

Functional Safety

Certificate No. SHFS2204000145MD ISSUE1

Certificate Holder: Suzhou Tongyi Automation Technology Co., Ltd.
401 Room 13 Building No. 2 Shuangma Street
Suzhou Jiangsu

Manufacturer: Same as Certificate Holder

Trademarks: **TONGYI**
AUTOMATION

Certified Product: Servo Drive

Model (s) No. / Series: IXL-II-2040, IXL-II-3060, IXL-II-4080,
IXL-II-100200, IXL-II-150300

Assessment Performed: ISO 13849-1:2015

Conclusion: The safety architecture and performance level meet PL d with category 3 according to ISO 13849-1:2015, detail information of safety function items is shown in APPENDIX.

Additional Information: Safety functions of IXL-II-20.40, IXL-II-30.60, IXL-II-40.80, IXL-II-95.190, IXL-II-150.300 were defined in EN 1175:2020.

As shown in the technical report number(s): SHFS220400014571

This certificate confirms the achievement of the requirements of functional safety based on proofs of the safety-related parameters (failure rate, DC / SFF, safety architecture etc), proofs that processes, and methods are established at the manufacturer guaranteeing that unexceptionable processes in terms of risk analysis, design, production, validation, modification and quality management comply with the standard.

Authorized by:

Issued Date: Jun. 21 2023


Andrew Zhai
Certifier

Expired Date: Jun. 21 2028

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Certification Body

SGS-CSTC Standards Technical Services Co., Ltd.
16/F, Century Yuhui Mansion, No.73 Fucheng Road, Beijing China 100036
Tel: (86-10)6845 669

APPENDIX

Supplementary of Functional Safety Certificate

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Summary of Safety Functions:

SF	Item & Description	PL Achieved	Response Time	MTTF _D (years)	PFH _D	Safe State
SF1	SBC&STO	PL d with Cat. 3, DC ≥ 60%	20ms	2037.165	1.01 x10 ⁻⁷	Switch off PWM and brake
SF2	Safety encoder	PL d with Cat. 3, DC ≥ 60%	10ms	329.364	1.01 x10 ⁻⁷	Switch off PWM and brake

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