

Protection and control

Residual current protection

RG1M, Residual current relays 1 module	88
RGE-R, Residual current relay, type A, for WGC transformer, 2 modules with visual prealarm	88
RGU-2, Programmable residual current relay, 2 modules with display and static prealarm output	88
Associated Transformers	89
RGU-10, Residual current relay, type A, for ultra-immunised WGC Transformer, 3 modules with display and programmable pre-alarm output	89
CBS-4, 4 channels residual current relays, type A, 3 modules with display and a configurable prealarm output	89
WGC, Residual current transformer	89
TP-WGC, Split-core residual current transformers	90
WRU-10, Residual current relay, type A, with built-in transformer, ultra-immunised	90
RGMD, Residual current protection type A, assembly with miniature circuit breaker, ultra-immunised	90
WGBU, Transformer with built-in residual current relay, type A	90
RGU-10B, Residual current current monitoring relay, type B	91
WGC-TB, Residual current transformers for type-B relays	91
RGU-100B, Residual current current monitoring relay, type B	92
CBS-400B, 4 channels residual current relays, type B, 3 modules	92
WGB, Residual current transformers for type-B relays	92
WGB-35-TB, Relay Type B built-in residual current current transformer	92
IDB-4, Type B RCCB	92
RGMD-TB, Residual current protection assembly with miniature circuit breaker, ultra-immunised	92

Self-reclosing overcurrent and Residual current protection

Table of residual current device and circuit breaker devices with automatic reclosing system	95
Residual current protection and self-reclosing	
REC4, RCCB with self-reclosing system, type A	96
REC4-C, RCCB with self-reclosing system, type A with compact output	96
RECB, RCCB with self-reclosing system, type B	96
RECB-C, Reclosing RCCB with status output	96
Residual current protection and reclosing system	
WRU-10RAL, Protection relays and residual current reclosing, Type A ultra-immunised with built-in transformer	98
RGU-10 RAL, Reclosing protection relays and residual current reclosing with WGC external transformer	98
CBS4-RA, Central protection and residual current reclosing with WGC external transformer	98
WGC, Residual current transformer	98
TP-WGC, Split-core residual current transformers	98
Residual current and circuit breaker protection	
Overcurrent and residual current protection and reclosing	
RECmax-CVM, Self-reclosing residual current relay with power analyzer functions, transformers included	100
RECmaxLPD, Self-reclosing residual current relay with circuit breaker, used with an external residual current transformer	100
RGU-10 MT, Reclosing residual current relay for motorized circuit breakers	101
WRU-10-MT, Residual current relay with built-in transformer	101
RECmaxMP, Motorized circuit breakers (up to 63 A)	101
Overcurrent self-reclosing	
MT-TS, Motorised circuit-breaker	102
MT-TSD, Motorised circuit-breaker suitable for residual current protection	102
Overcurrent self-reclosing	
RECmaxP, Motorized circuit breakers, up to 63 A	102

Residual current protection for electric vehicles

IDA-EV, 6 mADC type A RCCB with monitoring	105
Residual current protection and reclosing system for electric vehicles	
REC4-EV, 6mADC reclosing type A RCCB with monitoring	106
REC4-EV-C, 6mADC reclosing type A RCCB with monitoring	106
RECB-EV-C, Type-B self-reclosing RCCB	106

Relays and control elements

IMD-2R, Offline insulation relay	107
WI, Current detector relay	107

Protection current transformer

TRP, Protection transformers encapsulated in resin	108
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Measuring and testing equipments for substations

GETEST, Indirect earth contact simulator	110
CR, Relay tester	110
OT2, Dielectric strenght tester	110
MH, Microohmmeter	110
MD, Digital Megaohmmeters	110
TL6, Earth resistance meter	110

Residual current protection

Selection table for Type A devices

	RG1M	RGE-R	WGBU	RGU-2	WRU-10	RGU-10	CBS-4
							
Installation type							
Single phase, three-phase, 3 and 4 wires	●	●	●	●	●	●	●
Features / performance							
Ultra-immunized system	●	●	●	●	●	●	●
Monitoring	–	–	–	●	●	●	●
Pre-alarm	–	●	●	●	●	●	●
Remote control	–	–	–	●	●	●	●
Technical characteristics							
Residual current type	A	A	A	A	A	A	A
Measurement channels	1	1	1	1	1	1	4
Constant current sensitivity	●	–	–	–	–	–	–
Adjustable current sensitivity	–	●	●	●	●	●	●
Fixed delay time	●	–	–	–	–	–	–
Adjustable delay time	–	●	●	●	●	●	●
Built-in current transformer	–	–	35...210	–	28	–	–
External current transformer, WGC Ø 20...500x200 mm	●	●	–	●	–	●	●
Trigger output	●	●	●	●	●	●	●
Pre-alarm output	–	●	–	●	●	●	●
Remote control input	–	–	●	●	●	●	●
RS-485 Communications	–	–	–	–	–	ST	ST
Module size	1	2	–	2	3	3	3

ST - According to type



RG1M

Residual current relays 1 module

Type	Code	I _{Δn} (A)	N° relays	Módulos	Mounting	Delay	Power supply
RG1M - 0,03	[*] P12204.	0,03 A	1	1	DIN rail	0,02 S	230 Vac
RG1M - 0,3	[*] P12214.	0,3 A	1	1	DIN rail	0,02 S	230 Vac

Requires a WGC residual current transformer



RGE-R

Residual current relay, type A, for WGC transformer, 2 modules with visual prealarm.

Type	Code	I _{Δn} (A)	N° relays	Módulos	Mounting	Delay	Power supply
RGE-RL	[*] P12A32.	0,03 ... 5 A	1	2	DIN rail	0,02 ... 5 s	230 Vac
RGE-R	[*] P122320040000	0,03 ... 5 A	1	2	DIN rail	0,02 ... 5 s (*1)	24...48 Vac 24...125 Vdc

Requires a WGC residual current transformer To encode other parameters, such as the auxiliary power supply voltage, see the table at the end of the section



RGU-2

Programmable residual current relay, 2 modules with display and static prealarm output

Type	Code	I _{Δn} (A)	N° relays	Módulos	Mounting	Delay	Power supply
RGU2	[*] P11A61.	0,03 ... 5 A	1	2	DIN rail	0,1 ... 5 s, INS, SEL (*1)(*2)	120...230 Vac

The delay is cancelled in all relays with a 0.03 A sensitivity adjustment, according to IEC 60947-2, annex M INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a tripping time < 0.02 s Requires a WGC residual current transformer



RGU-10

Residual current relay, type A, for ultra-immunised WGC Transformer, 3 modules with display and programmable pre-alarm output.

Type	Code	IΔn (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Commu- nications	Protocol	Power supply
Possibility UL on demand										
RGU-10	[*] P11941.	0,03 ...30 A	1	●	3	DIN rail	0,02 ... 10 s, INS, SEL	-	-	230 Vac
RGU-10C	[*] P11944.	0,03 ...30 A	1	●	3	DIN rail	0,02 ... 10 s, INS, SEL	RS-485	Modbus/RTU	230 Vac

The delay is cancelled in all relays with a 0.03 A sensitivity adjustment, according to IEC 60947-2, annex M INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a tripping time < 0.02 s Requires a WGC residual current transformer To encode other parameters, such as the auxiliary power supply voltage, see the table at the end of the section



CBS-4

4 channels residual current relays, type A, 3 modules with display and a configurable prealarm output.

Type	Code	IΔn (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Commu- nications	Protocol	Power supply
CBS-4	[*] P12711.	0,03 ...30 A	4	●	3	DIN rail	0,02 ... 10 s, INS, SEL	-	-	230 Vac
CBS-4C	[*] P12712.	0,03 ...30 A	4	●	3	DIN rail	0,02 ... 10 s, INS, SEL	RS-485	Modbus/RTU	230 Vac

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M Delay: INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a trip time < 0.02 s Optional UL certification in CBS-4 at 230 Vac (not available for other power supply values). To encode other parameters, such as the auxiliary power supply voltage, see the table at the end of the section

Type	Code	Description
ADP CVM-MINI/ RGU10/CBS4	[*] M5ZZF1.	Panel adapter CVM MINI / RGU-10 / CBS-4 (72 x 72)

TABLE OF ADDITIONAL FEATURES

RGU-10, RGE, CBS-4, WRU-10, RGU-10B

P	1	X	X	X	X	0	0	X	X	X	X
Code	Internal code							↑		↑	↑
Power supply voltage	Standard (230 V _{ac})							0			-
	110 V _{ac} (RGU-10, RGU-10B)							1			1
	400 V _{ac} (RGE, RGU-10)							3			1
	24...48 V _{ac} 24...125 V _{dc} (RGE, RGU-10, RGU-10B)							4			1
	Certificate UL (RGU10/10C - 230 V _{ac})								0	7	2
	Certificate CCC (RGU10 - 230 V _{ac})								0	8	2

Associated Transformers



WGC

Residual current transformer

Type	Code	Usefull diam.(mm)	I _{max} .(A)	Cable (m)	weight (kg)
WGC-20-SC	[*] P10181.	20	63	0.5	0,08
WGC-30-SC	[*] P10182.	30	63	0.5	0,10
WGS-20	[*] P10131.	20	63	-	0,06
WGS-30	[*] P10132.	30	63	-	0,07
WGC-25	[*] P10151.	25	63	-	0,08
WGC-35	[*] P10152.	35	80	-	0,11
WGC-55	[*] P10153.	55	160	-	0,17
WGC-80	[*] P10154.	80	250	-	0,29
WGC-110	[*] P10155.	115	400	-	0,41
WGC-140	[*] P10156.	140	630	-	0,68
WGC-180	[*] P10157.	180	800	-	0,91
WGC-220x105	[C] P10158.	220 x 105	1250	-	3,90
WGC-350x150	[C] P10159.	350 x 150	2000	-	6,80
WGC-500x200	[C] P10160.	500 x 200	4000	-	11,00

Type	Code	Description
PA-TC/WG	[*] P19921.	DIN rail mounting accessory for WGC-25, WGC-35 and WGC-55

Delivery time: [*] Immediate, [x] working weeks, [c] Consult

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TP-WGC

Split-core residual current transformers

Type	Code	Usefull diam.(mm)	IΔn (A)	IΔn min.(A)	weight (kg)
TP58 WGC	[C] P11121.	80 x 50	acc. relay > 0,3A	0.3	0,80
TP88 WGC	[C] P11131.	80 x 80	acc. relay > 0,3A	0.3	1,05
TP812 WGC	[C] P11141.	120 x 80	acc. relay > 0,3A	0.3	1,06
TP816 WGC	[C] P11151.	160 x 80	acc. relay > 0,3A	0.3	2,45

Only for RGU-2, RGU-10/10C, CBS-4/4C

WRU-10



Residual current relay, type A, with built-in transformer, ultra-immunised

Programmable residual current relay, 3 modules with display and two configurable pre-alarm outputs. 230 Vac Auxiliary power supply

Type	Code	Usefull diam.(mm)	IΔn (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Nr. reclo-sures	Power supply
WRU-10-HS	[C] P14036.	28	0,01 ... 0,5 A	1	●	3	DIN rail	0,02 ... 10 s, INS, SEL	30	230 Vac
WRU-10	[*] P14035.	28	0,03 ... 30 A	1	●	3	DIN rail	0,02 ... 10 s, INS, SEL	-	230 Vac

The delay is cancelled in all relays with a 0.03 A sensitivity adjustment, according to IEC 60947-2, annex M Delay: INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a tripping time < 0.02 s To encode other parameters, such as the auxiliary power supply voltage, see the table at the end of the section



RGMD

Residual current protection type A, assembly with miniature circuit breaker, ultra-immunised

Type	Code	In (A)	Moun-ting	Poles	Sensi-tivity
RGMD Series, type A - 2 poles					
RGMD-2-16-30	[1] P13231.	16 A	DIN rail	2	30 mA
RGMD-2-25-30	[1] P13251.	25 A	DIN rail	2	30 mA
RGMD-2-32-30	[1] P13261.	32 A	DIN rail	2	30 mA
RGMD-2-40-30	[1] P13271.	40 A	DIN rail	2	30 mA
RGMD-2-63-30	[1] P13291.	63 A	DIN rail	2	30 mA
RGMD-2-16-300	[1] P13233.	16 A	DIN rail	2	300 mA
RGMD-2-25-300	[1] P13253.	25 A	DIN rail	2	300 mA
RGMD-2-32-300	[1] P13263.	32 A	DIN rail	2	300 mA
RGMD-2-40-300	[1] P13273.	40 A	DIN rail	2	300 mA
RGMD-2-63-300	[1] P13293.	63 A	DIN rail	2	300 mA
Type	Code	In (A)	Moun-ting	Poles	Sensi-tivity
RGMD Series, type A - 4 poles					
RGMD-4-16-30	[1] P13431.	16 A	DIN rail	4	30 mA
RGMD-4-25-30	[1] P13451.	25 A	DIN rail	4	30 mA
RGMD-4-32-30	[1] P13461.	32 A	DIN rail	4	30 mA
RGMD-4-40-30	[1] P13471.	40 A	DIN rail	4	30 mA
RGMD-4-63-30	[1] P13491.	63 A	DIN rail	4	30 mA
RGMD-4-16-300	[1] P13433.	16 A	DIN rail	4	300 mA
RGMD-4-25-300	[1] P13453.	25 A	DIN rail	4	300 mA
RGMD-4-32-300	[1] P13463.	32 A	DIN rail	4	300 mA
RGMD-4-40-300	[1] P13473.	40 A	DIN rail	4	300 mA
RGMD-4-63-300	[1] P13493.	63 A	DIN rail	4	300 mA

It features an RG1M residual current relay, WGS/WGC residual current transformer and C curve circuit breaker, 6 kA (IEC 60898) with 230 Vac trigger coil. Curve 10 kA (IEC 60947-2) check



WGBU

Transformer with built-in residual current relay, type A

Configurable residual current relay with visual pre-alarm. 230 Vac Auxiliary power supply

Type	Code	Usefull diam.(mm)	IΔn (A)	Mounting	Delay
WGBU-35	[C] P16011.	35	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-70	[C] P16012.	70	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-105	[C] P16013.	105	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-140	[C] P16014.	140	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-210	[C] P16015.	210	0,03 ... 3 A	Panel background	0,02...1 s

Relay mounted at 90°. It allows to reduce the mounting space

Type	Code	Usefull diam.(mm)	IΔn (A)	Mounting	Delay
WGBU-90-35	[C] P16021.	35	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-90-70	[C] P16022.	70	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-90-105	[C] P16023.	105	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-90-140	[C] P16024.	140	0,03 ... 3 A	Panel background	0,02...1 s
WGBU-90-210	[C] P16025.	210	0,03 ... 3 A	Panel background	0,02...1 s

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M

Selection table for Type B devices

	IDB-4	WGB-35-TB	RGU-10B	RGMD-TB	RGU-100B	CBS-400B
						
Installation type						
Single phase, three-phase, 3 and 4 wires	●	●	●	●	●	●
Features / performance						
Monitoring	—	—	●	●	●	●
Pre-alarm	—	—	●	●	●	●
Remote control	—	●	●	●	●	●
Technical characteristics						
Residual current type	B	B	B	B	B	B
Measurement channels	1	1	1	1	1	4
Fixed current sensitivity	●	●	—	—	—	—
Adjustable current sensitivity	—	—	●	●	●	●
Fixed delay time	●	●	—	—	—	—
Adjustable delay time	—	—	●	●	●	●
Built-in current transformer	●	35	—	—	—	—
External current transformer, WGC-TB or WGB	—	—	WGC-TB	WGC-TB	WGB	WGB
Trigger output	—	●	●	●	●	●
Pre-alarm output	—	—	●	●	●	●
Remote control input	—	—	●	●	●	●
Communications	—	—	—	—	●	●
Module size	4	—	3	8	3	3



RGU-10B

Residual current monitoring relay, type B

Type	Code	I _{Δn} (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Power supply
RGU-10B	[*] P11951.	0,1...3 A	1	●	3	DIN rail	0,1 ... 10 s	230 Vac

Requires an residual current transformer, WGC-TB type. See coding table for other options.

Type	Code	Description
ADP CVM-MINI/ RGU10/CBS4	[*] M5ZZF1.	Panel adapter CVM MINI / RGU-10 / CBS-4 (72 x 72)



WGC-TB

Residual current transformers for type-B relays

Type	Code	Usefull diam.(mm)	I _{Δn} min.(A)	I _{max} .(A)	weight (kg)
WGS-20-TB	[*] P11731.	20	0.1	63	0,08
WGC-25-TB	[*] P11751.	25	0.1	63	0,12
WGC-35-TB	[*] P11752.	35	0.1	80	0,11
WGC-55-TB	[*] P11753.	55	0.3	160	0,18
WGC-80-TB	[*] P11755.	80	0.5	250	0,25
WGC-110 TB	[*] P11756.	110	0.5	400	0,38
WGC-140 TB	[*] P11757.	140	0.5	630	0,48
WGC-180 TB	[*] P11758.	180	0.5	800	0,20

Only for RGU-10B type relays

TABLE OF ADDITIONAL FEATURES

RGU-10B				
P	1	X	X	X
Code	Internal code			Delivery time
Power supply voltage	Standard (230 V _{ac})			0
	24...48 V _{ac} / 24...125 V _{dc}			4

Delivery time: [*] Immediate, [x] working weeks, [c] Consult



RGU-100B

Residual current monitoring relay, type B

Type	Code	I _{Δn} (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Commu- nications	Protocol	Power supply
RGU-100B	[*] P11961.	0,03 ... 3 A	1	●	3	DIN rail	0,02 ... 10 s, I NS, SEL	RS-485	Modbus/RTU	230 Vac

Associated with WGB-type residual current transformers



CBS-400B

4 channels residual current relays, type B, 3 modules

Type	Code	I _{Δn} (A)	N° relays	Pre-alarm relay	Módulos	Mounting	Delay	Commu- nications	Protocol	Power supply
CBS-400B	[*] P12721.	0,03 ... 3 A	4	●	3	DIN rail	0,02 ... 10 s, INS, SEL	RS-485	Modbus/RTU	230 Vac

Associated with WGB-type residual current transformers



WGB

Residual current transformers for type-B relays

Type	Code	Usefull diam.(mm)	I _{Δn} (A)	I _{max} .(A)	weight (kg)
WGB-35	[C] P11B52.	35.5	0.03 ... 3 A	80	0,24
WGB-55	[C] P11B53.	55.5	0.03 ... 3 A	160	0,36
WGB-80	[C] P11B54.	80.5	0.03 ... 3 A	250	0,56
WGB-110	[C] P11B55.	110.5	0.03 ... 3 A	400	0,71

Only for relays type RGU-100B and CBS-400B

Type	Code	Description
ADP. CVM-E3-MINI/ RGU-100B/CBS-400B	[*] M5ZZF100000E3	Panel adapter CVM-E3-MINI, RGU-100B, CBS-400B (72 x 72)



WGB-35-TB

Relay Type B built-in residual current current transformer

Type	Code	Usefull diam.(mm)	Delay	Sensitivity	weight (kg)
WGB-35-TB30	[C] P16111.	35	INS	30 mA	0,25
WGB-35-TB300	[C] P16121.	35	INS	300 mA	0,27
WGB-35-TB300S	[C] P16131.	35	SEL	300 mA	0,25



IDB-4

Type B RCCB

Type	Code	I _n (A)	Mounting	Poles	Sensitivity
IDB-4 4P-40A-30 mA	[*] P17221.	40 A	DIN rail	4	30 mA
IDB-4 4P-40A-300 mA	[*] P17222.	40 A	DIN rail	4	300 mA
IDB-4 4P-63A -30 mA	[*] P17231.	63 A	DIN rail	4	30 mA
IDB-4 4P-63A -300mA	[*] P17232.	63 A	DIN rail	4	300 mA

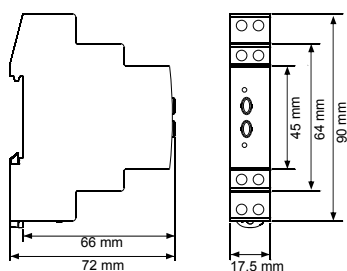
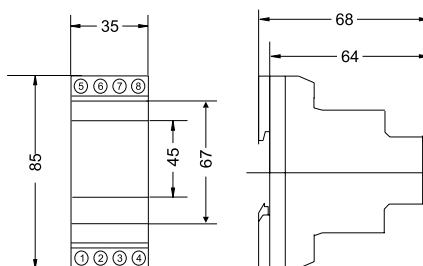
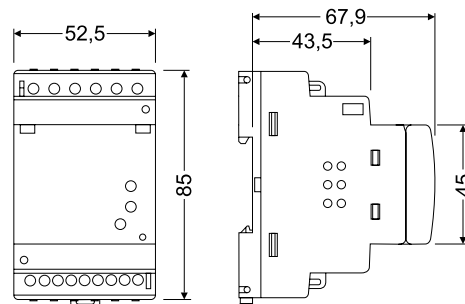
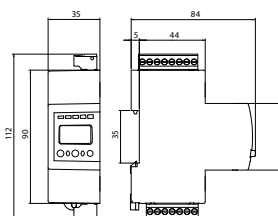
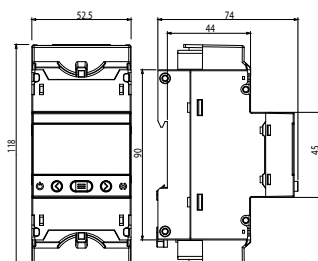
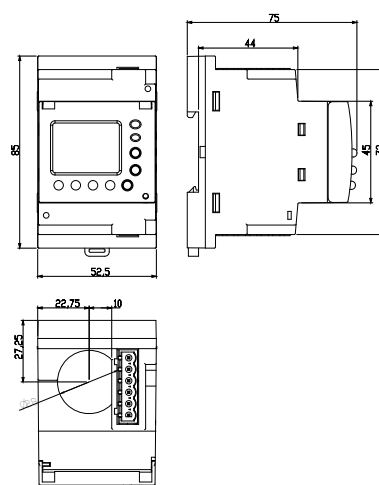
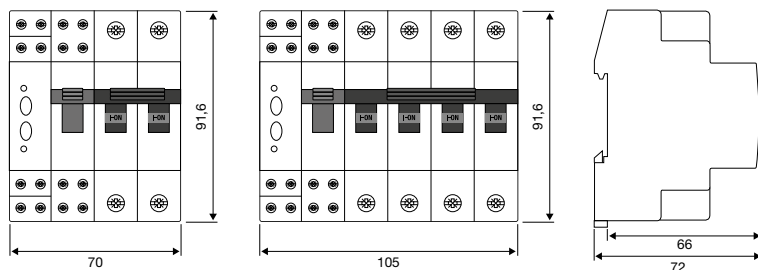
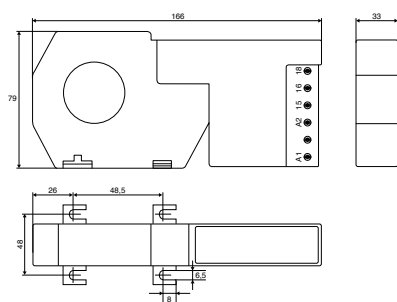
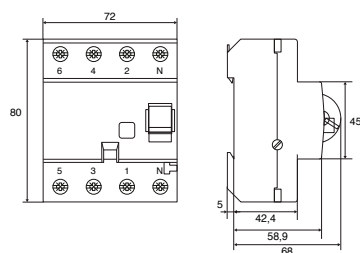


RGMD-TB

Residual current protection assembly with miniature circuit breaker, ultra-immunised

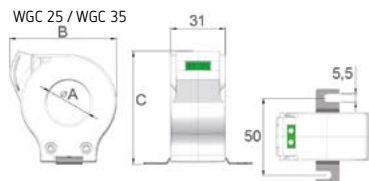
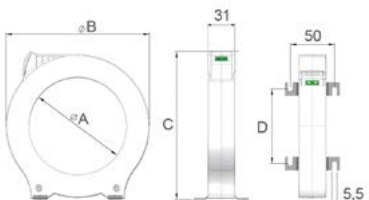
Type	Code	I _{Δn} (A)	I _n (A)	Cut off power	Módulos	Mounting	Delay
RGMD-TB Series, type B - 4 poles							
RGMD-TB-4-16	[C] P15001.	0,1...3 A	16 A	6 kA	8	DIN rail	0,1 ... 10 s
RGMD-TB-4-20	[C] P15002.	0,1...3 A	20 A	6 kA	8	DIN rail	0,1 ... 10 s
RGMD-TB-4-25	[C] P15003.	0,1...3 A	25 A	6 kA	8	DIN rail	0,1 ... 10 s
RGMD-TB-4-32	[C] P15004.	0,1...3 A	32 A	6 kA	8	DIN rail	0,1 ... 10 s
RGMD-TB-4-40	[C] P15005.	0,1...3 A	40 A	6 kA	8	DIN rail	0,1 ... 10 s
RGMD-TB-4-63	[C] P15006.	0,1...3 A	63 A	6 kA	8	DIN rail	0,1 ... 10 s
RGMD-TB-4-16/10	[C] P15011.	0,1...3 A	16 A	10 kA	8	DIN rail	0,1 ... 10 s

It includes an RGU-10B residual current relay, transformer (25 mm Ø) and a coil circuit breaker, C curve, 6 kA (EN 60898). Curve 10 kA (IEC 60947-2) check

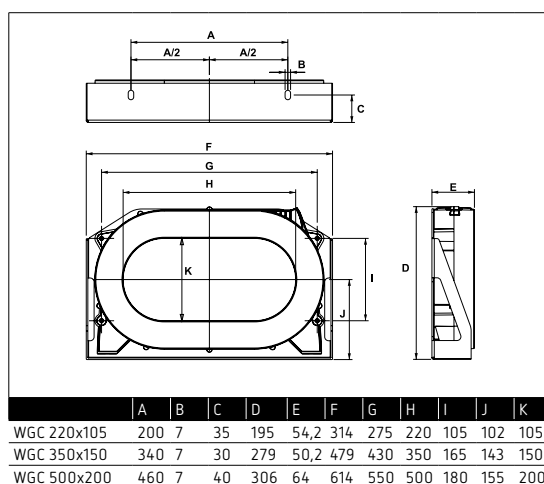
Dimensions**RG1M****RGE****RGU-10 / CBS-4 / RGU-10B****RGU-2****RGU-100B / CBS-400B****WRU-10****RGMD 2P / RGMD 4P****WGB-35-TB****IDB-4**

WGC / WGC-TB

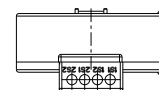
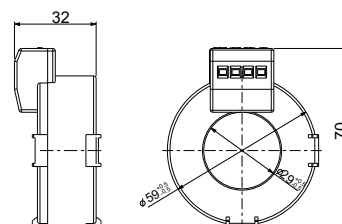
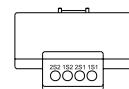
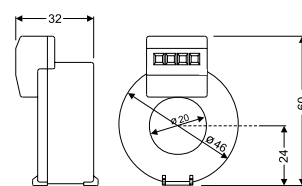
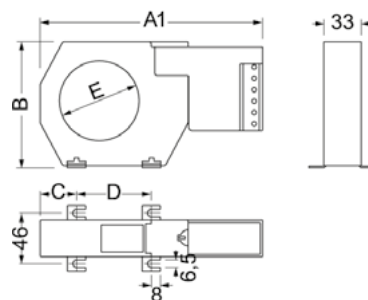
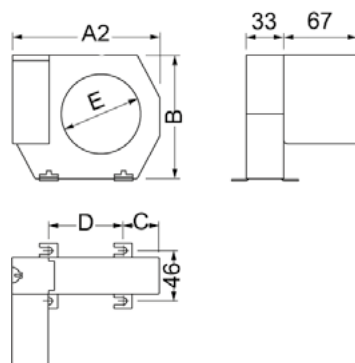
WGC 25 / WGC 35

WGC 55 / WGC 80
WGC 110 / WGC 140

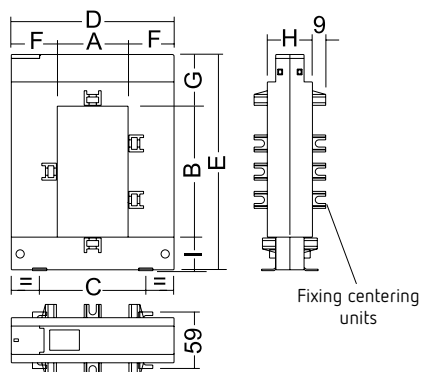
Modelo	A	B	C	D
WGC 25	25	60,5	64	
WGC 35	35	70,5	75,5	
WGC 55	55	92	98	38
WGC 80	80	124,5	130	60
WGC 110	110	163	168	84,5
WGC 140	140	201	206	110
WGC 180	180	252	256	144



	A	B	C	D	E	F	G	H	I	J	K
WGC 220x105	200	7	35	195	54,2	314	275	220	105	102	105
WGC 350x150	340	7	30	279	50,2	479	430	350	165	143	150
WGC 500x200	460	7	40	306	64	614	550	500	180	155	200

WGS**WGBU****WGBU-90**

Type	A1	A2	B	C	D	E
WGBU-35 (A1) / WGBU-90-35 (A2)	166	100	79	26	48,5	35
WGBU-70 (A1) / WGBU-90-70 (A2)	196	130	110	332	66	70
WGBU-105 (A1) / WGBU-90-105 (A2)	236	170	146	38	94	105
WGBU-140 (A1) / WGBU-90-140 (A2)	286	220	196	48,5	123	140
WGBU-210 (A1) / WGBU-90-210 (A2)	365	299	284	69	161	210

TP-WGC

Dimensions (mm)	TP-58	TP-88	TP-812	TP-816
a	50	80	80	80
b	80	80	120	160
c	78	108	108	120
d	114	144	144	184
e	145	145	185	245
f	32	32	32	52
g	32	32	32	47
h	32	32	32	52
i	32	32	32	38

Self-reclosing overcurrent and Residual current protection

Table of residual current device and circuit breaker devices with automatic reclosing system

RCCBs	REC4, REC4-C, RECB, RECB-C	95
Residual current relays	WRU-10 RAL, RGU-10 RAL, CBS4-RA	98
Residual current and circuit breaker protection	RGU-10MT, RECMa ^x LPD, RECMa ^x CVM,	101
Overcurrent self-reclosing	RECMa ^x P	

Selection table RCCBs

	REC4	REC4-C	RECB	RECB-C
		 New		 New
Protection type				
Residual current	●	●	●	●
Reclosure type				
Residual current	●	●	●	●
Installation type				
Single phase, three-phase, 3 and 4 wires	●	●	●	●
Circuit breaker				
Switch (included)	●	●	●	●
Features / performance				
Status indication	—	●	—	●
Insulation monitoring	●	●	—	—
Technical specifications				
Residual current type	A	A	B	B
Fixed current sensitivity	●	●	●	●
Fixed delay time	●	●	●	●
Built-in current transformer	●	●	●	●
Output status	—		—	●
Self-reclosing	●	●	●	●
Module size	"3 (2P) 5 (4P)"	"3 (2P) 5 (4P)"	5 (4P)"	5 (4P)"

Residual current protection and self-reclosing



REC4

RCCB with self-reclosing system, type A

Type	Code	Breaking element	In (A)	Poles	Sensitivity	Reclosing mode
REC4-2P-40-30	[*] P26A21.	built-in	40 A	2	30 mA	Insulation
REC4-2P-40-300	[C] P26A23.	built-in	40 A	2	300 mA	Time
REC4-2P-63-30	[C] P26A31.	built-in	63 A	2	30 mA	Insulation
REC4-2P-63-300	[C] P26A33.	built-in	63 A	2	300 mA	Time
REC4-4P-40-30	[C] P26F21.	built-in	40 A	4	30 mA	Time
REC4-4P-40-300	[C] P26F23.	built-in	40 A	4	300 mA	Time
REC4-4P-63-30	[C] P26F31.	built-in	63 A	4	30 mA	Time
REC4-4P-63-300	[C] P26F33.	built-in	63 A	4	300 mA	Time

3 reconnections: 3, 20, 180 s.

New



REC4-C

RCCB with self-reclosing system, type A with compact output

Type	Code	Breaking element	In (A)	Poles	Sensitivity	Reclosing mode
REC4-C 2P 40 30	[C] P27A21.	built-in	40A	2	30 mA	Time
REC4-C 2P 40 300	[C] P27A31.	built-in	40A	2	300 mA	Time
REC4-C 2P 63 30	[C] P27A23.	built-in	63 A	2	30 mA	Time
REC4-C 2P 63 300	[C] P27A33.	built-in	63 A	2	300 mA	Time
REC4-C 4P 40 30	[C] P27F21.	built-in	40A	4	30 mA	Time
REC4-C 4P 40 300	[C] P27F31.	built-in	40A	4	300 mA	Time
REC4-C 4P 63 30	[C] P27F23.	built-in	63 A	4	30 mA	Time
REC4-C 4P 63 300	[C] P27F33.	built-in	63 A	4	300 mA	Time

3 reconnections: 3, 20, 180 s.



RECB

RCCB with self-reclosing system, type B

Type	Code	Breaking element	In (A)	Poles	Sensitivity	Reclosing mode
RECB-4P-40-30	[C] P26G21.	built-in	40 A	4	30 mA	Time
RECB-4P-40-300	[C] P26G23.	built-in	40 A	4	300 mA	Time
RECB-4P-63-30	[C] P26G31.	built-in	63 A	4	30 mA	Time
RECB-4P-63-300	[C] P26G33.	built-in	63 A	4	300 mA	Time

3 reconnections: 3, 20, 180 s.

New



RECB-C

Reclosing RCCB with status output

Type	Code	Breaking element	In (A)	Poles	Sensitivity	Reclosing mode
RECB-C-4P-40-300	[C] P26M01.	built-in	40 A	4	300 mA	remote control
RECB-C-4P-63-300	[C] P26M11.	built-in	63 A	4	300 mA	remote control

(*1) Not included in the reference

Residual current protection and reclosing system

Selection table residual current relays

Residual current and circuit breaker protection

WRU-10 RAL



RGU-10 RAL



CBS4-RA



Protection type			
Residual current	●	●	●
Reclosure type			
Residual current	●	●	●
Installation type			
Single phase, three-phase, 3 and 4 wires	●	●	●
Circuit breaker			
Contact (not included)	●	●	●
Features / performance			
Monitoring	●	●	●
Pre-alarm	●	●	●
Remote control	●	●	●
Technical specifications			
Residual current type	A	A	A
Circuit breaker: contact	●	●	●
Measurement channels	1	1	4
Adjustable current sensitivity	●	●	●
Adjustable delay time	●	●	●
Built-in current transformer (Ø mm)	28 mm	–	–
External current transformer, WGC Ø 20...500x200	–	●	●
Trigger output	●	●	●
Pre-alarm output	●	●	–
Remote control input	●	●	●
Adjustable reclosing time	●	●	●
Communications	–	ST	ST
Module size	3	3	3

ST - Depending on type

Complete set formed by: Residual current relay + Contactor (*1)**WRU-10RAL**

Protection relays and residual current reclosing, Type A ultra-immunised with built-in transformer
Programmable residual current relay, 3 modules, display with prealarm output and reclosing locking system. 230 Vac
Auxiliary power supply

Type	Code	Usefull diam.(mm)	IΔn (A)	Breaking element	Delay	Nr. reclosures	Time between reclosures
WRU-10-RAL	[*] P24453.	28	0,03 ... 30 A	Contacteur	0,02...10 s, INS, SEL	Programmable	Programmable
WRU-10-RAL0,3-1	[*] P24457.	28	0,3 ... 1 A	Contacteur	0,02 INS	Programmable	Programmable

The delay is cancelled in all relays with a 0.03 A sensitivity adjustment, according to IEC 60947-2, annex M. INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a tripping time ≤ 0.02 s
The contactor is not supplied. To encode other parameters, see the table at the end of the section

Set composed of: Residual current relay+ Contactor (*1) + WGC transformers (*1)

RGU-10 RAL

Reclosing protection relays and residual current reclosing with WGC external transformer
Type A ultra-immunised residual current relay, programmable, 3 modules with display and locking status release by reclosing. 230 Vac auxiliary power supply.

Type	Code	IΔn (A)	Breaking element	Delay	Communications	Nr. reclosures
RGU-10 RAL	[*] P24622.	0,03 ... 30 A	Contacteur	0,02...10 s, INS, SEL	-	Programmable
RGU-10C RAL	[*] P24662.	0,03 ... 30 A	Contacteur	0,02...10 s, INS, SEL	RS-485	Programmable

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M.
INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a trip time <0.02 s
Requires an residual current transformer, WGC type and contactor (not included)
To encode other parameters, see the table at the end of the section

CBS4-RA

Central protection and residual current reclosing with WGC external transformer
Station with 4 Type A ultra-immunised residual current relays, programmable, 4 modules with display and locking status release by reclosing. 230 Vac Auxiliary power supply

Type	Code	IΔn (A)	N° relays	Breaking element	Delay	Communications	Nr. reclosures
CBS-4 RA	[*] P24911.	0,03 ... 30 A	4	Contacteur	0,02...10 s, INS, SEL	-	Programmable
CBS-4C-RA	[*] P24912.	0,03 ... 30 A	4	Contacteur	0,02...10 s, INS, SEL	RS-485	Programmable

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M.
INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a trip time <0.02 s
Requires an residual current transformer, WGC type and contactor (not included)
To encode other parameters, see the table at the end of the section

**WGC**

Residual current transformer

Type	Code	Usefull diam.(mm)	I _{max} .(A)	Cable (m)	weight (kg)
WGC-20-SC	[*] P10181.	20	63	0,5	0,08
WGC-30-SC	[*] P10182.	30	63	0,5	0,10
WGS-20	[*] P10131.	20	63	-	0,06
WGS-30	[*] P10132.	30	63	-	0,07
WGC-25	[*] P10151.	25	63	-	0,08
WGC-35	[*] P10152.	35	80	-	0,11
WGC-55	[*] P10153.	55	160	-	0,17
WGC-80	[*] P10154.	80	250	-	0,29
WGC-110	[*] P10155.	115	400	-	0,41
WGC-140	[*] P10156.	140	630	-	0,68
WGC-180	[*] P10157.	180	800	-	0,91
WGC-220x105	[C] P10158.	220 x 105	1250	-	3,90
WGC-350x150	[C] P10159.	350 x 150	2000	-	6,80
WGC-500x200	[C] P10160.	500 x 200	4000	-	11,00

**TP-WGC**

Split-core residual current transformers

Type	Code	Usefull diam.(mm)	IΔn (A)	IΔn min.(A)	weight (kg)
TP58 WGC	[C] P11121.	80 x 50	acc. relay > 0,3A	0.3	0,80
TP88 WGC	[C] P11131.	80 x 80	acc. relay > 0,3A	0.3	1,05
TP812 WGC	[C] P11141.	120 x 80	acc. relay > 0,3A	0.3	1,06
TP816 WGC	[C] P11151.	160 x 80	acc. relay > 0,3A	0.3	2,45

Only for RGU-2, RGU-10/10C, CBS-4/4C

(*1) Not included in the reference

Residual current and circuit breaker protection

Selection table residual current and circuit breaker protection

Residual current protection and reclosure control	WRU-10MT	RGU-10MT	RECMaXLPD	RECMaXCVM	RECMaXP
					
Circuit breaker protection	RECMaXMP MT-TSD	RECMaXMP MT-TSD			
Protection type					
Residual current	●	●	●	●	—
Circuit breaker	●	●	●	●	●
Reclosure type					
Residual current	●	●	●	●	—
Circuit breaker	●	●	●	●	●
Installation type					
Single phase, three-phase, 3 and 4 wires	●	●	●	●	●
Circuit breaker					
Switch (included)	●	●	●	●	●
Features / performance					
Monitoring	●	●	●	●	—
Remote control	●	●	●	●	●
Power analyzer	—	—	—	●	—
Technical specifications					
Residual current type	A	A	A	A	—
Adjustable current sensitivity	●	●	●	●	—
Adjustable delay time	●	●	●	●	—
Built-in current transformer	28 mm	—	—	—	—
External current transformer, WGC Ø 20...500x200 mm	—	●	●	●	—
Digital output	—	—	—	●	—
Reclosing end output	●	●	●	●	●
Switch status output	●	●	●	●	●
Alarm output	●	●	●	●	●
Reclosing blocked output	—	—	—	●	—
Remote control input	●	●	●	●	●
Self-reclosing	—	—	—	—	●
Adjustable reclosing time	●	●	●	●	—
Communications	—	ST	—	—	—
Module size	7,5 (2P) 9,5 (4P)	7,5 (2P) 9,5 (4P)	4,5 (2P) 6,5 (4P)	4,5 (2P) 6,5 (4P)	7,5 (2P) 9,5 (4P)

Overcurrent and residual current protection and reclosing

Set composed of: Residual current relay with built-in circuit breaker + WGC-SC Transformer + MC Measurement transformer



RECmax-CVM

Self-reclosing residual current relay with power analyzer functions, transformers included

Type	Code	In (A)	Módulos	Poles
2 Poles, C Curve				
RECmax-CVM 2P C2-10	[2] P2B111.	10 A	6.5	2
RECmax-CVM 2P C2-16	[2] P2B112.	16 A	6.5	2
RECmax-CVM 2P C2-20	[2] P2B113.	20 A	6.5	2
RECmax-CVM 2P C2-25	[2] P2B114.	25 A	6.5	2
RECmax-CVM 2P C2-32	[2] P2B115.	32 A	6.5	2
RECmax-CVM 2P C2-40	[2] P2B116.	40 A	6.5	2
RECmax-CVM 2P C2-50	[2] P2B117.	50 A	6.5	2
RECmax-CVM 2P C2-63	[2] P2B118.	63 A	6.5	2
4 Poles, C Curve				
RECmax-CVM 4P C4-10	[2] P2B121.	10 A	8.9	4
RECmax-CVM 4P C4-16	[2] P2B122.	16 A	8.9	4
RECmax-CVM 4P C4-20	[2] P2B123.	20 A	8.9	4
RECmax-CVM 4P C4-25	[2] P2B124.	25 A	8.9	4
RECmax-CVM 4P C4-32	[2] P2B125.	32 A	8.9	4
RECmax-CVM 4P C4-40	[2] P2B126.	40 A	8.9	4
RECmax-CVM 4P C4-50	[2] P2B127.	50 A	8.9	4
RECmax-CVM 4P C4-63	[2] P2B128.	63 A	8.9	4

Type	Code	In (A)	Módulos	Poles
2 Poles, D Curve				
RECmax-CVM 2P D2-10	[2] P2B131.	10 A	6.5	2
RECmax-CVM 2P D2-16	[2] P2B132.	16 A	6.5	2
RECmax-CVM 2P D2-20	[2] P2B133.	20 A	6.5	2
RECmax-CVM 2P D2-25	[2] P2B134.	25 A	6.5	2
RECmax-CVM 2P D2-32	[2] P2B135.	32 A	6.5	2
RECmax-CVM 2P D2-40	[2] P2B136.	40 A	6.5	2
RECmax-CVM 2P D2-50	[2] P2B137.	50 A	6.5	2
RECmax-CVM 2P D2-63	[2] P2B138.	63 A	6.5	2
4 Poles, D Curve				
RECmax-CVM 4P D4-10	[2] P2B141.	10 A	8.9	4
RECmax-CVM 4P D4-16	[2] P2B142.	16 A	8.9	4
RECmax-CVM 4P D4-20	[2] P2B143.	20 A	8.9	4
RECmax-CVM 4P D4-25	[2] P2B144.	25 A	8.9	4
RECmax-CVM 4P D4-32	[2] P2B145.	32 A	8.9	4
RECmax-CVM 4P D4-40	[2] P2B146.	40 A	8.9	4
RECmax-CVM 4P D4-50	[2] P2B147.	50 A	8.9	4
RECmax-CVM 4P D4-63	[2] P2B148.	63 A	8.9	4

All models feature the WGC20/30-SC residual current transformer and MC-3 or MC-1 measuring transformer with connected terminal Residual current relay with adjustable sensitivity (0.03 A, up to 1 A), adjustable delay (with curve, INS/SEL, or by time, from 0.1 to 1 s) and programmable automatic reclosing system The 0.03 A sensitivity adjustment cancels the delay for a specific period of time, IEC 60947-2, annex M C/D curve circuit breaker with 6 kA cut off power (IEC 60898). Curve 10 kA (IEC 60947-2) check.

Set composed of: Residual current relay with built-in circuit breaker + WGC Transformer (*1)



RECmaxLPD

Self-reclosing residual current relay with circuit breaker, used with an external residual current transformer

Type	Code	In (A)	Módulos	Poles
2 Poles, C Curve				
RECmaxLPd-C2-6	[1] P2A110.	6 A	5.3	2
RECmaxLPd-C2-10	[1] P2A111.	10 A	5.3	2
RECmaxLPd-C2-16	[1] P2A112.	16 A	5.3	2
RECmaxLPd-C2-20	[1] P2A113.	20 A	5.3	2
RECmaxLPd-C2-25	[1] P2A114.	25 A	5.3	2
RECmaxLPd-C2-32	[1] P2A115.	32 A	5.3	2
RECmaxLPd-C2-40	[1] P2A116.	40 A	5.3	2
RECmaxLPd-C2-50	[1] P2A117.	50 A	5.3	2
RECmaxLPd-C2-63	[1] P2A118.	63 A	5.3	2
4 Poles, C Curve				
RECmaxLPd-C4-6	[1] P2A120.	6 A	7.7	4
RECmaxLPd-C4-10	[1] P2A121.	10 A	7.7	4
RECmaxLPd-C4-16	[1] P2A122.	16 A	7.7	4
RECmaxLPd-C4-20	[1] P2A123.	20 A	7.7	4
RECmaxLPd-C4-25	[1] P2A124.	25 A	7.7	4
RECmaxLPd-C4-32	[1] P2A125.	32 A	7.7	4
RECmaxLPd-C4-40	[1] P2A126.	40 A	7.7	4
RECmaxLPd-C4-50	[1] P2A127.	50 A	7.7	4
RECmaxLPd-C4-63	[1] P2A128.	63 A	7.7	4

Type	Code	In (A)	Módulos	Poles
2 Poles, D Curve				
RECmaxLPd-D2-6	[1] P2A130.	6 A	7.7	2
RECmaxLPd-D2-10	[1] P2A131.	10 A	5.3	2
RECmaxLPd-D2-16	[1] P2A132.	16 A	5.3	2
RECmaxLPd-D2-20	[1] P2A133.	20 A	5.3	2
RECmaxLPd-D2-25	[1] P2A134.	25 A	5.3	2
RECmaxLPd-D2-32	[1] P2A135.	32 A	5.3	2
RECmaxLPd-D2-40	[1] P2A136.	40 A	5.3	2
RECmaxLPd-D2-50	[1] P2A137.	50 A	5.3	2
RECmaxLPd-D2-63	[1] P2A138.	63 A	5.3	2
4 Poles, D Curve				
RECmaxLPd-D4-6	[1] P2A140.	6 A	7.7	4
RECmaxLPd-D4-10	[1] P2A141.	10 A	7.7	4
RECmaxLPd-D4-16	[1] P2A142.	16 A	7.7	4
RECmaxLPd-D4-20	[1] P2A143.	20 A	7.7	4
RECmaxLPd-D4-25	[1] P2A144.	25 A	7.7	4
RECmaxLPd-D4-32	[1] P2A145.	32 A	7.7	4
RECmaxLPd-D4-40	[1] P2A146.	40 A	7.7	4
RECmaxLPd-D4-50	[1] P2A147.	50 A	7.7	4
RECmaxLPd-D4-63	[1] P2A148.	63 A	7.7	4

Residual current relay with adjustable sensitivity (0.03 to 1 A), adjustable delay (by curve, INS/SEL, or defined time span from 0.1 to 1 s) and automatic programmable reclosing. The 0.03 A sensitivity adjustment cancels the delay for a specific period of time, IEC 60947-2, annex M WGS-20/30 and WGC-25/35 residual current transformers C/D curve circuit breaker with 6 kA cut off power (IEC 60898). Curve 10 kA (IEC 60947-2) check

(*1) Not included in the reference

Complete set formed by: Residual current relay + WG/WGC Transformer(*1) + RECmax MP / MT-TSD (*1)

RGU-10 MT

Reclosing residual current relay for motorized circuit breakers

Type	Code	I _{Δn} (A)	Breaking element	Delay	Communications	Nr. reclosures	Time between reclosures
RGU-10 MT	[*] P24642.	0,03 ... 30 A	RECmaxMP MT-TSD	0,02...10 s, INS, SEL	-	Programmable	Programmable
RGU-10C MT	[*] P24652.	0,03 ... 30 A	RECmaxMP MT-TSD	0,02...10 s, INS, SEL	RS-485	Programmable	Programmable

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M.

INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a trip time < 0.02 s

 Requires a WGS/WGC residual current transformer (not included). To operate with RECmax MP (I_n ≤ 63 A), with MT-TSD (I_n > 63 A),

To encode other parameters, see the table at the end of the section

Complete set formed by: Residual current relay + RECmax MP / MT-TSD (*1)

WRU-10-MT

Residual current relay with built-in transformer

Type	Code	Usefull diam.(mm)	I _{Δn} (A)	Delay	Nr. reclosures	Time between reclosures
WRU-10-MT	[C] P24275.	28	0,03 ... 3 A 0,03 ... 30 A	0,02...10 s, INS, SEL	Programmable	Programmable

The delay is cancelled in all relays with a sensitivity adjustment of 0.03 A, IEC 60947-2, annex M. (*1) INS, SEL trip curves, according to IEC 61008-1, for trigger coils with a trip time ≤ 0.02 s

 To operate with RECmax MP (I_n ≤ 63 A), with MT-TSD (I_n > 63 A), To encode other parameters, see the table at the end of the section

RECmaxMP

Motorized circuit breakers (up to 63 A)

Type	Code	I _n (A)	Módulos	Poles
2 Poles, C Curve				
RECmax MP-C2-6	[1] P27110.	6 A	5.3	2
RECmax MP-C2-10	[1] P27111.	10 A	5.3	2
RECmax MP-C2-16	[1] P27112.	16 A	5.3	2
RECmax MP-C2-20	[1] P27113.	20 A	5.3	2
RECmax MP-C2-25	[1] P27114.	25 A	5.3	2
RECmax MP-C2-32	[1] P27115.	32 A	5.3	2
RECmax MP-C2-40	[1] P27116.	40 A	5.3	2
RECmax MP-C2-50	[1] P27117.	50 A	5.3	2
RECmax MP-C2-63	[1] P27118.	63 A	5.3	2
4 Poles, C Curve				
RECmax MP-C4-6	[1] P27120.	6 A	7.7	4
RECmax MP-C4-10	[1] P27121.	10 A	7.7	4
RECmax MP-C4-16	[1] P27122.	16 A	7.7	4
RECmax MP-C4-20	[1] P27123.	20 A	7.7	4
RECmax MP-C4-25	[1] P27124.	25 A	7.7	4
RECmax MP-C4-32	[1] P27125.	32 A	7.7	4
RECmax MP-C4-40	[1] P27126.	40 A	7.7	4
RECmax MP-C4-50	[1] P27127.	50 A	7.7	4
RECmax MP-C4-63	[1] P27128.	63 A	7.7	4
Type	Code	I _n (A)	Módulos	Poles
2 Poles, D Curve				
RECmax MP-D2-6	[1] P27130.	6 A	5.3	2
RECmax MP-D2-10	[1] P27131.	10 A	5.3	2
RECmax MP-D2-16	[1] P27132.	16 A	5.3	2
RECmax MP-D2-20	[1] P27133.	20 A	5.3	2
RECmax MP-D2-25	[1] P27134.	25 A	5.3	2
RECmax MP-D2-32	[1] P27135.	32 A	5.3	2
RECmax MP-D2-40	[1] P27136.	40 A	5.3	2
RECmax MP-D2-50	[1] P27137.	50 A	5.3	2
RECmax MP-D2-63	[1] P27138.	63 A	5.3	2
4 Poles, D Curve				
RECmax MP-D4-6	[1] P27140.	6 A	7.7	4
RECmax MP-D4-10	[1] P27141.	10 A	7.7	4
RECmax MP-D4-16	[1] P27142.	16 A	7.7	4
RECmax MP-D4-20	[1] P27143.	20 A	7.7	4
RECmax MP-D4-25	[1] P27144.	25 A	7.7	4
RECmax MP-D4-32	[1] P27145.	32 A	7.7	4
RECmax MP-D4-40	[1] P27146.	40 A	7.7	4
RECmax MP-D4-50	[1] P27147.	50 A	7.7	4
RECmax MP-D4-63	[1] P27148.	63 A	7.7	4

C/D curve circuit breakers with 6 kA cut off power (IEC 60898). Curve 10 kA (IEC 60947-2) check

TABLE OF ADDITIONAL FEATURES

RGU-10/C RAL / RGU-10/C MT									
P	2	X	X	X	X	0	0	X	0
Code	Internal code				Delivery time				
Power supply voltage	Standard (230 V _{AC})				-				
	110 V _{AC} (WRU-10 RAL / MT)				2				
	24...48 V _{AC} / 24...125 V _{DC} (RGU-10/C RAL RGU-10/C MT)				1				
	Certificate UL (Only RGU-10C MT 230 V _{AC})				2				

(*1) Not included in the reference

Delivery time: [*] Immediate, [x] working weeks, [c] Consult

Circuitor. The Future is Efficiency

New



MT-TS

Motorised circuit-breaker

Type	Code	In (A)	Poles
3 poles			
MT-TS- 80A- 3P	[1] P20H60.	80 A	3
MT-TS- 100A- 3P	[1] P20H61.	100 A	3
MT-TS- 125A- 3P	[1] P20H62.	125 A	3
MT-TS- 160A- 3P	[1] P20H63.	160 A	3
MT-TS- 250A- 3P	[1] P20H64.	250 A	3
MT-TS- 400A- 3P	[1] P20H65.	400 A	3
MT-TS- 630A- 3P	[1] P20H66.	630 A	3

Fixed magnetic and adjustable thermal protection

Type	Code	In (A)	Poles
4 poles			
MT-TS- 80A- 4P	[1] P20H70.	80 A	4
MT-TS- 100A- 4P	[1] P20H71.	100 A	4
MT-TS- 125A- 4P	[1] P20H72.	125 A	4
MT-TS- 160A- 4P	[1] P20H73.	160 A	4
MT-TS- 250A- 4P	[1] P20H74.	250 A	4
MT-TS- 400A- 4P	[1] P20H75.	400 A	4
MT-TS- 630A- 4P	[1] P20H76.	630 A	4

New



MT-TSD

Motorised circuit-breaker suitable for residual current protection

Type	Code	In (A)	Poles
3 poles			
MT-TSD- 80A- 3P	[1] P20K60.	80 A	3
MT-TSD- 100A- 3P	[1] P20K61.	100 A	3
MT-TSD- 125A- 3P	[1] P20K62.	125 A	3
MT-TSD- 160A- 3P	[1] P20K63.	160 A	3
MT-TSD- 250A- 3P	[1] P20K64.	250 A	3
MT-TSD- 400A- 3P	[1] P20K65.	400 A	3
MT-TSD- 630A- 3P	[1] P20K66.	630 A	3

Fixed magnetic and adjustable thermal protection

Type	Code	In (A)	Poles
4 poles			
MT-TSD- 80A- 4P	[1] P20K70.	80 A	4
MT-TSD- 100A- 4P	[1] P20K71.	100 A	4
MT-TSD- 125A- 4P	[1] P20K72.	125 A	4
MT-TSD- 160A- 4P	[1] P20K73.	160 A	4
MT-TSD- 250A- 4P	[1] P20K74.	250 A	4
MT-TSD- 400A- 4P	[1] P20K75.	400 A	4
MT-TSD- 630A- 4P	[1] P20K76.	630 A	4

Overcurrent self-reclosing



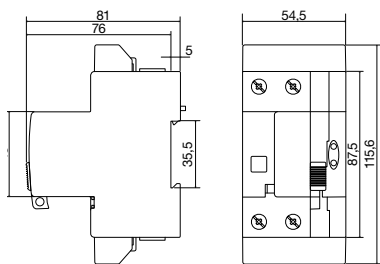
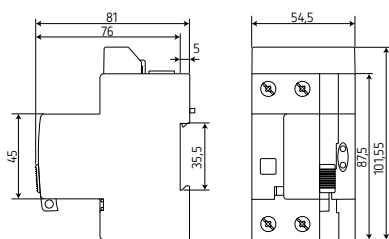
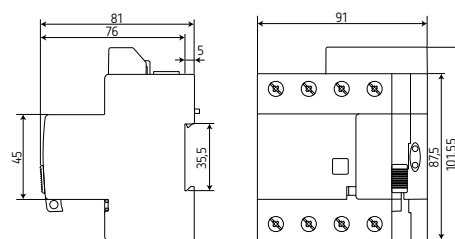
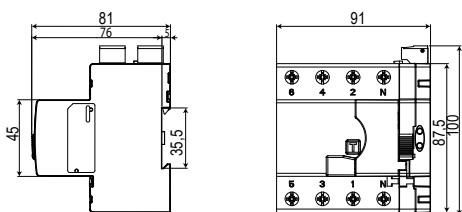
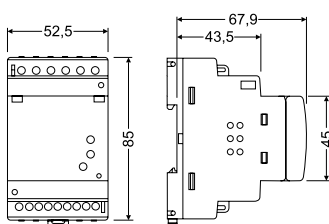
RECmaxP

Motorized circuit breakers, up to 63 A

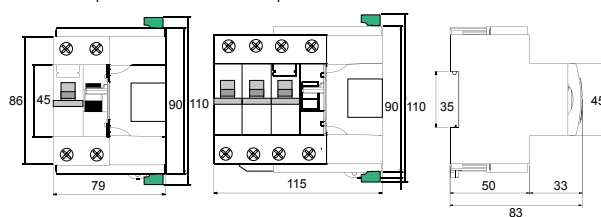
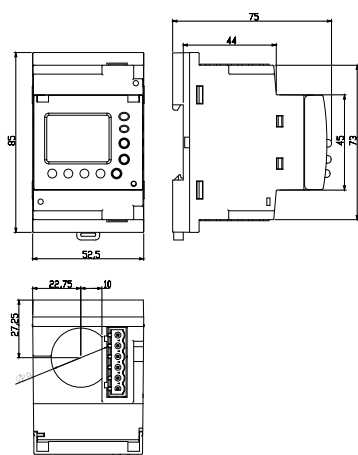
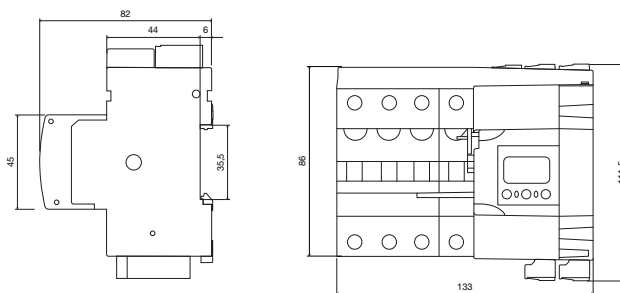
Type	Code	In (A)	Poles
2 Poles, C Curve			
RECmax P-C2-6	[1] P28110.	6 A	2
RECmax P-C2-10	[1] P28111.	10 A	2
RECmax P-C2-16	[1] P28112.	16 A	2
RECmax P-C2-20	[1] P28113.	20 A	2
RECmax P-C2-25	[1] P28114.	25 A	2
RECmax P-C2-32	[1] P28115.	32 A	2
RECmax P-C2-40	[1] P28116.	40 A	2
RECmax P-C2-50	[1] P28117.	50 A	2
RECmax P-C2-63	[1] P28118.	63 A	2
4 Poles, C Curve			
RECmax P-C4-6	[1] P28120.	6 A	4
RECmax P-C4-10	[1] P28121.	10 A	4
RECmax P-C4-16	[1] P28122.	16 A	4
RECmax P-C4-20	[1] P28123.	20 A	4
RECmax P-C4-25	[1] P28124.	25 A	4
RECmax P-C4-32	[1] P28125.	32 A	4
RECmax P-C4-40	[1] P28126.	40 A	4
RECmax P-C4-50	[1] P28127.	50 A	4
RECmax P-C4-63	[1] P28128.	63 A	4

C/D curve circuit breakers with 6 kA cut off power (IEC 60898). Curve 10 kA (IEC 60947-2) check

Type	Code	In (A)	Poles
2 Poles, D Curve			
RECmax P-D2-6	[1] P28130.	6 A	2
RECmax P-D2-10	[1] P28131.	10 A	2
RECmax P-D2-16	[1] P28132.	16 A	2
RECmax P-D2-20	[1] P28133.	20 A	2
RECmax P-D2-25	[1] P28134.	25 A	2
RECmax P-D2-32	[1] P28135.	32 A	2
RECmax P-D2-40	[1] P28136.	40 A	2
RECmax P-D2-50	[1] P28137.	50 A	2
RECmax P-D2-63	[1] P28138.	63 A	2
4 Poles, D Curve			
RECmax P-D4-6	[1] P28140.	6 A	4
RECmax P-D4-10	[1] P28141.	10 A	4
RECmax P-D4-16	[1] P28142.	16 A	4
RECmax P-D4-20	[1] P28143.	20 A	4
RECmax P-D4-25	[1] P28144.	25 A	4
RECmax P-D4-32	[1] P28145.	32 A	4
RECmax P-D4-40	[1] P28146.	40 A	4
RECmax P-D4-50	[1] P28147.	50 A	4
RECmax P-D4-63	[1] P28148.	63 A	4

Dimensiones**REC4 2P 30****REC4 2P 300****REC4 4P / RECB****RECB-C****RGU-10 / CBS-4****RECmax**
2 polos

4 polos

**WRU-10****RECmax CVM**

Residual current protection for electric vehicles

Selection table RCCBs

	IDA-EV	REC4-EV	REC4-EV-C	RECB-EV-C
				
		New	New	New
Protection type				
Residual current	●	●	●	●
Installation type				
Single phase, three-phase, 3 and 4 wires	●	●	●	●
Circuit breaker				
Switch (included)	●	●	●	●
Features / performance				
Status LEDs	–	●	●	●
Switch status output	–	–	●	●
Remote reclosing input	–	–	●	●
Remote trigger input	–	–	●	●
Technical specifications				
Earth leakage type	A + 6 mAdc	A + 6 mAdc	A + 6 mAdc	B
Self-powered	●	●	–	–
Auxiliary power supply	–	–	●	●
Constant current sensitivity	●	●	●	●
Fixed delay time	●	●	●	●
Built-in current transformer	●	●	●	●
Self-reclosing	–	●	–	–
Remote control	–	–	●	●
Module size	4	5	5	5

Residual current protection for electric vehicles



IDA-EV
6 mADC type A RCCB with monitoring

Type	Code	In (A)	Mounting	Poles	Sensitivity
IDA-EV-40-30	[*] P17321.	40 A	DIN rail	4	30 mA + 6 mAdc
IDA-EV-63-30	[*] P17322.	63 A	DIN rail	4	30 mA + 6 mAdc



Residual current protection and reclosing system for electric vehicles

New



REC4-EV

6mADC reclosing type A RCCB with monitoring

Type	Code	In (A)	Poles	Sensitivity	Reclosing mode
REC4-EV-4P-40-30	[C] P26H00.	40 A	4	30 mA	Time
REC4-EV-4P-63-30	[C] P26H01.	63 A	4	30 mA	Time

3 reconnections: 3, 20, 180 s. Complies with the EN 50557 Standard

New



REC4-EV-C

6mADC reclosing type A RCCB with monitoring
12 VAC auxiliary power supply

Type	Code	In (A)	Poles	Sensitivity	Reclosing mode
Self-reclosing RCCB with status output					
REC4-EV-C-4P-40-30	[*] P26L00.	40 A	4	30 mA	remote control
REC4-EV-C-4P-63-30	[*] P26L01.	63 A	4	30 mA	remote control

3 reconnections: 3, 20, 180 s. Complies with the EN 50557 Standard

New



RECB-EV-C

Type-B self-reclosing RCCB
12 VAC auxiliary power supply

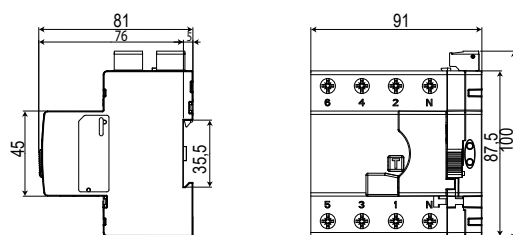
Type	Code	In (A)	Poles	Sensitivity	Reclosing mode
Reclosing RCCB with status output					
RECB-EV-C-4P-40-30	[C] P26M00.	40 A	4	30 mA	remote control
RECB-EV-C-4P-63-30	[C] P26M10.	63 A	4	30 mA	remote control

REC4-EV-C

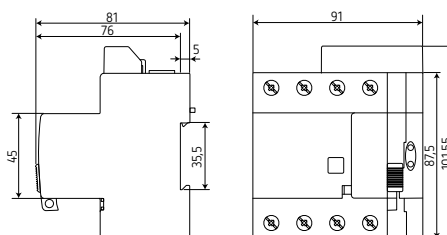
P	2	X	X	X	X	0	0	X
Code	Internal code							Delivery time
Frequency	Standard 50 Hz							0 -
	60 Hz							1 1

Dimensions

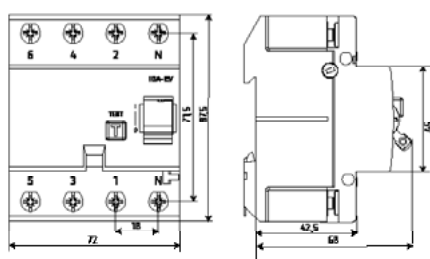
REC4-EV-C/ RECB-EV-C



REC4-EV 4P



IDA-EV



Relays and control elements



IMD-2R
Offline insulation relay

Type	Code	Description
IMD-2R	[*] P33020.	Monitoring relay for offline insulation. It controls and monitors the insulation resistance of the receivers that are occasionally disconnected from the electrical network

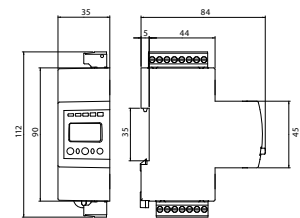


WI
Current detector relay

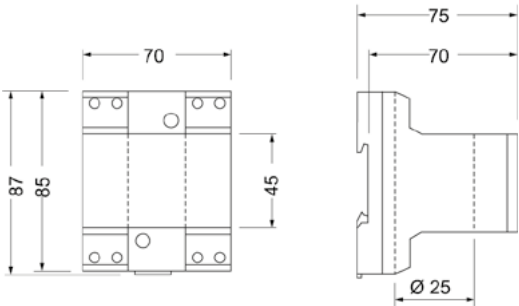
Type	Code	Trip time (adjustable)	Margin of setting (adjustable)
WI/005-30	[*] P32011.	0,5 ... 30 s	0,5 ... 5 A
WI/010-30	[*] P32012.	0,5 ... 30 s	1 ... 10 A
WI/020-30	[*] P32013.	0,5 ... 30 s	2 ... 20 A
WI/050-30	[*] P32014.	0,5 ... 30 s	5 ... 50 A
WI/100-30	[*] P32015.	0,5 ... 30 s	10 ... 100 A
WI/TS	[*] P32010.	0,5 ... 30 s	s / transf. ... / 5 A

Dimensions

IMD-2R



WI



Protection current transformer

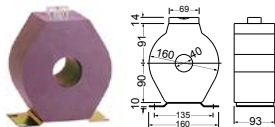
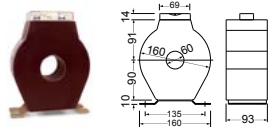
TRP model selection table, according to:

- Primary current intensity
- Maximum wiring diameter
- Assigned VA power
- Assigned accuracy/protection class

	TRP 40	TRP 60	TRP 80	TRP 100	TRP 140	TRP 180
	5P10-5P20	5P10-5P20	5P10-5P20	5P10-5P20	5P10-5P20	5P10-5P20
	Power (VA)					
100/5	5					
150/5	5	2.5				
200/5	10	2.5				
250/5	10	5	5			
300/5	15	5	5			
400/5	20	7.5	7.5			
500/5	25	10	10			
600/5	Cable Cable Ø 40 mm	10	10	Cable Cable Ø 100 mm		
750/5		15	15		5	Cable Cable Ø 140 mm
800/5		15	15		5	
1 000/5		20	20	7.5	5	
1 200/5		Cable Cable Ø 60 mm	25	10	5	Cable Ø 180 mm
1 250/5			25	10	5	
1 500/5			30	10	10	
1 600/5			30	15	10	5
1 800/5			35	15	10	5
2 000/5			Cable Cable Ø 80 mm	15	10	7.5
2 500/5				20	10	10
3 000/5				25	15	10
4 000/5					15	15
5 000/5						15

TRP

Protection transformers encapsulated in resin

Type	TRP40-5P10			TRP40-5P20			TRP60-5P10			TRP60-5P20		
												
Usefull diam.(mm)	ø 40 mm						ø 60 mm					
Accuracy	5P10			5P20			5P10			5P20		
A	VA	Code	weight (kg)	VA	Code	weight (kg)	VA	Code	weight (kg)	VA	Code	weight (kg)
100	5	[4] P50311.	5,00	5	[4] P50211.	9,00						
150	5	[4] P50312.	5,00	5	[4] P50212.	9,00	2.5	[4] P50321.	2,60	2.5	[4] P50221.	4,20
200	10	[4] P50313.	5,00	10	[4] P50213.	9,00	2.5	[4] P50322.	2,70	2.5	[4] P50222.	4,20
250	10	[4] P50314.	5,00	10	[4] P50214.	9,00	5	[4] P50323.	2,70	5	[4] P50223.	4,30
300	15	[4] P50315.	5,10	15	[4] P50215.	9,10	5	[4] P50324.	2,70	5	[4] P50224.	4,70
400	20	[4] P50316.	5,10	20	[4] P50216.	9,20	7.5	[4] P50325.	2,80	7.5	[4] P50225.	4,90
500	25	[4] P50317.	5,20	25	[4] P50217.	9,30	10	[4] P50326.	2,80	10	[4] P50226.	5,10
600							10	[4] P50327.	2,90	10	[4] P50227.	5,20
750							15	[4] P50328.	3,00	15	[4] P50228.	5,30
1000							20	[4] P50329.	3,20	20	[4] P50229.	5,50

Type	TRP80-5P10			TRP80-5P20			TRP100-5P10			TRP100-5P20		
												
Usefull diam.(mm)	ø 80 mm						ø 100 mm					
Accuracy	5P10			5P20			5P10			5P20		
A	VA	Code	weight (kg)	VA	Code	weight (kg)	VA	Code	weight (kg)	VA	Code	weight (kg)
250	5	[4] P50331.	3,20	5	[4] P50231.	5,60						
300	5	[4] P50332.	3,30	5	[4] P50232.	6,00						
400	7.5	[4] P50333.	3,30	7.5	[4] P50233.	5,80						
500	10	[4] P50334.	3,40	10	[4] P50234.	5,90						
600	10	[4] P50335.	3,50	10	[4] P50235.	6,10						
750							5	[4] P50341.	3,40	5	[4] P50241.	5,60
800	15	[4] P50336.	3,60	15	[4] P50236.	6,00						
1000	20	[4] P50337.	3,70	20	[4] P50237.	6,30	7.5	[4] P50342.	3,40	7.5	[4] P50242.	5,80
1200	25	[4] P50338.	3,80	25	[4] P50238.	6,60	10	[4] P50343.	3,40	10	[4] P50243.	5,90
1500	30	[4] P50339.	4,00	30	[4] P50239.	6,90	10	[4] P50344.	3,50	10	[4] P50244.	6,10
2000							15	[4] P50346.	3,70	15	[4] P50246.	6,40
2500							15	[4] P50347.	3,90	15	[4] P50247.	6,80
3000							20	[4] P50348.	4,56	20	[4] P50248.	7,65

Type	TRP140-5P10			TRP140-5P20			TRP180-5P10			TRP180-5P20		
												
Usefull diam.(mm)	ø 140 mm						ø 180 mm					
Accuracy	5P10			5P20			5P10			5P20		
A	VA	Code	weight (kg)	VA	Code	weight (kg)	VA	Code	weight (kg)	VA	Code	weight (kg)
1000	5	[4] P50351.	3,70	5	[4] P50251.	6,20						
1250	5	[4] P50352.	3,80	5	[4] P50252.	6,40						
1500	10	[4] P50353.	3,90	10	[4] P50253.	6,60	5	[4] P50361.	4,50	5	[4] P50261.	8,10
2000	10	[4] P50354.	5,10	10	[4] P50254.	7,10	7.5	[4] P50362.	4,50	7.5	[4] P50262.	7,60
2500	10	[4] P50355.	4,50	10	[4] P50255.	7,50	10	[4] P50363.	5,00	10	[4] P50263.	8,50
3000	15	[4] P50356.	4,60	15	[4] P50256.	8,00	10	[4] P50364.	5,20	10	[4] P50264.	8,90
4000	15	[4] P50357.	5,20	15	[4] P50257.	8,90	15	[4] P50365.	5,70	15	[4] P50265.	9,70
5000							15	[4] P50366.	6,20	15	[4] P50266.	10,60

TRP

P	5	X	X	X	X	0	0	X	
Code	Internal code							Delivery time	
Secondary current	Standard (.../ 5 A)							0	-
	... / 1 A							1	5



TRM, Measure current transformers encapsulated in resin, see section **Measurements and control / Measuring current transformers and shunts**

Measuring and testing equipments for substations



GETEST

Indirect earth contact simulator

Type	Code	Description	Communications
GETEST 5...50A	[C] P6012300A0000	Indirect earth contact simulator 5 ... 50 A, includes PDA	Bluetooth
Trolley GETEST	[C] P6990A.	Transport trolley GETEST	-
GETEST Probe	[C] P69928.	Measurement electrode	-

Includes the CIRCUTOR laboratory certificate



CR

Relay tester

Type	Code	Description
Relay tester		
CR-50	[C] P6021100A0000	Relay tester 50 A (carrying case version)
CR-100	[C] P6021200A0000	Relay tester 100 A (carrying case version)
CR-250	[C] P6021300A0000	Relay tester 250 A

Accessories

Trafo 2500 para CR-250	[C] P69903.	Transformer 2500 A for CR-250
Cable 1,5M/2500A	[C] P69902.	Cable: Length 1,5 m / 2500 A
MPC-CR	[C] P69901.	Transport trolley CR250

Includes the CIRCUTOR laboratory certificate



OT2

Dielectric strenght tester

Type	Code	Description
OT2-60 D	[C] P6031200A0000	Dielectric strenght tester for insulating oil 60 kV

Includes the CIRCUTOR laboratory certificate



MH

Microohmmeter

Type	Code	Description	Communications
MH-10r	[C] P6071500A0000	Microohmmeter (Thomson Bridge)	Bluetooth
MH-10/100u	[C] P6071400A0000	Microohmmeter 10 / 100 A	-



MD

Digital Megaohmmeters

Type	Code	Description	Communications
Digital megaohmmeter			
MD-5060e	[C] P6052100A0000	Digital megaohmmeter 5 kV (with memory and communications)	-
MD-10kVr	[C] P6052300A0000	Digital megaohmmeter 10 kV	Bluetooth
Analogue megaohmmeter			
MI-20kV	[C] P6051400A0000	Analogue megaohmmeter 20 kV	-



TL6

Earth resistance meter

Type	Code	Description	Communications
TL-6r	[C] P6062300A0000	4-way earth resistance meter	Bluetooth

TABLE OF ADDITIONAL FEATURES

P	6	X	X	X	X	0	0	X
Code						Internal Code		Delivery time
Certificate						ENAC calibration certificate		E C