

## AHBC-LF505 I<sub>p</sub>=500A



### Products Features

Excellent accuracy  
 Very good linearity  
 Wide frequency bandwidth  
 No insertion losses  
 High immunity to external interference

### Remarks

The false wiring may result in the damage of the sensor.

VOUT is positive when IP flows in the direction of the arrow.

Dynamic performances (di/dt and response time) are best with a single bar completely filling the primary hole.

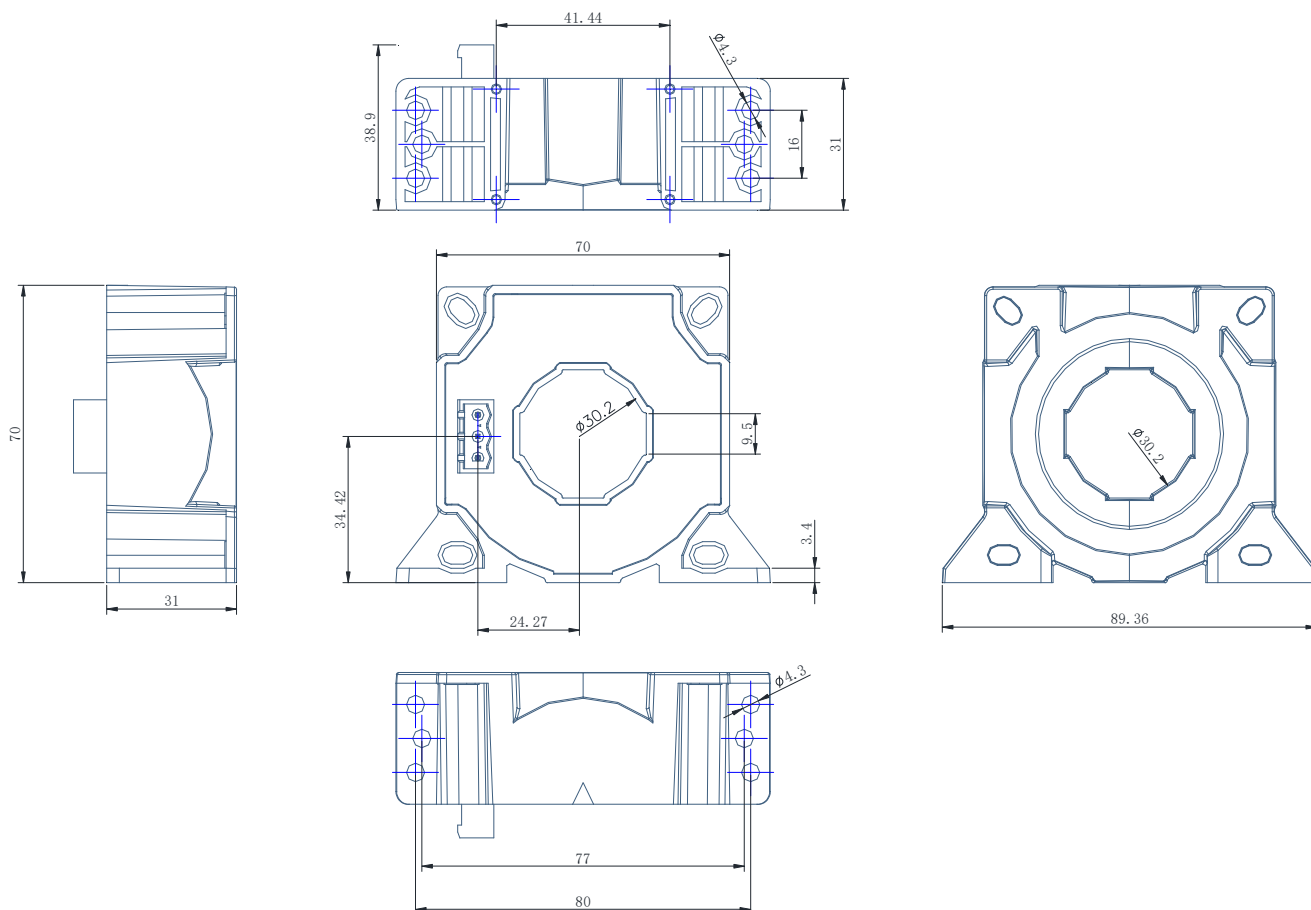
Temperature of the primary conductor should not exceed 100°C.

This is a standard model. For different versions (IP, supply voltages, output voltages, connection of secondary, turns ratios...), please contact us.

### Applications

Static converters for DC motor drives  
 Battery supplied applications  
 Uninterruptible Power Supplies (UPS)  
 SWITCHED Mode Power Supplies (SMPS)  
 Power supplies for welding applications

## Mechanical dimension



## Mechanical characteristics

General tolerance	$\pm 0.5 \text{ mm}$
Recommended fastening torque	3.2 N·m
Vertical position	4 holes $\Phi 4.2\text{mm}$ 4 M4 steel screws

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**Electrical data AHBC-LF505**

@  $T_A = 25\text{ }^\circ\text{C}$

Type	AHBC-LF505
$I_P$ Rated input	500A
$I_{PM}$ Measure range	800A
$I_S$ Rated output current	100mA
$K_N$ Conversion ratio	1:5000
$R_i$ Coil internal resistance	83 $\Omega$
$V_C$ Supply voltage	$\pm 15\text{VDC}$ ( $\pm 5\%$ )
$I_C$ Current consumption	(17+ $I_S$ ) mA
X Overall accuracy	$\pm 0.5\%$ FS
$\epsilon_L$ Linearity	$\leq 0.1\%$ FS
$I_O$ Offset current	$\pm 0.2\text{mA}$
$I_{OT}$ Offset current drift	$\leq 0.4\text{mA}$
$V_D$ Galvanic isolation	50Hz, 1min, 3.5KV
$T_R$ Response time	$< 1\mu\text{s}$
BW Frequency bandwidth-3db	DC~100KHz
$T_A$ Ambient operating temperature	-40~+85 $^\circ\text{C}$
$T_S$ Ambient storage temperature	-40~+125 $^\circ\text{C}$
m Mass	$\approx 251\text{g}$
Standards	JB/T 7490-2007