

CERTIFICATE OF COMPLIANCE

Certificate Number 20231025_4790940320
Report Reference E141084_4790940320_DescriptionFS
Issue Date 2023-10-25

Issued to: **Kollmorgen Europe GmbH**
Pempelfurtstr. 1,
40880, Ratingen, Germany

This is to certify that
representative samples of

Drive P80360 Series
R4E Version

Have been investigated by UL in accordance with the Standards indicated on this Certificate.

Standard(s) for Safety:

ISO 13849-1 Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design, Ed. 3, 2015-12-15

ISO 13849-2 Safety of machinery - Safety-related parts of control systems -Part 2: Validation, Ed. 2, 2012-10-15

Bruce A. Mahrenholz, CPO Director, North American Certification Programs
UL LLC

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Additional Information: Safe Torque Off (STO) function, complies with the requirements for the following functional safety ratings:

- PL e, Category 4

Further safety-related data:

- Max Response time: 100 ms
- $MTTF_D$ (Calculated):
351 years – R4E Version
- PFH_D :
 $7.04 \cdot 10^{-9}$ / hour - R4E Version
- Mission time: 20 years

The product must be installed, operated, and maintained, in accordance with the instructions for use.

Expiration date: 2025-May-3rd

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Please note that the Functional Safety Certificate (in accordance with UL's product category FSCO) will not imply that UL has Listed, Classified or Recognized the product nor will the attached Report authorize the use of Listing, Classification, or Recognition Marks or other references to UL, on these products.

Reviewed by:

Franz Xaver Brandl
Functional Safety Staff
Engineer

Dieter Petter
Functional Safety Senior
Project Engineer

André Thieme
Principal Engineer

Bruce A. Mahrenholz, CPO Director, North American Certification Programs
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