

# Time relays

## Technical characteristics

### Plug-in and flush mount version 48x48mm/1.9x1.9"

TYPE	L48T...	L48TP...	L48TPB...	L48M...
<b>DESCRIPTION</b>				
	On delay	On delay	On delay	Programmable multifunction
	Single scale	Multiscale	Multiscale	Multiscale
	Single voltage	Multivoltage	Single voltage	Multivoltage
<b>CONTROL CIRCUIT</b>				
Rated supply voltage Us	24VAC/DC①	24VAC/DC①	24VAC/DC①	24-240VAC/DC①
	220-240VAC①	110VAC① 220-240VAC①	220-240VAC①	
Rated frequency	50-60Hz			
Operating voltage range	0.85-1.1 Us			
Power consumption (maximum)	6VA			
Power dissipation (maximum)	Ⓜ			
<b>TIMING CIRCUIT</b>				
Time setting range	Single scale	Multiscale	Multiscale	Multiscale
	0.1-3s	0.3-3s	0.05-1s	0.05-1s
	0.1-6s	0.12-12s	0.10-10s	0.1-10s
	0.5-30s	10-100s	0.6s-1min	0.6s-1min
	0.5-60s	7.8-780s	6s-10min	6s-10min
	1s-3min	18s-3min		0.05-1min
	3s-6min	72s-12min		0.1-10min
	30s-30min	10-100min		0.6min-1h
	30s-60min	78-780min		1min-10h
3min-3h				
Setting accuracy	±9%		±5%	
Repeat accuracy	≤±0.5%		±0.5%	
Influence of voltage variation	±0.3%		±0.1%	
Average variation of set delays in related to 20°C condition	at -20°C	+2%	+2%	
	at +60°C	-3%	-3%	
Minimum ON time	—			
Resetting time	during operation	≥ 0.1s	≥ 0.1s	≥ 0.1s
	elapsed time	≥ 65ms	≥ 65ms	≥ 65ms
Immunity time for microbreakings	≤ 40ms	≤ 40ms	≤ 40ms	≤ 40ms
<b>RELAY OUTPUTS</b>				
Number of relays	1	1	2	2
Contact arrangement	1 delayed c/o	1 delayed c/o	2 del. or 1 inst. + 1 del. c/o	2 delayed c/o
Maximum switching voltage	250V			
IEC conventional free air thermal current (Ith)	5A			
UL/CSA and IEC/EN 60947-5-1 designation	B300			
Electrical life (with rated load)	10 <sup>5</sup> cycles			
Mechanical life	30x10 <sup>6</sup> cycles			
<b>CONNECTIONS</b>				
Tightening torque maximum	—			
Conductor section (min-max)	—			
<b>INSULATION (input-output)</b>				
IEC rated insulation voltage Ui	250V			
IEC power frequency withstand voltage Uimp	—			
IEC power frequency withstand voltage	2kV			
<b>AMBIENT CONDITIONS</b>				
Operating temperature	-10...+60°C			
Storage temperature	-30...+80°C			
Housing material	Self-extinguishing polyamide			

① Other voltages on request.

② Consult Customer Service for information; see contact details on inside front cover.

NOTE:

del. = delayed inst. = instantaneous c/o = changeover/SPDT