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- FLUSH-MOUNT VERSION
R1D TYPE**
- 1 operation threshold
 - External toroidal transformer
 - Adjustable tripping $I_{\Delta n}$ and delay time.



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- FLUSH-MOUNT VERSION
R2D TYPE**
- 2 operation thresholds
 - External toroidal transformer
 - Configurable fail safe operation
 - Adjustable tripping $I_{\Delta n}$ and delay time.
- R3D TYPE**
- 2 operation thresholds
 - External toroidal transformer
 - Configurable fail safe operation
 - Flag indicator
 - Adjustable tripping $I_{\Delta n}$ and delay time.



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- FLUSH-MOUNT VERSION
R4D TYPE**
- 2 operation thresholds
 - External toroidal transformer
 - Configurable fail safe operation
 - Fault current measurement
 - Digital display
 - Flag indicator
 - Shunt tripping circuit
 - Adjustable tripping $I_{\Delta n}$ and delay time.

- ◆ *Modular, flush and internal panel mount version, with or without flag indicator, configurable prealarm indication and fail safe operation*
- ◆ *Versions with automatic toroid connection control*
- ◆ *Choice of supply voltage ranges*
- ◆ *Adjustable fault current $I_{\Delta n}$*
- ◆ *Adjustment and choice of tripping range for both fault current and delay time.*



PLANET - DIN



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- MODULAR VERSION
RM1 TYPE**
- 1 operation threshold
 - External toroidal transformer
 - Fixed tripping $I_{\Delta n}$ and delay time.

- RM TYPE**
- 1 operation threshold
 - External toroidal transformer
 - Adjustable tripping $I_{\Delta n}$ and delay time.



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- MODULAR VERSION
RMT TYPE**
- 1 operation threshold
 - Incorporated toroidal transformer
 - Adjustable tripping $I_{\Delta n}$ and delay time.



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- COMPACT INTERNAL PANEL VERSION
RC TYPE**
- 1 operation threshold
 - Incorporated toroidal transformer
 - Adjustable tripping $I_{\Delta n}$ and delay time.

Earth leakage relays

With 1 operation threshold	13-	2
With 2 operation thresholds	13-	3
Toroidal current transformers	13-	3
External multiplier	13-	3

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- TOROIDAL CURRENT TRANSFORMERS
RT TYPE**
- Solid core
 - 35mm to 210mm diameter.
- RTA TYPE**
- Split core
 - 110mm and 210mm diameter.



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- EXTERNAL MULTIPLIER
RX10 TYPE**
- 10-fold multiplier.

Relays with 1 operation threshold



R1D...

Order code	Rated auxiliary supply voltage	Output contacts	Qty per pkg	Wt
	[V]	$\frac{4}{1}$	n°	[kg]
1 OPERATION THRESHOLD. Flush mount. External CT.				
R1D 48	24-48VAC/DC	1	1	0.180
R1D 415	110-240-415V ①	1	1	0.180

① Supply voltage:
110-125VAC (50/60Hz)/DC
220-240VAC (50/60Hz)
380-415VAC (50/60Hz).

General characteristics

- Green power LED indicator (ON)
- Red relay tripped LED indicator (TRIP)
- Front TEST and RESET buttons
- Configurable automatic or manual resetting
- Flush mount 96x96mm housing with transparent cover
- Degree of protection: IP20 terminals, IP40 on front with cover.

ADJUSTMENTS FOR R1D

- Configurable tripping set-point ($I_{\Delta n}$): 0.025-0.25A
0.25-2.5A
2.5-25A
25-250A (with external multiplier RX10)
- Configurable tripping delay time (t): 0.02-0.5s
0.2-5s

Reference standards

Compliant with standards: IEC/EN 62020; IEC/EN 61543.



RM1...

moduLo

Order code	Rated auxiliary supply voltage	Output contacts	Qty per pkg	Wt
	[V]	$\frac{4}{1}$	n°	[kg]
1 OPERATION THRESHOLD. Modular, 35mm DIN (EN 50022) rail mounting. External CT. Fixed tripping set point and time.				
RM1 48	24-48VAC/DC	1	1	0.078
RM1 415	110-240-415V AC ①	1	1	0.078

1 OPERATION THRESHOLD.
Modular, 35mm DIN (EN 50022) rail mounting. External CT.

31 RM 48	24-48VAC/DC	1	1	0,078
31 RM 415	110-240-415V ①	1	1	0,078

1 OPERATION THRESHOLD.
Modular, 35 mm DIN rail (EN 50022) mounting.
Ø 28 mm incorporated CT. Configurable fail safe.

31 RMT 48	24-48VAC/DC	2 ②	1	0,259
31 RMT 415	110-240-415V ①	2 ②	1	0,259

① Supply voltage:
110-125VAC (50/60Hz)/DC
220-240VAC (50/60Hz)
380-415VAC (50/60Hz).

② 2 output relays each with 1 changeover contact.

General characteristics

- Configurable fail safe operation for RMT type only
- Green power LED indicator (ON)
- Red relay tripped LED indicator (TRIP)
- Front TEST and RESET buttons
- Configurable automatic or manual resetting
- Modular DIN 43880 housing, 2modules, with transparent cover, suitable for fixing on 35mm DIN rail (IEC/EN 60715)
- Degree of protection: IP20 terminals, IP40 on front with cover.

SETTINGS FOR RM1

- Selectable tripping set point ($I_{\Delta n}$): fixed 0.3A or 0.5A
- Selectable tripping time (t): fixed 0.02s or 0.5s

ADJUSTMENTS FOR RM AND RMT

- Configurable tripping set-point ($I_{\Delta n}$): 0.025-0.25A
0.25-2.5A
2.5-25A
25-250A (with external multiplier RX10 for RM only)
- Configurable tripping delay time (t): 0.02-0.5s
0.2-5s

Reference standards

Compliant with standards: IEC/EN 62020; IEC/EN 61543.



31 RM...

moduLo



31 RMT...

moduLo



31 RC60...

Order code	Rated auxiliary supply voltage	Output contacts	Qty per pkg	Wt
	[V]	$\frac{4}{1}$	n°	[kg]
1 OPERATION THRESHOLD. Compact panel mount. CT incorporated.				
31 RC② 48	24-48VAC/DC	1	1	0.278
31 RC② 415	110-240-415V ①	1	1	0.278

① Supply voltage:
110-125VAC (50/60Hz)/DC
220-240VAC (50/60Hz)
380-415VAC (50/60Hz).

② Replace with the digit of the required diameter (35-60-80-110mm).

General characteristics

- Green power LED indicator (ON)
- Red relay tripped LED indicator (TRIP)
- Front TEST and RESET buttons
- Configurable automatic or manual resetting
- Compact housing for fixing on panel mounting plate
- Degree of protection: IP20 terminals.

ADJUSTMENTS FOR RC

- Configurable tripping set-point ($I_{\Delta n}$): 0.025-0.25A
0.25-2.5A
2.5-25A
- Configurable tripping delay time (t): 0.02-0.5s
0.2-5s

Reference standards

Compliant with standards: IEC/EN 62020; IEC/EN 61543.



31 RC110...

Relays with 2 operation thresholds



R2D...



R3D...



R4D...

Ordering code	Rated auxiliary supply voltage	Output contacts	Qty per pkg	Wt
	[V]	2	n°	[kg]

2 OPERATION THRESHOLDS.
Flush mount. External CT. Fail safe.

R2D 48	24-48VAC/DC	2	1	0.350
R2D 415	110-240-415V ^①	2	1	0.350

2 OPERATION THRESHOLDS.
Flush mount. External CT.
Fail safe. Flag Indicator.

R3D 48	24-48VAC/DC	2	1	0.360
R3D 415	110-240-415V ^①	2	1	0.360

2 OPERATION THRESHOLDS.
Flush mount. External CT.
Fault current measurement. Digital display.
Fail safe. Flag indicator.

R4D 48	24-48VAC/DC	2	1	0.440
R4D 415	110-240-415V ^①	2	1	0.440

① Supply voltage:
110-125VAC (50/60Hz)
220-240VAC (50/60Hz)
380-415VAC (50/60Hz).

General characteristics

- 2 output relays each with changeover contact, configurable 2 tripping or 1 tripping and 1 alarm
- Configurable fail safe prealarm and operation
- Automatic toroid connection control
- Green power LED indicator (ON)
- Red relay tripped LED indicator (TRIP)
- Red tripping prealarm LED indicator (ALARM)
- Front TEST button
- Manual resetting by front RESET button or remote contact closing
- Automatic resetting by remote contact closing or rear jumper connection
- Constant toroid-relay circuit control
- Flag indicator (TRIP MEMORY) (R3D-R4D only)
- Digital fault current measurement and display with configurable tripping value memory (R4D only)
- Shunt tripping circuit operating test (TCS) (R4D only)
- Flush mount 96x96mm housing with transparent cover
- Degree of protection: IP20 terminals, IP40 on front with cover.

ADJUSTMENTS FOR R2D and R3D

- Configurable tripping set-point (I_{Δn}): 0.025-0.25A
0.25-2.5A
2.5-25A
25-250A (with external multiplier RX10)
- Prealarm set point fixed 70%
- Configurable tripping delay time (t): 0.02-0.5s
0.2-5s

ADJUSTMENTS FOR R4D

- Configurable tripping set-point (I_{Δn}): 0.03-0.3A
0.3-3A
3-30A
30-300A (with external multiplier RX10)
- Prealarm set point fixed 70%
- Configurable tripping delay time (t): 0.03-0.5s
0.3-5s

Reference standards

Compliant with standards: IEC/EN 62020; IEC/EN 61543.

Toroidal current transformers



31 RT...



31 RTA...

Order code	Diameter	Openable	Qty per pkg	Wt.
	[mm]		n°	[kg]
31 RT 35	35	No	1	0.230
31 RT 60	60	No	1	0.280
31 RT 80	80	No	1	0.450
31 RT 110	110	No	1	0.410
31 RT 210	210	No	1	1.600
31 RTA 60	60	Yes	1	0.540
31 RTA 110	110	Yes	1	0.540
31 RTA 210	210	Yes	1	1.850

Reference standards

Compliant with standards: IEC/EN 62020; IEC/EN 61543.

External multiplier

Order code	Description	Qty per pkg	Wt
		n°	[kg]
31 RX 10	10-fold multiplier suitable for R1D, RM, R2D, R3D and R4D types only	1	0.183

General characteristics

- Dimensions: refer to RT35 toroidal transformer on page D-48.
- To connect between toroid and relay.

Reference standards

Compliant with standards: IEC/EN 62020; IEC/EN 61543.