

**multisio**

**2D2-4R0**



**Relay module**



**KBR GmbH**  
Am Kieferschlag 7  
D-91126 Schwabach

T +49 (0) 9122 6373-0  
F +49 (0) 9122 6373-83  
E [info@kbr.de](mailto:info@kbr.de)

[www.kbr.de](http://www.kbr.de)

## Table of Contents

<b>1</b>	<b>Function description relay module multisio 2D2-4RO .....</b>	<b>2</b>
<b>2</b>	<b>Relay module - connection chart .....</b>	<b>2</b>
<b>3</b>	<b>Relay module LED display .....</b>	<b>3</b>
<b>4</b>	<b>Function of scan button .....</b>	<b>3</b>
<b>5</b>	<b>Function of the DIP switches .....</b>	<b>4</b>
<b>6</b>	<b>Technical data .....</b>	<b>5</b>

## 1 Function description relay module multisiso 2D2-4RO

The hardware of the **multisiso 2D2-4RO** supports 1 non-floating switching voltage input, 4 non-floating relay outputs, 5 LEDs and a 8-way DIP switch.

The relay outputs are used to control the compensation stage contactors of the compensation facilities or other systems.

The module can be accessed by a master device (multisiso with module bus, multicom with module bus or via computer with VE via Multigate ES/BS) using the module bus interface. The master device has to configure the module.

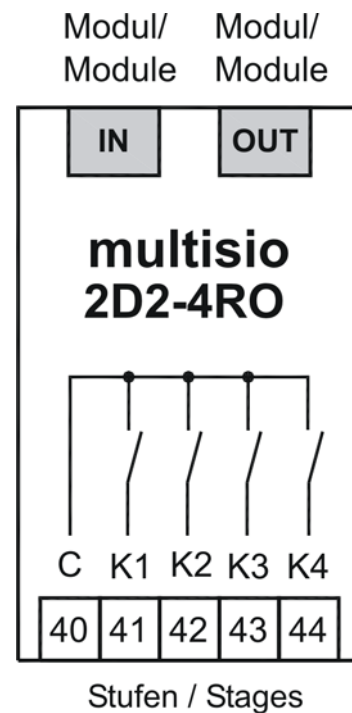
The operating voltage is supplied via the module bus interface. The module cannot be used as a stand-alone unit.

## 2 Relay module - connection chart

### Terminal assignment

- Terminal 40: shared connection (C)
- Terminal 41: output relay 1 ( K1 )
- Terminal 42: output relay 2 ( K2 )
- Terminal 43: output relay 3 ( K3 )
- Terminal 44: output relay 4 ( K4 )

IN / OUT:      Module bus / supply voltage



### Note

The relay outputs of the module are non-floating relating to terminal 40.

### 3 Relay module LED display

In EBUS scanning mode, all 4 output LEDs are flashing.  
 In the module detection mode, the output LEDs generate a running light.

Assignment:

LED1 for: Output relay 1 (K1) switched  
 LED2 for: Output relay 2 (K2) switched  
 LED3 for: Output relay 3 (K3) switched  
 LED4 for: Output relay 4 (K4) switched

Power LED: Operating voltage



### 4 Function of scan button

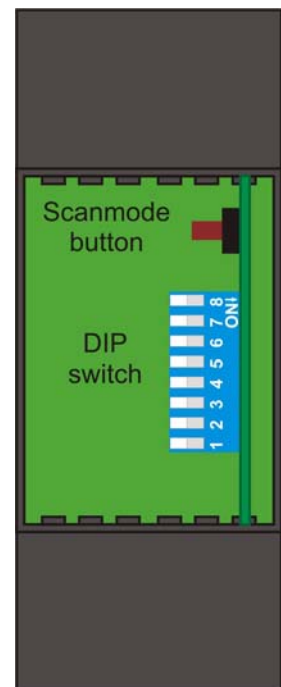


#### Note

If the scan button is pressed briefly,  
 the module enters the scanning mode.

Switch setting illustrated:

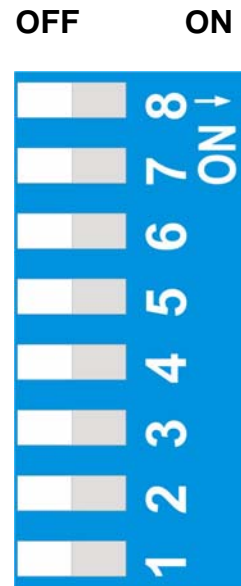
OFF = white  
 ON = gray



## 5 Function of the DIP switches

### Manual operation:

Each output can be individually set to manually active. If the DIP switch of a channel is set to "OFF", the output state is determined within the module. If the DIP switch of a channel is set to "ON", the output state is set to active, irrespective of the actually determined output state.



DIP	OFF	ON		
S8	automatic	manual		Output 4
S7	automatic	manual		Output 3
S6	automatic	manual		Output 2
S5	automatic	manual		Output 1
S4	no function	OFF	ON	Output 4
		passive / off	active / on	
S3	no function	passive / off	active / on	Output 3
S2	no function	passive / off	active / on	Output 2
S1	no function	passive / off	active / on	Output 1

## 6 Technical data

<b>Power supply:</b>	Via module bus	24VDC / ca. 1.3W
	Connection	Modular connector RJ12:6P6C
<b>Hardware outputs:</b>	Plug terminal 5-pole	
Supply voltage Relay outputs	Terminal 40	non-floating
4 relay outputs	Terminals 41 to 44	non-floating
	Contact capacity	500VA, 2A, 250V 50/60Hz each
	Overvoltage category	CAT II
<b>Module bus interface:</b>	serial port	RS485
	Module bus connection	RJ12 for ready-made KBR system cable, max. length 30 m when placed accordingly
	Transfer rate	38400 Bps
	Bus protocol	KBR module bus
<b>Display:</b>	LED	4x messages 1x operation display
Control unit	DIP switch	1x 8-way, for manual operation
	Button	Scan button (module bus)
<b>Mechanical data:</b>		
Bus bar device	Housing dimensions	90 x 36 x 61 mm (H x W x D)
	Mounting type	Wall mounting on DIN rail, 7.5 mm deep, in accordance with DIN EN 50022.
	Weight	approx. 100g
<b>Standards and miscellaneous:</b>		
Environmental conditions	Standards	DIN EN 60721-3-3/A2: 1997-07; 3K5+3Z11; (IEC721-3-3; 3K5+3Z11)
	Operating temperature	-5°C ... +55°C;
	Humidity	5% ... 95%, non-condensing
	Storage temperature	-25°C ... +70°C;
Electrical safety	Standards	DIN EN 61010-1/A2: 2001 + B1: 2002-11 + B2: 2004-1; (IEC1010-1/A2)
	Protection type	IP20 in accordance with DIN EN 40050 part 9:1993-05
	Electromagnetic compatibility	DIN EN 61000-6-3: 2001 + A11: 2004; (IEC61000-6-3) DIN EN 61000-6-2: 2001 (IEC61000-6-2)

