

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx DEK 20.0079X	Page 1 of 4	<u>Certificate history:</u>
			Issue 0 (2020-12-17)
Status:	Current	Issue No: 1	

Date of Issue: 2021-08-25

Hirschmann Automation and Control GmbH Applicant:

Stuttgarter Strasse 45-51 72654 Neckartenzlingen

Germany

Industrial Ethernet Rail Switch BOBCAT BRS Series Equipment:

Optional accessory:

Type of Protection: ec and nc

Marking: Ex ec nC IIC T4 Gc

Approved for issue on behalf of the IECEx R. Schuller Certification Body:

Position: **Certification Manager**

Signature:

Date:

(for printed version)

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Certificate issued by:

DEKRA Certification B.V. Meander 1051 6825 MJ Arnhem **Netherlands**





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Manufacturer: Hirschmann Automation and Control GmbH

Stuttgarter Strasse 45-51 72654 Neckartenzlingen

Germany

Additional Belden Hirschmann Industries (Suzhou)

manufacturing Co.,Ltd

locations: #333, Yanhu Road, Huaqiao Town, Kunshan

City, Jiangsu Province

China

Belden India Pvt. Ltd.

Plot No. D-228/1 Chakan MIDC, Phase II

Village Bhamboli, Taluka- Khed

District Pune 410507

India

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:5.0

079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements

other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

NL/DEK/ExTR20.0088/01

Quality Assessment Reports:

NL/DEK/QAR14.0021/04 NL/DEK/QAR19.0010/00 NL/DEK/QAR20.0013/00



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Industrial Ethernet Rail Switch BOBCAT BRS Series.

The rail mounted modules are intended for use in industrial automation applications, communicate via electrical or optical interfaces.

The electrical data, type code, the ambient temperature range and the temperature class of the modules shall be taken from Table 1, see Anne 1to NL/DEK/ExTR20.0088/01.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.

The modules shall be installed in a suitable enclosure providing a degree of protection of at least IP54 according to IEC 60079-0, taking into account the environmental conditions under which the equipment will be used.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)Addition of modules to the range of Industrial Ethernet Rail Switch BOBCAT.

Annex:

225579400-ExTR20.0088.01-Annex 1.pdf



Annex 1 to NL/DEK/ExTR20.0088.01

Table 1

BRS Industrial Ethernet Rail Switch Series

Product Code Table

Ex	cample	BRS	4	2	-	00	12	00	00	-	Е	Р	D	Z	W
	Item		II	III	IV	V	VI	VII	VIII	IX	Х	ΧI	XII	XIII	XIV

9	НН	S	Е	S	08.0.	00	-	NT
ΧV	XVI	XVII	XVIII	XIX	XX	XXI	XXII	XXIII

l:	(Pos. 1-3) BRS	Product designation BOBCAT Rail Switch
II:	(Pos. 4) 2 3 4 5	Datarate 100 MBit/s Ethernet Ports 100 & 1000 MBit/s Ethernet Ports 1000 MBit/s Ethernet Ports 1000 & 2500 MBit/s Ethernet Ports
III:	(Pos. 5) 0 2	Hardware Type Standard Standard + PoE
IV:	-	
V:	(Pos. 7,8) 00 04 05 06 08 09 10 11 12 16 20 24	Number of 100 Mbit/s Ports 0* 10/100 Mbit/s Ethernet Ports 4* 10/100 Mbit/s Ethernet Ports 5* 10/100 Mbit/s Ethernet Ports 6* 10/100 Mbit/s Ethernet Ports 8* 10/100 Mbit/s Ethernet Ports 9* 10/100 Mbit/s Ethernet Ports 10* 10/100 Mbit/s Ethernet Ports 11* 10/100 Mbit/s Ethernet Ports 12* 10/100 Mbit/s Ethernet Ports 16* 10/100 Mbit/s Ethernet Ports 20* 10/100 Mbit/s Ethernet Ports 20* 10/100 Mbit/s Ethernet Ports Ethernet Ports 21* 10/100 Mbit/s Ethernet Ports 22* 10/100 Mbit/s Ethernet Ports Ethernet Ports Ethernet Ports Ethernet Ports Ethernet Ports
VI:	(Pos. 9,10) 00 04 08 12 16 20	Number of 1000 (2500) Mbit/s Ports 0 * 100/1000 Mbit/s Ethernet Ports 4 * 100/1000 Mbit/s Ethernet Ports 8 * 100/1000 Mbit/s Ethernet Ports 12 * 100/1000 Mbit/s Ethernet Ports or 8 * 100/1000 Mbit/s + 4 * 1000/2500 Mbit/s Ethernet Ports 12 * 100/1000 Mbit/s Ethernet Ports 20 * 100/1000 Mbit/s Ethernet Ports or 16 * 100/1000 Mbit/s + 4 * 1000/2500 Mbit/s Ethernet Ports 24 * 100/1000 Mbit/s Ethernet Ports or 20 * 100/1000 Mbit/s Ethernet Ports or



Annex 1 to NL/DEK/ExTR20.0088.01

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VII:
      (Pos. 11,12) First Uplink (Group)
                        identical to the other ports / unavailable
      99
      2T
                        2 x Twisted Pair / RJ45 (1000 MBit/s)
                        1 x Multimode / SC (100 MBit/s)
      M2
                        1 x Multimode / ST (100 MBit/s)
      M4
      S2
                        1 x Singlemode / SC (100 MBit/s)
                        1 x Singlemode / ST (100 MBit/s)
      S4
      E2
                        1 x Singlemode Plus / SC (100 MBit/s)
                        1 x Singlemode LH / SC (100 MBit/s)
      L2
                        1 x Singlemode LH / SC 200km
      G2
      Z6
                        1 x SFP Slot (100 MBit/s)
                        2 x Multimode / SC (100 MBit/s)
      MM
      NN
                        2 x Multimode / ST (100 MBit/s)
      ۷V
                        2 x Singlemode / SC (100 MBit/s)
      UU
                        2 x Singlemode / ST (100MBit/s)
      ΕE
                        2 x Singlemode Plus / SC (100 MBit/s)
      LL
                        2 x Singlemode LH / SC (100 MBit/s)
                        2 x Singlemode LH / SC 200km (100MBit)
      GG
                        2 x SFP Slot (100 MBit/s)
      ZZ
                        2 x SFP Slot (100/1000 MBit/s)
      00
      2Q
                        2 x SFP Slot (100/1000/2500 MBit/s)
VIII: (Pos. 13,14) Second Uplink (Group)
                        identical to the other ports / unavailable
      99
      2T
                        2 x Twisted Pair / RJ45 (1000 MBit/s)
                         1 x Multimode / SC (100 MBit/s)
      M2
      M4
                        1 x Multimode / ST (100 MBit/s)
      S<sub>2</sub>
                         1 x Singlemode / SC (100 MBit/s)
      S4
                        1 x Singlemode / ST (100 MBit/s)
      E2
                        1 x Singlemode Plus / SC (100 MBit/s)
                        1 x Singlemode LH / SC (100 MBit/s)
      L2
      G2
                        1 x Singlemode LH / SC 200km
                        1 x SFP Slot (100 MBit/s)
      Z6
                        2 x Multimode / SC (100 MBit/s)
      MM
                        2 x Multimode / ST (100 MBit/s)
      NN
      VV
                        2 x Singlemode / SC (100 MBit/s)
      UU
                        2 x Singlemode / ST (100MBit/s)
                        2 x Singlemode Plus / SC (100 MBit/s)
      ΕE
                        2 x Singlemode LH / SC (100 MBit/s)
      LL
                        2 x Singlemode LH / SC 200km (100MBit)
      GG
      77
                        2 x SFP Slot (100 MBit/s)
      00
                        2 x SFP Slot (100/1000 MBit/s)
      2Q
                        2 x SFP Slot (100/1000/2500 MBit/s)
IX:
X:
      (Pos. 16)
                    Temperature range
                        0°C --> +60°C
      S
      С
                        0°C --> +60°C, conf. Coating
      Τ
                        -40°C --> +70°C
      Ε
                        -40°C --> +70°C, conf. Coating
      G
                        -40°C --> +70°C, conf. Coating, glued
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Annex 1 to NL/DEK/ExTR20.0088.01

XI: (Pos. 17) Voltage range Т 2x (12 - 24 VDC) 2x 24 VDC U 2x (24 - 48 VDC + 24 VAC) F Ρ 2x (48VDC (POE) / 54VDC (POE+)) XII: (Pos. 18) Housing **IP30 Plastic** C IP30 Metal D IP40 Metal Ε XIII: (Pos. 19) Approvals/ Declarations Part A (only for information) CE; FCC; EN61131; EN62368-1 Ζ Further approvals/ declarations Х XIV: (Pos. 20) Approvals/ Declarations Part B (only for information) W ATEX/ IECEx Further approvals/ declarations XV: (Pos. 21) Software Packages (only for information) Reserved XVI: (Pos. 22,23) Customization (only for information) HH Hirschmann XVII: (Pos. 24) Technology (only for information) Standard XVIII: (Pos. 25) Software Configuration (only for information) **Empty** Ε Ρ **PROFINET** XIX: (Pos. 26) Software Level (only for information) HiOS Layer 2 Standard S HiOS Layer 2 Advanced Α HiOS Layer 2 Advanced (Dual RSTP Support) В (Pos. 27-31) Software Version (only for information) Software version 08.0 08.0. Further software versions XX.X. XXI: (Pos. 32,33) Software Maintenance (only for information) Maintenance version 00 00 Further maintenance versions XXXXII: -XXIII: (Pos. 35,36) Production Location Neckartenzlingen (Germany) NT Suzhou (China) SZ PΝ Pune (India)

Note: x = any letter or number