

Product data sheet

Characteristics

ZBRRC

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



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 EN/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 mm ² - AWG 26...AWG 14 - solid - without cable end conforming to IEC 60947-1 2 conductors cable 0.14...1.5 mm ² - AWG 26...AWG 16 - solid - without cable end conforming to IEC 60947-1 1 conductor cable 0.14...4 mm ² - AWG 26...AWG 12 - flexible - with cable end conforming to IEC 60947-1 2 conductors cable 0.14...1.5 mm ² - AWG 26...AWG 16 - flexible - with cable end conforming to IEC 60947-1
Tightening torque	0.5...1 N.m conforming to EN/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 EN/IEC 60715 Mounting plate
Rated short-duration power frequency withstand voltage	1 kV 50 Hz conforming to EN/IEC 60947-5-1
[Uiimp] rated impulse withstand voltage	0.8 kV

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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	EN/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 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 (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 Weight	122 g
Package 1 Height	4.6 cm
Package 1 width	7.9 cm
Package 1 Length	9.6 cm
Unit Type of Package 2	S03
Number of Units in Package 2	64
Package 2 Weight	8.498 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

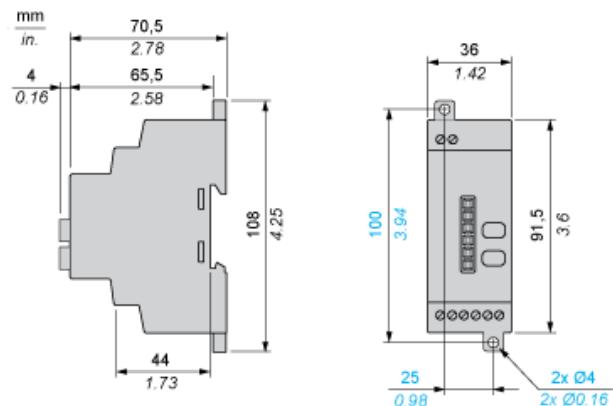
Offer Sustainability

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <input checked="" type="checkbox"/> EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration
Environmental Disclosure	<input checked="" type="checkbox"/> Product Environmental Profile
Circularity Profile	<input checked="" type="checkbox"/> 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

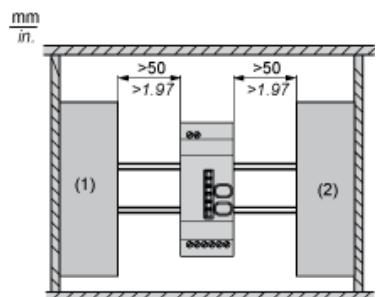
Contractual warranty

Warranty	18 months
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Programmable Receiver

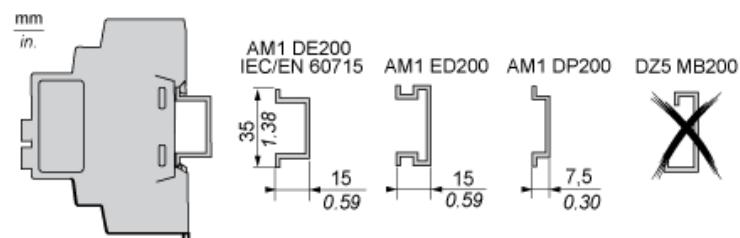


Receiver Clearance



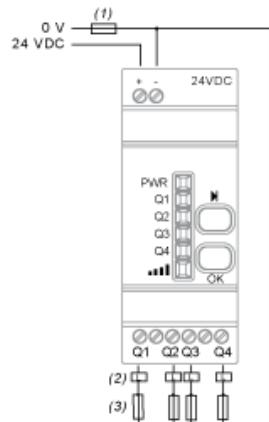
(1) Drive
(2) Power Supply or PLC

Receiver Mounting



Programmable Receiver

Wiring Diagram



- (1) 400 mA fast-blow fuse
- (2) $I_{max} = 200$ mA
- (3) $I_{max} = 300$ mA