Timer and switching devices

"Technical intermediary" between the power and control level
Timer and switching devices are tried and tested as intermediaries between the
intelligent logic level – e.g. a control device or other computer system – and the highperformance machines that they control. They create an information interface, which
includes electrical isolation between the low-voltage range in which the logic works,
and the machine operation, which has high electrical power consumption.

Schleicher supplies a wide range of timer and switching relays with a variety of performance features and functions. This range of equipment, which was developed through dialogue with the market, facilitates precise component selection in accordance with the requirements of your field of application.

Time relay

- + On-delayed
- + Off-delayed
- + On-delayed and off-delayed
- + On and/or off-wipe (impulse generator)

Function relays

- + Impulse generator
- + Blinker relay
- + Relay for a star-delta switch
- + Impulse counter
- + Coupling relays
- + Latching relays



	Overview of timer & switching devices																												
	The type overview includes a selection of the								7	72	91	92				4													
	latest devices; additional types are available	-SI	12-SL	JS-	52-SI	32 L	9	0	ZW)	ZW.	ZWX	NI	=	12	33	100	1600	2	=	12	12-S	7	310	710	720	32	9	_	10
	on request.	DZ 12-SL	DZN 12-SL	DZ 52-SL	DZA 52-SI	DZD 92 L	KPT 11 KD	KSP 12	KZL/KMZ 71	KZL/KMZ 72	KZL/KMZ 91	KZL/KMZ	KTZH	NGB 12	NGD	NGM	NGM	NGS 1	NGZ	NGZ	NGZ 12-S	NGZ	NGZ	NGZ 710	NGZ 720	NGZP 32	SSP 56	SSY 12	OZD
LAYOUT	Multifunction					8			4		8					10												3	
	Monofunction						•	•					•	•	•			•	•	•	•	•	•	•	•	•			
	Multi-range			5/6	6	7	10		7	7	7					16	16					13		16	16				8
	Single-range	•	•	•	•								•		•				•	•	•		•			•			
	Fixed time													•														•	
TIME RELAY	Response delay	•		•	•	•			•	•	•	•	•			•	•		•	•	•	•				•			•
	Response delay (impulse control)		•																										•
	Off-delay					•					•	•				•	•							•	•				•
	Off-delay without auxiliary voltage																						•				Т		
	Response & off-delay, symmetrical interval					•					•	•					•										Т		
	Wiper switch-on					•			•	•	•	•				•	•										Т	•	•
	Wiper off					•										•	•											•	
	Wiper on & off										•	•					•									П	П	•	
IMPULSE GENER.	Start of pause, symmetrical & adjustable					•					•	•																	•
	Start of pause, pause & impulse adjusted separately						•																						
	Start of impulse, symmetrically adjustable					•			•	•	•	•																	
	Start of impulse, symmetrical & fixed adjustment															•													
	Start of pause & impulse, symmetrical & fixed																												
FLINCT DELAY	cycle time adjustment range																•												
FUNCT. RELAY	Impulse generator, response delay, impulse output								•	•	•	•				•	•										Т	Т	
	Impulse generator, start of pause,																												
	adjustable pause time, fixed impulse time															•													
	Impulse generator, pauses & impulse time																										T	Т	
	adjustable																•												
	Impulse generator (wiper switch-on)					•										•	•											Т	
	Blinking relay, start of pause, symmetr., fixed adjustm.													•													Т		
	Coupling relays with instantaneous changeover																	•									П		
	Latching relays, zero-voltage							•																			•		
	Star-delta relay: Switch, wiper switch-on														•		•										T		
CONTACTS	Delayed switch-over	1	1	1	1	2 ²	1		1	2 ²	1	2 ²	13	2		1	21		1	2	1	1	1	1	2	2		1	1
	Timer relay														2													1	
	Instantaneous changeover	1	1	1	1	12		1		12		12					11	2			1								
	Closer/opener per							1																			3		
ĺ	Multi-voltage AC/DC 24 - 230V								•	•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	Т	Т	П
	Separate voltage ranges					•	•	•					•					•									Т	•	•
SPECIAL FEATURES	Remote potentiometer connection																									•			
	Zero-voltage		•					•																					•
	Adding (+) or adding/subtracting (±)	+		+	+	+										+	+												±
	Ready signal via B1 (B) or Reset (R)															В													R
	Digital (D) & analogue (A) adjustment	Α	Α	Α	Α	A/D	Α		Α	Α	Α	Α	Α		Α	Α	Α		Α	Α	Α	Α	А	Α	Α	Α			D
HOUSING	Rack: 48.0 x 48.0 mm / 1.9 x 1.9 in																											П	•
	72.0 x 72.0 mm / 2.8 x 2.8 in	•	•	•	•	•																				П	\exists	\top	
HOUSING	Built-on enclosure: 22.5 mm / 0.9 in						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	\top	\top	
	45.0 mm / 1.8 in																										•	•	\neg

¹ = 1 timed and instantaneous changeover contact or 2 timed changeover contacts, depending on the function 2 = 1 timed and instantaneous changeover contact or 2 timed changeover contacts, adjustable 3 = semiconductors