



WRU-10-RAL, Residual current relay

Code: P24453.

> Usefull diam.(mm): 28

> IΔn (A): 0,03 ... 3 A | 0,03 ... 30 A

> Delay: 0,02...10 s, INS, SEL

> Nr. reclosures: Programmable

> Time betwen reclosures: Programmable

> Breaking element: Contactor > Type of protection: Type A

### Description

Electronic residual current protection relay with self-reclosing system, with built-in 28 mm transformer, forming a single unit. Super-immunised type-A relay with high-frequency current filtering and high immunity. True root mean square (TRMS) measure. Display with LEDs and backlit display:

- o Residual current reclosing / protection parameters
- o Protection trip current.
- O Number of reclosures
- o Protection status messages, etc.

Device with three changeover contact output relays and two simple relays (all relays can be programmed). The main relay provides the protection associated with the contactor, one is for the prealarm and the other one is for interlocking once the maximum number of reclosures has been reached. It also has a voltage-free input for external tripping and rearming.

- Assembly on DIN 46277 rail (EN-50022)
- o Compact size: 3 modules
- o Connection by pluggable terminal strips

### **Application**

WRU-10 RAL relays associated with a contactor allow automatic reclosing after tripping, thus offering the most adequate solution for street lights, ATMs, refrigerating chambers, traffic lights, etc. Their design features guarantee maximum security and electrical service continuity, avoiding unwanted tripping.







Residual current relay with built-in transformer and display (type A)  $\,$ 

Code: P24453.

# Specifications

Consumption	4,5 VA		
Frequency	50/60 Hz		
Nominal voltage	230 V ~ ±30 % / 110 V ~ ±10 %		
250 V - 250 77 110 V - 210 70			
Mechanical characteristics			
Size (mm) width x height x depth	52.5 x 109.4 x 75 (mm)		
Fastening	DIN 46277 (EN 50022)		
Weight (kg)	0,17		
Environmental characteristics			
Protection class	IP 20		
Relative humidity (without condensation)	95%		
Working temperature	-20 +70 °C		
External reset input for tripping			
Туре	Voltage free, not insulated		
Standards			
Electrical safety, Maximum height (m)	2000		
Standards	IEC 60947-2-M, IEC 60755, IEC 62020		
Other digital relay outputs			
Nominal load	1250 VA		
Nominal current	5 A ~		
Nominal voltage	250 V ~		
Digital relay outputs			
Nominal load	62,5 VA		
Nominal current	0,25 A ~		
Nominal voltage	230 V ~		
Differential protection			
Туре	Type A ultra-immunised		
Sensitivity (I∆n), A	0,03 3 / 5-10-30 (Setup)		
Delay time (tΔ)	Direct setting: 0.02 1 s Programmable: 3-5-10 s Inverse curve: Instantaneous of selective		







Residual current relay with built-in transformer and display (type A)  $\,$ 

Code: P24453.

### Protection

LED indication	Power supply voltage Earth leakage tripping Prealarm Latching
Measure	True root mean square (TRMS)
Reclosure type	

Reclosure number	Programmable
Reset time	Programmable
Reclosure time	Programmable

### WRU-10RAL

Protection relays and residual current reclosing, Type A ultra-immunised with built-in transformer

CODE	TYPE	IΔn (A)	Breaking element
P24453.	WRU-10-RAL	0,03 3 A   0,03 30 A	Contactor
P24457.	WRU-10-RAL0,3-1	0,3 1 A	Contactor

Requires an residual current transformer, WGC type (not included). The breaking element to be associated must be a contactor not included. To encode other parameters, see the table at the end of the section.







Residual current relay with built-in transformer and display (type A)  $\,$ 

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# **Dimensions**



