

SIRIUS 3TK28 Safety Relays

With electronic enabling circuits

Selection and ordering data

Type	3TK28 40 Basic units	3TK28 41 Basic units	3TK28 42 Basic units	3TK28 45							
			t_v	Multi-function units "auto-matic and monitored start"	Multi-function units "auto-matic and monitored start"	Multi-function units "monitored start"	Multi-function units "monitored start"	Multi-function units OK button	Multi-function unit OK button	Multifunction units "spring-type interlocking tumbler"	Multifunction units "solenoid-interlocking tumbler"
				t_v	t_v		t_v		t_v	t_v	t_v
Sensors											
• Inputs	1	1	1	2	2	2	2	2	2	2	2
• Electronic	--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• With contacts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Safety mats	--	✓	✓	✓	✓	✓	✓	--	--	--	--
Start											
• Auto	✓	✓	✓	1	1	--	--	1	1	--	--
• Monitored	✓	✓	✓	1	1	2	2	1	1	2	2
Cascading input 24 V DC	--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Key-operated switch	--	--	--	✓	✓	✓	✓	✓	✓	✓	✓
Enabling circuit, floating											
• Stop category 0	--	--	--	2 NO	1 NO	2 NO	1 NO	2 NO	1 NO	1 NO	1 NO
• Stop category 1	--	--	--	--	1 NO	--	1 NO	--	1 NO	1 NO	1 NO
Enabling circuit, solid-state											
• Stop category 0	2 ¹⁾	2	1	2	1	2	1	2	1	1	1
• Stop category 1	--	--	1	--	1	--	1	--	1	1	1
Signaling outputs											
• Floating	--	--	--	--	--	--	--	--	--	--	--
• Electronic	--	--	--	1	1	1	1	1	1	1	1
Standards	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508	EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508 DIN EN 50156-1		EN 60204-1, EN ISO 12100, EN 954-1, IEC 61508							
Test certificates	TÜV, UL, CSA										
Category acc. to EN 954-1 max	3	4	4	4	4	4	4	4	4	4	4
SIL level max. acc. to IEC 61508	2	3	3	3	3	3	3	3	3	3	3
Performance level PL acc. to ISO 13849-1	d	e	e	e	e	e	e	e	e	e	e
Probability of a dangerous failure per hour (PFH_d)	1.1 x 10 ⁻⁸ 1/h	5.4 x 10 ⁻¹¹ 1/h	5.4 x 10 ⁻¹¹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h	6.9 x 10 ⁻⁹ 1/h
Rated control supply voltage 24 V DC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ = Available
-- = Not available

¹⁾ The outputs are only safe when an external contactor is used.