

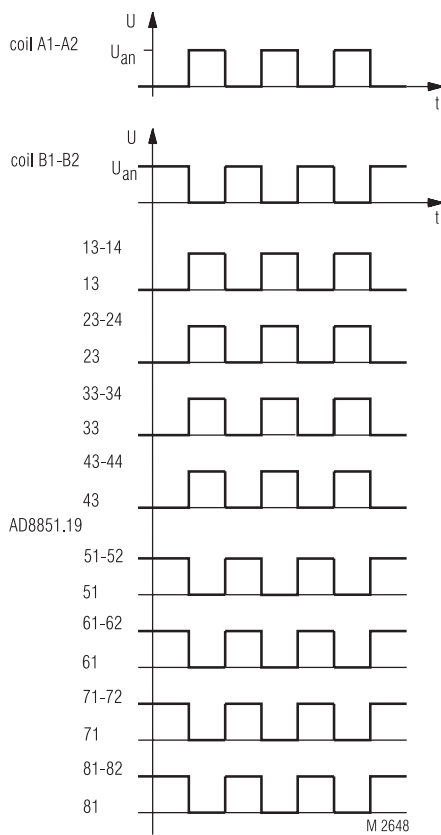
Latching Relay AD 8851

Translation
of the original instructions



- According to IEC/EN 61810-1
- Manual operation possible
- Contact position indication via control lever
- Max. 4 NC contacts, 4 NO contacts
- Width 45 mm

Function Diagram



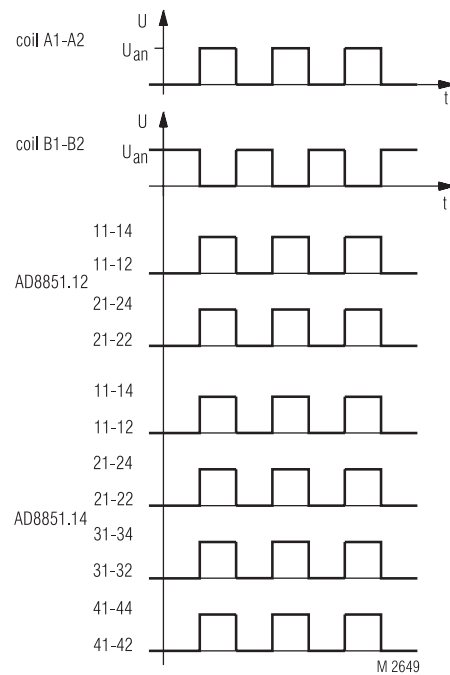
Approvals and Markings



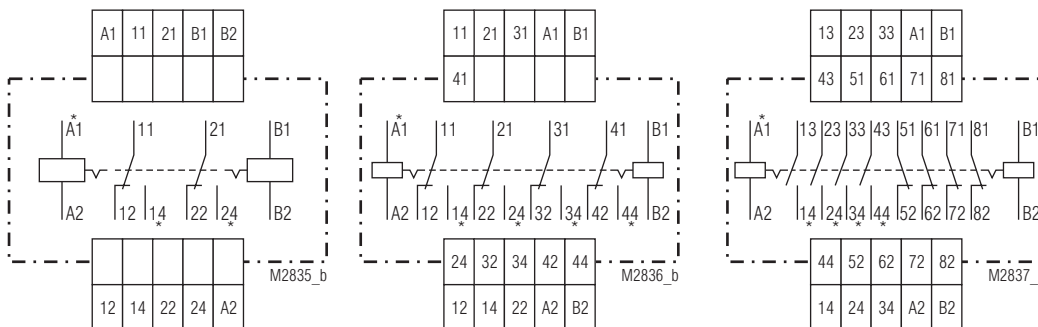
Application

Interlocking of control circuits

Function Diagram



Circuit Diagrams



The Circuit Diagrams have been provided with star-Marking. If the coil, provided with the star will be energized, the contacts, provided with the star, are closed.

Function

The relay will be actuated by impulse or continuous energizing of the coils A1-A2 or B1-B2. During the energizing of both systems at the same time, the interlocking is disabled; the contact position corresponds with the energizing of the coil A1-A2.

All contacts are on the same magnetic system, which is connected on A1, A2. Thus it is achieved, that in case of energizing of both systems at the same time, there will be no undefined contact condition.

Technical Data

Input

Nominal voltage U_N:	AC 24, 42, 110, 127, 230, 240 V DC 12, 24, 60, 110, 220, 240 V
Voltage range:	0.8 ... 1.1 U_N
Nominal consumption:	AC 230 V / 3 VA DC 220 V / 3 W
Nominal frequency:	50 / 60 Hz
Frequency range:	$\pm 5\%$

Output

Contacts

AD 8851.12:	2 changeover contacts
AD 8851.13:	3 changeover contacts
AD 8851.14:	4 changeover contacts
AD 8851.17:	2 NO, 2 NC contacts
AD 8851.18:	3 NO, 3 NC contacts
AD 8851.19:	4 NO, 4 NC contacts
Operate time of contacts:	< 40 ms
Release time of contacts:	< 40 ms
Thermal current I_{th}:	8 A / 5 A / 4 A current via 2/3/4 contacts

Switching capacity

to AC 15	
NO contacts:	3 A / AC 230 V IEC/EN 60947-5-1
NC contacts:	1 A / AC 230 V IEC/EN 60947-5-1
Electrical life	IEC/EN 60947-5-1

to AC 15 at 1 A, AC 230 V:	1 x 10 ⁵ switching cycles 3 000 switches/h at 50 % of the switching capacity 0.5 x 10 ⁶ switching cycles 1 000 switches/h at 100% of the switching capacity
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Permissible switching frequency:

3 000 switching cycles / h

Short circuit strength

max. fuse rating: 10 A gG / gL IEC/EN 60947-5-1

Mechanical life:

50 x 10⁶ switching cycles

General Data

Operating mode: Continuous operation

Temperature range: - 20 ... + 45°C

Clearance and creepage distances

Rated impulse voltage / pollution degree: 4 kV / 2 IEC 60664-1

EMC

Electrostatic discharge: 6 kV (contact) IEC/EN 61000-4-2

Fast transients: 4 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

Degree of protection:

Housing: IP 40 IEC/EN 60529

Terminals: IP 20 IEC/EN 60529

Housing: Thermoplast with V0-behaviour

to UL subject 94

Vibration resistance: Amplitude 0,35 mm

frequency 10...55Hz, IEC/EN 60068-2-6

Climate resistance: humid heat IEC/EN 60068-2-30

Terminal designation: EN 50005

Technical Data

Wire connection: 2 x 2.5 mm² solid or
2 x 1.5 mm² stranded wire with sleeve
DIN 46228-1/-2/-3/-4

Wire fixing: Flat terminals with self-lifting
clamping piece IEC/EN 60999-1

Mounting: DIN rail IEC/EN 60715

Weight: 400 g

Dimensions

Width x height x depth: 45 x 77 x 127 mm

Standard Type

AD 8851.19	AC 230 V	50 / 60 Hz	
Article number	0016356		stock item
• Output:	4 NO, 4 NC contacts		
• Nominal voltage U_N :	AC 230 V		
• Width:	45 mm		

Ordering Example

AD 8851 .18 AC 230 V 50 / 60 Hz

