

Timers

Time Switches

7LF4 4 digital time switches

Technical specifications

Daten nach DIN EN 60730-1, -2-7, VDE 0631 Teil1, Teil 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 device	V AC V AC/DC	230 --	120, 230	120, 230 24	230 --	120/230 24
Operating range • 24 V device	$\times U_c$ $\times U_c$	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 range • 24 V device	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 with 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 operations • Electrical operations at p.f. = 1		CO contact 30 000 000 80 000	10 000 000 100 000			
Minimum contact loads	V; mA	12; 100				
Incandescent lamp ratings	A	5	8			
Fluorescent lamps • At 7 μ F • Uncorrected	VA VA	-- 1400	60			
Safety						
Different phases between actuator/contact permissible		yes				
Electrical isolation creepage and clearances • 1-channel device • 2- and 4-channel devices	mm mm mm	4/3 4/3 --	8/6 4/3 4/3			--
Rated impulse withstand voltage U_{imp} • EMC: burst acc. to IEC 61000-4-4 • EMC: surge acc. to IEC 61000-4-5 • Electrostatic discharge acc. 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 at 20 °C at 40 °C	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 DIN EN 61010-1		III				
Function						
Minimum switching sequences		1 min				1 s
Make and break cycles		1 min				1 s
Clock error per days , typical	s/day	± 2.5	± 0.86	± 0.2		
Control inputs , 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	screw (Pozidriv)	PZ 1				
Conductor cross-sections of main current path • Rigid • Flexible, with/without sleeve	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 acc. to DIN EN 60068-1		EN 60730-1				
Degree of protection acc. to DIN EN 60529		IP20				
Safety class acc. to DIN EN 61140 (VDE 0140 Part 1)		II				

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