

DC Current transducer DK-B5/10

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

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 voltage output.



Electrical data

Primary Nominal Current I_{PN} (A.t)	Analogue Output Signal ¹⁾ V_{OUT} (V)	Type	RoHs Date Code
50,75,100	0-5	DK 100 B5	planned
100,150,200	0-5	DK 200 B5	planned
150,225,300	0-5	DK 300 B5	planned
200,300,400	0-5	DK 400 B5	planned
50,75,100	0-10	DK 100 B10	MAY 2006
100,150,200	0-10	DK 200 B10	MAY 2006
150,225,300	0-10	DK 300 B10	planned
200,300,400	0-10	DK 400 B10	planned
V_c Supply voltage		20-50 22-38	V DC V AC
R_L Load resistance		50 .. 250	kΩ
V_b Rated voltage (CAT III, PD2)		150	V AC
V_d Isolation voltage		3000	V AC
f Frequency		DC	
I_c Current consumption (max)		100	mA

Features

- DC Measurement
- Split core box
- Voltage 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.

Accuracy - Dynamic performance data

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

General data

T_A	Ambient operating temperature (0-95% RH)	- 20 .. + 50	°C
T_S	Ambient storage temperature	- 20 .. + 85	°C
m	Mass	120	g
	Protection type	IP 20	
	Safety	IEC 61010-1	
	EMC	EN 61326 ²⁾	

Notes : ¹⁾ For 0-3 V output model, no saturation output up to 3.5 V for 0-5 V output model, no saturation output up to 5.75 V and for 0-10 V output model, no saturation output up to 11.5 V

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

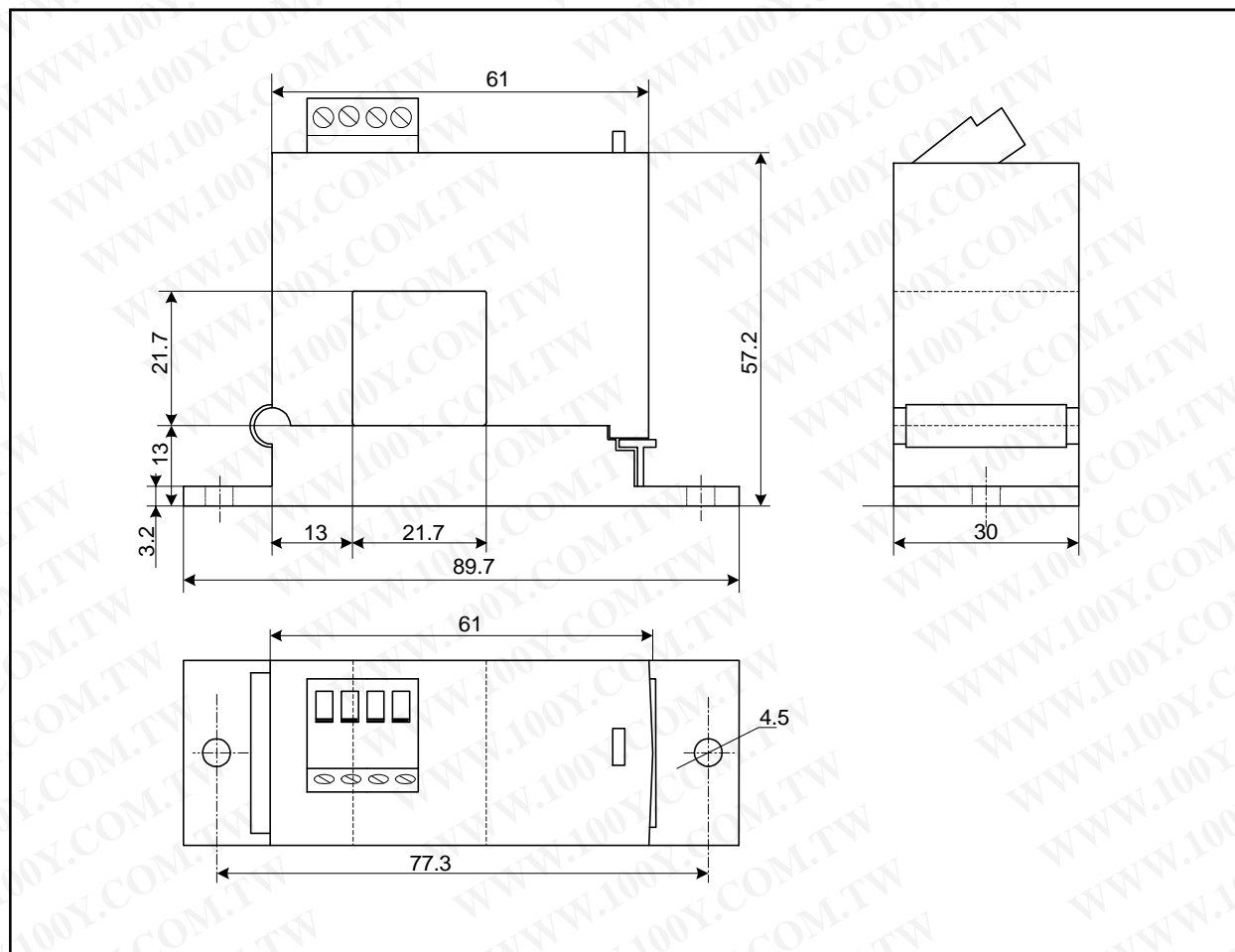
Applications

- 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.

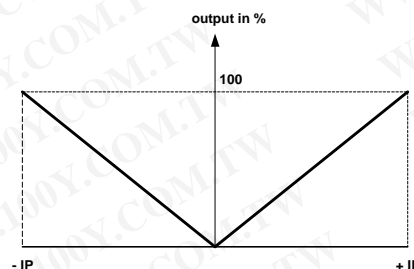
Dimensions DK-B5/10 (unit : mm, 1mm = 0.0394 inch)



Mechanical characteristics

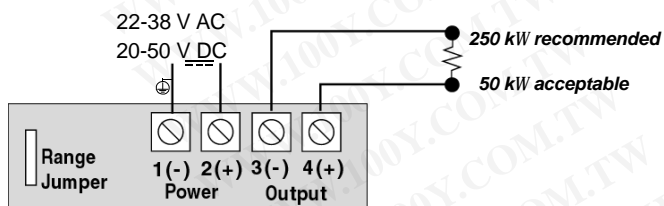
- General tolerance ± 1 mm
- Primary aperture 21.7 mm sq.
- Panel mounting 2 holes $\varnothing 4.5$ mm
Distance between holes 77.3 mm

Output



Connections

- 2 x UNC8 Cylindric Head



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

Remark

- Temperature of the conductor should not exceed 60°C.