

# Certificate

**Certificate**  
UL-US-2431013

**Issue date**  
2024-08-01

**Expiration date**  
2029-08-01

**Report Reference**  
E365340-00000000-  
DescriptionFS.docx



This is to acknowledge that

## **BDF DIGITAL S.P.A.**

Via Della Oreficeria 41 Vicenza, VI, 36100  
Italy

has had

## **OPDE Plus XS**

evaluated and meets the requirements of the standard(s)

**EN 61800-5-2, 04/2017; EN 61800-5-2, 10/2007; IEC 61800-5-2:2016; EN ISO 13849-1:2015; EN ISO 13849-2:2012; ISO 13849-1, Edition 3, Issue Date 2015-12-04; ISO 13849-2, 2nd Ed., Issue Date: 2012-10-15**

### **General Conditions and Notes**

- 1)This certificate (in accordance with UL's Functional Safety Certificate Scheme) does not imply that UL has issued product-marking based safety certification (such as Listing, Recognition, or Classification) nor will the referenced report authorize the use of product safety certification marks or other references to UL on these products.
- 2)This certificate only covers the product version that is listed in the report reference. Any changes applied to the certified product are not covered by this Certificate.

### **Certification Program Owner:**

André Thieme

A handwritten signature in blue ink that reads 'André Thieme'.

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# FUNCTIONAL SAFETY CERTIFICATE OF COMPLIANCE

## OPDE Plus XS

<b>HW Version Identification:</b>	<b>SW Version Identification:</b>
n/a	n/a

The certified module provides the following safety ratings:

Safety Function/Goal	Maximum Safety Rating	PFH avg /h	DC %	MTTFd (years)	SRL	Cat.	CCF
STO	PL e	1.181E <sup>-8</sup>	92.3	100	NA	3	75

Stop category 0 (EN 60204-1:2018/NFPA79) is realized when the STO function provided by the product is used in combination with external devices complying with the above-mentioned standards and installed following the instructions of the manual, in particular the safety-related instructions.

Safety Function/Goal	Max. Safety Rating	PFH avg /h	PFD avg (1yr)	DC %	Safe Failure Rate (/h)	HFT	SFF %	Type A/B
STO	SIL 3	1.181E <sup>-8</sup>	--	92.3	--	1	99.5	B

Stop category 0 (EN 60204-1:2018/NFPA79) is realized when the STO function provided by the product is used in combination with external devices complying with the above-mentioned standards and installed following the instructions of the manual, in particular the safety-related instructions.

### Conditions of Safe Use of the Certified Product:

- 1) The product must be installed, operated, and maintained as specified in:

Document Identifier	Revision	Issue Date	Title

- 2) The manufacturer of the certified product shall keep record of the failure analysis for all returned products.

### Certificate Revision Records

Issue Date	Revised Date	Report Reference No	Summary of Change Records
2024-08-01	2024-08-14	E365340-00000000-DescriptionFS.docx	CPLD FW revision 1.0

