

# DSE201

## Technical features and overall dimensions

### Electrical features

Standards			IEC 61009-1; IEC 61009-2-2; AS/NZS 61009
Type (wave form of the earth leakage sensed)			AC, A
Number of poles			1P+N
Rated current $I_n$		A	$6 \leq I_n \leq 50$
Rated sensitivity $I_{\Delta n}$		mA	30
Rated voltage $U_e$		V	230-240
Insulation voltage $U_i$		V	500 V AC
Overvoltage category			III
Pollution degree			2
Max. operating voltage		V	264
Min. operating voltage for protection against $I_{\Delta n}$ residual sinusoidal alternating currents		V	85
Min. operating voltage of circuit test		V	195
Rated frequency		Hz	50/60
Rated breaking capacity acc. to IEC 61009	ultimate $I_{cn}$	A	6000
Rated residual breaking capacity $I_{\Delta m}$		kA	6
Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV	4 kV (test voltage 6.2kV at sea level, 5kV at 2000m)
Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
Thermomagnetic release - characteristic	B: $3 I_n \leq I_m \leq 5 I_n$ C: $5 I_n \leq I_m \leq 10 I_n$		■ ■
Surge current resistance (wave 8/20)		A	250

### Mechanical data

Housing			insulation group II, RAL 7035
Toggle			insulation group IIIA, black, sealable in ON-OFF positions
Contact position indication			CPI on toggle (I ON / 0 OFF)
Electrical life		operations	10000
Mechanical life		operations	20000
Protection degree	housing		IP4X
	terminals		IP2X
Shock resistance acc. to IEC/EN 60068-2-27			30g - 2 shocks - 13ms
Vibration resistance acc. to IEC/EN 60068-2-6			0.35mm or 5g - 20 cycles at 5...150...5 Hz without load
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 $\leq +35$ °C)		°C	-25...+55
Storage temperature		°C	-40...+70

## Installation

Terminal type	top (load side)		failsafe cage (shock protected)
	bottom (line side)		failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	load side (top)	mm <sup>2</sup>	16
	line side (bottom)	mm <sup>2</sup>	25
Terminal size for busbars	load side (top)		only for wire connection
	line side (bottom)	mm <sup>2</sup>	10 (Standard ABB busbar / distribution board system)
Tightening torque	top (load side)	Nm	1.2
	bottom (line side)	Nm	2.8
Neutral load cable	Type		low smoke halogen free
	Length	mm	750
	Section	mm <sup>2</sup>	2.5 mm <sup>2</sup> up to 20 A; 4 mm <sup>2</sup> up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Length	mm	750
	Section	mm <sup>2</sup>	0.75
	Color		white
Mounting			on DIN rail EN 60715 (35 mm) by means of fast clip device in consumer unit Type A according to IEC 61439-1&3, BS EN 61439-1&3, in distribution board Type B according to IEC 61439-1&3, BS EN 61439-1&3.
Supply from			bottom terminal

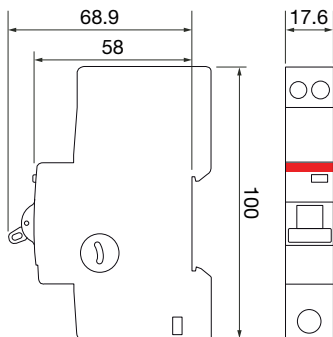
## Dimensions and weight

Dimensions (H x D x W)		mm	100 x 68.9 x 17.6
Weight		g	180

## Combination with auxiliary elements

Combinable with accessories and auxiliaries	no		
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## Dimensions



**50A version is 115 mm height**

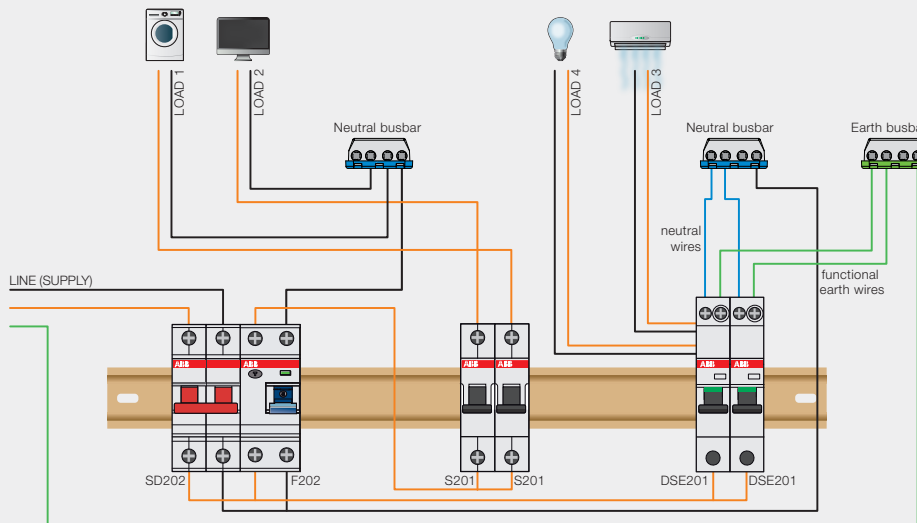
Dimensions in mm

# DSE201: The importance of simplicity

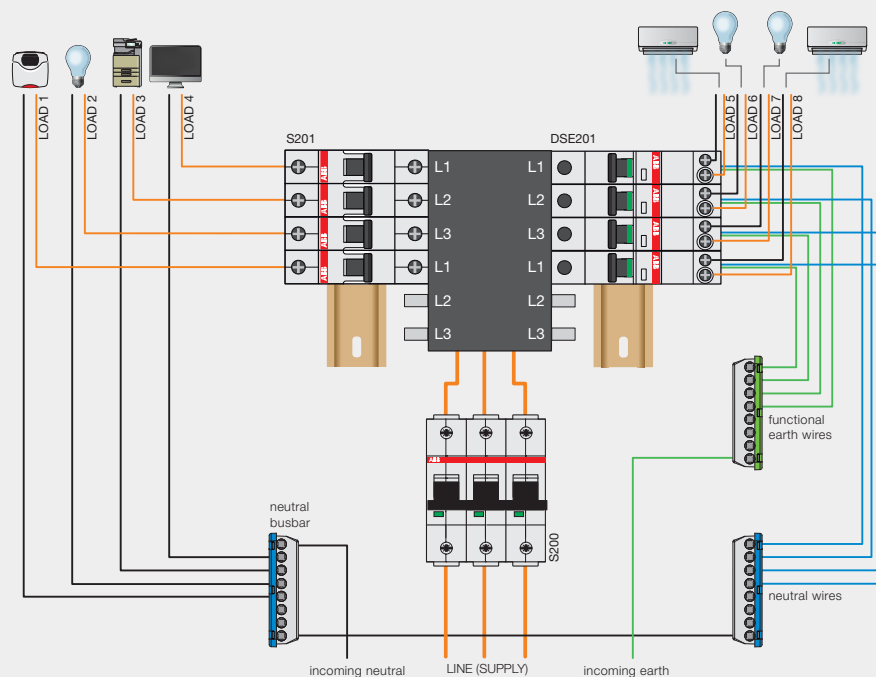
## Smart solutions for easier and safer installation in residential and light commercial applications

With its breaking capacity of 6kA in only one module width and 100mm height, the DSE201 series is the perfect solution for a complete protection in residential and light commercial applications. The series has been renewed with the introduction of rated current 40A and 50A, to cover all the possible different applications.

At home or in the office or in a shop, these devices are essential for the safety of people, utilities and equipment, protecting not only against earth fault residual currents - due to loss of isolation or accidental contact with live parts - but also against overcurrents. The DSE201 series is particularly compact, flexible and easy to install, either in consumer units or in distribution boards.



Example of installation of DSE201 in a consumer unit (DIN rail) in conjunction with other ABB protection devices.



Example of installation of DSE201 in a distribution board (chassis) in conjunction with other ABB protection devices.