

RCCB RCD36-4A

Data Sheet V1.0



In the current situation more components need to be placed in the distribution board, often there is limited space available. Save the needed space with the SEP RCD36 earth leakage circuit breaker. The RCD36 is only 36mm width (2 modules), this earth leakage circuit breaker is the smallest 3p+n version currently available on the market. This version is available in both 25A and 40A, with a sensitivity of 30, 100 or 300mA. An auxiliary contact is also available for this product so that men can remotely signal the status of the earth leakage circuit breaker.



RCD36-4A residual current circuit breaker

CE

UK
CA

CB

KEMA
EUR

RoHS

RCD36-4A is a RCCB compliant to product standard IEC/EN 61008 and with the following main technical features

- Breaking capacity 10kA
- Electromagnetic (IEC/EN 61008-2-1)
- Type A
- Sensitivity 30, 100, 300mA
- rated current up to 40A

Application benefits

- Supply possible from top and bottom
- Pin type busbar connection (above and below) up to 16mm² and cable connection up to 10mm² cables.
- Terminal cover with sealing possibility for operator safety
- Locking possibility for the handle in off position integrated in the housing.
- Family feeling in the SEP Compact range modular components

RCCB's RCD36

Technical Data



				RCD36-4A
Type				IEC/EN 61008-1; IEC/EN 61008-2-1
Standards				CE, UKCA, CB, KEMA KEUR
Certification				CN
Country of origin				Compliant, No Exemption
RoHS Compliance Status				
Electrical features	Type (wave form of the earth leakage sensed)			A
	Number of poles			3p+n
	Rated current	I _n	A	25 - 40
	Rated sensitivity	I _{Δn}	A	0.03 – 0,1 – 0,3
	Rated voltage	U _e	V	240 / 415
	Operating time	Type		instantaneous
	Insulation voltage	U _i	V	500 V AC
	Overvoltage category			III
	Pollution degree			2
	Operating voltage of circuit test		V	110 – 415V
	Rated frequency		Hz	50 - 60
	Rated breaking capacity acc. to IEC/EN 61009-1	I _{cu}	A	10.000
	Rated residual breaking capacity I _{Δm} according to EN 61008-1	I _{Δm}	A	1.000
	Rated impulse withstand voltage (1.2/50) U _{imp}		kV	4
	Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
	Surge current resistance (wave 8/20)			3000
Mechanical features	Housing			Insulation group I - II, RAL 7035
	Toggle			Insulation group II, RAL 5017
	Test button			Insulation group II, RAL 2000
	Contact position indication			Green / Red window
	Earth fault trip indication			White window
	Electrical life	operations		4.000
	Mechanical life	operations		10.000
	Protection degree acc. to EN 60529	housing		IP4X
		terminals		IP2X
	Shock resistance acc. to IEC/EN 60068-2-27			25g - 2 shocks - 13ms
	Vibration resistance acc. to IEC/EN 60068-2-6			0.1 mm or 1 g - 20 cycles at 5...150...5 Hz
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
	Reference temperature for setting of thermal element		°C	30
	Ambient temperature (with daily average ≤ +35 °C)		°C	-25... +40
	Storage temperature		°C	-40... +70

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Type				RCD36-4A
Installation	Terminal type	bottom / top		lift / open-mouthed
	Terminal size for cables	bottom / top	mm ²	10/16
	Terminal size for PIN busbar	bottom / top	mm ²	10/16
	Solid /stranded wiring			1x 1,5mm ² - 16mm ² 2 x 1,5mm ² - 6mm ² *
	Flexible wires with or without ferrules			1x 1,5mm ² - 10mm ² 2 x 1,5mm ² - 6mm ² *
	Tightening torque	bottom / top		1.2 Nm
	Stripping length of the cable			10mm
	Mounting			on DIN rail EN 60715 (35mm) by means of mounting clip
	Mounting position			Any
	Supply from			Top / bottom terminals
	Dimensions (H x W x D)			mm 86 x 36 x 73
	Weight			kg 0,20
Packing	Packing A	QTY		1
		Dimensions (H x W x D)	mm	90 x 40 x 80
		Weight	kg	0,215
	Packing B (x A)	QTY		5
		Dimensions (H x W x D)	mm	225 x 95 x 86
		Weight	kg	1,5
	Packing C (x B)	QTY		60
		Dimensions (H x W x D)	mm	470 x 310 x 190
		Weight	kg	15
	CN-code			85362010
Combination with auxiliary elements	Auxiliary contact			Yes
	Alarm contact			NA
	Shunt trip			NA
	Auxiliary contact for bottom fitting			NA
	Undervoltage release			NA
	Overvoltage release			NA
	Motor operating device			NA

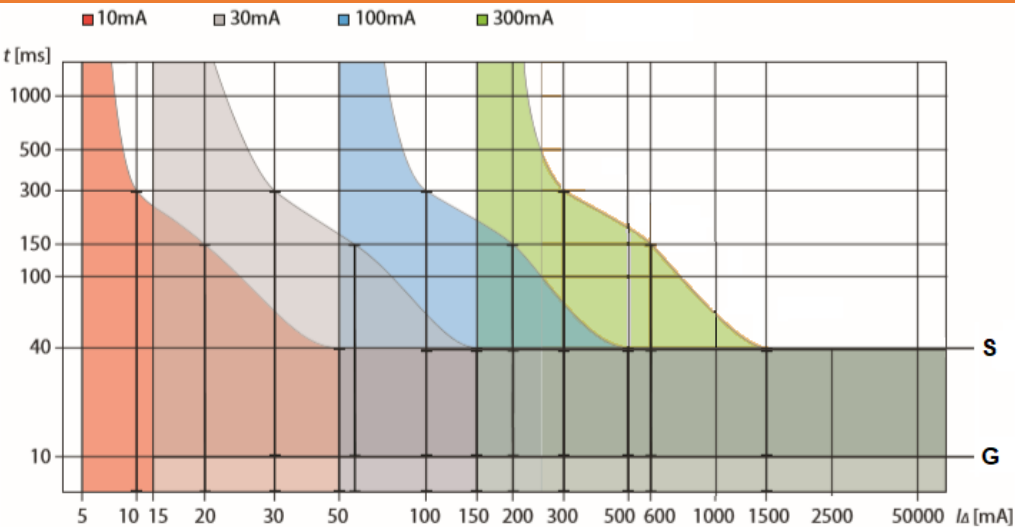
* Check local installation rules, this type of connection is not advised. Special add-on terminals are available.

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Tripping Characteristics (IEC/EN 61008)

Tripping characteristics, tripping time range and selectivity of instantaneous current devices (surge current-proof [G] and surge current-proof – selective [S] residual current devices are not available for RCD36 type RCCB).



Performance in altitude*

Elevation [m]	2000	3000	4000	5000	6000
Rated current [A]	$1 \times I_n$	$0,95 \times I_n$	$0,92 \times I_n$	$0,90 \times I_n$	$0,88 \times I_n$
Rated voltage [V]	$1 \times U_n$	$0,85 \times U_n$	$0,75 \times U_n$	$0,65 \times U_n$	$0,55 \times U_n$

* the RCCB is designed for standard level operations, performance information on higher altitude is not available

Influence of adjacent devices

Number of devices	1	2-3	4-5	6-9	≥ 10
Correction factor	1	0,9	0,8	0,7	0,6

These values are provided by recommendation IEC 61439-1 and standards EN 61439-1. In order to avoid having to use these coefficients there must be good ventilation and the devices must be kept apart using the spacing element article number 2119000010 (0.5 module).

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Derating in temperature *RCD36*

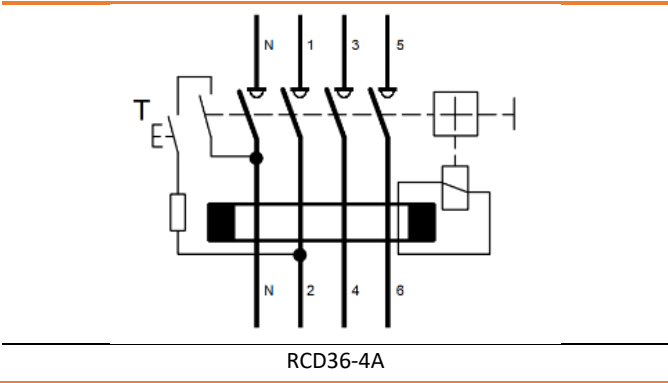
Max operating current depending on the ambient temperature (daily average $\leq +35\text{ }^{\circ}\text{C}$)

In [A]	Ambient temperature [°C]									
	-25	-15	-5	10	30	40	45	55	60	70
25	31.4	30.2	29.1	27.3	25	23.9	23.3	22.1	21.6	21
40	51	49	47	44	40	38.1	37.1	35.1	34.1	33.1

Power loss

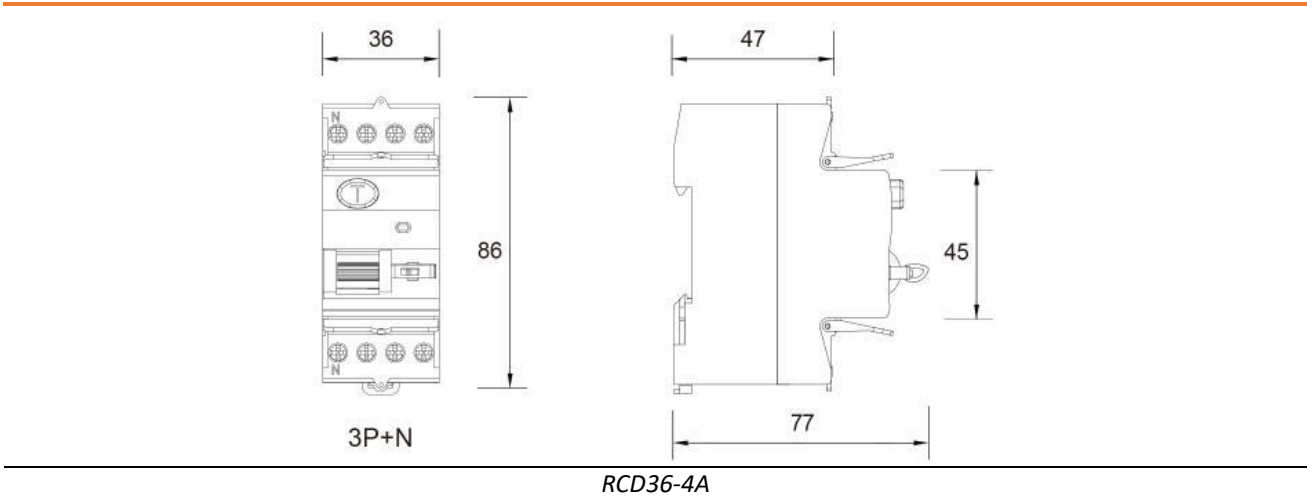
In [A]	Average per pole	Total [W]
25	2,10	8,39
40	5,37	21,47

Connection diagram



Overall dimensions

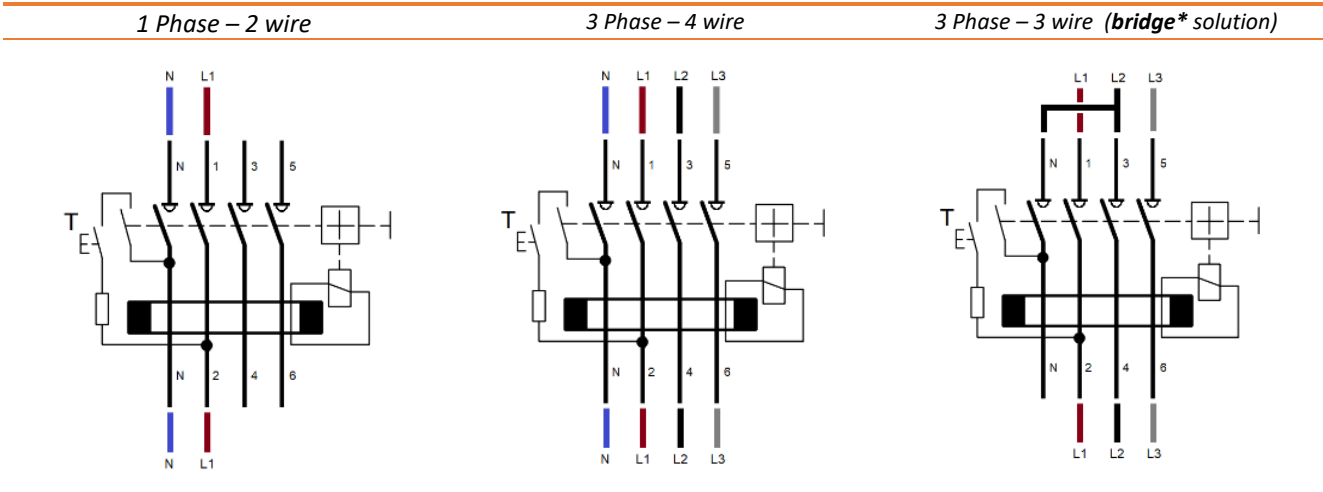
All measurements in mm



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Wiring options



* If there is no neutral, the RCCB will be connected normally but a bridge wire will need to be added across terminals N/3, as shown, will cause a voltage drop which leaves the test circuit at a suitable normal operation range.

Order codes

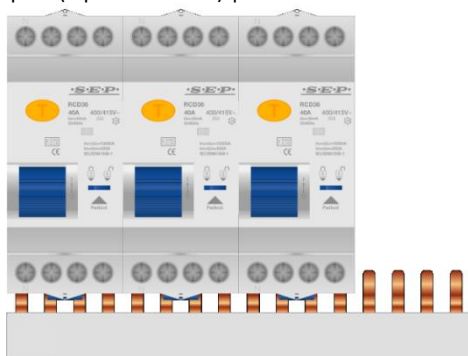
	Inom	30mA	100mA	300mA
	25 A	3105200025	3105202025	3105203025
	40 A	3105200040	3105202040	3105203040
	Auxiliary contact 1CO	3105300001		

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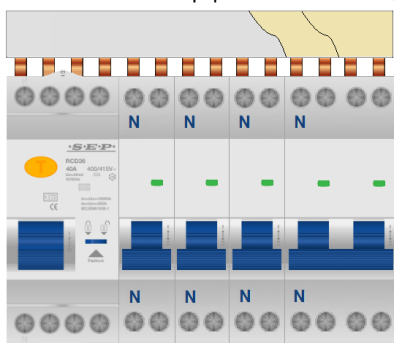
Order codes for connective rail

Busbar / connective rail type*

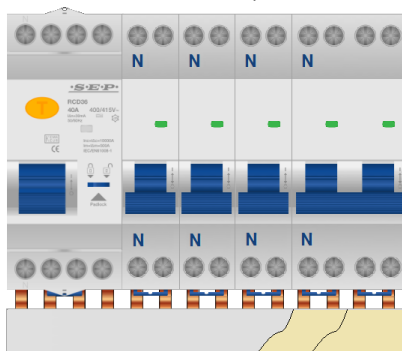
4 pole (3 phase neutral) | N123-N123...






Combination rail - top | N123-N1-N2-N3-(N1 / N123)



Combination rail - bottom | N123-N1-N2-N3-(N1 / N123)




4p (2 modules)	2p (1 modules)	10mm ² (closed end - non cuttable)
		ΣI 
No. devices	No. devices	PIN
2	-	2305142808
3	-	2305142812
4	-	2305142816
5	-	2305142820
6	-	2305142824
1	3	2305195910
1	4	2305195912
2	3	2305195914
1	3	-
1	4	2305194010
2	3	2305194014
Open mouth covers for busbar PIN		2115900015

* pictures are indicative – other combinations are possible


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Order codes accessories


Add-on terminals

Reference image	Wire size	PIN connection high		PIN connection Low	
		Grey	Blue	Grey	Blue
	2x10mm² solid/stranded 2x6mm² flexible	2115900040	2115900540	2115900041	2115900541

Marker - spacer

Reference image	Description	Code
	Component Spacer 0,5mm	2119000010

Lockout

Reference image	Description	Code
	Lockout set - complete	2115909099
	Locking devices adaptor	2115909015
	Locking device screw adaptor	2115909010
	Padlock with 2 identical keys	2115909020
	Warning tag (English)	2115909030