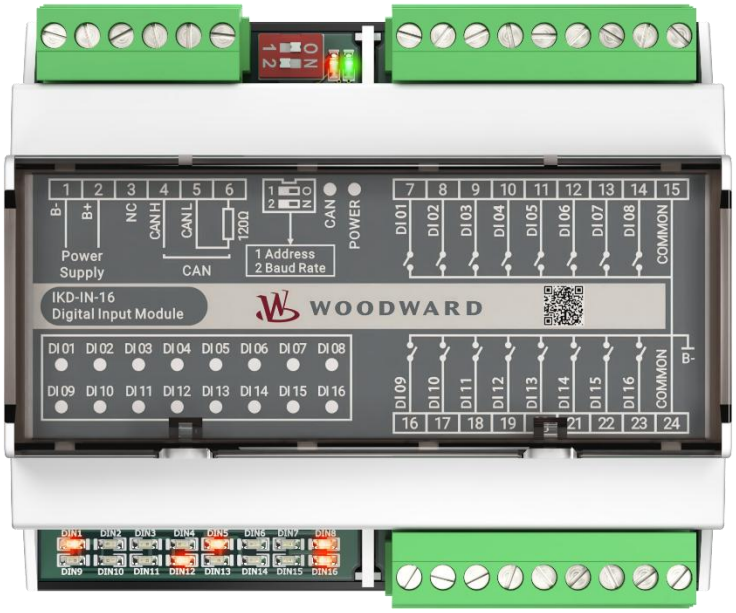
Digital Input Expansion Module
IKD-IN-16 UL

Data sheet



General

The IKD-IN-16 is a smart solution to increase number of digital inputs to Kuhse controls of KEA 300 series or apply it as a remote input module in your PLC based control system. It is possible to connect one or more IKD-IN-16 modules (see Related Products below).

The IKD-IN-16 input status are transferred over the CAN bus to a higher-level controller. Configuration of each input such as name, alarm class, NO/NC configuration, and time delay is performed in the main controller. The name and class are displayed on the connected genset controller's display. It requires no configuration tool as few parameters such as module address and CAN baud rate can be setup by onboard DIP switches.

Function overview

- 16 configurable digital inputs
- plug-n-play connection with Kuhse controls of KEA 300 series
- easy integration
- compact remote I/O with IKD-OUT-16
- Configuration via toolkit software, no additional configuration tool required
- For 12/24V DC applications
- CAN bus communication
- CE/UKCA marked
- UL/cUL listed

Description

Features

- 16 configurable discrete inputs
- CAN bus communication to the higher-level controller
- The control unit evaluates the status of these discrete inputs and depending on the configuration of the control unit takes an appropriate action
- The IKD-IN-16 can be used with other manufacturer's controllers/PLCs. Consult product manual 37953 for information regarding the CAN bus data telegram
- DIP switches to configure device module number and CAN baud rate.
- Power, CAN, and DI status LEDs

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Subject to alteration
Stand: 02/2025

Technical Data

Power supply	24 VDC (9 to 35 VDC)
Intrinsic consumption	max. 1.2 W
Reverse voltage protection	Yes
Ambient temperature (operation)	-20 to 70 °C / -4 to 158 °F
Ambient temperature (storage)	-30 to 80 °C / -22 to 176 °F
Ambient humidity	95%, non-condensing
Discrete inputs	non-isolated
Input range	24 VDC (0 to 60 VDC)
Common terminal	connected to battery minus (B-)
CAN Interface	isolated
Insulation voltage (continuous)	2500 VDC
Version	CAN bus
Internal line termination	yes (terminals 5,6)
Housing	
DIN-rail mounting	Plastic housing
Dimensions WxHxD	107.6 × 89.7 × 60.7 mm
Connection.	screw-plug-terminals 2.5 mm² Protection system IP20
Weight	approx. 250 g
Disturbance test (CE)	tested according to applicable IEC standards
Listings	CE, UKCA, UL/cUL

Related Products

Supported power management controllers	Max. # of IKD-IN-16
• LS-6XT-P2 (LS-6XT-P1)	2 (1)
• KEA 320 Lite / KEA 320 RP Lite	1
• KEA 320 / KEA 320 RP	1
• KEA 350 P1 / KEA 350 RP P1	2
• KEA 350 P2 / KEA 350 RP P2	1
• easYgen-2000	1
• easYgen-800/1500/1700/1800	1
• DTSC-200 and -200A	1

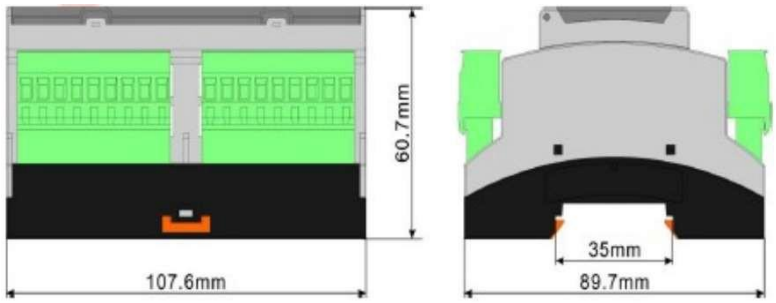
Article number

- 2RIKD16DI1

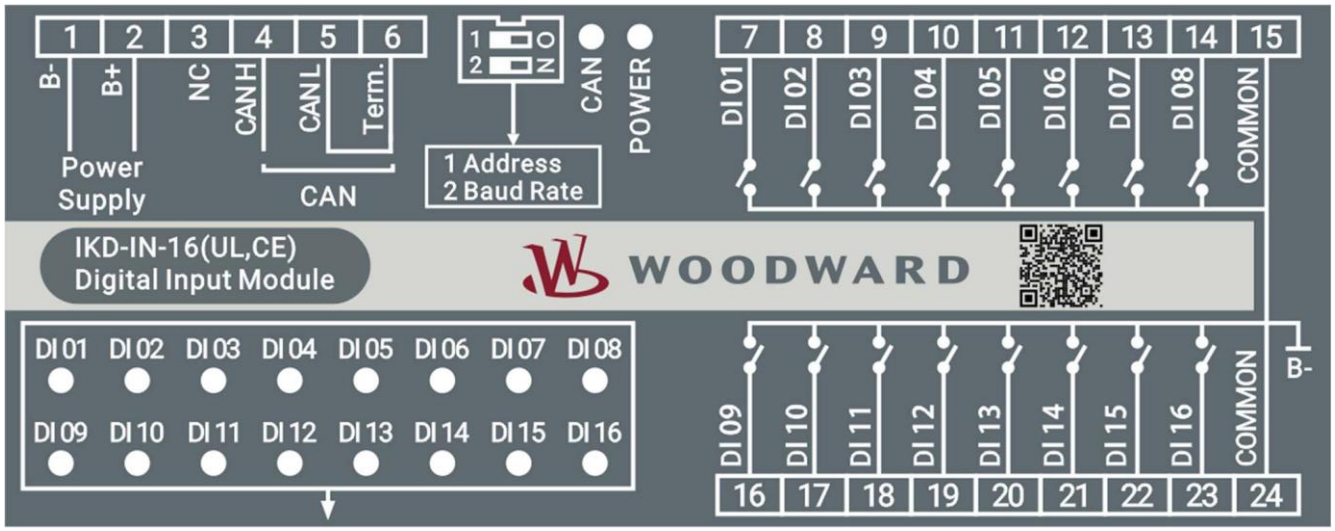
Related Products

- 2RIKD16DO1 | Extension module for digital outputs IKD-OUT-16
- 2RIKD1M000 | Digital I/O expansion card IKD 1

Dimensions



Terminal Diagram



Typical Application

The digital inputs are read by the IKD-IN-16 and transferred via the CAN bus to the control unit (incl. alarm class). Each alarm input may have a delay as well as the control logic (NO/NC) configured individually during set up. The status of the alarm input is monitored in the control device and will show the alarm text in its display. The alarm class assigned in the control device evaluates the alarm input and reacts accordingly. If a discrete input on the IKD-IN-16 is enabled, the control device displays a text message, and the control functions of the alarm class are executed (refer to according manual of the supported control devices).