System 800xA Networks
Wired network RNRP routers/firewalls

System 800xA Networks consist of equipment enabling both a wired and wireless network infrastructure. The following are high performance industrial Ethernet routers and firewalls. They support Redundant Network Routing Protocol (RNRP) used in System 800xA.

The network equipment has been tested to meet EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments.

Network equipment has following general features:
- Pre-defined configurations for use with System 800xA

- Enhanced monitoring using PNSM
- Long life duration
- Fully supported by ABB

For uppdated information regarding System 800xA Networks hardware, please visit our 800xA Hardware Selector. **www.800xahardwareselector.com**
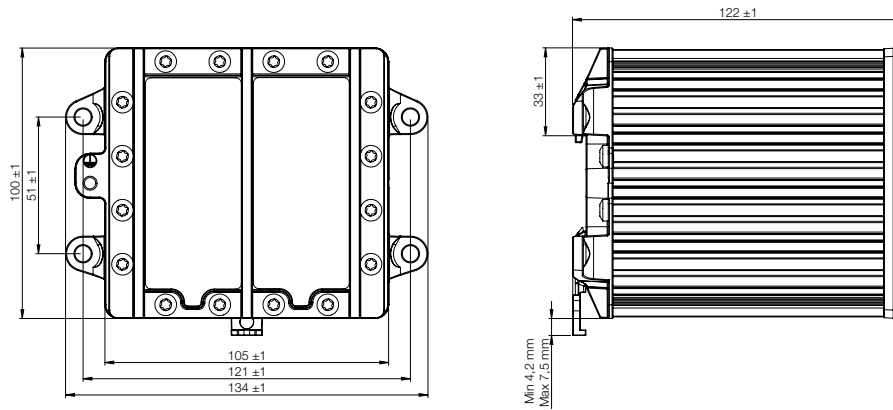
Specific feature [1]	NE870	NE871
Article number	3BSE080239R1	3BSE080240R1
Managed	Yes	Yes
Routing	Yes	Yes
Firewall	Yes	Yes
Dimension (W x H x D)	134 x 100 x 122 mm	134 x 100 x 122 mm
Weight	1.5 kg	1.5 kg
Degree of protection	IP40	IP40
Operating voltage	16 to 60 VDC	16 to 60 VDC
Rated current	0.43 (0.60[2]) A @ 20 VDC 0.19 (0.25[2]) A @ 48 VDC	0.31 (0.48[2]) A @ 20 VDC 0.15 (0.21[2]) A @ 48 VDC
Ethernet TX	3 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 8 x 10/100 Mbit/s, Ethernet TX, RJ-45	3 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45
Digital I/O	1 x 4-ports detachable screw terminal	1 x 4-ports detachable screw terminal
Console	1 x USB Micro-B connector	1 x USB Micro-B connector
Operating Temperature	−40 to +70 °C	−40 to +70 °C
Temperature Storage & Transport	−50 to +85 °C	−50 to +85 °C
Mounting	DIN-mounted	DIN-mounted
Marine certificate	DNV	DNV
G3 compliant	Compliant	Compliant
MTBF [3]	430,000 hours	430,000 hours

(1) For detailed information on each module, please visit: **www.800xahardwareselector.com**
(2) With 500 mA USB load
(3) according to MIL-HDBK-217K

100 ±1
51 ±1
105 ±1
121 ±1
134 ±1

122 ±1
33 ±1
Min 4,2 mm
Max 7,5 mm

Agency approvals and standards compliance [1]

EMC	EN 50121-4	Railway applications – Electromagnetic compatibility – Emission and immunity of the signalling and telecommunications apparatus
	EN 55022	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
	EN 55024	Information technology equipment – Immunity characteristics Limits and methods of measurement
	EN 61000-6-1	Electromagnetic compatibility – Immunity for residential, commercial and light-industrial environments
	EN 61000-6-2	Electromagnetic compatibility – Immunity for industrial environments
	EN 61000-6-3	Electromagnetic compatibility – Emission standards for residential, commercial and light industrial environments
	EN 61000-6-4	Electromagnetic compatibility – Emission standard for industrial environments
	FCC part 15 Class A	
Safety	UL/IEC/EN 60950-1, IT equipment	
Marine	DNV Standard for Certification no. 2.4	
RoHS compliance	EN 50581:2012	
WEEE compliance	DIRECTIVE/2012/19/EU	

(1) For detailed information on each module, please visit: **www.800xahardwareselector.com**

—
abb.com/800xA
abb.com/controlsystems