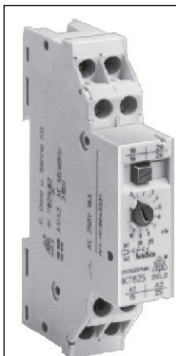


MINITIMER Timer, On-delay IK 7825

Translation
of the original instructions

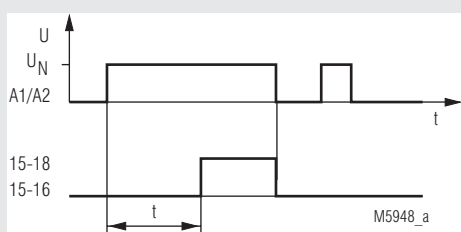


0221566



- Power ON-delay relay according to EN 61812-1
- Delay of 0.05 s ... 60 min.
- Repeat accuracy $\leq 0.5\% + 10\text{ ms}$
- Pushbutton for manual actuation of the contact
- 1 or 2 changeover contacts for 16 A
- Width 17.5 mm

Function Diagram



Approvals and Markings



Applications

- Time-dependent controllers

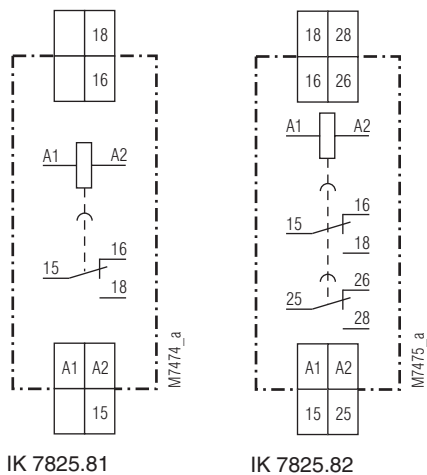
Indicators

Push button: Pressed, when relay energized

Notes

A change of time setting is accepted directly.
If during elaps of time the time setting is changed, the output relay may switch unintentionally!

Circuit Diagrams



IK 7825.81

IK 7825.82

Connection Terminals

Terminal designation	Signal description
A1	L / +
A2	N / -
15, 16, 18; 25, 26, 28	Changeover contacts

Technical Data			
Time ranges:	0.05	...	1 s
	0.5	...	10 s
	5	...	100 s
	0.5	...	10 min.
	1.5	...	30 min.
	3	...	60 min.
Tolerance of end value:	- 5 ... + 25 % of nominal value		
Time setting:	Steppless, 1:20 on relative scale		
Recovery time:	Approx. 60 ms (after time run-down)		
	Approx. 700 ms (during time run-down)		
Repeat accuracy:	< ± 0.5 % + 10 ms		
Voltage influence:	< 1 % over voltage range		
Temperature influence:	< 0.1 % / K		
Input			

Input

Nominal voltage U_N :	AC 24, 127, 230 V DC 24 V
Voltage range:	90 ... 110 % U_N
Release voltage:	15 % U_N
Nominal consumption	
AC:	2.3 VA
DC:	1.5 W
Nominal frequency:	50 Hz
Frequency range:	± 5 %

Output

Contacts	
IK 7825.81:	1 changeover contact delayed
IK 7825.82:	2 changeover contacts delayed
Contact material:	AgSnO ₂
Measured nominal voltage:	AC 250 V
Release time of the contacts:	< 30 ms
Thermal current I_{th} :	16 A
Electrical life	At 500 switching cycles / h
Under ohmic load AC 230 V:	6 A 150 x 10 ⁴ switching cycles
	10 A 72 x 10 ⁴ switching cycles
	16 A 12 x 10 ⁴ switching cycles
	10 A 10 x 10 ⁴ switching cycles
Inductive load cos. φ 0.6:	
Direct current load:	See arc limit curve
Permissible switching frequency:	1000 switching cycles / h
Short circuit strength	
Max. fuse rating:	16 A gG / gL IEC/EN 60947-5-1
Mechanical life:	> 3 x 10 ⁶ switching cycles

General Data

Operating mode:	Continuous operation	
Temperature range		
Operation:	- 20 ... + 45 °C	
Storage:	- 25 ... + 70 °C	
Relative Luftfeuchte:	95 % at 40 °C	
Betriebshöhe:	≤ 2000 m	
Clearance and creepage distances		
Rated impulse voltage / pollution degree:	4 kV / 2 (basis insulation)	IEC 60664-1
Overvoltage category:	III	
Insulation test voltage, type test:	2,5 kV; 1 min	
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation		
80 MHz ... 2.7 GHz:	10 V / m	IEC/EN 61000-4-3
Fast transients:	2 kV	IEC/EN 61000-4-4
Surge voltages		
Between		
wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	2 kV	IEC/EN 61000-4-5
HF-wire guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011

Technical Data		
Degree of protection		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm, frequency 10 ... 55 Hz IEC/EN 60068-2-6	
Climate resistance:	20 / 045 / 04 IEC/EN 60068-1	
Terminal designation:	EN 50005	
Wire connection:	DIN 46228-1/-2/-3/-4	
Cross section:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded ferruled	
Stripping length:	10 mm	
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60999-1	
Fixing torque:	0.8 Nm	
Mounting:	DIN rail IEC/EN 60715	
Weight:	100 g	

Dimensions

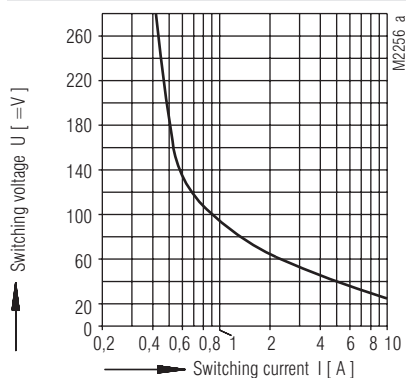
Width x height x depth:	17.5 x 89 x 58 mm
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Standard Type			
IK 7825.81	AC 230 V	50 Hz	5 ... 100 s
Article number:	0043326		
• Output:	1 changeover contact delayed		
• Nominal voltage U_N :	AC 230 V		
• Time range:	5 ... 100 s		
• Width:	17.5 mm		

Ordering Example

IK 7825	.81	AC 230 V	50 Hz	1 s	
					Time range limit value
					Nominal frequency
					Nominal voltage
					Contact
					Type

Characteristic



safe braking, no continuous arcing
max. 1000 switching cycles / h
contact spacing min. 0.6mm

Arc limit curve