Coupling Relay ZCoupling C4

User Information

English translation

Errors and technical changes reserved

Correct Use

The pre-assembled relay is a comprehensive solution with a plug-in industrial relay and four changeover contacts. The base has push-in connection terminals that simplify the wiring process. In addition, the four changeover contacts offer a flexible option for controlling multiple circuits.

Features

- *4 changeover contacts*
- *Only 31.5 mm wide*

Application

The ZCoupling C4 is a powerful and reliable electrical switching solution designed for the extension, amplification, isolation, and conversion of signals in various mechanical devices and process control systems within the industrial sector.
The relay coil of the C4 is controlled via terminals A1 and A2, which activate the relay's changeover contact. Terminals 9, 10, 11, and 12 serve as the common (COM) connections; terminals 5, 6, 7, and 8 as the normally open (NO) contacts; and terminals 1, 2, 3, and 4 as the normally closed (NC) contacts.
An integrated protective circuit ensures optimal protection for connected sensor elements, such as PLC outputs.
An LED on the top of the relay indicates the switching status.

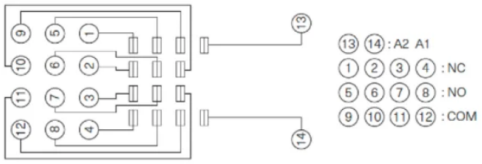
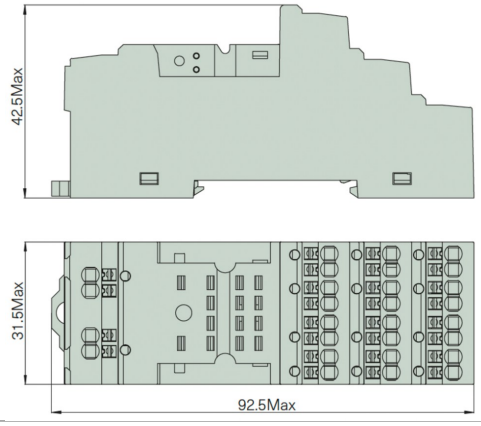


Fig. 1 Schematic diagram of ZCoupling C4

Installation

In accordance with EN 60204-1, the device is intended for installation in electrical cabinets with a minimum protection rating of IP54. It is mounted on a 35 mm DIN rail in accordance with DIN EN 60715 TH35.

Dimensioned drawing



Safety Precautions

- The installation and operation must be carried out by qualified personnel only,
  - who is familiar with the professional handling of machine equipment,
  - who is familiar with the valid rules of industrial safety and accident prevention,
  - who read and understood the operating instructions.
- The safe function of the device during machine operation cannot be guaranteed in case of wrong connection or improper operation. This may lead to fatal injuries.
- Pay attention to country specific regulations.
- The electrical installation must be performed after disconnecting the device and the machine from the mains supply.
- The wiring must be carried out according to the instructions of this operating manual.
- The person who programs the device must be protected against electrostatic discharge (ESD protection).
- Opening the device, any manipulation of the device and the avoidance of the safety facilities are not permitted.
- All relevant safety regulations and standards must be attended to.
- Non-observance of the safety regulations may cause death, severe injuries or substantial damage to property.
- Before use, please, read the operating instructions and keep it in a safe place. Make sure that the operating instructions are always available for installation, initial operation and maintenance.

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E61-492-00

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Techn. Data

Rated voltage A1	24 VDC | 230VAC
Tolerance	± 10%
Contact form	4 changeover contact
Maximum switching capacity	1250 VA / 150 W
Rated resitive load	5A - 250VAC/30VDC
Contact material	Silver alloy contacts
Contact Resistance	≤100mΩ (1A 6VDC)
Electrical endurance	2x10^5 cycles (23°C, 2s on, 1s off, resistive) 1x10^5 cycles (55°C, 1s on, 1s off, resistive)
Mechanical endurance	1x10^7 cycles
Ambient temperature (operating)	-40°C to 70°C
Operating humidity (non-condensing)	30% to 85% RH
Impact / Shock	Stable operation 98 m/s² Damage limit 980 m/s²
Vibration	10Hz up to 55Hz, 1mm dual amplitude
Weight	app. 107g
Width	31.5mm
Height	92,5 mm
Operate time	max. 20 ms, at rated voltage
Release time	max. 20 ms, at rated voltage
IInsulation resistance	1000MΩ (500VDC)
Dielectic strenght	Between coil and contacts - 1500VAC, 1min.; 4000V/S Between contact sets - 1000VAC, 1min.; 3000V/S Between open contacts - 1000VAC, 1min.; 2500V/S
Making voltage	24V 75% rated voltage | 230V 80% rated voltage
Breaking voltage	24V 10% rated voltage | 230V 30% rated voltage
Rated power	24V typ. 900 mW | 230V typ. 940 mW
Coil resistance	24V 630Ω ± 10% at 23°C | 230V 18021Ω ± 10% bei 23°C
Rated current - socket	10 A
Rated voltage - socket	300V
External connection wire	0.5 to 1.5mm²; 20 to 16 AWG
Protection	IP20
Operation height	≤ 2000 m above seelevel
Installation place	Control cabinet with minimum protection rating IP54
Montage	35 mm rail DIN EN 60715 TH35

CE

Variants

Best.-Nr. 456032	ZCoupling C4 input voltage DC 24 V
Best.-Nr. 456033	ZCoupling C4 input voltage AC 230 V

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CE Konformitätserklärung
EC Declaration of Conformity

Hersteller: H. ZANDER GmbH & Co. KG
Producer: Am Gut Wolf 15 • 52070 Aachen • Deutschland

Produktgruppe: Funktionsmodule
Product Group: Function Modules

Produkt Name
Product Name

ZCoupling C1
ZCoupling C2P
ZCoupling C4

Die Produkte stimmen mit den Vorschriften folgender Europäischer Richtlinien überein:
The products conform with the essential protection requirements of the following European directives:

2014/35/EU : Niederspannungsrichtlinie
2014/35/EU : Low-voltage directive

2011/65/EU : RoHS Richtlinie
2011/65/EU : RoHS directive

Die Übereinstimmung der bezeichneten Produkte mit den Vorschriften der o.a. Richtlinie wird, falls anwendbar, nachgewiesen durch die vollständige Einhaltung folgender Normen:
If applicable, the conformity of the designated products is proved by full compliance with the following standards:

EN 61810-1:2015+A1

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Aachen, 11.02.2025

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