

ZBRRD

Programmable receiver - 2 relays - 24..240 V
AC/DC - 2 pusbuttons - 6 LEDs



Main

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

Complementary

Nominal output current	0.3 A at 48 V DC for EN/IEC 60947-5-1 3 A at 24 V DC for UL 508 1.5 A at 240 V AC for EN/IEC 60947-5-1 3 A at 120 V AC for EN/IEC 60947-5-1 3 A at 240 V AC for UL 508 3 A at 24 V DC for CSA C22.2 No 14 3 A at 240 V AC for 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
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)
Channels utilisation	<= 32 per receiver
Utilisation category	AC-15 : B300 conforming to EN/IEC 60947-5-1 DC-12 conforming to EN/IEC 60947-5-1
Power consumption in W	<= 4 W
Breaking capacity	15 W
Breaking capacity	750 VA
Control circuit frequency	50...60 Hz +/- 10 %
Short circuit protection	0.4 A fuse 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

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Status LED	1 LED, color: green for power ON 2 LEDs, color: green for relay ON 2 LEDs, color: green for function mode 1 LED, color: green and yellow for reception signal
Mounting support	
Rated short-duration power frequency withstand voltage	1.5 kV 50 Hz conforming to EN/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
Rated power 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	EN/IEC 60947-1 EN/IEC 60947-5-1 UL 508 CSA C22.2 No 14
radio agreement	RSS SRRC ICASA ANATEL ARIB T66 FCC
product certifications	CCC CSA C-Tick GOST 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) 6000 shocks conforming to IEC 60068-2-27
IP degree of protection	IP20 on casing conforming to IEC 60529 IP20 on 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 EN/IEC 61000-6-2 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 Conducted emission conforming to EN 300-489-1 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

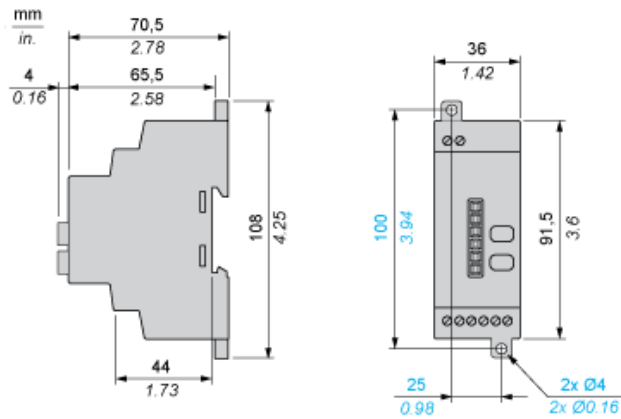
IEC 61000-4-5
 1.2/50 µs shock waves immunity test (test level: 2 kV) common mode conforming to IEC 61000-4-5
 Radiated emission conforming to ETSI EN 300 440-1
 Conducted emission conforming to ETSI EN 300 489-3
 Radiated emission conforming to ETSI EN 300 440-2

electrical durability	100000 cycles
mechanical durability	1000000 cycles

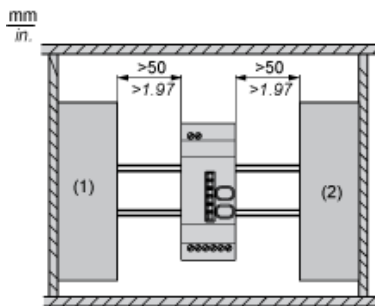
Offer Sustainability

Sustainable offer status	Not Green Premium product
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Programmable Receiver

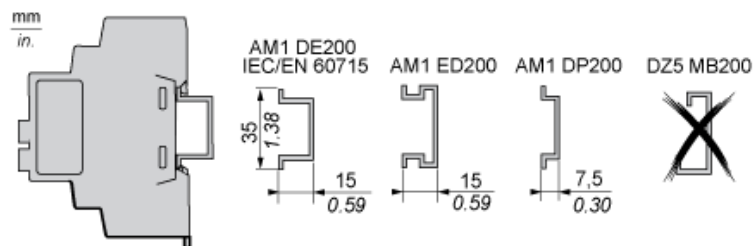


Receiver Clearance

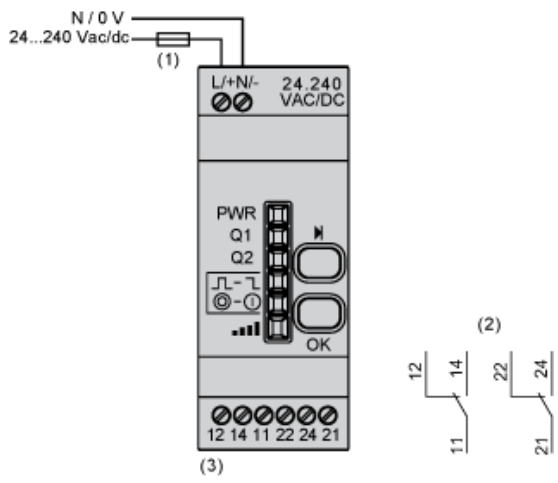


- (1) Drive
- (2) Power Supply or PLC

Receiver Mounting



Programmable Receiver



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