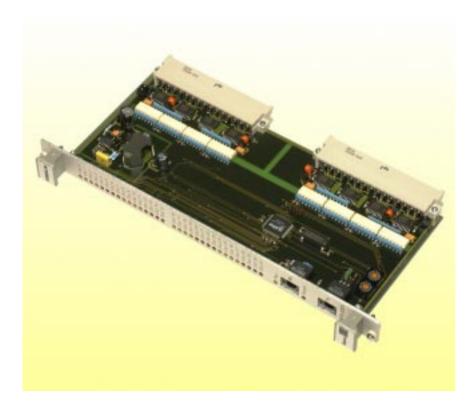
## **32 Outputs**

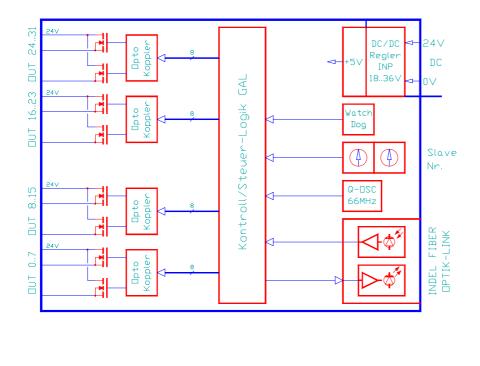
## **INFO-32Or**



The INFO-32Or board belongs to the digital I/O modules; as all modules, it is serv-ed once per millisecond, i.e. each input and each output in the machine or plant is refreshed everyms. The power supply of the outputs is

divided into four groups of 8. This allows various stop functions to be implemented.

The board is also suitable for activating stepping motors up to 1kHz or pulse-width-modulated DC motors.



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## **Technical Data**

#### Outputs

- 32 outputs
- 24V, max. 2A
- Short-circuit-proof
- Supplied in four groups of 8

#### **Stepping motor activation**

- Max. frequency 1kHz

#### **Pulse width modulation**

- Rotary speed control by pulse width modulation

#### **Status indication**

- User-friendly indication of all inputs and outputs by LEDs.

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Rev. 0006

Order No. INFO-32Or 96227



# INFO-32Or

# **32 Outputs**

## **Mode of operation**

The INFO-32Or board allows 32 inductive or ohmic loads such as relays, valves, various motors and other consumers with up to 2A continuous load to be activated.

The outputs are divided into four groups. The output groups are electrically isolated from the board logics.

The states of all 32 outputs are indicated on the front panel by LEDs. Per output, two connections (OUT,0V) are available. This allows direct wiring of the consumers.

Up to maximum 250 INFO-I/O boards can be connected by the INFO-Link to the PC master. Serial transmission is so fast that a board is served every 4  $\mu$ s. In other words, in one millisecond all 250 INFO-32Or boards are addressed. In case of Power-Off of the computer, or in the event of a rupture of the fiberoptic line, a watchdog will immediately switch all outputs off.

## **Connector Allocations**

		d			b		Z
2	0	OUT-	0	00	O_GND	I	K_24V
4	0	OUT-	1		O_GND	I	K_GND
6	0	OUT-	2	0	O_GND	I	O_24V
8	0	OUT-	3	0	O_GND	I	O_24V
10	0	OUT-	4	0	O_GND	I	O_GND
12	0	OUT-	5	0	O_GND	I	O_GND
14	0	OUT-	6	0	O_GND	I	O_GND
16	0	OUT-	7	0	O_GND	I	O_GND
18	0	OUT-	8	000	O_GND	I	O_GND
20	0	OUT-	9		O_GND	I	O_GND
22	0	OUT-	10	0	O_GND	I	O_GND
24	0	OUT-	11	0	O_GND	I	O_GND
26	0	OUT-	12	0	O_GND	I	O_24V
28	0	OUT-	13	0	O_GND	I	O_24V
30 32	0 0	OUT- OUT-	14 15	0 0	O_GND O_GND		

### Connector 1

90° angled DIN 41612, Type F-48 2.8mm pins

		d			b		Z
2 4	0 0	OUT- OUT-	16 17	0 0	O_GND O_GND		
6	0	OUT-	18	0	O_GND	I	O_24V
8	0	OUT-	19	0	O_GND	I	O_24V
10	0	OUT-	20	0	O_GND	I	O_GND
12	0	OUT-	21	0	O_GND	I	O_GND
14	0	OUT-	22	0	O_GND	I	O_GND
16	0	OUT-	23	0	O_GND	I	O_GND
18	0	OUT-	24	0	O_GND	I	O_GND
20	0	OUT-	25	0	O_GND	I	O_GND
22	0	OUT-	26	0	O_GND	I	O_GND
24	0	OUT-	27	0	O_GND	I	O_GND
26	0	OUT-	28	0	O_GND	I	O_24V
28	0	OUT-	29	0	O_GND	I	O_24V
30 32	0 0	OUT- OUT-	30 31	0 0	O_GND O_GND		

**Connector 2** 90° angled

DIN 41612, Type F-48 2.8mm pins



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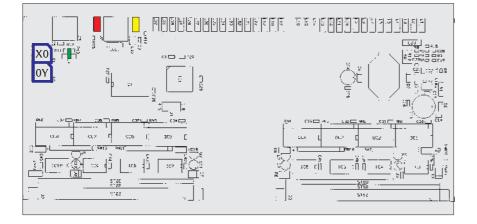
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# **32 Outputs**

## **INFO-320r**

## Assembly



#### Addressing (blue)

S1 (X0)	S2 (0Y)	Board
0	0	0,1
0	1	1,2
0	2	2,3
F0	0F	255,256

### LEDs on the front panel

The status of all outputs is indicated on the front panel by LEDs.

### LEDs on receiver module

LED-red	=	+5V power supply
LED-yellow	=	INFO-Link receiver signal OK

### Jumper (green)

The jumper influences the illumination intensity of the emitting LED and thereby the segment length of the fiber cable to the next board.

Segment length	Jumper position
0 10m	nojumper
8 30m	>10
2050m	>30

Customized modifications are available as needed.

### **Specifications**

#### **Power supply**

+18...36V, 350mA max.

#### **Climatic conditions**

-	Ambient temperature:	
	Storage:	-20+80°C
	Operation:	0 +45°C
-	Board temperature:	
	Operation:	0+70 °C
-	Relative air humidity	
	no condensation:	95%

#### Outputs

- 32 P-channel FET output
- 24V, 1A continuous power (all outputs)
- Max. 2A per output (every second output)
- Short-circuit-proof, thermal deactivation of the output stage (FET)
- Isolated as groups, two groups with 16 outputs each
- $R_{on} = 110 m\Omega$
- Dissipation loss: P=3.6W/board(32x1A)

### Addressing

- The board occupies two consecutive board places.

#### **Board sequence**

 In order to utilize the entire number of I/O boards, one INFO-32Ir and INFO-32Or board each are allowed to have the same address. In this case, make sure that the INFO-32Or is switched into the link **before** the INFO-32Ir board. Otherwise, the INFO-32Or will not respond.

#### Mounting

- Connector DIN 41612, Type F-48
- Mounting in 19" chassisDimensions:
  - 234 x 100 x 20 mm (LxWxH)
- 6(1 x 4S(1

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# INFO-32Or

# **32 Outputs**

## Connections

### Board power supply

For the board power supply, a 3-phase rectifier without electrolytic capacitor will suffice. But to prevent interference, an electrolytic capacitor of  $4,700 \dots 10,000 \mu$ F is recommended. The 24V power supply must pass through a line filter.

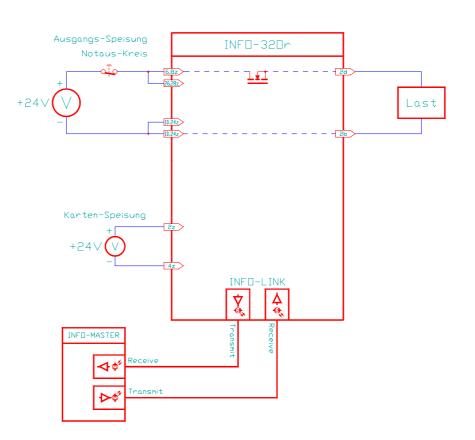
### **Shielded lines**

All leads from and to the INFO-32Or board can be installed unshielded.

## Grounding

The INFO-32Or board is grounded at the front panel. Make sure that the connection between the rack housing and the control cabinet is conductive. This is best achieved using chromatized mount-ing bars to allow interference to be dis-charged.

See also the INDEL Wiring Guidelines and INDEL Design Guidelines.



## **Connection Example**



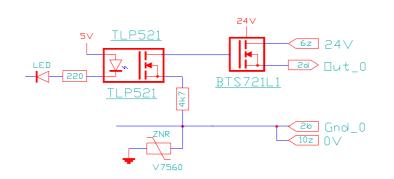
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## Interfaces

## Outputs



Wiring

# Outputs

Wiring of the outputs Out-0 connector 1

