

Product data sheet

Specifications



Programmable receiver, Harmony
XB5R, 2 relays, 2 buttons, 6
indicating LEDs, monostable,
bistable, 24...240V AC DC

ZBRRD

Main

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

Complementary

| | |
|--------------------------------|--|
| Nominal output current | 0.3 A at 48 V DC conforming to IEC 60947-5-1 3 A at 24 V DC conforming to UL 508 1.5 A at 240 V AC conforming to IEC 60947-5-1 3 A at 120 V AC conforming to IEC 60947-5-1 3 A at 240 V AC conforming to UL 508 3 A at 24 V DC conforming to CSA C22.2 No 14 3 A at 240 V AC conforming to CSA C22.2 No 14 |
| Output type | 2 relays |
| Output contacts | 2 C/O |
| Input output isolation | Galvanic isolation |
| Time delay range | 0.5 s (tolerance: - 15...15 %) |
| Switching capacity in VA | 1250 VA |
| Maximum switching current | 5 mA AC/DC |
| Maximum switching voltage | 250 V AC/DC |
| [Us] rated supply voltage | 24...240 V AC/DC 50/60 Hz - 10...10 % |
| 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 | AC-15 : B300 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 |
| Maximum power consumption in W | 4 W AC/DC |

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

| | |
|--|--|
| Breaking capacity | 15 W |
| Breaking capacity | 750 VA |
| Control circuit frequency | 50...60 Hz +/- 10 % |
| 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 2 LEDs green for relay ON 2 LEDs green for function mode 1 LED green and yellow for reception signal |
| Mounting support | 35 mm symmetrical DIN rail conforming to IEC 60715 Mounting plate |
| Rated short-duration power frequency withstand voltage | 1.5 kV 50 Hz conforming to IEC 60947-5-1 |
| [Uimp] rated impulse withstand voltage | 4 kV |
| Surge withstand | 1 kV differential mode conforming to IEC 61000-4-5 2 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 |
| Product weight | 0.13 kg |

Environment

| | |
|------------------------|---|
| Standards | CSA C22.2 No 14 IEC 60947-5-1 UL 508 IEC 60947-1 |
| Radio agreement | RSS SRRC ANATEL ARIB T66 FCC ICASA |
| Product certifications | CCC UL GOST CSA C-Tick |
| 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 | II conforming to IEC 60664-1 |
| Insulation resistance | > 500 MOhm at 500 V DC conforming to NF C 20-030 |
| [Ui] rated insulation voltage | 250 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 (relay wires) conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 2 kV (power supply wires) conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test - test level: 1 kV (differential mode) conforming to IEC 61000-4-5 1.2/50 µs shock waves immunity test - test level: 2 kV (common mode) conforming to IEC 61000-4-5 Conducted RF disturbances - test level: 10 V conforming to IEC 61000-4-6 Immunity to microbreaks and voltage drops - test level: 10 ms conforming to IEC 61000-4-11 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 durability | 100000 cycles |
| Mechanical durability | 1000000 cycles |

Packing Units

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.5 cm |
| Package 1 Width | 7.9 cm |
| Package 1 Length | 9.7 cm |
| Package 1 Weight | 138.0 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 | 9.541 kg |

Contractual warranty

Warranty

18 months


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 | 32 |

Use Better

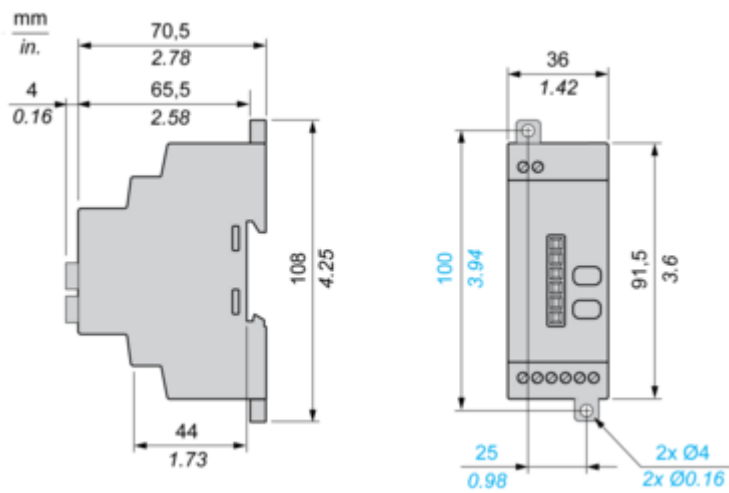
|  Materials and Substances | |
|--|--|
| Packaging made with recycled cardboard | No |
| Packaging without single use plastic | No |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| SCIP Number | 25b7f895-3732-43c8-9910-ef6005058640 |
| California proposition 65 | 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 | |
|--|---|
| 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 |

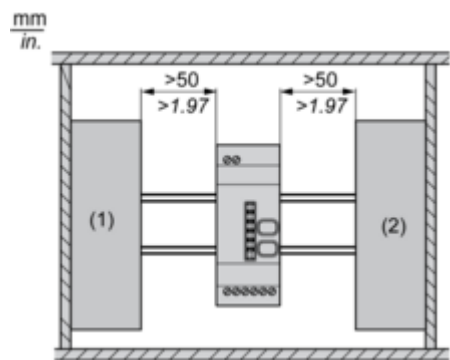
Dimensions Drawings

Programmable Receiver



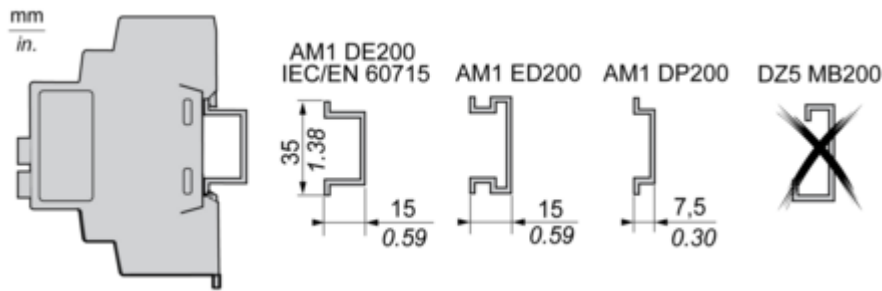
Mounting and Clearance

Receiver Clearance



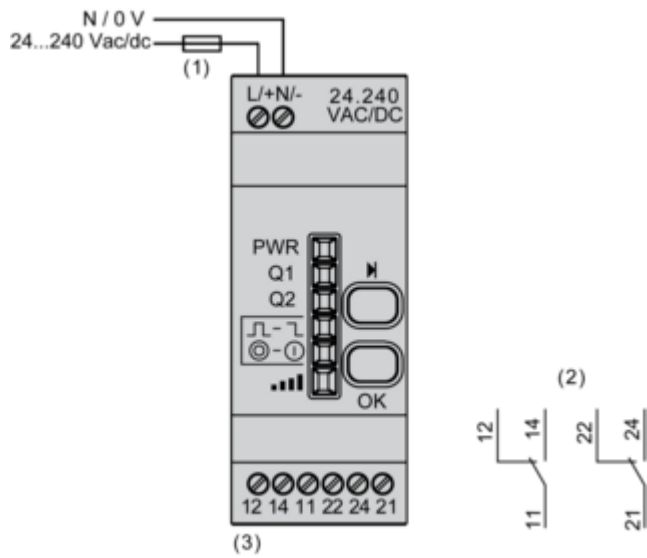
- (1) Drive
- (2) Power Supply or PLC

Receiver Mounting



Connections and Schema

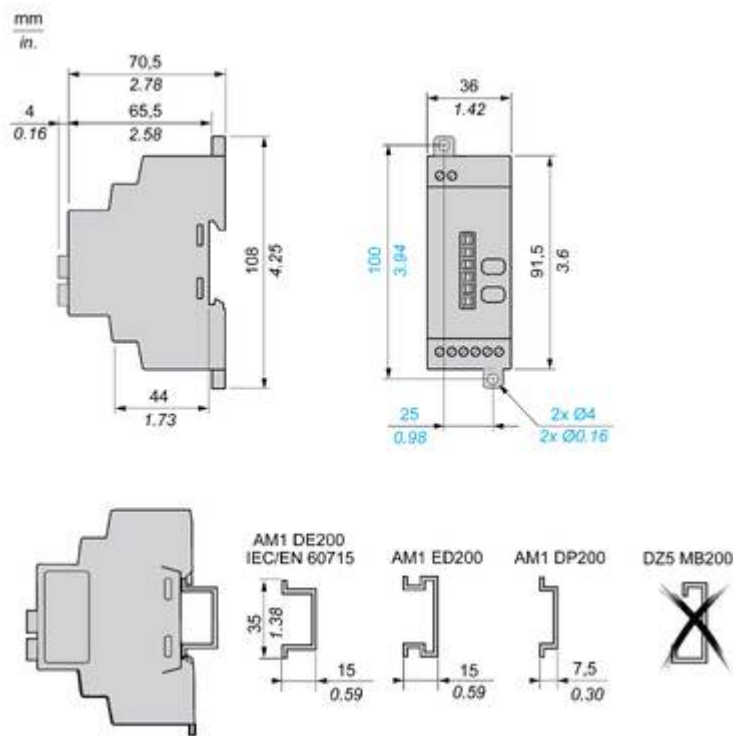
Programmable Receiver



- (1) 500 mA
- (2) Output contacts
- (3) I_{max} = 3 A

Technical Illustration

Dimensions



Technical Illustration

Wiring diagram

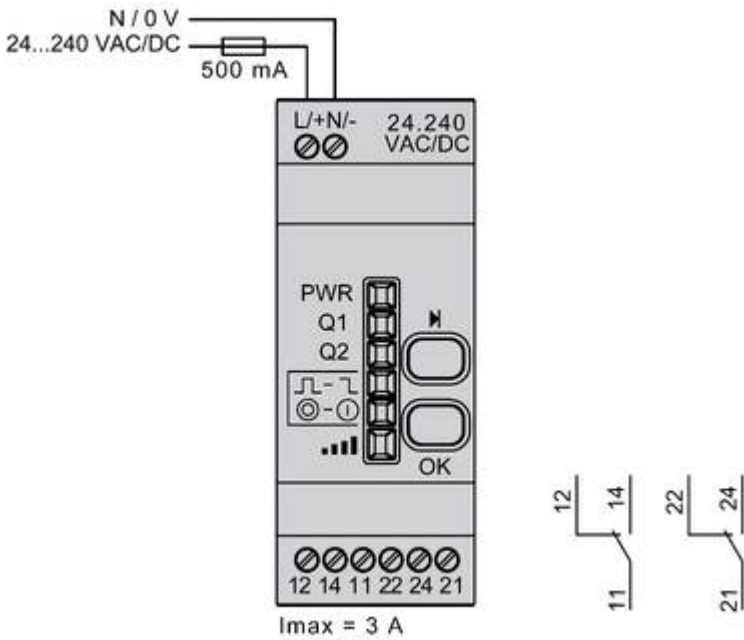


Image of product / Alternate images

Alternative

