

# SIRIUS 3TK28 Safety Relays

## With contactor relay enabling circuits

### Selection and ordering data

Type	3TK28 50 Basic units	3TK28 51 Basic units	3TK28 52 Basic units	3TK28 53 Basic units	3TK28 56 Expansion units <sup>1)</sup>	3TK28 57 Expansion units <sup>1)</sup>
<b>Sensors</b>						$t_v$
• Inputs	1	1	1	1	--	--
• Electronic	--	--	--	✓	--	--
• With contacts	✓	✓	✓	✓	--	--
<b>Safety mats</b>	✓	✓	✓	✓	--	--
<b>Start</b>						
• Auto	✓	✓	✓	✓	--	--
• Monitored	✓	✓	✓	✓	--	--
<b>Cascading input 24 V DC</b>	--	--	--	✓	✓	✓
<b>Key-operated switch</b>	--	--	--	--	--	--
<b>Enabling circuit, floating</b>						
• Stop category 0	3 NO	2 NO	6 NO	3 NO	6 NO	--
• Stop category 1	--	--	--	--	--	3 NO
<b>Enabling circuit, solid-state</b>						
• Stop category 0	--	--	--	1	1	1
• Stop category 1	--	--	--	--	--	--
<b>Signaling outputs</b>						
• Floating	--	1 NC	1 NC	--	1 NC	--
• Electronic	--	--	--	--	--	--
<b>Standards</b>	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508
<b>Test certificates</b>	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA
<b>Category acc. to EN 954-1 max</b>	3	3	3	4	As basic unit	As basic unit
<b>SIL level max. acc. to IEC 61508</b>	2	2	2	--	As basic unit	As basic unit
<b>Performance level PL acc. to ISO 13849-1</b>	d	d	d	e	As basic unit	As basic unit
<b>Probability of a dangerous failure per hour (PFH<sub>d</sub>)</b>	1.2 x 10 <sup>-8</sup> /h	1.1 x 10 <sup>-8</sup> /h	1.1 x 10 <sup>-8</sup> /h	1.1 x 10 <sup>-8</sup> /h	1.1 x 10 <sup>-8</sup> /h	1.1 x 10 <sup>-8</sup> /h
<b>Rated control supply voltage</b>						
• 24 V DC	✓	✓	✓	✓	✓	✓
• 24 V AC/DC	--	--	--	--	--	--
• 24 V AC	✓	✓	--	--	--	--
• 115 V AC	✓	✓	--	--	--	--
• 230 V AC	✓	✓	✓	--	--	--
• 24 ... 240 V AC/DC	--	--	--	--	--	--
<b>Rated operational voltage</b>						
• 24 V DC	✓	✓	✓	✓	✓	✓
• 230 V AC	✓	✓	✓	✓	✓	✓
• 600 V AC	✓	✓	✓	✓	✓	✓
<b>Switching capacity</b>						
• AC-15 at U = 230 V	6 A	6 A	6 A	6 A	6 A	6 A
• DC-13 at U = 24 V	10 A	10 A	10 A	10 A	10 A	10 A

✓ = Available

-- = Not available

<sup>1)</sup> For expansion of Siemens safety products.