LON/LONMARK interface NIDES.RX

Allows the integration of DESIGO™ RXC controllers into the Landis & Staefa building management stems.

Use

The NIDES.RX interface is used for integration of the DESIGO RXC controllers into the Landis & Staefa building management systems

It organises the exchange of data between the management station and the controllers which communicate on the LON bus (using LONMARK).

The data points are mapped as RS data points for this purpose. This enables a controller to be accessed and engineered as an RS controller from the management station.

The hardware platform of the NIDES.RX consists of a LON section and a NICO/NITEL section. The engineering for the NIDES.RX is therefore quite similar to the engineering of the NICO-N or the NITEL.

Functions

The NIDES.RX allows the integration of all DESIGO RXC controllers.

Note: For more information regarding the DESIGO RXC range see the document CA2S3801E.

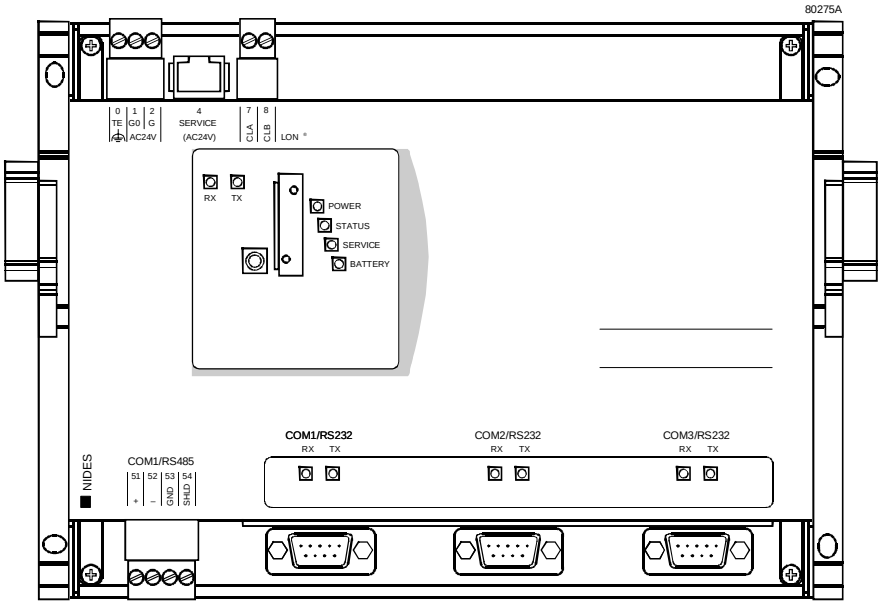
Ordering

The types can be ordered with the following designation:

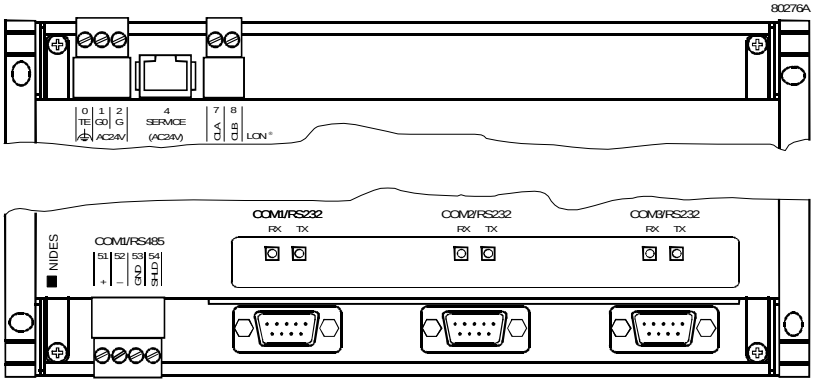
NIDES.RX-CO	MS2000, VISONIK and UNIGYR plants
NIDES.RX1...4*	NITEL plants

* = depending on language version

Mechanical design



Terminal layout



Pin layout of COM1/RS232

Abbrev.:	Pin:	Description:
RD	2	Receive Data
TD	3	Transmit Data
DTR	4	Data Terminal Ready
GND	5	Signal Ground
DSR	6	Data Set Ready
RTS	7	Request To Send
CTS	8	Clear To Send

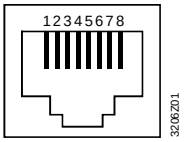
Pin layout of COM1/RS485

51	+
52	–
53	GND
54	SHLD

Pin layout of COM2 and COM3/RS232(*):

DCD	1	Data Channel Received Line Signal Detector
RD	2*	Receive Data
TD	3*	Transmit Data
DTR	4	Data Terminal Ready
GND	5*	Signal Ground
DSR	6	Data Set Ready
RTS	7*	Request To Send
CTS	8*	Clear To Send

Pin layout of SERVICE connector



1	LON, Data A (CLA)	5	Not used
2	LON, Data B (CLB)	6	Not used
3	G0 (AC 24 V, neutral)	7	Not used
4	G (AC 24 V, permanent phase)	8	Not used

Software and firmware versions

The NIDES.RX supports the following software versions.

- MS2000 V3.0 and higher
- TS1500 V1.4 and higher
- VISONIK system: BPS V16,
  DCS V16 for VISONIK Insight,
  DCS V18 for DESIGO INSIGHT
- UNIGYR systems V7 and higher

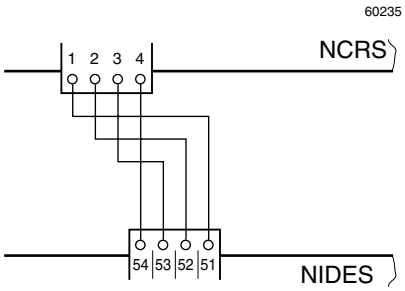
Note: For more information regarding engineering and commissioning of the NIDES.RX interface see the basic document, CA2Z3299E.

Power supply	
Nominal voltage	AC 24 V, 48 ... 62 Hz
– Admissible tolerance	±15 %
Power consumption	Max. 6 VA
Connections	
COM1	RS485
Connection to MS2000 (NCRS)	Max. 9600 baud Half-duplex Automatic baud rate detection, Electrically isolated
COM1	RS232
Connection to VISONIK (PRV2)	Max. 9600 baud
(or to a VT100 terminal)	Half-duplex Automatic baud rate detection Standard DB9-S male connector
COM2	RS232
Connection to MS1000 / TS15000	Max. 9600 baud Full-duplex Automatic baud rate detection Standard DB9-S male connector
COM3	RS232
(spare)	Max. 9600 baud Half-duplex Automatic baud rate detection Standard DB9-S male connector
LON bus	
– Interface type	LON, electrically isolated
– Transceiver	FTT-10/A
– Baud rate	78 kBit/s
– Bus topology, bus connection	See “Installation guide” CA2Z3802E
Service socket	Service terminal (bus connection including power supply)
Weight excluding packaging	1.15 kg
Dimensions (W x H x D)	236 x 170 x 51 mm
Mounting	Snap-mounted on DIN rails or screwed to a flat surface
Safety	
Product safety	EN 61010-1
– Overvoltage category	II; with transient overvoltages up to 2500 V
– Contamination level	2; normal, non-conductive contamination
Electrical safety	SELV-E (PELV to IEC 364-4-41)
General ambient conditions	
Usage	– For indoor use – In control panels – Up to 3000 m above sea level
Temperature range:	
– Operation	5 ... 40 °C
– Storage	– 25 ... 70 °C
Ambient humidity	Max. 65 % rh average over year, non-condensing
Conformity	Meets the requirements for CE marking

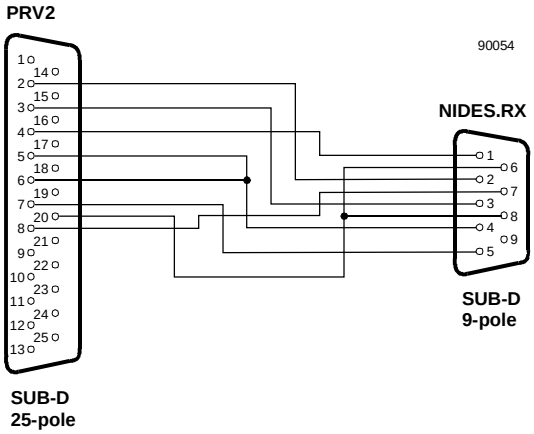
Standard RS232 cables can be used for COM1/RS232, COM2/RS232 and COM3/RS232.

Connection to an NCRS trunk

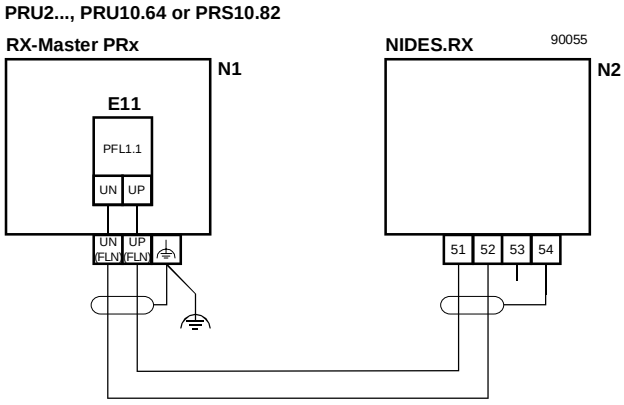
Use a cable according to the wiring diagram below to connect the NIDES.RX to a trunk of the NCRS.



Connection to PRV2 (VISONIK)

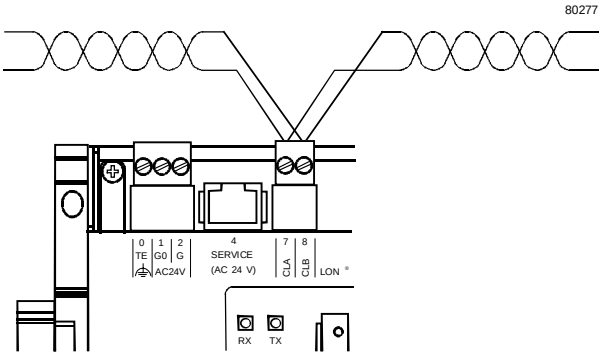


Connection to UNIGYR



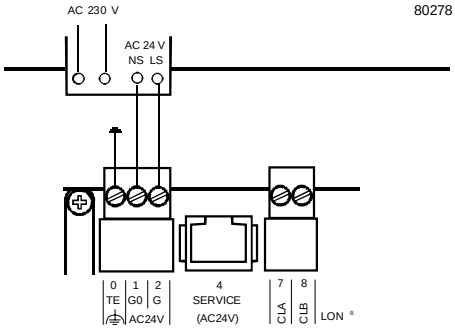
Connection to the LON bus

The two LON data cables are connected to the LON terminals of the NIDES.RX (interchangeable connection).



Connection to the power supply

The NIDES.RX is connected to an AC 24 V power supply.



Mounting

The NIDES.RX can be fixed directly to a flat surface with four screws, or snap-mounted on DIN rails