

### Converter Module PF-K9UM00

for CRF and DAF encoders (refer to data sheets CRF 10266 / DAF 10286)

**PF** 10713 CE

09 / 2010

### **General description**

This module has been designed for the programming of CRF and DAF encoders via a PC, by converting the RS 485 level to RS 232. A Zero-modem cable which is supplied with each module, connects the device to the serial input of the PC. To connect the encoder, a cable with an appropriate counter plug can be supplied upon request (refer to order code). Constructional and connecting details are shown below.

**Note:** The PF-K9UM00 module replaces the absolete PF-M1UM01, PF-K9S01 and PF-VK items. It can also be used to program the PAS 96 indicator via the ProPas 96 software.

### Structure

EN standard busbar carrier with snap-on base - printed circuit board with 2 COMBICON screw clamps for connecting the programming leads (Pr+/Pr-) and for connecting the operating voltage - LED for operation display - 9-pin sub-D connector for connecting the zero modem cable.

### **Technical Data**

■ Supply voltage U<sub>B</sub>: +24 VDC ± 10%
■ Current: ≤ 150 mA (depending)

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■ Temperature range: 0°C to + 50°C

Mounting: EN-case for snap on (PHOENIX CONTACT)

Contacts: 2,5 mm²Zero-modem cable: 2 m long

PF-NM01 (included in delivery)

■ Connecting cable: 0,5 m long

(refer to order code)

#### Order code format

PF-K9UM00: Basic model w/o connecting cable.

Order code (with cable)	Connector	Number of contacts	Cable assembly  twisted pair   twisted pair  brown   white   green   yellow  +V <sub>s</sub>   -V <sub>s</sub>   PR   PR			yellow
PF-K9UM01	BI 423	12	L	М	F	E
PF-K9UM02	RS 25	12	11	12	6	5
PF-K9UM03	DC 37	37	36	37	26	25
PF-K9UM04	HAN 40	40	D9	D10	C6	C5
PF-K9UM05	DC 37*	37	36	37	26	25

<sup>\*</sup> with adapter to angle encoder and angle transducer with Ø 105 mm

# **Contact configuration**

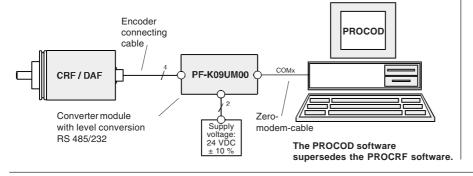
COMBICON:  $+ U_B = + 24 \text{ VDC} \pm 10\%$ (2 pins) GND = 0 VDC

COMBICON: + U<sub>B</sub> Supply voltage for encoder (if required)

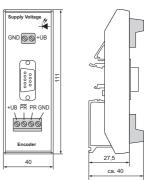
PR Programming wire Differential-Data driver according to RS 485/422

To connect the programming wires PR and  $\overline{PR}$  a twisted-pair cable is to be used.

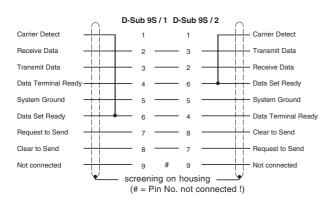
### **Block diagram**



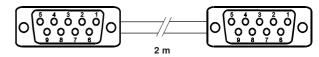
# Dimensions in mm



## Zero-modem cable PF-NM01



#### Socket contact configuration (mating side)



**Attention:** The supply voltages for CRF/DAF, for the converter module and for the encoder connecting cable must not be electrically separated (common ground for signals)!