



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Hirschmann Automation and Control GmbH
Address	45-51 Stuttgarter Str., Neckartenzlingen, 72654, Germany
Type	Control Units
Description	Industrial Ethernet BOBCAT rail switch refer to the Appendix for details
Trade Name	BRS20/30/40/50
Application	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and category ENV3 for nomenclature value at position 16 "T" or "E" (general power distribution zones) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – March, 2019.
Specified Standard	EN 55032:2015 Class A EN61000-6-2:2005 EN 61131-2: 2007 EN50121-4:2016 IACS unified requirements E10 (Rev.9 Aug 2023)
Ratings	refer to the Appendix for details

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Other Conditions For installation on bridge and deck zone, the provided ferrite core is mandatory on power supply cable.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR25252159TA

The Design Appraisal Document TSO-25-030203/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Appendix

TYPES

BRS20/30/40/50

Digit	Attribute	Identification	Feature
1 to 3	Product	BRS	BOBCAT Rail Switch
4	Datarate	2	100 MBit/s Ethernet Ports
		3	100 & 1000 MBit/s Ethernet Ports
		4	1000 MBit/s Ethernet Ports
		5	1000 & 2500 MBit/s Ethernet Ports
5	Hardware Typ	0	Standard
6	Hyphen	-	
7 to 8	Number of 100 Mbit/s Ports	00	0* 10/100 Mbit/s Ethernet Ports
		04	4 * 10/100 Mbit/s Ethernet Ports
		05	5 * 10/100 Mbit/s Ethernet Ports
		06	6 * 10/100 Mbit/s Ethernet Ports
		08	8 * 10/100 Mbit/s Ethernet Ports
		09	9 * 10/100 Mbit/s Ethernet Ports
		10	10 * 10/100 Mbit/s Ethernet Ports
		11	11 * 10/100 Mbit/s Ethernet Ports
		12	12 * 10/100 Mbit/s Ethernet Ports
9 to 10	Number of 1000 (2500) Mbit/s Ports	00	0 * 100/1000 Mbit/s Ethernet Ports
		04	4 * 100/1000 Mbit/s Ethernet Ports
		08	8 * 100/1000 Mbit/s Ethernet Ports
		12	12 * 100/1000 Mbit/s Ethernet Ports or 8 * 100/1000 Mbit/s + 4 * 1000/2500 Mbit/s Ethernet Ports
11 to 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 (100/1000/2500 MBit/s)
13 to 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 (100/1000/2500 MBit/s)
15	Hyphen	-	
16	Temperature range	S	0°C --> +60°C
		C	0°C --> +60°C, conf. coating
		T	-40°C --> +70°C
		E	-40°C --> +70°C, conf. coating
17	Voltage range	T	2 x (12 - 24 VDC)
		F	2 x (24 - 48 VDC + 24 VAC)
18	Housing	C	IP30 Plastic
		E	IP40 Metall
19 to 20	Approvals/ Declarations Part A	S9	CE; FCC; EN61131; EN62368-1 + Expanded Ship Approvals
		XX	Any letter, depending on approvals and/or declarations
21	Software Packages	9	Reserved
22 to 23	Customization	HH	Hirschmann
		XX	Any letter, depending on customization
24	Technology	S	Standard
25	Software Configuration	E	Empty
26	Software Level	S	HiOS Layer 2 Standard
		A	HiOS Layer 2 Advanced
		B	DRS
27 ... 31	Software version	XX.X.	Software version (see Software release#)
32 ... 33	Maintenance	XX	Any letter, depending on maintenance
34	Hyphen	-	
35 ... 36	Production location	NT	Neckartenzlingen
		XX	Further manufacturing places



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Certificate No: LR25252159TA
Issue Date: 28.11.2025
Expiry Date: 20.02.2030

HiOS Software release: 07.x
HiOS Software release: 08.x

Accessories:
Auto Configuration Adapter: ACA22-USB-C (EEC)