



## FEATURES

- 100 Watts @ 24 V dc power
- 1-mm air gap between rings
- Industrial housing (aluminum) with integrated mounting holes
- Potted electronics
- Power not interrupted due to rotation or speed.
- Tested to 250 rpm
- -20 to 70 C° operating temperature
- CE listed

## OVERVIEW

The model KLS-100 power coupling system is a 100W ring-to-ring wireless power transmission system configured to transfer electrical power across an air gap of 1.0 +/- 0.5 mm without contact. The transfer of electrical power is available when the fixed and mobile rings are facing and within the specified air gap.

The fixed coupling ring incorporates a DC to AC converter and open ferrite coils for power coupling. The mobile ring includes a secondary inductive antenna and receives the power from the fixed ring. Power is rectified and stabilized to 24 V DC. LEDs integrated to the ring bodies show operational status.

The ring bodies are fabricated from aluminium for stability in harsh environments where dirt, chemicals and liquids are common.

## BENEFITS

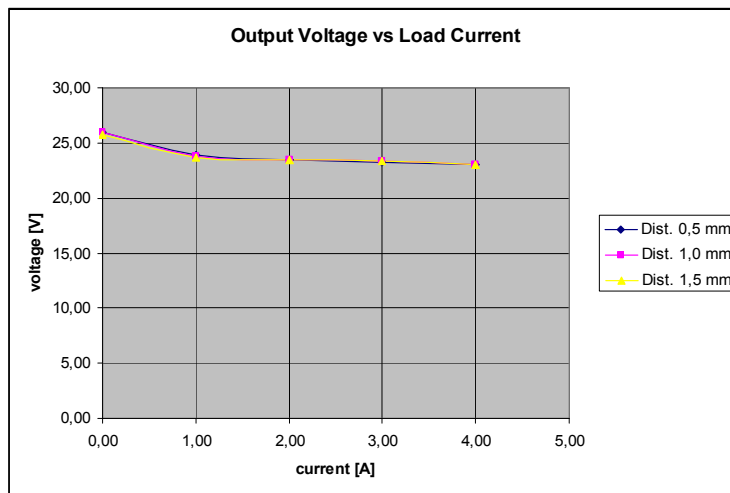
- NO mechanical contact = NO wear
- Unlimited rotation in either direction
- No effects due to starting and stopping
- Power coupling status indicated by LEDs
- Water, solvents, dirt or oil do not interfere with performance of life
- Simple installation

# 100 Watt Contactless Power Coupling Rings

## SPECIFICATIONS: Model KLS-100

DETAIL	STATIONARY RING	MOBILE RING.
POWER (voltage/current):	Nominal supply power: 24 V DC +/- 0.5% @ 7 Amp	Nominal supply power: 24 V DC @ 100 Watt
AIR GAP TOLERANCES, mm, (inch):	1-mm +/- 0.5-mm, (0.025-in +/-0.13-in)	
OPERATING TEMPERATURE RANGE, C° (F°):	-20 to 70 C°, (-4 to 158 F°)	
OPERATING STATUS:	Green LED on stationary unit shows 24 V DC power is applied to the system.	Green LED on mobile unit confirms availability of transferred output voltage
MECHANICS: dimensions, weight, cable length:	OD 462-mm, ID 328-mm, Height 50-mm, 10.5 kg , cable tail 3-meter.	OD 420-mm, ID 280-mm, Height 50-mm, 9.5 kg, cable tail 3-meter.

## VOLTAGE vs. AIR GAP



## GENERAL

The integrated power regulation of the system is based on internal load resistors. They do stabilize the output voltage during no load or reduced load conditions. The power dissipation with the internal resistors will generate some heat, increasing surface temperature of the mobile ring. To avoid unnecessary thermal stress to the system, it is recommended not to operate the system in the no load condition over a period longer than one hour.

Model number: KLS-100, Item Number: 888201

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