




PRODUCT CHANGE NOTIFICATION

Discontinuation of electronics type IMCA and KAB / Announcement of
successor type DEEneo and DEEneo-ISC



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| Title: Discontinuation of electronics type IMCA and KAB / Notification of successor type DEEneo and DEEneo-ISC | |
|--|--|
| 1. Reason for change | |
| <input checked="" type="checkbox"/> Material <input checked="" type="checkbox"/> Technical data / Specifications <input checked="" type="checkbox"/> Design /Firmware | <input type="checkbox"/> Processing, Manufacturing <input type="checkbox"/> Quality / Reliability |
| 2. Change description | |
| <p>Due to the discontinuation of electronic components, the LVDT electronics of type IMCA and KAB will no longer be available from the end of quarter 3/2024. The electronics will be replaced by successor versions based on a different central chip. Signal processing will no longer be purely analogue but will use a digital signal processor.</p> | |
| 3. Affected products | |
| The discontinuation affects all model variants of the IMCA and KAB. | |
| Previous model | New model |
| External Electronics IMCA | Digital External Electronics DEEneo |
|  |  |
| Cable electronics KAB | Inline Signal Conditioner DEEneo-ISC |
|  |  |

4. Compatibility

The successor electronics represent a completely new development and are not 1:1 exchangeable. Please note the following points. All relevant modifications are described below.

Electronics for switch cabinet installation or mounting on top-hat rail:

The variant for switch cabinet installation has a new housing with a modern design due to new functions. The functional differences are explained in detail in the following points. The following relevant data changes regarding installation and cabling:

1. Housing dimensions: The integration of RJ45 sockets has increased the width of the housing.
2. Changed position of the connection clamps for power supply and signal: these are now all located at the bottom.
3. Changed position of the socket for the sensor connector: This is now positioned on the top.

Note: The connector previously used with the IMCA is compatible and can continue to be used.

Cable electronics:

The electronics integrated into the sensor connection cable have a new circuit board. The electronics housing remains unchanged. In terms of geometry and cabling, the old and new electronics can be changed 1:1.

5. Compare of technical data

| | IMCA | DEEneo |
|-------------------------------------|--|--|
| Dimensions (LxWxH) | 79 x 74 x 22,5 mm | 75 x 76,5 x 26 mm |
| Supply | 9...36 VDC | 9...36 VDC |
| Output signal | optional, 0...20 mA, 4...20 mA, 0...5 V, 0...10 V, ±5 V, ±10 V | optional, 0...20 mA, 4...20 mA, 0...5 V, 0...10 V, ±5 V, ±10 V |
| Signal processing | analog | digital by microprocessor |
| Resolution | converted approx. 13 bit | 16 bit |
| Power consumption | 75 mA at 24 VDC, 150 mA at 12 VDC | 70 mA bei 24 VDC, 130 mA at 12 VDC |
| Sensor supply | standard: 3V / 3,3 kHz, configurable by hardware | standard: 3V / 3,3 kHz, modifiable by software |
| Cable break detection | yes | yes |
| Alarm output | yes, max. 14 V and 30 mA | open Drain bis 60 V |
| Switch output | no | open Drain bis 60 V |
| Signal adjustment | via DIP switch and trimming potentiometer | via Teach-Button, via software |
| Linearisation sensor characteristic | no | yes, optionally possible |

| | KAB | DEEneo-ISC |
|--------------------|--|---|
| Dimensions (LxWxH) | no modification to the housing | no modification to the housing |
| Supply | 9...36 VDC | 9...36 VDC |
| Output signal | selectable, 0...20 mA, 4...20 mA, 0...5 V, 0...10 V, ±5 V, ±10 V | selectable/configurable, 0...20 mA, 4...20 mA, 0...5 V, 0...10 V, ±5 V, ±10 V |
| Signal adjustment | analog | digital by microprocessor |
| Resolution | converted approx.13 bit | 16 bit |

| | | |
|-------------------------------------|---|---|
| Power consumption | 75 mA at 24 VDC, 150 mA at 12 VDC | 70 mA at 24 VDC, 130 mA at 12 VDC |
| Sensor supply | standard: 3V / 3,3 kHz, configurable by hardware | standard: 3V / 3,3 kHz, modifiable by software |
| Cable break detection | yes | yes |
| Signal adjustment | via DIP switch and trimming potentiometer | via teach-button, via software |
| Linearisation sensor characteristic | no | yes, optionally possible |

6. Changed dimensions

Illustration and dimensional drawing IMCA:

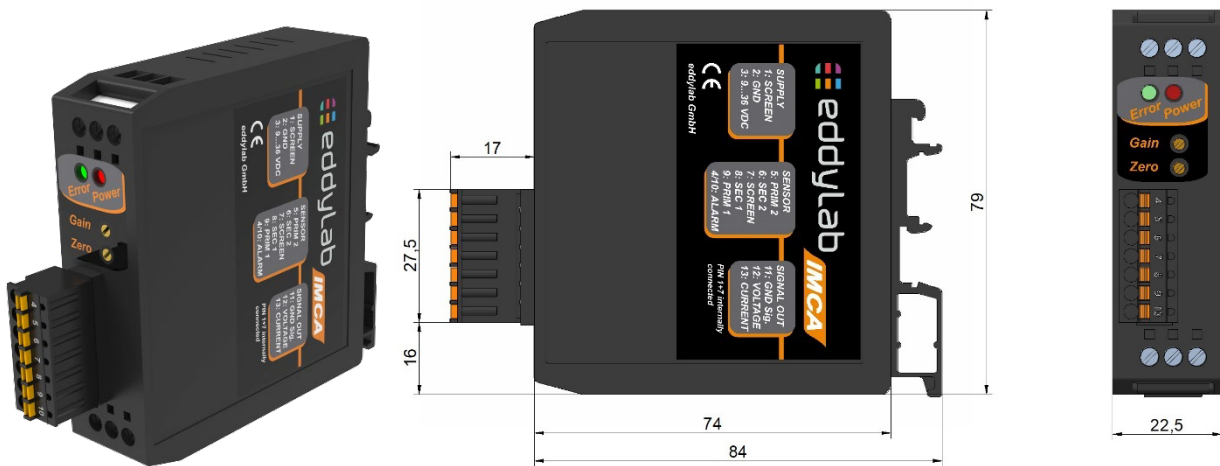


Illustration and dimensional drawing DEEneo:

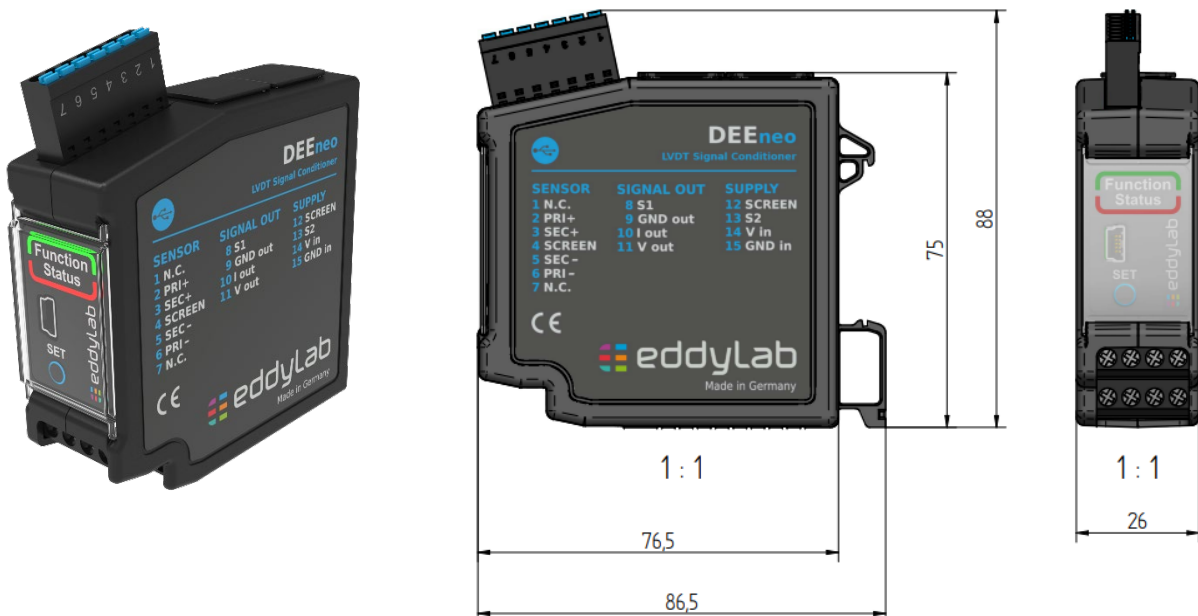


Illustration and dimensional drawing Cable Electronics / DEEneo-ISC:

Illustration

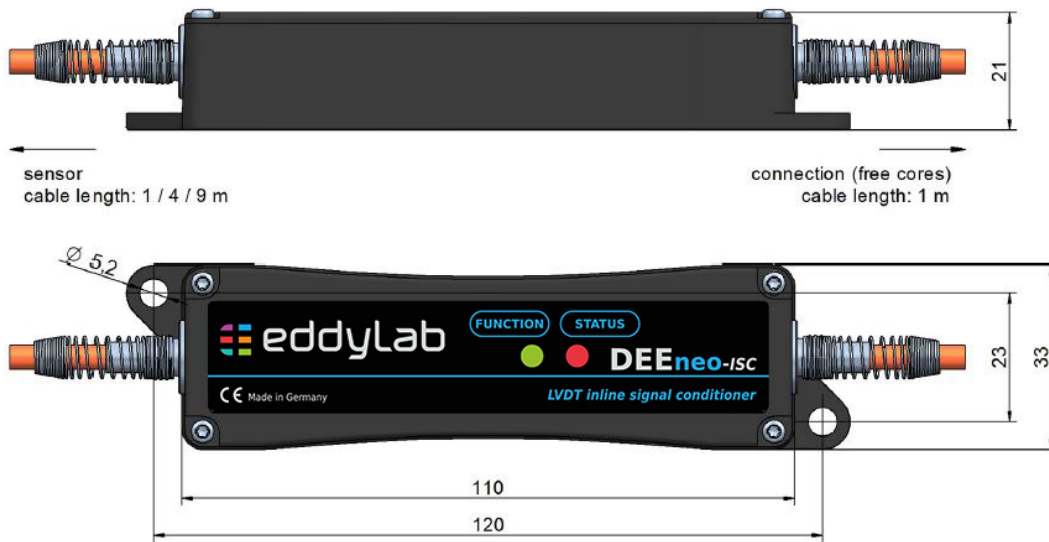
KAB



DEEneo-ISC

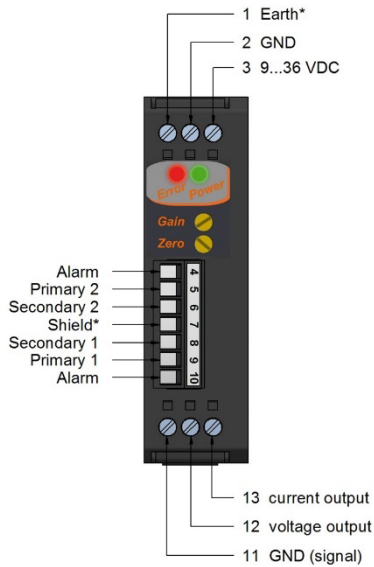


Dimensional drawing



7. Connection / Assignment

IMCA:



DEEneo:



8. Procedure for replacing IMCA/KAB by successor

IMCA:

Electronics are preset by eddylab. The customer is responsible for setting the signal using the ZERO and GAIN trimming potentiometers or sends the corresponding sensor to EddyLab for calibration.

DEEneo:

Current: Electronics are preset by eddylab. The customer is responsible for setting the signal using the teach button or sends the associated sensor to EddyLab for calibration. The start and end of the measuring range are defined using the teach button. The electronics then scale the desired output signal (e.g. 4...20 mA) to this range.

If required, the electronics can be calibrated and linearised together with the sensor. Linearisation takes place over 50 points so that the measuring chain achieves a linearity deviation of $\leq 0,01\%$.

Outlook / future features

Digital interfaces: Profinet, Ethernet-IP, RS485, Ethercat, etc.

9. Date of change / Coming into force

Availability of the new electronics from October 2024

Data sheet with order code, operating instructions will follow and be published on www.eddylab.com

eddylab GmbH will fulfil outstanding blanket orders for IMCA and KAB electronics. Remaining stocks will be sold off.