

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

### Accuracy - Dynamic performance data

X	Accuracy @ $I_{PN}, T_A=25^\circ C$	$\pm 1$	%
$\epsilon_L$	Linearity	$\pm 0.75$	%
$t_r$	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

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

### 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

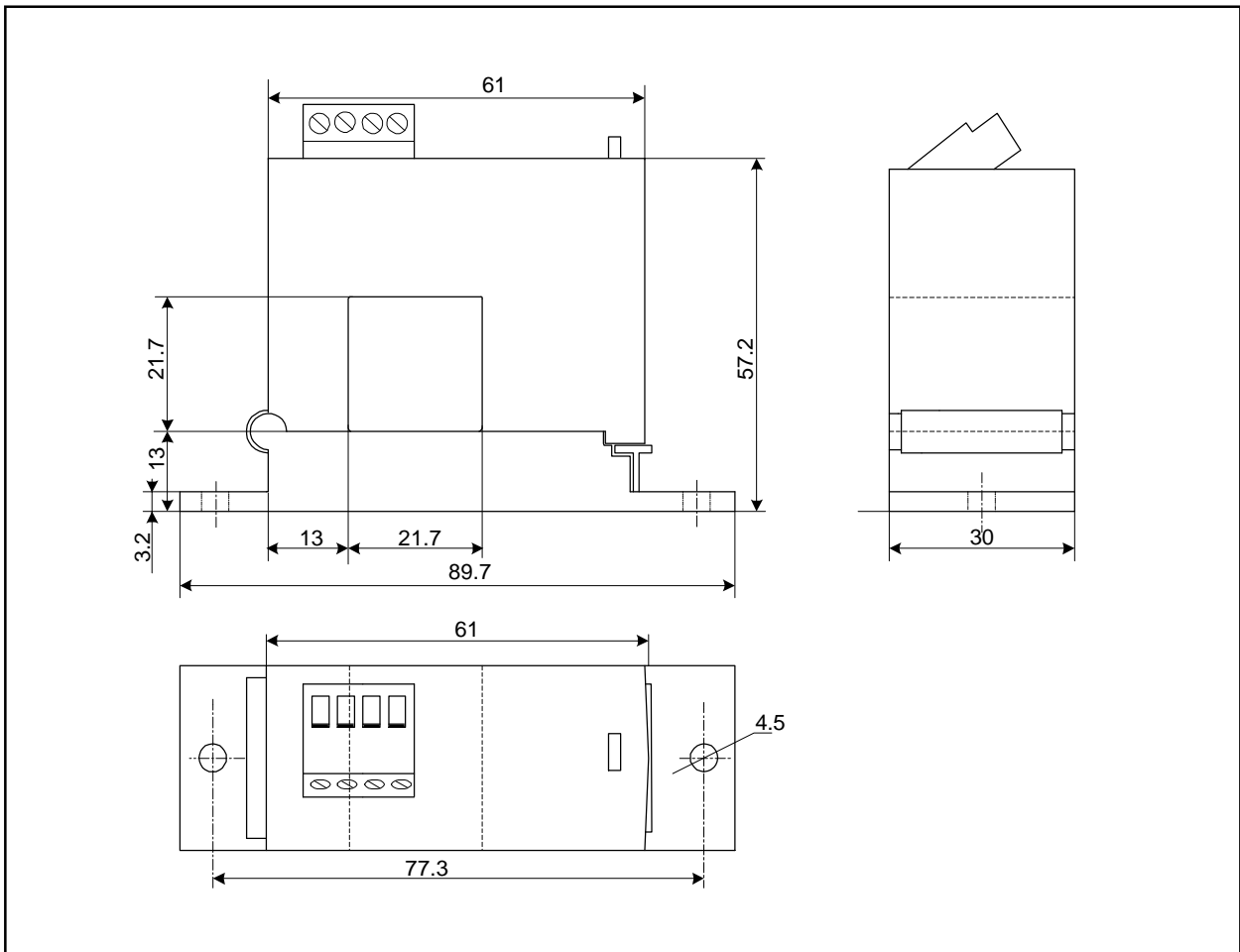
### Applications

- 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.

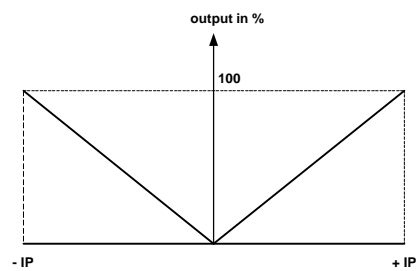
## Dimensions DK-B020/420 (unit : mm, 1 mm = 0.0394 inch)



### Mechanical characteristics

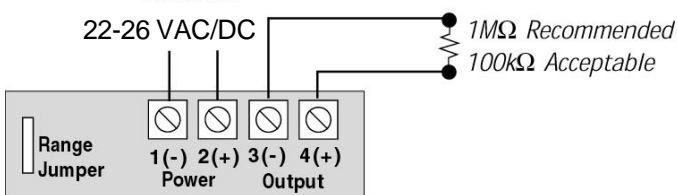
- General tolerance  $\pm 1$  mm
- Primary aperture 21.7 mm sq.
- Panel mounting 2 holes  $\varnothing 4.5$  mm
- Distance between holes 77.3 mm

### Standard output



### Connections

- 2 x UNC8 Cylindric Head



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

### Bipolar output

