

BETA Protecting Miniature Circuit Breakers



High-capacity range

Technical specifications

			5SY6	5SY4	5SY5	5SY7	5SY8	5SP4	5SP5	
Standards Approved	acc. to		EN 60898	EN 60898; EN 60947-2	EN 60947-2		--	EN 60898; EN 60947-2	EN 60898; EN 60947-2	
			EN 60898; UL 1077; CSA C22.2 No.235; UL File No. E 116386	--	--	EN 60898; UL 1077; CSA C22.2 No.235; UL File No. E 116386	--	--	--	
Operational voltage	min.	V AC/DC	24	24	24	24	24	24	24	
Acc. to EN 60898 and EN 60947-2	max.	V DC/pole	60 ¹⁾	60 ¹⁾	220	60 ¹⁾	60	60 ¹⁾	220	
	max.	V AC	440	440	440	440	440	440	440	
Acc. to UL 1077 and CSA C22.2 No.235	max.	V AC	480	480	--	480	480	480	--	
	max.	V DC/pole	60	60	--	60	60	60	--	
Rated switching capacity										
• I_{cn} acc. to IEC/EN 60898-1		kA AC	6	10	10	15	15	10	3	
• I_{cn} acc. to IEC/EN 60898-2		kA DC	--	--	10	--	--	--	10	
• I_{cu} acc. to IEC/EN 60947-2		kA AC	--	--	--	--	25	--	--	
• Acc. to UL1077 and CSA C22.2 No.235		kA AC	5	5	--	5	5	5	--	
Insulation coordination										
• Rated insulation voltage		V AC	250/440							
• Degree of pollution for overvoltage category			3/III							
Touch protection										
to EN 50274-1										
Yes										
Handle end position, sealable										
Yes										
Degree of protection										
acc. to EN 60529										
IP20, with connected conductors										
CFC and silicone-free										
Yes										
Mounting										
• Snap-on fixing system			Yes						--	
• Standard mounting rail and screw connection			--						Yes	
Terminals										
• Tunnel terminals at both ends			--						Yes	
• Combined terminals at both ends			Yes						--	
• Terminal connection solid, stranded or finely stranded, with end sleeve		mm ²	0.75 ... 25							
• Terminal tightening torque		Nm	2.5 ... 3						2.5 ... 3.5	
Conductor cross-sections										
• Solid and stranded, top and bottom terminal		mm ²	0.75 ... 35						0.75 ... 50	
• Finely stranded, with end sleeve, top and bottom terminal		mm ²	0.75 ... 25						0.75 ... 35	
Mains connection										
Any										
Mounting position										
Any										
Service life										
on average, with rated load										
20000 actuations for 5SY5 at 40 A, 50 A and 63 A 10000 actuations										
Ambient temperature										
°C										
-25 ... +45, occasionally +55, max. 95 % humidity, storage temperature: -40 ... +75										
Resistance to climate										
Acc. to IEC 60068-2-30										
6 cycles										
Resistance to vibrations										
Acc. to IEC 60068-2-6										
m/s ²										
60 at 10 Hz ... 150 Hz										

1) The operational voltage 60 V DC/pole takes into account a battery charging voltage with peak value of 72 V.