

Technical specifications

		Mini 7LF4 401-5	Top 7LF4 411 7LF4 412	Profi 7LF4 421 7LF4 422	Astro 7LF4 431 7LF4 432	Expert 7LF4 444
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7; UL 60730				
Approved acc. to		VDE, UL 60730/UL 917 CSA C22.2 No. 14 and 177				
Supply						
• Rated control supply voltage U_c	V AC V AC/DC --	110 ... 240 --	120, 230 24	120, 230 --	230 --	120/230 24
- Operating range	$\times U_c$	0.85 ... 1.1	0.85 ... 1.1	0.85 ... 1.1 ¹⁾	0.85 ... 1.1	80 ... 253 V ¹⁾
- Frequency ranges	Hz	50 ... 60	50 ... 60	50 ... 60 ²⁾	50 ... 60	50 ... 60 ²⁾
• Rated power dissipation P_v	VA	0.035	2	2	2	2.5/4 ³⁾
Channels/contacts						
• Switching channels	V AC	1	1 or 2			4
- Rated operational voltage U_e	250					
- Rated operational current I_e	A at p.f. = 1 A at p.f. = 0.6	16 10				
• Contacts		1 CO > 5 6000 (20 A)	1 or 2 CO 10 100000			4 CO
- Mechanical switching cycles (in millions)						
- Electrical switching cycles	at p.f. = 1					
• Minimum contact load	V; mA	12; 100 5	8			
- Incandescent lamp load	at 7 µF	58	60			
- Fluorescent lamp loads	Uncorrected	1400				
Safety						
• Different phases permissible between drive/contact		Yes				
• Rated impulse withstand voltage U_{imp}	kV	4				
- EMC: burst	acc. to IEC 61000-4-4	> 4.4				
- EMC: surge	acc. to IEC 61000-4-5	> 2.0				
- Electrostatic discharge	acc. to IEC 61000-4-2	> 8.0				
• Power reserve storage	Mains/battery	a	6/2	6		5
- Battery type			Li primary cell			
• Program memory	Non-volatile	--	Yes			
• Overvoltage category	acc. to DIN EN 61010-1	III				
Function						
• Minimum switching sequences	min	1				1 s
• Make and break cycles	min	1				1 s
• Clock errors per day	Typical	s/day	+0.3 ±1 ⁴⁾	±0.86	±0.2	
• Control input	Terminal S		--			Yes
• Memory spaces						
- Programs ⁵⁾		28	56 (2 × 28)		28 (2 × 14)	4 × 3 × 28
- Pulse (alternatively)		--		84	--	
- Pulse cycle		--		1 s ... < 60 min	--	
Terminals						
• Terminals ± screw (Pozidriv)		PZ 1				
• Conductor cross-sections of main current paths						
- Rigid, max.	mm ²	4				
- Rigid, min.	mm ²	1.5				
- Flexible with end sleeve	max.	2.5				
Environmental conditions						
• Permissible ambient temperature	°C	-10 ... +55	-20 ... +55			
• Storage temperature	°C	-20 ... +60				
• Resistance to climate	acc. to EN 60068-1	10/055/21	20/055/21			
• Degree of protection	acc. to EN 60529			IP20, with connected conductors		
• Safety class	acc. to EN 60730-1	II				

¹⁾ For 24 V devices (7LF4 421-2, 7LF4 422-2 and 7LF4 444-2): tolerance -10/+10 %; operating range 0.9 ... 1.1 × U_c .

²⁾ For 24 V devices (7LF4 421-2, 7LF4 422-2 and 7LF4 444-2): frequency range 0 ... 60 Hz.

³⁾ For 24 V device (7LF4 444-2): $P_v = 4$ VA.

⁴⁾ At 25 °C a clock error of +0.3 s is assumed. Accuracy may deviate by a further ±1 s around this value.

⁵⁾ A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.