

DC Current transducer DK-B020/420

A split core transducer for the electronic measurement DC current, with galvanic isolation between the primary (High power) and the secondary circuits (Electronic circuit) with current output.



$I_{PN} = 50 \dots 400A$



Electrical data

| Primary Nominal Current I_{PN} (A.t) | Analogue Output Signal ¹⁾ I_{OUT} (mA) | Types |
|---|--|--------------------|
| 50,75,100 | 0-20 | DK 100 B020 |
| 100,150,200 | 0-20 | DK 200 B020 |
| 150,225,300 | 0-20 | DK 300 B020 |
| 200,300,400 | 0-20 | DK 400 B020 |
| 50,75,100 | 4-20 | DK 100 B420 |
| 100,150,200 | 4-20 | DK 200 B420 |
| 150,225,300 | 4-20 | DK 300 B420 |
| 200,300,400 | 4-20 | DK 400 B420 |
| V_c Supply voltage | 22-26 | V AC/ DC |
| R_L Load resistance (max) | 650 | Ω |
| V_d Isolation voltage | 3000 | V |
| f Frequency | DC | |
| I_c Current consumption (max) | 100 | mA |

Accuracy - Dynamic performance data

| X | Accuracy @ $I_{PN}, T_A=25^\circ C$ | ± 1 | % |
|--------------|-------------------------------------|------------|----|
| ϵ_L | Linearity | ± 0.75 | % |
| t_r | Response time @ 90% of I_{PN} | < 100 | mS |

General data

| | | | |
|-------|--|--------------|------------|
| T_A | Ambient operating temperature (0-95% RH) | - 20 .. + 50 | $^\circ C$ |
| T_S | Ambient storage temperature | - 20 .. + 85 | $^\circ C$ |
| m | Mass | 120 | g |

Options

Bipolar output :

DK 100 B 420 B, DK 200 B 420 B, DK 300 B 420 B, DK 400 B 420 B

Features

- DC Measurement
- Split core box
- Current output
- Jumper selectable ranges
- Panel mounting
- Extended measuring range

Advantages

- Large aperture
- High isolation between primary and secondary circuits
- Easy to mount
- No insertion losses

Applications

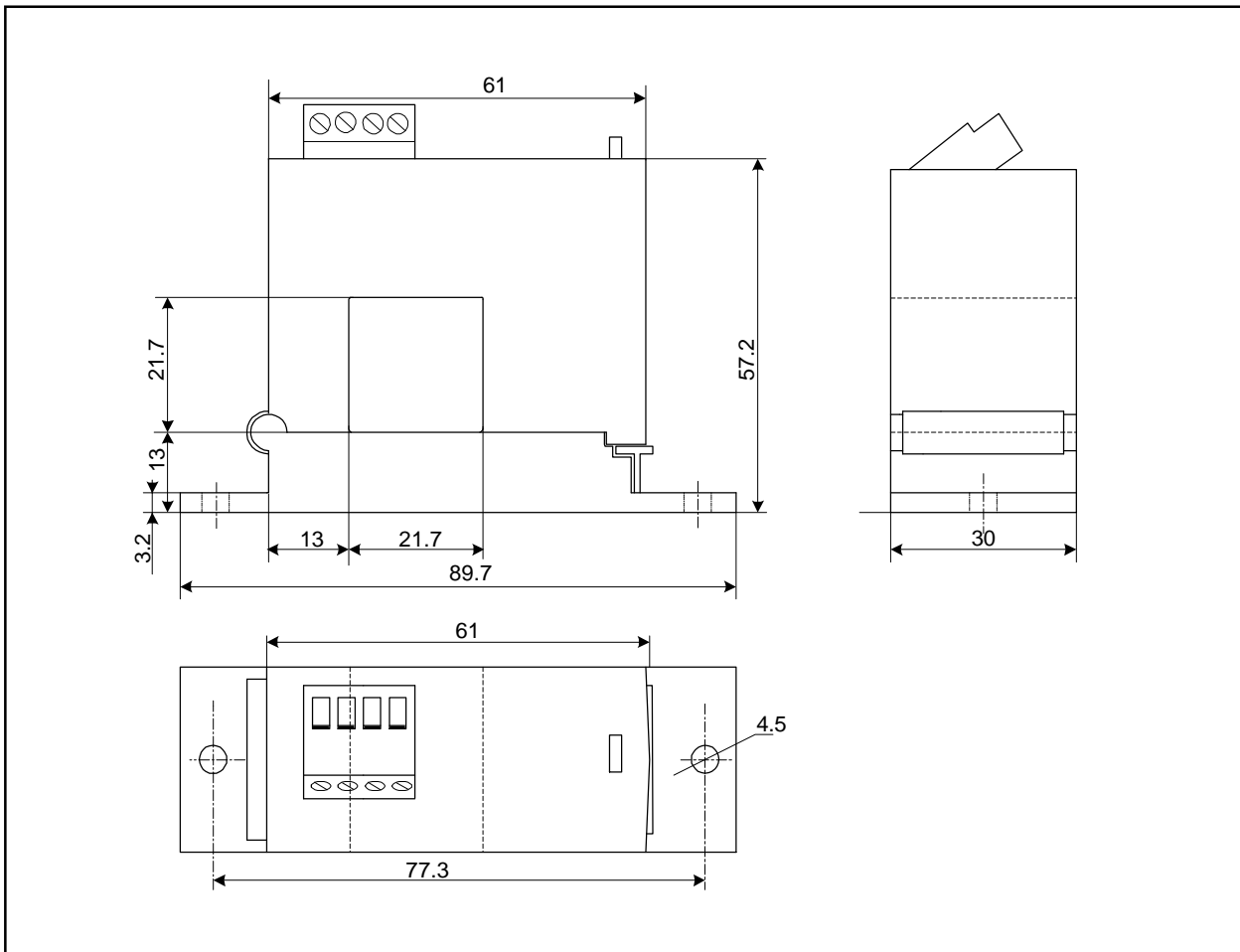
- Battery Banks
 - Monitors load current
 - Monitors charging current
 - Verifies operation
- Transportation
 - Measures traction power or auxiliary loads
- Electric Heating Elements
 - Faster response than temperature sensors.

Options on request

- Bipolar output
- DIN mounting.

Note : ¹⁾ For 0-20 mA and 4-20 mA outputs models, no saturation outputs up to 23 mA.

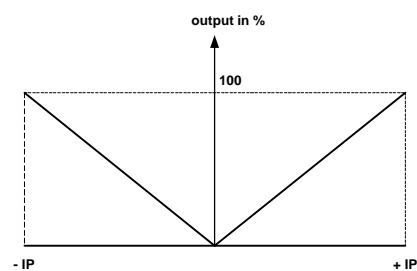
Dimensions DK-B020/420 (unit : mm, 1 mm = 0.0394 inch)



Mechanical characteristics

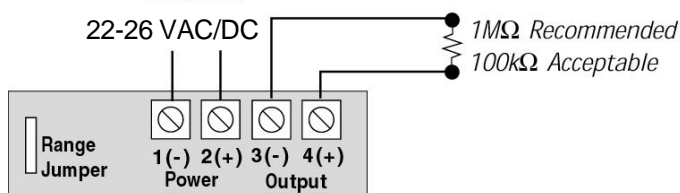
- General tolerance ± 1 mm
- Primary aperture 21.7 mm sq.
- Panel mounting 2 holes $\varnothing 4.5$ mm
- Distance between holes 77.3 mm

Standard output



Connections

- 2 x UNC8 Cylindric Head



- dead front captive screw terminals
- 12-22AWG solid or stranded

Bipolar output

