Technical data

RCBO´s DS 261 / DS 271

Residual current operated circuit breakers with integral overcurrent protection

ABB

When connecting aluminium conductors ensure that the contact surfaces of the conductors are cleaned, brushed and treated with grease. Re-tighten contact terminals after 6 to 8 weeks' time.

We recommend that connector sleeves be used when working with flexible conductors.

Conditions for Delivery and Sale

For domestic business, the Standard Terms for Delivery of Products and Services of the Electrical Industry (ABB Form 2292) shall apply in connection with the Standard Sale Terms (ABB Form 2327) in their then applicable version. For foreign business, the Standard Terms for Delivery of Products and Services of the Electrical Industry (ABB Form 2293 German-English, or ABB-Form 2294 German- French) shall apply in connection with the Standard Sale Terms (ABB-Form 2381 English) in their then applicable version.

Warranty

We assume warranty in accordance with the Standard Sale and Delivery Terms. Complaints shall be made in writing within eight days following receipt of the goods.

Technical information and illustrations are not binding and subject to change without notice.

Residual current 0perated circuit breakers DS 261 and DS 271

Contents Page

Description, Technical data 4
Tripping diagrams 5
Selection table DS 261AC-B and DS 261AC-C 5
Selection table DS 261A-B and DS 261A-C 6
Selection table DS 271AC-B and DS 271AC-C 6
Selection table DS 261A-B and DS 261A-C 7
Dimension drawings 7

Residual current 0perated circuit breakers
DS 261 and DS 271

SK 003 B 02

DS 261/DS 271

Description

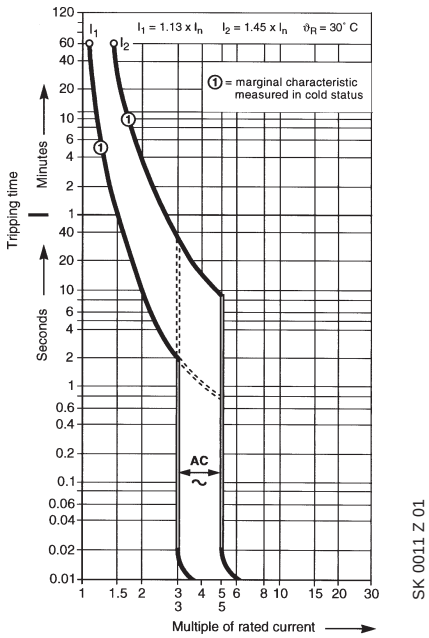
The residual current operated circuit breakers with integral overcurrent protection (RCBO) DS261/DS271 are a combination of an MCB and an RCCB in one unit in a compact housing (1 module).
RCBO´s are used to provide supplimentary protection for people from the risk of electrocution and protection against the risk of an electrical fire and overcurrent protection of equipment and cables.

Technical Data

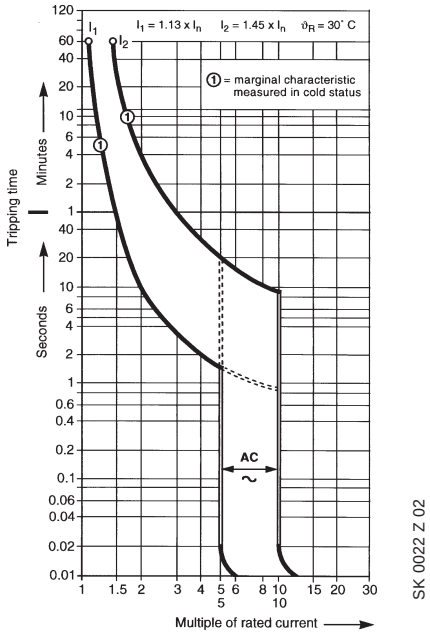
Type:	**DS261AC**	**DS261A**	**DS271AC**	**DS271A**
Standards:	EN 61009-1, BSEN 61009-2-2, IEC 61009			
Number of poles:	1P + solid Neutral			
Rated current I_n:	6A, 10A, 16A, 20A, 25A, 32A			
MCB tripping characteristic:	B and C			
Rated residual operating current ID_n:	10mA and 30mA			
RCCB type:	AC	A	AC	A
Rated voltage U_n:	230V			
Rated frequency:	50...60Hz			
Max. service voltage U_{max} :	U_n + 10%			
Function:	dependent on line voltage 0,85´U_n ... 1,1´U_n			
Rated short-circuit capacity I_{cn}:	6.000 A	6.000 A	10.000 A	10.000 A
Service short-circuit capacity I_{cs}:	6.000 A	6.000 A	7.500 A	7.500 A
Rated residual making and breaking capacity ID_m:	6.000 A	6.000 A	6.000 A	6.000 A
Energy limiting class:	3	3	3	3
Serviceable life:	At least 5000 switching cycles			
Ambient temperature:	-25°C up to 55°C			
Storage temperature:	-25°Cup to 70°C			
Climatic resistance acc. to IEC68 part 2-30:	Damp heat, cyclic (55°C/28cyles)			
Fixing:	Snap-on to DIN rail acc. to IEC 60715 and installation in consumer units and distribution boards			
Terminal and wiring line side:	L1: Combi-frame with screw M5 for conductors from 1 up to 25mm² N: flexible cable 4mm² FE: flexible cable 0,5mm²			
load side:	L1 and N: Frame with screw M4 for conductors from 1 up to 10mm²			

Residual current 0perated circuit breakers
DS 261 and DS 271

Tripping diagrams



DS 261/DS 271.. -B



DS 261/DS 271.. -C

Selection table

Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	**Ordering details** **Type No.**		**bbn 4012233** **EAN**	**Price** 1 piece **DM**	Weight 1 piece kg	Pack. unit pcs.
Series DS 261 AC (Solid Neutral, 6 kA, Type AC)							
Characteristic B							
10	6	**DS261AC-B6/0,01A**					
10	10	**DS261AC-B10/0,01A**					
10	16	**DS261AC-B16/0,01A**					
10	20	**DS261AC-B20/0,01A**					
10	25	**DS261AC-B25/0,01A**					
10	32	**DS261AC-B32/0,01A**					
30	6	**DS261AC-B6/0,03A**					
30	10	**DS261AC-B10/0,03A**					
30	16	**DS261AC-B16/0,03A**					
30	20	**DS261AC-B20/0,03A**					
30	25	**DS261AC-B25/0,03A**					
30	32	**DS261AC-B32/0,03A**					
Series DS 261 AC (Solid Neutral, 6 kA, Type AC)							
Characteristic C							
10	6	**DS261AC-C6/0,01A**					
10	10	**DS261AC-C10/0,01A**					
10	16	**DS261AC-C16/0,01A**					
10	20	**DS261AC-C20/0,01A**					
10	25	**DS261AC-C25/0,01A**					
10	32	**DS261AC-C32/0,01A**					
30	6	**DS261AC-C6/0,03A**					
30	10	**DS261AC-C10/0,03A**					
30	16	**DS261AC-C16/0,03A**					
30	20	**DS261AC-C20/0,03A**					
30	25	**DS261AC-C25/0,03A**					
30	32	**DS261AC-C32/0,03A**					

SK 003 B 02

DS 261/DS 271

Residual current 0perated circuit breakers
DS 261 and DS 271

SK 003 B 02

DS 261/DS 271

Selection table

Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	**Ordering details** **Type No.**		**bbn 4012233** **EAN**	**Price** 1 piece **DM**	Weight 1 piece kg	Pack. unit pcs.
Series DS 261 A (Solid Neutral, 6 kA, Type A) **Characteristic B**							
10	6	**DS261A-B6/0,01A**					
10	10	**DS261A-B10/0,01A**					
10	16	**DS261A-B16/0,01A**					
10	20	**DS261A-B20/0,01A**					
10	25	**DS261A-B25/0,01A**					
10	32	**DS261A-B32/0,01A**					
30	6	**DS261A-B6/0,03A**					
30	10	**DS261A-B10/0,03A**					
30	16	**DS261A-B16/0,03A**					
30	20	**DS261A-B20/0,03A**					
30	25	**DS261A-B25/0,03A**					
30	32	**DS261A-B32/0,03A**					
Series DS 261 A (Solid Neutral, 6 kA, Type A) **Characteristic C**							
10	6	**DS261A-C6/0,01A**					
10	10	**DS261A-C10/0,01A**					
10	16	**DS261A-C16/0,01A**					
10	20	**DS261A-C20/0,01A**					
10	25	**DS261A-C25/0,01A**					
10	32	**DS261A-C32/0,01A**					
30	6	**DS261A-C6/0,03A**					
30	10	**DS261A-C10/0,03A**					
30	16	**DS261A-C16/0,03A**					
30	20	**DS261A-C20/0,03A**					
30	25	**DS261A-C25/0,03A**					
30	32	**DS261A-C32/0,03A**					
Series DS 271 AC (Solid Neutral, 10 kA, Type AC) **Characteristic B**							
10	6	**DS271AC-B6/0,01A**					
10	10	**DS271AC-B10/0,01A**					
10	16	**DS271AC-B16/0,01A**					
10	20	**DS271AC-B20/0,01A**					
10	25	**DS271AC-B25/0,01A**					
10	32	**DS271AC-B32/0,01A**					
30	6	**DS271AC-B6/0,03A**					
30	10	**DS271AC-B10/0,03A**					
30	16	**DS271AC-B16/0,03A**					
30	20	**DS271AC-B20/0,03A**					
30	25	**DS271AC-B25/0,03A**					
30	32	**DS271AC-B32/0,03A**					
Series DS 271 AC (Solid Neutral, 10 kA, Type AC) **Characteristic C**							
10	6	**DS271AC-C6/0,01A**					
10	10	**DS271AC-C10/0,01A**					
10	16	**DS271AC-C16/0,01A**					
10	20	**DS271AC-C20/0,01A**					
10	25	**DS271AC-C25/0,01A**					
10	32	**DS271AC-C32/0,01A**					
30	6	**DS271AC-C6/0,03A**					
30	10	**DS271AC-C10/0,03A**					
30	16	**DS271AC-C16/0,03A**					
30	20	**DS271AC-C20/0,03A**					
30	25	**DS271AC-C25/0,03A**					
30	32	**DS271AC-C32/0,03A**					

Residual current 0perated circuit breakers
DS 261 and DS 271

SK 003 B 02

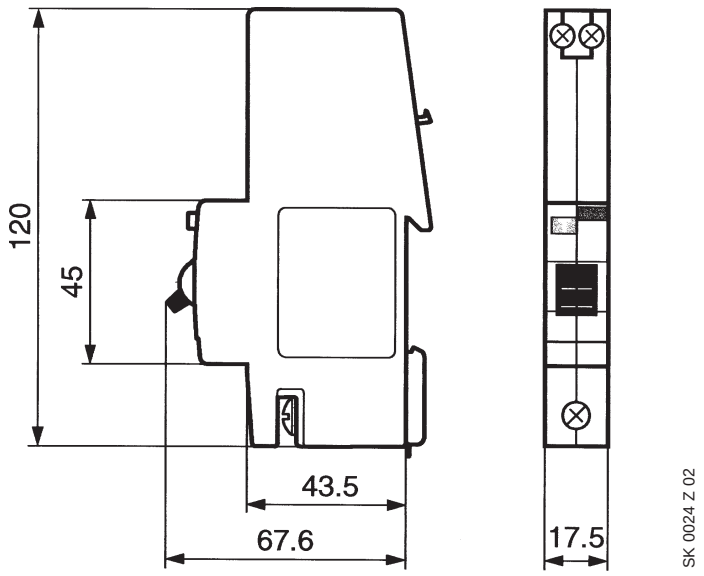
DS 261/DS 271

Selection table

Rated residual current $I_{\Delta n}$ mA	Rated current I_n A	**Ordering details** **Type No.**		**bbn 4012233** **EAN**	**Price** 1 piece **DM**	Weight 1 piece kg	Pack. unit pcs.
Series DS 271 A (Solid Neutral, 10 kA, Type A) **Characteristic B**							
10	6	**DS271A-B6/0,01A**					
10	10	**DS271A-B10/0,01A**					
10	16	**DS271A-B16/0,01A**					
10	20	**DS271A-B20/0,01A**					
10	25	**DS271A-B25/0,01A**					
10	32	**DS271A-B32/0,01A**					
30	6	**DS271A-B6/0,03A**					
30	10	**DS271A-B10/0,03A**					
30	16	**DS271A-B16/0,03A**					
30	20	**DS271A-B20/0,03A**					
30	25	**DS271A-B25/0,03A**					
30	32	**DS271A-B32/0,03A**					
Series DS 261 A (Solid Neutral, 10 kA, Type A) **Characteristic C**							
10	6	**DS271A-C6/0,01A**					
10	10	**DS271A-C10/0,01A**					
10	16	**DS271A-C16/0,01A**					
10	20	**DS271A-C20/0,01A**					
10	25	**DS271A-C25/0,01A**					
10	32	**DS271A-C32/0,01A**					
30	6	**DS271A-C6/0,03A**					
30	10	**DS271A-C10/0,03A**					
30	16	**DS271A-C16/0,03A**					
30	20	**DS271A-C20/0,03A**					
30	25	**DS271A-C25/0,03A**					
30	32	**DS271A-C32/0,03A**					

Dimension drawings

Dimension in mm



SK 0024 Z 02

DS 261 / DS 271

ABB STOTZ-KONTAKT, the Heidelberg-based company, develops, manufactures and sells highly modern, modular systems for electrical building installations.
It offers complete installation ranges for a wide variety of applications:

System pro *M*

For classic installation applications

The modular **System pro *M*** for installation on DIN rails incorporates Europe's best-selling miniature circuit-breakers and residual-current-operated circuit-breakers as well as a complete range of built-in devices.
The system components have been designed with various functions and performance capabilities and are therefore to able optimally cover the complete range of applications in building installation:

- conventional domestic electrical installations
- industrial and commercial installations
- protection and switch functions
- checking and monitoring tasks
- control and time-dependent tasks etc.

System pro *M* compact®

The extension of **System pro *M*** for targeted use in domestic electrical installations stands out due to its compact and easily comprehensible range of miniature circuit-breakers, residual-current-operated circuit-breakers and cross wiring tools as well as an optimised installation technology taking into account the special circumstances and requirements of domestic electrical installations.

System *Connect*

This pioneering system concept contains seamlessly integrated system units – consisting of miniature circuit-breakers and residual-current-operated circuit-breakers as well as apparatus racks and flush-mounted wall boxes - was designed to suit the special requirements of domestic electrical installations.

The new plug-in connection technology for the devices and apparatus rack ensures quick and reliable installations: assembly, connection of the devices and cross wiring are carried out time-effectively in one single step.
If need be, component sets may still be changed quickly and flexibly right until transfer takes place; devices may also be exchanged easily at some later date, and economically in terms of both money and time, at that.

The entire **System *Connect*** was developed by ABB STOTZ-KONTAKT and Striebel & John, within the framework of their successful system partnership.

EIB Installation Systems

For intelligent Building Installation

Highly modern, programmable installation systems with bus technology based on the European EIB standard.

ABB i-bus® EIB

System with special 2-core bus cable, primarily for new buildings.

ABB Powernet EIB

System for retrofitting in existing buildings. Transfer of information via the existing network.

Security Systems

All-in-one Protection

Wide range of security systems and components: intruder and fire alarm systems, radio-controlled alarm systems, door locking system and signalling components.

During the century-long experience of the company, it has always contributed pioneering solutions to the safe application of electricity.
Today, ABB STOTZ-KONTAKT GmbH is an integral part of the ABB Group, a major player on the electrical and electronic markets.

Pub. No. 2CDC 420 001 D0201

ABB STOTZ-KONTAKT GmbH
P.O. Box 10 16 80, D-69006 Heidelberg
Eppelheimer Straße 82, D-69123 Heidelberg
Phone (0 62 21) 701 - 0
Fax (0 62 21) 701 - 723
www.abb.de/stotz-kontakt