

DS201 UL RCBO



This Residual Current Circuit Breaker with Overcurrent Protection (RCBO) combines 30 mA RCD and MCBs with trip curves B, C, or K. DS201 UL can be equipped with an auxiliary contact for bottom fitting, making it also suitable for retrofitting and applications with space constraints.

DS201 UL replaces the DS951 UL product line.

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DS201 UL helps protect supplementary circuits against overload, short circuits, and ground faults.

Product details

- Test push button to verify the correct functioning of the device
- Ground fault indicator
- Contact position indicator (CPI)
- Dedicated space for label
- Terminals equipped with fail-safe feature to avoid improper installation.
- Double slot for connection with cables (25mm²) and PS busbars (10mm²)
- Supply possible either from top or bottom side
- Space for RFid tag containing a unique serial number assigned to ABB in order to authenticate the product

Technical features

- Trip curves B, C and K
- 277/Y480 VAC
- 6 to 40 A
- Rated Sensitivity 0.03A
- Ultimate Icu breaking capacity acc. to IEC 60947-2 (only referring to short circuit test) 10kA
- Service Ics breaking capacity acc. to IEC 60947-2 (only referring to short circuit test) 7.5kA
- Rated breaking capacity acc to UL 1053, IEC 61009-1, IEC 61009-2-1 Icn is 6kA

Certifications and standards

- IEC 61009-1
- IEC 61009-2-1
- UL 1053
- UL 1077
- CSA C22.2 NO. 235

Applications

- Wind turbines after market
- Industrial control panel builders



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Standards		UL 1053, UL 1077, IEC 61009-1, IEC 61009-2-1		
Electrical features	Type (wave form of the earth leakage sensed)	-	A	
	Number of poles	-	1P + N	
	Rated current I _n	A	6 ≤ I _n ≤ 40	
	Rated sensitivity IΔ _n	A	0.03	
	Rated voltage U _e	V	230-240	
	Insulation voltage U _i	V	500 V AC	
	Overtoltage category	-	III	
	Pollution degree	-	2	
	Operating voltage of circuit test U _t	V	110 – 277	
	Rated frequency	Hz	50/60	
	Rated breaking capacity acc. to To UL 1053, IEC 61009-1, IEC 61009-2-1	I _{cn}	A	6 000
	Rated breaking capacity acc. to IEC 60947-2	ultimate I _{cu}	kA	10
		service I _{cs}	kA	7.5
	Rated residual breaking capacity IΔ _m according to IEC 61009-1	IΔ _m	A	6 000
	Rated impulse withstand voltage (1.2/50) U _{imp}	kV	-	4 kV
	Dielectric test voltage at ind. freq. for 1 min.	kV	-	2 kV (50 / 60Hz, 1 min.)
	Thermomagnetic release - characteristic	B: 3 I _n ≤ I _n ≤ 5 I _n	-	■
		C: 5 I _n ≤ I _n ≤ 10 I _n	-	■
		K: 10 I _n < = I _n	-	■
		> = 14 I _n	-	■
Rated residual breaking capacity IΔ _m	A	-	6 000	
Surge current resistance (wave 8/20 μs)	-	-	NA	
Mechanical features	Housing	-	Insulation group I - II, RAL 7035	
	Toggle	-	Insulation group II, Black RAL 9005, sealable in ON-OFF positions	
	Contact position indication	-	Green/Red Window	
	Earth fault trip indication	-	Blue flag on toggle	
	Electrical life	operations	-	10000
	Mechanical life	operations	-	20000
	Protection degree acc. to EN 60529	housing	-	IP4X
		terminals	-	IP2X
	Shock resistance acc. to IEC/EN 60068-2-27	-	-	25g - 2 shocks - 13ms
	Vibration resistance acc. to IEC/EN 60068-2-6	-	-	0.1 mm or 1 g - 20 cycles at 5...150...5 Hz
	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 / °F	-	30 / 86
	Ambient temperature (with daily average ≤ +35 °C)	°C / °F	-	-25...+55 / -13...+131
	Storage temperature	°C / °F	-	-40...+70 / -40...+158
	Installation	Terminal type	top / bottom	-
Terminal size for solid cables		top / bottom	mm ² / AWG	25/25 / 10/10
Terminal size for stranded cables		top / bottom	mm ² / AWG	16/16 / 6/6
These terminals are not suitable for copper compact stranded conductors				
Terminal size for busbars		top / bottom	mm ² / AWG	10/8
Tightening torque		top / bottom	Nm / in.lb	2.8 / 24.5
Stripping length of the cable		-	mm / in	12 / 0.5
Mounting		-	-	on DIN rail EN 60715 (35mm) by means of mounting clip
Mounting position		-	-	Any
Supply from		-	-	Top/Bottom terminals
Dimensions and weight	Dimensions (H x D x W)	mm / in	-	85 x 69 x 35 / 3.34 x 2.71 x 1.37
	Weight	g / lb	-	200 / 0.44
Combination with auxiliary elements	Combinable with accessories and auxiliaries	Auxiliary contact	-	yes
		Signal contact / auxiliary contact	-	yes
		Shunt trip	-	yes
		Auxiliary contact for bottom fitting	-	yes
		Undervoltage release	-	yes
		Overtoltage release	-	yes
		Motor operating device	-	yes

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