

Your Schneider Electric Zelio Relays Guide



Want to learn how to control and monitor a timer relay with your smart phone?



Life Is On



Zelio RXG, RSL, and RXM electromechanical relays



RXG interface relays

Type		RXG relays without test button				RXG relays with test button			
Contact		1 CO		2 CO		1 CO		2 CO	
Current		10 A		5 A		10 A		5 A	
Connection		Flat pins (Faston type)				Flat pins (Faston type)			
LED display		Without LED	With LED	Without LED	With LED	Without LED	With LED	Without LED	With LED
Complete product	6 VDC	922-1714	922-1694	922-1811	922-1795	922-1647	922-1663	922-1748	922-1764
	12 VDC	922-1708	852-6856	852-6897	852-6866	922-1638	852-6822	922-1732	852-6847
	24 VDC	852-6881	852-6850	852-6890	852-6875	922-1619	852-6831	852-6816	852-6840
	48 VDC	922-1691	922-1675	922-1792	922-1776	922-1622	922-1650	922-1726	922-1751
	60 VDC	922-1710	922-1685	922-1818	922-1786	922-1635	922-1669	922-1745	922-1760
	110 VDC	922-1704	922-1688	922-1805	922-1789	922-1629	922-1657	922-1739	922-1758
	24 VAC	852-6878	852-6844	852-6884	852-6869	922-1616	852-6825	852-6819	852-6834
	48 VAC	922-1697	922-1672	922-1798	922-1773	922-1613	922-1641	922-1723	922-1742
	120 VAC	922-1701	922-1679	922-1802	922-1770	922-1625	922-1653	922-1720	922-1754
	220 VAC	922-1717	922-1681	922-1809	922-1782	922-1631	922-1666	922-1736	922-1767
230 VAC	852-6872	852-6853	852-6888	852-6862	922-1644	852-6828	852-6812	852-6838	
Screw connector socket		852-6894		852-6904		852-6894		852-6904	



RSL interface relays

Type		RSL relays		Sockets for RSL relays		Pre-assembled relays/sockets	
Contact		1 CO		-		1 CO	
Current		6 A - standard	6 A - low level	-		6 A	
Connection		PCB pins		Screw connector	Spring terminal	Screw connector	Spring terminal
LED display		Without LED		-		With LED	
Complete product	12 VAC/VDC	827-3502	124-0204	819-4526	827-3391	819-4522	819-4529
	24 VAC/VDC	819-4576	124-0202	8194-526	827-3391	828-3058	827-3427
	48 VAC/VDC	827-3518	124-0203	819-4535	124-0206	827-3203	827-3275
	60 VAC/VDC	827-3512	124-0205	819-4535	124-0206	-	-
	110 VAC/VDC	-	-	-	-	827-3212	827-3284
	230 VAC/VDC	-	-	-	-	827-3215	827-3287



RXM miniature relays

Type		RXM relays with test button					
Contact		2 CO		3 CO		4 CO	
Current		12 A		10 A		6 A	
Connection		Flat pins (Faston type)					
LED display		Without LED	With LED	Without LED	With LED	Without LED	With LED
Complete product	12 VDC	140-549	139-820	139-987	140-763	652-9068	652-9030
	24 VDC	140-533	849-7590	139-909	140-808	652-8992	652-9080
	48 VDC	139-870	139-814	139-965	140-820	140-268	140-505
	110 VDC	849-7742	139-808	139-993	140-842	140-252	849-7878
	24 VAC	140-527	849-7755	140-757	884-1506	884-1294	652-9052
	48 VAC	139-864	140-482	140-971	140-814	140-016	140-296
	120 VAC	849-7749	139-842	139-971	849-7834	652-9018	849-7641
	230 VAC	849-7594	139-836	140-000	140-779	652-9046	849-7626
	220 VDC	-	-	-	-	140-274	-
	240 VDC	-	-	-	-	140-280	-
Screw clamp socket (1)		652-9096		-		884-1317	
Screw connector socket (2)		652-9103		-		884-1326	
Screw connector socket (2)		849-7610		884-1288		884-1310	

(1) With mixed contacts (2) With separate contacts

Zelio RPM and RPF electromechanical relays



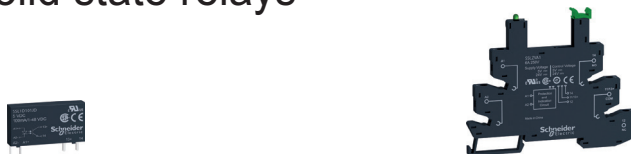
1 RPM power relays (15 A)

Type	RPM relays with test button								
Contact	1 CO		2 CO		3 CO		4 CO		
Current	15 A								
Connection	Flat pins (Faston type)								
LED display	Without LED	With LED	Without LED	With LED	Without LED	With LED	Without LED	With LED	
Complete product	12 VDC	827-3304	819-4608	819-4516	828-3121	827-3499	827-3322	827-3470	827-3366
	24 VDC	827-3290	819-4588	827-3524	828-3042	827-3486	827-3310	824-2192	827-3350
	48 VDC	827-3297	819-4591	819-4504	828-3124	827-3483	827-3420	827-3467	827-3515
	110 VDC	827-3300	819-4598	819-4513	828-3127	827-3495	827-3423	827-3461	827-3363
	24 VAC	827-3281	819-4585	827-3521	828-3111	827-3477	827-3316	827-3455	827-3357
	48 VAC	827-3293	819-4582	827-3528	828-3115	827-3489	827-3411	827-3464	827-3506
	120 VAC	827-3307	819-4594	828-3048	124-0200	827-3492	827-3329	828-3051	827-3354
	230 VAC	827-3313	819-4601	819-4510	828-3130	827-3509	827-3326	827-3473	827-3360
Screw connector socket	124-0201		828-2853		819-4642		824-2921		

2 RPF power relays (30 A)

Type	RPF relays without test button						
Contact	2 NO		2 CO		2 CO		
Current	30 A		30 A on NO / 3 A on NC		30 A		
Connection	Flat pins (Faston type)			Flat pins (Faston type)			
LED display	Without LED			Without LED			
Complete product	12 VDC	124-0197	827-3344	Complete product	24 VAC	124-0194	827-3338
	24 VDC	828-3045	827-3332		120 VAC	124-0195	827-3341
	110 VDC	124-0196	124-0199		230 VAC	124-0198	827-3348

Zelio SSL solid state relays



SSL1 slim interface solid state relays (DC switching)

Type	SSL1 relays (6 mm)		Screw connector sockets	Spring terminal sockets
Contact	1 NO		–	–
Switching type	DC switching		–	–
Load current	0.1 A	3.5 A	–	–
Load voltage	1...48 VDC		–	–
Complete product	3...12 VDC	922-1852	922-1846	922-1874
	24 VDC	922-1843	922-1837	922-1874
	60 VDC	922-1855	922-1849	922-1877
				922-1868

SSL1 slim interface solid state relays (random switching)

Type	SSL1 relays (6 mm)		Screw connector sockets	Spring terminal sockets
Contact	1 NO		–	–
Switching type	Random switching		–	–
Load current	2 A		–	–
Load voltage	24...280 VAC		–	–
Complete product	3...12 VDC	922-1821	922-1874	922-1859
	24 VDC	922-1824	922-1874	922-1859
	60 VDC	922-1833	922-1877	922-1868
	110 VAC/VDC	922-1833	922-1871	922-1861
	230 VAC/VDC	922-1833	922-1880	922-1865

SSL1 slim interface solid state relays (zero voltage switching)

Type	SSL1 relays (6 mm)		Screw connector sockets	Spring terminal sockets
Contact	1 NO		–	–
Switching type	Zero voltage switching		–	–
Load current	2 A		–	–
Load voltage	24...280 VAC		–	–
Complete product	3...12 VDC	922-1827	922-1874	922-1859
	24 VDC	922-1815	922-1874	922-1859
	60 VDC	922-1830	922-1877	922-1868
	110 VAC/VDC	922-1830	922-1871	922-1861
	230 VAC/VDC	922-1830	922-1880	922-1865

Zelio SSM and SSP solid state relays



1 SSM modular DIN rail solid state relays (DC switching)

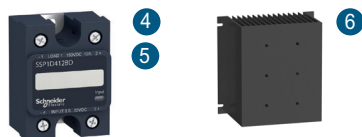
Contact	1 NO				
Switching type	DC switching				
Load current	6 A		12 A		
Load voltage	1...60 VDC	1...100 VDC	1...60 VDC	1...100 VDC	
Frontal width	12 mm		18 mm		
Complete product	4...32 VDC	922-1978	922-1981	922-1975	922-1972

2 SSM modular DIN rail solid state relays (random switching)

Contact	1 NO				2 NO		
Switching type	Random switching						
Load current	6 A		12 A		6 A		
Load voltage	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC	
Frontal width	12 mm			18 mm			
Complete product	4...32 VDC	922-1925	922-1966	922-1899	922-1944	922-1988	922-1990
	18...36 VAC	922-1912	–	922-1887	922-1947	–	–
	90...140 VAC	922-1922	–	922-1893	922-1956	–	–
	200...265 VAC	922-1934	–	922-1900	922-1969	–	–

3 SSM modular DIN rail solid state relays (zero voltage switching)

Contact	1 NO				2 NO		
Switching type	Zero voltage switching						
Load current	6 A		12 A		6 A		
Load voltage	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC	
Frontal width	12 mm			18 mm			
Complete product	4...32 VDC	922-1916	922-1962	922-1896	922-1940	922-1984	922-1997
	90...140 VAC	922-1928	–	922-1893	922-1953	–	–
	200...265 VAC	922-1931	–	922-1906	922-1950	–	–



4 SSP1 1-phase panel mount solid state relays (DC switching)

Contact	1 NO		
Switching type	DC switching		
Load current (I)	12 A	25 A	40 A
Load voltage	3...150 VDC		
Control voltage	3...12 VDC		
With thermal pad	904-5768	904-5771	904-5778
Without thermal pad	904-5765	904-5762	904-5774

5 SSP1 1-phase panel mount solid state relays (zero voltage switching)

Contact	1 NO							
Switching type	Zero voltage switching							
Load current (I)	10 A	25 A	50 A	50 A	75 A	75 A	90 A	125 A
Load voltage	24...300 VAC	24...300 VAC	24...300 VAC	48...660 VAC	24...300 VAC	48...660 VAC	48...660 VAC	48...660 VAC
Control Voltage	4...32 VDC							
With thermal pad	904-5633	904-5651	904-5670	904-5712	904-5689	904-5730	904-5759	904-5709
Without thermal pad	904-5639	904-5649	904-5667	904-5715	904-5686	904-5728	904-5746	904-5695
Control Voltage	90...280 VAC							
With thermal pad	904-5645	904-5664	904-5677	904-5724	904-5692	904-5743	904-5756	904-5706
Without thermal pad	904-5642	904-5655	904-5673	904-5721	904-5683	904-5734	904-5752	904-5702

6 Heat sinks for customer assembly

Number of SSP1 relays	Up to 3 units	Up to 3 units	Up to 3 units	Up to 2 units	1 unit	Up to 3 units
Surface area cm²/in²	6823/1058	4406/683	1425/221	659/102	336/52.10	1425/221
Thermal resistance °C/W	0.2	0.5	1	1.7	2.5	1
Reference	922-2117	922-2111	922-2120	922-2123	922-2127	922-2114
Mounting type	Panel mount					DIN rail mount

Zelio RM17, RM22, and RM35 Control Relays



1 3-phase monitoring relays for DIN rail mounting

Phase loss and sequence	Yes						
Asymmetry	–	Yes	–	Yes	–	–	
Undervoltage	–	–	Yes	–	–	–	
Voltage window mode	–	–	–	–	Yes	–	
Measuring range	183...528 VAC	183...484 VAC	183...528 VAC	183...528 VAC	160...288 VAC	183...528 VAC	304...576 VAC
Output contacts/Current	1 CO / 5 A	2 CO / 5 A	–	1 CO / 5 A	2 CO / 8 A	1 CO / 5 A	2 CO / 8 A
Power supply	Self-powered						
Frontal width	17.5 mm				22.5 mm	17.5 mm	22.5 mm
Complete product	146-250	146-238	146-591	146-597	124-0185	146-496	124-0184

2 3-phase voltage monitoring relays for DIN rail mounting

Detected loss of one or more phases	Yes						
Absence of neutral	–	Yes	–	–	–	–	
Overvoltage and undervoltage	Yes						
Measuring range	183...528 VAC	114...329 VAC	194...528 VAC	–	–	–	
Output contacts/Current	1 CO / 5 A	1 CO 5A for over Voltage threshold + 1 CO 5A for under Voltage threshold					–
Power supply	Self-powered						
Frontal width	17.5 mm	35 mm	–	–	–	–	
Complete product	146-452	146-468	146-474	–	–	–	

3 Phase or DC voltage monitoring relays for DIN rail mounting

Voltage window mode	Yes						
Overvoltage	Yes	–	–	–	–	–	
Undervoltage	Yes	–	–	–	–	–	
Measuring range	20...80 VAC/VDC	65...260 VAC/VDC	0.05...5 VAC/VDC	1...100 VAC/VDC	15...500 VAC/VDC	15...500 VAC/VDC	80...300 VAC/VDC
Output contacts/Current	1 CO / 5 A			2 CO / 8 A			
Power supply	Self-powered			24...240 VAC		380...415 VAC	110...240 VAC
Frontal width	17.5 mm			22.5 mm			
Complete product	146-519	146-531	124-0186	124-0187	124-0188	124-0189	124-0190



4 Current monitoring relays for DIN rail mounting

Monitoring characteristics	Overcurrent	Current window mode with/without memory				
Integrated current transformer	Yes	–				
Measuring range	2...20 A	4...1,000 mA	2...500 mA	0.15...15 A		
Output contacts/Current	1 CO / 5 A	2 CO / 8 A	2 CO / 5 A		2 CO / 8 A	
Power supply	24...240 VAC/VDC			380...415 VAC		
Frontal width	17.5 mm	22.5 mm	35 mm			
Complete product	146-092	124-0179	146-200	145-976	124-0191	124-0192

5 Level monitoring relays for DIN rail mounting

Level monitoring by	Resistive probe					Discrete sensor
Measuring range	5...100 kW		25 W...1 MW			–
Output contacts/Current	1 CO / 8 A		2 CO / 8 A		2 CO / 5 A	1 CO / 5 A
Power supply	24...240 VAC/VDC	380...415 VAC	24...240 VAC/VDC	380...415 VAC	24...240 VAC/VDC	24...240 VAC/VDC
Frontal width	22.5 mm				35 mm	
Complete product	124-0182	124-0183	124-0180	124-0181	124-0193	146-020

Note: Please consult our website for other application relays available for motor temperature monitoring and pump, frequency, speed or temperature control.

Zelio Electronic Timing Relays



1



2



3



4

1 Timing relays with screw terminals for DIN rail mounting, 1 contact

Type	1 function	2 functions	2 functions	1 function	Multifunction	Multifunction
Functions (1)	A	A, At	L, Li	C	A, At, B, C, H, Ht, D, Di, Ac, Bw	Ad, Ah, N, O, P, Pt, T, Tt, W
Timing range	0.1 s...100 h					
Type of output/current	1 solid state 0.7 A	1 relay output 1 CO / 8 A				
Power supply	24...240 VAC/VDC	24 VDC, 24...240 VAC			12...240 VAC/VDC	24 VDC, 24...240 VAC
Frontal width	17.5 mm					
Complete product	791-2708	791-2711	791-2739	791-2723	791-2749 (2)	791-2758

2 Timing relays with screw terminals for DIN rail mounting, 2 contacts

Type	3 functions	2 functions	Multifunction			
Functions (1)	A, At, Aw	C, Ct	A, At, Aw, C, Ct, D, Dt, Dw, Di, Dit, Diw, H, Ht, Hw, Qg, Qgt, Qgw, Qt, Qtt, Qtw, W, Wt			
Timing range	0.05 s...300 h					
Type of output/current	2 CO / 8 A					
Power supply	24 VDC, 24...240 VAC					
Frontal width	22.5 mm					
Complete product	897-6716	897-6703	897-6725			

3 Miniature plug-in timing relays for DIN rail mounting

Function (1)	A (Delay on energization)					
Timing range	0.1 s...100 h					
Type of output/current	2 CO / 5 A			4 CO / 5 A		
Power supply	24 VDC	120 VAC	230 VAC	24 VDC	120 VAC	230 VAC
Complete product	745-1938	745-1931	745-1944	745-1941	745-1950	745-1957
Screw connector socket (3)	884-1297			884-1310		

4 Analog plug-in (8-pins) timing relays for DIN rail or front panel mounting

Type	1 function	4 functions	2 functions	4 functions
Functions (1)	A	A1, A2, H1, H2	L, Li	A, B, C, Di
Timing range	0.02 s...300 h			
Type of output/current	1 CO / 5 A	1 + 1 (instant.) / 5 A	2 CO / 5 A	
Power supply	24...240 VAC/VDC			
Complete product	914-8246	914-8233	914-8230	914-8237
Screw connector socket (4)	140-785		849-7604	

<p>A: power on-delay relay Ac: on-delay & off-delay relay (5) Act: on-delay & off-delay relay (5) (6) Ad: pulse delayed relay (5) Ah: pulse delayed relay (single cycle) (5) Ak: asymmetrical on-delay & off-delay relay (5) Akt: asymmetrical on-delay & off-delay relay (5) (6) At: power on-delay relay (6) Aw: power on-delay relay with retrigger/restart control signal A1: power on-delay relay (R1 instantaneous, R2 timed) A2: power on-delay relay (both R1/R2 timed) B: interval relay (5) Bw: double interval relay (5) C: off-delay relay (5) Ct: off-delay relay (6)</p>	<p>D: symmetrical flashing relay (starting pulse-off) Di: symmetrical flashing relay (starting pulse-on) Dit: symmetrical flashing relay (starting pulse-on) (6) Diw: symmetrical flashing relay (starting pulse-on) with retrigger/restart control signal Dt: symmetrical flashing relay (starting pulse-off) (6) Dw: symmetrical flashing relay (starting pulse-off) with retrigger/restart control signal H: interval relay He: pulse on de-energization relay Ht: interval relay (6) Hw: interval relay with retrigger/restart control signal H1: interval relay (R1 instantaneous, R2 timed) H2: interval relay (both R1/R2 timed) K: delay on de-energization relay (without auxiliary supply)</p>	<p>L: asymmetrical flashing relay (starting pulse-off) Li: symmetrical flashing relay (starting pulse-on) Lt: symmetrical flashing relay (6) N: safe guard relay O: delayed safe guard relay P: pulse delayed relay with fixed pulse length Pt: pulse delayed relay with fixed pulse length (6) Qc: star-delta timing relay, 1 C/O output Qe: star-delta timing relay, 1 NC + 1 NO output & split common Qg: star-delta timing relay, 2 C/O outputs & same common Qgt: star-delta timing relay, 2 C/O outputs & same common (6) Qt: star-delta timing relay, 2 C/O outputs & split common Qtt: star-delta timing relay, 2 C/O outputs & split common (6) Tt: retriggerable bistable relay with control signal on W: interval relay with control signal off Wt: interval relay with control signal off (6)</p>
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(1) For more details about functions, please refer to the technical descriptions and schemes on our website www.schneider-electric.com.
 (2) For spring terminal version, order 9148221 (3) With separate contacts (4) With mixed contacts (5) With control signal (6) With pause-summation control signal

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