




## RESTART WITH AUTOTEST

## Technical data

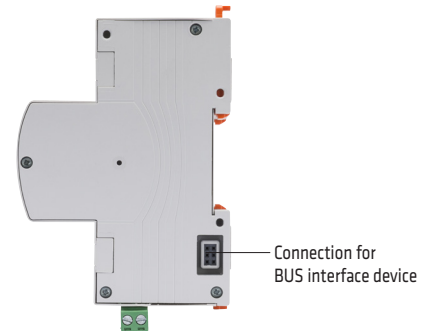
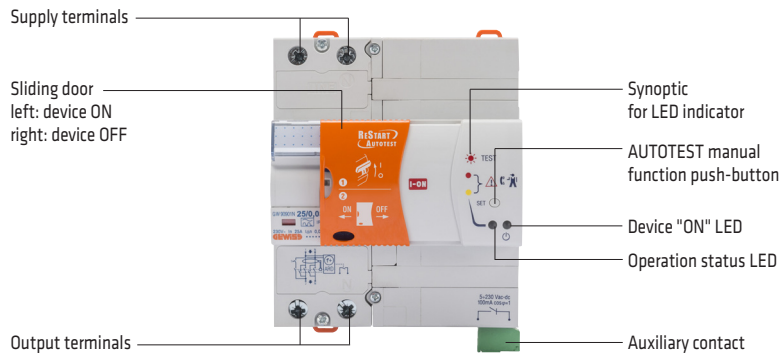
TYPE	ReStart with Autotest 2P	ReStart with Autotest PRO 2P	ReStart with Autotest PRO 4P
			
Electrical characteristics			
Standards:	EN 50557, EN 61008-1		
Distribution system:	TT - TN-S		
Rated operational voltage (Ue):	(V)	230 AC <sup>(1)</sup>	400 AC
Minimum operating voltage (min Ue)	(V)	85% Ue	
Maximum operating voltage (max Ue):	(V)	110% Ue	
Rated insulation voltage (Ui):	(V)	500	
Dielectric strength test voltage between pole and earth:	(V)	2500 AC for 1 minute	
Rated impulse withstand voltage (Uimp):	(kV)	4	
Overvoltage category:		III	
Rated frequency:	(Hz)	50	
Residual making and breaking capacity (IΔm):	(A)	630	
Rated conditional residual short-circuit current with fuse (IΔc):	(A)	10000 (gL 63A) for In=25-40A 10000 (gL 80A) for In=63A	
Number of poles:		2	4
Type of associated residual current circuit breaker:		A[IR]	
Rated current (In):	(A)	25 - 40	25 - 40 - 63
Rated residual operating current (IΔn):	(mA)	30	30 - 300
Rated non-operating resistance between live parts and earth (Rdo):	(kΩ)	20	8 (30mA) - 2.5 (300mA)
Rated operating resistance between live parts and earth (Rd):	(kΩ)	70	16 (30mA) - 5 (300mA)
Power loss at In:	(W)	2.2 (25A) - 5.4 (40A) - 6.2 (63A)	
Off-load absorbed power:	(VA)	4 (cosφ=0.2)	
Power absorbed during automatic reclosing:	(VA)	41 (cosφ=0.5)	
Power supply:		from above	
Mechanical characteristics			
Width in DIN modules:		5	7
Reclosing time:	(s)	10	
Autotest cycle time:	(s)	7	
Maximum operational frequency:	(oper./h)	30	
Max mechanical endurance (total no. operations):		4000	
Maximum no. of consecutive automatic reclosure operations <sup>(2)</sup> :		3	
Counter reset time no. of consecutive automatic reclosure operations:	(s)	60	
Section of circuit breaker terminals:	(mm <sup>2</sup> )	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	
Rated tightening torque:	(Nm)	2	
Mounting position:		any	
Degree of protection:		IP20 (terminals) - IP40 (front)	
Pollution degree:		2	
Operating temperature:	(°C)	-25 +40	-25 +60 <sup>(3)</sup>
Stocking temperature:	(°C)	-40 +70	
Tropicalization:		55°C - RH 95%	
Auxiliary contact characteristics			
Type of contact:		Photomos (potential free contact)	
Operating voltage:	(V)	5-230 AC/DC	
Operating current:	(mA)	0,6 (min) - 100 cosφ=1 (max)	
Operating frequency:	(Hz)	50	
Category of use:		AC12	
Operating mode:		NO / NC / NC + impulse <sup>(4)</sup>	
Terminal section:	(mm <sup>2</sup> )	≤ 2.5	
Rated tightening torque:	(Nm)	0.4	
Autotest function			
Regular and automatic RCCB test:		•	•
Light signalling for autotest cycle in progress:		•	•
Light signalling for any device anomaly:		•	•
ReStart function			
Automatic reclosure for untimely tripping:		•	•
Earth leakage check:		•	•
Continuous system check:		•	•
Interruption of reclosure operation in the event of a fault:		•	•
Signalling of reclosure operation in progress:		•	•
Light signalling of failure:		•	•
Activation / exclusion of ReStart function:		•	•
Auxiliary contact for remote operating status access:		•	•
Internal electrical protection:	PTC	PTC	PTC

<sup>(1)</sup> Power supply 230V phase-neutral<sup>(2)</sup> In the absence of a system fault<sup>(3)</sup> Average daily temperature ≤ +35°C<sup>(4)</sup> Choosing NC + impulse option, auxiliary contact switches for 100ms at the end of each cycle of Autotest carried out successfully.

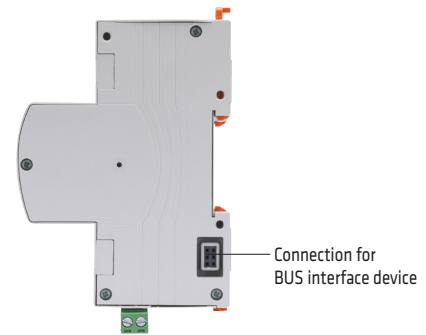
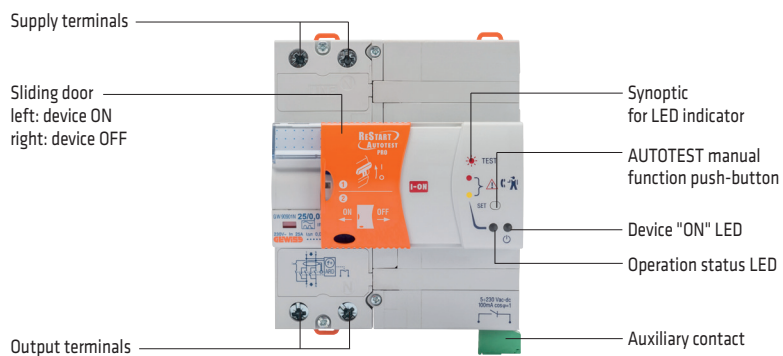
For technical information contact the Technical Assistance Service or visit gewiss.com

### DEVICE DESCRIPTION

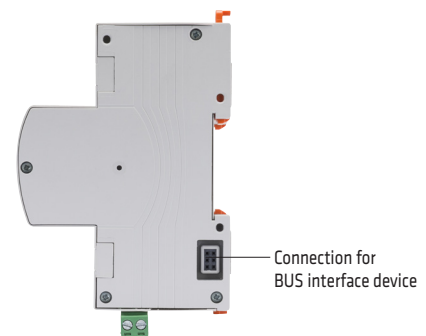
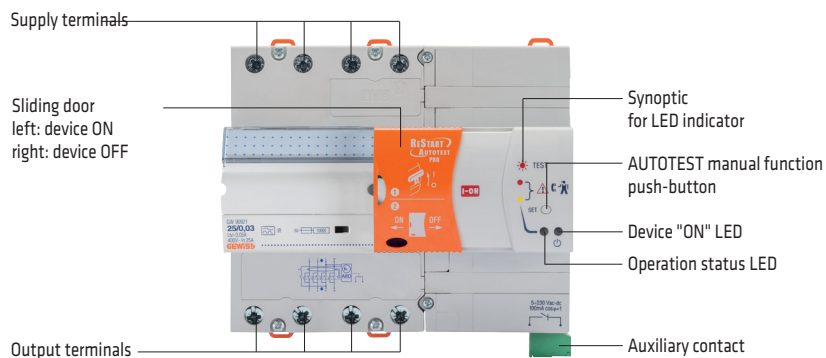
#### ReStart with Autotest 2P



#### ReStart with Autotest PRO 2P



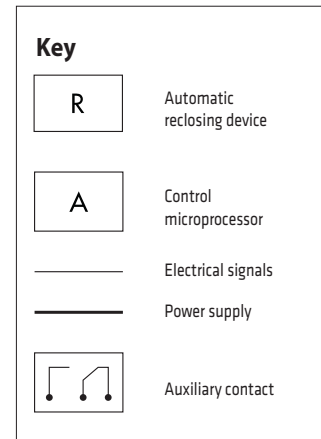
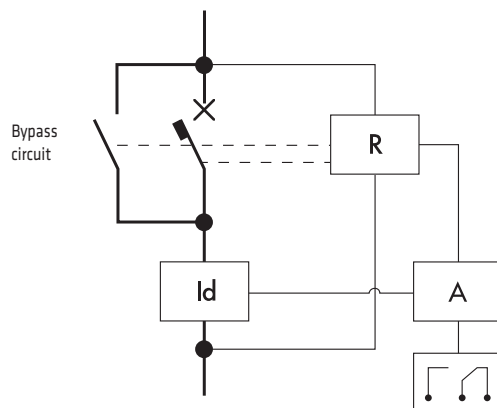
#### ReStart with Autotest PRO 4P



### AUTOTEST FUNCTION

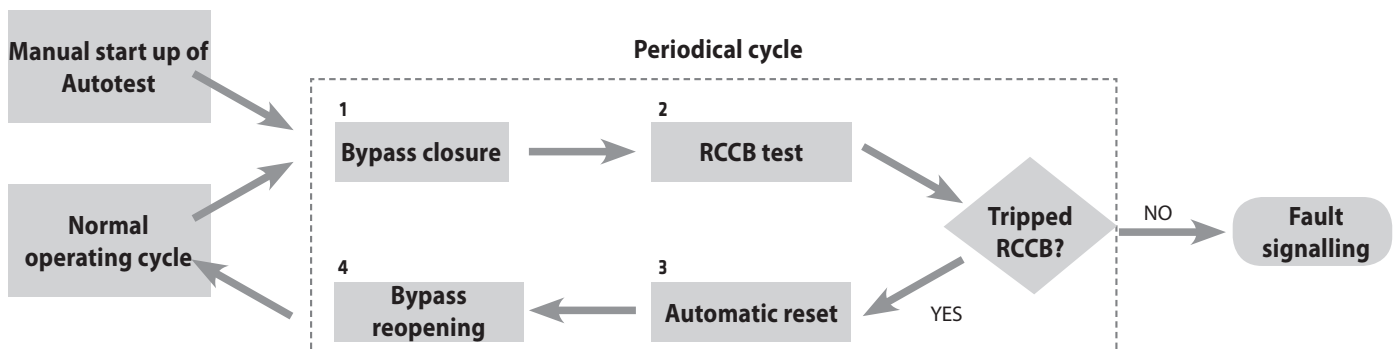
The Autotest function periodically tests the working of the residual current circuit breaker protection. During the test, a bypass circuit ensures electrical continuity meanwhile an additional RCCB protection device guarantees system safety. The automatic reclosing device ensures the automatic resetting of the lever of circuit breaker in ON position. Moreover, pressing the button on the front of the device at any time, Autotest immediately carries out an automatic test on the RCCB without interrupting the power supply. This means test can be carried out during normal day-to-day operations without any inconvenience.

#### Electrical diagram



#### Periodical test function

After installation, it is possible to start up the Autotest function manually (pressing the appropriate button) in order to check if the wiring is correct and to synchronise the periodical test function.



## AUTOMATIC RECLOSING DEVICES

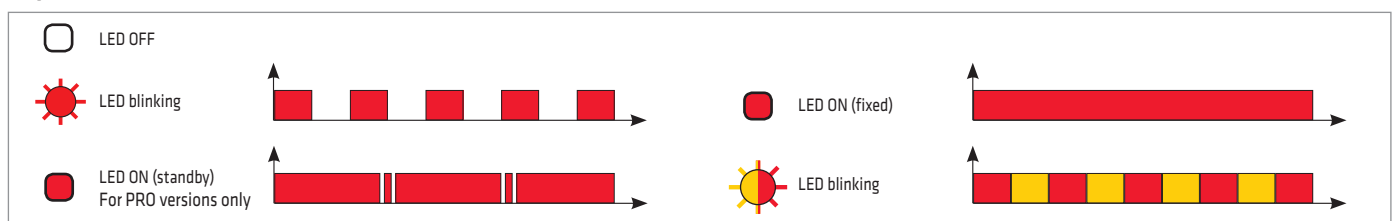
### ReStart with Autotest light signalling

ReStart with Autotest is equipped with two LEDs on the front which show the operation conditions of device. Precisely, the right LED is switched on when the device is activated, whereas the left LED shows the operation conditions.

ReStart conditions	ReStart front	Lever position	LED indicators			Description
			Left LED	Right LED	Aux contact	
MANUAL OPERATION						
Deactivated		I			OFF	ARD and autotest <b>OFF</b>
Deactivated for over 15 minutes		I			ON	ARD and autotest <b>OFF</b>
Deactivated		0			OFF	ARD and autotest <b>OFF</b>
AUTOMATIC OPERATING CYCLE (*)						
Normal operation		I			OFF	ARD and autotest ON Automatic functions ON
Electric circuit check		0			OFF	ARD and autotest <b>checks the electric system insulation</b>
System failure		0			ON	ARD and autotest in <b>block condition</b> due to system fault <b>For PRO versions only</b> , ARD and autotest in <b>standby condition</b> due to system fault
Periodic Autotest		I/O			OFF	<b>Electric circuit check in progress</b> <b>Electric system supplied</b>
Device fault		0			ON	There is a fault in Restart device after testing RCCB. It is possible to restore the proper functions.
Device fault		I			ON	There is a fault in Restart device after testing RCCB. It is possible to restore the proper functions.
Device failure		I			ON	ARD and autotest <b>not working</b> Call a technician for replacement
Device failure		0			ON	ARD and autotest <b>not working</b> Call a technician for replacement

(\*) Before sliding the plastic cover to the left to activate the device, it is necessary to set the circuit breaker in the "I" position.  
NOTE: ReStart device can be in block condition (red led fixed) after 4 following trips too (t≤60s after previous trip).

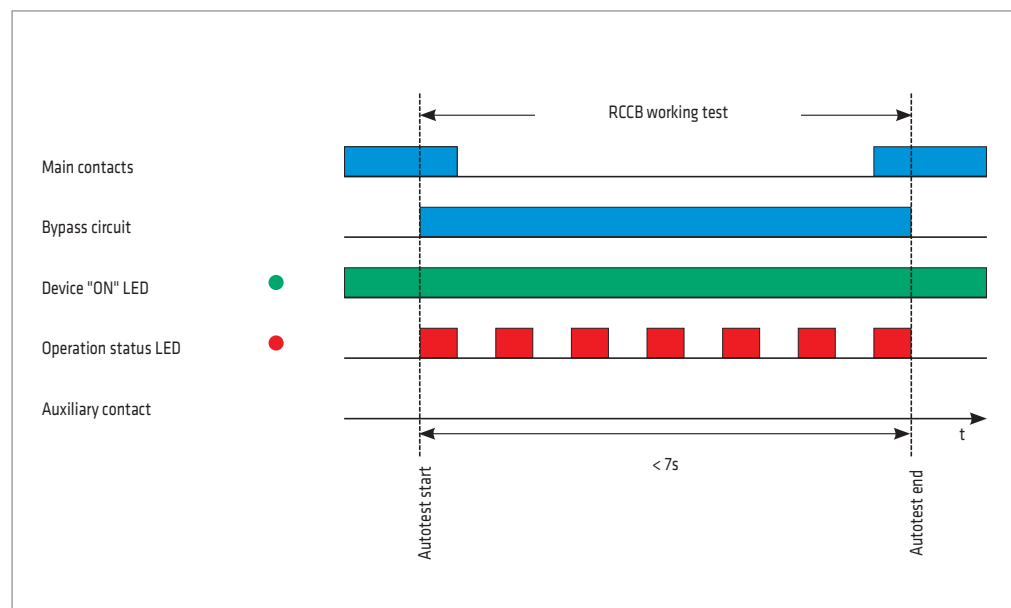
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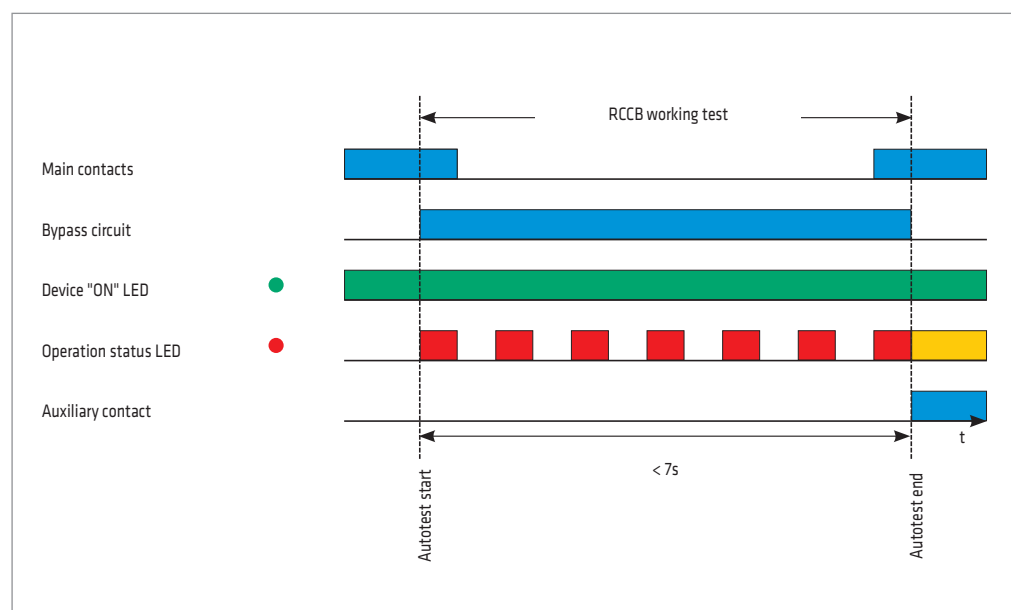


### ReStart with Autotest operation conditions

#### Autotest function with positive result



#### Autotest function with negative result

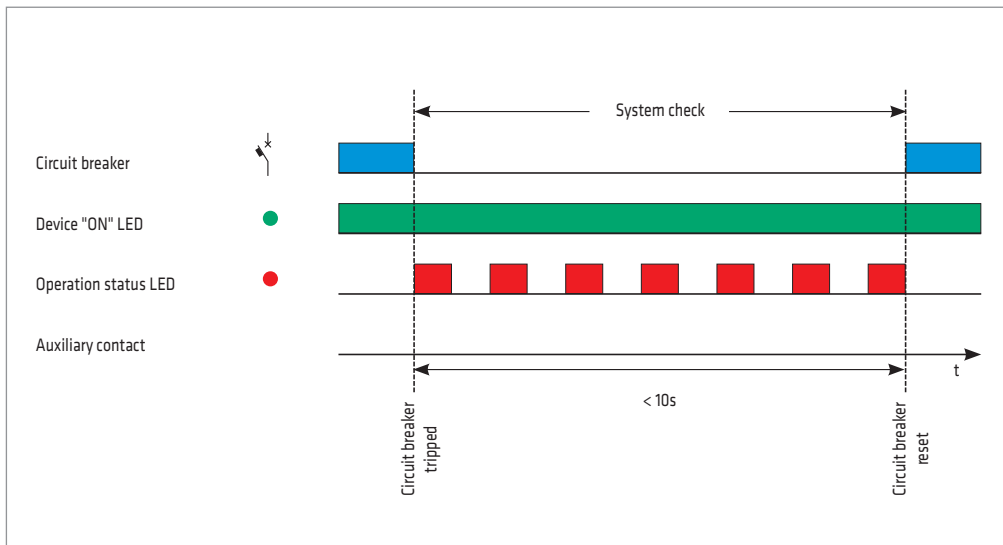


#### Key

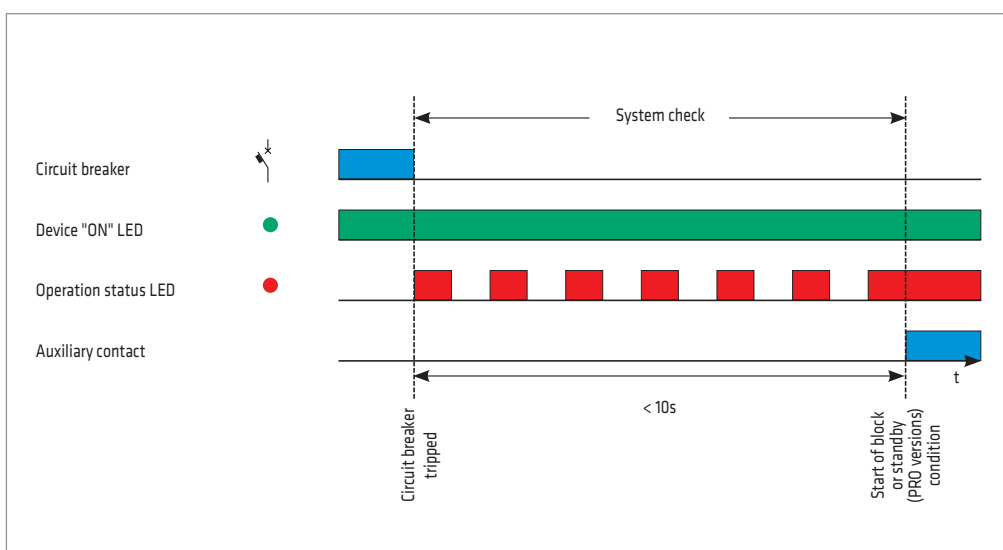
- Closed circuit
- Device ON
- Test in progress
- Device fault

## AUTOMATIC RECLOSING DEVICES

### ReStart function with positive result



### ReStart function with negative result






### Key

- Closed circuit
- Device ON
- System check in progress
- Device block
- Device in standby (PRO version)

## RESTART RD

## Technical data






TYPE	ReStart Rd 2P	ReStart Rd PRO 2P	ReStart Rd PRO 4P
			
Electrical characteristics			
Standards:	EN 50557		
Distribution system:	TT - TN-S		
Rated operational voltage (Ue):	(V)	230 AC <sup>(1)</sup>	
Minimum operating voltage (min Ue)	(V)	85% Ue	
Maximum operating voltage (max Ue):	(V)	110% Ue	
Rated insulation voltage (Ui):	(V)	500	
Dielectric strength test voltage between pole and earth:	(V)	2500 AC for 1 minute	
Rated impulse withstand voltage (Uimp):	(kV)	4	
Overvoltage category:		III	
Rated frequency:	(Hz)	50	
Residual making and breaking capacity (IΔm):	(A)	IΔm of the associated circuit breaker	
Rated conditional residual short-circuit current with fuse (IΔc):	(A)	IΔc of the associated circuit breaker	
Number of poles:		2	4
Type of IDP RCCB:		AC - A - A[IR] - A[S]	
Rated current (In):	(A)	25 - 40 - 63 - 80 - 100	
Rated residual operating current (IΔn):	(mA)	30 - 100 - 300 - 500	
Rated non-operating resistance between live parts and earth (Rdo):	(kΩ)	8 (30mA) - 2,5 (100/300/500mA)	
Rated operating resistance between live parts and earth (Rd):	(kΩ)	16 (30mA) - 5 (100/300/500mA)	
Power loss at In:	(W)	Power loss of the associated circuit breaker	
Off-load absorbed power:	(VA)	3 (cosφ=0.4)	4 (cosφ=0.2)
Power absorbed during automatic reclosing:	(VA)	18 (cosφ=0.5)	45 (cosφ=0.5)
Mechanical characteristics			
Width in DIN modules:		1	3
Reclosing time:	(s)	10	
Maximum operational frequency:	(oper./h)	30	
Max mechanical endurance (total no. operations):		4000	
Maximum no. of consecutive automatic reclosure operations <sup>(2)</sup> :		3	
Counter reset time no. of consecutive automatic reclosure operations:	(s)	60	
Section of circuit breaker terminals:	(mm <sup>2</sup> )	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	
Circuit breaker rated tightening torque:	(Nm)	3 (IDP) - 2 (IDP NA)	
Mounting position:		any	
Circuit breaker degree of protection:		IP20 (terminals) - IP40 (front)	
Pollution degree:		2	
Operating temperature:	(°C)	-5 +40	-5 +60 <sup>(3)</sup>
Stocking temperature:	(°C)	-40 +70	
Tropicalization:		55°C - RH 95%	
Auxiliary contact characteristics			
Can be fitted with auxiliary:	no	yes (with GWD0951)	already integrated in the ReStart
Type of contact:	-	Photomos (potential free contact)	
Operating voltage:	(V)	5-230 AC/DC	
Operating current:	(mA)	0,6 (min) - 100 cosφ=1 (max)	
Operating frequency:	(Hz)	50	
Category of use:	-	AC12	
Operating mode:	-	NO\NC\NO as signal of handle position	
Terminal section:	(mm <sup>2</sup> )	≤ 2,5	
Rated tightening torque:	(Nm)	0.4	
ReStart function			
Automatic reclosure for untimely tripping:	•	•	•
Earth failure test:	•	•	•
Earth leakage check:	•	•	•
Interruption of reclosure operation in the event of a fault:	•	•	•
Signalling of reclosure operation in progress:	•	•	•
Light signalling of failure:	•	•	•
Activation / exclusion of ReStart function:	•	•	•
Auxiliary contact for remote operating status access:		•	•
Internal electrical protection:	PTC	PTC	PTC

<sup>(1)</sup> Power supply 230V phase-neutral<sup>(2)</sup> In the absence of a system fault<sup>(3)</sup> Average daily temperature ≤ +35°C

## AUTOMATIC RECLOSING DEVICES

## RESTART RM

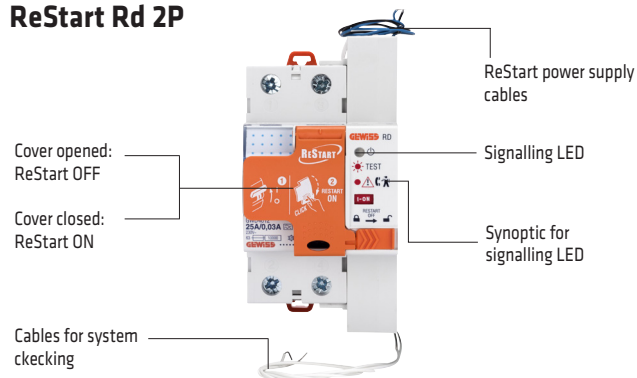
## Technical data

TYPE	ReStart Rm 2P	ReStart Rm PRO 2P	ReStart Rm PRO 4P	Rm TOP	CM	
						
Electrical characteristics						
Standards:	EN 50557			-	-	
Distribution system:	TT - TN-S			TT - TN - IT <sup>(1)</sup>	TT-TN-IT	
Rated operational voltage (Ue):	(V)	230 AC <sup>(2)</sup>				
Minimum operating voltage (min Ue)	(V)	85% Ue				
Maximum operating voltage (max Ue):	(V)	110% Ue				
Rated insulation voltage (Ui):	(V)	500				
Dielectric strength test voltage between pole and earth:	(V)	2500 AC for 1 minute				
Rated impulse withstand voltage (Uimp):	(kV)	4				
Overvoltage category:		III				
Rated frequency:	(Hz)	50				
Residual making and breaking capacity (IΔm):	(A)	IΔm of the associated circuit breaker				
Number of poles:		2		4		
Type of MDC RCBO:		AC - A - A[IR] - A[S]				
Type of MT+BD RCBO:		-		AC - A - A[IR] - A[S]		
Rated current (In):	(A)	from 6 to 32			from 1 to 63	
Rated residual operating current (IΔn):	(mA)	30 - 300			30 - 300 - 500 - 1000	
Rated non-operating resistance between live parts and earth (Rdo):	(kΩ)	8 (30mA) - 2.5 (300mA)			8 (30mA) - 2.5 (300/500/1000mA)	
Rated operating resistance between live parts and earth (Rd):	(kΩ)	16 (30mA) - 5 (300mA)			16 (30mA) - 5 (300/500/1000mA)	
Rated non-operating resistance between live parts (Rcco):	(Ω)	0.4			0.3	
Rated operating resistance between live parts (Rcc):	(Ω)	2.3			1.8	
Power loss at In:	(W)	Power loss of the associated circuit breaker				
Off-load absorbed power:	(VA)	3 (cosφ=0.4)	16 (cosφ=0.2)	15 (cosφ=0.1)	0 (cosφ=0.2)	
Power absorbed during automatic reclosing:	(VA)	18 (cosφ=0.5)	34 (cosφ=0.7)	30 (cosφ=0.6)	30 (cosφ=0.6)	
Reclosing control:		automatic		automatic / remote <sup>(3)</sup>	remote <sup>(3)</sup>	
Mechanical characteristics						
Width in DIN modules:		1	3	4	2	
Reclosing time:	(s)	10		3 (without system test) 10 (with system test)	3	
Remote control opening time:	(s)	-		2		
Maximum operational frequency:	(oper./h)	30				
Max mechanical endurance (total no. operations):		4000		10000		
Maximum no. of consecutive automatic reclosure operations <sup>(4)</sup> :		3			-	
Counter reset time	(s)	60			-	
no. of consecutive automatic reclosure operations:						
Section of circuit breaker terminals:	(mm²)	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10				
Rated tightening torque:	(Nm)	2				
Mounting position:		any				
Degree of protection:		IP20 (terminals) - IP40 (front)				
Pollution degree:		2				
Operating temperature:	(°C)	-5 +40	-5 +60 <sup>(5)</sup>	-25 +60 <sup>(5)</sup>		
Stocking temperature:	(°C)	-40 +70				
Tropicalization:		55°C - RH 95%				
Auxiliary contact characteristics						
Can be fitted with auxiliary:		no	yes (with GWD0951)	already integrated in the ReStart	already integrated in the ReStart	already integrated in the ReStart
Type of contact:		-	Photomos (potential free contact)		Changeover	Photomos (potential free contact) Changeover
Operating voltage:	(V)	-	5-230 AC/DC		230 AC / 30 DC	5-230 AC/DC
Operating current:	(mA)	-	0,6 (min) - 100 cosφ=1 (max)		1,5 a.c. / 0,8 d.c.	0,6 (min)- 100 cosφ=1 (max)
Operating frequency:	(Hz)	-	50			1,5 a.c. / 0,8 d.c.
Category of use:		-	AC12			
Operating mode:		-	NO/NC/NO as signal of handle position		CO	NO/NC/ INTERMITTENT
Terminal section:	(mm²)	-	≤ 2.5			
Rated tightening torque:	(Nm)	-	0.4			
ReStart function						
Automatic reclosure for untimely tripping:		•	•	•	•	
Earth leakage check:		•	•	•	•	
Short-circuit check:		•	•	•	•	
Adjustable insulation threshold:					•	
Continuous system check:			•	•	•	
Adjustable reset standby time <sup>(6)</sup> :					•	
Adjustable reclosing mode:					•	
Interruption of reclosure operation in the event of a fault:		•	•	•	•	
Signalling of reclosure operation in progress:		•	•	•	•	
Light signalling of failure:		•	•	•	•	
Activation / exclusion of ReStart function:		•	•	•	•	•
Auxiliary contact for remote operating status access:			•	•	•	•
Internal electrical protection:		PTC	PTC	PTC	PTC	PTC

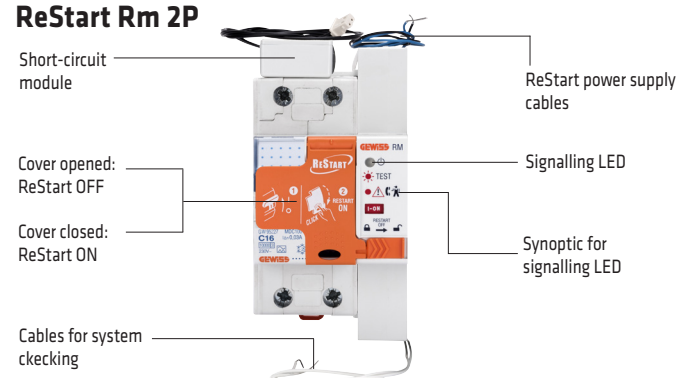
<sup>(1)</sup> For IT system reclosing without fault check<sup>(4)</sup> In the absence of a system fault<sup>(2)</sup> Power supply 230V phase-neutral<sup>(5)</sup> Average daily temperature ≤ +35°C<sup>(3)</sup> Impulse duration ≥ 200ms<sup>(6)</sup> Automatic reclosure delay time: 0-1h

### DEVICE DESCRIPTION

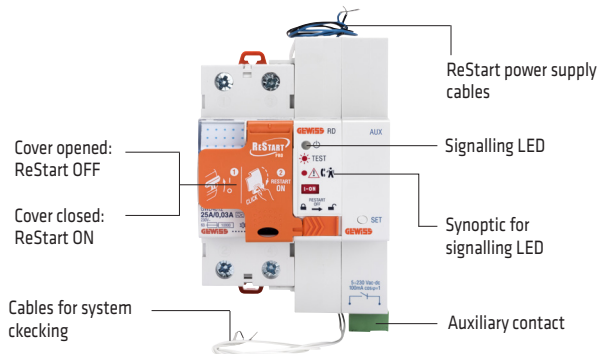
#### ReStart Rd 2P



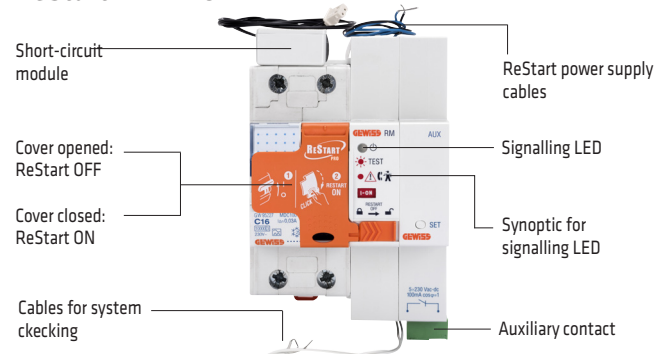
#### ReStart Rm 2P



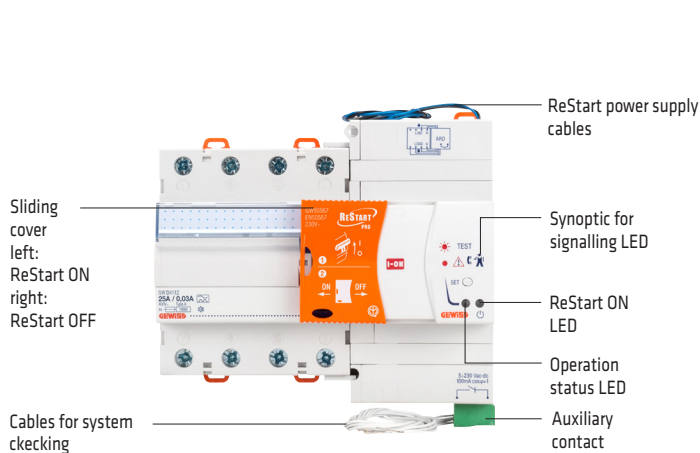
#### ReStart Rd PRO 2P



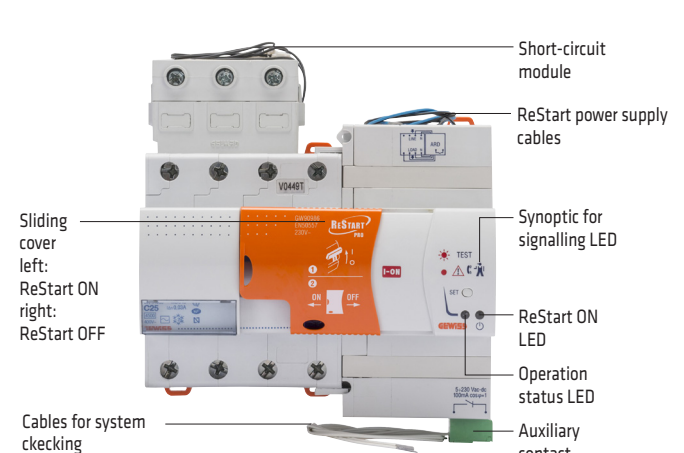
#### ReStart Rm PRO 2P



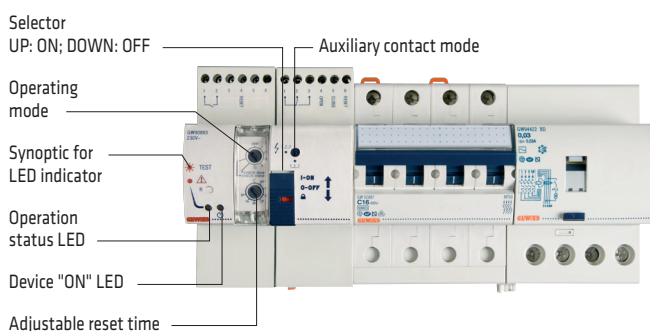
#### ReStart Rd PRO 4P



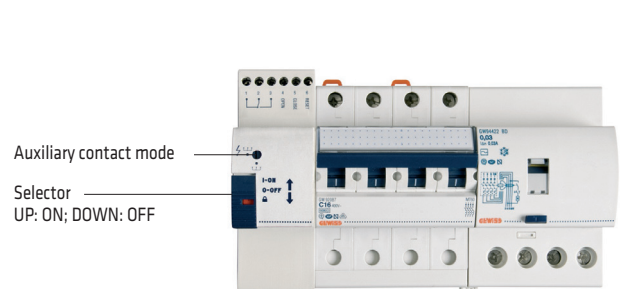
#### ReStart Rm PRO 4P



#### ReStart Rm TOP



#### ReStart Cm

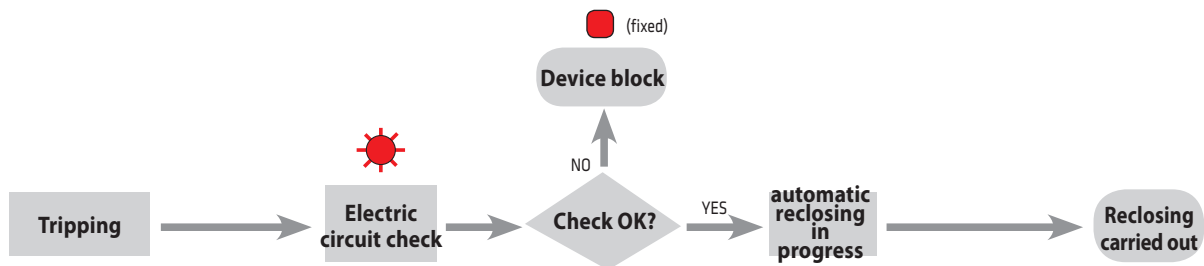


## AUTOMATIC RECLOSING DEVICES

### AUTOMATIC RECLOSING FUNCTION

#### ReStart with Autotest, Rd and Rm

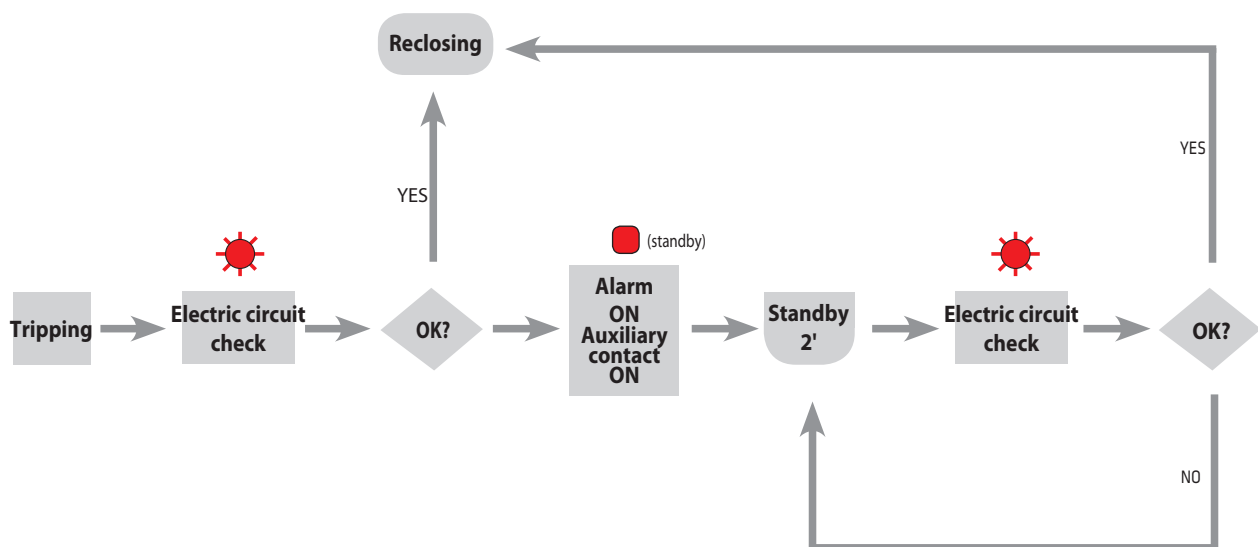
The automatic reclosing is carried out after an untimely tripping of the circuit breaker but only after an electrical circuit check. If a fault is found, the device sets itself on block condition and signals the fault by means of the front LED indicator.



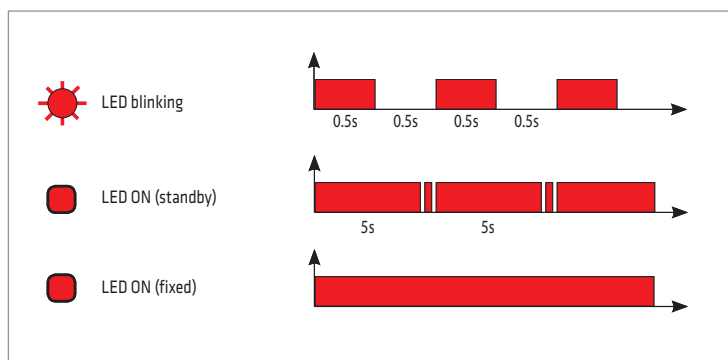
### RESTART WITH AUTOTEST, RD AND RM PRO VERSION

The circuit breaker is reclosed after an untimely tripping of the circuit breaker but only after a system check.

When the system check gives a negative result, the device goes into standby and signals this condition by means of the frontal LED indicator. System checks will then be carried out at 2' intervals, and the device will only reclose when the result of the test is positive. If no positive result is obtained, the device will remain in standby until the next test, or until a manual reset. The auxiliary contact signals the system fault.



#### Key



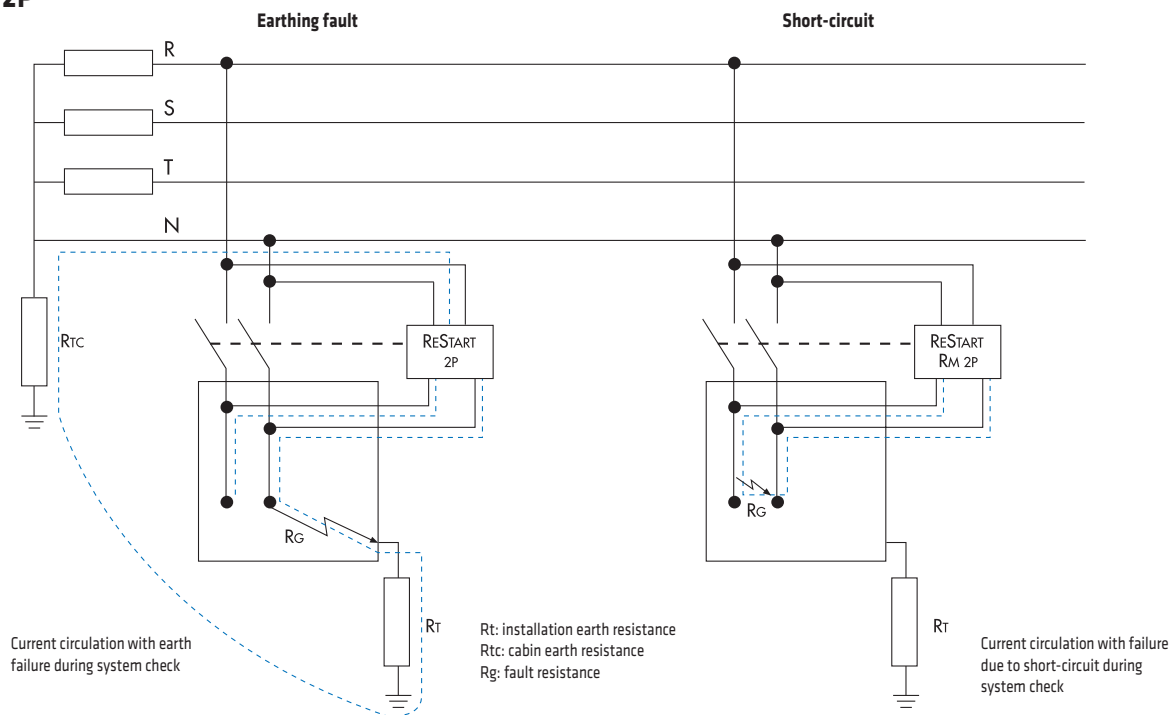
### System fault check

Every device belonging to ReStart range is equipped with internal electronic circuit which is able to check the system and then to carry out the automatic reclosing of the circuit breaker if the value of the insulation resistance measured by the electronic circuit is compatible with the predefined safety values.

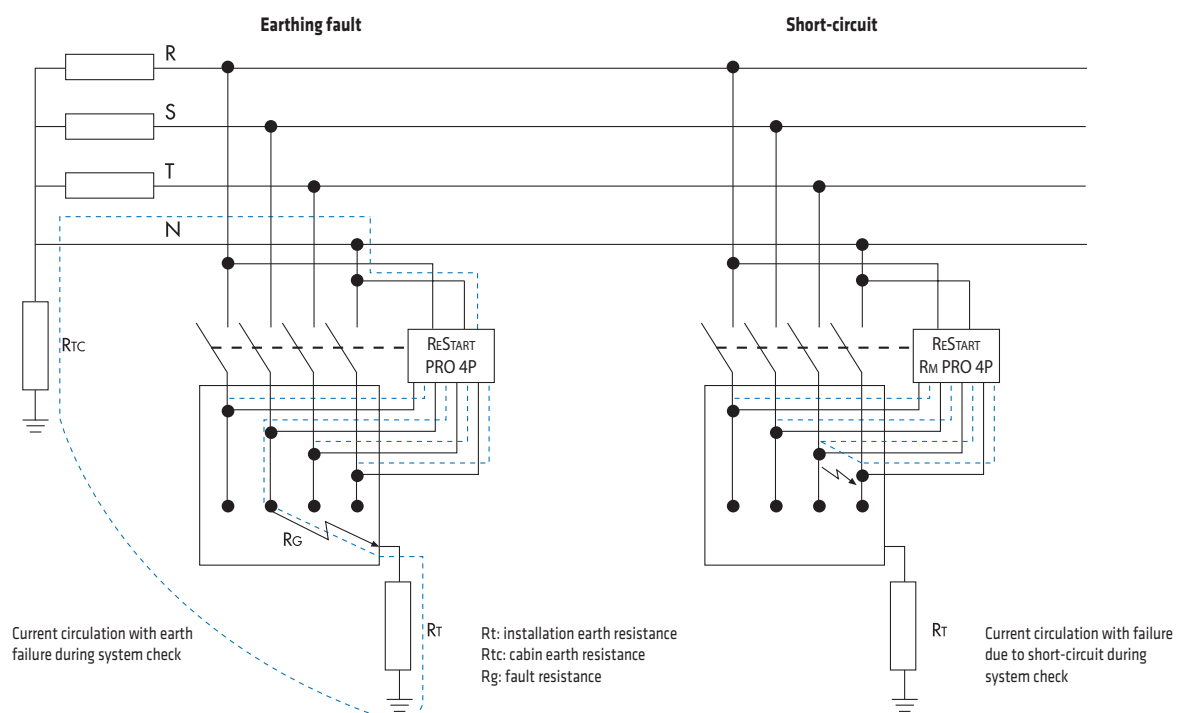
During the system check ReStart injects a pulsant unidirectional current type in order to check the status of the system. The intensity of this current is extremely low in order to guarantee always the people safety. The figures below are given as an example to show the route taken by the current during system check for TT distribution systems both single and three phase.

ReStart RM, in addition to the check of the insulation resistance, carries out a system short circuit check.

#### ReStart 2P



#### ReStart 4P



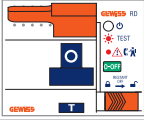





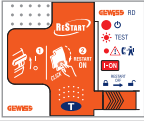



## AUTOMATIC RECLOSING DEVICES

## ReStart Rd and Rm light signalling

ReStart Rd and Rm are equipped with one LED on the front which shows the operation conditions of the device.

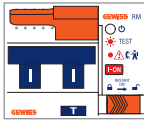

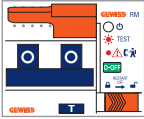







## ReStart Rd

ReStart conditions	ReStart front	Lever position	Indicator LED	Description
MANUAL OPERATION				
Deactivated		I		Reset device <b>OFF</b>
Deactivated		0		Reset device <b>OFF</b>
AUTOMATIC OPERATING CYCLE (*)				
Normal operation		I		Reset device <b>ON</b>
Electric circuit check		0		Reset device in <b>electric system insulation check condition</b> .
System failure		0		Reset device in <b>block</b> condition due to low insulation of downstream electric system.

(\*) Before sliding the plastic cover to the left to activate the device, it is necessary to set the associated circuit breaker in the "I" position.

NOTE: ReStart device can be in block condition (red led fixed) after 4 following trips too (t≤60s after previous trip).

## ReStart Rm

ReStart conditions	ReStart front	Lever position	Indicator LED	Description
MANUAL OPERATION				
Deactivated		I		Reset device <b>OFF</b>
Deactivated		0		Reset device <b>OFF</b>
AUTOMATIC OPERATING CYCLE (*)				
Normal operation		I		Reset device <b>ON</b>
Electric circuit check		0		Reset device in <b>electric system insulation and short-circuit check conditions</b> .
System failure		0		Reset device in <b>block</b> condition due to low insulation or short-circuiting fault of downstream electric system

(\*) Before sliding the plastic cover to the left to activate the device, it is necessary to set the associated circuit breaker in the "I" position.

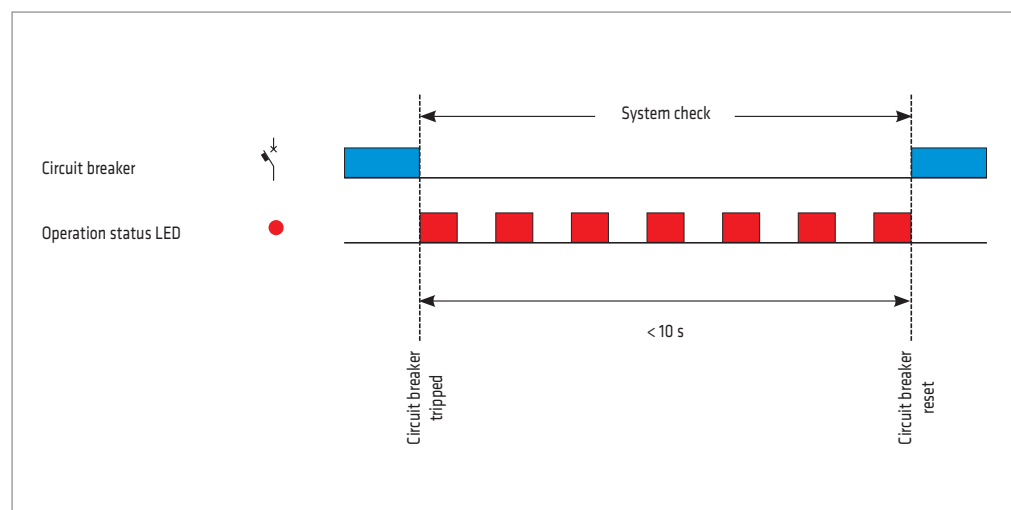
NOTE: ReStart device can be in block condition (red led fixed) after 4 following trips too (t≤60s after previous trip).

For technical information contact the Technical Assistance Service or visit [gewiss.com](http://gewiss.com)

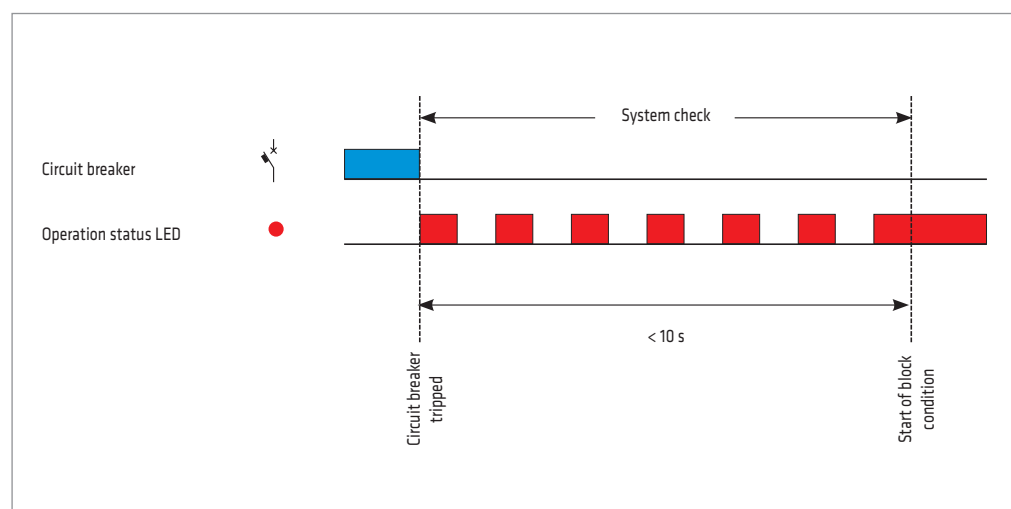


### ResStart Rd and Rm operation conditions

#### ReStart function with positive result



#### ReStart function with negative result



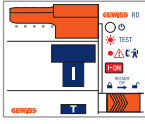

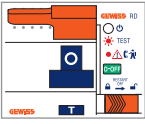

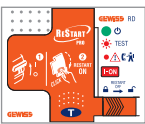





#### Key

- Closed circuit
- System check in progress
- Device block

## AUTOMATIC RECLOSING DEVICES

## ReStart Rd and Rm PRO light signalling for circuit breakers 2 poles



ReStart Rd and Rm PRO for circuit breakers 2 poles are equipped with one LED on the front which shows the operation conditions of device.

ReStart conditions	ReStart front	Lever position	LED indicators	Description
MANUAL OPERATION				
Deactivated		I		Reset device <b>OFF</b>
Deactivated		0		Reset device <b>OFF</b>
AUTOMATIC OPERATING CYCLE <sup>(*)</sup>				
Normal operation		I		Reset device ON
Electric circuit check		0		Reset device in <b>system check condition</b> .
System insulation fault		0	 (standby)	Reset device in <b>standby</b> conditions due to insulation fault of downstream electric system

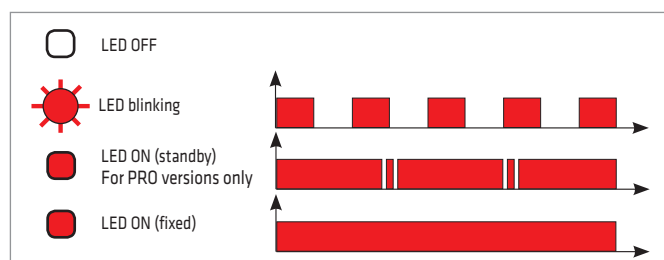
<sup>(\*)</sup> Before sliding the plastic cover to the left to activate the device, it is necessary to set the associated circuit breaker in the "I" position.

NOTE: ReStart device can be in block condition (red led fixed) after 4 following trips too (t≤60s after previous trip)

Specifically, Restart Rm PRO may have the following operation condition:

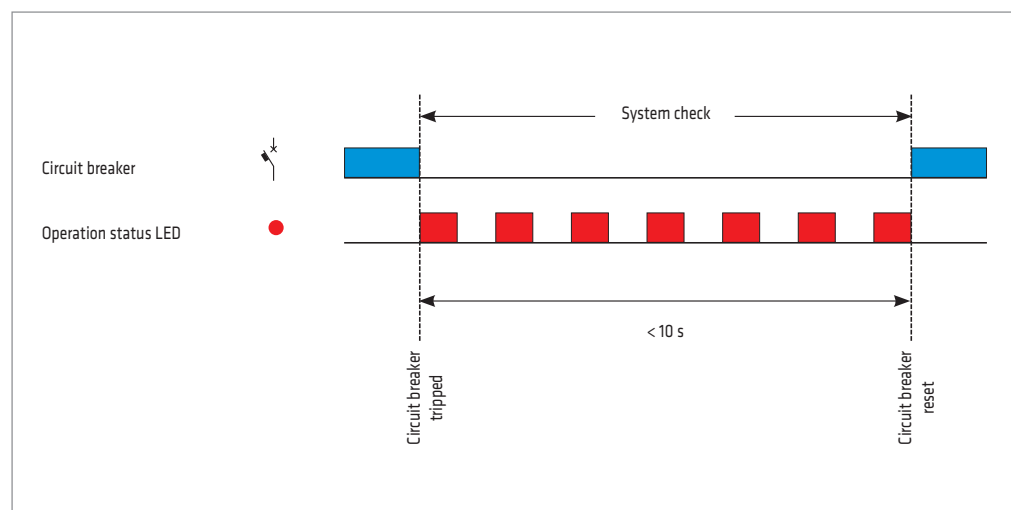
ReStart conditions	ReStart front	Lever position	LED indicators	Description
AUTOMATIC OPERATION				
System short-circuit fault		0	 (fixed)	Reset device in <b>block</b> condition due to short-circuit fault of downstream electric system

## Key

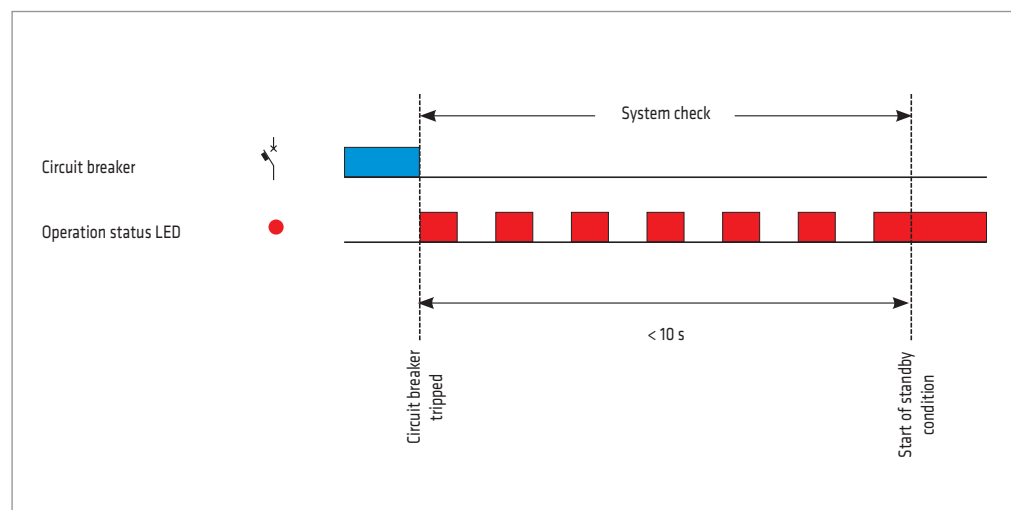


### Restart Rd and Rm PRO operation conditions for circuit breakers 2 poles

#### ReStart function with positive result



#### ReStart function with negative result



#### Key

- Closed circuit
- System check in progress
- Device standby

## AUTOMATIC RECLOSING DEVICES

## ReStart Rd and Rm PRO light signalling for circuit breakers 4 poles

ReStart PRO for circuit breaker 4 poles is equipped with two LEDs on the front which show the operation conditions of device.




The right-hand LED is switched on when the device is activated, and the left-hand LED shows the operation conditions.

ReStart conditions	ReStart front	Lever position	LED indicators			Description
			Left LED	Right LED	Aux contact	
MANUAL OPERATION						
Deactivated		I			OFF	Reset device <b>OFF</b>
Deactivated for over 15 minutes		I			ON	Reset device <b>OFF</b>
Deactivated		0			OFF	Reset device <b>OFF</b>
AUTOMATIC OPERATING CYCLE (*)						
Normal operation		I			OFF	Reset device ON
Electric circuit check		0			OFF	Reset device in <b>system check condition</b> .
System insulation fault		0			ON	Reset device in <b>standby</b> conditions due to insulation fault of downstream electric system

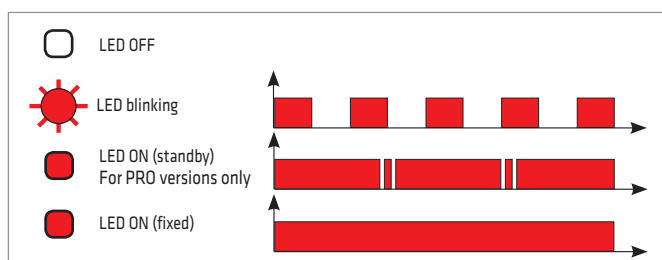
<sup>(\*)</sup> Before sliding the plastic cover to the left to activate the device, it is necessary to set the associated circuit breaker in the "I" position.

NOTE: ReStart device can be in block condition (red led fixed) after 4 following trips too (t≤60s after previous trip)

Specifically, Restart Rm PRO may have the following operation condition:

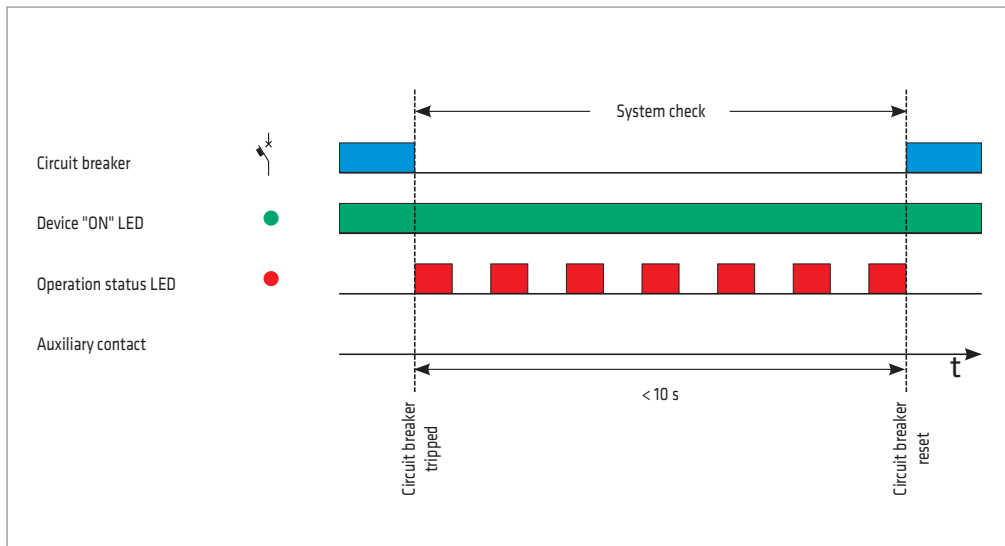
ReStart conditions	ReStart front	Lever position	LED indicators			Description
			Left LED	Right LED	Aux contact	
AUTOMATIC OPERATION						
System short-circuit fault		0	 (fixed)		ON	Reset device in <b>block</b> condition due to short-circuit fault of downstream electric system

## Key

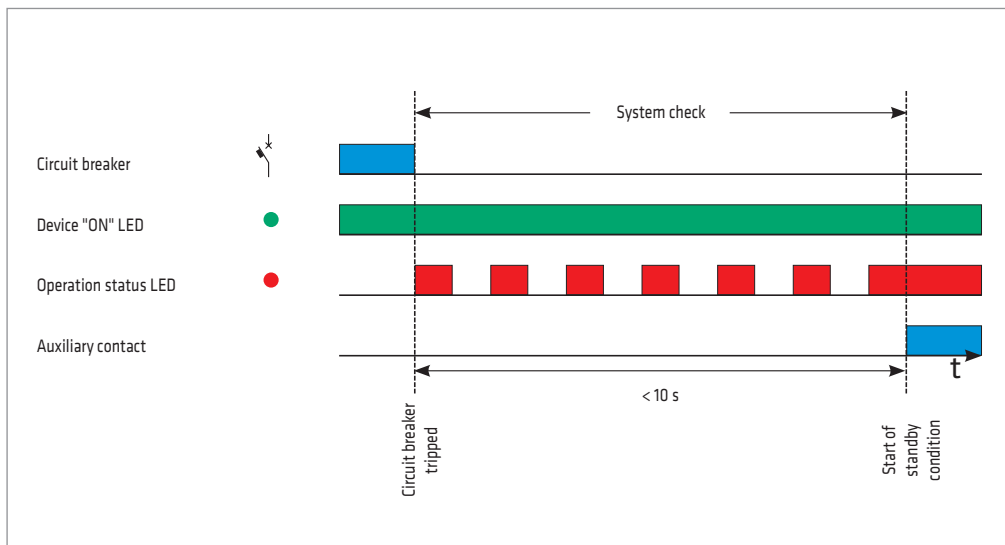


### Restart Rd and Rm PRO operation conditions for circuit breaker 4 poles

#### ReStart function with positive result



#### ReStart function with negative result





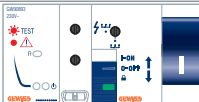


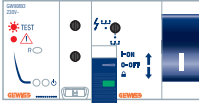





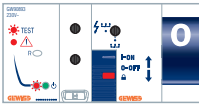


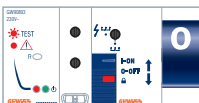


#### Key

- Closed circuit
- Device ON
- System check in progress
- Device standby

## AUTOMATIC RECLOSING DEVICES

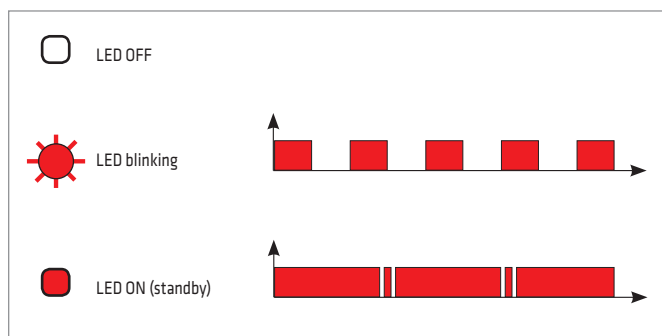
### ReStart Rm TOP light signalling

ReStart Rm TOP is equipped with two LEDs on the front which show the operation conditions of the device. In addition, by adjusting the two trimmers you can select the operation mode.

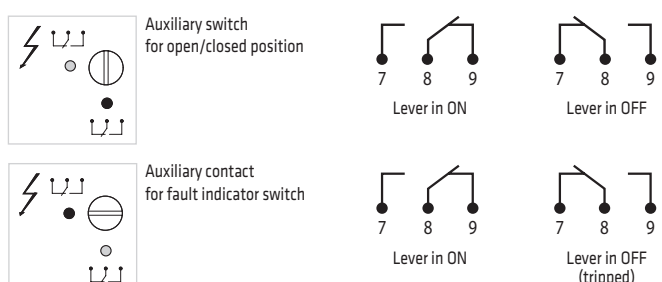
ReStart conditions	ReStart front	Lever position	LED indicators				Description
			Left LED	Right LED	Aux contact 1 	Aux contact 2 	
MANUAL OPERATION							
Deactivated		I			OFF	ON (OFF)*	Device OFF
Deactivated		0			OFF	OFF	Device OFF
AUTOMATIC OPERATING CYCLE							
Normal operation		I			OFF	ON	Device ON
Electric circuit check		0			OFF	OFF	Device in <b>system check condition</b>
System failure		0			ON	OFF	Device in <b>standby</b> due to system fault

(\*) If it has been set as fault indicator switch.

### Key



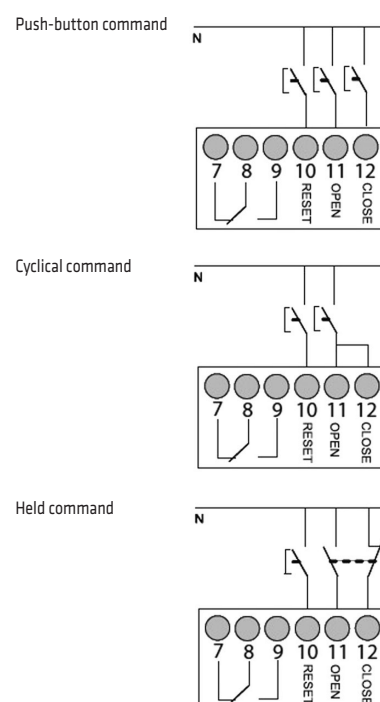
### Setting of Aux contact 2



NOTE: to change the function Aux contact 2, from open/closed position to fault indicator switch and viceversa, it's required to turn the selector by screwdriver and to make an automatic reclosing cycle.

For technical information contact the Technical Assistance Service or visit [gewiss.com](http://gewiss.com)

### Setting as motor operating

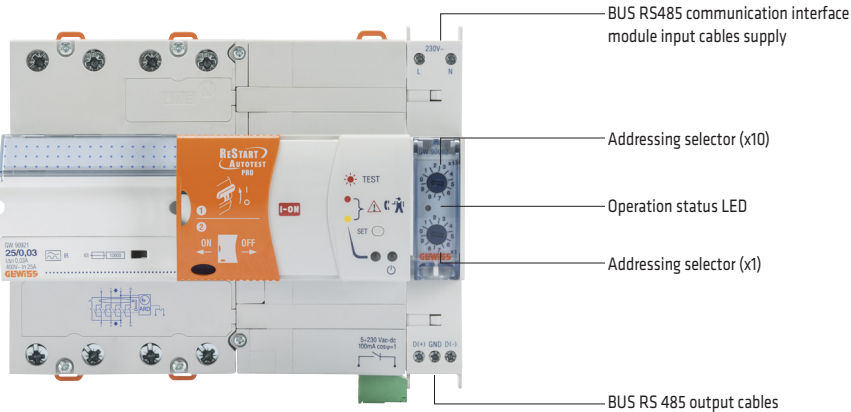


### BUS RS485 Communication interface module

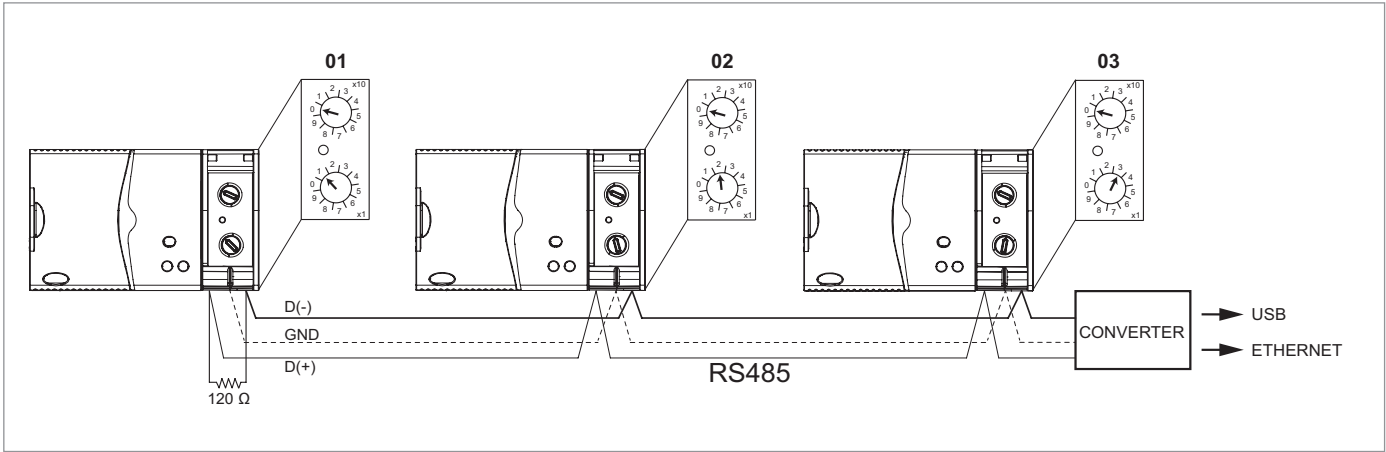
Technical data		
Code:		GW90992
Rated operational voltage (Ue):	(V)	230 a.c.
Minimum operating voltage (min Ue):	(V)	85% Ue
Maximum operating voltage (max Ue):	(V)	110% Ue
Rated impulse voltage (Uimp):	(kV)	4
Rated frequency:	(Hz)	50
Width in DIN modules:		1
Communication protocol:		modbus RS485
Number of addresses:		1 ÷ 99
Transmission speed:		38.400 baud rate
Coupled with:		ReStart with Autotest (2 e 4 pole) ReStart Rm PRO (4 pole) ReStart Rd PRO (4 pole)
Rated tightening torque:	(Nm)	0,4
Power loss:	(W)	1
Degree of protection:		IP20
Operating temperature:	(°C)	-25...+60 <sup>(1)</sup>
Maximum conductor cross section:	(mm²)	2,5
Sealable:		yes

<sup>(1)</sup> Average daily temperature  $\leq +35^{\circ}\text{C}$

### Device description



### Connection example



### Application examples

#### ReStart PRO and ReStart Rm TOP

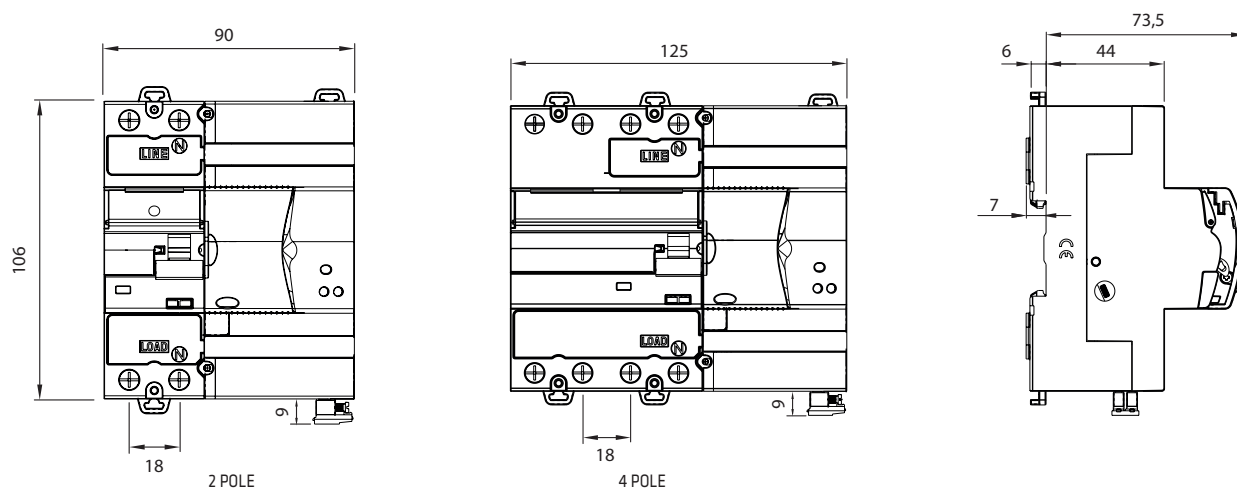
With Restart PRO it is possible to monitor the insulation level after tripping for an indefinite period of time (until acceptable values are obtained and the automatic reset operation is performed). This control system is indispensable where the system's insulation level can suddenly drop, due to weather conditions, and then rise thus allowing reset operations once optimal conditions are re-established.

		SPECIFICATIONS	TYPICAL SYSTEMS
OUTDOOR SYSTEMS		<ul style="list-style-type: none"> <li>- Exposure to atmospheric disturbance</li> <li>- Insulation levels depending on weather conditions (temperature and humidity)</li> <li>- Presence of electronic power supplies</li> <li>- Extensive damage due to blackout</li> <li>- Difficult accessibility of electrical circuit</li> </ul>	<ul style="list-style-type: none"> <li>- Lighting in public places</li> <li>- Outdoor lighting in gardens and squares</li> <li>- Sporting facilities</li> <li>- Traffic lights</li> <li>- Signalling</li> <li>- Pollution control stations</li> <li>- Telecommunication installations</li> <li>- Radio links</li> <li>- Traffic-information panels</li> <li>- Advertising hoardings</li> </ul>
INDOOR SYSTEMS		<ul style="list-style-type: none"> <li>- Strong presence of electronic power supplies</li> <li>- Extensive damage due to blackout</li> <li>- Need for guaranteed service continuity</li> <li>- Sensitivity to disturbance induced by mains supply and by atmospheric conditions</li> <li>- Insulation levels depending on weather and operating conditions</li> </ul>	<ul style="list-style-type: none"> <li>- Small, medium, and large tertiary sector</li> <li>- Industrial plants</li> <li>- Data processing centres</li> <li>- Garages</li> <li>- Pumping systems</li> <li>- Catering</li> <li>- Supermarkets</li> <li>- Ice-cream shops</li> <li>- Alarm system protection</li> <li>- CCTV system protection</li> <li>- Access monitoring system protection</li> <li>- Door and automatic gate protection</li> </ul>

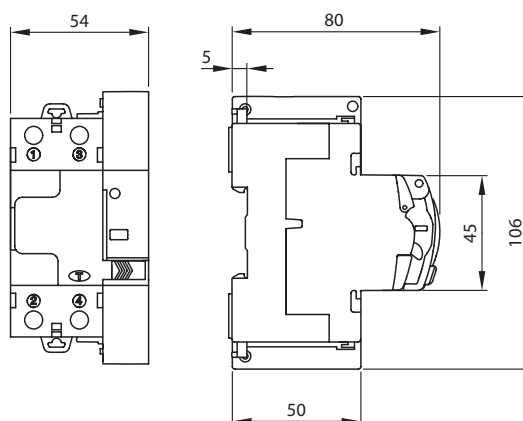


### Dimension tables

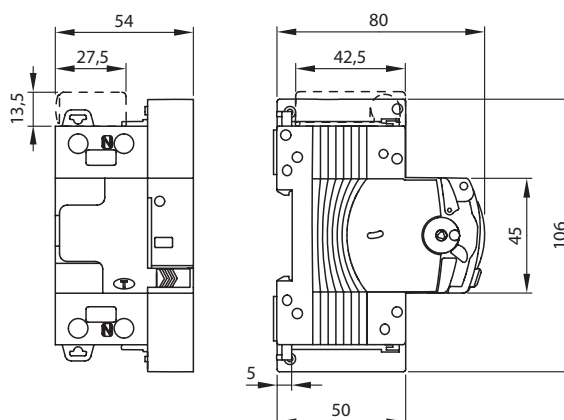
#### ReStart with Autotest



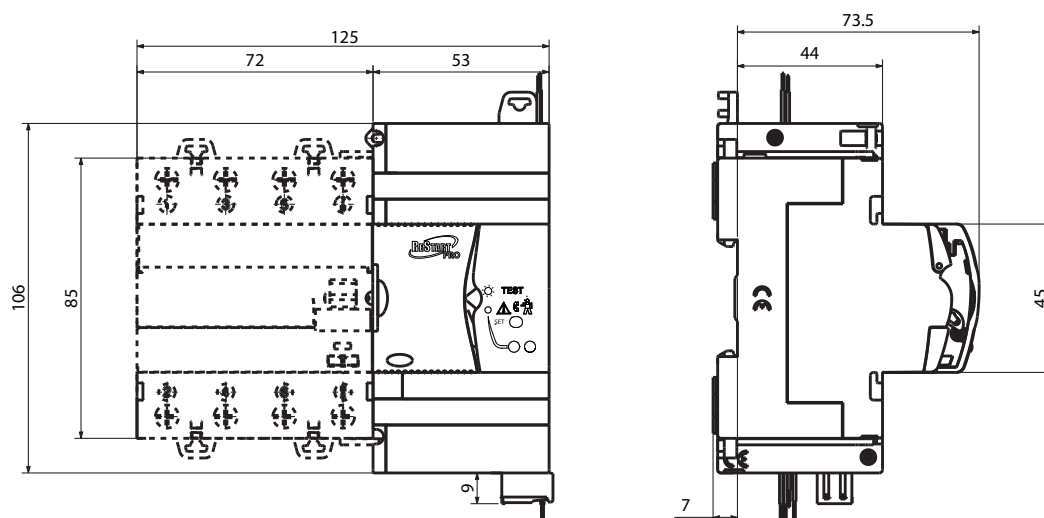
#### ReStart Rd and Rd PRO 2P



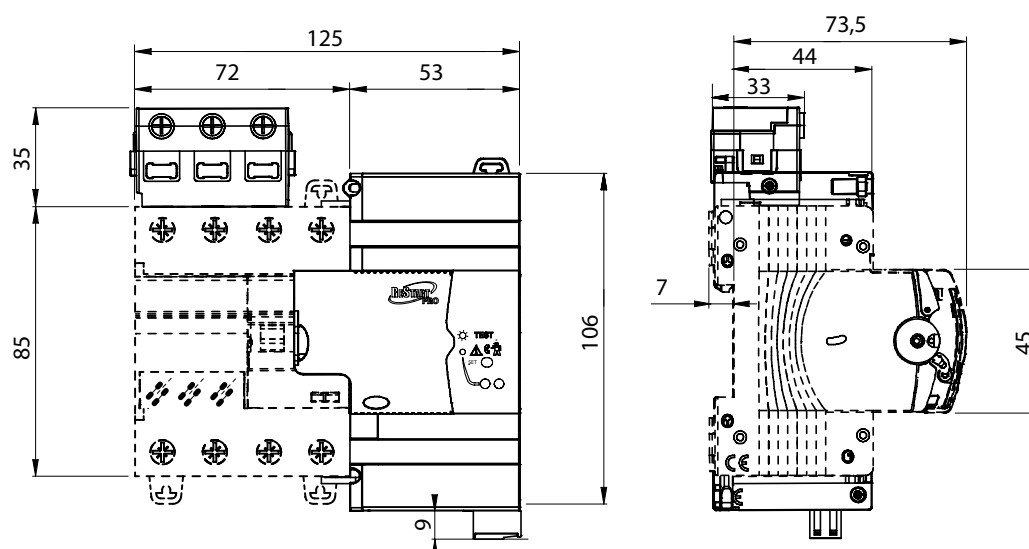
#### ReStart Rm and Rm PRO 2P



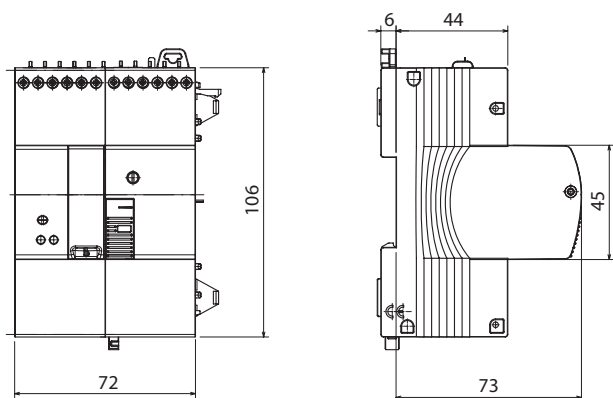
### ReStart Rd PRO 4P



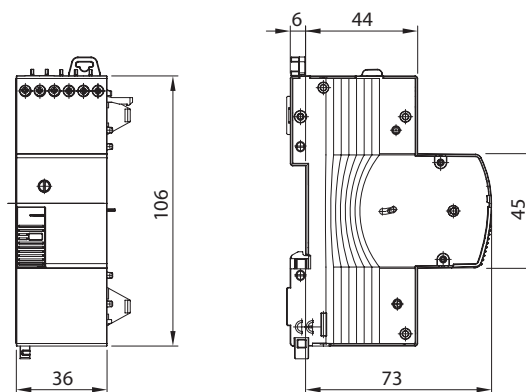
### ReStart Rm PRO 4P



**ReStart Rm TOP**



**ReStart Cm**



**BUS RS485 Interface module**

