



DSE201, DSE201 M

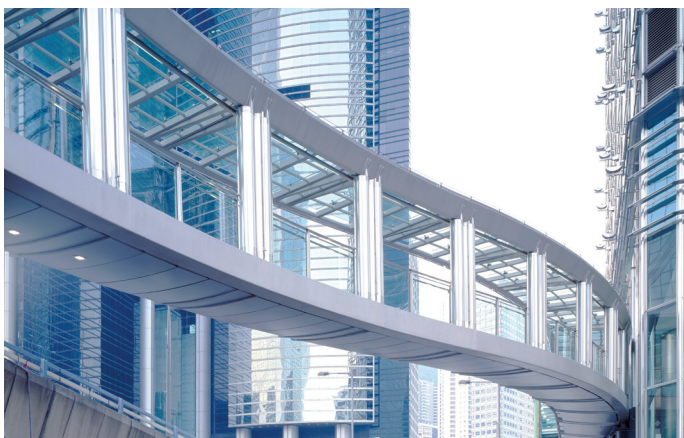
Compact design with enhanced protection

Ultimate safety

DSE201 and DSE201 M: the highest level of reliability

The 1P+N electronic residual current circuit-breakers with overcurrent protection (RCBOs) of DSE201 and DSE201 M series offer a breaking capacity of 6 kA and 10 kA respectively, and meet the demand for devices that fully protect modern installations against short-circuit currents, overloads, earth fault currents and indirect contacts, providing additional protection against direct contacts (30 mA versions). The 1P+N electronic RCBOs share the same profile of the System pro M compact® range of modular products, offering a smart retrofit solution for space constrained applications in residential, commercial and industrial environments.

Electronic RCBOs can be installed in countries where the use of 1P+N RCBO with functional earth (FE) is consolidated. Functional earth guarantees the highest level of safety. In case of loss of the neutral loop, the electronic trip unit is supplied by the voltage between phase and earth: even if only one phase is available, the RCD trips in case of leakage current.



The module for total safety

DSE201 6kA and DSE201 M 10kA: complete protection in one module width

The electronic RCBOs series is perfectly integrated with the System Pro M compact line for modular products, synonymous of ABB quality around the world.

With the same width as standard MCBs, these electronic RCBOs are fully integrated with ABB's range of Consumer Units and Distribution Boards. Suitable to work from -25 °C to +55 °C ambient temperatures, the DSE201 and DSE201 M series of 1P+N electronic RCBOs cover all applications, offering a complete protection of single-phase systems from short circuit, overload and residual current conditions.

With breaking capacity of 6 and 10kA and rated current from 6 to 50A, the series is suitable for installation in residential, light commercial, commercial and industrial applications.

Installation is made simpler by reduced heights compared to the previous series. The availability of two slots of different dimensions at the bottom side allows the use of both cables and busbars. Installation and removal operations from busbar and cabling are very easy and can be done with a standard insulated screwdriver. Line side terminals are fail-safe type to avoid improper connection, while double clips ensure a secure mounting of the devices in any type of consumer unit or distribution board.

The possibility to lock the toggle in ON/OFF positions with a padlock avoids unwanted manipulation of the lines.

The DSE201 M series is equipped with an earth fault indicator to detect any earth fault trip and also with a contact position indicator window to clearly identify the contacts status.



DSE201 6kA



DSE201 M 10kA

DSE201, the value of quality

Made with attention to details

Space for insulated screwdrivers

The larger neutral hole allows the use of an insulated screwdriver to tighten the screw of neutral terminals, ensuring maximum operation safety. All versions are equipped with cage type terminals (16mm² load side), with tightening torque of 1.2 Nm.

Product coding

All the necessary technical and installation information can be found directly on the device. Product range, tripping characteristics, rated currents, sensitivity, type, breaking capacity, rated voltage, order code, EAN code, electrical scheme, reference standards and many other specifications are laser printed on the front and side of units.

Real contact position indicator on toggle

Directly connected to the moving contact of the device, it indicates the exact position of the contacts at all times (red: closed contacts, green: open contacts).

Easy to install

Fast installation is supported by the two flying leads for neutral cable and functional earth, each integrated in the device, which can be directly connected to the main neutral bar and main earth bar.

Anti counterfeiting

Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

In control

Test button allows the regular check of the functionality of the device: to be pushed every six months.

Reduced height

Thanks to its reduced height, only 100 mm, DSE201 makes easier wiring operation inside the consumer unit or the distribution board.

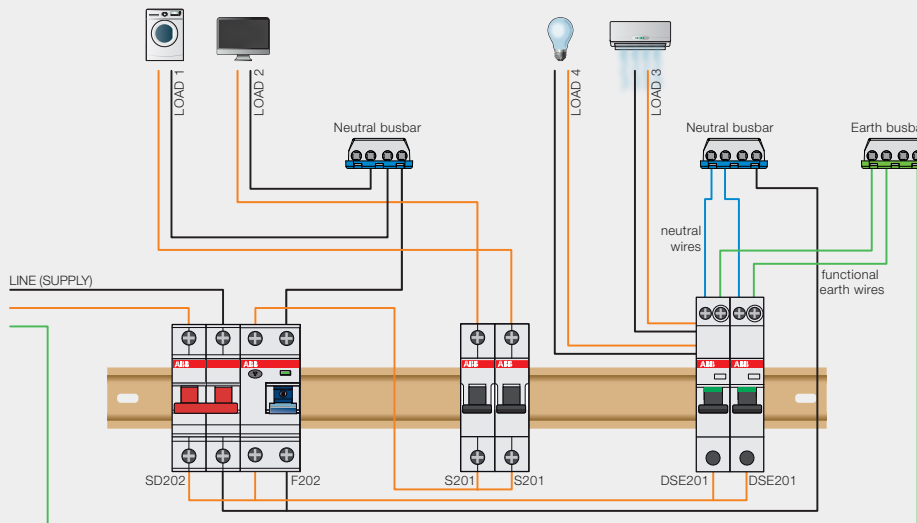


DSE201: The importance of simplicity

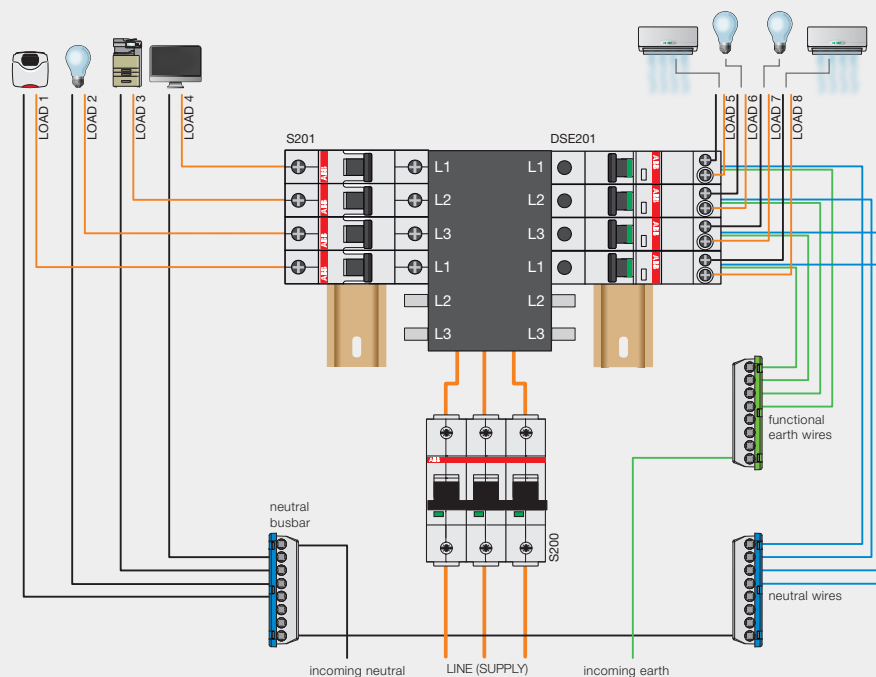
Smart solutions for easier and safer installation in residential and light commercial applications

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.

DSE201 M, unique solution

New features to make operations friendly

Space for insulated screwdrivers

The larger neutral hole allows the use of an insulated screwdriver to tighten the screw of neutral terminals, ensuring maximum operation safety. All versions are equipped with cage type terminals (16mm² load side), with tightening torque of 1.2 Nm.

Earth fault indicator

Blue window in the front of the device to detect any earth fault trip: the cause of trip of the device can be identified in a short time, reducing the downtime for maintenance. DSE201 M is the only device equipped with an earth fault indicator between one module width electronic RCBOs.

Real contact position indicator below the toggle

Directly linked to the moving contact of the device, the green/red window in the front of the device can identify the current position of the contacts (open/closed) independently on the toggle position.

Combination with auxiliary elements

New platform suitable for quick installation in combination with the standard auxiliary elements that can be mounted with RCDs and MCBs.

Easy to install

Fast installation is supported by the two flying leads for neutral cable and functional earth, each integrated in the device, which can be directly connected to the main neutral bar and main earth bar.

Anti counterfeiting

Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

In control

Test button allows the regular check of the functionality of the device: to be pushed every six months.

Reduced height

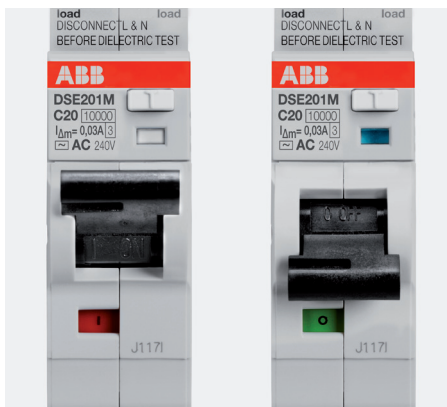
Thanks to its reduced height, only 115 mm, DSE201 M makes easier wiring operation inside the consumer unit or the distribution board.



DSE201 M, unique solution

Distinctive features

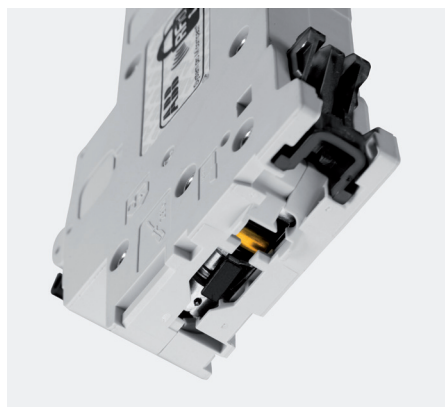
With its breaking capacity of 10kA in only one module width and 115mm height, DSE201 M series is the perfect solution for a complete protection in commercial and industrial applications, where space optimization is particularly required. The unique earth fault indicator window identifies any earth fault trip, making easier the troubleshooting on the network and reducing the downtime for maintenance.



Device status at a glance

Earth fault indicator: blue window above the toggle to immediately detect and identify any earth fault trip, reducing downtime for maintenance.

Contact position indicator (CPI): green/red window below the toggle to identify the real position of the contacts independently on the toggle position.



Double slot terminal

Easy to install. Fail-safe line side terminal to avoid improper connection. Two slots of different dimensions (35mm² and 10mm²) available to allow the connection both with cables and busbars.



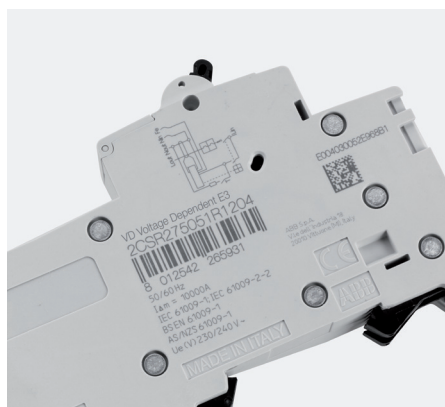
Load side

Load side terminal accepts cables, both rigid and flexible up to 16mm². Flying leads are straight instead of pigtail ones to reduce the space required for wiring operations.



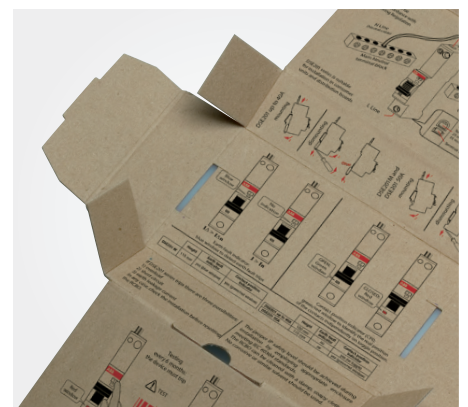
Easy and flexible

Double and bistable clips with a new design for a secure fixing in any type of consumer unit or distribution board. Easy removal from a cluster of RCBOs/MCBs supplied with Busbars.



Smart case

Main technical information are laser-printed on the front and left side of product to ensure long readability. On the right side, the tightening torque and the stripping length of the cable for a correct and safety installation of the unit are molded.



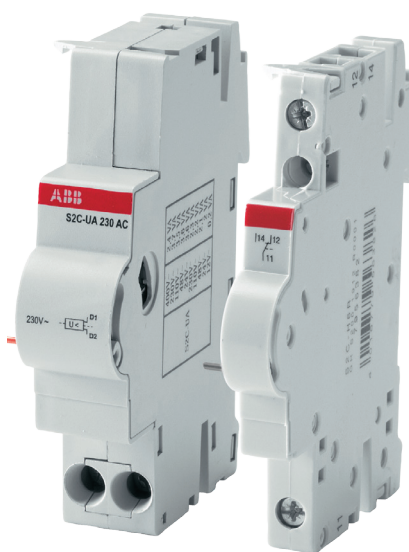
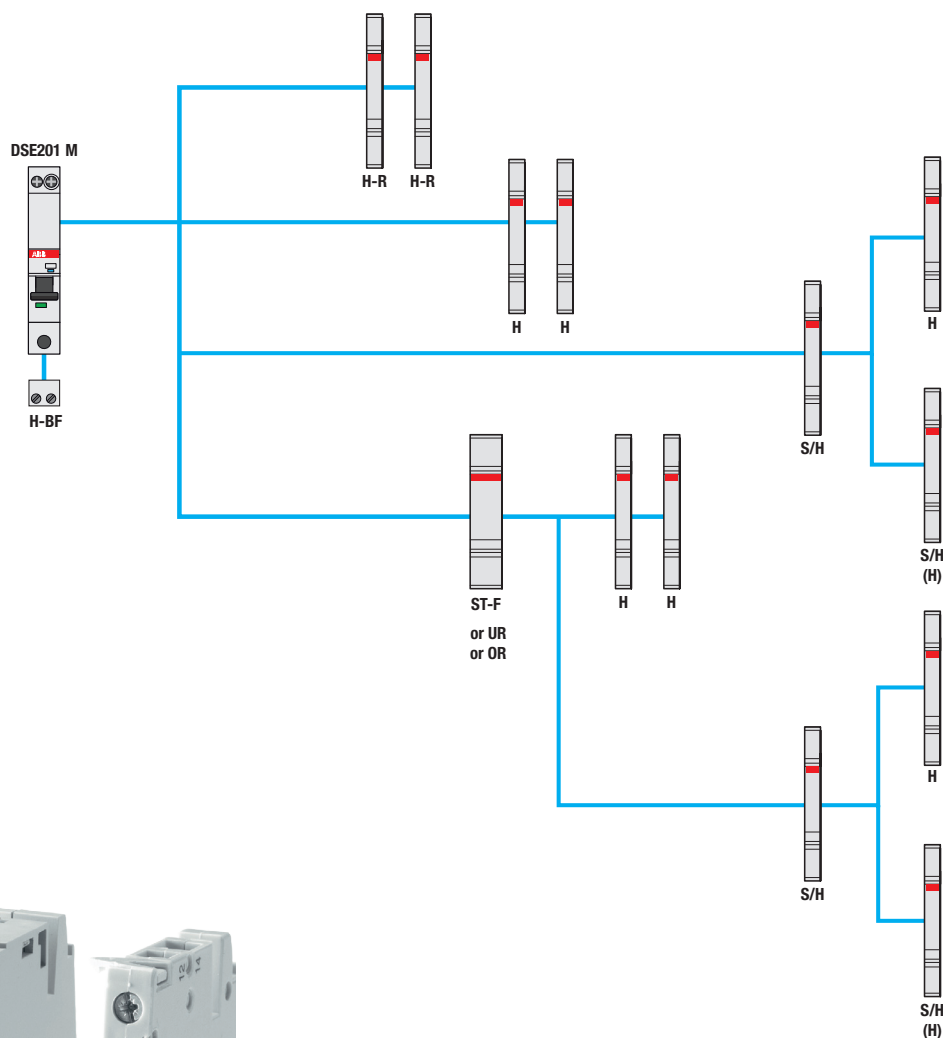
Smart package

Instruction manual printed inside the box with no additional paper wasted. Packaging is glue-less and takes advantage of the adhesive label containing the order information.

DSE201 M, unique solution

Combination with auxiliary elements

The new DSE201 M series is suitable for quick installation in combination with the standard auxiliary elements that can be mounted with RCDs and MCBs: auxiliary and signal contacts, shunt trip, overvoltage release, undervoltage release. The auxiliary elements can be mounted directly within the product in few steps, following the same instructions of S200 MCBs.

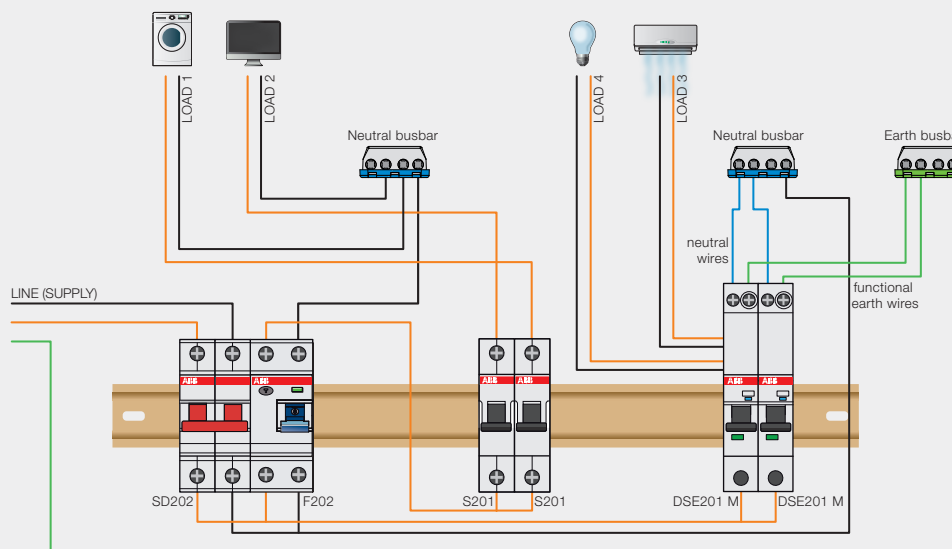


Legend	Description	Accessory name
H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6R / S2C-H6-xxR
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST-F	Shunt trip for RCD	F2C-A
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
H-BF	Auxiliary contact for bottom fitting	S2C-H01 / S2C-H10

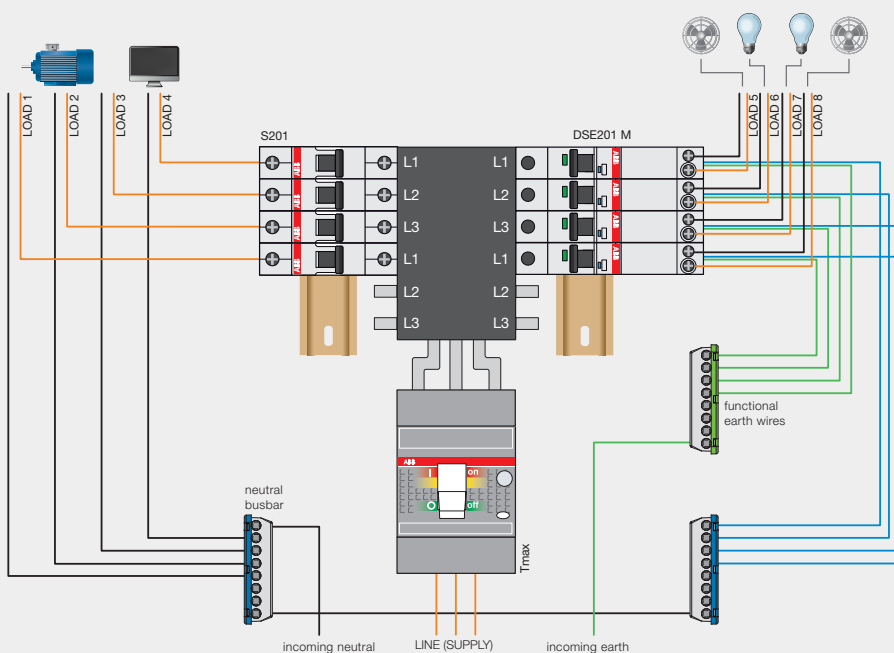
DSE201M the importance of simplicity

Smart solutions for easier and safer installation in commercial and industrial applications

With its compact, flexible design, DSE201 M series can be easily installed either in switchboards (mounting on DIN rail) or distribution boards (mounting on chassis). With rated current from 6 to 50A and sensitivities 10, 30, 100 and 300mA, the DSE201 M series can cover all the possible applications in commercial and industrial installations.



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



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

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 ²	16
	line side (bottom)	mm ²	25
Terminal size for busbars	load side (top)		only for wire connection
	line side (bottom)	mm ²	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
	Lenght	mm	750
	Section	mm ²	2.5 mm ² up to 20 A; 4 mm ² up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm ²	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

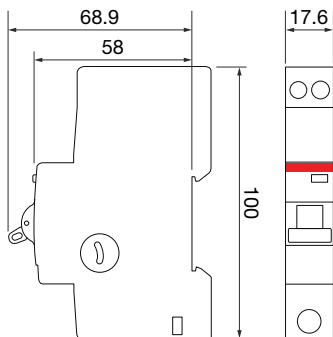
Dimensions and weight

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 M

Technical features and overall dimensions

Electrical features

Standards			IEC 61009-1 ; IEC 61009-2-2; BS EN 61009-1; 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	10-30-100-300
Rated voltage U_e		V	230-240
Insulation voltage U_i		V	500 V AC
Overtoltage 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	10000
Rated breaking capacity acc. to IEC 60947-2	ultimate I_{cu}	kA	15 (for $6A \leq I_n \leq 40A$)
		kA	10 (for $I_n = 50A$)
	service I_{cs}	kA	7.5
Rated residual breaking capacity $I_{\Delta m}$		kA	10
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 II, black, sealable in ON-OFF positions
Earth fault indicator			blue window
Contact position indication			green/red Window
Electrical life		operations	10000
Mechanical life		operations	20000
Protection degree	in enclosure with cover		IP40
	terminals		IP20
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	mm ²	16
	line side (solid/flexible)	mm ²	35/25
Terminal size for busbars	load side		only for wire connection
	line side	mm ²	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 ²	2.5 mm ² up to 20 A; 4 mm ² up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Length	mm	750
	Section	mm ²	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

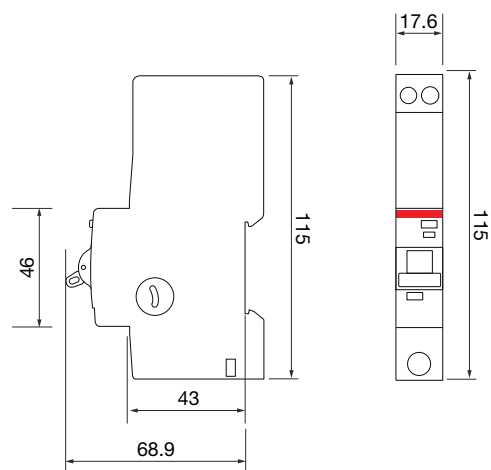
Dimensions and weight

Dimensions (H x D x W)		mm	115 x 68.9 x 17.6
Weight		g	200

Combination with auxiliary elements

Auxiliary contact	yes		
Signal contact / auxiliary switch	yes		
Shunt trip	yes		
Undervoltage release	yes		
Overvoltage release	yes		
Auxiliary contact for MCBs bottom fitting	yes		

Dimensions



Dimensions in mm

DSE201 - 6kA

Order codes - Type A - B/C characteristic



DSE201 ... A30

DSE201 - Type A

N. of poles	Rated residual current I _{Δn} [mA]	Rated Current I _n [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
B characteristic							
1P+N	30	6	399629	2CSR255151R1065	DSE201 B6 A30	0.180	1
		10	399728	2CSR255151R1105	DSE201 B10 A30	0.180	1
		16	658924	2CSR255151R1165	DSE201 B16 A30	0.180	1
		20	658429	2CSR255151R1205	DSE201 B20 A30	0.180	1
		25	659921	2CSR255151R1255	DSE201 B25 A30	0.180	1
		32	659426	2CSR255151R1325	DSE201 B32 A30	0.180	1
		40	658627	2CSR255151R1405	DSE201 B40 A30	0.180	1
		50	179337	2CSR255151R1505	DSE201 B50 A30	0.200	1
C characteristic							
1P+N	30	6	658122	2CSR255151R1064	DSE201 C6 A30	0.180	1
		10	659624	2CSR255151R1104	DSE201 C10 A30	0.180	1
		16	910923	2CSR255151R1164	DSE201 C16 A30	0.180	1
		20	659129	2CSR255151R1204	DSE201 C20 A30	0.180	1
		25	658726	2CSR255151R1254	DSE201 C25 A30	0.180	1
		32	658221	2CSR255151R1324	DSE201 C32 A30	0.180	1
		40	659723	2CSR255151R1404	DSE201 C40 A30	0.180	1
		50	349532	2CSR255151R1504	DSE201 C50 A30	0.200	1

DSE201 - 6kA

Order codes - Type AC - B/C characteristic



DSE201 ... A30

DSE201 - Type AC

N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current I_n [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
B characteristic							
1P+N	30	6	659228	2CSR255051R1065	DSE201 B6 AC30	0.180	1
		10	658825	2CSR255051R1105	DSE201 B10 AC30	0.180	1
		16	658320	2CSR255051R1165	DSE201 B16 AC30	0.180	1
		20	659822	2CSR255051R1205	DSE201 B20 AC30	0.180	1
		25	659327	2CSR255051R1255	DSE201 B25 AC30	0.180	1
		32	658528	2CSR255051R1325	DSE201 B32 AC30	0.180	1
		40	658023	2CSR255051R1405	DSE201 B40 AC30	0.180	1
		50	179238	2CSR255051R1505	DSE201 B50 AC30	0.200	1
C characteristic							
1P+N	30	6	659525	2CSR255051R1064	DSE201 C6 AC30	0.180	1
		10	910824	2CSR255051R1104	DSE201 C10 AC30	0.180	1
		16	659020	2CSR255051R1164	DSE201 C16 AC30	0.180	1
		20	660125	2CSR255051R1204	DSE201 C20 AC30	0.180	1
		25	660521	2CSR255051R1254	DSE201 C25 AC30	0.180	1
		32	660026	2CSR255051R1324	DSE201 C32 AC30	0.180	1
		40	660422	2CSR255051R1404	DSE201 C40 AC30	0.180	1
		50	349433	2CSR255051R1504	DSE201 C50 AC30	0.200	1

DSE201 M - 10kA

Order codes - Type A - B characteristic



DSE201 M ... A30

DSE201 M - Type A

N. of poles	Rated residual current I Δ n [mA]	Rated Current In [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
B characteristic							
1P+N	10	6	079231	2CSR275151R0065	DSE201 M B6 A10	0.200	1
		10	305033	2CSR275151R0105	DSE201 M B10 A10	0.200	1
		16	305132	2CSR275151R0165	DSE201 M B16 A10	0.200	1
		20	400233	2CSR275151R0205	DSE201 M B20 A10	0.200	1
		25	400035	2CSR275151R0255	DSE201 M B25 A10	0.200	1
		32	400134	2CSR275151R0325	DSE201 M B32 A10	0.200	1
		40	058830	2CSR275151R0405	DSE201 M B40 A10	0.200	1
		50	896531	2CSR275151R0505	DSE201 M B50 A10	0.200	1
1P+N	30	6	830832	2CSR275151R1065	DSE201 M B6 A30	0.200	1
		10	839835	2CSR275151R1105	DSE201 M B10 A30	0.200	1
		16	896739	2CSR275151R1165	DSE201 M B16 A30	0.200	1
		20	768432	2CSR275151R1205	DSE201 M B20 A30	0.200	1
		25	831136	2CSR275151R1255	DSE201 M B25 A30	0.200	1
		32	840138	2CSR275151R1325	DSE201 M B32 A30	0.200	1
		40	830733	2CSR275151R1405	DSE201 M B40 A30	0.200	1
		50	839736	2CSR275151R1505	DSE201 M B50 A30	0.200	1

DSE201 M - 10kA

Order codes - Type A - C characteristic



DSE201 M ... A300

DSE201 M - Type A

N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current I_n [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
C characteristic							
1P+N	10	6	768234	2CSR275151R0064	DSE201 M C6 A10	0.200	1
		10	830931	2CSR275151R0104	DSE201 M C10 A10	0.200	1
		16	839934	2CSR275151R0164	DSE201 M C16 A10	0.200	1
		20	768531	2CSR275151R0204	DSE201 M C20 A10	0.200	1
		25	831235	2CSR275151R0254	DSE201 M C25 A10	0.200	1
		32	840237	2CSR275151R0324	DSE201 M C32 A10	0.200	1
		40	896432	2CSR275151R0404	DSE201 M C40 A10	0.200	1
		50	768135	2CSR275151R0504	DSE201 M C50 A10	0.200	1
1P+N	30	6	896630	2CSR275151R1064	DSE201 M C6 A30	0.200	1
		10	768333	2CSR275151R1104	DSE201 M C10 A30	0.200	1
		16	831037	2CSR275151R1164	DSE201 M C16 A30	0.200	1
		20	840039	2CSR275151R1204	DSE201 M C20 A30	0.200	1
		25	631637	2CSR275151R1254	DSE201 M C25 A30	0.200	1
		32	376033	2CSR275151R1324	DSE201 M C32 A30	0.200	1
		40	629733	2CSR275151R1404	DSE201 M C40 A30	0.200	1
		50	375937	2CSR275151R1504	DSE201 M C50 A30	0.200	1
1P+N	100	6	779339	2CSR275151R2064	DSE201 M C6 A100	0.200	1
		10	769330	2CSR275151R2104	DSE201 M C10 A100	0.200	1
		16	631538	2CSR275151R2164	DSE201 M C16 A100	0.200	1
		20	375838	2CSR275151R2204	DSE201 M C20 A100	0.200	1
		25	779230	2CSR275151R2254	DSE201 M C25 A100	0.200	1
		32	631439	2CSR275151R2324	DSE201 M C32 A100	0.200	1
		40	940739	2CSR275151R2404	DSE201 M C40 A100	0.200	1
		50	941330	2CSR275151R2504	DSE201 M C50 A100	0.200	1
1P+N	300	6	620235	2CSR275151R3064	DSE201 M C6 A300	0.200	1
		10	021834	2CSR275151R3104	DSE201 M C10 A300	0.200	1
		16	021735	2CSR275151R3164	DSE201 M C16 A300	0.200	1
		20	021636	2CSR275151R3204	DSE201 M C20 A300	0.200	1
		25	021537	2CSR275151R3254	DSE201 M C25 A300	0.200	1
		32	021438	2CSR275151R3324	DSE201 M C32 A300	0.200	1
		40	021339	2CSR275151R3404	DSE201 M C40 A300	0.200	1
		50	021230	2CSR275151R3504	DSE201 M C50 A300	0.200	1

DSE201 M - 10kA

Order codes - Type AC - B characteristic



DSE201 M ... A30

DSE201 M - Type AC

N. of poles	Rated residual current I Δ n [mA]	Rated Current In [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
B characteristic							
1P+N	10	6	938132	2CSR275051R0065	DSE201 M B6 AC10	0.200	1
		10	297734	2CSR275051R0105	DSE201 M B10 AC10	0.200	1
		16	373230	2CSR275051R0165	DSE201 M B16 AC10	0.200	1
		20	373131	2CSR275051R0205	DSE201 M B20 AC10	0.200	1
		25	077534	2CSR275051R0255	DSE201 M B25 AC10	0.200	1
		32	077435	2CSR275051R0325	DSE201 M B32 AC10	0.200	1
		40	077336	2CSR275051R0405	DSE201 M B40 AC10	0.200	1
		50	077237	2CSR275051R0505	DSE201 M B50 AC10	0.200	1
1P+N	30	6	076438	2CSR275051R1065	DSE201 M B6 AC30	0.200	1
		10	076339	2CSR275051R1105	DSE201 M B10 AC30	0.200	1
		16	076230	2CSR275051R1165	DSE201 M B16 AC30	0.200	1
		20	076131	2CSR275051R1205	DSE201 M B20 AC30	0.200	1
		25	076032	2CSR275051R1255	DSE201 M B25 AC30	0.200	1
		32	353430	2CSR275051R1325	DSE201 M B32 AC30	0.200	1
		40	353331	2CSR275051R1405	DSE201 M B40 AC30	0.200	1
		50	266334	2CSR275051R1505	DSE201 M B50 AC30	0.200	1

DSE201 M - 10kA

Order codes - Type AC - C characteristic



DSE201 M ... A300

DSE201 M - Type AC

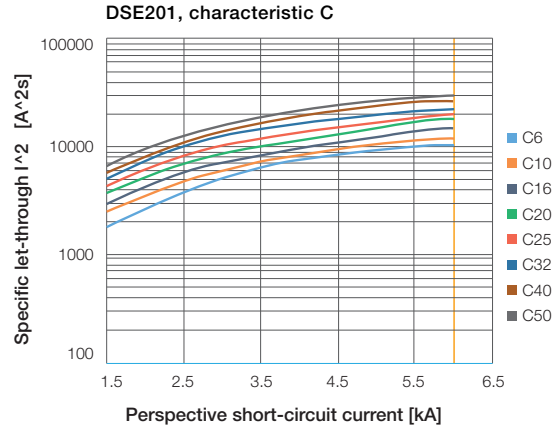
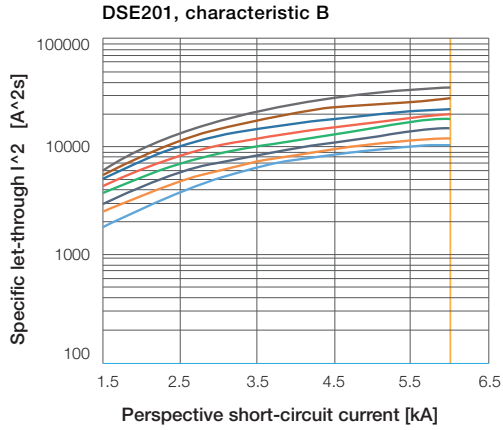
N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current I_n [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
C characteristic							
1P+N	10	6	077138	2CSR275051R0064	DSE201 M C6 AC10	0.200	1
		10	077039	2CSR275051R0104	DSE201 M C10 AC10	0.200	1
		16	076933	2CSR275051R0164	DSE201 M C16 AC10	0.200	1
		20	790532	2CSR275051R0204	DSE201 M C20 AC10	0.200	1
		25	076834	2CSR275051R0254	DSE201 M C25 AC10	0.200	1
		32	076735	2CSR275051R0324	DSE201 M C32 AC10	0.200	1
		40	076636	2CSR275051R0404	DSE201 M C40 AC10	0.200	1
		50	076537	2CSR275051R0504	DSE201 M C50 AC10	0.200	1
1P+N	30	6	266235	2CSR275051R1064	DSE201 M C6 AC30	0.200	1
		10	266136	2CSR275051R1104	DSE201 M C10 AC30	0.200	1
		16	266037	2CSR275051R1164	DSE201 M C16 AC30	0.200	1
		20	265931	2CSR275051R1204	DSE201 M C20 AC30	0.200	1
		25	790839	2CSR275051R1254	DSE201 M C25 AC30	0.200	1
		32	265832	2CSR275051R1324	DSE201 M C32 AC30	0.200	1
		40	353232	2CSR275051R1404	DSE201 M C40 AC30	0.200	1
		50	518235	2CSR275051R1504	DSE201 M C50 AC30	0.200	1
1P+N	100	6	186830	2CSR275051R2064	DSE201 M C6 AC100	0.200	1
		10	352235	2CSR275051R2104	DSE201 M C10 AC100	0.200	1
		16	186731	2CSR275051R2164	DSE201 M C16 AC100	0.200	1
		20	352136	2CSR275051R2204	DSE201 M C20 AC100	0.200	1
		25	263937	2CSR275051R2254	DSE201 M C25 AC100	0.200	1
		32	263838	2CSR275051R2324	DSE201 M C32 AC100	0.200	1
		40	263739	2CSR275051R2404	DSE201 M C40 AC100	0.200	1
		50	263630	2CSR275051R2504	DSE201 M C50 AC100	0.200	1
1P+N	300	6	263531	2CSR275051R3064	DSE201 M C6 AC300	0.200	1
		10	518334	2CSR275051R3104	DSE201 M C10 AC300	0.200	1
		16	263432	2CSR275051R3164	DSE201 M C16 AC300	0.200	1
		20	186038	2CSR275051R3204	DSE201 M C20 AC300	0.200	1
		25	352037	2CSR275051R3254	DSE201 M C25 AC300	0.200	1
		32	185932	2CSR275051R3324	DSE201 M C32 AC300	0.200	1
		40	185833	2CSR275051R3404	DSE201 M C40 AC300	0.200	1
		50	185734	2CSR275051R3504	DSE201 M C50 AC300	0.200	1

DSE201: Technical details

Limitation of specific let-through energy I^2t , Peak current I_p and tripping characteristic

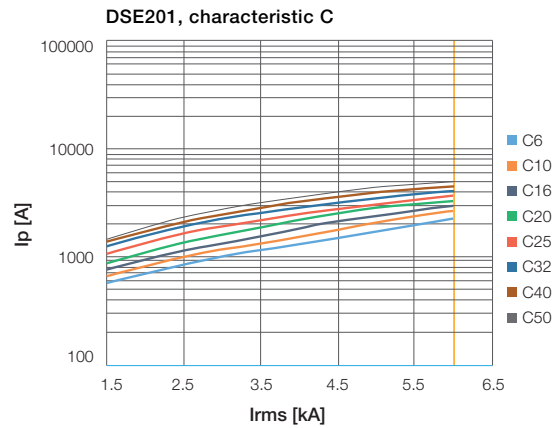
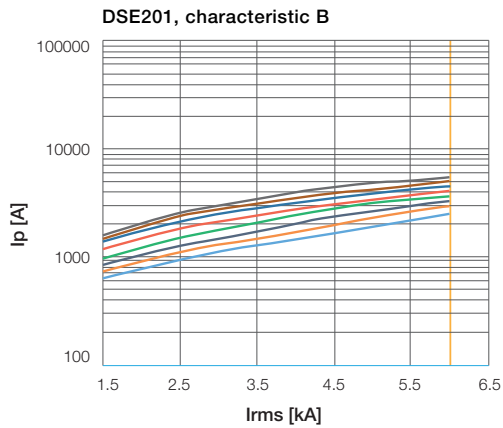
Limitation of specific let-through energy I^2t

The I^2t curves give the values of the specific let-through energy expressed in A^2s (A=amps; s=seconds) in relation to the perspective short-circuit current (I_{rms}) in kA.

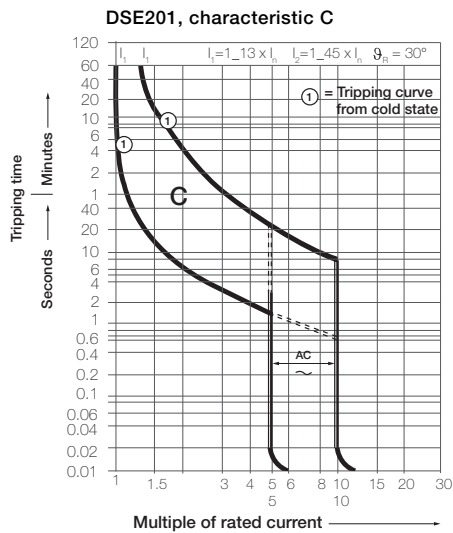
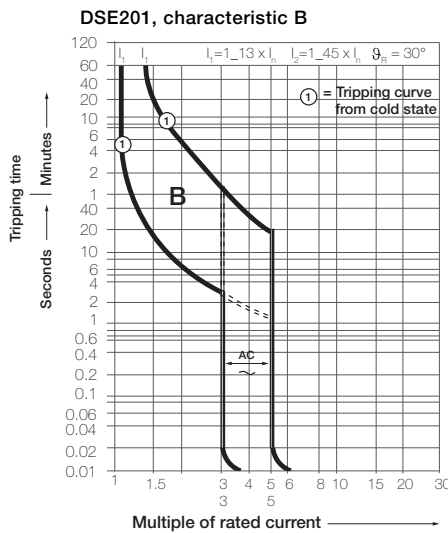


Peak current I_p

The I_p curves give the values of the peak current, expressed in kA, in relation to the perspective symmetrical short-circuit current (kA).



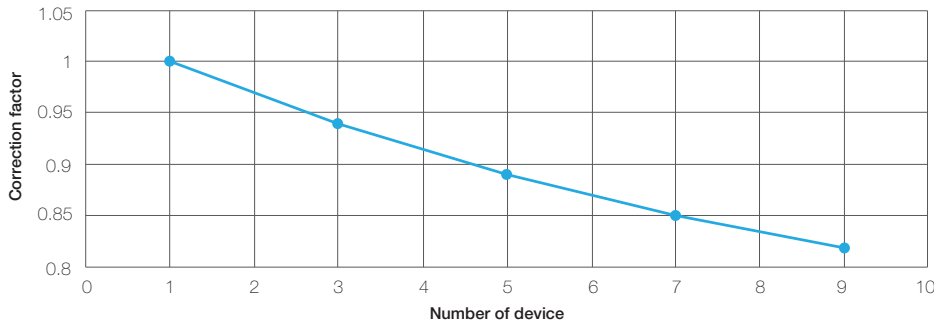
Tripping characteristic



DSE201: Technical details

Influence of adjacent devices, derating in temperature, performance in altitude and power loss

Influence of adjacent devices (DSE201 up to 32A)



N. of devices	Correction factor
1	1
3	0.94
5	0.89
7	0.85
9	0.82

Derating in temperature

In	Temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
6A	8.1	8.0	7.8	7.4	6.9	6.5	6.0	5.9	5.8	5.7
10A	13.8	13.5	13.0	12.3	11.6	10.8	10.0	9.9	9.7	9.7
16A	19.7	19.5	19.1	18.5	17.6	16.6	16.0	15.8	15.5	15.4
20A	23.7	23.5	23.2	22.7	21.6	20.5	20.0	19.7	19.4	19.2
25A	30.2	29.9	29.2	28.4	27.0	25.7	25.0	24.6	24.1	23.9
32A	39.4	38.8	37.7	36.4	34.7	33.0	32.0	31.4	30.7	30.4
40A	50.3	49.4	47.9	45.6	43.6	41.5	40.0	39.0	38.4	38.1
50A	61.1	60.4	59.2	57.1	54.4	51.7	50.0	48.8	48.0	47.9

Max operating current depending on the ambient temperature of a circuit breaker in load circuit of characteristics type B and C

Performance in altitude

Elevation (m)	3000	4000	5000	6000
Rated Current (A)	0.96 x In	0.94 x In	0.92 x In	0.90 x In
Rated Voltage (V)	0.877 x Un	0.775 x Un	0.676 x Un	0.588 x Un

Voltage drop, power loss and internal resistance

In	Voltage drop (V)	Power loss (W)	Internal resistance (mΩ)
6A	0.42	2.5	70
10A	0.25	2.5	25
16A	0.24	3.8	15
20A	0.27	5.5	14
25A	0.15	3.8	6.1
32A	0.16	5.2	5.0
40A	0.14	5.5	3.4
50A	0.11	5.3	2.1

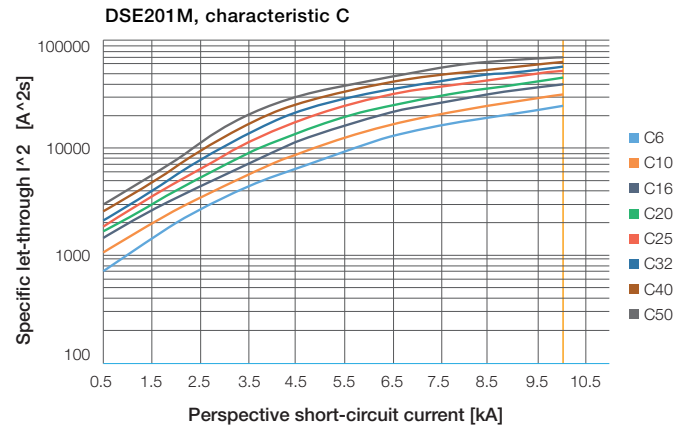
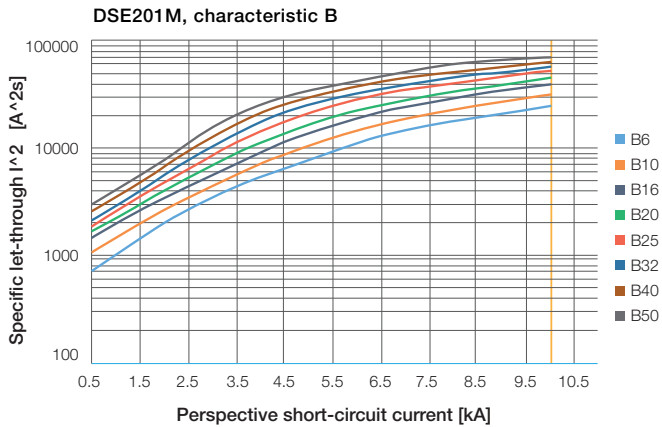
For the coordination tables, refer to the values published in SOC- Selected Optimized Coordination tool

DSE201M: Technical details

Limitation of specific let-through energy I^2t , Peak current I_p and tripping characteristic

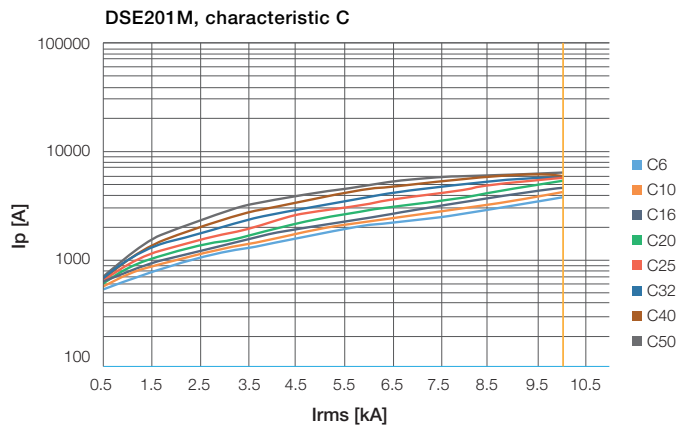
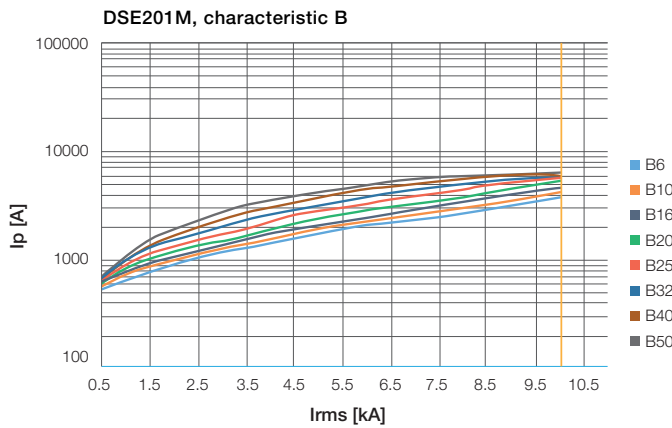
Limitation of specific let-through energy I^2t

The I^2t curves give the values of the specific let-through energy expressed in A^2s (A=amps; s=seconds) in relation to the perspective short-circuit current (I_{rms}) in kA.

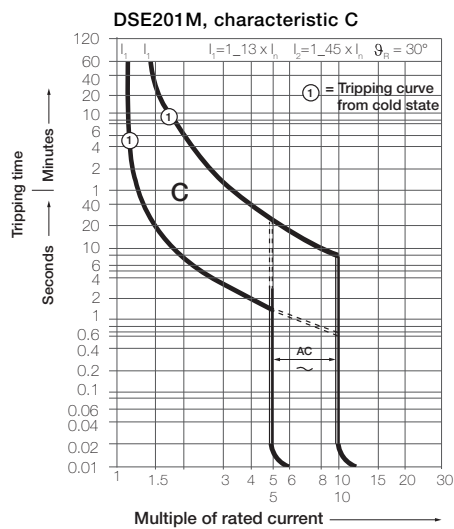
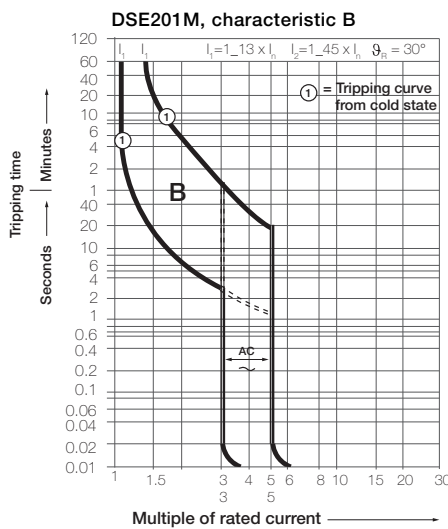


Peak current I_p

The I_p curves give the values of the peak current, expressed in kA, in relation to the perspective symmetrical short-circuit current (kA).



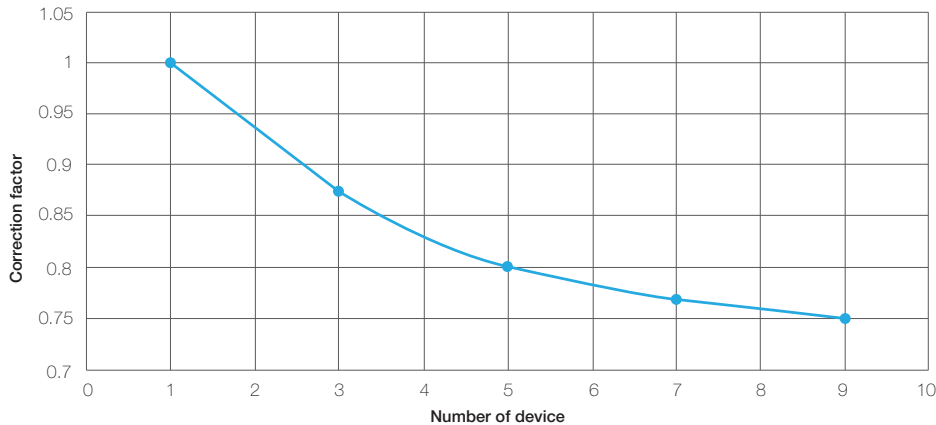
Tripping characteristic



DSE201 M: Technical details

Influence of adjacent devices, derating in temperature, performance in altitude and power loss

Influence of adjacent devices (DSE201M and DSE201 40A-50A)



N. of devices	Correction factor
1	1.00
3	0.87
5	0.80
7	0.77
9	0.75

Derating in temperature

In	Temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
6A	7.3	7.2	6.9	6.7	6.4	6.2	6.0	5.9	5.9	5.8
10A	13.0	12.9	12.2	11.4	10.9	10.4	10.0	9.8	9.7	9.5
16A	20.2	19.7	18.7	17.8	17.3	16.6	16.0	15.8	15.4	15.2
20A	26.0	25.2	24.0	22.8	21.9	20.7	20.0	19.8	19.6	19.5
25A	32.6	31.5	30.4	29.0	27.5	26.0	25.0	24.6	24.2	23.9
32A	41.1	39.7	38.0	36.3	34.8	33.1	32.0	30.9	29.8	29.6
40A	50.3	49.4	47.9	45.6	43.7	41.5	40.0	39.0	38.4	38.1
50A	61.1	60.4	59.2	57.1	54.7	51.7	50.0	48.8	48.0	47.9

Max operating current depending on the ambient temperature of a circuit breaker in load circuit of characteristics type B and C

Performance in altitude

Elevation (m)	3000	4000	5000	6000
Rated Current (A)	0.96 x In	0.94 x In	0.92 x In	0.90 x In
Rated Voltage (V)	0.877 x Un	0.775 x Un	0.676 x Un	0.588 x Un

Voltage drop, power loss and internal resistance

In	Voltage drop (V)	Power loss (W)	Internal resistance (mΩ)
6A	0.30	1.8	49
10A	0.18	1.8	18
16A	0.15	2.4	9.5
20A	0.15	3.0	7.6
25A	0.13	3.3	5.3
32A	0.14	4.4	4.3
40A	0.14	5.5	3.4
50A	0.11	5.3	2.1

For the coordination tables, refer to the values published in SOC - Selected Optimized Coordination tool

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