EFLA
YOUR AGL PARTNER

PRODUCT DATASHEET

Toroidal Transformer

KR500

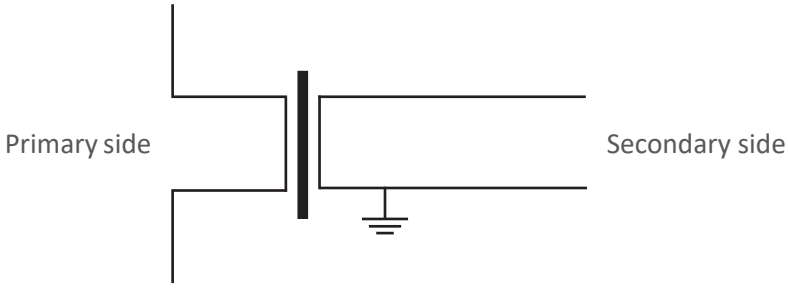
FAA AC 5345-47, L-830 / L-831, 60 Hz / 50 Hz

KR500 is used to supply the current in the AGL circuit and to provide a separation point between the primary and secondary circuits. KR500 series offers standard transformer features. Transformers are certified by FAA. They also comply with ICAO Annex 14 and MAK.

- Superior isolation resistance by thermoplastic elastomer (TPE)
- Easy to install by using factory molded connectors
- Galvanic separation provides superior protection for electrical components
- Optimal physical size and electrical performance of toroidal structure
  - Rated power 30 - 300 W
  - Rated current 6.6 A/6.6 A , other currents upon request
  - Power factor > 0,97
  - L (leak) 470 µH - 3800 µH
  - L (magn) 16 mH - 35 mH

KR500 with or without earthing (grounding)

EFLA supplies transformers with or without earthing. The earthing is connected to the end of the secondary winding in the side of the larger socket. This means that the thicker pin is grounded to the secondary side.



Primary leads

- The transformers have two primary leads with the standard length of 0.6 m and a cross section of 6 mm2
- One of the leads is with a FAA L-823, Style 2 Plug
- The other lead is with a FAA L-823, Style 9 Receptacle

Secondary leads

- The transformers have one secondary lead with the standard length of 1.2 m and a cross section of 2.5 mm2
- The secondary cable is rated to 600 V
- The secondary lead is with a FAA Style 8 Receptacle

Pins and sockets

The contact parts are tin-plated brass. In addition, the sockets are supplied with a copper beryllium sleeve-type spring to ensure an adequate contact pressure.

Special and Customized Transformers

On the top of our standard 6.6/6.6 A series isolation transformers, EFLA also delivers customized transformers with e.g. special ratings based on different project specifications, e.g. 6.6/2.2 A, 2.2/2.2 A, and other ratings case by case. The transformers can also be equipped with different cable lengths and with different connectors, e.g. FAA Style 7 connectors for the secondary side.

Dimensions

	EFLA type	D [mm]	L [mm]	H [mm]	Weight [kg]
KR531	KR531.1	100	125	55	1.6
KR536	KR536.1	135	180	55	1.9
KR541	KR541.1	120	160	55	3.0
KR546	KR546.1	147	193	60	3.12
KR551	KR551.1	147	193	64	3.37
KR561	KR561.1	147	193	73	4.17
KR581	KR581.1	147	193	95	5.33

Temperature rise values

Type	Pri. temp rise [C°]	Sec. temp rise [C°]
KR531	28	25
KR536	41	25
KR541	41	38
KR546	40	33
KR551	50	40
KR561	65	59

Accessories

Transformer hanger

Perfect accessories when there are no built places for transformers to be placed. It allows to hang transformer or screw them on the wall.

Electrical information

EFLA Type with Earthing	EFLA Type without Earthing	FAA Type	Rated Power [W]	Rated Current [A]	Power Range [W]	Load [Ω]	Efficiency [%]	Power Factor
KR531	KR531.1	L-830-1 L-831-1	30/45	6.6/6.6	25-60	0.57-1.38	> 85	> 0.97
KR536	KR536.1	L-830-3 L-831-3	65	6.6/6.6	50-85	1.15-1.95	> 85	> 0.97
KR541	KR541.1	L-830-4 L-831-4	100	6.6/6.6	80-125	1.84-2.87	> 85	> 0.97
KR546	KR546.1	L-830-18 L-831-18	150	6.6/6.6	120-178	2.75-4.13	> 90	> 0.97
KR551	KR551.1	L-830-6 L-831-6	200	6.6/6.6	160-230	3.67-5.28	> 90	> 0.97
KR561	KR561.1	L-830-10 L-831-10	300	6.6/6.6	220-338	5.05-8.25	> 90	> 0.97

* According to FAA AC 150/5345-47

Leakage inductances

EFLA Type with Earthing	EFLA Type without Earthing	Power [W]	Short Circuited voltage [V]	L (magn) [mH]	L (leak) [mH]
KR531	KR531.1	30/45	< 6.7	16.0	< 0.47
KR536	KR536.1	65	< 6.7	19.0	< 1.1
KR541	KR541.1	100	< 6.7	14.0	< 1.1
KR546	KR546.1	150	< 6.7	24.0	< 2.0
KR551	KR551.1	200	< 6.7	25.0	< 2.0
KR561	KR561.1	300	< 6.7	35.0	< 3.8

EFLA is the world's leading supplier of seamless power and communication products for airfield ground lighting circuits. With more than 30 years experience in the field, it develops, manufactures and sells globally-certified series isolation transformers, connector kits and prefabricated cable leads. The company's components meet the highest qualifications in materials and electrical design to withstand challenging installation in underground pits and cans and direct underground installation. Headquartered in Porvoo, Finland, EFLA supplies products to international airports around the world.

EFLA OY • Kipinätie 3 • FI-06150 Porvoo, Finland • tel +358 (0)20 198 0190 • www.efla.net