



Order Code

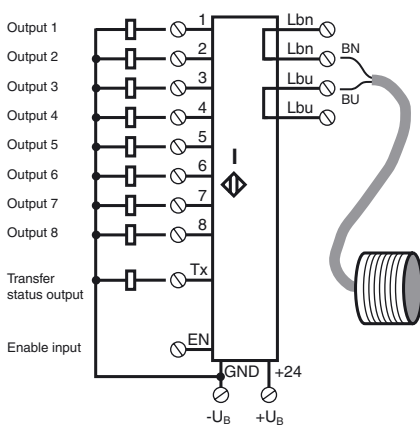
NDP-KE2-8E2

Features

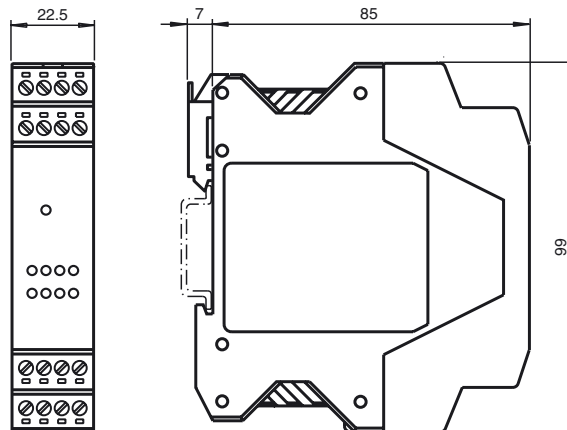
- 8 channels
- 9 outputs
- LEDs for display of the output states and communication
- Deactivation option
- Housing with removable terminals
- DIN rail mounting

Electrical Connection

Connection:



Dimensions



Technical Data

Nominal ratings

Operating voltage U_B	24 V DC \pm 10 %
Number of signal channels	8
Signal transfer direction	from secondary side to primary side
Reverse polarity protection	protected against reverse polarity
Current consumption	max. 1000 mA

Indicators/operating means

Switching state	8 x LED, yellow
Transfer indicator Tx	LED, green

Input

Number	1
Input type	enable/disable input signal levels: \geq 15 V = enable, \leq 3 V disable
Input current	\leq 1 mA
Internal resistor	\geq 15 k Ω

Output

Output type	1 status output (high in case of proper transmission) and 8 switch outputs pnp, NO (switched high), overload and short-circuit resistant
Operating current	max. 50 mA
Response time	\leq 200 ms (statical operation, the transmission heads stand opposite to each other)

Ambient conditions

Ambient temperature	0 ... 50 °C (273 ... 323 K)
Storage temperature	-25 ... 85 °C (248 ... 358 K)

Mechanical specifications

Protection degree	IP20
Connection	removable terminals rated connection capacity: rigid/flexible (with and without wire-end ferrules): 0.25 mm ² ... 2.5 mm ² for multiple-wire connection with two wires of equal cross-section: flexible with twin wire-end ferrules: 0.5 mm ² ... 1.5 mm ²

Material

Housing	PA 66-FR
Installation	DIN rail mounting
Mass	106 g

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Functional description

A WIS (wireless inductive system) inductive transfer system always consists of the following four components:

- WIS primary module
- WIS primary transmitter
- WIS secondary transmitter
- WIS secondary module

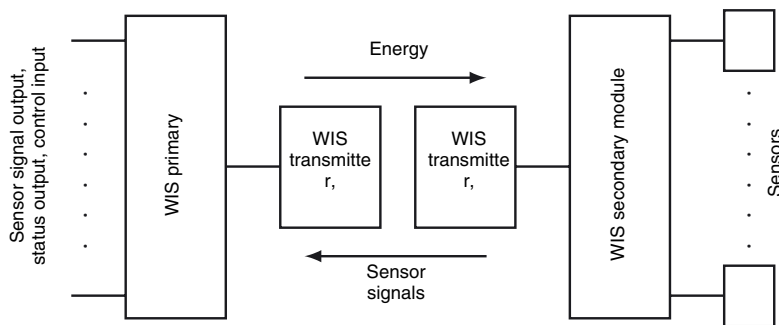
The WIS primary module is installed in the stationary component and is connected to a downstream control (i.e., PLC). The WIS primary transmitter connected to the WIS primary module. The WIS secondary transmitter and the WIS secondary module that is connected to it are installed in the moveable part of the component. The WIS secondary module disposes of connection capabilities for several sensors. If the two transmitters are located in front of each other within the system range, then electric power is transferred from the primary side to the secondary side. The sensors attached to the WIS secondary module are now supplied with electric energy and begin to operate. The sensor output signals are transmitted in the opposite direction from the secondary side to the primary side and are separately available on the WIS primary module output terminals for further processing by the equipment control. The sensor signal status is also displayed by LEDs that correspond to the sensor channels.

A separate output signal Tx on the WIS primary module indicates the communication status. A high signal indicates communication between the WIS transmitters. This is also indicated by a glowing LED Tx.

Power transfer and communication in the system can be activated and deactivated on the WIS primary module with the EN input .

Input signal on EN	Function
+ UB (24 V DC)	Transfer activated
GND or open.	Transfer deactivated

Function schematic



The sum of the currents of all sensors attached to the WIS secondary module must not be greater than the maximum transferable current. This is calculated by dividing the transferable power by the 12 V provided by the transmitters.