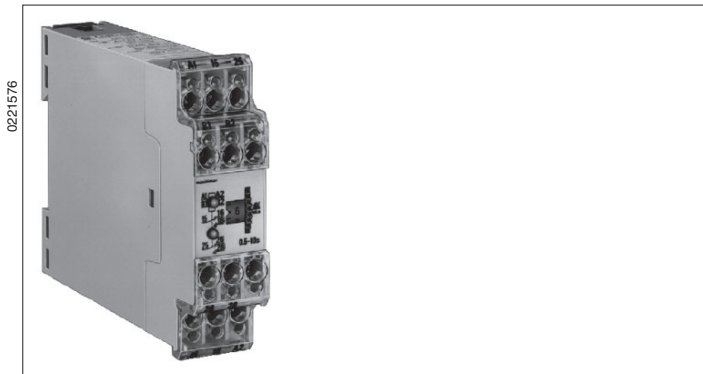


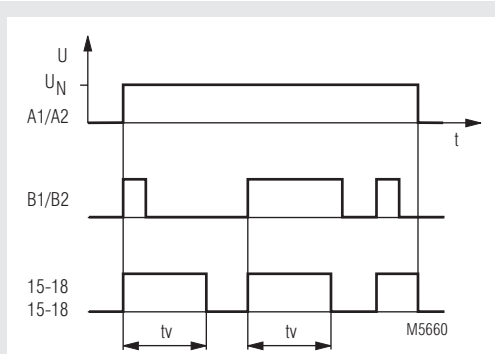
MINITIMER Pulse Extender MK 7856/024

Translation
of the original instructions



- According to IEC/EN 61812-1
- Converts pulses to selectable length
- No repeat control during the time period (of the pulse)
- Pulse lengthening / shortening
- Time range up to 60 min
- Repeat accuracy $\leq \pm 1\%$
- Setting on absolute scale
- 2-voltage version
- LED displays for availability and contact position
- Available with 1 or 2 changeover contacts
- Width 22.5 mm

Function Diagram



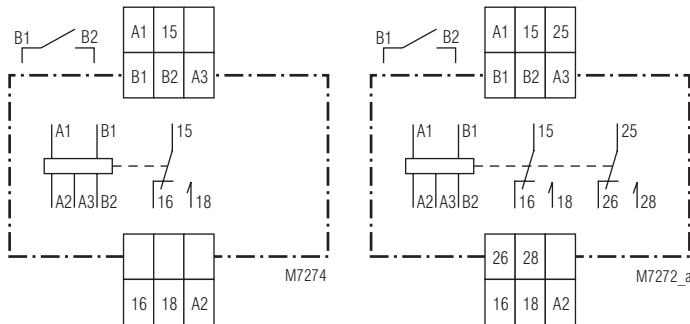
Approvals and Markings



Application

Time-dependent controllers

Circuit Diagram



MK 7856.71/024

MK 7856.72/024

Connection Terminals

Terminal designation	Signal description
A1, A2, A3	Power supply AC/DC
15, 16, 18	Changeover contacts (output relay)
25, 26, 28	Changeover contacts (2. output relay)

Technical Data	
Time circuit	
Time ranges:	
0.05 ... 1 s	0.5 ... 10 min.
0.15 ... 3 s	1.5 ... 30 min.
0.5 ... 10 s	3 ... 60 min.
1.5 ... 30 s	
3 ... 60 s	
5 ... 100 s	
15 ... 300 s	
Time setting:	Stepless
Min. switch-on time:	≥ 20 ms
Repeat accuracy:	≤ ± 1 % of full-scale value
Voltage influence:	≤ 1 %
Temperature influence:	< 0.1 % / K
Input	

Nominal voltage U_N:	AC/DC 24 ¹⁾ + AC/DC 42 V ²⁾
	AC/DC 24 ¹⁾ + AC/DC 48 V ²⁾
	AC/DC 24 ¹⁾ + AC 110 V ²⁾
	AC/DC 24 ¹⁾ + AC 127 V ²⁾
	AC/DC 24 ¹⁾ + AC 230 V ²⁾
	AC/DC 24 ¹⁾ + AC 240 V ²⁾
	¹⁾ at terminals A3 - A2 ²⁾ at terminals A1 - A2
Voltage range:	0.8 ... 1.1 U_N
Nominal consumption:	AC 230 V 7 VA
	DC 24 V 0.8 W
Nominal frequency:	50 / 60 Hz
Frequency range:	± 5 % f_N

Output	
Contacts	
MK 7856.71:	1 changeover contact
MK 7856.72:	2 changeover contacts
Contact material:	AgNi + 0.2 µm Au
Measured nominal voltage:	AC 250 V
Thermal current I_{th}:	5 A
Switching capacity	
To AC 15:	
NO contact:	3 A / AC 230 V IEC/EN 60947-5-1
NC contact:	2 A / AC 230 V IEC/EN 60947-5-1
Electrical life	
To AC 15 at 3 A, AC 230 V: 5 x 10 ⁵ switching cycles IEC/EN 60947-5-1	
Permissible switching frequency:	6000 switching cycles / h
Short circuit strength	
Max. fuse rating:	6 A gG / gL IEC/EN 60947-5-1
Mechanical life:	30 x 10 ⁶ switching cycles

General Data	
Operating mode:	Continuous operation
Temperature range:	
Operation:	- 20 ... + 60 °C
Storage:	- 20 ... + 60 °C
Altitude:	< 2000 m
Clearance and creepage distances	
Rated impulse voltage / pollution degree:	4 kV / 2 IEC 60664-1
EMC	
Electrostatic discharge:	8 kV (air) IEC/EN 61000-4-2
HF irradiation:	10 V/m IEC/EN 61000-4-3
Fast transients:	2 kV IEC/EN 61000-4-4
Surge voltages	
Between	
wires for power supply:	2 kV IEC/EN 61000-4-5
Between wire and ground:	4 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 / 060 / 04 IEC/EN 60068-1
Terminal designation:	EN 50005
Wire connection:	2 x 1.5 mm ² solid or 2 x 1.0 mm ² stranded wire with sleeve DIN 46228-1/-2/-3/-4
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:	140 g

Dimensions	
Width x height x depth:	22.5 x 82 x 99 mm

Standard Type	
MK 7856.71/024	AC/DC24V + AC220...240V 50/60Hz 3s
Article number:	0030950
• Output:	1 changeover contact
• Nominal voltage U_N :	AC/DC 24 V + AC 220 ... 240 V
• Time range:	0.15 ... 3 s
• Width:	22.5 mm

Ordering example	
MK 7856 .71 /024	AC/DC 24 V + AC 230 V 50 / 60 Hz 60 min.
	Time range end value
	Nominal frequency
	Nominal voltage
	Variant
	Contact
	Type

Accessories	
ET 4752-143:	Marking plate Article number: 0043203