Product data sheet
Characteristics

ZBRRA
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	ZBRRA
Product specific application	Interface to actuators
Function of module	Bi-stable Monostable Stop/Start
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)

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

	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 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 EN/IEC 60947-1
Housing material	Self-extinguishing plastic
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
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	C-Tick CSA GOST UL CCC
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	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 Immunity for industrial environments conforming to EN/IEC 61000-6-2
Electrical durability	100000 cycles
Mechanical durability	1000000 cycles

Offer Sustainability

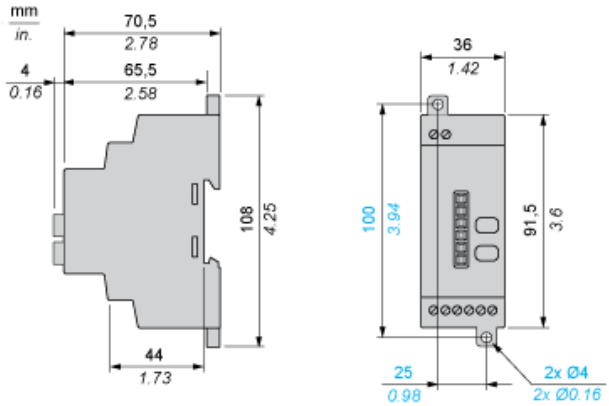
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 1142 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
Product end of life instructions	Need no specific recycling operations

Contractual warranty

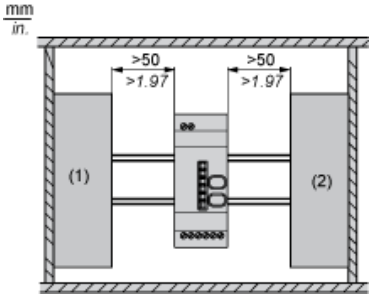
Warranty period	18 months

Dimensions Drawings

Programmable Receiver

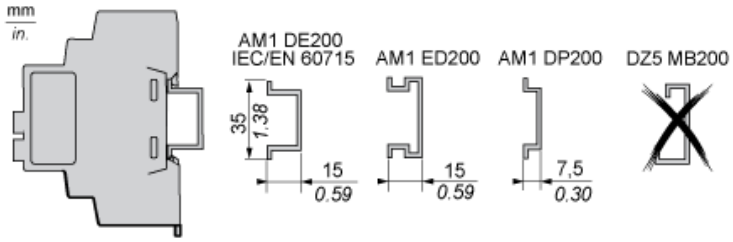


Receiver Clearance

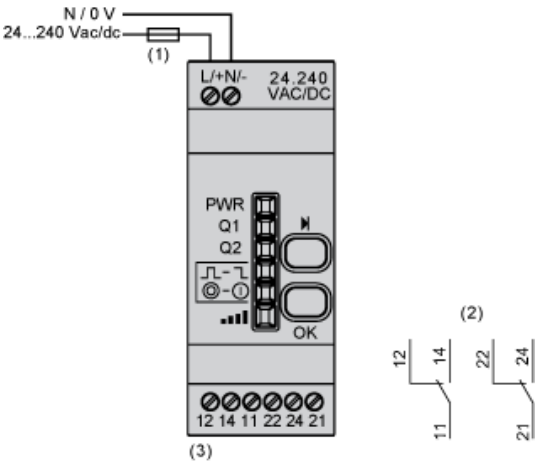


(1) Drive
(2) Power Supply or PLC

Receiver Mounting



Programmable Receiver



(1) 500 mA
(2) Output contacts
(3) Imax = 3 A