

# 5SU1 RCBO

Combined personnel and line protection  
in 2-, 3- and 4-pole version

Modern electrical devices and the rising number of communication and multimedia devices lead to a higher current loading in the electrical installation of buildings – in new buildings as well as in the modernization of existing buildings. 5SU1 RCBO combine residual current circuit breakers and miniature circuit breakers in one device. They protect people from fault currents and systems from short circuits and overload.

## Highlights

- All-pole protection of final circuits with 2, 3 or 4 outer conductors, also protection of the N-conductor against overload due to harmonics with non-linear loads such as PC power supplies, energy-saving lamps or entertainment electronics
- Less space required due to compact design and less wiring
- Higher system availability
- Easy fault detection due to displaying “tripped due to residual current”



5SU1 RCBO as 2-, 3- and 4-pole version

## The use of RCBOs has a series of advantages:


- Each circuit is assigned its own RCBO: if the device has tripped due to a residual current, only the affected circuit is disconnected. This is done in the same way as it has been for years when the miniature circuit-breaker exclusively assigned to a circuit trips due to overcurrent.
- Due to division of the circuits, the user profits from increased operational safety and equipment availability because leakage currents produced by electronic equipment, such as parts of power supply systems, for operating reasons do not add up to produce non-permissible values and exceed the tripping value of the RCCB.
- Planning is simplified in that demand factors as in the case of loads on residual, current operated circuit breakers do not have to be taken into account. The RCBO protects itself against overload.
- In the event of a fault, all poles are disconnected from the power supply. All live parts are thus reliably disconnected from the supply and troubleshooting is simplified.

These advantages led to a note in DIN VDE 0100-410 recommending the use of RCBOs as additional protection in final circuits for outdoors and for socket outlets. The above mentioned requirements that the circuits in an electrical installation must always be divided up among several residual current protective devices can also be complied with optimally by using RCBOs. Short-circuit, overload, personal and fire protection are implemented in one compact device. It is easy to retrofit circuits which have not previously been equipped with a RCCB.

The 5SU1 RCBOs are available with characteristics B and C. Type A RCBOs provide protection against sinusoidal alternating currents and pulsating currents with smooth direct residual currents which do not exceed 6 mA to earth.



## Order Information

### 5SU1 RCBO – 30 mA

	B-Char., Type A, 6 kA	C-Char., Type A, 6 kA	B-Char., Type A, 10 kA	C-Char., Type A, 10 kA	B-Char., Type A super-resistant 10 kA	C-Char., Type A, super-resistant 10 kA
<b>2P</b>						
	6 A 5SU1326-6FP06	5SU1326-7FP06	5SU1324-6FP06	5SU1324-7FP06	–	5SU1324-7FR06
	10 A 5SU1326-6FP10	5SU1326-7FP10	5SU1324-6FP10	5SU1324-7FP10	–	5SU1324-7FR10
	13 A 5SU1326-6FP13	5SU1326-7FP13	5SU1324-6FP13	5SU1324-7FP13	–	–
	16 A 5SU1326-6FP16	5SU1326-7FP16	5SU1324-6FP16	5SU1324-7FP16	5SU1324-6FR16	5SU1324-7FR16
	20 A 5SU1326-6FP20	5SU1326-7FP20	5SU1324-6FP20	5SU1324-7FP20	5SU1324-6FR20	5SU1324-7FR20
	25 A 5SU1326-6FP25	5SU1326-7FP25	5SU1324-6FP25	5SU1324-7FP25	5SU1324-6FR25	5SU1324-7FR25
	32 A 5SU1326-6FP32	5SU1326-7FP32	5SU1324-6FP32	5SU1324-7FP32	–	5SU1324-7FR32

### 5SU1 RCBO – 30 mA

### 300 mA

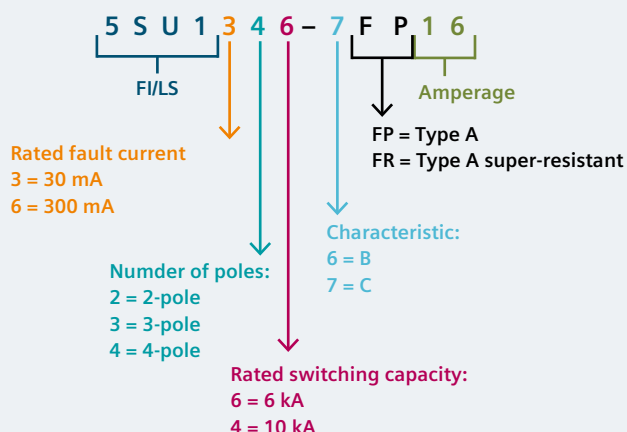
	B-Char., Type A, 6 kA	C-Char., Type A, 6 kA	B-Char., Type A, 6 kA	C-Char., Type A, 6 kA
<b>3P</b>				
	6 A 5SU1336-6FP06	5SU1336-7FP06	5SU1636-6FP06	5SU1636-7FP06
	10 A 5SU1336-6FP10	5SU1336-7FP10	5SU1636-6FP10	5SU1636-7FP10
	13 A 5SU1336-6FP13	5SU1336-7FP13	–	–
	16 A 5SU1336-6FP16	5SU1336-7FP16	5SU1636-6FP16	5SU1636-7FP16
	20 A 5SU1336-6FP20	5SU1336-7FP20	5SU1636-6FP20	5SU1636-7FP20
	25 A 5SU1336-6FP25	5SU1336-7FP25	5SU1636-6FP25	5SU1636-7FP25
	32 A 5SU1336-6FP32	5SU1336-7FP32	5SU1636-6FP32	5SU1636-7FP32
<b>4P</b>				
	6 A 5SU1346-6FP06	5SU1346-7FP06	5SU1646-6FP06	5SU1646-7FP06
	10 A 5SU1346-6FP10	5SU1346-7FP10	5SU1646-6FP10	5SU1646-7FP10
	13 A 5SU1346-6FP13	5SU1346-7FP13	–	–
	16 A 5SU1346-6FP16	5SU1346-7FP16	5SU1646-6FP16	5SU1646-7FP16
	20 A 5SU1346-6FP20	5SU1346-7FP20	5SU1646-6FP20	5SU1646-7FP20
	25 A 5SU1346-6FP25	5SU1346-7FP25	5SU1646-6FP25	5SU1646-7FP25
	32 A 5SU1346-6FP32	5SU1346-7FP32	5SU1646-6FP32	5SU1646-7FP32

### Auxiliary switch for 5SU1...-FP/FR..

#### 5ST1010-0FP



The following structure applies to the order numbers:



Note: 5SU1 RCBOs can be slid using standard pin busbars

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