



Z45, Z46, Z47, Z60 Coupling Relays

Application

These coupling relays are used to control plant components in the DDC system. They serve as switching coupling components between the DDC switching outputs and the device inputs; they can be used to control valve actuators, pumps, burners or fans, for example.



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Product Description

Z45, Z46, Z47, Z60

Important Information on Product Safety

Safety instructions

This document contains information on installing and commissioning the product “Z45, Z46, Z47, Z60”. Each person who carries out work on this product must have read and understood this document. If you have any questions that are not resolved by this document, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this document, the protection provided could be impaired.

The applicable regulations must be observed when installing and using the devices. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (German Association for Electrical, Electronic & Information Technologies). If the device is used outside of the EU, it is the responsibility of the plant engineer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers based on their technical training, knowledge and experience, as well as their knowledge of the applicable regulations.

Symbol meanings



WARNING

Indicates a hazard of medium risk which can result in death or serious bodily injury if not avoided.



CAUTION

Indicates a hazard of low risk which can result in minor or medium bodily injury if not avoided.



CAUTION

Indicates a hazard which can result in material damage or malfunctions if not avoided.



NOTE

Indicates additional information that can simplify working with the product.

Notes on disposal

In accordance with the applicable laws and directives of the European Union countries, the product should not be disposed of with household waste. This ensures environmental protection and sustainable recycling or raw materials.

Commercial users should contact their supplier and observe the conditions of the purchase agreement. This device may not be disposed of together with other commercial waste.

The local and currently applicable laws must be observed.



Item

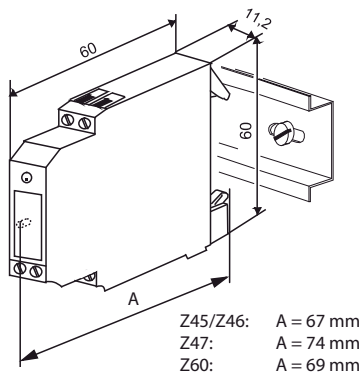
Z45	Coupling relay with one changeover switch
Z46	Coupling relay with two changeover switches
Z47	Coupling relay with one changeover switch und a manual switch at field level
Z60	Coupling relay with one changeover switch und a manual switch at field level with a potential-free feedback contact

Technical data

Power	Z45/Z47/Z60	AC/DC 24 V $\pm 10\%$, 13 mA
	Z46	AC/DC 24 V $\pm 10\%$, 20 mA
Output contact	Z45/Z47/Z60	1 changeover switch, max. AC 250 V, 6 A, 1500 VA
	Z46	2 changeover switches, each with max. AC 250 V, 3 A, 250 VA
Display	LED operating display	
Manual switch	Z45/Z46	None
	Z47	Manual switch at field level
	Z60	Manual switch at field level with a potential-free feedback contact
Connection	Terminal connection, max. 2.5 mm ²	
Overvoltage category		
Rated impulse voltage		
Level of contamination		
Automatic action	Type 1	
Degree of protection	Terminals	IP20
	Housing	IP50
Ambient temperature	-20 - +55 °C	
Weight	45 g	
Mounting	Control panel installation on standard rail EN 50022 - 35 x 7.5; can be snapped open without there having to be free space to the left/right; installation position can be chosen freely	

Dimensions

Z45..Z60



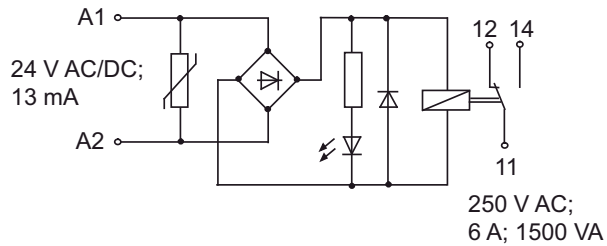


Product Description

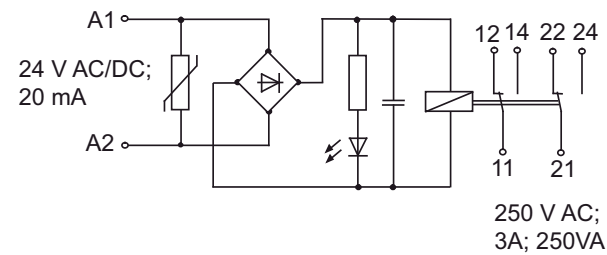
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Connection

Z45



Z46



Z47

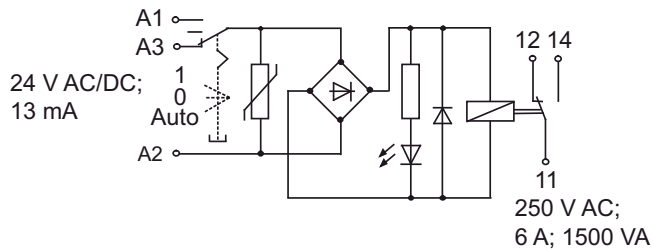


Fig. Switch in automatic position

Z60

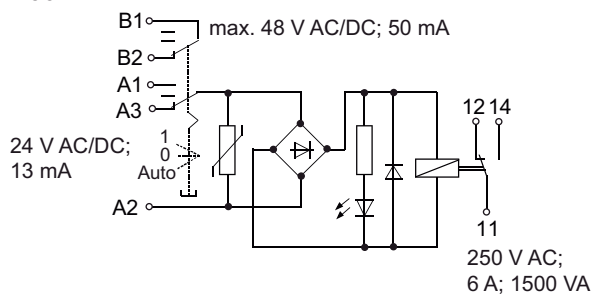


Fig. Switch in automatic position B1, B2 position feedback

Mounting and Installation



WARNING

Contact with live components of the building's electrical system can cause death due to electric shock.

Mount or remove only when power is switched off.

Comply with VDE guidelines and local wiring regulations when mounting/removing.



Connection example with input-output modules



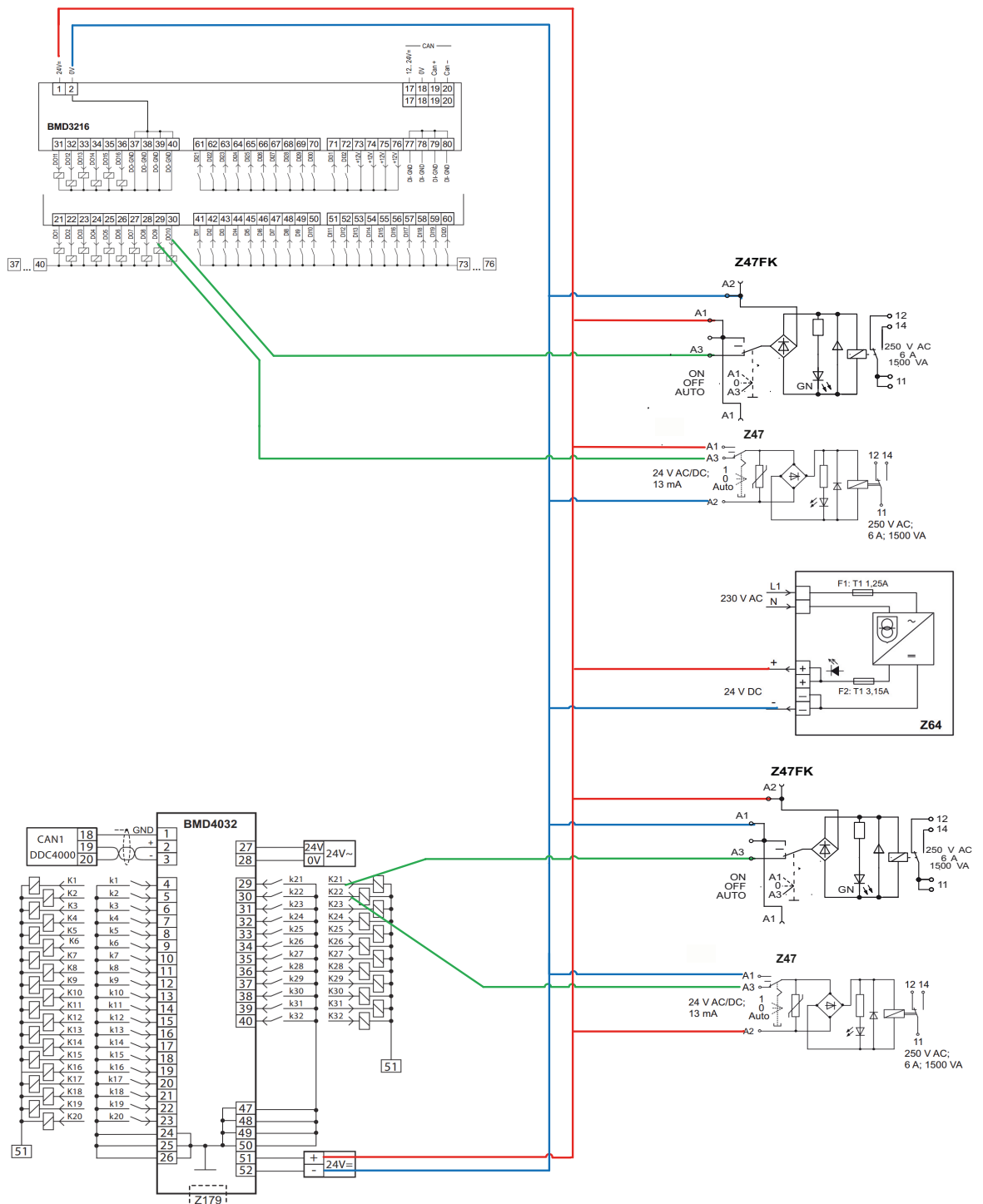
CAUTION

Previously, the binary outputs of the GND were switched in our devices.

The implemented new device concept provides that the +24V DC are switched at the output terminals.

In secondary earthed systems (PELV), this prevents any unwanted connection to ground or the reference potential and prevents an active signal from being generated at the input/output module.

- Connection example BMD3216 new device concept
- Connection example BMD4032 old device concept





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