Product datasheet

Specifications

Configurable receiver, Harmony XB5R, 4 PNP, 2 buttons, 6 indicating LEDs, monostable, 24V DC

ZBRRC

Main

Range of product	Harmony
Product or component type	Programmable receiver
Device short name	ZBRRC
Product specific application	Interface to PLC
Function of module	Monostable
Reset time	2 ms time delay
Transmission frequency	2405 MHz
emission class	5M00G7W
Antenna type	Omnidirectional

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
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

Electrical connection	1 conductor cable 0.14…2.5 mm² - AWG 26...AWG 14 - solid - without cable end conforming to IEC 60947-1 2 conductors cable 0.14…1.5 mm² - AWG 26...AWG 16 - solid - without cable end conforming to IEC 60947-1 1 conductor cable 0.14…4 mm² - AWG 26...AWG 12 - flexible - with cable end conforming to IEC 60947-1 2 conductors cable 0.14…1.5 mm² - AWG 26...AWG 16 - flexible - with cable end conforming to IEC 60947-1
Tightening torque	0.5…1 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
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
Max power consumption in W	1 mW
Number of channels	1
Modulation Technique	O-QPSK
Bandwidth	5 MHz
Antenna gain	0 dBi
Width	36 mm
Height	108 mm
Depth	75 mm
Net weight	0.13 kg

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	4.6 cm
Package 1 Width	7.9 cm
Package 1 Length	9.6 cm
Package 1 Weight	122.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	64
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.498 kg

Contractual warranty

Warranty	18 months

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.

How this information helps you >

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**32**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
China RoHS Regulation	**China RoHS declaration**

Use Again

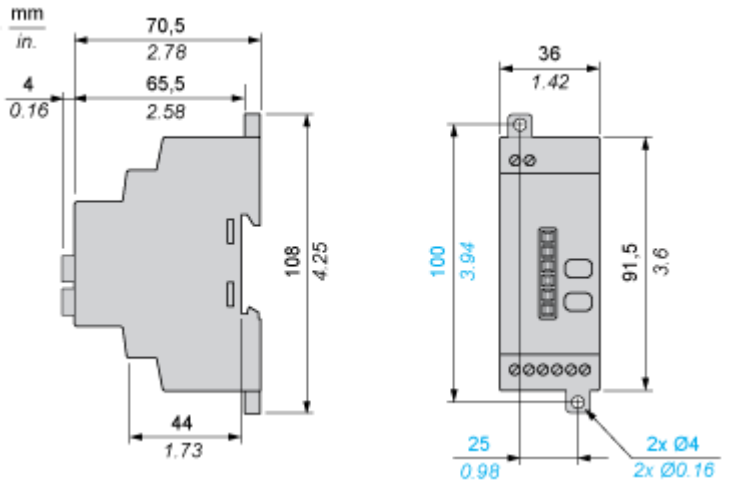
Repack and remanufacture

Circularity Profile	**End of Life Information**
WEEE	 **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Take-back	**No**

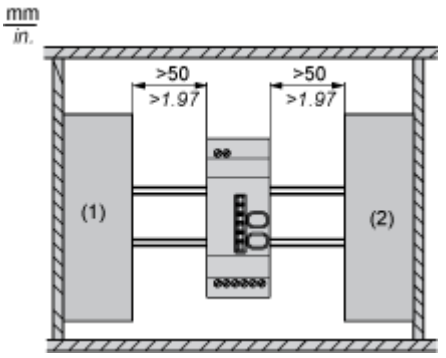
Dimensions Drawings

Programmable Receiver



Mounting and Clearance

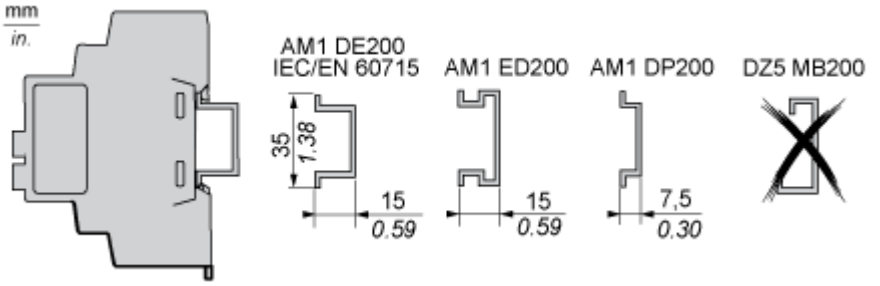
Receiver Clearance



(1) Drive

(2) Power Supply or PLC

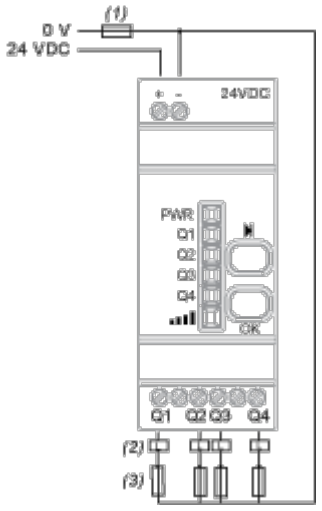
Receiver Mounting



Connections and Schema

Programmable Receiver

Wiring Diagram



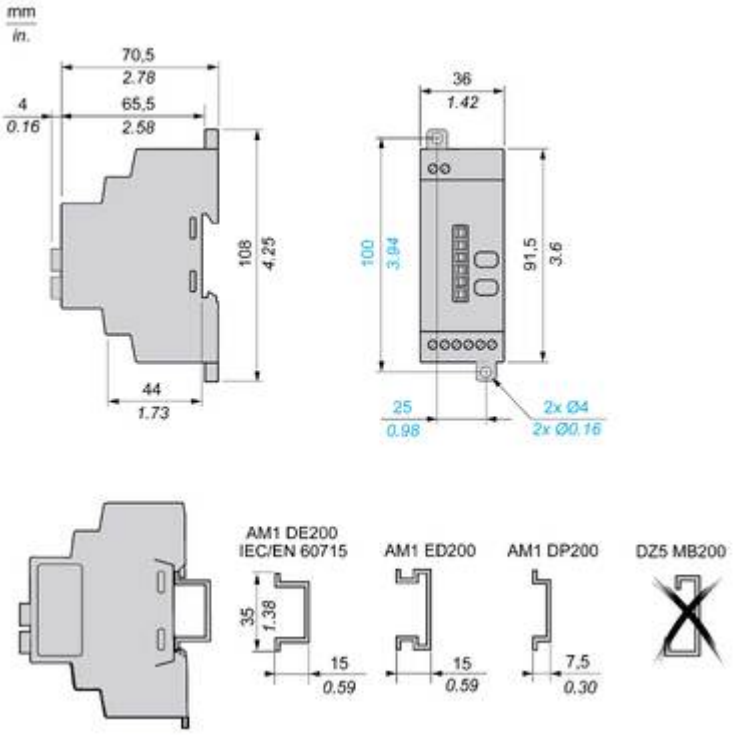
(1) 400 mA fast-blow fuse

(2) Imax = 200 mA

(3) Imax = 300 mA

Technical Illustration

Dimensions



Technical Illustration

Wiring diagram

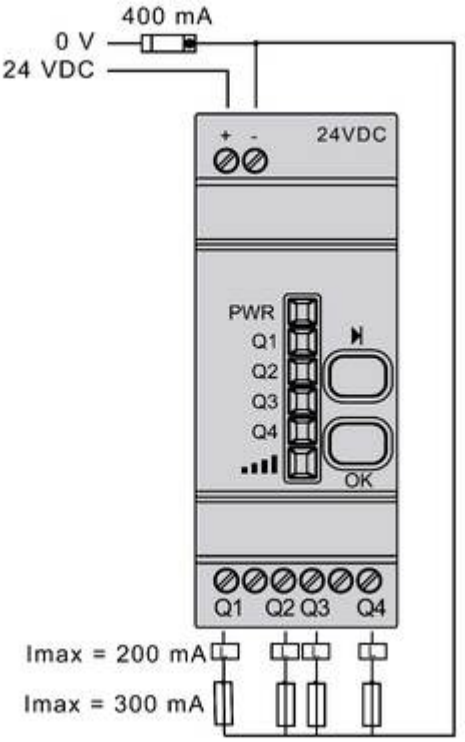
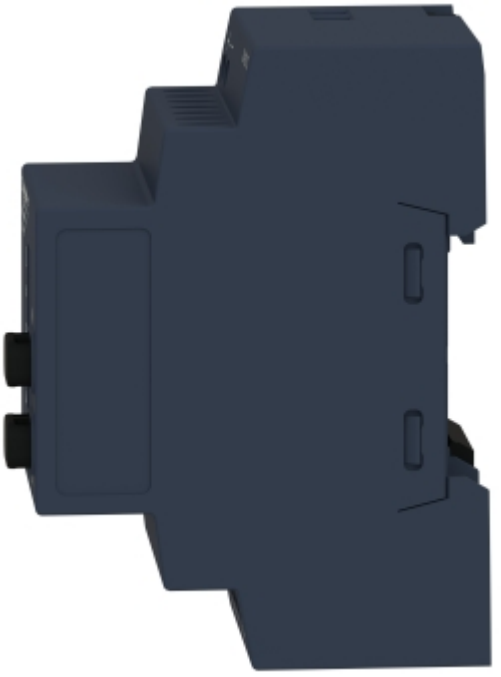
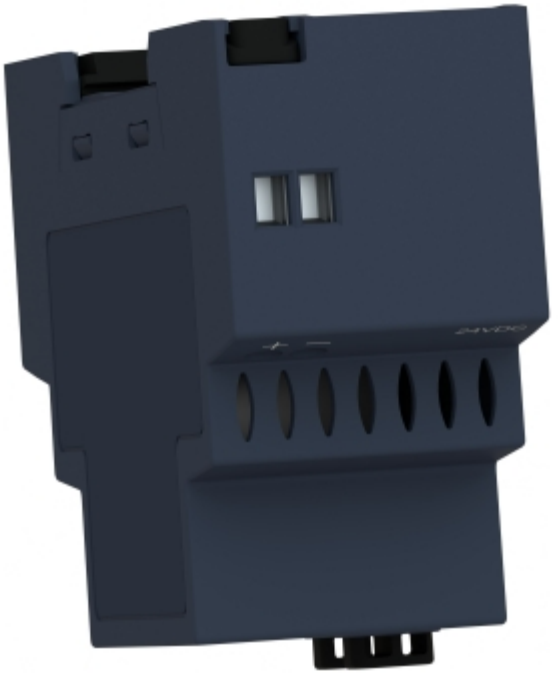


Image of product / Alternate images

Alternative






24VDC
Schneider Electric
Harmony
ZBRRC
Q1
Q2
Q3
Q4
OK
Q1
Q2
Q3
Q4