

TECHNICAL DATA

# **Smart Buildings**

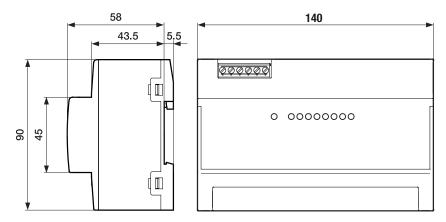
IS/S 8.1.1 IP Switch



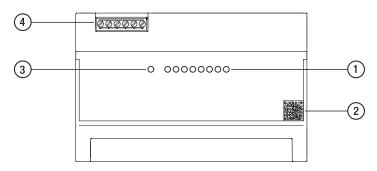
### **Description of product**

The device is designed for the special requirements of building automation. The device is designed for installation in electrical distribution boards and small casings for rapid mounting on a 1.38 in (35 mm) mounting rail in accordance with EN 60715. The device meets the relevant industry standards, provides very high operational reliability, even under extreme conditions, and also longterm reliability and flexibility.

# Dimension drawing



#### **Connection - Front view**



### **LEGEND**

- 1 LED display elements for port status
- 2 Data matrix code
- **3** LED display element for device status
- **4** 6-pin terminal block with screw lock

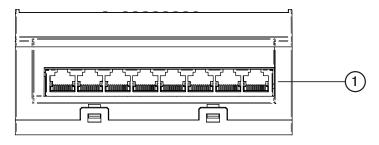
#### NOTE

The packaging and the front of the device are labeled with matrix codes (QR codes or data matrix codes). These codes are used for unique identification of the device and include the following information:

- Device serial number
- Link to the product page
- Order number

The matrix codes can be read using any mobile device with an appropriate app.

## **Connection - View from below**



#### **LEGENDE**

1 8 × RJ45 socket for 10/100-Mbit/s Twisted Pair connections

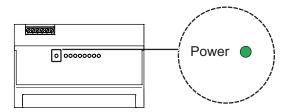
# Operating and display elements

# Display elements

After the supply voltage is switched on, the device performs a self-test. During this process, various LEDs light up.

#### **Device state**

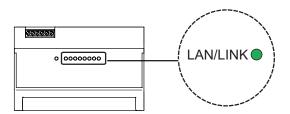
This LED provides information on the status of the power supply.



Color	Activity	Meaning
green	lights up	Supply voltage is on. Device is ready for operation
-	none	Supply voltage is too low. Device is not ready for operation

#### Port-Status

These LEDs provide port-related information.



LAN/LINK (link status/data)	Color	Activity	Meaning	
green		lights up	Device detects a valid link	
		flashing	Device is transmitting and/or receiving data	
	-	none	Device detects an invalid or missing link	

Technical data				
Dimensions W × H × D	IP Switch IS/S 8.1.1	See Dimension drawing on page 2		
Modular width		8 MW		
Mounting Position		Any		
Weight		8.82 oz (250 g)		
Supply voltage	1 voltage input			
	Rated voltage range	100 V AC 240 V AC, 50 Hz 60 Hz		
	Voltage range incl. maximum tolerances	85 V AC 264 V AC, 47 Hz 63 Hz		
	Power consumption/power output	max. power 1.4 W consumption		
		Power output 4.8 Btu (IT)/h		
	Connection type	6-pin terminal block with screw lock		
		Tightening torque 4.4 lb-in 5.3 lb- (0.5 Nm 0.6 Nm		
		min. conductor 0.14 mm² diameter (AWG26)		
		max. conductor 1.5 mm² diameter (AWG16)		
	Stripping length	6 mm		
	Power loss buffer	10 ms bei 115 V AC 40 ms bei 230 V AC		
	Back-up fuse	16 A with 1.5 mm² (AWG16) or smaller according to the wire cross-section used		
	Peak inrush current	25 A at 115 V AC 45 A at 230 V AC		
	Overvoltage category	III according to EN 60664-1		
Climatic conditions during operation	Ambient air temperature 1)	+23 °F +140 °F (-5 °C +60 °C)		
	Humidity	20 % 90 % (non-condensing)		
	Air pressure	Without derating • min. 795 hPa (+6562 ft; +2000 m) • max. 1060 hPa (-1312 ft; -400 m)		
		With derating • min. 700 hPa (+9842 ft; +3000 m)		
Climatic conditions during storage	Ambient air temperature 1)	-40 °F +185 °F up to 3 months (-40 °C +85 °C)		
		-40 °F +158 °F up to 1 year (-40 °C +70 °C)		
		-40 °F +122 °F up to 2 years (-40 °C +50 °C)		
		+32 °F +86 °F up to 10 years (0 °C +30 °C)		
	Humidity	10 % 95 % (non-condensing)		
	Air pressure	<ul> <li>min. 600 hPa (+13123 ft; +4000 m)</li> <li>max. 1060 hPa (-1312 ft; -400 m)</li> </ul>		
Pollution degree		2 according to EN 60664-1		
Protection classes	Degree of protection	IP20		
Fire classification		Flammability V-0 as per UL 94		
Certificates and declarations	CE declaration of conformity	→ 9AKK107992A2179		

<sup>1)</sup> Temperature of the ambient air at a distance of 2 in (5 cm) from the device

Ethernet Ports	
8 x 10/100-Mbit/s twisted pair port	
according to the IEEE 802.3 10BASE-T/100BASE-TX standard	
Port RJ45 socket	
Port supports:	Autonegotiation
	• Autopolarity
	• Autocrossing
	• 100 Mbit/s half-duplex mode, 100 Mbit/s full duplex mode
	• 10 Mbit/s half-duplex mode, 10 Mbit/s full duplex mode

Network range	
10/100-Mbit/s twisted pair port	
Length of a twisted pair segment	max. 328 ft (100 m) (for Cat5e cable)

Other underlying technical standards		
Name		
CSA C22.2 No. 142	Canadian National Standard(s) – Process Control Equipment – Industrial Products	
FCC 47 CFR Part 15	Code of Federal Regulations	
UL/IEC 61010-1, UL/IEC 61010-2-201	Safety for Control Equipment	

The device has an approval based on a specific standard exclusively if the approval indicator appears on the device casing.

The device generally fulfills the technical standards named in their current versions.

Ordering details					
Device type	Product Name	Order No.	bbn 40 53546 EAN	Weight 1 pcs. [kg]	Packaging [pcs.]
IS/S 8.1.1	IP Switch	2CDG120082R0011	04551 2	0.25	1

# NOTE

For a detailed description, please refer to the technical documentation for the device. It is available for download on the Internet at www.abb.com.



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