

EYZ485: DL-Converter for V.24

The EYZ485 enables communication between a PC and a group of EY2400 substations via the serial PC port (e.g. for process visualisation). Communication is monitored by a handshake signal. The housing is of fire-retardant material.

DL converter: For running a dataline network with up to 100 substations (200 nF/300 Ω). Areas of use: For parameterising substations (islands) via DL (essential for EY2400-ecos/ecu).



Products

Type	Description
EYZ485F001	V.24 / EY2400 DL converter

Technical data

Electrical supply	
Power supply	230 V~ , 50/60 Hz
Power consumption	5 VA
V.24 line length	max. 15 m
EY2400 – size of data line	max. 300 Ω/200nF (4 km)

Permitted ambient conditions	
Operating temperature	0...45 °C
Storage and transport temperature	-25...70 °C
Humidity	10...90% rh
	no condensation

Installation	
Dimensions H × W × D (mm)	103 × 178.5 × 43
Weight (kg)	0,4

Standards, guidelines and directives	
Degree of protection	IP 20

Additional information	
Fitting instructions	MV 505657
Dimension drawing	M02181
Wiring diagram	A09440

Engineering notes

- This compact converter is suitable for mounting in rows as per DIN 43880 and can be fitted in a control panel using a top-hat rail (35 mm; to be supplied by the customer) as per EN 50022. The converter runs on 230 V~.
- The power supply, the EY2400 data line and the PC link are connected via spring terminals.
- The converter also has four LEDs for showing various statuses: one LED (green) for power, plus a red LED each for TXD, RXD and the handshake signal.

V.24/EY2400 DL converter

Using this converter, a data-line network (substation island) with up to 100 substations (200 nF/300 Ω) can be run from a V.24 interface.

Areas of use:

- Data-line access from novaPro Open to EY2400 substations.
- Parameterisation of EY2400 substations.

Handshake signal (Break / Break)

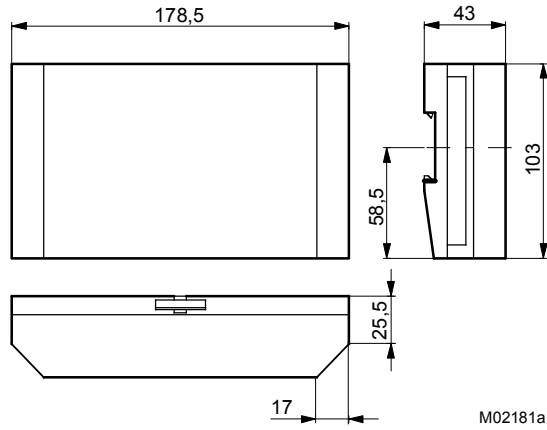
As soon as there is a telegram on the EY2400 data line, a handshake signal is sent to the PC via the EYZ485 auxiliary unit. This makes it possible to know: (a) when EY2400 telegrams are running on the data-line network; and (b) that a telegram in the direction of the EYZ485 has to be blocked. This prevents the PC's telegrams from colliding with the telegrams of the EY2400 system on the data line. When using the handshake signal, only one of the two connections labelled Break (terminal 4) or Break (terminal 5) should be utilised.

Telegram transmission

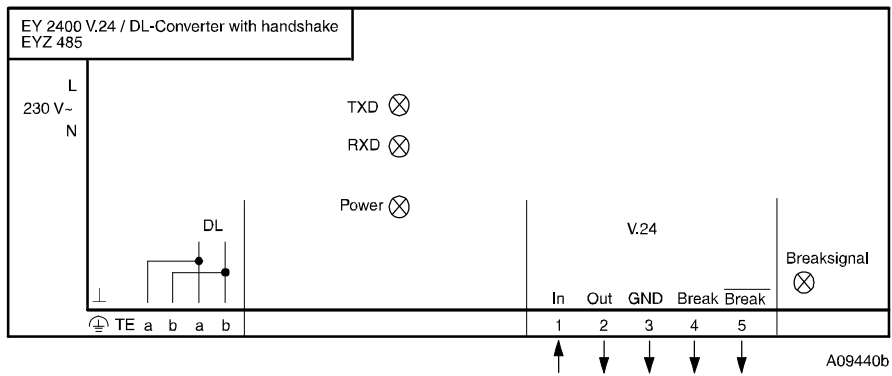
The transmission speed (bit transmission rate) of EY2400 substations is 1220 bits per second. When used with novaPro Open, the FIFO buffers must be set to the minimum value for receiving.

- **Under Win 2000:** Control Panel | System | Device Manager | Ports [double-click a COM port] | Properties | Port Settings | Advanced
- **Under Win NT4:** Control Panel | Ports | Settings | Advanced | Activate FIFO

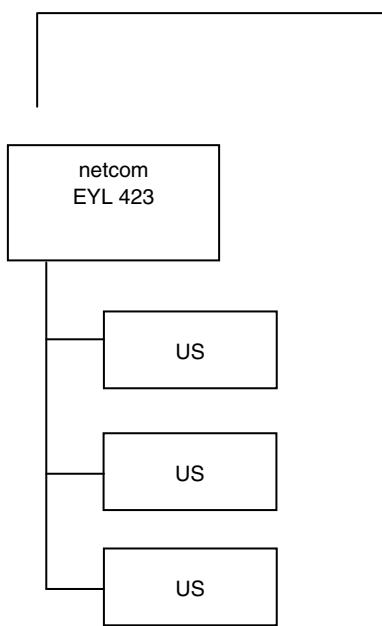
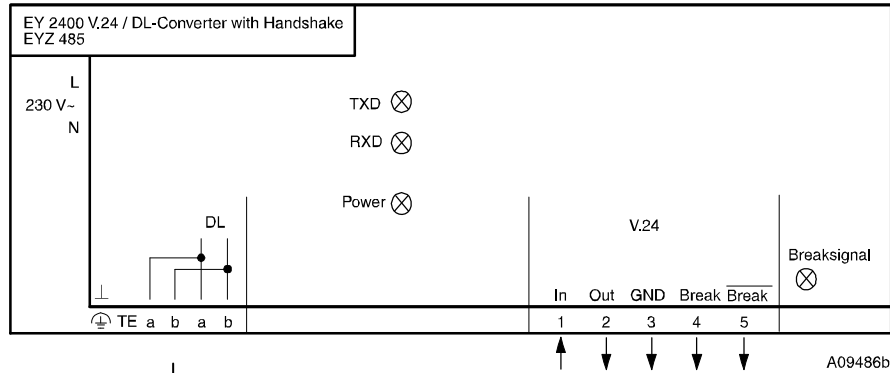
Dimension Drawing



Wiring diagram



Example of connections for PC



EYZ485		PC side	
	Terminal		
In	1	⇐ TD	DB9 3 DB25 2
Out	2	⇒ RD	DB9 2 DB25 3
GND	3	⇐ GND	DB9 5 DB25 7
Break*	4	⇒ DSR/CTS	DB9 6/8 DB25 6/5
Break*	5	⇒ DSR/CTS	DB9 6/8 DB25 6/5

* see Engineering Notes, 'Handshake Signal' section

