Datasheet ROLLER SHUTTER FM
RSH-201-T-01

Grenton ROLLER SHUTTER FM allows you to control a roller shutter drive, two digital inputs and two 1-Wire sensors.

1. Parameters - Roller Shutter

Characteristics:	
State	Output state: 0 - no movement,1 - moving upwards, 2 - moving downwards
MaxTime	Default Time parameter value. 0 if not specified
Up	State of UP relay (moving upwards)
Down	State of DOWN relay (moving downwards)
LoadCurrent	Returns current in amperes
Overcurrent	Maximum value of LoadCurrent characteristic after exceeding which the OnOvercurrent event is generated
VoltageType	0 - AC, 1 - DC, signal
Methods:	
MoveUp	Roller shutter up or STOP if moving. Parameter Time: number - output is active for specified timer, 0 - output is active for the time specified in MaxTime
MoveDown	Roller shutter down or STOP if moving. Parameter Time: number - output is active for specified timer 0 - output is active for the time specified in MaxTime
Start	Roller shutter up if the preceding motion was down or roller shutter down if the preceding motion was up
Stop	STOP if moving
Hold	Hold with direction change
HoldUp	Hold always up
HoldDown	Hold always down
Events:	
OnStateChange	Result from a change in the state of any of the outputs
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 Start is requested
OnStop	Occurs when Stop is requested
OnOvercurrent	Occurs when LoadCurrent value is equal or higher than Overcurrent value

2. Parameters - DIN

Characteristics:	
Inertion	Inertion
HoldDelay	Time in milliseconds after which, when pressing and holding a button, the OnHold event occurs
HoldInterval	Cyclical interval in milliseconds after which, when pressing and holding a button, the OnHold event occurs
Value	Returns input state as 0 or 1
StatisticState	Load measurement type: Off - turned off, Continuous - load mesurement for the whole device's period operation
Pulse - load measurement counted at the moment of a high state appearing on the input	
Load	The measured value multiplier. For StatisticState: Continuous - load measurement value in the unit of time, Pulse - load measurement value for the single impulse (e.g. 1kW)
DistributedLogicGroup	Distributed Logic group - broadcast group for distributed logic
Methods:	
SetInertion	Minimum interval in milliseconds which has to pass between presses of a button so that it is interpreted as a new pressing activity
SetHoldDelay	Sets HoldDelay value
SetHoldInterval	Sets HoldInterval value
Events:	
OnValueChange	Occurs when a change in the input state takes place (regardless of the value)
OnSwitchOn	Occurs when the high state is set at input
OnSwitchOff	Occurs when the low state is set at input
OnShortPress	Occurs after pressing the button for 500 - 2000ms
OnLongPress	Occurs after pressing the button for at least 2000ms
OnHold	Occurs for the first time after HoldDelay time and then cyclically every HoldInterval value
OnClick	Occurs after pressing the button for less than 500 ms

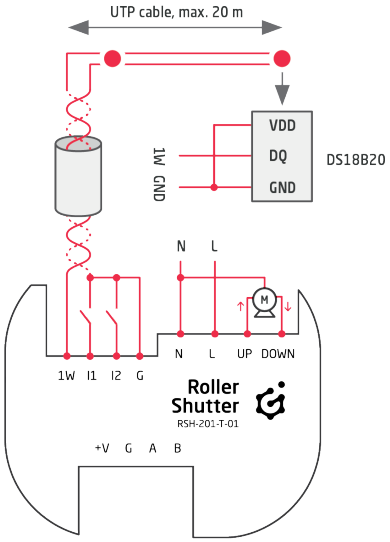
3. Parameters - PowerSupplyVoltage

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 event is generated
MaxValue	Maximum value of the Value characteristic after exceeding which the OnOutOfRange event 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

4. Technical data

Device power supply	24 V_{dc}
Maximum power consumption	0,96 W
Maximum device current	30 mA (for 24 V_{dc})
Rated load voltage	230 V_{ac} or 24 V_{dc}
Rated channel load AC1	1,5 A / 230 V_{ac}
Maximal breaking capacity AC1	350 VA
Relay type	NO, inrush
Maximum wire cross section for relay outputs	2,5 mm^2
Maximum wire cross section for digital inputs	1,5 mm^2
Weight	30 g
Fixing	flush mounted
Dimensions (H/W/D)	19/45/36 mm
Operating temperature range	0 to +45 °C

5. Wiring diagram



+V	Device power supply
G	GND
A	A signal input
B	B signal input
1W	1-Wire input
I1	first digital input
I2	second digital input
G	GND for 1-Wire and digital inputs
N	'Neutral' signal
L	'Line' signal
UP	UP signals connectors
DOWN	DOWN signals connectors

Relay outputs:
- 'N' i 'L' signals are necessary for 230 V_{ac} loads for switch condition optimization.
- 'L' signal supply UP and DOWN outputs.
- For loads up to 24 V_{dc} switching signal has to be connected to 'L'. 'N' is not necessary in this case.

6. Warnings and cautionary statements

ATTENTION !

- 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 valid 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.
- 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 !

- 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 shock.
- 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 licences.
- 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.

7. 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 approach appropriate for this equipment. In particular, Grenton Sp. z o. o. declares that the device fulfills the requirements on safety, specified by law, and that it conforms to the national regulations that implement the appropriate directives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).

8. Warranty

Warranty available at: www.grenton.com/warranty

9. Manufacturer contact details

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