

230 V~ Actuator Control WST 4d / WST 8d

Installation and Operation Instructions - Version 1/13

Please read all information given in these instructions very carefully.

Only skilled personnel are permitted to work on this unit!

1. Concept

- Control for integration of 24 V- actuators in 230 V~ systems
- The actuators can be operated by ventilation buttons Δ / ∇
- Internal indication of travelling direction Open Δ and Close ∇
- Combination of type WST 2, WST 4 and WST 8 controls is possible
- Plastic enclosure, light grey (RAL 7035)
- Optionally available with contacts for forwarding the actuator positions Open / Closed (option PK-SA).
For using this option, actuators with additional limit switches are required

2. Installation / Putting into service

⚠ Perform work at the Control only in deenergised condition!

- Fasten the enclosure securely using suitable mounting material.
- Pass the connection cables through the membrane grommets and wire the Control according to the terminal diagrams enclosed.
- After the mains supply is turned on, WST is ready for operation.

3. Technical Data

Type	WST 4d	WST 8d
Product code	8162 4404 0000	8162 8408 0000
Product code WST with option PK-SA	8162 4404 0002	8162 8408 0002
Mains power supply	230 V~ / 50 - 60 Hz	230 V~ / 50 - 60 Hz
Current input	0,7 A	1,1 A
Output current	4 A (24 V ^{DC} / 96 W)	8 A (24 V ^{DC} / 192 W)
Environmental Class I (to VdS 2581)	-5 °C ... +75 °C	
Max. constant ambient temperature	60 °C	
Relative humidity (non-condensing)	20 % ... 80 %	
Duty cycle / power-on time:	S1	
230 V~ input	S3 30 % ¹	
24 V- output		
Dimensions in mm (W x H x D)	255 x 180 x 75	
Installation dimensions in mm (W x H)	238 x 163	
Cable entry through membrane grommets	5 x M16, 2 x M25	
Enclosure protection rating	IP66	
Mains fuse (miniature fuse 5 x 20 mm)	F1: T 2 A	

Allowed cable length between Control and actuator with simple and moderately branched arrangement:

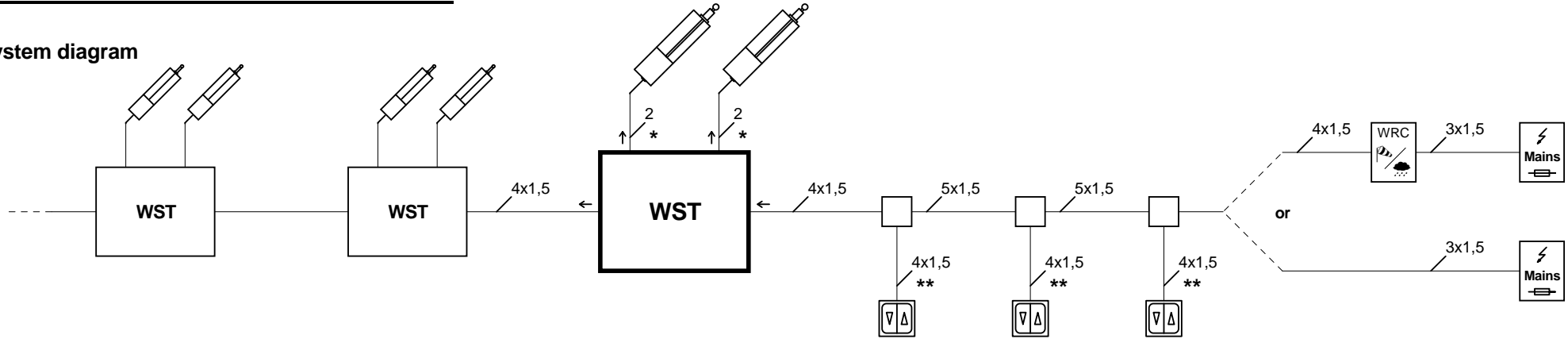
Current Cross-section	1 A	2 A	3 A	4 A	5 A	6 A	7 A	8 A
2 x 1,5 mm ²	44 m	22 m	15 m	11 m	9 m	7 m	6 m	5 m
2 x 2,5 mm ²	73 m	36 m	24 m	18 m	15 m	12 m	10 m	9 m
2 x 4,0 mm ²	116 m	58 m	39 m	29 m	23 m	19 m	17 m	15 m

The Control complies with the requirements of the 2006/95/EC and 2004/108/EC Directives (emission: EN 61000-6-3 and EN 55022, immunity: EN 61000-6-2 and EN 50130-4).

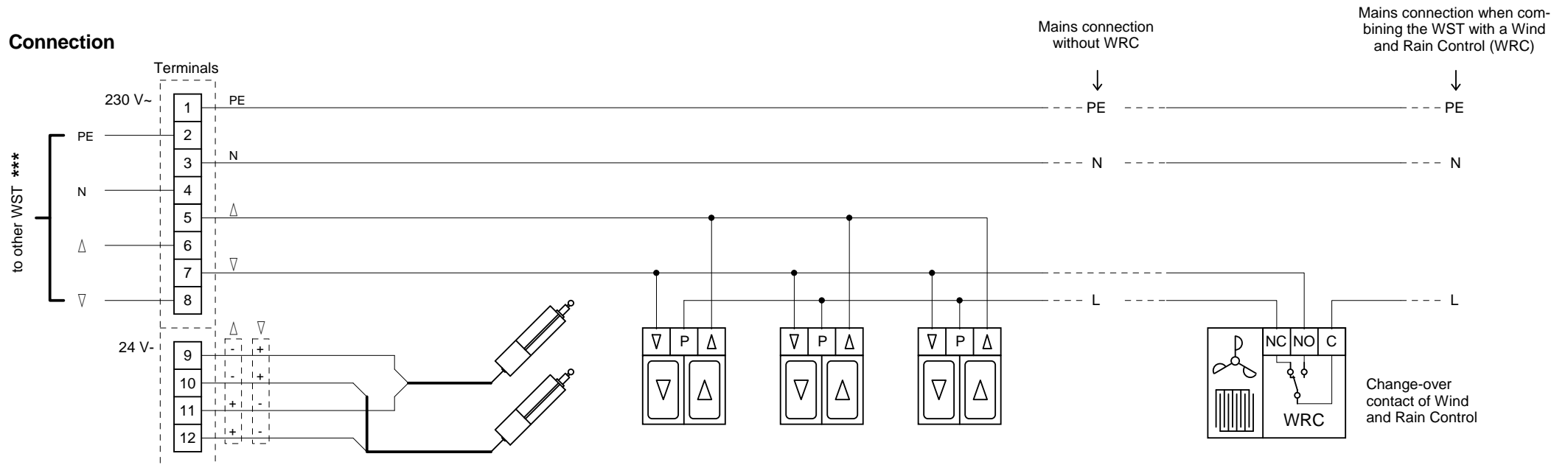
¹ Up to an ambient temperature of 40 °C. Up to 75 °C the duty cycle decreases linearly to S3 10 %.
 S1 = Continuous operation, S3 = Operation with specified power-on time related to 10 min.

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System diagram



Connection



* For max. allowed lengths of cable, please refer to section "Technical Data".
Max. 4 mm² can be clamped.

** PE not used.

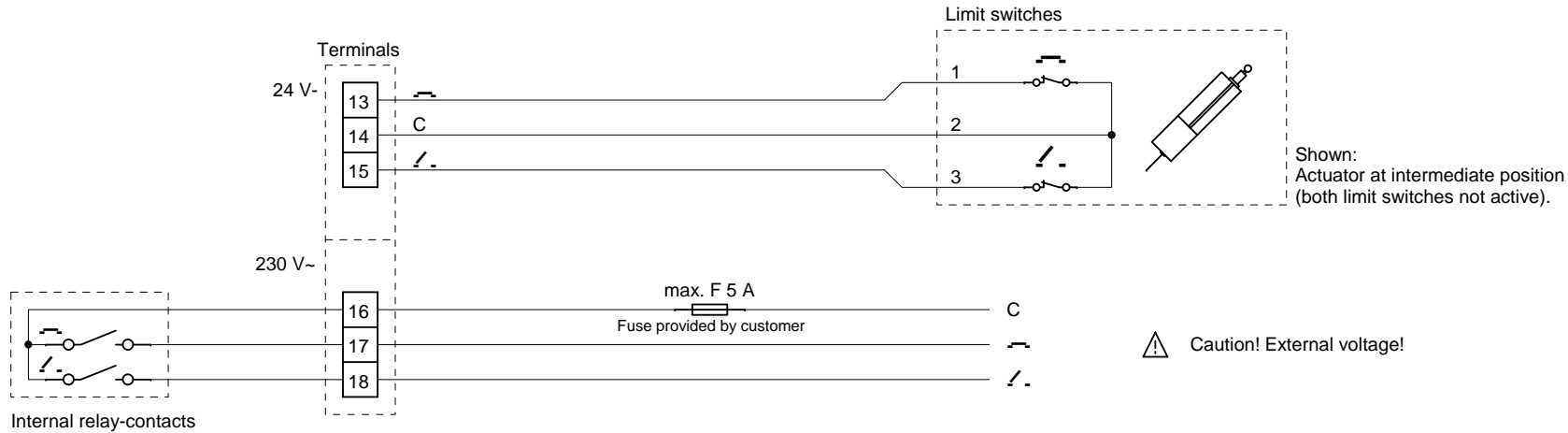
*** Terminals 2, 4, 6 and 8 allow parallel connection of several WST, in which connection to terminals 1, 3, 5 and 7 will be re-established. The WST within one group are operated by the same ventilation buttons.
Combination of type WST 2, WST 4 and WST 8 controls is possible.

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Option PK-SA

Potential-free contacts for forwarding indication of position Open / Closed

For using the option, actuators with additional limit switches (normally closed contacts) or external limit switches are required.



The relay contact "Closed" will be closed, if all limit switches for the position "Closed" are activated.
 The relay contact "Open" will be closed, if all limit switches for the position "Open" are activated.
 At intermediate positions both contacts are opened.

Contact load rating: 230 V~ / 5 A. Fuse F 5 A to be supplied by customer.

Example of connection: 230 V~ indication of position

(limit switches are to be connected as shown above)

