DATA SHEET
Hall Effect Current Sensor

PN : BJHCS-BR

IPN = 50A - 100A - 150A- 200A - 300A - 400A - 500A - 600A

Features

- **Open loop**
- **Supply voltage : ±15V DC**
- **Through hole primary**
- **Frame mounting**
- **Voltage output**
- **Can be customized**
- Connection by 4 wire cable
- Small size
- Easy installation
- High anti jamming capability

Applications

- AC/DC variable speed motor driver
- Battery applications
- Uninterruptible power supplies (UPS)
- Power supplies for welding applications
- Switching Power Supply (SMPS)

ELECTRICAL DATA

BJHCS-BR-…	50A	100A	150A	200A	300A	400A	500A	600A
Nominal current rms I_{PN} (A)	50	100	150	200	300	400	500	600
Sensed current range I_{PM} (A)	±150	±300	±450	±600	±900	±900	±900	±900
Rated output voltage @ I_{PN} (V)	±4							
Supply voltage V_C (Vdc)	±15 V ±5%							
Static current consumption I_C (mA)	≤ 15							

ACCURACY DYNAMIC PERFORMANCE

Accuracy X_G @ I_{PN}, T=25℃		± 1	%
Zero Offset voltage V_{OE} @ I_P=0, T=25℃		± 25	mV
Offset voltage drift @ -40 to +85 ℃	I_{PN}=50A	≤ ± 1	mV/℃
	Other	≤ ± 0,5	
Hysteresis offset voltage V_{OH} @ -40 to +85 ℃	I_{PN}=50A	± 25	mV
	Other	± 20	
Linearity error ε_L		≤ 1	% FS
Response time tr		≤ 3	µs

GENERAL & ISOLATION CHARACTERISTICS

Operating temperature range	-40 to +85	℃
Storage temperature	-40 to +125	℃
Weight	75	g
Lead length	650	mm
Insulation voltage (50Hz, 1mn)	2,5	KV

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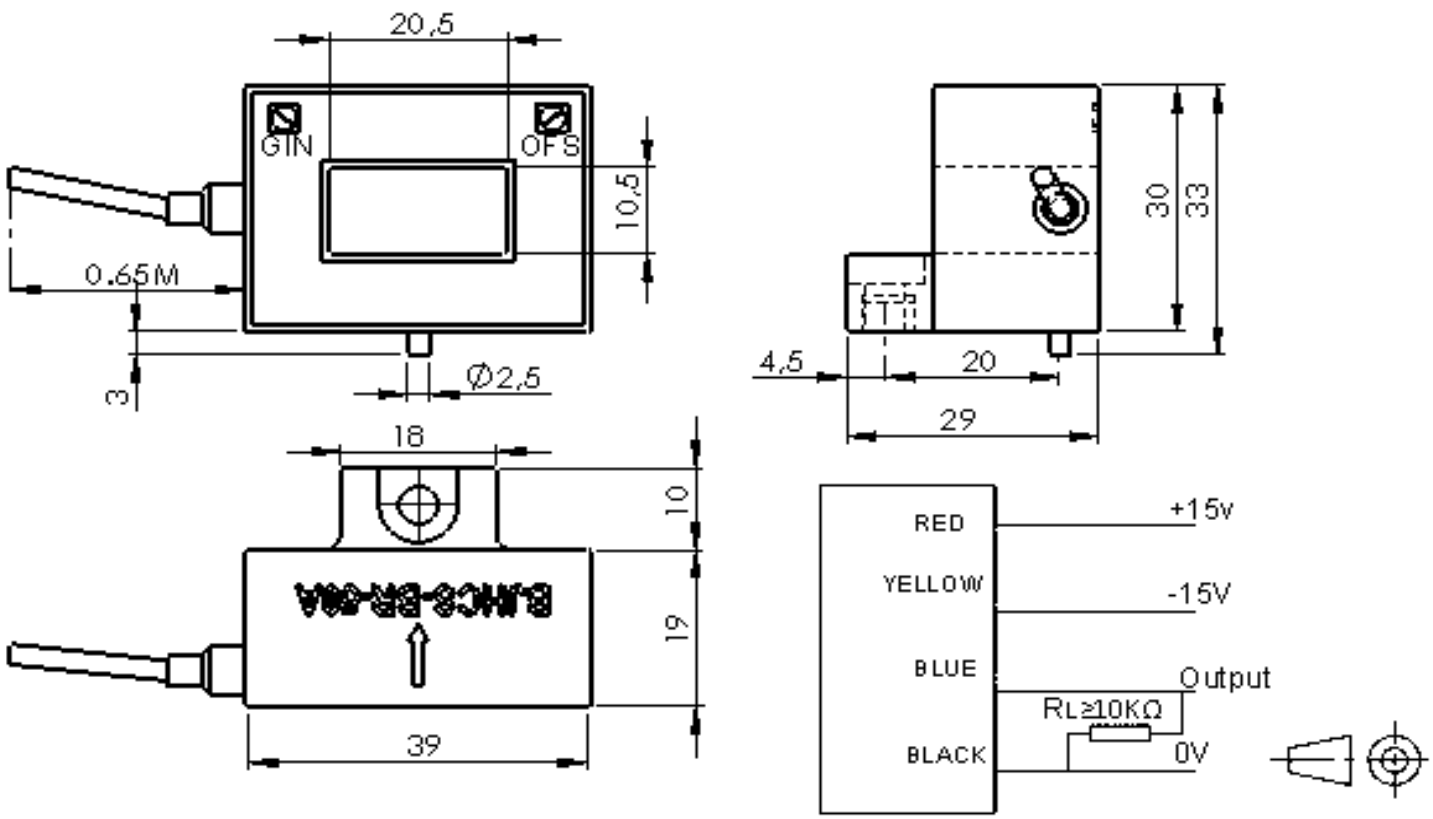
DIMENSIONS



MECHANICAL CHARACTERISTICS

General tolerance	± 0,2 mm
Primary square through hole size	20,5 x 10,5
Transducer fastening	M4
Recommended fastening torque	< 1,5 Nm
Terminal connection	4 wires cable 650mm lenght, stripped and tinned leads

Cautions :

- I_S is positive when I_P flows in accordance whith the arrow direction (see the top of the sensor);
- Primary conductor temperature should not exceed 100 ℃;
- Best dynamic performances (di/dt and response time) are achieved with a single electrical conductor completely filling the through hole;
- To achieve the best magnetic coupling, the primary winding must be wound around the top edge of the sensor.

Required connection circuit :

- See drawing above.

WARNING : Incorrect wiring may cause damage to the sensor.