

## PRODUCT DATASHEET

### Low Leakage Transformer for Addressable Systems

# KR600



FAA AC 5345-47, L-830 / L-831, 60 Hz / 50 Hz, EN 61823



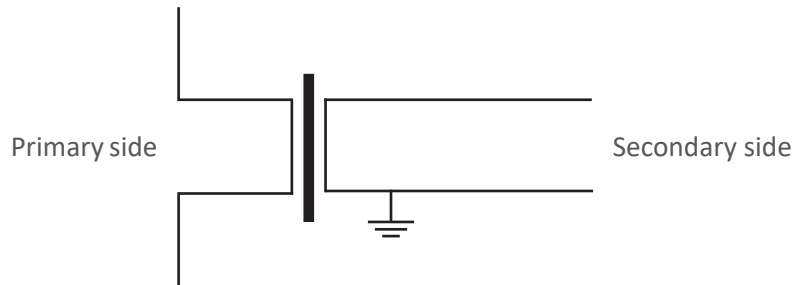
KR600 is used to supply the current in the AGL circuit and to provide a separation point between the primary and secondary circuits. KR600 series has special design offering very low leakage inductance on top of the common features, which support single lamp control and more advanced control and monitoring requirements. KR600 is the most energy efficient transformer in the market due to toroidal core and low leakage design. Transformers are certified by FAA and approved by IEC. They also comply with ICAO Annex 14 and several other national standards (MAK, CAAC).

- Superior isolation resistance by thermoplastic elastomer (TPE)
- Optimal physical size and electrical performance of toroidal structure
  - Rated power 10 - 500 W
  - Rated current 6.6 A/6.6 A , other currents upon request
  - Power factor > 0,97
  - L (leak) 20 $\mu$ H - 130  $\mu$ H
  - L (magn) 13.0mH - 64 mH



## KR600 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 mm<sup>2</sup>
- 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 mm<sup>2</sup>
- 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]
KR621	KR621.1	89	115	45	1.03
KR625	KR625.1	89	115	45	1.03
KR631	KR631.1	105	128	57	1.6
KR636	KR636.1	120	145	54	1.9
KR641	KR641.1	130	155	59	2.4
KR646	KR646.1	146	192	60	3.10
KR651	KR651.1	146	192	65	3.30
KR661	KR661.1	146	192	77	4.00
KR681	KR681.1	146	192	96	5.33

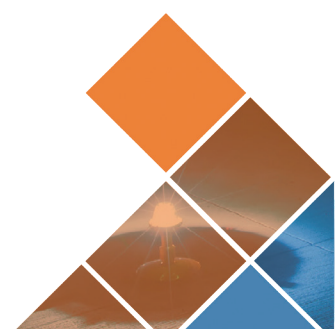
## Temperature rise values

Type	Pri. temp rise [C°]	Sec. temp rise [C°]
KR631	22	14
KR636	35	26
KR641	27	19
KR646	29	21
KR651	36	26
KR661	48	38

## 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 [ $\Omega$ ]	Efficiency [%]	Power Factor
KR621	KR621.1	L-830-16 L-831-16	10/15	6.6/6.6	10-15	0.34*	> 70	> 0.97
KR625	KR625.1	L-830-17 L-831-17	20/25	6.6/6.6	20-25	0.57*	> 70	> 0.97
KR631	KR631.1	L-830-1 L-831-1	30/45	6.6/6.6	25-60	0.57- 1.38	> 85	> 0.97
KR636	KR636.1	L-830-3 L-831-3	65	6.6/6.6	50-85	1.15- 1.95	> 85	> 0.97
KR641	KR641.1	L-830-4 L-831-4	100	6.6/6.6	80-125	1.84- 2.87	> 85	> 0.97
KR646	KR646.1	L-830-18 L-831-18	150	6.6/6.6	120-178	2.75- 4.13	> 90	> 0.97
KR651	KR651.1	L-830-6 L-831-6	200	6.6/6.6	160-230	3.67- 5.28	> 90	> 0.97
KR661	KR661.1	L-830-10 L-831-10	300	6.6/6.6	220-338	5.05- 8.25	> 90	> 0.97
KR681	KR681.1	L-830-14 L-831-14	500	6.6/6.6	400-523	12.00*	> 90	> 0.97

\* According to FAA AC 150/5345-47

## Leakage inductances

EFLA Type with Earthing	EFLA Type without Earthing	Power [W]	Short Circuited current [V]	Open Circuited voltage [V]	L (magn) [mH]	L (leak) [mH]
KR621	KR621.1	10/15	< 6.7	< 8	13.0	< 0.02
KR625	KR625.1	20/25	< 6.7	< 8	13.0	< 0.02
KR631	KR631.1	30/45	< 6.7	< 13	16.0	< 0.03
KR636	KR636.1	65	< 6.7	< 16	19.0	< 0.04
KR641	KR641.1	100	< 6.7	< 23	14.0	< 0.04
KR646	KR646.1	150	< 6.7	< 25	24.0	< 0.06
KR651	KR651.1	200	< 6.7	< 41	25.0	< 0.06
KR661	KR661.1	300	< 6.7	< 70	35.0	< 0.1
KR681	KR681.1	500	< 6.7	< 100	64.0	< 0.13



**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.