ST100AC controller is suitable for use in hotels, pensions and guesthouse rooms where air-condition switching off on window/door opening is not installed. With ST100AC and wireless CTX magnet window state detector installed, air-condition unit operation will be automatically on/off controlled depending on close or open state of windows or doors. The detectors are installed on windows or doors wings and are programmed to the controller. If window or door is opened for airing or other purpose, the CTX detector wirelessly notifies the controller which sets the air-condition unit OFF (cuts off mains power supply). As soon as the window or door closed state is returned, the CTX detector notifies the controller which sets the air-condition unit ON (mains power supply is set ON). ST100AC controller supplies 230VAC mains voltage at relay output and can operate with up to 16 wireless CTX detectors simultaneously. Radio transmission notification from CTX detector to ST100AC controller is protected by *KEELOQ®* hopping code encryption technology allowing high code security and error free communication.

System Operation.

The opening of one or more windows protected by magnet detectors CTX cuts OFF air-condition unit power supply. Power supply setting ON again is done as soon as all installed magnet detectors will detect all windows shut. The controller remembers open or shut state of all windows in case of power supply cut off. On power supply return the controller will reinstate open or shut windows state as it was before the power supply cut off and consequently, will set the air-conditioning on or off. If, during the power supply cut-off period, a window was shut or open then it will be necessary to once open-shut the window to update window status memory of the controller.

Jumper JP1 options.

Setting OFF jumper JP1 results that the controller is neglecting any short time (less than 16 seconds) opening of protected window/s or door/s and should be off in standard operation. In that case, power supply to the air-conditioning unit will not be set OFF. If jumper JP1 is ON, the controller will switch off air-conditioning unit immediately on any window/s or door/s opening.

Service RS switch.

If signal from magnet detector is not received by the controller due to detector failure, detector loss or detector's battery failure, pressing momentarily the RS switch resets the controller to "all windows shut" state and air-condition unit will be switch ON.

Service OP and CL switches.

Pressing service switches OP (open) or CL (close) executes the air-condition unit momentary (as long as switch is pressed) power supply setting to OFF or ON respectively, neglecting current window/s or door/s state.

Jumpers JP2 and JP3. These jumpers are not used.

Programming CTX detectors the controller.

Up to 16 wireless magnet CTX detectors can be programmed (learned-in) to the ST100AC controller following procedure described below:

a) Press shortly PRG button switch in the controller: the controller's LED lights on steady after button release.

b) Close or open window with CTX detector to be programmed or, move magnet in and out of the CTX case on the side of battery if detector is not installed yet: controller's LED starts several blinking confirming end of procedure. Not blinking LED signals programming error and the procedure should be repeated.

Deleting all CTX detectors in controller's memory: To delete all CTX detectors in the controller's memory press and hold down PRG switch button in the controller as long as detector's LED starts blinking (over 8 seconds) and then release the button. Further blinking LED confirms cleared memory of the controller. It is not possible to delete one of many detectors in controller's memory.

Installation.

ST100AC controller should be installed in safe and dry place. No external antenna is needed in standard same room operation with CTX detector/s. If needed, an external 17 cm long wire antenna should be installed to A marked terminal and let loose downwards (not glued or fitted to wall). Care should be taken not to expose the controller to harsh environmental conditions or high humidity.

Description of ST100AC controller wiring terminals:

L – controller 230VAC mains supply **LIVE** wire terminal,

N - controller 230VAC mains supply **NEUTRAL** wire terminal,

PE - controller mains supply **GROUND** wire terminal,

PE – air-condition unit **Ground** wire terminal,

Lo - air-condition unit mains supply **LIVE** wire terminal,

No - air-condition unit mains supply **NEUTRAL** wire terminal.

## WARNING! Switches OP, CL and RS must never be connected to any voltage!

Specification

- mains supply 230VAC controller with receiver for 433,92MHz band,
- relay outputs for air-condition unit max 16A/230VAC (2.5 kW),
- indoor operation only with temperature from 0 up to +50 deg. Centigrade,
- control panel external dimensions (l/w/h) 87/87/39mm,
- wireless open field operating range: up to 100m.

Manufacturer: ELMES ELECTRONIC, 54-611 Wroclaw – PL, Avicenny Str. 2, phone (+48) 71-784-59-61, fax (+48) 71-784-59-63

Manufacturer's Limited Warranty:
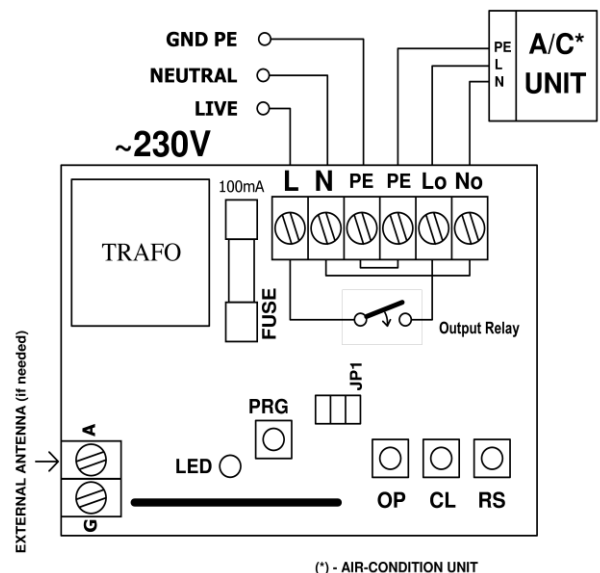
DECLARATION OF CONFORMITY

Manufacturer Elmes Elektronik

declares under sole responsibility that its products:

AIR-CONDITION POWER SUPPLY CONTROLLER

Model type: ***ST100AC***

comply with essential requirements of the following directives:

2014/53/EU Radio Equipment Directive (RED),
2014/30/EU Electromagnetic Compatibility Directive (EMC),
2014/35/EU Low Voltage Directive (LVD),
and applied harmonized standards, in particular:

EN 60335-1:2012   and   EN 60335-2-103:2015
EN 60950-1:2007/A11:2009+A1:2010+A12:2011
EN 61000-6-1:2008
EN 61000-6-3:2008/A1:2012
EN 301 489-1 V1.9.2 (2011-09)
EN 301 489-3 V1.6.1 (2013-06)
EN 300 220-1 V2.4.1 (2012-01)
EN 300 220-2 V2.3.1 (2009-12)
Manufacturer:
ELMES ELEKTRONIK, ul. Avicenny 2, 54-611 Wroclaw, Poland
phone (+48)717845961, fax: (+48)717845963, email: *biuroelmes@elmes.pl*

elmes®
electronic

Signature..
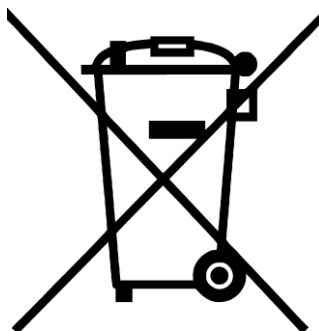Director - Miroslaw Binkowski
Date: 2018-05-28

Waste Electrical and Electronic Equipment (WEEE) Symbol

(EN) The use of the WEEE symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly you will protect the environment. Recycling information of this product can be obtained at the place of sale, your household waste disposal service provider, or local authority.