TA500625-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 11 TA500625-XX L831-12 500 6.6/20 4 12.5/4.9 60/24 1.2/48 7.7 11 TA500625-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 11 TA500665-XX L831-14 500 6.6/6.6 4 12.5/4.9 60/24 1.2/48 8.5 14	TA200265-XX	L831-7	200	20/6.6	4	9.9/3.9	60/24	1.2/48	5.9	13.0
TA300665-XX L831-10 300 6.6/6.6 4 12.5/4.9 60/24 1.2/48 7.9 1 TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 1 TA50025-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 1 TA500625-XX L831-12 500 6.6/20 4 12.5/4.9 60/24 1.2/48 7.7 1 TA500225-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 14 TA500665-XX L831-14 500 6.6/6.6 4 12.5/4.9 60/24 1.2/48 8.5 14	TA300625-XX	L831-8	300	6.6/20	4	11.4/4.5	60/24	1.2/48	6.9	15.1
TA300265-XX L831-11 300 20/6.6 4 11.4/4.5 60/24 1.2/48 7.9 11 TA500625-XX L831-12 500 6.6/20 4 12.5/4.9 60/24 1.2/48 7.7 11 TA500225-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 11 TA500665-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 11 TA500665-XX L831-14 500 6.6/6.6 4 12.5/4.9 60/24 1.2/48 8.5 14	TA300225-XX	L831-9	300	20/20	4	11.4/4.5	60/24	1.2/48	7.7	17
TA500625-XX L831-12 500 6.6/20 4 12.5/4.9 60/24 1.2/48 7.7 1 TA500225-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 14 TA500665-XX L831-14 500 6.6/6.6 4 12.5/4.9 60/24 1.2/48 8.4 14	TA300665-XX	L831-10	300	6.6/6.6	4	12.5/4.9	60/24	1.2/48	7.9	17.5
TA500225-XX L831-13 500 20/20 4 12.5/4.9 60/24 1.2/48 8.4 14 TA500665-XX L831-14 500 6.6/6.6 4 12.5/4.9 60/24 1.2/48 8.5 14	TA300265-XX	L831-11	300	20/6.6	4	11.4/4.5	60/24	1.2/48	7.9	17.5
TA500665-XX L831-14 500 6.6/6.6 4 12.5/4.9 60/24 1.2/48 8.5 14	TA500625-XX	L831-12	500	6.6/20	4	12.5/ 4.9	60/24	1.2/48	7.7	17.0
	TA500225-XX	L831-13	500	20/20	4	12.5/4.9	60/24	1.2/48	8.4	18.5
TA500265-XX L831-15 500 20/6.6 4 12.5/4.9 60/24 1.2/48 8.5 14	TA500665-XX	L831-14	500	6.6/6.6	4	12.5/4.9	60/24	1.2/48	8.5	18.7
	TA500265-XX	L831-15	500	20/6.6	4	12.5/4.9	60/24	1.2/48	8.5	18.7
TA010665-XX L831-16 10/15 6.6/6.6 1 6.6/2.6 60/24 1.2/48 1.40 3	TA010665-XX	L831-16	10/15	6.6/6.6	1	6.6/2.6	60/24	1.2/48	1.40	3.04
TA025665-XX L831-17 20/25 6.6/6.6 1 7.8/3.1 60/24 1.2/48 1.45 3	TA025665-XX	L831-17	20/25	6.6/6.6	1	7.8/3.1	60/24	1.2/48	1.45	3.20
TA150665-XX L831-18 150 6.6/6.6 4 9.1/3.6 60/24 1.2/48 4.8 10	TA150665-XX	L831-18	150	6.6/6.6	4	9.1/3.6	60/24	1.2/48	4.8	10.5
TA150265-XX L831-19 150 20/6.6 4 9.1/3.6 60/24 1.2/48 4.9 10	TA150265-XX	L831-19	150	20/6.6	4	9.1/3.6	60/24	1.2/48	4.9	10.8





Lay-In Ground Lug

CSA Certified Transformers (Canada) — With Lay-In Ground Lug

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CAT. NO.	RATED WATTS	PRI/SEC. AMPS	FIG. (SEE PAGE I-90)	T DIM. (CM/IN.)	PRIMARY LEAD Length (CM/IN.)	SEC. LEAD Length (m/in.)	WEIGHT (KG)	WEIGHT (LB.)
CTAG010666-XX	10/15	6.6/6.6	1	6.6/2.6	60/24	1.2/48	1.30	2.88
CTAG0255666-XX	20/25	6.6/6.6	1	7.8/3.1	60/24	1.2/48	1.45	3.20
CTAG045666-XX	30/45	6.6/6.6	2	8.6/3.4	60/24	1.2/48	2.4	5.2
CTAG04566D-XX	30/45	6.6/6.6	3	8.9/3.4	60/24	1.2/48	3.1	6.9
CTA10066D-XX	100	6.6/6.6	3	8.9/3.5	60/24	1.2/48	3.3	7.7
CTAG200666-XX	200	6.6/6.6	4	9.1/3.6	60/24	1.2/48	4.9	10.8
CTAG250626-XX	250	6.6/20	4	9.9/3.9	60/24	1.2/48	5.6	12.4
CTAG300666-XX	300	6.6/6.6	4	11.4/4.5	60/24	1.2/48	7.1	15.8
TAG500666-XX CS058	500	6.6/6.6	4	12.5/4.9	60/24	1.2/48	9.0	19.1

IAF Compliant Transformers (India)

CAT. NO.	RATED WATTS	PRI/SEC. AMPS	FIG. (SEE PAGE I-90)	T DIM. (CM/IN.)	PRIMARY LEAD Length (CM/IN.)	SEC. LEAD Length (m/in.)	WEIGHT (KG)	WEIGHT (LB.)
TA045865-01 CS068	30/45	8.3/6.6	2	8.6/3.4	60/24	1.2/48	2.4	5.2
TA065865-01-CS069	65	8.3/6.6	2	8.9/3.4	60/24	1.2/48	3.3	7.7
TA200865-01 CS070	200	8.3/6.6	4	9.9/3.9	60/24	1.2/48	5.6	12.4

Lighting — Amerace® Airfield Lighting

www.amerace.com



Series Isolating Transformers



Fax: 416.292.1614 Email: amerace@tnb.com

I-328



Primary Connector Kits

Primary Connector Kits for Unscreened Cable



Ņ	Qualified to FAA Specification AC 150/5345	

Electrical Rating Construction **EPDM Rubber** 5000 volts insulation Every kit filled with silicone **Suggested Crimping Tools** Shipping 54 Super Kit (FAA L823: Style 3, Style 10) .23kg (.5 lb. each) See page I-336 11.5kg (25 lb.) 54 Classic Kit (FAA L823: Style 3, Style 10) **Catalog Number Code Model Number Receptacle Housing Plug Housing**

54 = Classic Cable Code — Outside diameter Cable Code — Outside diameter of cable: Select from Table 1 of cable: Select from Table 1 **54 Super** = Extra Features: Conductor Code — Wire size: Conductor Code — Wire size: Amerseal Select from Table 2 Select from Table 2 Superseal · Positive Grip

Example: If a customer has a #8 AWG cable with an 0.D. of .400" and desires the extra feature of the primary kit, the catalog code would be: 54SUPER-D4-D4

Table 1

25 amps

	CABLE DIAMETER					
MET	TRIC	IMPE	IMPERIAL			
MIN.	MAX.	MIN.	MAX.	SIZE CODE		
5.0	6.6	.195"	.260"	B*		
6.4	8.4	.250"	.330"	С		
8.1	10.9	.320"	.430"	D		
9.4	12.9	.370"	.507"	Z		
10.7	14.9	.420"	.585"	E		
14.6	19.9	.575"	.785"	F		

* 54 Classic Kit only includes adapter.

Table 2

CONCENTR	IC STRANDED	S	SIZE			
MM ²	MM ² AWG		AWG MM ² AWG		AWG	CODE
4–6	#10#12	4–6	#8-#10	6		
10	#8	10	#6	4		
16	#6	16	#4	3		
_	#4	_	_	2		
_	#2	_	_	1		

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Primary Connector Kits

Primary Connector Kits for Screened Cable Airport Equipment Qualified to FAA Specification AC 150/5345 **Electrical Rating** Construction 25 amps EPDM rubber 5000 volts insulation Every kit filled with silicone Shipping **Suggested Crimping Tools** .23kg (.5 lb. each) See page I-336 Tin-Plated 12kg (26.5 lb.) Ground Lead 52Super B Kit (FAA L823: Style 3, Style 10) Insulated Ground Lead 52Super I Kit (FAA L823: Style 3, Style 10) **Catalog Number Code Model Number Receptacle Housing Plug Housing 52 Super** = Connecting screened Cable Code — Outside diameter Cable Code — Outside diameter primary cable to Amerace® of jacket: Select from Table 1. of jacket: Select from Table 1. transformers or creating a Insulation diameter: Select from Insulation diameter: Select from separate splice in screened Table 1. Table 1. primary cable Conductor Code — Wire size: Conductor Code — Wire size: Earth Wire: Select from Table 2. Select from Table 2. **B** = Bare-tin plated I = Insulated

Example: If a customer has a shielded cable that is:

- #8 AWG
- Jacket O.D. of .500" - Insulation diameter of .400"

- Insulated grounding wire Catalog Code would be: 52SUPER-I-ED4-ED4

Table 1

	_			
ME	ETRIC	IMP	ERIAL	. SIZE
MIN.	MAX.	MIN.	MAX.	CODE
6.4	8.4	.250"	.330"	С
8.1	10.9	.320"	.430"	D
10.7	14.9	.420"	.585"	E
14.6	19.9	.575"	.785"	F
	MIN. 6.4 8.1 10.7	METRIC MIN. MAX. 6.4 8.4 8.1 10.9 10.7 14.9	MIN. MAX. MIN. 6.4 8.4 .250" 8.1 10.9 .320" 10.7 14.9 .420"	METRIC IMPERIAL MIN. MAX. MIN. MAX. 6.4 8.4 .250" .330" 8.1 10.9 .320" .430" 10.7 14.9 .420" .585"

Table 2

CONCENTR	CONCENTRIC STRANDED SOLID					
MM ²	AWG	MM ²	AWG	SIZE CODE		
4–6	#10-#12	4–6	#8-#10	6		
10	#8	10	#6	4		
16	#6	16	#4	3		
—	#4	_	—	2		

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Airport Equipment

Qualified to FAA Specification

Secondary Connector Kits

Secondary Connector Kits

Used for field assembly of extension cords or repair of damaged connectors.

Ordering Instructions

Amerace[®] connector kit model numbers make it easy to select the right product for your specific application.

Follow the chart to the right.

Example

Order catalog number 90P-B6 for a secondary connector kit for a plug (male) termination on two single conductors with an outside diameter over insulation between 5mm² (.195") and 6.6mm² (.260") and wire size of 4mm² (#10–#12 AWG) stranded or 6mm² (#8–#10 AWG) solid.

Shipping

.06kg (.14 lb. each) 6.5kg (14 lb., 100/box)

Suggested Crimping Tools See page I-336

Electrical

20A 600V between contacts 1500V to earth



Catalog Number Code



Table 1

INS	SULATION OR J					
ME	METRIC IMPERIAL			- SIZE	APPLICABLE TO KIT	
MIN.	MAX.	MIN.	MAX.	CODE	MODELS	
3.0	4.0	.120"	.160"	S	90P, 90R	
3.9	5.5	.155"	.205"	А	90P, 90R	
5.0	6.6	.195"	.260"	В	90P, 90R	
6.4	8.4	.250"	.330"	С	90P, 90R	
8.1	10.9	.320"	.430"	D	91P, 91R	
10.7	14.9	.420"	.585"	Е	91P, 91R	
14.6	19.9	.575"	.785"	F	91P, 91R	

Table 2

CONCENTR	CONCENTRIC STRANDED SOLID					
MM ²	AWG	MM ²	AWG	SIZE CODE		
—	#14–#16	_	#12#14	8		
2.5	—	—	—	6		
4	#10#12	6	#8#10	6		
6	#8	10	6	4		

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Primary Cable Assemblies

Primary Cable Assemblies

- All connectors are molded on the cable for strong waterproof joints
- 25 amps
- 5000 volts to earth





- Every cable assembly is continuity checked prior to shipment
- Cable assemblies are conveniently coiled and shipped in boxes or fiber drums (contact factory for reels or other arrangements)

Standard Cable



Catalog Number Code 54 - , Connector Configuration P = Plug (male) connector Style 2 R = Receptacle (female) connector Style 9 • If both ends of the cable are to be terminated, use two letters here • If only one end is to be terminated, select the

terminated, select the correct configuration and use only one letter

T Cable



Note: Also available with Style 2 plug or Style 9 receptacle on free end.



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Secondary Cable Assemblies

Secondary Cable Assemblies

Airport Equipment Qualified to FAA Specification AC 150/5345



Catalog Number Code



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Voltage Transformers

Voltage Transformers

- Used in parallel circuits (see diagram on page I-335)
- Submersible
- Plug in using standard FAA connectors (pages I-331–I-332)
- Allow step down of line voltage for standard airfield bulbs (6.6 amp) or for other standard bulbs, such as automotive (12V) or 120/240 volt



Voltage Transformers 50/60 Hz

	RATED	PRI/SEC.			LEAD LENGTH		APPROX. SHIP. WT.	
CAT. NO.	WATTS	RATING.	FIG	"T" DIM. CM/IN.	PRIMARY	SECONDARY	KG	LBS.
VTA045P120S6.9-01	45	120/6.9	5	8.9/3.5	38cm (15")	38cm (15")	3.1	6.9
/TA045P240S6.9-01	45	240/6.9	5	8.9/3.5	38cm (15")	38cm (15")	3.1	6.9
VTA200P240S30.3-01	200	240/30	7	9.9/3.9	38cm (15")	38cm (15")	5.5	12.0
VTA300P240S45.5-01	300	240/45	7	11.4/4.5	38cm (15")	1.2m (48")	6.6	14.5



Don't see what you want here?

Contact us with your requirements or go to our web site to create your own transformer.

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Typical Parallel Lighting Circuit



Lighting — Amerace® Airfield Lighting

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Suggested Crimping Tools for Use with Amerace® Connector Kits

AMERACE			CRIMPS			
CONTACT SIZE	MM ²	AWG	RECOMMENDED TOOLS	#	LOCATION	APPLICATION
8	2 Stranded 3 Solid	#16 Stranded #14 Stranded #14 Solid #12 Solid	T&B WT 111M "AB" Groove Channel Lock #909 BURNDY Y 14MF	2	Rotate the second crimp 90° from the first	Primary Only Primary & Secondary Primary & Secondary
6	4 Stranded 6 Solid	#12 Stranded #10 Stranded #10 Solid #8 Solid	T&B WT 111M "C" Groove Channel Lock #909 BURNDY Y 14MF	2	Rotate the second crimp 90° from the first	Primary Only Primary & Secondary Primary & Secondary
4	6 Stranded 10 Solid	#8 Stranded #6 Solid	T&B TBM25S "Red" Groove T&B TBM45S "Red" Groove Channel Lock #909 BURNDY Y 14MF BURNDY MR4C "8" Groove Nico Press 31 "E" Groove	2	Rotate the second crimp 90° from the first	Primary Only Primary Only Primary & Secondary Primary & Secondary Primary Only Primary Only
3	10 Stranded 16 Solid	#6 Stranded #4 Solid	T&B TBM25S "Blue" Groove T&B TBM45S "Blue" Groove BURNDY MR4C "6" Groove Nico Press 41 "G" Groove	2	Rotate the second crimp 90° from the first	Primary Only Primary Only Primary Only Primary Only
2	16 Stranded	#4 Stranded	Nico Press 31 "J" Groove	2	Rotate the second crimp 90° from the first	Primary Only
1	_	#1 Stranded	T&B No. TBM45S or TBM25S "Brown" Groove	2	Rotate the second crimp 90° from the first	Primary Only

For available Amerace tools, please contact Amerace Sales.

Lighting — Amerace[®] Airfield Lighting

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Amerace[®] Airport Lighting Guide to FAA L823 Connectors

FAA Designations in Red



The * symbol indicates the connector is certified by ETL, and listed in the FAA AC 150/5345-IV "Approved Airport Equipment." This list is updated monthly and may be downloaded from http://www.faa.gov/airports/resources/advisory_circulars/.

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Technical Information

Amerace[®] Guide to FAA Style Airfield Lighting Connectors

FAA Type I Primary

Single-Conductor, 25 Amps, 5000 Volts to Earth



Primary Cable Assemblies Series 54M

Single-Wire Extension



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FAA Interface Dimensions

A/C 150/5345-26

Extracted from FAA Advisory Circular

FAA Type II Secondary

Two-Conductor, 20 Amps, 600 Volts between Conductors, 1500 Volts to Earth

(a) Plug, Type II, Class A, Style 1 (b) Receptacle, Type II, Class A, Style 7



(c) Receptacle, Type II, Class A, Style 8





DIMENSION	INCHES	CENTIMETERS	REFERENCE
а	.155 ±.001	.394 ±.003	Connector for White Wire
b	.124 ±.001	.315 ±.003	Connector for Black Wire
С	.625 ±.015	1.587 ±.038	Plug Pin
d	.343 +.031,000	.871 +.079,000	Plug
е	.435 ±.010	1.105 ±.025	Plug, Receptacle
f	.725 +.010,000	1.841 +.025,000	Plug
g	.1.000 +.000,031	2.540 +.000,079	Plug, Receptacle
h	.157 ±.001	.399 ±.003	Socket Dia. before Splitting Connector for White Wire
j	.126 ±.001	.320 ±.003	Socket Dia. before Splitting Connector for Black Wire
k	.641 Min.	1.628 Min.	Depth of Socket includes .125" (.318cm) Recess below Inside Face of Receptacle
	.358 +.000,015	.909 +.000,038	Receptacle
m	.694 ±.010	1.763 ±.025	Receptacle
n	1.125 ±.031	2.857 ±.079	Receptacle
0	1.500 ±.031	3.810 ±.079	Receptacle
р	1.750 ±.031	4.445 ±.079	Receptacle

Secondary Cable Assemblies Series 95M

Two-Wire Extensions



"H" is as "F" but #16 AWG (1.3mm²)

Secondary Connector Kits

Series 91 for Two-Core Cable



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"I" is as "G" but #2/16 AWG (1.3mm²)

Series 90 for Two Individual Wires







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