



Certificate number: 59339/B0 BV

File number: AP4868

Product code: 4502H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Hirschmann Automation and Control GmbH
Neckartenzlingen - GERMANY

for the type of product

NETWORK COMMUNICATION SYSTEMS

Ethernet Rail Switch
BRS 20/30/40/50

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships
EC Code: 31B/41B

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 05 Nov 2030

For Bureau Veritas Marine & Offshore,

At BV HAMBURG, on 05 Nov 2025,

Dirk Hoepfner

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The **BRS 20/30/40/50** series are Ethernet Switches for mounting on DIN-Rail.

1.1 - Variants:

Nomenclature digits: BRS[4][5]-[7][8][9][10][11][12][13][14]-[16][17][18]

Digit	Attribute	Identification	Feature
[1] to [3]	Product Name	BRS	Rail Switch without Gigabit-Port
[4]	Data rate	2	100 Mbit/s
		3	100/1000 Mbit/s
		4	1000 Mbit/s
		5	1000/2500 Mbit/s
[5]	Hardware Type	0	Standard
[6]	Hyphen	-	
[7] and [8]	Number of 100 Mbit/s Ports	00	0 x 10/100 Mbit/s Ethernet Ports
		04	4 x 10/100 Mbit/s Ethernet Ports
		05	5 x 10/100 Mbit/s Ethernet Ports
		06	6 x 10/100 Mbit/s Ethernet Ports
		08	8 x 10/100 Mbit/s Ethernet Ports
		09	9 x 10/100 Mbit/s Ethernet Ports
		10	10 x 10/100 Mbit/s Ethernet Ports
		11	11 x 10/100 Mbit/s Ethernet Ports
		12	12 x 10/100 Mbit/s Ethernet Ports
[9] and [10]	Number of 1000 (2500) Mbit/s Ports	00	0 x 100/1000 Mbit/s Ethernet Ports
		04	4 x 100/1000 Mbit/s Ethernet Ports
		08	8 x 100/1000 Mbit/s Ethernet Ports
		12	8 x 100/1000 Mbit/s + 4 x 1000/2500 Mbit/s Ethernet Ports or 12 x 100/1000 Mbit/s
[11 and [12]	1. + 2. Uplink Port	99	not configurable
		M2	1 x Multimode / SC (100 MBit/s)
		M4	1 x Multimode / ST (100 MBit/s)
		S2	1 x Singlemode / SC (100 MBit/s)
		S4	1 x Singlemode / ST (100 MBit/s)
		E2	1 x Singlemode Plus / SC (100 MBit/s)
		L2	1 x Singlemode LH / SC (100 MBit/s)
		G2	1 x Singlemode LH / SC 200km
		Z6	1 x SFP Slot (100 MBit/s)
		MM	2 x Multimode / SC (100 MBit/s)
		NN	2 x Multimode / ST (100 MBit/s)
		VV	2 x Singlemode / SC (100 MBit/s)
		UU	2 x Singlemode / ST (100MBit/s)
		EE	2 x Singlemode Plus / SC (100 MBit/s)
		LL	2 x Singlemode LH / SC (100 MBit/s)
		GG	2 x Singlemode LH / SC 200km (100MBit)
		ZZ	2 x SFP Slot (100 MBit/s)
		OO	2 x SFP Slot (100/1000 MBit/s)
		2Q	2 x SFP Slot (1000/2500 MBit/s)
[13] and [14]	3. + 4. Uplink Port	99	not configurable
		M2	1 x Multimode / SC (100 MBit/s)
		M4	1 x Multimode / ST (100 MBit/s)
		S2	1 x Singlemode / SC (100 MBit/s)
		S4	1 x Singlemode / ST (100 MBit/s)
		E2	1 x Singlemode Plus / SC (100 MBit/s)
		L2	1 x Singlemode LH / SC (100 MBit/s)
		G2	1 x Singlemode LH / SC 200km
		Z6	1 x SFP Slot (100 MBit/s)
		ZZ	2 x SFP Slot (100 MBit/s)
		OO	2 x SFP Slot (100/1000 MBit/s)
		2Q	2 x SFP Slot (1000/2500 MBit/s)
[15]	Hyphen	-	

[16]	Temperature range	S C T E	Standard, 0 ... +60 °C Standard with Conformal Coating, 0 ... +60 °C Extended, -40 ... +70°C Extended with Conformal Coating -40 ... +70°C
[17]	Voltage range	T F	2 x 24V DC 2 x 24V DC ... 48V DC/ 24V DC
[18]	Housing	C E	IP30 Plastic IP40 Metal

Accessories: Auto Configuration Adapter: ACA22-USB-C (EEC)
Software Version: 08.x

2. DOCUMENTS AND DRAWINGS:

- 837-827-X01 dated 02.10.18; 837-828-XXX dated 28.01.19; 942-170-999 dated 22.09.17
SQP HiOS Software 08.0.00 dated 01.08.2019
For version B0
- User Manual/Installation: BRS Family IG_BRS_15_0824_en_2024-08-15

3. TEST REPORTS:

- Hirschmann Automation and Control GmbH: PTR_94242002_PS_Navy_1v0 dated 2019-07-18;
PTR_94242002_PE_Navy_1v0 dated 2019-07-18; PTR_94242002 EMC_Navy_1v0 dated 2019-07-18
- TELUS- Testlabor für Umweltsimulation GmbH:132ea/19 dated 05th April 2019; 502e/18 dated 16th October 2018
For version B0
- Phoenix Testlab GmbH: E250482E1 dated 31.07.2025

4. APPLICATION / LIMITATION:

4.1 - Bureau Veritas Rules for the Classification of Steel Ships.
4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
4.3 - Bureau Veritas Environmental Category, **EC Code: 31B/41B**
4.4 - The equipment fulfils the EMC requirements for installation in Bridge Zone by using ferrit core 74277255 on power supply cable.
4.5 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 9.
4.6 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:
- Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.
- Inspection and testing before installation onboard is to be performed under the surveillance of the Society
4.7 - Only Hardware and Firmware successfully tested together in compliance with the Rules as referred to in page one, according to the declaration of the manufacturer is covered by this certificate.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above mentioned products are to be supplied by **Hirschmann Automation and Control GmbH** in compliance with the type described in this certificate.
5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
5.3 - **Hirschmann Automation and Control GmbH** has to make the necessary arrangements to have its works recognized by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
5.4 - For information, **Hirschmann Automation and Control GmbH** has declared to Bureau Veritas the following production site:

Hirschmann Automation and Control GmbH
Stuttgarter Str. 45 - 51
72654 Neckartenzlingen
GERMANY

6. MARKING OF PRODUCT:

- Maker's name or trademark
- Equipment type or model identification
- Date of manufacture and/or serial number

7. OTHERS:

7.1 - It is the responsibility of **Hirschmann Automation and Control GmbH** to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 59339/A0 BV issued on 27 Jan 2020 by the Society

***** END OF CERTIFICATE *****