Product data sheet

Specifications



Wireless Receiver, Harmony XB5R, 4 PNP, 2 pusbuttons, LED, 200mA, 24V DC

ZBRRH

To be discontinued on: Dec 31, 2026

To be discontinued

Main

Range of product	Harmony
Product or component type	Wireless receiver
Device short name	ZBRRH
Product specific application	Interface to Harmony hub
Function of module	Bi-stable
Reset time	2 ms time delay
Transmission frequency	2405 MHz
Antenna type	Omnidirectional
Antenna gain	0 dBi
emission class	5M00G7W

Complementary

Output type	Transistor PNP
Output contacts	4 PNP
Time delay range	0.5 s (tolerance: - 15...15 %)
Maximum switching current	0.2 mA DC
Minimum switching current	10 mA at 5 V DC
[Us] rated supply voltage	24 V DC - 15...20 %
Maximum voltage drop	<2 V DC at 2 A
Communication port protocol	Zigbee green power at 2.4 GHz conforming to IEEE 802.15.4
Maximum sensing distance	100 m in free field 25 m transmitter in a plastic box type XAL D and receiver in a metal enclosure 40 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna
Response time	< 30 ms after transmitter clicks
Channels utilisation	1 Harmony Hub per receiver
Utilisation category	DC-13 conforming to IEC 60947-5-1
Maximum power consumption in VA	20 VA DC
Maximum power consumption in W	20 W DC
Breaking capacity	4.8 W (per output)
Short-circuit protection	0.4 A fuse type fast blow
Operating position	Any position without derating

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Electrical connection	1 conductor cable 0.14…2.5 mm² - 26 AWG...14 AWG - solid - without cable end conforming to IEC 60947-1 2 conductors cable 0.14…1.5 mm² - 26 AWG...16 AWG - solid - without cable end conforming to IEC 60947-1 1 conductor cable 0.14…4 mm² - 26 AWG...12 AWG - flexible - with cable end conforming to IEC 60947-1 2 conductors cable 0.14…1.5 mm² - 26 AWG...16 AWG - flexible - with cable end conforming to IEC 60947-1
Housing material	Polycarbonate
Status LED	1 LED green for power ON 1 LED green and yellow for reception signal 4 LEDs green for relay ON
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715 Mounting plate
Rated short-duration power frequency withstand voltage	1 kV 50 Hz conforming to IEC 60947-5-1
[Uimp] rated impulse withstand voltage	0.8 kV
Surge withstand	0.5 kV differential mode conforming to IEC 61000-4-5 1 kV common mode conforming to IEC 61000-4-5
Number of channels	1
Modulation Technique	O-QPSK
Bandwidth	5 MHz
Width	36 mm
Height	108 mm
Depth	75 mm
Net weight	0.13 kg
Tightening torque	0.5…1 N.m conforming to IEC 60947-1

Environment

Standards	IEC 60947-5-1
Radio agreement	RSS SRRC ANATEL ARIB T66 FCC ICASA
Product certifications	CCC CSA GOST C-Tick UL
Marking	CE
Ambient air temperature for storage	-40…70 °C
Relative humidity	90 % at -20…55 °C, without condensation conforming to ETSI EN 300 440-1
Vibration resistance	+/- 7.5 mm (f= 5…14 Hz) conforming to IEC 60068-2-6 2 gn (f= 8…150 Hz) conforming to IEC 60068-2-6
Shock resistance	10 gn (duration = 16 ms) for 6000 shocks conforming to IEC 60068-2-27
IP degree of protection	IP20 (casing) conforming to IEC 60529 IP20 (terminals)
Pollution degree	2 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 500 MOhm at 500 V DC conforming to NF C 20-030

[Ui] rated insulation voltage	60 V conforming to IEC 60664-1
Electromagnetic compatibility	Immunity for industrial environments conforming to IEC 61000-6-2 Conducted and radiated emissions class B conforming to CISPR 22 Electrostatic discharge immunity test - test level: 8 kV (in free air (in insulating parts)) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 6 kV (on contact (on metal parts)) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m (80...2000 MHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 3 V/m (80...2700 MHz, distance = 20 m) conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 2 kV (power supply wires) conforming to IEC 61000-4-4 Conducted RF disturbances - test level: 10 V conforming to IEC 61000-4-6 Radiated emission conforming to ETSI EN 300 440-1 Conducted emission conforming to EN 300-489-1 Conducted emission conforming to ETSI EN 300 489-3 Radiated emission conforming to ETSI EN 300 440-2 Electrical fast transient/burst immunity test - test level: 1 kV (PNP output wires) conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test - test level: 0.5 kV (differential mode) conforming to IEC 61000-4-5 1.2/50 µs shock waves immunity test - test level: 1 kV (common mode) conforming to IEC 61000-4-5 Immunity to microbreaks and voltage drops - test level: 7 ms conforming to IEC 61000-4-11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.200 cm
Package 1 Width	10.800 cm
Package 1 Length	10.200 cm
Package 1 Weight	118.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	64
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.400 kg

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**1 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**1 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**0 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.1 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**25b7f895-3732-43c8-9910-ef6005058640**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
California proposition 65	**WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**

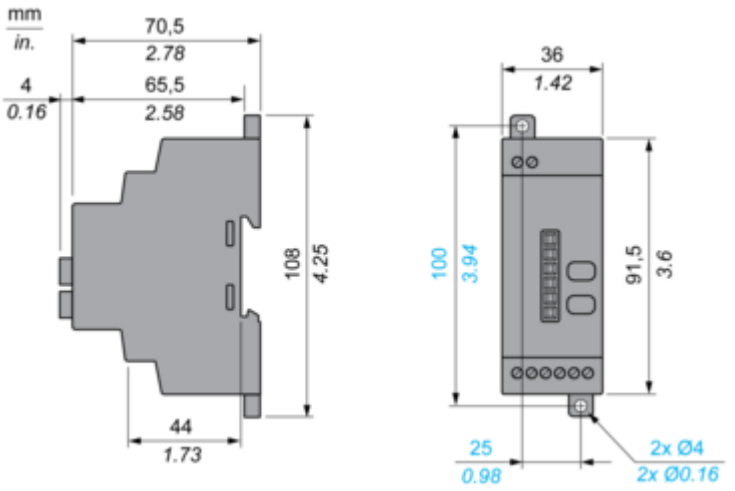
Use Again

Repack and remanufacture

Recyclability potential, in %	**12**
End of life manual availability	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

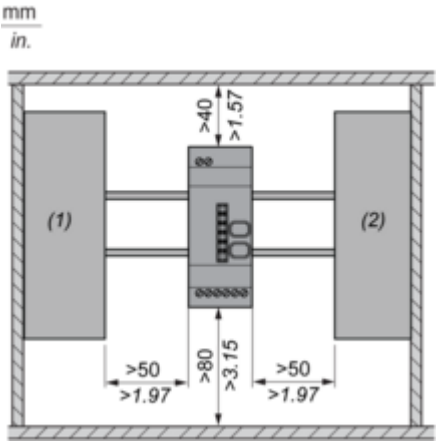
Dimensions Drawings

Programmable Receiver



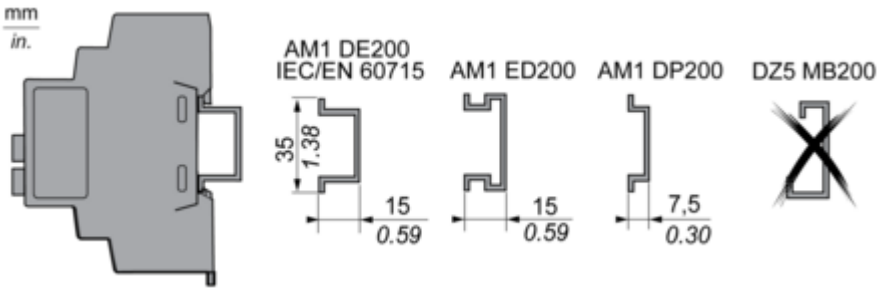
Mounting and Clearance

Receiver Clearance



(1) Drive
(2) Power Supply or PLC

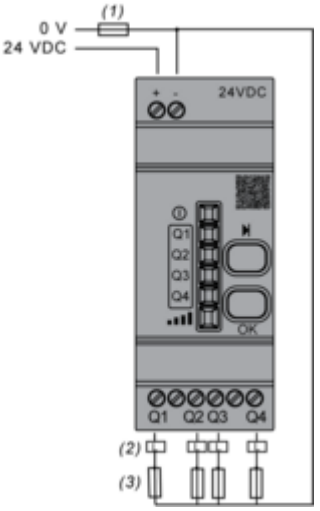
Receiver Mounting



Connections and Schema

Programmable Receiver

Wiring Diagram

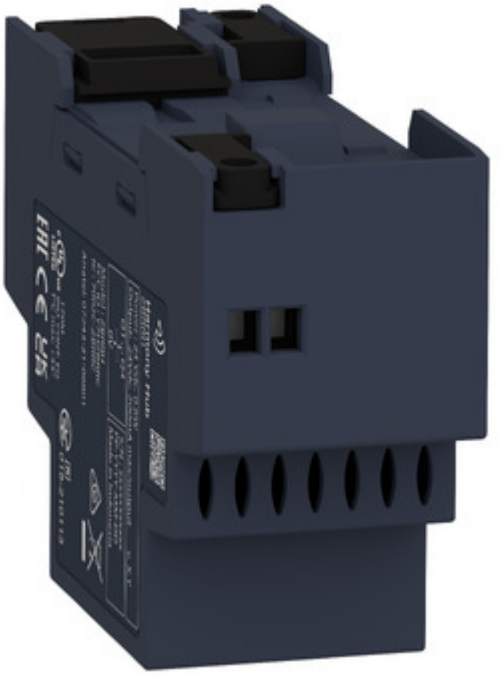


(1) 400 mA fast-blow fuse
(2) Imax = 200 mA
(3) Imax = 300 mA

Image of product / Alternate images

Alternative






Harmony Hub
ZBRRH
Power : 24 Vdc, 0.8W
Output: 24Vdc, 200mA max/output v. X.Y
Q1 ...Q4
0V
S/N : xxxxxxxxxx
PP-YYYY-MM-DD
Made in Indonesia
Model : ZBRRH
FCC ID : Y7HZBRRC
IC : 7002C-ZBRRC
Anatel: 07243-21-06801
018-210113
LISTED
IND. CONT. EQ.
T°C max +55°






OK
Q1
Q2
Q3
Q4