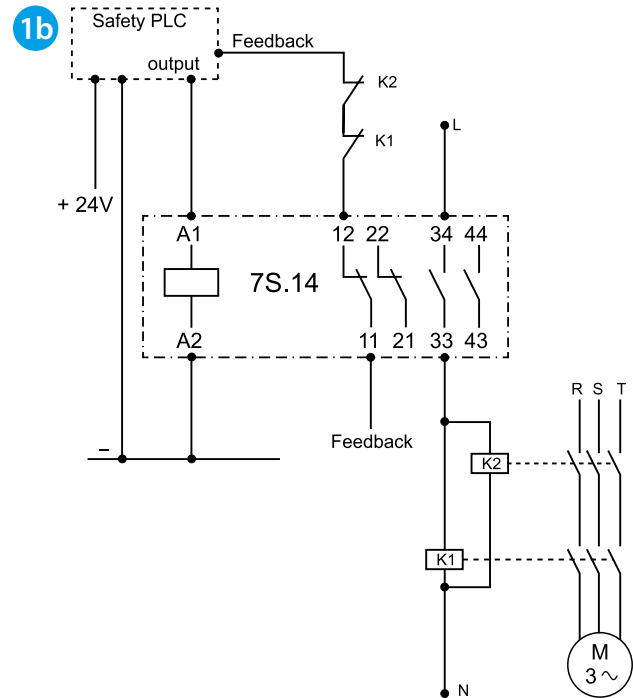
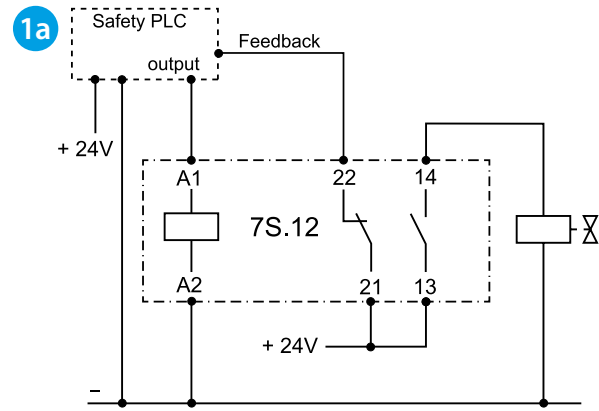
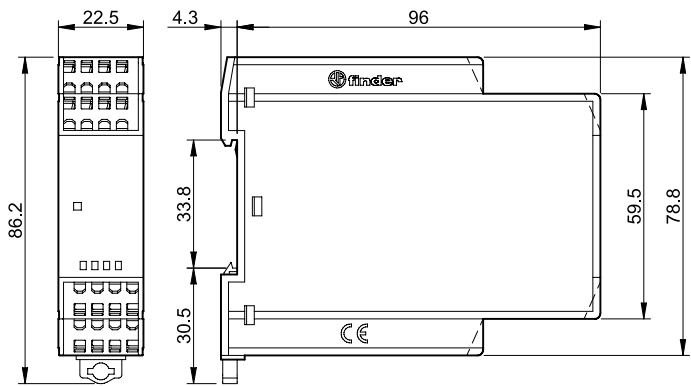




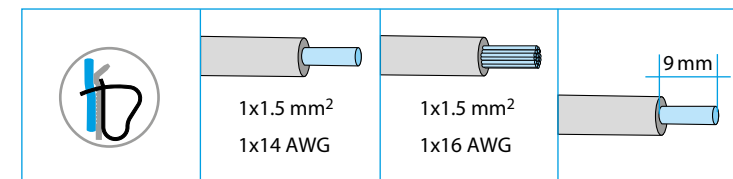
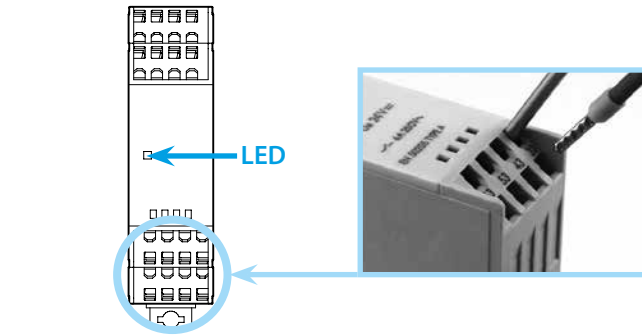
7S

	7S.1x.8.xxx.xxx0 120 U _N (110...125)V AC 230 U _N (230...240)V AC U _{min} - U _{max} (0.85...1.1)U _N	7S.1x.9.xxx.xxx0 012 U _N 12 V DC U _{min} - U _{max} (0.8...1.2)U _N 024 U _N 24 V DC 110 U _N 110 V DC U _{min} - U _{max} (0.7...1.25)U _N
	P 2.3 VA (50 Hz) / 1 W	
	7S.12.x.xxx.5110 1NO (SPST- NO) + 1NC (SPST- NC) 7S.14.x.xxx.0220 2NO (SPST- NO) + 2NC (SPST- NC) 7S.14.x.xxx.0310 3NO (SPST- NO) + 1NC (SPST- NC) 7S.16.x.xxx.0420 4NO (SPST- NO) + 2NC (SPST- NC)	
	6 A 250 V AC (Σ I ≤ 12 A)	
	AC1 AC15 (230V) DC1 (30/110/220)V DC13 (24V)	1500 VA 500 VA 700VA (7S.12) (6/0.6/0.3)A (6/0.6/0.2)A (7S.12) 1A
	(-40...+70)°C	
IP20		

EN 61810-3



7S.12 A1 22 14 A2 21 13	7S.14...0220 A1 12 22 34 44 A2 11 21 33 43	7S.14...0310 A1 22 14 34 44 A2 21 13 33 43	7S.16 A1 22 32 14 44 54 64 A2 21 31 13 43 53 63
 21 22 14 13 A1 A1 A2 A2	 11 12 34 44 22 43 33 21 A1 A1 A2 A2	 21 22 14 13 44 34 43 33 A1 A1 A2 A2	 21 22 14 13 64 54 44 32 63 53 43 31 A1 A1 A2 A2



ENGLISH

7S.12/14/16 SIL2 - IEC61508

Use of relay with forcibly guided contacts for applications up to SIL2. Considering that 7S is a single channel device, the diagnostics, entrusted for example to safety PLC, should be aimed at identifying the fault before the safety function is required. There is no requirement for dynamic tests to be imposed on the relay, but it is required that the frequency of the demand for the NO to open under emergency function will not exceed 1/100 of the demand for it to open under normal machine cycling. Any time the NO contact fails to open when the coil is de-energized the NC contact will not close, and restarting the machine must then be prevented. Using the relay as a device for realising a safety function requires that circuit techniques well established for safety purposes are followed. ie. Using the NO contacts of a relay which will remove the power supply circuit from the load when the coil is de-energised. On this basis, the failure of the NO contact to close is a failure in safety, whereas failure to open is a dangerous failure.

Relay interface type 7S.12.9xxx.5110

SIL	Load Type	Cycle time (s)	PFH _D (1/h)	External diagnostic	Architecture	DC avg
2	AC1-8A 250V	180	9*10 ⁻⁷	YES	Single channel	90%
2	AC1-4A 250V	120	8.5*10 ⁻⁷	YES	Single channel	90%
2	AC15-3A 250V	450	9.4*10 ⁻⁷	YES	Single channel	90%
2	AC15-2A 250V	240	9.3*10 ⁻⁷	YES	Single channel	90%
2	AC15-1A 250V	180	8*10 ⁻⁷	YES	Single channel	90%
2	DC13-1A 24V, 60 ms	180	9.5*10 ⁻⁷	YES	Single channel	90%

Relay interface type 7S.14.9xxx.0310 - 7S.14.9xxx.0220 - 7S.16.9xxx.0420

SIL	Load Type	Cycle time (s)	PFH _D (1/h)	External diagnostic	Architecture	DC avg
2	AC15-3A 230V	30	6*10 ⁻⁷	YES	Single channel	90%
2	AC15-1,5A 230V	12	9.3*10 ⁻⁷	YES	Single channel	90%
2	DC13-5A 24V, 100ms	60	7.7*10 ⁻⁷	YES	Single channel	90%

1a Direct load switching & contact diagnostics-common supply
1b Indirect load switching & contact diagnostics-different load supply

