



### Applications

The IKD 1 is a smart solution to increase numbers of digital I/O's to Kuhse KEA 300 series controllers.

It is possible to connect one or more IKD 1 units to the genset controllers (see table Related Products below).

Each of the inputs can be assigned a name, alarm class, NO/NC configuration and time delay. The name and class are displayed on the connected genset controller's display.

The IKD 1 output relays are controlled over the CAN bus connection from the main genset controller. Configuration of the IKD 1 is performed through the relay manager in the main controller and transmitted to the IKD 1.

A direct configuration cable (DPC) and software can be purchased for use with a PC or laptop and may be advisable for extensive configuration applications or where several similar units are to be set up.

- 8 discrete inputs
- 8 relay outputs
- FORM C
- PC configurable<sup>1)</sup>
- CAN bus communication
- Microprocessor technology for accurate, repeatable and reliable operation
- CE marked
- UL/cUL Listing

1) Use Toolkit software for configuration

### Description

#### Features

- 8 configurable discrete alarm inputs
- 8 configurable FORM C relays with potential free contacts
- Configurable delays for each input
- CAN bus communication
- The discrete inputs transfer their status via CAN bus to the control unit.
- The control unit evaluates the status of these discrete inputs coming from the IKD 1 and depending on the

configuration of the control unit, will take the appropriate action.

- The control unit can send commands via the CAN bus to remotely control the output relays of the IKD 1.
- The IKD 1 can be used with other manufacturer's controllers. Consult product manual 37135 for information regarding the address assignments of the CAN bus interface.

## Technical Data

Power supply	12/24 Vdc (6 to 36 Vdc)
Intrinsic consumption	max. 3 W
Ambient temperature	-40 to 85 °C
Ambient humidity	95 %, non-condensing
Discrete inputs	isolated
Input range	12/24 Vdc (6 to 32 Vdc)
Input resistance	approx. 6.8 kΩ
Relay outputs	isolated
Contact material	AgCdO
Load (GP)	2.00 Aac@250 Vac
	2.00 Adc@24 Vdc / 0.36 Adc@125 Vdc / 0.18 Adc@250 Vdc
Pilot duty (PD)	
	1.00 Adc@24 Vdc / 0.22 Adc@125 Vdc / 0.10 Adc@250 Vdc
Service interface	
Version	RS-232
CAN interface	isolated
Insulation voltage (continuously)	100 Vac
Insulation test voltage (≤ 5 s)	1,000 Vac
Version	CAN bus
Housing	
DIN-rail mounting	extrusion profile Um 122
	to snap-on on a DIN rail/C-profile
	168 × 128 × 51 mm
Connection	screw/plug terminals 2.5 mm <sup>2</sup>
Weight	approx. 360 g
Protection system	IP 20
Disturbance test (CE)	tested according to applicable EN guidelines
Listings	UL/cUL, GHOST-R

### Related Products

max. # of IKD 1

- KEA 320 / KEA 320 RP 4
- KEA 350 / KEA 350 RP 4

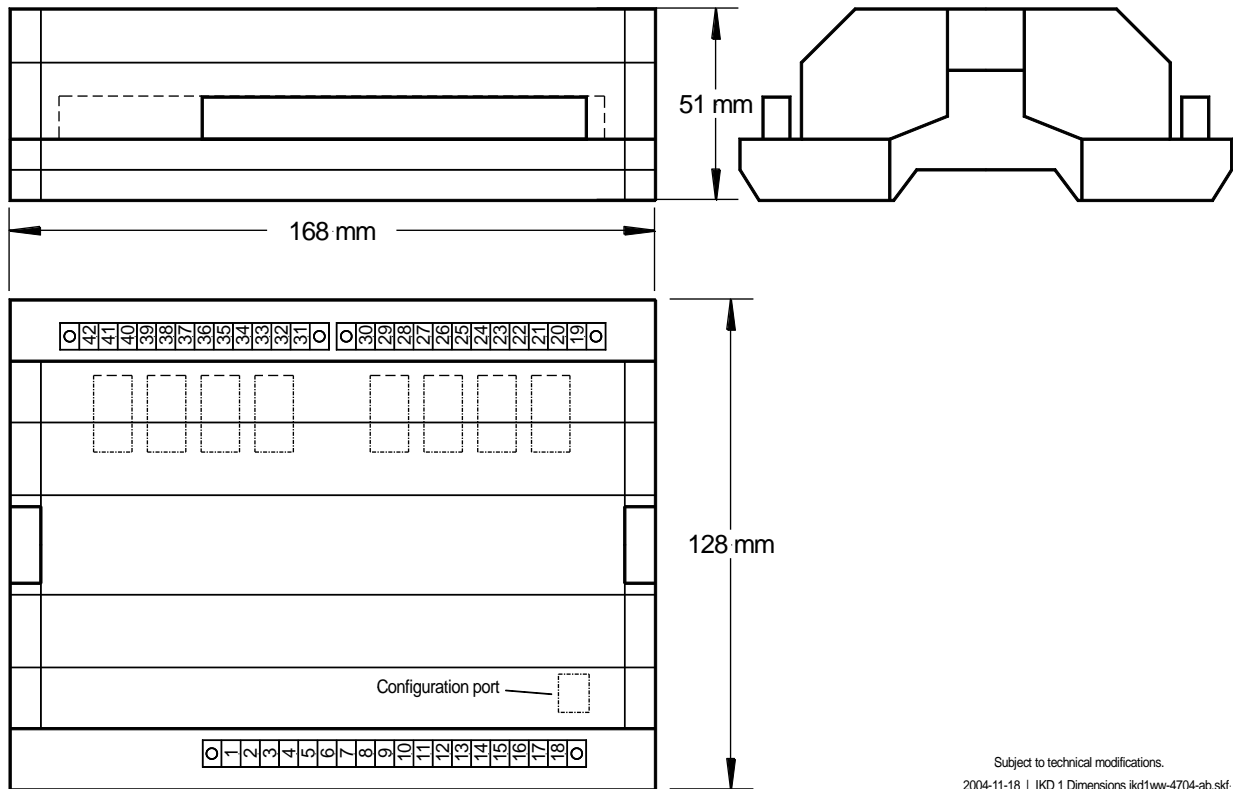
### Product Number P/N

- 2RIKD1M000

### Accessory

- 2A300DPC00 | Connection Starter Set, incl. 1x Communication Device - DPC USB to connect to IKD 1

### Dimensions



Subject to technical modifications.  
2004-11-18 | IKD 1 Dimensions ikd1ww-4704-ab.skf



## Typical applications

The digital inputs are read by the IKD 1 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.

The control device's relay manager controls the IKD 1 relays. The control logic for each IKD 1 relay can be programmed individually in the control device. Logical commands can be configured using internal events as well as the status of the digital inputs coming from the IKD 1.

If a discrete input on the IKD 1 is enabled, the control device displays a text message and the control functions of the alarm class are executed (refer to all manuals relating to the control device). The control device must operate the IKD 1 relays.

