

Product datasheet

Specifications



Relay Antenna, AC/DC, 5m cable output

Local distributor code: 398217440 ZBRA1

Main

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|-----------------------------|---|
| Range of product | Harmony XB5R |
| Product or component type | Wireless and batteryless range |
| Device short name | ZBRA |
| Product destination | Wireless Schneider Electric ecosystem devices |
| Control station application | Transceiver (emission and reception) |
| Colour of base of enclosure | Black (RAL 9011) |
| Colour of cover | Transparent |
| Material | Polycarbonate |
| Frequency | 2405 MHz for transmitter 2405 MHz for receiver |
| Emission class | 5M00G7W |
| Antenna type | Omnidirectional |

Complementary

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|--|--|
| Communication port protocol | Zigbee green power at 2.4 GHz conforming to IEEE 802.15.4 |
| Antenna gain | 0 dBi |
| Maximum sensing distance | 300 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna |
| Emission power | 3 mW |
| [Us] rated supply voltage | 24...240 V AC/DC 50/60 Hz - 10...10 % |
| Maximum power consumption in W | 4 W AC/DC |
| Operating position | Vertical |
| Status LED | 1 LED green for power ON 1 LED green for emission signal |
| Overvoltage category | III conforming to IEC 60664-1 |
| Rated short-duration power frequency withstand voltage | 4 kV 50 Hz conforming to EN/IEC 60947-5-1 |
| [Uimp] rated impulse withstand voltage | 4 kV |
| Electrical connection | 2 conductors cable 0.34 mm² - flexible - 5 m conforming to EN/IEC 60947-1 |
| Tightening torque | 0.6 N.m conforming to EN/IEC 60947-1 |
| Housing material | Self-extinguishing plastic |

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|----------------------------|---------------------------|
| Short-circuit protection | 0.4 A fuse type fast blow |
| Max power consumption in W | 1 mW |
| Number of channels | 1 |
| Modulation Technique | O-QPSK |
| Bandwidth | 5 MHz |
| Net weight | 0.2 kg |

Environment

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|-------------------------------------|---|
| Ambient air temperature for storage | -40...70 °C |
| Relative humidity | 90 % at -20...55 °C, without condensation conforming to ETSI EN 300 440-1 |
| Electrical shock protection class | Class II conforming to IEC 61140 |
| IP degree of protection | IP65 conforming to IEC 60529 55 °C 0.1 m |
| Pollution degree | 3 conforming to IEC 60664-1 |
| IK degree of protection | IK03 conforming to EN 50102 |
| Radio agreement | RSS SRRC ANATEL, type III conforming to ETSI EN 301 489-3 ARIB T66, class 2 conforming to ETSI EN 301 489-3 FCC, category 2 conforming to ETSI EN 300 440-1 ICASA, category 1 conforming to ETSI EN 300 440-1 |
| Product certifications | CCC BT 2006/95/EC UL GOST CSA CE C-Tick |
| Directives | 1999/5/EC - R&TTE directive 2004/108/EC - electromagnetic compatibility |
| Vibration resistance | +/-0.5 mm (f= 10...55 Hz) conforming to IEC 60068-2-6 6 gn (f= 55...150 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 25 gn (duration = 6 ms) for 6000 shocks conforming to IEC 60068-2-27 15 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |
| Insulation resistance | > 500 MOhm at 500 V DC conforming to NF C 20030 |
| [Ui] rated insulation voltage | 250 V conforming to IEC 60664-1 |
| Electromagnetic compatibility | Immunity for industrial environments conforming to EN/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 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 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 |

Packing Units

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|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 252.0 g |
| Package 1 Height | 8.1 cm |

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| Package 1 width | 8 cm |
| Package 1 Length | 18.7 cm |

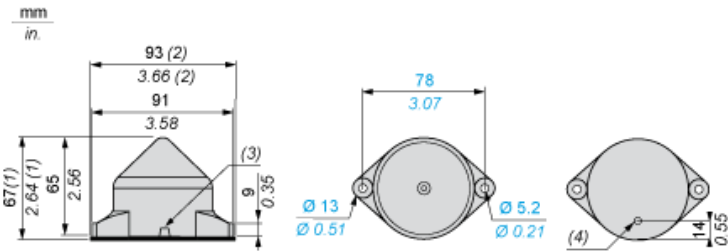
Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| 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 |

Contractual warranty

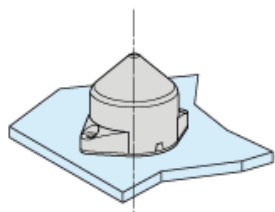
| | |
|----------|-----------|
| Warranty | 18 months |
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Relay-Antenna



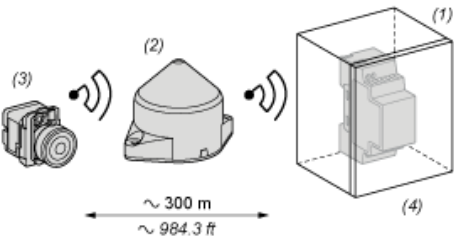
- (1) Knock-out for wire routing, maximum capacity 14 mm/0.55 in.
- (2) With seal
- (3) Radial cable route
- (4) Axial cable route

Antenna Mounting



The antenna is installed following his vertical axis

Antenna Clearance in a Metal Enclosure



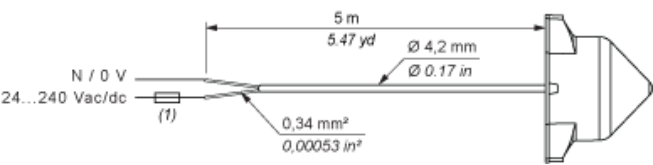
- (1): Metal enclosure
- (2): Relay Antenna
- (3): Transmitter
- (4): Receiver

The range is reduced if the transmitter is placed in a metal enclosure (reduction factor:approx 10%).

| | |
|-----------------|------------|
| Glass window | 10...20 % |
| Plaster wall | 30...45 % |
| Brick wall | 60 % |
| Concrete wall | 70...80 % |
| Metal structure | 50...100 % |

Relay-Antenna

Wiring Diagram



(1) 400 mA fast-blow fuse