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TESTED®
DEVICE

KUKA Roboter GmbH
KR AGILUS - 2 series
Report No. KU 1707-926

DUPLICATE

Statement of
Qualification

Electrostatic
Resistance

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Statement of Qualification

Customer

KUKA Roboter GmbH
Zugspitzstrasse 140
86165 Augsburg
Germany

Component tested

Category: Automation Components

Subcategory: Robotics

Product name: KR AGILUS - 2 series consisting of:
- KR6 R700-2 (manufacturing date: 7/2017; color: white; serial number: 1023004)
- KR10 R1100-2 (manufacturing date: 9/2017; color: white; serial number: 1023013)

Electrostatic discharge measurements at representative points (discharge resistance)

Standards/Guidelines: DIN EN 61340-2-3 ; DIN EN 61340-5-1
The norms stated generally refer to the version valid at the time of the tests.

Test devices:
- Data capture: ..... Tera-Ohm-Meter, type 6206, ... Eltex-Elektrostatik-GmbH

Test environment parameters:
- Cleanroom Air Cleanliness Class (according to ISO 14644-1): ..... ISO 1
- Airflow velocity: ..... 0.45 m/s
- Airflow pattern: ..... vertical laminar flow
- Temperature: ..... 22 °C ± 0.5 °C
- Relative humidity: ..... 45 % ± 5 %

Test procedure parameters:
- Insulating mount:
  – Type: ..... 4x hexagonal insulators with R > 10^{14} Ω
  – Material: ..... polyester, glassfilled
  – Thickness: ..... 35 mm

Test result / Classification

The KR AGILUS - 2 series was examined for its resistance to earth in accordance with DIN EN 61340-2-3. The test result lies below the required maximum value of 1 x 10^9 Ω according to DIN EN 61340-5-1 for ESD protective elements.

	Operating voltage [V]	Resistance [Ω]	Compliance with limit value according to DIN EN 61340-5-1
KR6 R700-2: **Discharge resistance**	**10**	**1.30 x 10^3**	**fulfilled**
KR10 R1100-2: **Discharge resistance**	**10**	**< 2 x 10^3**	**fulfilled**

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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on behalf of
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