## Datasheet Roller Shutter x3 RSH-203-D-01

The Roller Shutter allows you to control three independent 230V<sub>ac</sub> roller shutter drives.



### 1. Parameters - ROLLER\_SHUTTER

Characteristics:		
MechanicalOffset	The time of compensation for start of the drive	
MaxTime	The time in milliseconds it takes to fully open / close the blind	
BlindsUpMaxTime	The time in milliseconds it takes to fully open the blind	
BlindsDownMaxTime	The time in milliseconds it takes to fully close the blind	
State	Output state: 0 - no movement, 1 - moving upwards, 2 - moving downwards, 3 - blocked, 4 calibration	
Up	State of UP relay (moving upwards)	
Down	State of DOWN relay (moving downwards)	
Position	Percentage value of the shutter opening: 0% - fully closed, 100% - fully open	
LamelPosition	Roller shutter lamel position 90 - fully closed, 0 - fully open	
LamelMoveTimeout	The maximum working time of the shutter's slats, if the shutter does not have slats, shou be set to 0	
DistributedLogicGroup	Distributed Logic group - broadcast group for distributed logic	
ReversePosition	The function for inverting position range (0-100% for 100-0%): 0 - No, 1 - Yes	
ReverseDirections	The function of reversing the direction of the roller shutter operation	
Methods:		
SetMechanicalOffset	Sets the time of compensation for start of the drive	
SetBlindsUpMaxTime	Sets the shutter opening time	
SetBlindsDownMaxTime	Sets the shutter closing time	
SetPosition	Shutter opening percentage setting: 0% - fully closed, 100% - fully open	
SetLamelPosition	Sets the position of the slats	
Calibration	Calibrates the shutter position	
SetLamelMoveTimeout	Sets the cycle time of the slats	
MoveUp	Roller shutter UP or STOP if moving, Parameter Time: num - move up time (or until roller shu ter is open), 0 - move up time equal MaxTime + LamelMoveTimeout (or until roller shutter open)	
MoveDown	Roller shutter DOWN or STOP if moving. Parameter Time: num - move down time (or un roller shutter is closed), O - move down time equal MaxTime + LamelMoveTimeout (or un roller shutter is closed)	
Start	Roller shutter up if the preceding motion was down or roller shutter down if the preceding motion was up, Parameter Time: num - move time (or until roller shutter is at the end position), 0 - move time equal MaxTime + LamelMoveTimeout (or until roller shutter is at the erposition)	
Stop	STOP if moving	
Hold	Hold with direction change	
HoldUp	Hold always up	
HoldDown	Hold always down	
SetRollerBlocked	Enables / disables the ability to control the roller shutter	
LamelStart	Changes the position of the slats by 45°	
Events:		
OnStateChange	Result from a change in the State properties	
OnUp	Occurs when changing the Stop state to the Up state	
OnDown	Occurs when changing the Stop state to the Down state	
OnStart	Occurs when the shutter is activated	
OnStop	Occurs when the shutter is stopped	
OnLamelClosed	Occurs when the slats are closed (value 90°)	
OnLamelOpen	Occurs when the slats are opened (value 0°)	
OnPositionChange	Occurs when the roller shutter position has changed	
OnLamelPositionChange	Occurs when the position of the slats has changed	

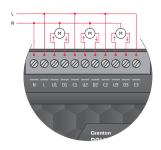
## 2. Parameters - PowerSupplyVoltage

Characteristics:		
Value	Current output value taking into account the scalar	
Value%	Current percentage input value of the maximum value (MaxValue characteristic)	
Sensitivity	Minimum change of input state when the OnValueChange, OnValueLower or OnValueRise	
	event is generated	
MinValue	Minimum value of the Value characteristic after exceeding which the OnOutOfRange even	
	is generated	
MaxValue	Maximum value of the Value characteristic after exceeding which the OnOutOfRange even	
	is generated	
Methods:		
SetSensitivity	Sets input sensitivity value	
SetMinValue	Sets MinValue	
SetMaxValue	Sets MaxValue	
Events:		
OnValueChange	Event resulting from changing input state	
OnValueLower	Event occurs when a value lower than the value from the last reading appears at input	
OnValueRise	Event occurs when a value higher than the value from the last reading appears at input	
OnOutOfRange	Event resulting from exceeding the permissible range (MinValue - MaxValue)	
OnInRange	Event occurs when value returns to MinValue - MaxValue range	

# 3. Technical data

Device power supply	24 V <sub>dc</sub>
Maximal power consumption	2,4 W
Maximal device current	100 mA (for 24 V <sub>dc</sub> )
Rated load voltage	230 V <sub>ac</sub>
Rated load current:	
AC3	3 A / 230 V <sub>ac</sub>
Maximal channel breaking capacity AC3	690 VA
Channels	3
Relay type	3680VA, NO
Max. wire cross section	2,5 mm <sup>2</sup>
Weight	135 g
Size [DIN]	4
Fixing	electrical box, rail DIN-3 / TH 35 / TS 35
Dimensions (H/W/D)	58/71/90 mm
Operating temperature range	0 to +45 °C

### 4. Wiring diagram





N	'Neutral' signal input
L	'Line' signal input
U1	UP1 signal input
D1	DOWN1 signal input
Cl	'Line' signal input for channel 1
U2	UP2 signal input
D2	DOWN2 signal input
C2	'Line' signal input for channel 2
U3	UP3 signal input
D3	DOWN3 signal input
C3	'Line' signal input for channel 3

'N' 'i 'l ' signals are necessary.

# 5. Warnings and cautionary statements



Before proceeding with the assembly, read the installation schematics and full instructions available at www.grenton.com. Failure to follow the guidelines contained in the instructions and other requirements of due care vailed as a result of the nature of the equipment (device) may be dangerous to life / health, damage the device or installation to which it is connected, damage other property or violate other applicable.

regulations. The manufacturer of the device, Grenton Sp. z o. o. does not bear any responsibility for the damage (property and non-property related) resulting from the assembly and / or use of the equipment not in accordance with the instructions and / or due diligence in handling the equipment (device).

• Device power supply, permissible load or other characteristic parameters have to be in accordance with the device specification, described in particular in the "Technical data" section.

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   The product is not intended for children and animals.

   If you have technical questions or comments about the device operation, contact Grenton Technical Support.

   Answers to frequently asked questions can be found at: www.support.grenton.pl



- Danger to life caused by electric current!
   The components of the installation (individual devices) are designed to work in a home electrical installation or directly in its

vicinity. Incorrect connection or use may cause a fire or electric

- All work related to the installation of the device, in particular works involving interference in the electrical installation, may be performed only by a person with appropriate qualifications or li-
- When installing the device, make sure that the power supply voltage is disconnected from the circuit in which the device is connected or near which the assembly takes place.

### 6. CE marking

The manufacturer declares that the device is in full compliance with the requirements of EU legislation that includes the directives of a new appropriate for this equipment. In particular, Grenton Sp. z o. o. declares that the device fulfills the effective on the initiation of the use of specific substances quirements on safety, specified by law, and that it conforms to

tives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE), the Low Voltage Directive (IVD 2014/35/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).



#### 7. Warranty

Warranty available at: www.grenton.com/warranty

#### 8. Manufacturer contact details

Grenton Sp. z o.o. ul. Na Wierzchowinach 3 30-222 Kraków, Polska (PL) www.grenton.com