## FUNCTIONAL SAFETY

## CERTIFICATE

CERTIFICATO - ZERTIFIKAT - CERTIFICADO - CERTIFICAT

The product:

VC-8000 Backplane

Manufactured by:

Brüel & Kjær Vibro America Inc. (p<mark>a</mark>rt of Brü<mark>el</mark> & Kjær V<mark>i</mark>bro, a Spe<mark>c</mark>tris Com<mark>p</mark>any) 1100 Mark Circle, Gardnerville, NV 89410, United States

Is suitable for the following safety function(s):

Allow the communication between VC-8000 functional safety boards

has been assessed per the relevant requirements of

IEC 61508:2010 Parts 1 to 7

and meets the requirements providing the following:

## Systematic Capability:

The compliance with the requirements for the avoidance of systematic faults and the requirements for the control of systematic faults have been achieved following the compliance route 1s.

Hardware Safety Integrity:

The constraints on hardware safety integrity have been verified in order to achieve a sufficiently robust architecture taking into account the level of element and subsystem complexity following the compliance route 1<sub>H</sub>.

## Random Safety Integrity:

The estimated safety integrity, for each safety function, due to random hardware safe and dangerous failures rates (excluding "no part" and "no effect" contribution).

The architectural constraints and the effects of random failures (PFH/PFD<sub>AVG</sub>) must be verified for each specific application and safety function implemented by the E/E/PE safety-related system.

Certified by:

BYHON Certification Director.



BKVA-BKPFS-PSE-E01

Revision: A

Issued: [October 21st, 2020]

Valid until: [October 20th, 2023]

The owner of a valid certificate for an assessed product is authorized to affix the following mark and relative ID number, to all recognized devices which are identical to the product assessed.



SC<sub>2</sub>

Type

See

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2.

