

Miniature Circuit Breakers

5SL Miniature Circuit Breakers

Introduction

Technical specifications

		5SL3	5SL6	5SL4
Standards		EN 60898-1		
Approvals		see chapter "Appendix"		
Tripping characteristic		B, C		B, C, D
Rated voltage U_n	V AC	230/400		
Operational voltage				
• Min.	V AC/DC per pole	24		
• Max.	V AC V DC/pole	250/440 60 ¹⁾		60 ¹⁾²⁾
Rated breaking capacity				
• I_{cn} acc. to IEC/EN 60898-1	kA AC	4.5	6	10
• I_{cu} acc. to IEC/EN 60947-2	kA AC	4.5	6	10
Insulation coordination				
• Rated insulation voltage	V AC	250/440		
• Pollution degree for overvoltage category		2/III		
Rated frequency	Hz	50/60		
Touch protection	Acc. to EN 50274	Yes		
Handle end position, sealable		Yes		
Degree of protection		IP20 with connected conductors, IP40 in the area of the handle with distribution cover	IP40 with connected conductors	IP20 with connected conductors
CFC and silicone-free		Yes		
Conductor cross-sections				
• 1-wire				
- Solid ($\leq 10 \text{ mm}^2$) / stranded ($\geq 16 \text{ mm}^2$)	mm ²	0.75 ... 35		
- Finely stranded with non-insulated end sleeve	mm ²	0.75 ... 25		
- Finely stranded with insulated end sleeve	mm ²	0.75 ... 25		
- Finely stranded without end sleeve	mm ²	1 ... 35		
• 2-wire, same cross-section				
- Solid ($\leq 10 \text{ mm}^2$) / stranded ($\geq 16 \text{ mm}^2$)	mm ²	0.75 ... 10		
- Finely stranded with non-insulated end sleeve	mm ²	0.75 ... 4		
- Finely stranded with insulated end sleeve	mm ²	0.75 ... 4		
- Finely stranded without end sleeve	mm ²	1 ... 4		
• 1-wire + busbar (pin thickness 1.5 mm)				
- Solid ($\leq 10 \text{ mm}^2$) / stranded ($\geq 16 \text{ mm}^2$)	mm ²	10 ... 25		
- Finely stranded with non-insulated end sleeve	mm ²	6 ... 25		
- Finely stranded with insulated end sleeve	mm ²	6 ... 16		
Terminals	± Screw (Pozidriv)	2		
• Terminal tightening torque	Nm	2.5 ... 3		
Mounting position		Any		
Service life, on average, with rated load		20000 actuations		
Storage temperature	°C	-40 ... +75		
Ambient temperature	°C	-25 ... +45, occasionally +55, max. 95 % humidity		-25 ... +55, max. 95 % humidity
Resistance to climate	Acc. to IEC 60068-2-30	6 cycles		

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

²⁾ Exempt: Characteristic C: 0.3 ... 1 A, characteristic D: 0.3 ... 2 A.