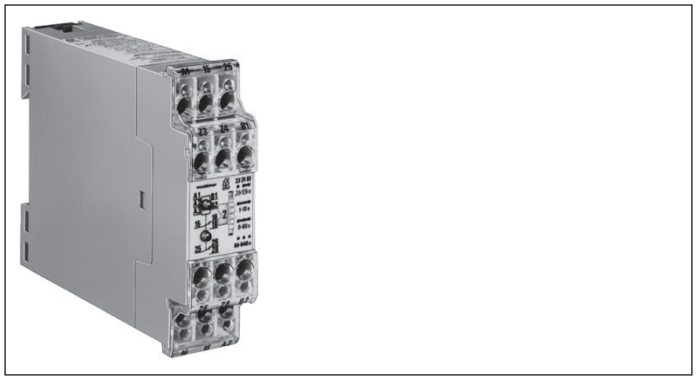
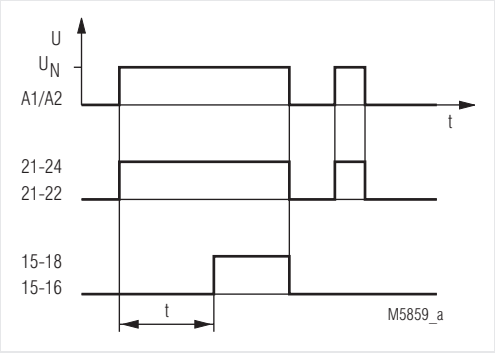
MINITIMER
Multi Range Time Delay Relay, Operate Delay
MK 7858

DOLD



- According to IEC/EN 61 812-1
- Delay of 0.25 ... 640 s or min.
- 4 switchable time ranges
- Repeat accuracy ≤ ± 0.5 %
- Can be controlled with 2-wire initiators at terminals A1-A2, residual current ≤ 5 mA
- Available as 2-voltage version
- Available with instantaneous contact
- 2 changeover contacts
- 2 LED displays for power supply and contact position
- Width 22.5 mm

Function Diagram



Approvals and Marking

CE

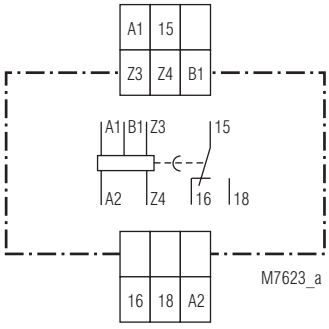
Application

Time-dependent controllers

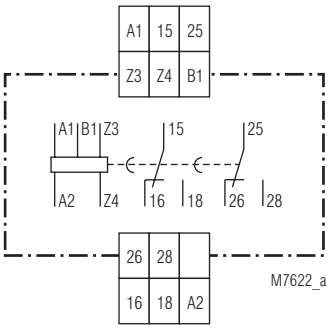
Indicators

upper LED: on, when supply connected
lower LED: on, when output relay energized

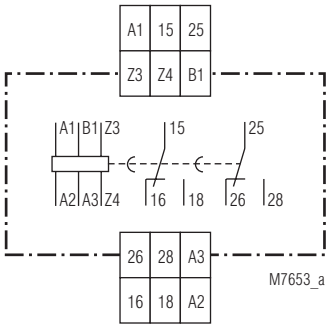
Circuit Diagram



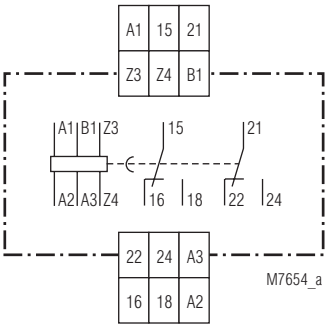
MK 7858.81



MK 7858.82



MK 7858.82/024



MK 7858.32/024

Technical Data

Time circuit

Time ranges: 4 time ranges can be programmed externally via terminals Z3-Z4-B1

Bridge Z3 Z4 B1	Device with seconds ranges	Device with minutes ranges
0 0—0	0.25 - 2.5 s	0.25 - 2.5 min
0———0	1 - 10 s	1 - 10 min
0—0—0	8 - 80 s	8 - 80 min
0 0 0	64 - 640 s	6 - 640 min

Time setting: steppless
Recovery time
tw 50 / 100: 40 ms
Repeat accuracy: ≤ ± 0.5 % of set value
Voltage influence: ≤ 1 %
Temperature influence: < 0.1 % / K

Input

Nominal voltage U_N: AC/DC 24, 42, 48 V (see Variant)
Voltage range: AC 0.8 ... 1.1 U_N
DC 0.9 ... 1.25 U_N

Nominal consumption	AC 230 V	DC 24 V
MK 7858.81:	7 VA	1 W
MK 7858.82:	8.5 VA	1 W
MK 7858.32:	9.5 VA	1 W

Nominal frequency: 50 / 60 Hz
Frequency range: ± 5 % f_N
Release voltage: 15 % U_N
Permissible residual current: 5 mA

Technical Data

Output

Contacts

MK 7858.81:	1 delayed changeover contact
MK 7858.82:	2 delayed changeover contacts
MK 7858.32:	1 delayd chageover contact 1 non-delayed changeover contact
Thermal current I_{th}:	5 A
Switching capacity	
to AC 15:	
NO contact:	3 A / AC 230 V IEC/EN 60 947-5-1
NC contact:	2 A / AC 230 V IEC/EN 60 947-5-1
Electrical life	IEC/EN 60 947-5-1
to AC 15 at 3 A, AC 230 V:	5 x 10^5 switching cycles
Permissible operating frequency:	3 000 switching cycles / h
Short circuit strength max. fuse rating:	6 A gL IEC/EN 60 947-5-1
Mechanical life:	30 x 10^6 switching cycles

General Data

Operating mode:	Continuous operation
Temperature range:	- 20 ... + 60 °C
Clearance and creepage distances	
rated impuls voltage / pollution degree:	4 kV / 3 IEC 60 664-1
EMC	
Electrostatic discharge:	4 kV (air) IEC/EN 61 000-4-2
HF irradiation:	10 V/m IEC/EN 61 000-4-3
Fast transients:	4 kV IEC/EN 61 000-4-4
Surge voltages between	
wires for power supply:	2 kV IEC/EN 61 000-4-5
between wire and ground:	4 kV IEC/EN 61 000-4-5
HF-wire guided:	10 V IEC/EN 61 000-4-6
Interference suppression	Limit value class B EN 55 011
Degree of protection	
Housing:	IP 40 IEC/EN 60 529
Terminals:	IP 20 IEC/EN 60 529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94
Vibration resistance:	Amplitude 0.35 mm, frequency 10 ... 55 Hz, IEC/EN 60 068-2-6
Climate resistance:	20 / 60 / 04 IEC/EN 60 068-1
Terminal designation:	EN 50 005
Wire connection:	2 x 1.5 mm² solid or 2 x 1.0 mm² stranded wire with sleeve DIN 46 228-1/-2/-3/-4
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1
Mounting:	DIN rail IEC/EN 60 715
Weight:	150 g

Dimensions

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

Standard Type

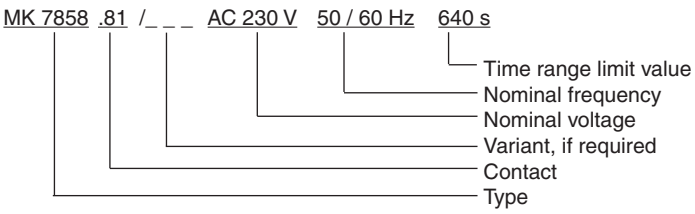
MK 7858.81/024 AC/DC 24 V + AC 220 ... 240 V 640 s

Article numer:	0039445
• Output:	1 changeover contact, delayed
• Nominal voltage U_N:	AC/DC 24 V + AC 220 ... 240 V
• Time ranges:	0.25 ... 640 s
• Width:	22.5 mm

Variant

MK 7858. _ _ /024: 2-voltage version
AC/DC 24 V[1] + AC 110 ... 127 V[2]
AC/DC 24 V[1] + AC 230 V[2]
[1] at terminals A3 - A2
[2] at terminals A1 - A2

Ordering example for variant



Accessories

ET 4752-143: Marking plate

Safety Remark

- when operating the unit the general standards for electrostatic endangered part have to be ovserved