

**multisio**

**1D4-4RO ISO**



**Potential free  
4 relay output module**

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## 1 Function description relay output module multisio 1D4-4RO ISO

The hardware of the **multisio 1D4-4RO ISO** supports 4 potential free relay outputs, 5 LEDs and an 8-fold DIP switch.

The relay outputs serve to control contactors of bus devices or other systems.

The module can be accessed via a master device (multimax 3D6, multisio 5D6 or higher, or a computer with VE via multisys 3D2-ESBS) using the module bus interface. The master device has to configure the module.

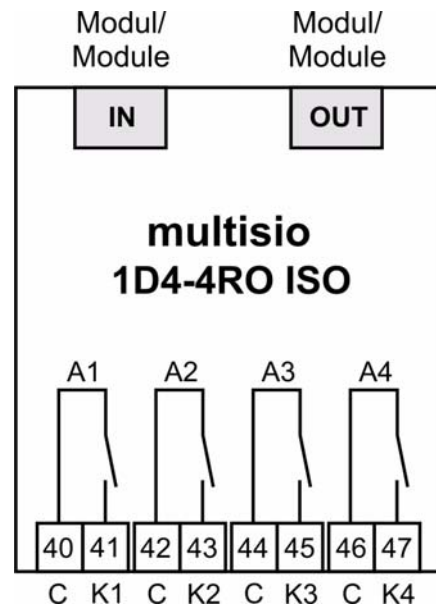
The operating voltage is supplied via the module bus interface. The module cannot be used on its own.

## 2 Connection diagram for relay output module

### Terminal assignment

Terminal 40: Input	relay 1	(A1)
Terminal 41: Output	relay 1	(A1)
Terminal 42: Input	relay 2	(A2)
Terminal 43: Output	relay 2	(A2)
Terminal 44: Input	relay 3	(A3)
Terminal 45: Output	relay 3	(A3)
Terminal 46: Input	relay 4	(A4)
Terminal 47: Output	relay 4	(A4)

IN / OUT: Module bus / supply voltage



### Note

The module relay outputs are designed as potential free outputs.

### 3 Relay output module LED display

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

The displays are:

LED1 for: Output relay 1 (A1) switched  
LED2 for: Output relay 2 (A2) switched  
LED3 for: Output relay 3 (A3) switched  
LED4 for: Output relay 4 (A4) switched

Power LED: Operating voltage



### 4 Function of scan button

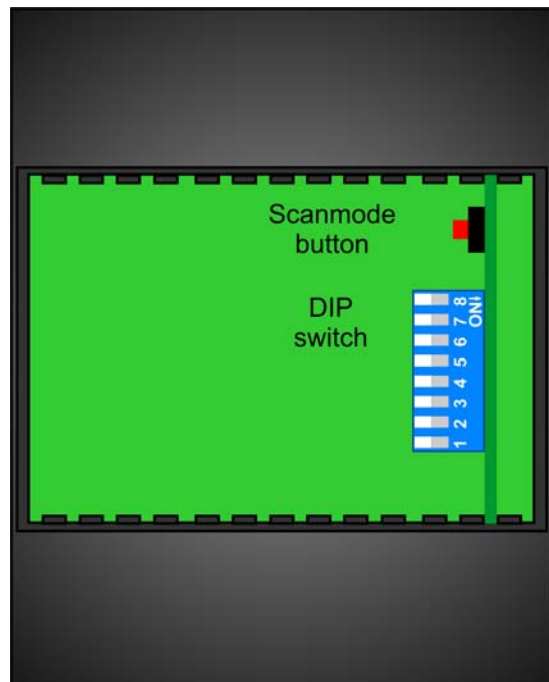


#### Note

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

#### Switch setting illustrated:

OFF = white  
ON = gray



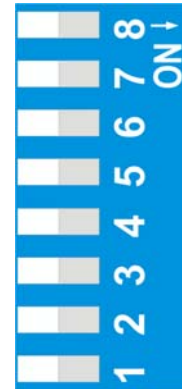
## 5 Function of the DIP switches

### 5.1 Mode of operation

For every output, the **multisio 1D4-4RO ISO** differentiates between the operating modes "normal" and "manual". Switching is performed via the DIP switches 5 to 8.

The DIP switches are assigned to the outputs as follows:

- DIP switch 5 determines the operating mode of output 1
- DIP switch 6 determines the operating mode of output 2
- DIP switch 7 determines the operating mode of output 3
- DIP switch 8 determines the operating mode of output 4



If the DIP switch is set to Off, the respective output is in the normal operating mode. If the DIP switch is set to On, the respective output is in the manual operating mode.

#### Switch setting illustrated:

- OFF = white
- ON = gray

#### Normal operating mode

In the normal operating mode, the state created in the module is issued at the corresponding output.

#### Manual operating mode

In the manual operating mode, the state of DIP switches 1 to 4 is issued at the corresponding output, instead of the state created in the module. The DIP switches are assigned to the outputs as follows:

- DIP switch 1 determines the state of output 1
- DIP switch 2 determines the state of output 2
- DIP switch 3 determines the state of output 3
- DIP switch 4 determines the state of output 4

If the DIP switch is set to **Off**, the output is passive / off. If the DIP switch is set to **On**, the output is active / on.

### 5.2 DIP switch settings

Mode of operation		State DIP		Explanation
S5	Off	---	---	Output 1 = normal operating mode
	On	S1	Off	Output 1 = manual operating mode passive / off
On			Output 1 = manual operating mode active / on	
S6	Off	---	---	Output 2 = normal operating mode
	On	S2	Off	Output 2 = manual operating mode passive / off
On			Output 2 = manual operating mode active / on	
S7	Off	---	---	Output 3 = normal operating mode
	On	S3	Off	Output 3 = manual operating mode passive / off
On			Output 3 = manual operating mode active / on	
S8	Off	---	---	Output 4 = normal operating mode
	On	S4	Off	Output 4 = manual operating mode passive / off
On			Output 4 = manual operating mode active / on	

## 6 Technical data

<b>Power supply:</b>	Via module bus	24VDC / ca. 1.3W
	Connection	Modular connector RJ-12:6P6C
<b>Hardware outputs:</b>	4 plug terminal, each 2 pole	
4 relay outputs	Terminals 40 to 47	potential free
	Contact capacity	500VA each, 2A, 250V and 50/60Hz
	Overvoltage category	CAT II
<b>Module bus interface:</b>	Serial interface	RS-485
	Module bus connection	RJ-12 for ready-made KBR system cable, max. length 30 m when placed accordingly
	Transmission speed	38400 Bps
	Bus protocol	KBR module bus
<b>Display:</b>	LED	4x message 1x operation display
Control unit	DIP switch	1x 8-fold, for manual operation
	Button	Scan button (module bus)
<b>Mechanical data:</b>		
Top hat rail device	Housing measurements	90 x 70 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. 130g
<b>Standards and miscellaneous:</b>		
Ambient 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)
	Mode of protection	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)

**ERKLÄRUNG DER KONFORMITÄT  
DECLARATION OF CONFORMITY  
DÉCLARATION DE CONFORMITÉ****Wir** **KBR GmbH Schwabach**

We/Nous (Name des Anbieters / supplier's name / nom du fournisseur)

**Am Kieferschlag 7  
D-91126 Schwabach**

(Anschrift / address / adresse)

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**mit folgenden Europäischen Richtlinien übereinstimmt (übereinstimmen)**

is (are) in conformity with the following directives / Répondet(ent) aux directives suivantes

**Niederspannungsrichtlinie Nr.**Low Voltage Directive No.  
Directive Basse Tension N°**EMV-Richtlinie Nr.**EMV Directive No.  
EMV Directive N°**2006/95/EG**2006/95/EC  
2006/95/CE**2004/108/EG**2004/108/EC  
2004/108/CE**Dies wird nachgewiesen durch die Einhaltung folgender Norm(en)**

This is documented by the accordance with the following standard(s) / Justifié par le respect de la (des) norme(s) suivante(s)

**DIN EN 61010-1-2001;****DIN EN 61010-1/B1:2002****DIN EN 61010-1/B2:2004****DIN EN 61000-6-1:2007****DIN EN 61000-6-2:2005****DIN EN 61000-6-3:2007****DIN EN 61000-6-4:2007**

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