

PN : BJHCS151-100/100B

IPN = 25A - 50A

Features

- Closed loop
- High accuracy
- Very good linearity
- Low power consumption
- Good over-current capability
- Supply voltage : $\pm 15V$ DC
- Current output
- Small PCB mounting
- Can be customized

Applications

- Frequency drive control home appliances
- Solar power management system
- Inverter applications
- Uninterruptible power supplies (UPS)
- Current monitoring



ELECTRICAL DATA

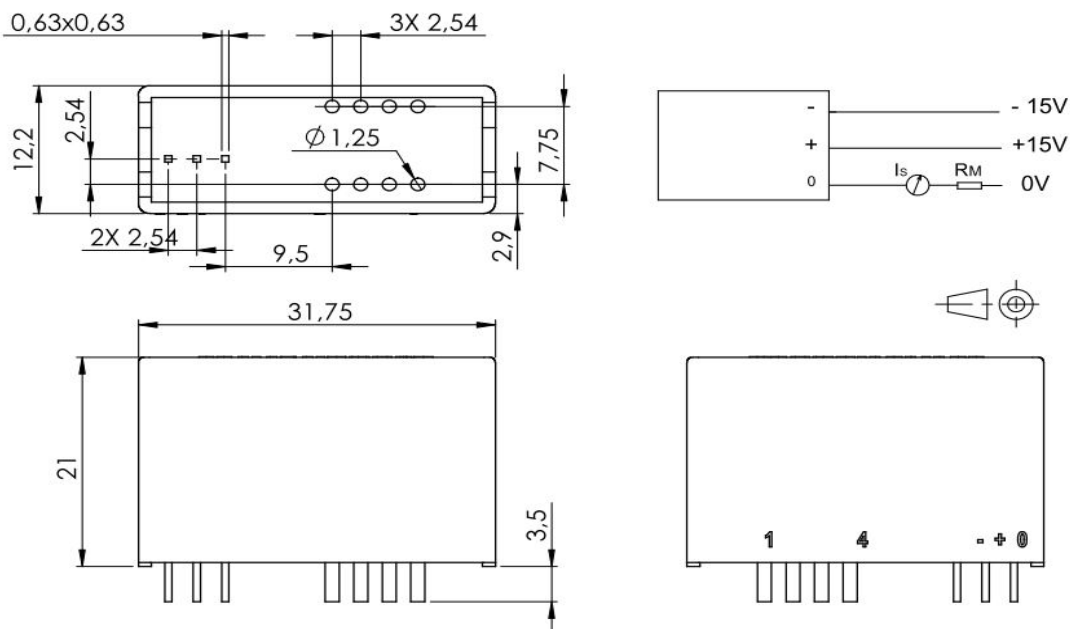
| BJHCS-151-... | 100 | 100B |
|---|----------------------|----------------------|
| Nominal rms current I_{PN} (A) | 25 | 50 |
| Sensed current range I_{PM} (A) | ± 55 | ± 100 |
| Measuring resistance R_M (Ω) with $V_C = \pm 15 V$ | 54 to 360 | 68 to 180 |
| Coil turns ratio K ($P^N:S^N$) | 1 - 2 - 3 - 4 : 1000 | 1 - 2 - 3 - 4 : 1000 |
| Secondary coil resistance (Ω) | 30 | |
| Nominal analog output current I_{SN} (mA) | 25 | 50 |
| Static current consumption I_{CO} (mA) | ≤ 15 | |
| Supply voltage V_C (Vdc) | $\pm 15 \pm 5\%$ | |

ACCURACY DYNAMIC PERFORMANCE

GENERAL & ISOLATION CHARACTERISTICS

| | | | | | |
|---|----------------|------------|--------------------------------|-------------|------------|
| Accuracy X_G @ I_{PN} , $T=25^\circ C$ | $\pm 0,5\%$ | % | Operating temperature | -40 to +85 | $^\circ C$ |
| Zero offset Current I_O @ $I_P=0$, $T=25^\circ C$ | $\leq \pm 0,2$ | mA | Storage temperature | -40 to +125 | $^\circ C$ |
| Zero current drift @ - 40 $^\circ C$ to 85 $^\circ C$ | $\leq \pm 0,5$ | mA | Weight | 15 | g |
| Linearity error ϵ_L | $\leq 0,1$ | % FS | Insulation voltage (50Hz, 1mn) | 5 | KV |
| di/dt accurately followed | > 50 | A/ μs | | | |
| Response time t_r | ≤ 1 | μs | | | |
| Bandwidth (- 3db) | DC to 200 | kHz | | | |

DIMENSIONS



WIRING DIAGRAM

| Number of Primary turns | Primary current I_{PN} (A) | | Peak Current I_{PM} (A) | | Output Current I_{SN} (mA) | | Primary pin |
|-------------------------|------------------------------|------|---------------------------|------|------------------------------|------|---|
| | 100 | 100B | 100 | 100B | 100 | 100B | BJS-151-100 & 100B |
| 1 | 25 | 50 | 55 | 100 | 25 | 50 | <div> <div>8</div> <div>5 Out</div> <div>In 1</div> <div>4</div> </div> |
| 2 | 12 | 25 | 27 | 50 | 24 | 50 | <div> <div>8</div> <div>5 Out</div> <div>In 1</div> <div>4</div> </div> |
| 3 | 8 | 16 | 18 | 33 | 24 | 48 | <div> <div>8</div> <div>5 Out</div> <div>In 1</div> <div>4</div> </div> |
| 4 | 6 | 12 | 13 | 25 | 24 | 48 | <div> <div>8</div> <div>5 Out</div> <div>In 1</div> <div>4</div> </div> |

MECHANICAL CHARACTERISTICS

| | |
|---------------------|---------------------------|
| General tolerance | $\pm 0,2$ mm |
| Primary pins | 8 x $\varnothing 1,25$ mm |
| Terminal connection | 3 x 0,635*0,635 |

Cautions :

- Do respect the wiring diagram in accordance with the current value and its flow direction.

WARNING : Incorrect wiring may cause damage to the sensor.