

## LPED New product announcement S200UDC Series of miniature circuit breakers



### **ABB is pleased to announce the release of the new S200UDC series of Miniature Circuit Breakers.**

The S200UDC series of Miniature Circuit Breakers extends the portfolio of the UL489 DC applications up to 125VDC, and will replace the current S201DC series in its entirety.

### **Product Range**

The S200UDC series includes 1-pole and 2-pole devices with K and Z characteristics and rated current from 1A to 63A and is approved according to the UL489 Standard. The short circuit current rating is 14kA and the reference temperature for the tripping characteristics is 25° C (77° F).

### **Replacement of Current S200DC Series**

The existing S201DC MCBs with factory mounted integrated auxiliary switches will be phased out without a replacement.

**Order availability:** April 2011

**Shipment availability:** May 2011

**Pricing:** Pricing will be available in SAP and cBOL

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# New S201UDC Series and cross reference

## K curve, 1 pole

Current S200DC	New S200UDC	Description
S201DC-K1	S201UDC-K1	S200UDC MCB 1P K 1A 60VDC BCPD
S201DC-K1,6	S201UDC-K1,6	S200UDC MCB 1P K 1.6A 60VDC BCPD
S201DC-K2	S201UDC-K2	S200UDC MCB 1P K 2A 60VDC BCPD
S201DC-K3	S201UDC-K3	S200UDC MCB 1P K 3A 60VDC BCPD
S201DC-K4	S201UDC-K4	S200UDC MCB 1P K 4A 60VDC BCPD
	S201UDC-K5	S200UDC MCB 1P K 5A 60VDC BCPD
S201DC-K6	S201UDC-K6	S200UDC MCB 1P K 6A 60VDC BCPD
S201DC-K8	S201UDC-K8	S200UDC MCB 1P K 8A 60VDC BCPD
S201DC-K10	S201UDC-K10	S200UDC MCB 1P K 10A 60VDC BCPD
S201DC-K13	S201UDC-K13	S200UDC MCB 1P K 13A 60VDC BCPD
	S201UDC-K15	S200UDC MCB 1P K 15A 60VDC BCPD
S201DC-K16	S201UDC-K16	S200UDC MCB 1P K 16A 60VDC BCPD
	S201UDC-K20	S200UDC MCB 1P K 20A 60VDC BCPD
S201DC-K25	S201UDC-K25	S200UDC MCB 1P K 25A 60VDC BCPD
	S201UDC-K30	S200UDC MCB 1P K 30A 60VDC BCPD
	S201UDC-K32	S200UDC MCB 1P K 32A 60VDC BCPD
	S201UDC-K40	S200UDC MCB 1P K 40A 60VDC BCPD
	S201UDC-K50	S200UDC MCB 1P K 50A 60VDC BCPD
	S201UDC-K60	S200UDC MCB 1P K 60A 60VDC BCPD
	S201UDC-K63	S200UDC MCB 1P K 63A 60VDC BCPD

## Z curve, 1-pole

Current S200DC	New S200UDC	Description
S201DC-Z1	S201UDC-Z1	S200UDC MCB 1P Z 1A 60VDC BCPD
S201DC-Z1,6	S201UDC-Z1,6	S200UDC MCB 1P Z 1.6A 60VDC BCPD
S201DC-Z2	S201UDC-Z2	S200UDC MCB 1P Z 2A 60VDC BCPD
S201DC-Z3	S201UDC-Z3	S200UDC MCB 1P Z 3A 60VDC BCPD
S201DC-Z4	S201UDC-Z4	S200UDC MCB 1P Z 4A 60VDC BCPD
	S201UDC-Z5	S200UDC MCB 1P Z 5A 60VDC BCPD
S201DC-Z6	S201UDC-Z6	S200UDC MCB 1P Z 6A 60VDC BCPD
S201DC-Z8	S201UDC-Z8	S200UDC MCB 1P Z 8A 60VDC BCPD
S201DC-Z10	S201UDC-Z10	S200UDC MCB 1P Z 10A 60VDC BCPD
	S201UDC-Z15	S200UDC MCB 1P Z 15A 60VDC BCPD
S201DC-Z16	S201UDC-Z16	S200UDC MCB 1P Z 16A 60VDC BCPD
S201DC-Z20	S201UDC-Z20	S200UDC MCB 1P Z 20A 60VDC BCPD
S201DC-Z25	S201UDC-Z25	S200UDC MCB 1P Z 25A 60VDC BCPD
	S201UDC-Z30	S200UDC MCB 1P Z 30A 60VDC BCPD
	S201UDC-Z32	S200UDC MCB 1P Z 32A 60VDC BCPD
	S201UDC-Z40	S200UDC MCB 1P Z 40A 60VDC BCPD
	S201UDC-Z50	S200UDC MCB 1P Z 50A 60VDC BCPD
	S201UDC-Z60	S200UDC MCB 1P Z 60A 60VDC BCPD
	S201UDC-Z63	S200UDC MCB 1P Z 63A 60VDC BCPD

There will be no replacements for the following MCBs with mounted integrated auxiliary switch

### K curve

S201DC-K1H10	S201DC-K4H10	S201DC-K13H10
S201DC-K1,6H10	S201DC-K6H10	S201DC-K16H10
S201DC-K2H10	S201DC-K8H10	S201DC-K20H10
S201DC-K3H10	S201DC-K10H10	S201DC-K25H10

## K curve, 2-pole

Current S200DC	New S200UDC	Description
	S202UDC-K1	S200UDC MCB 2P K 1A 60*VDC BCPD
	S202UDC-K1,6	S200UDC MCB 2P K 1.6A 60*VDC BCPD
	S202UDC-K2	S200UDC MCB 2P K 2A 60*VDC BCPD
	S202UDC-K3	S200UDC MCB 2P K 3A 60*VDC BCPD
	S202UDC-K4	S200UDC MCB 2P K 4A 60*VDC BCPD
	S202UDC-K5	S200UDC MCB 2P K 5A 60*VDC BCPD
	S202UDC-K6	S200UDC MCB 2P K 6A 60*VDC BCPD
	S202UDC-K8	S200UDC MCB 2P K 8A 60*VDC BCPD
	S202UDC-K10	S200UDC MCB 2P K 10A 60*VDC BCPD
	S202UDC-K13	S200UDC MCB 2P K 13A 60*VDC BCPD
	S202UDC-K15	S200UDC MCB 2P K 15A 60*VDC BCPD
	S202UDC-K16	S200UDC MCB 2P K 16A 60*VDC BCPD
	S202UDC-K20	S200UDC MCB 2P K 20A 60*VDC BCPD
	S202UDC-K25	S200UDC MCB 2P K 25A 60*VDC BCPD
	S202UDC-K30	S200UDC MCB 2P K 30A 60*VDC BCPD
	S202UDC-K32	S200UDC MCB 2P K 32A 60*VDC BCPD
	S202UDC-K40	S200UDC MCB 2P K 40A 60*VDC BCPD
	S202UDC-K50	S200UDC MCB 2P K 50A 60*VDC BCPD
	S202UDC-K60	S200UDC MCB 2P K 60A 60*VDC BCPD
	S202UDC-K63	S200UDC MCB 2P K 63A 60*VDC BCPD

60\* = 125VDC poles connected in series

## Z curve, 2 pole

Current S200DC	New S200UDC	Description
	S202UDC-Z1	S200UDC MCB 2P Z 1A 60*VDC BCPD
	S202UDC-Z1,6	S200UDC MCB 2P Z 1.6A 60*VDC BCPD
	S202UDC-Z2	S200UDC MCB 2P Z 2A 60*VDC BCPD
	S202UDC-Z3	S200UDC MCB 2P Z 3A 60*VDC BCPD
	S202UDC-Z4	S200UDC MCB 2P Z 4A 60*VDC BCPD
	S202UDC-Z5	S200UDC MCB 2P Z 5A 60*VDC BCPD
	S202UDC-Z6	S200UDC MCB 2P Z 6A 60*VDC BCPD
	S202UDC-Z8	S200UDC MCB 2P Z 8A 60*VDC BCPD
	S202UDC-Z10	S200UDC MCB 2P Z 10A 60*VDC BCPD
	S202UDC-Z15	S200UDC MCB 2P Z 15A 60*VDC BCPD
	S202UDC-Z16	S200UDC MCB 2P Z 16A 60*VDC BCPD
	S202UDC-Z20	S200UDC MCB 2P Z 20A 60*VDC BCPD
	S202UDC-Z25	S200UDC MCB 2P Z 25A 60*VDC BCPD
	S202UDC-Z30	S200UDC MCB 2P Z 30A 60*VDC BCPD
	S202UDC-Z32	S200UDC MCB 2P Z 32A 60*VDC BCPD
	S202UDC-Z40	S200UDC MCB 2P Z 40A 60*VDC BCPD
	S202UDC-Z50	S200UDC MCB 2P Z 50A 60*VDC BCPD
	S202UDC-Z60	S200UDC MCB 2P Z 60A 60*VDC BCPD
	S202UDC-Z63	S200UDC MCB 2P Z 63A 60*VDC BCPD

60\* = 125VDC poles connected in series

### Z curve

S201DC-K1H10	S201DC-K4H10	S201DC-K13H10
S201DC-K1,6H10	S201DC-K6H10	S201DC-K16H10
S201DC-K2H10	S201DC-K8H10	S201DC-K20H10
S201DC-K3H10	S201DC-K10H10	S201DC-K25H10

# Technical data

## S200UDC Series MCBs

Standards	IEC/EN UL/CSA		-- UL 489
<b>Electrical data</b>			
Poles			1P, 2P
Tripping characteristics			K, Z
Rated current I <sub>n</sub>		A	1...63 A
Rated voltage U <sub>n</sub>	IEC/EN 60898-1	V	--
Rated voltage U <sub>n</sub>	IEC/EN 60898-2	V	--
Rated voltage U <sub>e</sub>	IEC/EN 60947-2	V	--
Rated voltage	UL	V	1P: 60 V DC 2P: 125 V DC *
Insulation voltage U <sub>i</sub>	IEC/EN 60898-1 / 60947-2	V	--
Max. operating voltage U <sub>Bmax</sub> .		V	--
Min. operating voltage U <sub>Bmin</sub> .		V	12 V DC
Rated frequency f		Hz	DC
Rated short-circuit capacity I <sub>cn</sub>	IEC/EN 60898-1	kA	--
Ultimate short-circuit capacity I <sub>cu</sub>	IEC/EN 60947-2	kA	--
Service short-circuit capacity I <sub>cs</sub>	IEC/EN 60947-2	kA	--
Rated interrupting capacity	UL 1077	kA	--
Short-circuit current rating SCCR	UL 489	kA	14 kA
Energy limiting class	IEC/EN 60898-1		--
Overvoltage category	IEC/EN 60898-1 / 60947-2		--
Pollution degree	IEC/EN 60898-1 / 60947-2		--
Rated impulse withstand voltage U <sub>imp</sub> . (1.2/50µs)	IEC/EN 60898-1 / 60947-2	kV	--
Dielectric test voltage	IEC/EN 60898-1	kV	--
<b>Mechanical data</b>			
Housing			Insulation group I, RAL 7035
Toggle			Insulation group II, black, sealable
Contact position indication			Marking on toggle (I ON / 0 OFF), Real CPI (red ON / green OFF)
Protection degree	IEC/EN 60529		IP20 / IPXXB, IP40 in enclosure with cover
Electrical endurance		ops.	6,000 ops.
Mechanical endurance		ops.	20,000 ops.
Shock resistance	IEC/EN 60068-2-27		30g - 20 cycles at 5...150...5 Hz with load 0.8n
Vibration resistance	IEC/EN 60068-2-6		5g - 20 cycles at 5...150...5 Hz with load 0.8n
Tropicalization (damp heat cyclic)	IEC/EN 60068-2-30	°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
Ambient temperature		°C	-25 ... +55°C
Storage temperature		°C	-40 ... +70°C
Reference temperature for tripping characteristics	UL	°C	25°C
<b>Installation</b>			
Terminal			Failsafe bi-directional cylinder-lift terminal
Cross-section of conductors (top / bottom)	IEC/EN 60898-1 / 60947-2 UL	mm <sup>2</sup> AWG	-- 18 - 4 AWG
Cross-section of busbars (top / bottom)	IEC/EN 60898-1 / 60947-2 UL	mm <sup>2</sup> AWG	-- 18 - 8 AWG
Torque	IEC/EN UL	Nm in-lbs.	2.8 Nm 25 in-lbs.
Screwdriver			No. 2 Pozidrive
Mounting			On DIN rail 35 mm acc. to EN 60715 by fast clip
Mounting position			Any
Supply			Please note polarity of device
<b>Dimensions and weight</b>			
Mounting dimensions	DIN 43880		--
Pole dimensions (H x D x W)		mm	92 x 71 x 17.5 mm
Pole weight		g	ca. 140 g
<b>Combination with aux. elements</b>			
Auxiliary contact			Yes
Signal contact/auxiliary switch			Yes
Shunt trip			Yes
Undervoltage release			No

\* poles connected in series

Note: In consideration of modifications to standards and materials, the characteristics and overall dimensions indicated in this data sheet may be considered binding only following confirmation by ABB.

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