

Timers

Time Switches

7LF4 4 digital time switches

Technical specifications

Data according to EN 60730-1, -2-7, VDE 0631-1, -2-7, UL 60730		Mini 7LF4 401	Top 7LF4 411 7LF4 412	Profi 7LF4 421 7LF4 422	Astro 7LF4 431 7LF4 432	Expert 7LF4 444
Supply						
Rated control supply voltage U_c • 24 V devices	V AC V AC/DC	230 --	120, 230	120, 230 24	230 --	120/230 24
Operating range • 24 V devices	$\times U_c$ $\times U_c$	0.85 ... 1.1 --		0.85 ... 1.1 0.9 ... 1.1	0.85 ... 1.1 --	80 .. 253 V 0.9 ... 1.1
Rated frequency	Hz	50				
Frequency ranges • 24 V devices	Hz Hz	50/60 --		50/60 0 ... 60	50/60 --	50/60 0 ... 60
Rated power dissipation P_v	VA	1.5	2			2.5 (4 at 24 V)
Channels/contacts						
Switching channels		1	1 or 2			4
Rated operational voltage U_e	V	250				
Rated operational current I_e • At p.f. = 1 • At p.f. = 0.6	A A	16 10				
Contacts • Mechanical switching cycles • Electrical switching cycles at p.f. = 1		CO contacts 30 000 000 80 000	10 000 000 100 000			
Minimum contact loads	V; mA	12; 100				
Incandescent lamp load	A	5	8			
Fluorescent lamps • At 7 μ F • Uncorrected	VA VA	-- 1400	60			
Safety						
Different phases permissible between drive/contact		Yes				
Electrical isolation creepage and clearances • 1-channel device • 2-channel and 4-channel devices	actuator/contact actuator/contact contact/contact	mm mm mm	4/3 4/3 --	8/6 4/3 4/3		--
Rated impulse withstand voltage U_{imp} • EMC: burst according to IEC 61000-4-4 • EMC: surge according to IEC 61000-4-5 • Electrostatic discharge according to IEC 61000-4-2	kV kV kV kV	4 > 4.4 > 2.0 > 8.0				
Power reserve storage • Minimum loading time • Battery type • Service life	h a a	> 100 h 48 h NiMH cell 10 5	6 a -- Li primary cell		5 a	
Program storage , non-volatile		--	Yes			
Overvoltage category acc. to EN 61010-1		III				
Functions						
Minimum switching sequences		1 min				1 s
Make and break cycles		1 min				1 s
Clock error per day , typical	s/day	± 2.5	± 0.86	± 0.2		
Control input , S terminal		--			Yes	
Memory spaces • Programs ¹⁾ • Pulse (alternatively) • Pulse cycle		8 -- --	56 (2 $\times$ 28)	84 1 s ... < 60 min	28 (2 $\times$ 14) -- --	4 $\times$ 3 $\times$ 28
Connections						
Terminals $\pm$ screw (Pozidriv)		PZ1				
Conductor cross-sections , main current paths • Rigid • Flexible with/without end sleeves	mm ² mm ²	1.5 ... 4 2.5/4				
Environmental conditions						
Permissible ambient temperature	°C	-10 ... +55				
Storage temperature	°C	-20 ... +60				
Resistance to climate according to DIN 60068-1		EN 60730-1				
Degree of protection according to EN 60529		IP20				
Safety class according to EN 61140 (VDE 0140-1)		II				

¹⁾ A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.