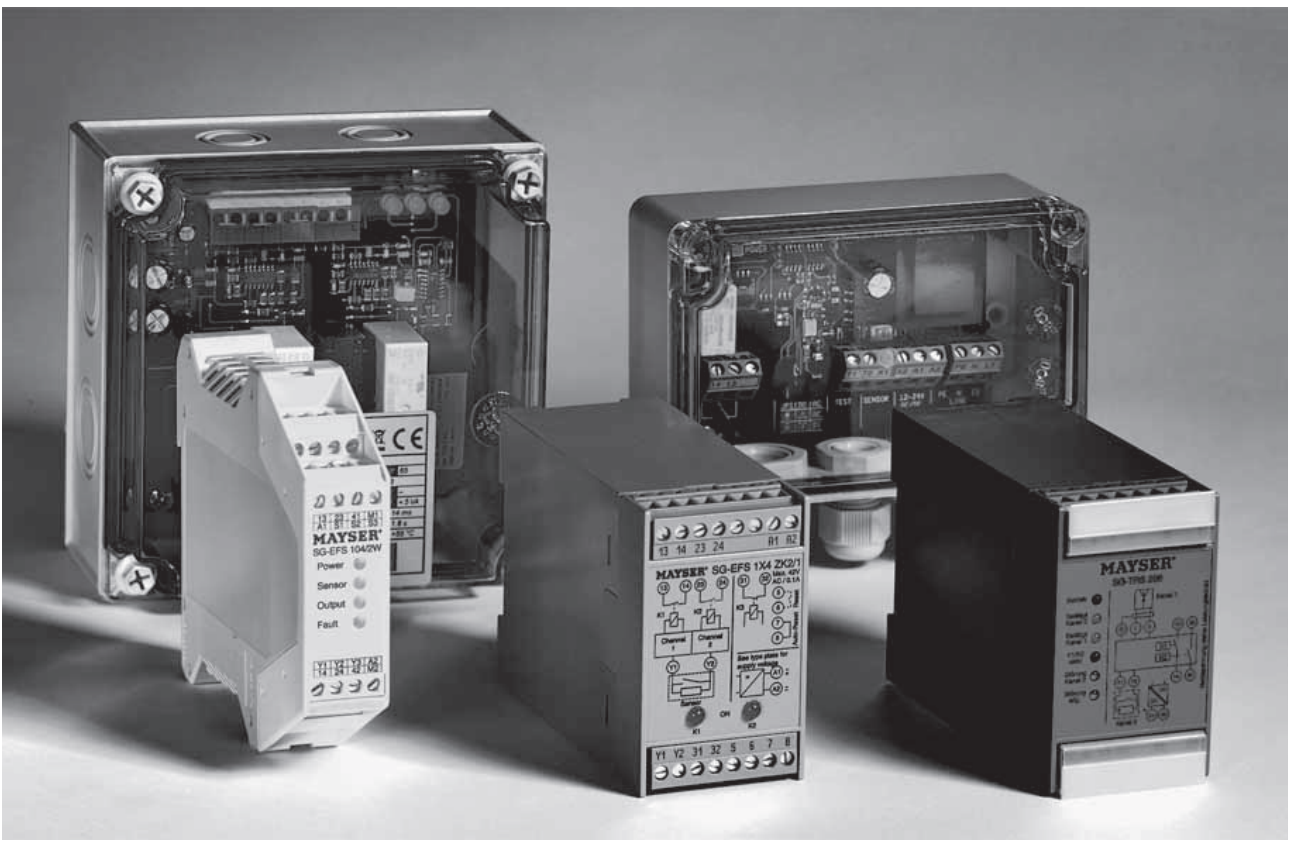




## Overview



## Control Units SG

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<b>Type</b>	<b>SG-EFS 104/4L</b>	<b>SG-EFS 104/2W</b>	<b>SG-EFS 1X4 ZK2/1</b>	<b>SG-EFS 1X4 ZK2/1 8k2</b>
<b>Safety classifications</b>				
ISO 13856: Reset function	with/without	with/without	with/without	with/without
ISO 13849-1:2006	Category 3 PL e	Category 3 PL d	Category 3 PL e	Category 3 PL e
MTTF <sub>d</sub>	69 years	257 years	313 years	313 years
DC <sub>avg</sub>	90%	60%	90%	90%
B <sub>10d</sub> [ × 10 <sup>6</sup> ]	0.4	1.8	2	2
<b>Times</b>				
Reaction time	< 30 ms	< 15 ms	< 10 ms	< 10 ms
Re-start time	< 500 ms	< 50 ms	< 190 ms	< 190 ms
<b>Control Unit-Inputs</b>				
Sensor types	SM, SL, MSL, SB	SM, SL, MSL, SB	SM, SL, MSL, SB	SM, SL, MSL, SB
Type of monitoring	4-wire technology	monitoring resistor 1k2 or 8k2	monitoring resistor 1k2	monitoring resistor 8k2
Monitoring circuit	1 × 2-channel	1 × 2-channel	1 × 2-channel	1 × 2-channel
Further Inputs				
<b>Control Unit-Outputs</b>				
Switching channels	3	2	2	2
Switching voltage (min. / max.)	- / 5 A	- / 4 A	10 mA / 2 A	10 mA / 2 A
Switching capacity (max.)	1150 VA / 120 W	1000 VA / 96 W	500 VA / 48 W	500 VA / 48 W
Further Outputs	1 signal circuit	1 signal circuit, 2 signal outputs	1 signal circuit	1 signal circuit
<b>Mechanical operating conditions</b>				
Mounting	IEC 60715 mounting rail	IEC 60715 mounting rail	IEC 60715 mounting rail	IEC 60715 mounting rail
IEC 60529: Degree of protection	IP20	IP20	IP20	IP20
Operating temperature	-25 to +55 °C	-25 to +55 °C	-20 to +50 °C	-20 to +50 °C
Dimensions (W × H × D)	22.5 × 99 × 114.5 mm	22.5 × 99 × 114.5 mm	45 × 75 × 105 mm	45 × 75 × 105 mm
<b>Variants</b>	<b>SG-EFS 104/4L</b>	<b>SG-EFS 104/2W</b>	<b>SG-EFS 104 ZK2/1</b>	<b>SG-EFS 104 ZK2/1 8k2</b>
Connecting voltage U <sub>s</sub>	AC/DC 24 V	AC/DC 24 V	AC/DC 24 V	AC/DC 24 V
Power consumption P	< 7 VA / < 3 W	< 4 VA / < 3 W	< 5 VA / < 3 W	< 5 VA / < 3 W
			<b>SG-EFS 114 ZK2/1</b>	
			AC/DC 115 V	
			< 7 VA	
			<b>SG-EFS 134 ZK2/1</b>	<b>SG-EFS 134 ZK2/1 8k2</b>
			AC 230 V	AC 230 V
			< 7 VA	< 7 VA

					
<b>SG-SLE X4-0X1</b>	<b>SG-RST 153</b>	<b>SG-RS 204</b>			
without Category 3 PL e 279 years 90% 2	without Category 2 PL c 33 years 90% 0.18	without Category 1 PL c 155 years – 1			
< 14 ms < 1.8 s	< 5 ms < 50 ms	< 15 ms < 20 ms			
SM, SL, MSL, SB monitoring resistor 22k1 4× 2-channel	SM, SL, MSL, SB monitoring resistor 8k2 1 1× test signal	SL, MSL monitoring resistor 1k2 2			
2 10 mA / 2 A 500 VA / 48 W 1 reverse travel command	1 – / 2 A 500 VA / 48 W —	1 10 mA / 2 A 250 VA / 48 W —			
wall-mounted / PCB without enclosure IP65 / IP00 -20 to +55 °C 125 × 125 × 105 mm / 107 × 99 × 41.5 mm	wall-mounted IP65 -30 to +55 °C 120 × 107 × 55 mm	IEC 60715 mounting rail IP20 -25 to +60 °C 22.5 × 75 × 105 mm			
<b>SG-SLE X4-051</b> AC/DC 24 V < 5 VA / < 3 W <b>SG-SLE X4-021</b> AC 230 V < 5 VA	<b>SG-RST 153</b> AC/DC 12 to 24 V < 1.5 VA / < 1.5 W <b>SG-RST 153</b> AC 230 V < 3 VA	<b>SG-RS 204</b> AC/DC 24 V < 4 VA / < 2 W			