

## RCD

OVERVIEW	DIN-SAFE						MOD6						
	DSRCBS	DSRCBH	DSRCB	DSRCBxxxAl	DSRCBT	DSRCD	M6RCBS	M6RCBD	M6RCBO1	M6RCBO2	M6RCBF	M6RCBT	MOD6RCCB
<b>Standard (AS/NZS)</b>	61009	61009	61009	61009	61009	61008	61009	61009	61009	61009	61009	61009	61008
<b>No. poles and module width</b>	1P + N - 18 mm	1P + N - 18 mm	2P - 36 mm	2P - 36 mm	3P + N - 54mm	2P - 36 mm 4P - 72 mm	1P + N - 18 mm	1P + N - 18 mm	1P + N - 18 mm	2P - 36 mm	3P + N - 72 mm	3P + N - 54 mm	2P - 36 mm 4P - 72 mm
<b>Mounting</b>	Chassis / DIN rail	Chassis / DIN rail	Chassis / DIN rail	Chassis / DIN rail	Chassis/ DIN rail	DIN rail	Chassis / DIN rail	DIN rail	Chassis / DIN rail	Chassis / DIN rail	DIN rail	Chassis / DIN rail	DIN rail
<b>Current ratings</b>	6A / 10A / 16A / 20A / 25A / 32A	6A / 10A / 16A / 20A / 25A / 32A / 40A	6A / 10A / 16A / 20A / 25A / 32A / 40A	6A / 10A / 16A / 20A / 25A / 32A / 40A	6A / 10A / 16A / 20A / 25A / 32A / 40A / 50A / 63A	40A / 63A / 80A	6A / 10A / 16A / 20A / 25A / 32A	6A / 10A / 16A / 20A / 25A / 32A	10A / 16A / 20A / 25A / 32A	10A / 16A / 20A / 25A / 32A / 40A	6A / 10A / 16A / 20A / 25A / 32A	6A / 10A / 16A / 20A / 25A / 32A / 40A / 50A / 63A	40A / 63A
<b>Trip sensitivity</b>	10 mA / 30 mA	10 mA / 30 mA / 100 mA	10 mA / 30 mA / 100 mA	30 mA	30 mA / 100 mA / 300 mA	30 mA / 100mA / 300mA	10 mA / 30 mA	10 mA / 30 mA	30 mA	10 mA / 30 mA	30mA	30mA	30 mA
<b>Neutral</b>	Switched	Unswitched	Switched	Switched with overcurrent protection	Unswitched	Switched	Switched	Switched	Unswitched	Switched	Switched	Unswitched	Switched
<b>Line side</b>	Bottom	Bottom	Top or bottom	Top or bottom	Bottom	Top or bottom	Bottom	Top or bottom	Bottom	Top or bottom	Top or bottom	Bottom	Top or bottom
<b>Sensitivity type</b>	A	A	A	AI	A	A, AI, S, F & B	A	A	A	A	A	A	A
<b>Short circuit rating</b>	6 kA / 10kA <sup>1)</sup>	6 kA / 10 kA	10 kA	6 kA	10kA	Inc -10 kA MCB or fuse backup	6 kA	6 kA	6 kA	6 kA	6 kA	6 kA	Inc -10 kA MCB or fuse backup
<b>Curve types</b>	B and C	C and D	C	C	C	-	C	C	C	C	C	C	-
<b>Rated AC voltage 1P/2,3,4P</b>	230 / 240 V	230 / 240 V	230 / 240 V <sup>2)</sup>	230 / 240 V	400 / 415 V	2P 230 / 240 V 4P 400 / 415 V	230 / 240 V	230 / 240 V	230 / 240 V	230 / 240 V	400 / 415 V	400 / 415 V	2P 230 / 240 V 4P 400 / 415 V
<b>Sealable in ON-Off position</b>	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
<b>Terminal size - on-top</b>	16 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	50 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	50 mm <sup>2</sup>
<b>Terminal size - OFF - bottom</b>	35 mm <sup>2</sup>	35 mm <sup>2</sup>	35 mm <sup>2</sup>	35 mm <sup>2</sup>	25 mm <sup>2</sup>	50 mm <sup>2</sup>	25 mm <sup>2</sup>	16 mm <sup>2</sup>	35 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	25 mm <sup>2</sup>	50 mm <sup>2</sup>

Notes: 1) 10kA only available up to 20A in C curve. 2) DSRCBxx30A units are suitable for 110/240V.

### Frequently asked questions

**Q:** I have a 20A RCBO running at 6A but the unit still trips?

**A:** When selecting an RCBO, the earth leakage current of the end devices needs to be considered, not just the load current. Typically an RCD device should be designed to run at not more than 1/3 of its rating e.g: 30mA devices normally run at 10mA or less.

Device	Typical leakage current
Computer	1.5 mA
Fluorescent light	0.5 mA
Printer	0.8 mA

Approximate values only, as leakage will vary from device to device, brand to brand.

**Q:** What is the tripping time for general type 30mA RCDs as per standards AS/NZS 61009 and AS/NZS61008?

**A:** As per the table below:

Test leakage current	Tripping times
IΔn 30 mA	≤300 ms
IΔn 60 mA	≤150 ms
IΔn 150 mA	≤40 ms

### Q: What RCD type?

Type	Description	Use
AC	Type AC RCDs are designed to operate when residual sinusoidal alternating currents are detected.	These type of RCDs are ideal for circuits containing AC operated equipment – general purpose applications.
A	Type A RCDs are designed to operate on both residual sinusoidal alternating current and residual pulsating direct currents.	This type of RCD is ideal for general purpose applications as well as rectified loads such as switch mode power supplies, power tools and motor speed controllers.
F	Type F as per type A and in addition are capable of detecting composite residual currents.	Single phase invertors, such as washing machines, dishwashers with a built in drives

Type	Description	Use
B	Type B RCDs ensure tripping as described for Type F RCDs as well as: i) residual sinusoidal alternating currents up to 1000Hz. ii) residual alternating currents or pulsating direct currents superimposed on a smooth direct current current of 0.4 times the rated residual current. iii) residual direct currents that may result from rectifying circuits.	This type of RCD is specifically for applications such as solar inverters, data centres and even electric vehicle recharging.

