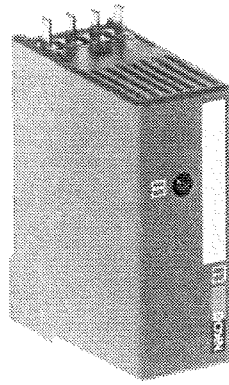
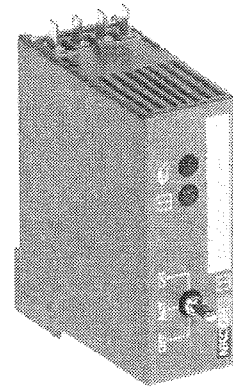


NKOD, NKODH**Relay terminal module**

NKODH with manual switch.

Suitable module carriers:
NTOM, NTOMS, NTIO(S).

**NKOD****NKODH****Technical data**

DC supply voltage	Extra low voltage (SELV-E) from terminal module carrier
Nominal voltage	DC 15 V, $\pm 10\%$
Current consumption	Max. 10 mA
AC supply voltage	Extra low voltage (SELV-E) from terminal module carrier
Nominal voltage	AC 24 V, 50/60 Hz
Power consumption	Max. 0.75 VA
Signal input	From RS card module
Range	DC 0 ... 10 V
Input impedance	100 k Ω
Signal output	Relay contact ¹⁾
Contact rating	Max. AC 250 V Max. 6 A resistive Max. 2 A inductive ($\cos\phi \geq 0,4$) Min. admissible load: 1 mA at DC 1 V ²⁾
Voltage against earth	Max. 250 V
Connections	
Plug-in connections	Plugs directly into terminal module carrier
Weight excluding packaging	0.045 kg
Dimensions (W x H x D)	
NKOD	24 x 68 x 50 mm
NKODH	24 x 68 x 58 mm
Mounting	Plugged into terminal module carrier
Safety	
Product safety	EN 61010-1
- Contamination level	2
- Overvoltage category	II
- Insulation	Input - output double insulated
Electrical safety	SELV-E (PELV to IEC 364-4-41)
General ambient conditions	
Usage	Installed in control panel
Temperature range	
- Operation	5 ... 45 °C
- Storage	-25 ... 70 °C
Ambient humidity	10 ... 90 %rh, non-condensing
Conformity	This product meets the requirements for CE marking

1) The relay contacts are made of AgCdO or AgNi, with a 5 μm hard-gold plating. This type of contact is suitable for switching both low level signals ($>1\text{ mA}/>1\text{ V}$) and large loads (see maximum load data).

2) Applies to contact in new condition.

Caution

Relays which have been used for large loads must not subsequently be used for low level signal switching.

Caution

If higher voltages than extra low voltage are connected via the NKOD(H) terminal module, the coding pins supplied must be inserted into the corresponding carrier slots on the terminal module carrier.

Note

When the NKOD or NKODH is used to switch inductive loads (e.g. contactor coils), suitable suppression may be necessary.

Brief description

The DC 0 ... 10 V from the RS card module is electrically isolated in the NKOD or NKODH and switches the relay on and off to control the peripheral devices:

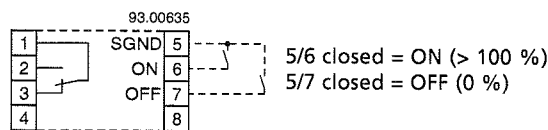
- Signal \leq DC 1 V Off
- Signal \geq DC 2.4 V On

A power-on delay prevents the relay from energising for the first five seconds after the DC 15 V supply has been established. This is necessary because the digital output drive signals only assume their correct status approximately two seconds after RS card module power-up.

Terminals 5, 6 and 7 may be used for a hard-wired interlock circuit.

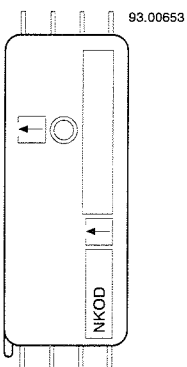
The manual switch on the NKODH overrides the hard-wired interlock.

Terminal layout on module carrier



Indicators / Labelling

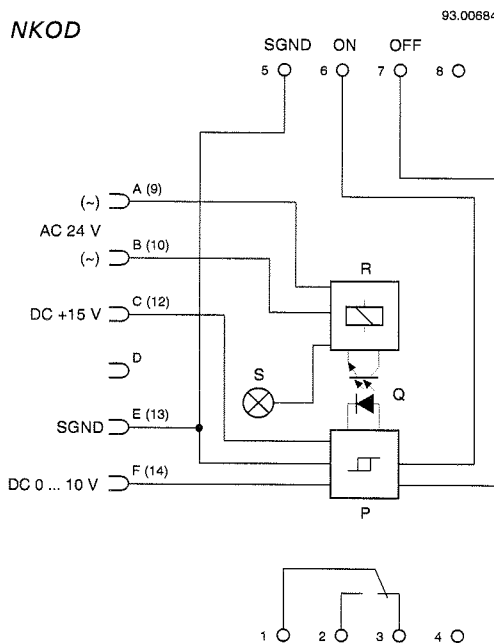
NKOD



- Output signal (green):**
- LED Off Contact 1 – 3 closed
 - LED On Contact 1 – 2 closed

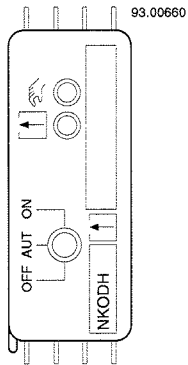
Block diagrams

NKOD



- 1 ... 4 Connection terminals for peripheral devices
- 5 ... 8 Hard-wired interlock
- A ... F Connection to terminal module carrier (9 ... 14: NTIO)
- P Input amplifier with power-on delay
- Q Opto-isolator
- R Relay
- S Output signal LED

NKODH



Output signal (green):

LED Off Contact 1 – 3 closed
LED On Contact 1 – 2 closed



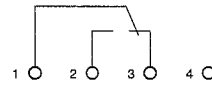
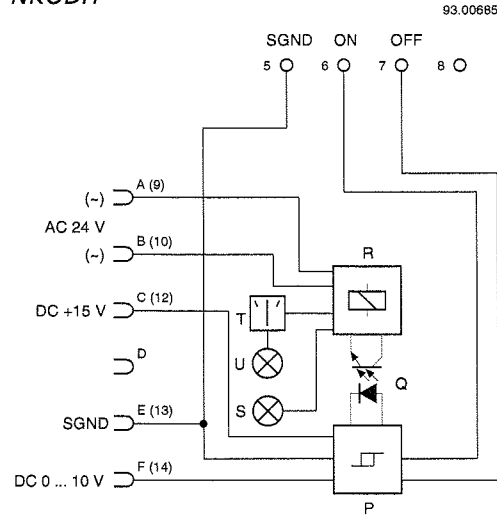
Manual override (red):

LED On Manual override ON

Manual switch:

OFF Contact 1 – 3 closed
ON Contact 1 – 2 closed
AUT Controlled by RS controller

NKODH



- 1 ... 4 Connection terminals for peripheral devices
- 5 ... 8 Hard-wired interlock
- A ... F Connection to terminal module carrier (9 ... 14: NTIO)
- P Input amplifier with power-on delay
- Q Opto-isolator
- R Relay
- S Output signal LED
- T Manual switch
- U Manual override LED

