



दूरसंचार विभाग, भारत सरकार


DEPARTMENT OF TELECOMMUNICATION, GOVERNMENT OF INDIA

दूरसंचार अभियांत्रिकी केंद्र

TELECOMMUNICATION ENGINEERING CENTRE

CERTIFICATE OF MANDATORY CONFORMANCE

This is to certify that the product described below conforms to the Essential Requirement issued by TEC under Mandatory Testing and Certification of Telecom Equipment as notified vide Indian Telegraph (Amendment) Rules, 2017.

i.	*Certificate No.: 379401427	ii.	Dated: 30-Nov-2023
iii.	Certificate Category: Regular	iv.	Certificate Type: NEW
v.	APPLICANT: Belden India Private Limited, Unit No 233-236 2nd floor Spazende Tower B Sohna Road Sector 47 Gurugram Haryana 122002	vi.	ORIGINAL EQUIPMENT MANUFACTURER: Hirschmann Automation and Control GmbH, Stuttgarter Str. 45-51, 72654 Neckartenzlingen / Germany
vii.	PRODUCT NAME: LAN Switch	viii.	PRODUCT VARIANT: L2 LAN Switch
ix.	PREVIOUS CERTIFICATE NO.: NA	x.	PREVIOUS CERTIFICATE ISSUED DATE: NA
xi.	MODEL NO.: Bobcat Rail Switch	xii.	FAMILY NAME: Yes
xiii.	ASSOCIATED MODEL NO.: As given at Table-1 overleaf	xiv.	INTERFACES TESTED: As given at Table-2 overleaf
xv.	SOFTWARE VERSION: HiOS-08.7.04	xvi.	HARDWARE VERSION: S01
xvii.	VALID FROM: 30-Nov-2023	xviii.	VALID UPTO: 31-Dec-2032
xix.	ER NO.: TEC37942308	DDG (TC) K L Bhawan, Janpath, New Delhi - 110001	
xx.	EMI / EMC CLASS: A		
xxi.	QR CODE: 		

Note:

- *1. This certificate is valid for product(s) manufactured in Germany and India only, as per the details at Table-3.*
- 2. This certificate is issued for model/family name indicated at (xi) above and applicable for associated/ family model(s) mentioned at Table-1, overleaf only.*
- 3. Bill of Material covered under this certificate is given at Table-4.*
- 4. Terms & Conditions mentioned at MTCTE portal (<https://www.mtcte.tec.gov.in/>) shall be applicable.*

Table-1

List of Associated/Family Models	
i.	BRS20
ii.	BRS50
iii.	BRS32
iv.	BRS40
v.	BRS52
vi.	BRS30



Table-2

List of Interfaces Tested	
i.	1 G Optical Ethernet
ii.	10 100 1000 BASE-T Ethernet
iii.	10 100 BASE-T Ethernet
iv.	Fast Ethernet Optical



Table-3

List of manufacturing locations (as declared by the applicant) for which this certificate (No. 379401427) is valid:								
S. No.	Product Model number	Contract Manufacturing	Manufacturing Location Address	Contact Person Name (Plant Incharge)	E-mail-ID	Contact number	*Country Of Origin	**Country of Manufacturing
1	BRS20	No	Hirschmann Automation and Control GmbH Stuttgarter Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
2	BRS20	No	Belden India Private Limited Plot No D 228 1 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	Avinash.Pawar@belden.com	918956980234	India	India
3	BRS30	No	Hirschmann Automation and Control GmbH Stuttgarter Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
4	BRS30	No	Belden India Private Limited Plot No D 228 1 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	Avinash.Pawar@belden.com	918956980234	India	India
5	BRS40	No	Hirschmann Automation and Control GmbH Stuttgarter Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
6	BRS40	No	Belden India Private Limited Plot No D 228 1 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	Avinash.Pawar@belden.com	918956980234	India	India
7	BRS50	No	Hirschmann Automation and Control GmbH Stuttgarter Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
8	BRS50	No	Belden India Private Limited Plot No D 228 1 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	Avinash.Pawar@belden.com	918956980234	India	India
9	BRS32	No	Hirschmann Automation and Control GmbH Stuttgarter Str 45 51 72654	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany

List of manufacturing locations (as declared by the applicant) for which this certificate (No. 379401427) is valid:

List of manufacturing locations (as declared by the applicant) for which this certificate (No. 379401427) is valid:								
			Neckartenzlingen Germany					
10	BRS32	No	Belden India Private Limited Plot No D 228 1 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	Avinash.Pawar@belden.com	918956980234	India	India
11	BRS52	No	Hirschmann Automation and Control GmbH Stuttgarter Str 45 51 72654 Neckartenzlingen Germany	Michael Schlecht	michael.schlecht@belden.com	497127142101	Germany	Germany
12	BRS52	No	Belden India Private Limited Plot No D 228 1 Chakan MIDC Phase II Village Bhambholi Taluka Khed Pune 410507	Avinash Pawar	Avinash.Pawar@belden.com	918956980234	India	India

Note: *1. Country of Origin is as per the criteria defined under Custom Rules.

**2. Country of Manufacturing refers to the place where the Telecom product under certification against product model number given above is manufactured/assembled as complete unit only.



Table-4

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)						
Module Name/Atribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
Module No.						
EMI/EMC Class of equipment						Class A
Bobcat Rail Switch Family		S01	HiOS-08.7.04			Bobcat Rail Switch Family BRSXX Where 'X' can be any number between 0-9
Sub Unit 1		S01	HiOS-08.7.04	Bobcat Rail Switch	BRS20	
Microcontroller/Processor	NFBGA324P08		HiOS-08.7.04			
Motherboard - PCB 1	7.42879002E8	S01	HiOS-08.7.04			BRS, Main PCB 4TX FE - 1. BRS Main PCBA 4TX FE 12V DC 2. BRS Main PCBA 4TX FE 24V AC + DC
Motherboard - PCB 2	7.42880101E8	S01	HiOS-08.7.04			BRS, Main PCB 8TX FE MS -

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Atribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
						1. BRS Main PCBA 8TX FE MS 12V DC 2. BRS Main PCBA 8TX FE MS 24V AC + DC
PSU - Power Supply - T		S01				Max. Power Rating: 20.4W T = 2x (12-24 VDC)
PSU - Power Supply - F		S01				Max. Power Rating: DC Supply: 19.2W & AC Supply: 40.8W F = 2x (24-48 VDC + 24 VAC)
Fast Ethernet Optical	7.42884001E8	S01				SC (100 MBit/s) BRS, Uplink PCB 2FX 6P
Fast Ethernet Optical	742885001	S01				FX, EZx (100 MBit/s) BRS, Uplink PCB 2SFP 6P

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
Fast Ethernet Optical	742886001	S01				ST, SC, (100MBit/s), BRS, Uplink PCB 3FX
Fast Ethernet Optical	7.42887001E8	S01				FX, EZx (100 MBit/s), BRS, Uplink PCB 4SFP 2,5GE
Fast Ethernet Electrical	7.42879002E8	S01				PCB 4TX FE
Fast Ethernet Electrical	7.42880101E8	S01				PCB 8TX FE MS
Sub Unit 2		S01	HiOS-08.7.04	Bobcat Rail Switch	BRS30	
Microcontroller/Processor	NFBGA324P08		HiOS-08.7.04			
Motherboard - PCB 4	7.42936001E8	S01	HiOS-08.7.04			BRS, Main PCB 8TX FE/GE HP - 2x (24-48 VDC + 24 VAC)
PSU - Power Supply - F		S01				Max. Power Rating: DC Supply: 19.2W & AC Supply:

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Atrtribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
						40.8W F = 2x (24-48 VDC + 24 VAC)
1GE Ethernet	742939101	S01				RJ45 (1000 MBit/s), BRS, Uplink PCB 4TX GE HP
Sub Unit 3		S01	HiOS-08.7.04	Bobcat Rail Switch	BRS40	
Microcontroller/Processor	NFBGA324P08		HiOS-08.7.04			
Motherboard - PCB 3	7.42881101E8	S01	HiOS-08.7.04			BRS, Main PCB 8TX GE MS - 1. BRS Main PCBA 8TX GE MS 12V DC 2. BRS Main PCBA 8TX GE MS 24V AC + DC
PSU - Power Supply - T		S01				Max. Power Rating: 20.4W, T = 2x (12-24 VDC)
PSU - Power		S01				Max. Power Rating:

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Atrtribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
Supply - F						DC Supply: 19.2W & AC Supply: 40.8W F = 2x (24-48 VDC + 24 VAC)
1GE Ethernet	742888001	S01				RJ45 (1000 MBit/s), BRS, Uplink PCB 4TX GE
Gigabit Ethernet Optical	7.42887001E8	S01				LX, SX (1000 MBit/s), BRS, Uplink PCB 4SFP 2,5GE
Sub Unit 4		S01	HiOS-08.7.04	Bobcat Rail Switch	BRS50	
Microcontroller/Pro cessor	NFBGA324P08		HiOS-08.7.04			
Motherboard - PCB 4	7.42936001E8	S01	HiOS-08.7.04			BRS, Main PCB 8TX GE HP - 1. 2x (24-48 VDC + 24 VAC)
PSU - Power		S01				Max. Power Rating:

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
Supply - T						20.4W, T = 2x (12-24 VDC)
Gigabit Ethernet Optical	7.42938001E8	S01				SFP (1000/2500 MBit/s), BRS, Upl. PCB 4SFP 2,5GE HP
Sub Unit 5		S01	HiOS-08.7.04	Bobcat Rail Switch	BRS32	
Microcontroller/Processor	NFBGA324P08		HiOS-08.7.04			
Motherboard - PCB 5	7.42941001E8	S01	HiOS-08.7.04			BRS, Main PCB 8TX FE/GE PoE
PSU - Power Supply - U	837-823-X01	S01				Max. Power Rating: 110.4W, U = 2x 24 VDC
1GE Ethernet	742888001	S01				RJ45 (1000 MBit/s), BRS, Uplink PCB 4TX GE
Sub Unit 6		S01	HiOS-08.7.04	Bobcat Rail Switch	BRS52	
Microcontroller/Processor	NFBGA324P08		HiOS-08.7.04			

Details of major modules / components (as declared by the applicant) of the model under certification (BILL OF MATERIAL)

Module Name/Attribute Name	Module Code	Module Hardware Version	Module Software Version	Sub Unit Name	Sub Unit Model No.	Remarks
Motherboard - PCB 5	7.42941001E8	S01	HiOS-08.7.04			BRS, Main PCB 8TX GE PoE
PSU - Power Supply - P		S01				Max. Power Rating: 270W. P = 2x (48 VDC (POE) / 54VDC (POE+))
Gigabit Ethernet Optical	7.42887001E8	S01				LX, SX (1000 MBit/s), BRS, Uplink PCB 4SFP 2,5GE
1G Ethernet	7.42941001E8	S01				PCB 8TX GE PoE

*** End of the certificate ***