

Technical specifications

Data acc. to DIN EN 60730-1, DIN EN 60730-2-7		Synchronous time switches without power reserve					Quartz-clock time switches with power reserve							
		7LF5 300-1	7LF5 300-5	7LF5 300-6	7LF5 300-7	7LF5 301-0	7LF5 301-1	7LF5 301-4	7LF5 301-5	7LF5 301-6	7LF5 301-7	7LF5 305-0		
Operating mode		synchronous					quartz							
Time program		day	day	week	hour	day	day	day	week	day	week	day		
Supply														
Rated control supply voltage U_c		V AC	230					230						
Operating range		$\times U_c$	0.85 ... 1.1					0.85 ... 1.1						
Rated frequency		Hz	50					50						
Frequency range		Hz	50					50/60						
Rated power dissipation P_v		W	1					1	0.2	0.2	1	1	1	
Channels/contacts														
Switching channels			1					1						
Rated operational voltage U_e		V AC	250					250						
Rated operational current I_e														
• at p.f. = 1		A	16					16						
• at p.f. = 0.6		A	4					4						
Contact			NO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	NO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000	CO contacts 20 000 000 100 000		
• Mechanical operations														
• Electrical operations (at p.f. = 1)														
Minimum contact loads		V; mA	4; 1					4; 1						
Incandescent lamp ratings		A	5					5						
Fluorescent lamps														
• At 7 μ A		VA	60					60						
• Uncorrected		VA	1400					1400						
Safety														
Different phases between actuator/contact permissible			yes					yes						
Electrical isolation		creepage and clearances actuator/contact	mm	8/6					8/6					
Rated impulse withstand voltage U_{imp}		kV	4					4						
• EMC: burst acc. to IEC 61000-4-4		kV	> 4.4					> 4.4						
• EMC: surge acc. to EC 61000-4-5		kV	> 2.0					> 2.0						
• Electrostatic discharge acc. to IEC 61000-4-2		kV	> 8.0					> 8.0						
Power reserve storage								100 h		6 a		100 h		
• Minimum loading time		h	--					48		--		48		
• Battery type			--					NiMH		Li primary cell		NiMH		
• Service life		at 20 °C	--					6		10		6		
at 40° C		a	--					5						
Overvoltage category acc. to DIN EN 61010-1			III					III						
Function														
Minimum switching intervals		min	30	30	240	5	30	30	30	240	30	240	30	
Make and break cycles		min	15	15	120	37.5 s	10	15	15	120	15	120	10	
Switching accuracy		min	± 5	± 5	± 30	± 0.2	± 5	± 5	± 5	± 30	± 5	± 30	± 5	
Clock errors per day			system-synchronized					± 2.5 s		± 60 s/year		± 2.5 s		
Connections														
Terminals		screw (Pozidriv)	PZ 1					PZ 1						
Conductor cross-sections main current paths														
• Rigid		mm ²	1.5 ... 4					1.5 ... 4						
• Flexible, with/without sleeve		mm ²	2.5/4					2.5/4						
Environmental conditions														
Permissible ambient temperature		°C	-10 ... +55					-10 ... +55						
Storage temperature		°C	-10 ... +60					-10 ... +60						
Resistance to climate acc. to DIN EN 60068-1			EN 60 730-1					EN 60 730-1						
Degree of protection acc. to DIN EN 60529			IP20					IP20						
Safety class acc. to DIN EN 61140 (VDE 0140 part 1)			II					II						