

## 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.

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



### Electrical data

Primary Nominal Current	Analogue Output Signal <sup>1)</sup>	Types	RoHS
$I_{PN}$ (A.t)	$I_{OUT}$ (mA)		Date Code
50,75,100	0-20	<b>DK 100 B020</b>	MAY 2006
100,150,200	0-20	<b>DK 200 B020</b>	planned
150,225,300	0-20	<b>DK 300 B020</b>	planned
200,300,400	0-20	<b>DK 400 B020</b>	planned
50,75,100	4-20	<b>DK 100 B420</b>	planned
100,150,200	4-20	<b>DK 200 B420</b>	MAY 2006
150,225,300	4-20	<b>DK 300 B420</b>	planned
200,300,400	4-20	<b>DK 400 B420</b>	planned
$V_c$ Supply voltage	20-50 V DC	22-38	V AC
$R_L$ Load resistance (max)		650 max.	$\Omega$
$V_b$ Rated voltage (CAT III, PD2)		150	V AC
$V_d$ Isolation voltage		3000	V
f Frequency		DC	
$I_c$ Current consumption (max)		100	mA

### Accuracy - Dynamic performance data

X	Accuracy @ $I_{PN}, T_A=25^\circ\text{C}$	$\pm 1$	%
	<b>DK 300 BXX</b>	$\pm 1.5$	%
	<b>DK 400 BXX</b>	$\pm 2$	%
$\epsilon_L$	Linearity error	$\pm 0.75$	%
$t_r$	Response time @ 90% of $I_{PN}$	< 100	mS

### General data

$T_A$	Ambient operating temperature (0-95% RH)	- 20 .. + 50	$^\circ\text{C}$
$T_S$	Ambient storage temperature	- 20 .. + 85	$^\circ\text{C}$
m	Mass	120	g
IPXX	Protection type	IP 20	
	Safety	IEC 61010-1	
	EMC	EN 61326 <sup>2)</sup>	

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

<sup>2)</sup> For IEC 61000-4-3, IEC 61000-4-6 and IEC 61000-4-4 Criterion B : temporary impairment to operational behavior.

Remark : Temperature of the primary conductor should not exceed 60°C.

### 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

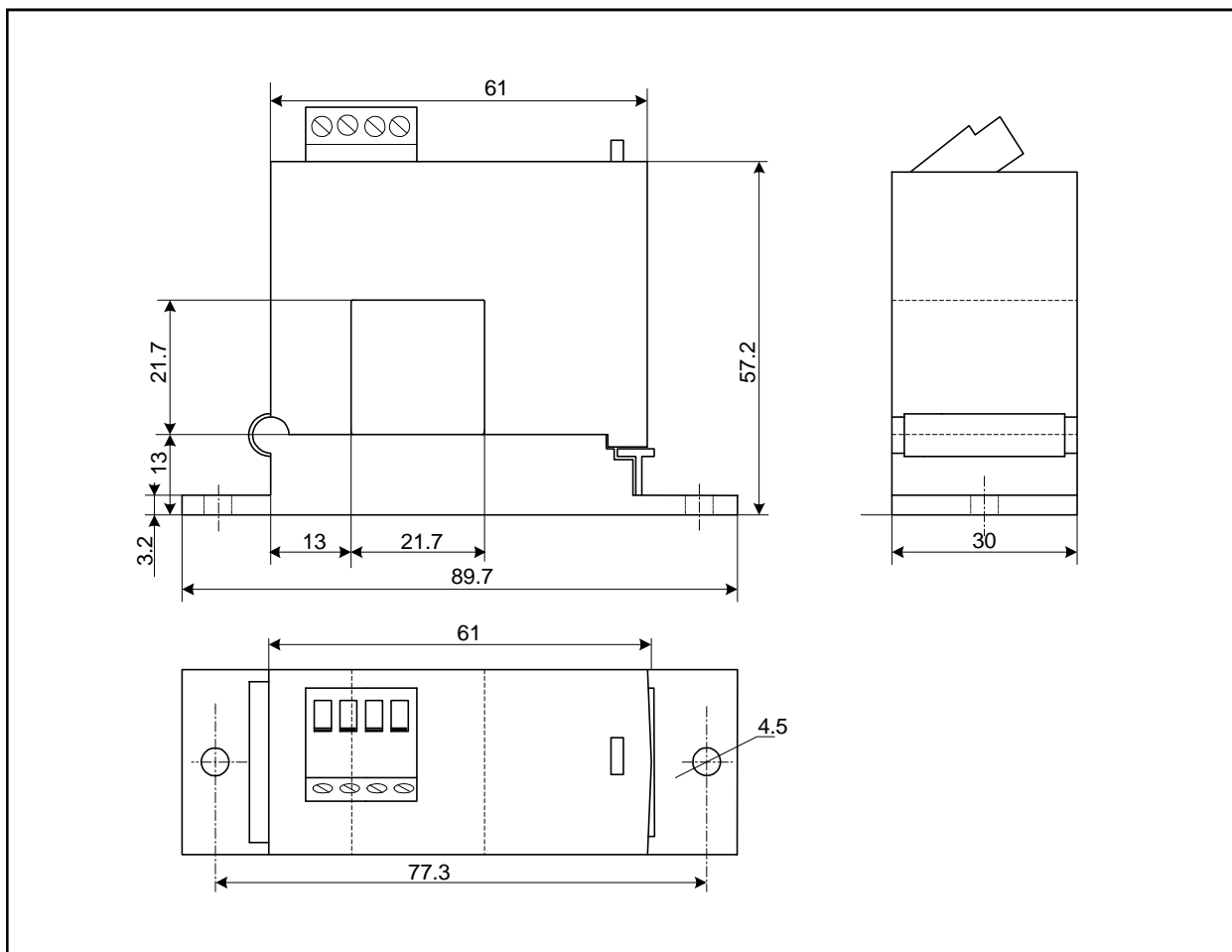
### Options on request

- DIN mounting

### Application domain

- Industrial.

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

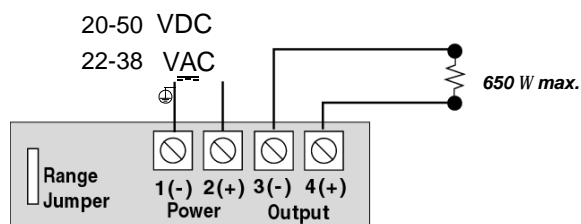


### Mechanical characteristics

- 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

### Connections

- 2 x UNC8 Cylindric Head



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

### Standard output

