Catalogue

Closed Loop Hall Effect AC/DC Current Sensors

Transducers with Round Windows

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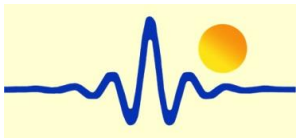

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Hall Effect AC/DC Current Sensor CYHCS-B200

This Hall Effect current sensor is based on closed loop principle and designed with a high galvanic isolation between primary and secondary circuits. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• Photovoltaic equipment • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL CHARACTERISTIC

Part number	CYHCS-B200-10A	CYHCS-B200-20A	CYHCS-B200-25A	CYHCS-B200-40A
Nominal current	10A	20A	25A	40A
Measuring range	0 ~ 20A	0 ~ 40A	0 ~ 50A	0 ~80A
Internal measuring resistance	100Ω±0.5%	50Ω±0.5%	40Ω±0.5%	40Ω±0.5%
Turns ratio	1:1000	1:1000	1:1000	1:1600
Nominal analogue output voltage	+2.5VDC ± (1V ± 0.5%)			
Supply voltage	+5V ±5%			
Galvanic isolation	50Hz,1min, 2.5kV			

ACCURACY DYNAMIC PERFORMANCE

Zero offset voltage Ta=25°C	2.5 ±0.5%	V
Thermal drift of offset voltage Ip=0, Ta-25°C ~ +85°C	≤ ±0.5	mV/°C
Measuring accuracy, Ta=25°C	≤±0.7	% FS
Linearity	≤±0.1	%FS
Following accuracy di/dt	50	A/µs
Response time	<0.5	µS
Bandwidth (-1db)	DC ~ 200	kHz
Load resistance	≥10	kΩ

GENERAL CHARACTERISTIC

Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C
Current consumption Ip=0	<45	mA

Relation between Input Current and Output Voltage

Take the sensor CYHCS-B200-30A as sample, the relation between the input current and output voltage is shown in the table 1, Fig.1 and Fig. 2

Table 1. Relation between the input current and output voltage

Input current (A)	-60	-45	-30	-15	0	15	30	45	60
Output voltage (V)	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5

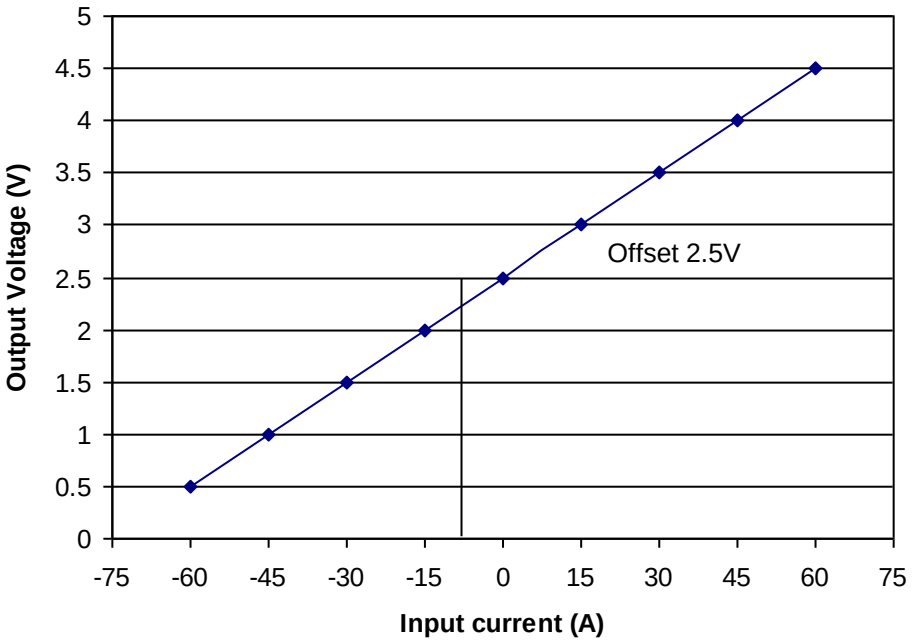


Fig. 1 Relation between the input current (DC) and output voltage (DC)

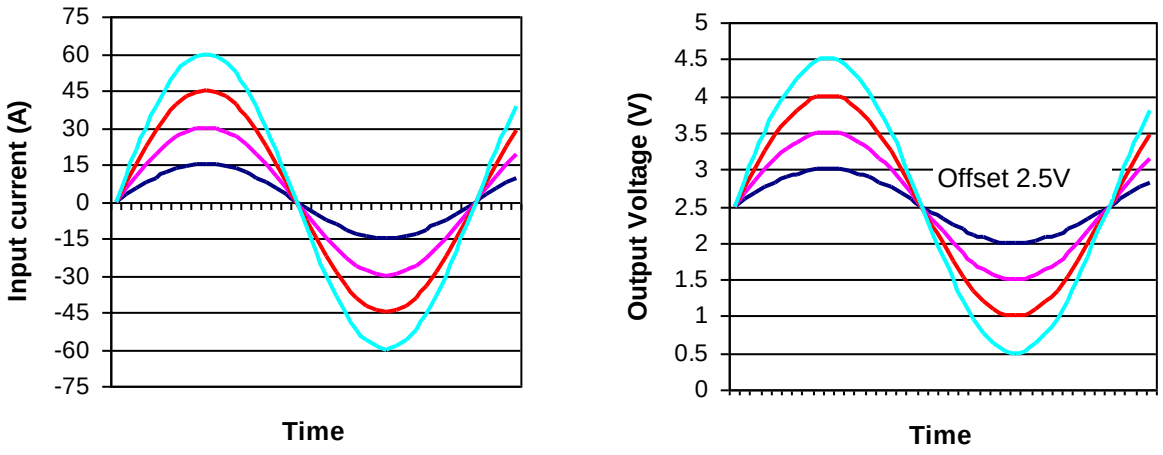
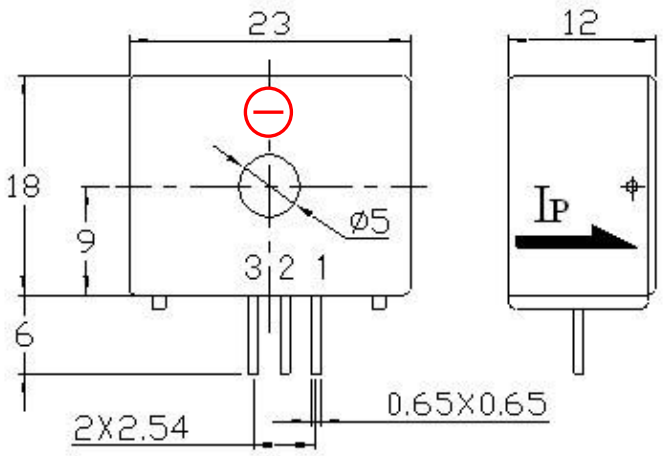


Fig. 2 Relation between the input current (AC) and output voltage (AC)

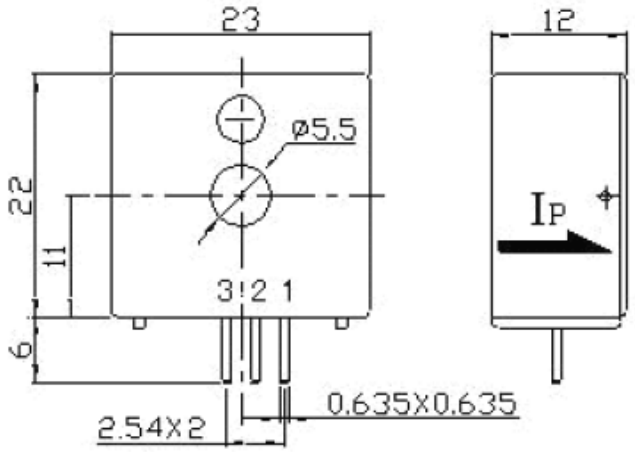
Dimensions (mm)



Terminal:

1(+): +5V
2(G): Ground
3(O): Output

Fig. 3 Dimensions of CYHCS-B200-10A and CYHCS-B200-20A



Terminal:

1(+): +5V
2(G): Ground
3(O): Output

Fig. 4 Dimensions of CYHCS-B200-25A and CYHCS-B200-40A

Connection

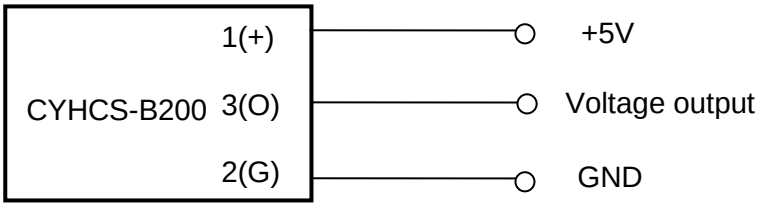


Fig. 5 Connection of CYHCS-B200

Notes:

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection.
2. The in-phase output can be obtained when the current direction of current carrying conductor is the same as the direction of arrow marked above.
3. The best accuracy can be achieved when the window is fully filled with cable (current carrying conductor).

Hall Effect AC/DC Current Sensor CYHCS-LSP

This Hall Effect current sensor is based on closed loop principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• Photovoltaic equipment • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL CHARACTERISTIC

Part number	CYHCS-LSP20A	CYHCS-LSP25A
Nominal current	20A	25A
Measuring range	0 ~ ±20A	0 ~ ±25A
Internal measuring resistance	100Ω±0.5%	100Ω±0.5%
Turns ratio	1:1000	1:1250
Nominal analogue output voltage	+2.5VDC ± (2V ± 0.5%)	
Supply voltage	+5VDC ±5%	
Galvanic isolation	50Hz,1min, 3kV	
Impulse withstand voltage	1.2/50μs, >8kV	
Creepage distance	>15.4mm	
Load capacity	≤ 10nF @ Vout and GND	

ACCURACY DYNAMIC PERFORMANCE

Zero offset voltage Ta=25°C	2.5 ±0.6%	V
Thermal drift of offset voltage Ip=0, Ta-25°C ~ +85°C	≤ ±0.5	mV/°C
Measuring accuracy, Ta=25°C	≤±0.7	% FS
Linearity	≤±0.1	%FS
Following accuracy di/dt	50	A/μs
Response time	<1.0	μS
Bandwidth (-1db)	DC ~ 200	kHz
Load resistance	≥10	kΩ

GENERAL CHARACTERISTIC

Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C
Current consumption Ip=0	10	mA
Unit weight	10	g

Relation between Input Current and Output Voltage

Take the sensor CYHCS-LSP-20A as sample, the relation between the input current and output voltage is shown in the table 1, Fig.1 and Fig. 2

Table 1. Relation between the input current and output voltage

Input current (A)	-20	-15	-10	-5	0	5	10	15	20
Output voltage (V)	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5

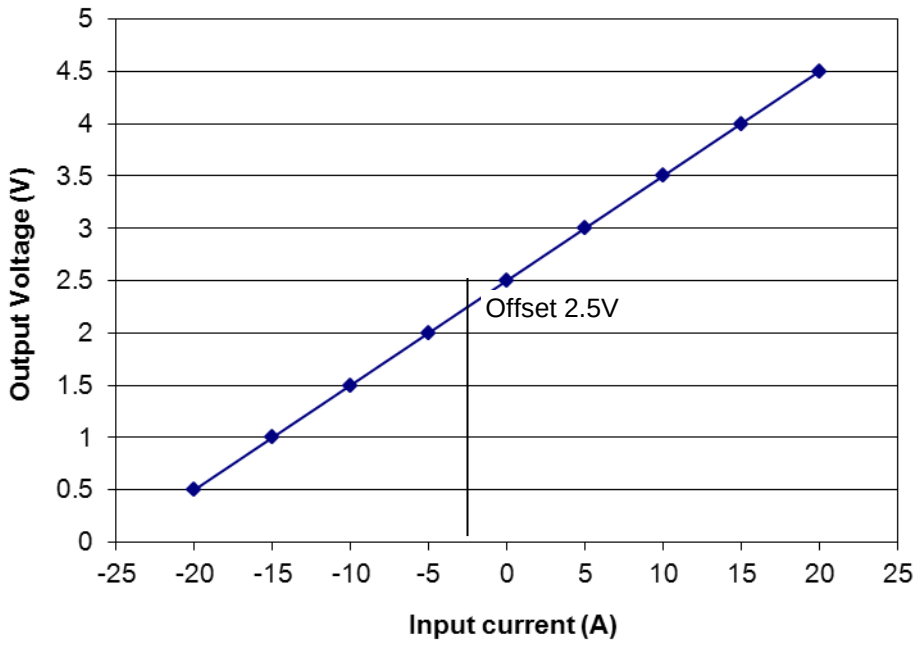


Fig. 1 Relation between the input current (DC) and output voltage (DC)

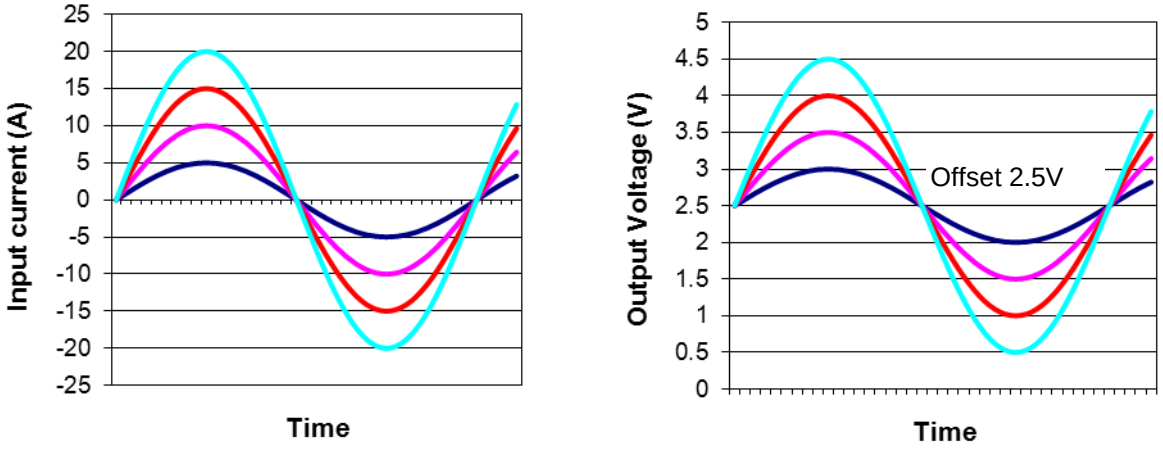


Fig. 2 Relation between the input current (AC) and output voltage (AC)

Dimensions (mm)

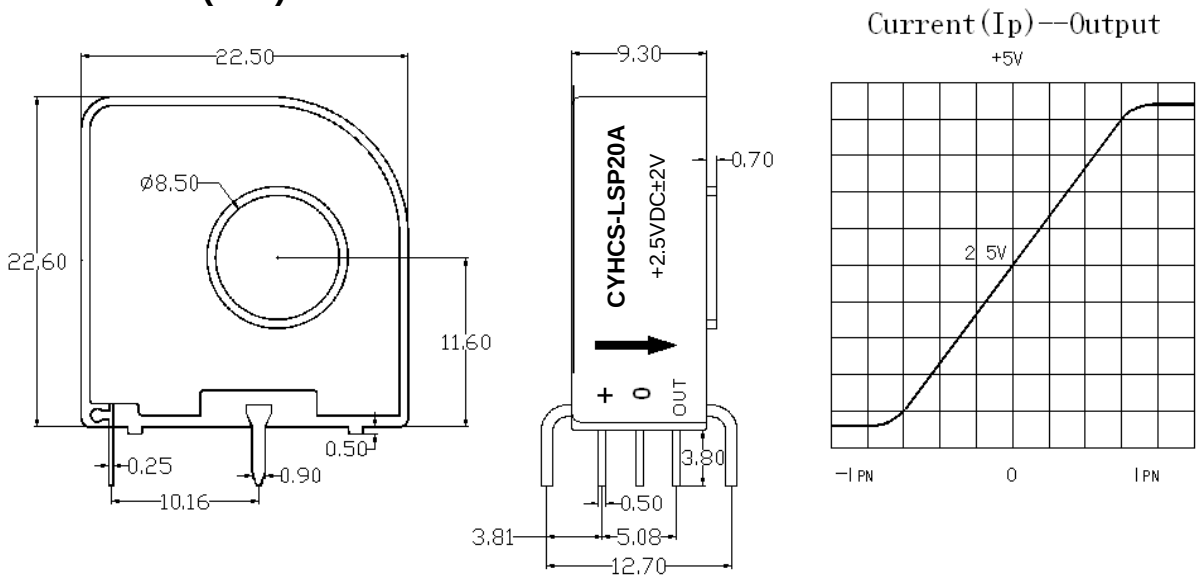


Fig. 3 Dimensions of CYHCS-LSF

Connection

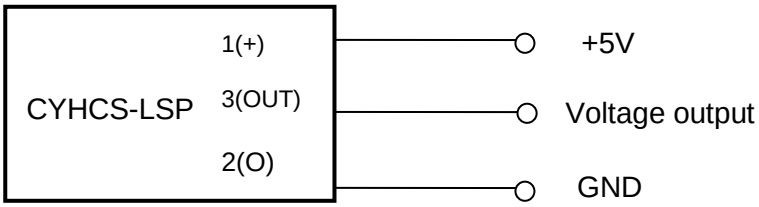


Fig. 4 Connection of CYHCS-LSF

Sizes and tolerances:

- Geometric tolerance: ±0.2mm
- Sizes of 3 pins: 0.25x0.5mm
- Size of mounting pins: 0.8x0.9mm
- Hole diameter: Φ8.5mm

Pin arrangement

+: +5VDC
O: GND
OUT: Output

Notes:

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances (di/dt and the response time) are best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

Hall Effect AC/DC Current Sensor CYHCS-ES565

This Hall Effect current sensor is based on the closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

Electrical Data

Part number	Primary Rated Current I_r (A)	Measuring Range I_p(A)	Turns ratio	Internal measuring resistor (Ω)
CYHCS-ES565-10A	10	± 32	1:1600	100±0.1%
CYHCS-ES565-25A	25	± 80	1:2000	50±0.1%
CYHCS-ES565-50A	50	± 150	1:1333	16.66±0.1%
CYHCS-ES565-75A	75	± 225	1:1500	12.5±0.1%
CYHCS-ES565-100A	100	± 240	1:1600	10.0±0.1%

Rated Output Voltage:	+2.5V±0.625V ±0.5%FS
Supply Voltage	+5V ± 5%,
Reference voltage R:	+2.5VDC ±0.5% FS
Electric Offset Voltage	+2.5VDC ±0.5% FS
Current Consumption (at V_{out}=0V)	<20mA
Isolation voltage (50/60Hz, 1min)	3.0kV
Accuracy:	0.5% FS
Linearity:	<0.1% FS
Thermal Drift of Offset Voltage,	±0.2mV/°C
Response Time:	< 1.0µs
Di/dt following accuracy:	100A/µs
Frequency Bandwidth (-1dB):	DC ~ 200 kHz

General Data

Ambient Operating Temperature:	-25°C ~ +85°C
Ambient Storage Temperature:	-40°C~ +100°C

Relation between Input Current and Output Voltage

Take the sensor CYHCS-ES565-25A as sample, the relation between the input current and output voltage is shown in the table 1, Fig.1 and Fig. 2

Table 1. Relation between the input current and output voltage

Input current (A)	-75	-50	-25	-12.5	0	12.5	25	50	75
Output voltage (V)	0.625	1.25	1.875	2.188	2.5	2.813	3.125	3.75	4.375

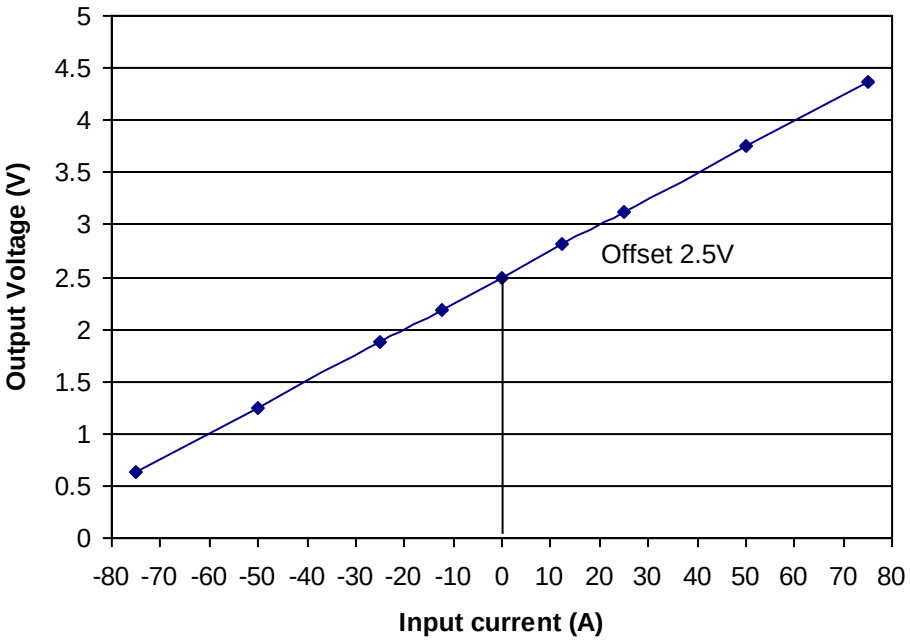


Fig. 1 Relation between the input current (DC) and output voltage (DC)

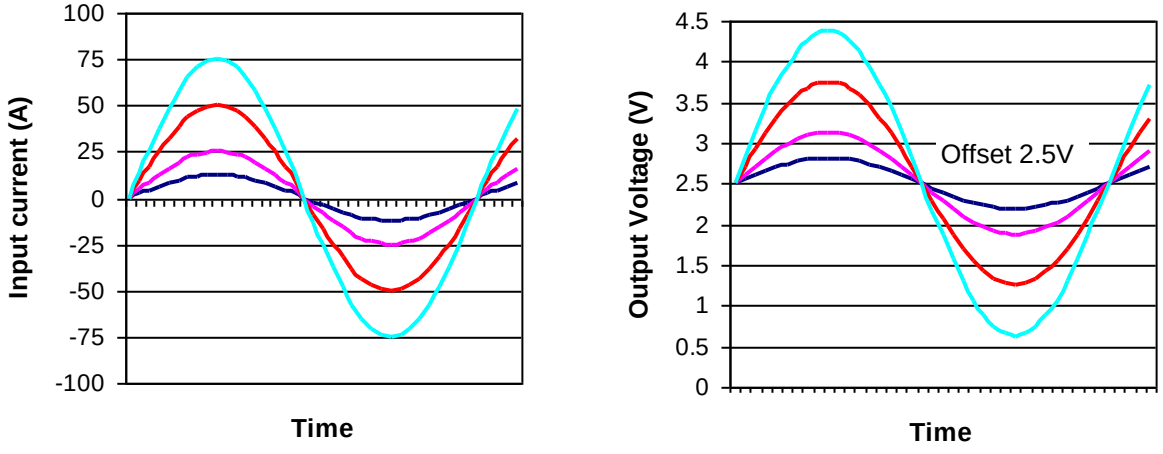


Fig. 2 Relation between the input current (AC) and output voltage (AC)

Dimensions (mm)

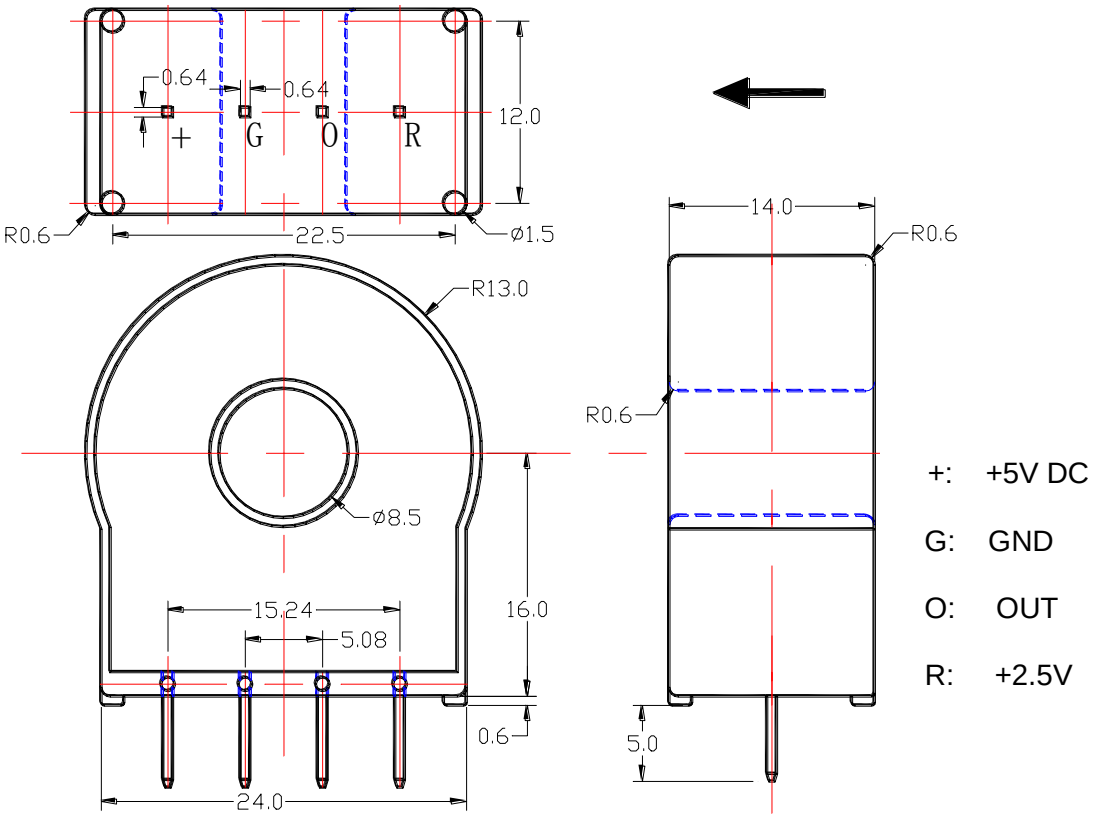
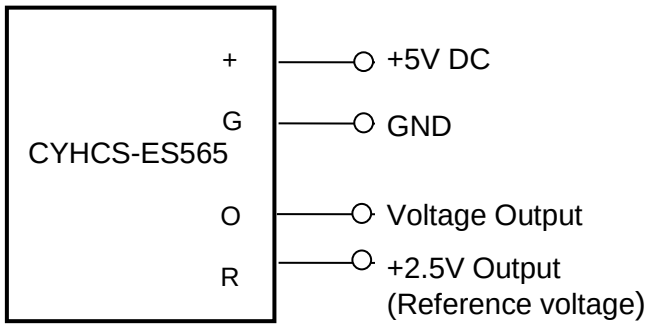


Fig. 3 Dimensions of CYHCS-ES565

Connection



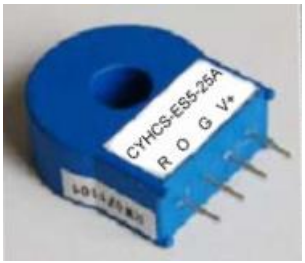


Fig. 4 Connection of CYHCS-ES565

Operating instructions

1. Connect the pins of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.

Hall Effect AC/DC Current Sensor CYHCS-ES5

This Hall Effect current sensor is based on the closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

Electrical Data/Input

Part number	Primary Rated Current I_r (A)	Measuring Range I_p(A)	Turns ratio	Internal measuring resistor (Ω)
CYHCS-ES5-10A	10	± 22	1:1000	100±0.1%
CYHCS-ES5-25A	25	± 55	1:1250	50±0.1%
CYHCS-ES5-50A	50	± 110	1:1250	25±0.1%
CYHCS-ES5-75A	75	± 165	1:1500	20±0.1%
CYHCS-ES5-100A	100	± 220	1:2000	20±0.1%

Rated Output Voltage:	+2.5V±1.0V ±0.5%FS
Supply Voltage	+5V ± 5%,
Reference voltage R:	+2.5VDC ±0.5% FS
Electric Offset Voltage	+2.5VDC ±0.5%FS
Current Consumption (at V_{out}=0V)	<20mA
Isolation voltage (50/60Hz, 1min)	3.0kV
Accuracy:	0.5% FS
Linearity:	<0.1% FS
Thermal Drift of Offset Voltage,	±0.5mV/°C
Response Time:	< 1.0µs
Di/dt following accuracy:	100A/µs
Frequency Bandwidth (-1dB):	DC ~ 200 kHz

General Data

Ambient Operating Temperature:	-25°C ~ +85°C
Ambient Storage Temperature:	-40°C~ +100°C

Relation between Input Current and Output Voltage

Take the sensor CYHCS-ES5-25A as sample, the relation between the input current and output voltage is shown in the table 1, Fig.1 and Fig. 2

Table 1. Relation between the input current and output voltage

Input current (A)	-55	-40	-25	-15	0	15	25	40	55
Output voltage (V)	0.3	0.9	1.5	1.9	2.5	3.1	3.5	4.1	4.7

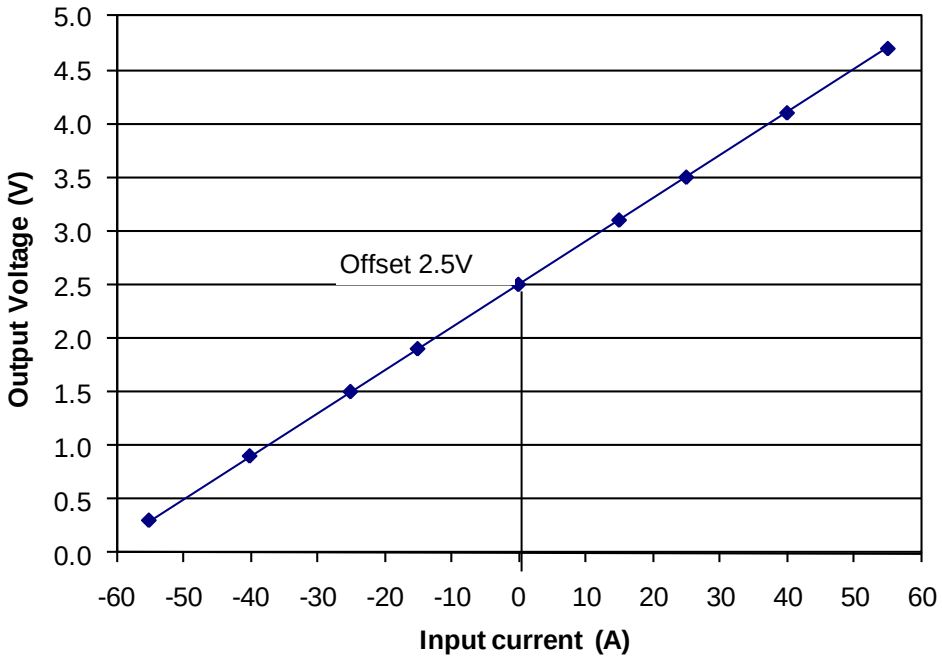


Fig. 1 Relation between the input current (DC) and output voltage (DC)

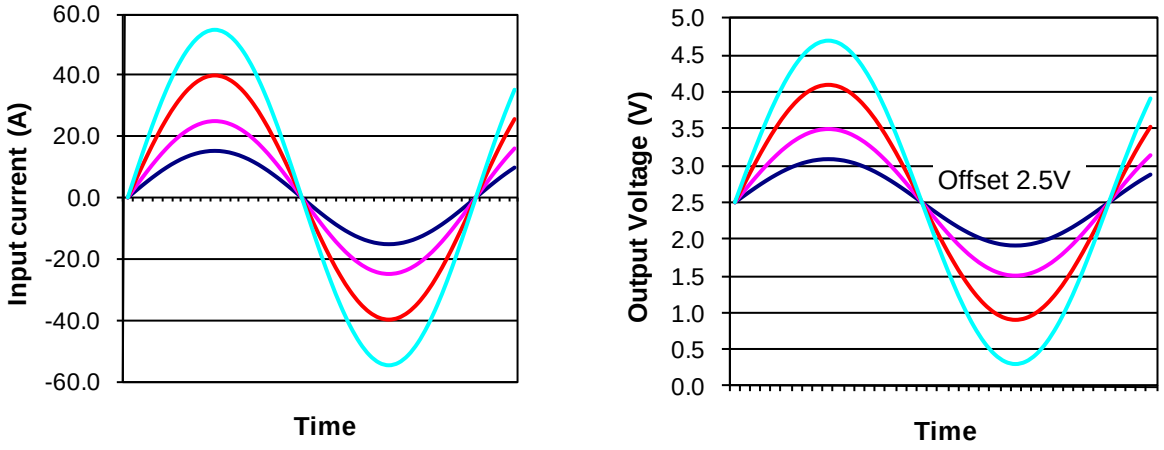


Fig. 2 Relation between the input current (AC) and output voltage (AC)

Dimensions (mm)

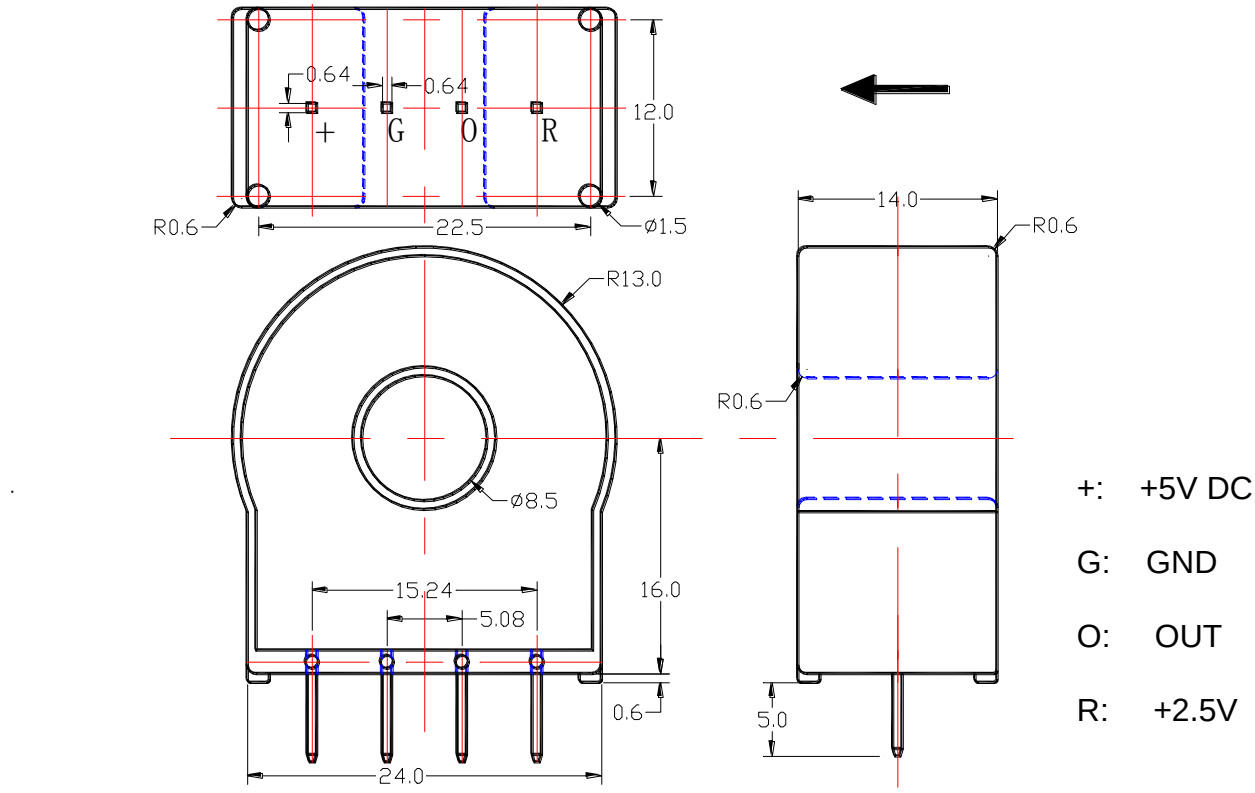
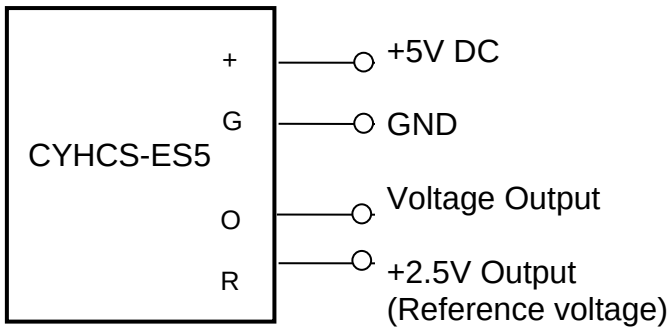


Fig. 3 Dimensions of CYHCS-ES5

Connection



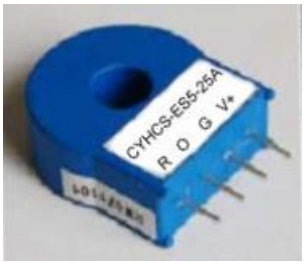


Fig. 4 Connection of CYHCS-ES5

Operating instructions

1. Connect the pins of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.

Hall Effect AC/DC Current Sensor CYHCS-ES5A

This Hall Effect current sensor is based on the closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

Electrical Data

Part number	Primary Rated Current I_r (A)	Measuring Range I_p(A)	Turns ratio	Internal measuring resistor (Ω)
CYHCS-ES5A-10A	10	± 30	1:1000	62.5±0.1%
CYHCS-ES5A-25A	25	± 75	1:2000	50±0.1%
CYHCS-ES5A-50A	50	± 150	1:2000	25±0.1%

Rated Output Voltage:	+2.5V±0.625V ±0.5%FS
Supply Voltage	+5V ± 5%,
Reference voltage R:	+2.5VDC ±0.5% FS
Electric Offset Voltage	+2.5VDC ±0.5% FS
Current Consumption (at V_{out}=0V)	<20mA
Isolation voltage (50/60Hz, 1min)	3.0kV
Max. isolation leakage current (3.5kVAC, 50/60Hz, 1min):	≤10mA
Accuracy:	0.5% FS
Linearity:	<0.1% FS
Thermal Drift of Offset Voltage,	±0.4mV/°C
Response Time:	< 1.0µs
Di/dt following accuracy:	100A/µs
Frequency Bandwidth (-1dB):	DC ~ 200 kHz

General Data

Ambient Operating Temperature:	-25°C ~ +85°C
Ambient Storage Temperature:	-40°C~ +100°C

Relation between Input Current and Output Voltage

Take the sensor CYHCS-ES5A-25A as sample, the relation between the input current and output voltage is shown in the table 1, Fig.1 and Fig. 2

Table1. Relation between the input current and output voltage

Input current (A)	-75	-50	-25	-12.5	0	12.5	25	50	75
Output voltage (V)	0.625	1.25	1.875	2.188	2.5	2.813	3.125	3.75	4.375

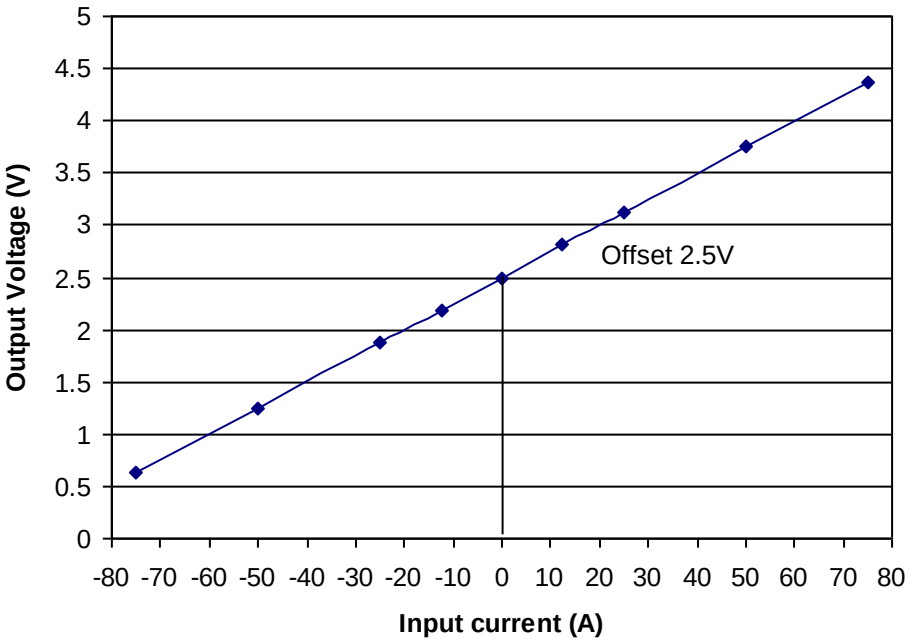


Fig. 1 Relation between the input current (DC) and output voltage (DC)

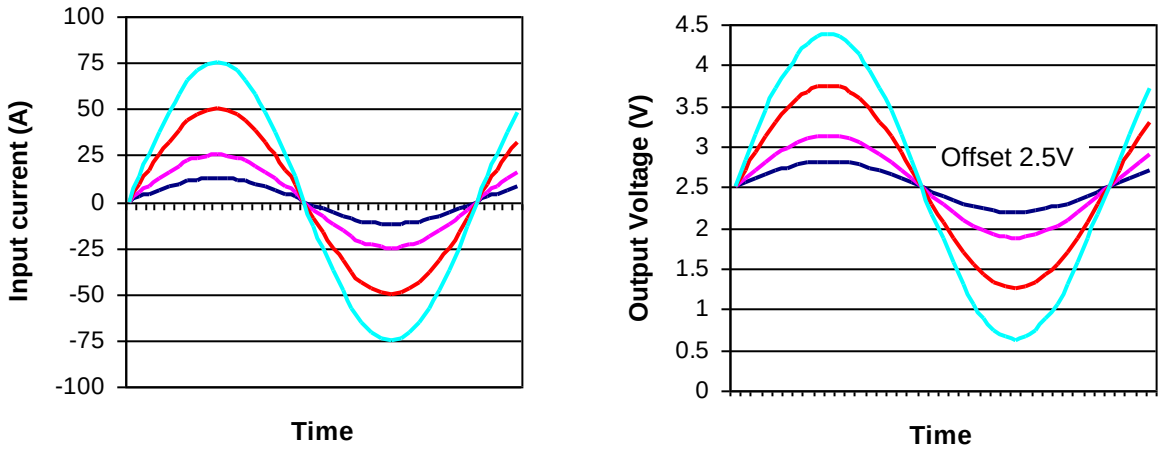
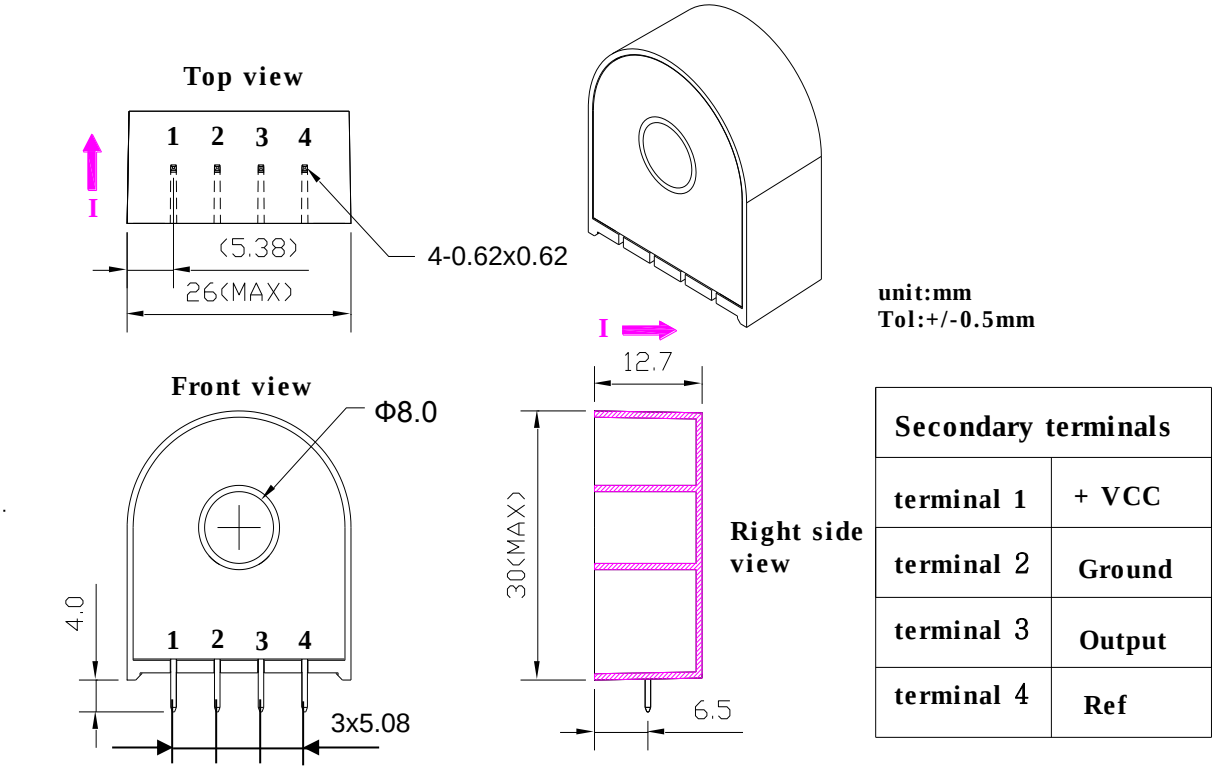


Fig. 2 Relation between the input current (AC) and output voltage (AC)

Dimensions (mm)



Secondary terminals	
terminal 1	+ VCC
terminal 2	Ground
terminal 3	Output
terminal 4	Ref

Fig. 3 Dimensions of CYHCS-ES5A

Connection

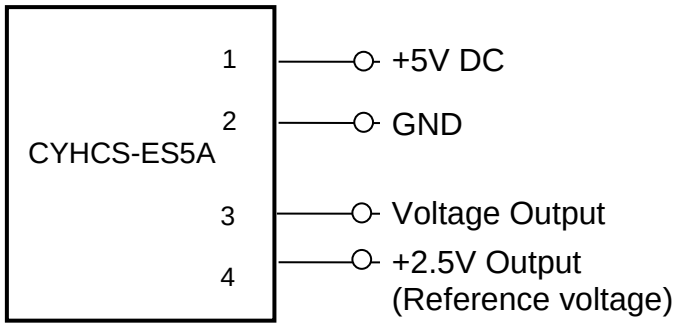


Fig. 4 Connection of CYHCS-ES5A

Operating instructions

1. Connect the pins of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.

Hall Effect AC/DC Current Sensor CYHCS-ES5B

This Hall Effect current sensor is based on the closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

Electrical Data/Input

Part number	Primary Rated Current I_r (A)	Measuring Range I_p(A)	Turns ratio	Internal measuring resistor (Ω)
CYHCS-ES5B-10A	10	± 22	1:1000	100±0.1%
CYHCS-ES5B-25A	25	± 55	1:1250	50±0.1%
CYHCS-ES5B-50A	50	± 110	1:1250	25±0.1%
CYHCS-ES5B-75A	75	± 165	1:1500	20±0.1%
CYHCS-ES5B-100A	100	± 220	1:2000	20±0.1%

Rated Output Voltage:	+2.5V±1.0V ±0.5%FS
Supply Voltage	+5V ± 5%,
Reference voltage R:	+2.5VDC ±0.5% FS
Electric Offset Voltage	+2.5VDC ±0.5% FS
Current Consumption (at V_{out}=0V)	20mA
Isolation voltage (50/60Hz, 1min)	3.0kV
Accuracy:	0.5% FS
Linearity:	<0.1% FS
Thermal Drift of Offset Voltage,	±0.5mV/°C
Response Time:	< 1.0µs
Di/dt following accuracy:	100A/µs
Frequency Bandwidth (-1dB):	DC ~ 200 kHz

General Data

Ambient Operating Temperature:	-25°C ~ +85°C
Ambient Storage Temperature:	-40°C~ +100°C

Relation between Input Current and Output Voltage

Take the sensor CYHCS-ES5B-25A as sample, the relation between the input current and output voltage is shown in the table 1, Fig.1 and Fig. 2

Table 1. Relation between the input current and output voltage

Input current (A)	-55	-40	-25	-15	0	15	25	40	55
Output voltage (V)	0.3	0.9	1.5	1.9	2.5	3.1	3.5	4.1	4.7

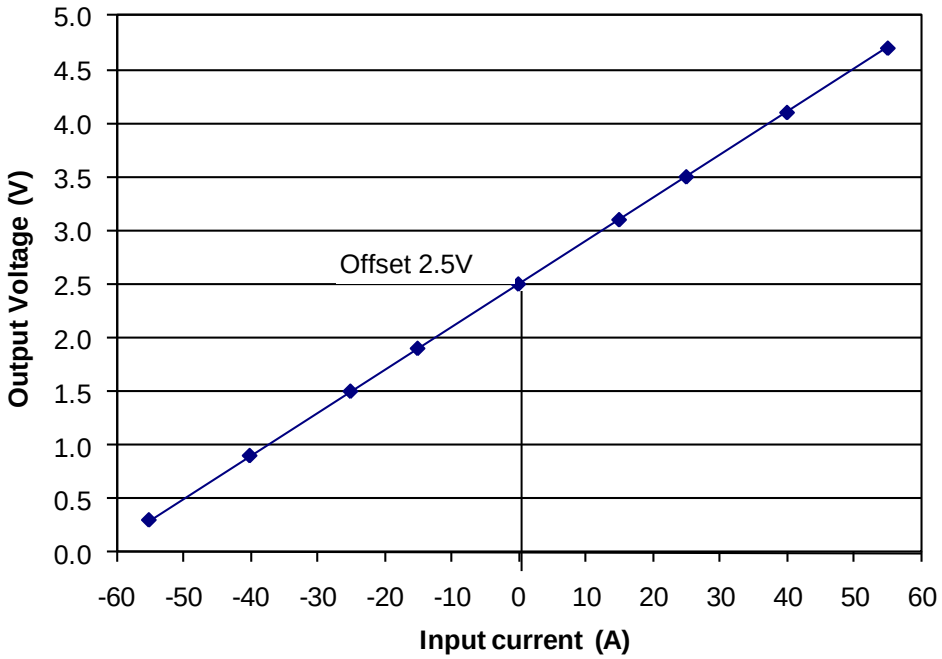


Fig. 1 Relation between the input current (DC) and output voltage (DC)

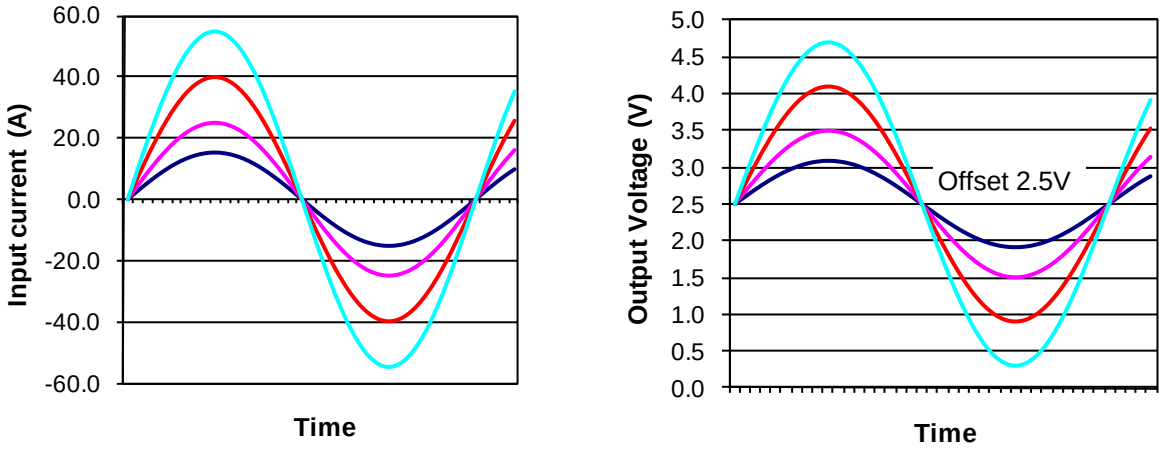


Fig. 2 Relation between the input current (AC) and output voltage (AC)

Dimensions (mm)

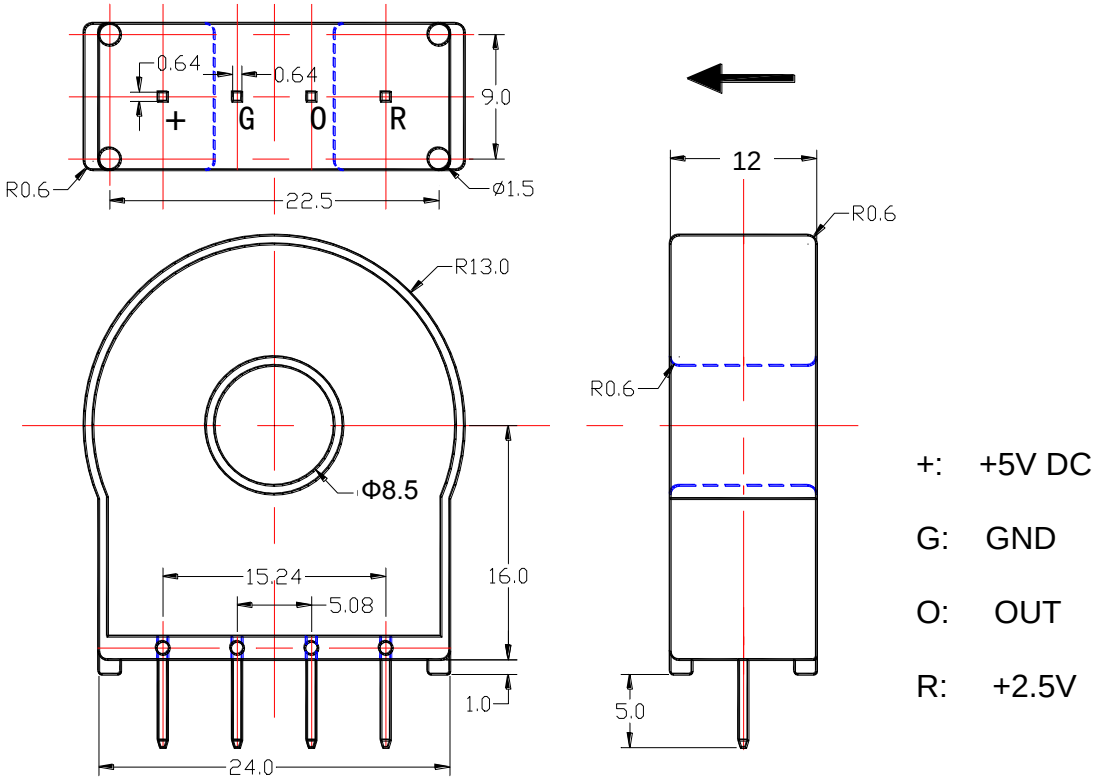
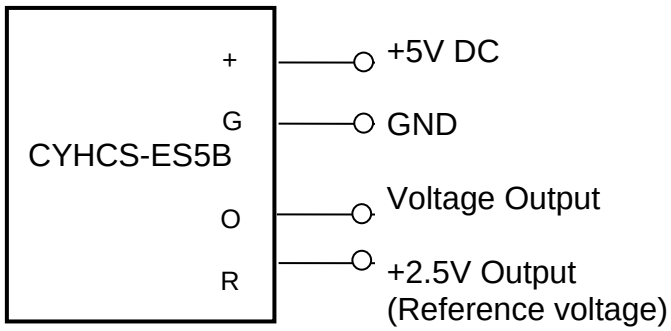


Fig. 3 Dimensions of CYHCS-ES5B

Connection



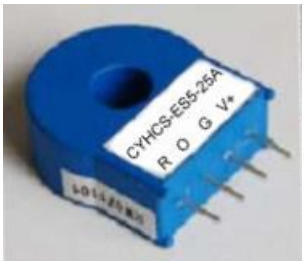


Fig. 4 Connection of CYHCS-ES5B

Operating instructions

1. Connect the pins of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.

Hall Effect AC/DC Current Sensor CYHCS-EC/ECH

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-EC50A/ CYHCS-ECH50A	CYHCS-EC75A/ CYHCS-ECH75A	CYHCS-EC100A/ CYHCS-ECH100A	CYHCS-EC200A/ CYHCS-ECH200A	Unit
Nominal current	50	75	100	200	A
Measuring range	150 (±18V, 82 Ω)	225 (±18V, 68 Ω)	300 (±18V, 51 Ω)	400 (±18V, 15 Ω)	A
Turns ratio	1:1000	1:1500	1:2000	1:2000	
Nominal analogue output current	50±0.5% / 50±0.2%	50±0.5% / 50±0.2%	50±0.5% / 50±0.2%	100±0.5% / 100±0.2%	mA
Secondary coil resistance	30	45	50	55	Ω
Supply voltage	±12 ~ ±18				V
Current consumption	20 + output current				mA
Galvanic isolation	50HZ, 1min, 3kV				kV

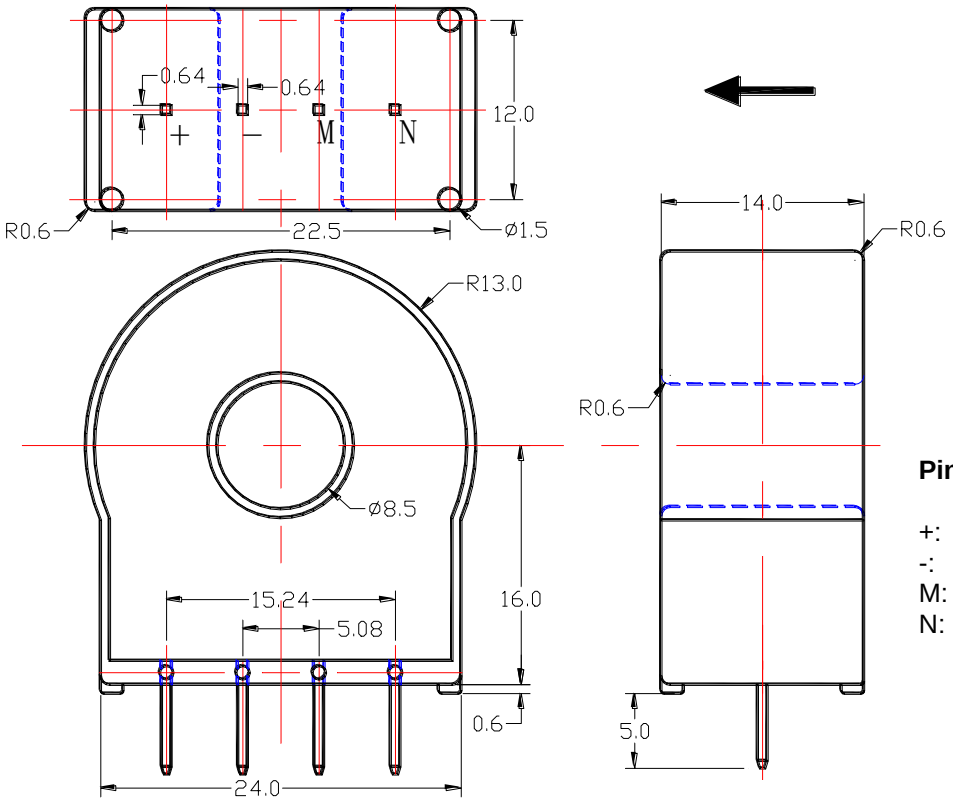
ACCURACY DYNAMIC PERFORMANCE

Zero offset current	±0.2	mA
Thermal drift of offset current	-25°C ~ +85°C, ±0.005	mA/°C
Response time	<1	μs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…150	kHz
di/dt following accuracy	>100	A/μs

GENERAL DATA

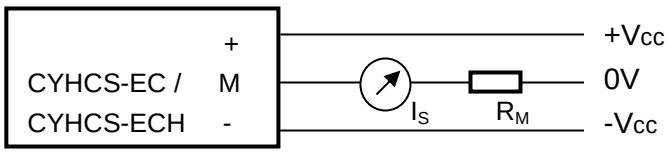
Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C

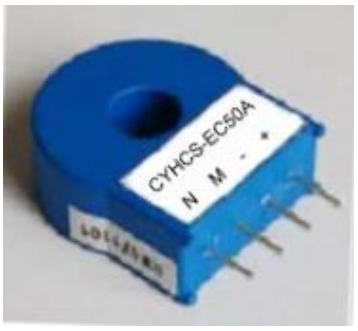
Dimensions (mm)



Pin Arrangement

+: +12V ~ +18VDC
-: -12V ~ -18VDC
M: Output
N: NC





Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.

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

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

4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

Hall Effect AC/DC Current Sensor CYHCS-D1

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Less power consumption • Current overload capability • Good temperature properties	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL CHARACTERISTICS

Part number	CYHCS-D1-50A	CYHCS-D1-75A	CYHCS-D1-100A	CYHCS-D1-200A	CYHCS-D1-300A
Rated current (RMS)	50A	75A	100A	200A	±300A
Measuring range	±120A	±200A	±250A	±450A	±550A
Turn ratio	1:1000	1:1500	1:1000	1:2000	1:3000
Inner measuring resistance	80Ω±0.1%	80Ω±0.1%	40Ω±0.1%	40Ω±0.1%	40Ω±0.1%
Load resistance (at rated current)	≥10kΩ				
Rated output voltage	4V ±0.5%				
Supply voltage	±15 VDC ±5%				
Galvanic isolation	3kV RMS/50Hz/1min,				
Current consumption	<14mA				

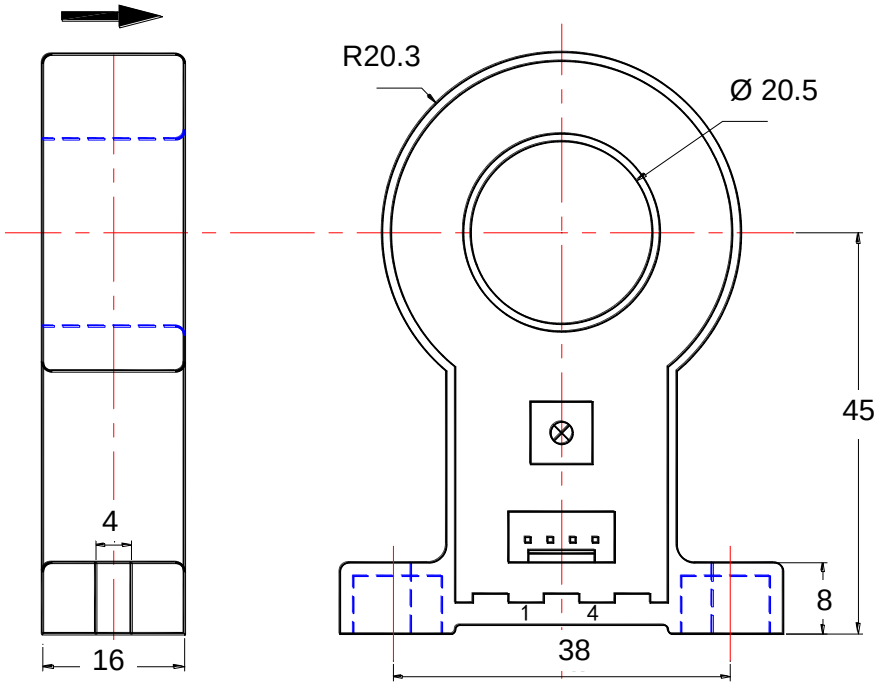
ACCURACY DYNAMIC PERFORMANCE

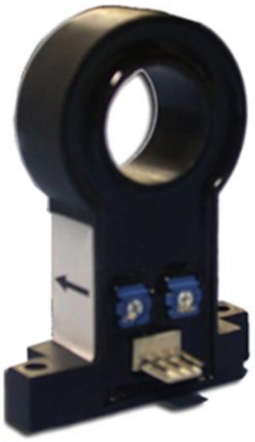
Zero offset voltage	±10mV
Thermal drift of offset voltage	±0.5mV/°C
Response time	<1.0μs
Accuracy	±0.5%
Linearity	≤0.1% FS
Bandwidth(-3dB)	DC ~ 150kHz

GENERAL CHARACTERISTIC

Operating temperature	-25°C~+85°C
Storage temperature	-40°C~+100°C

Dimensions (mm)





Terminal 1: +15V,
Terminal 2: -15V,
Terminal 3: Output,
Terminal 4: ground

Notes:

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection.

2. Two potentiometers can be adjusted, only if necessary, by turning slowly to the required accuracy with a small screwdriver.

3. The best accuracy can be achieved when the window is fully filled with bus-bar (current carrying conductor).

4. The in-phase output can be obtained when the direction of current of current carrying conductor is the same as the direction of arrow marked on the transducer

Hall Effect AC/DC Current Sensor CYHCS-LTP/LTR

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. The output from the current sensor is the balancing current which is a perfect image of the primary current reduced by the number of secondary turns. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-LTP/LTR100A	CYHCS-LTP/LTR200A	CYHCS-LTP/LTR300A	
Nominal current	100	200	300	A
Measuring range	300 (±18V, 20 Ω)	600(±18V, 30 Ω)	900 (±18V, 20 Ω)	A
Turns ratio	1:2000 (or 1:1000)	1:2000	1:3000	
Measuring resistance	with±12V DC			
	@±100Amax 80(max)	@±200Amax 80(max)	@±300Amax 76(max)	Ω
	@±200Amax 25 (max)	@±500Amax 27(max)	@±600Amax 22(max)	Ω
	with±15V DC			
	@±100Amax 110(max)	@±200Amax 120(max)	@±300Amax 100(max)	Ω
	@±200Amax 40(max)	@±500Amax 33(max)	@±600Amax 36(max)	Ω
Nominal analogue output current	50±0.5% (or 100±0.5%)	100±0.5%	100±0.5%	mA
Secondary internal resistance	25	20	30	Ω
Supply voltage	±12 ~ ±18±5%			V
Current consumption	20 + output current			mA
Galvanic isolation	50Hz, 1min, 6			KV
MTBF	≥100k			hours

ACCURACY DYNAMIC PERFORMANCE

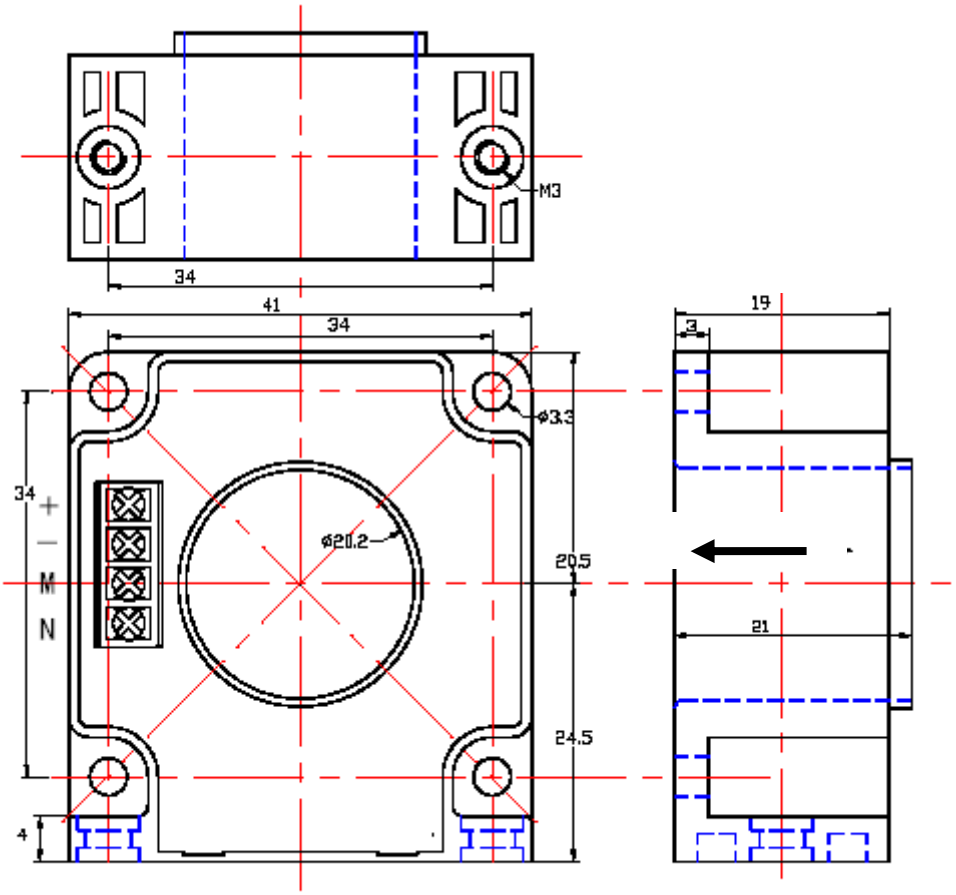
Zero offset current	±0.2	mA
Thermal drift of offset current	-40°C ~ +85°C, ±0.5	mA
Response time	<1	μs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…100	kHz
di/dt following accuracy	>200	A/μs

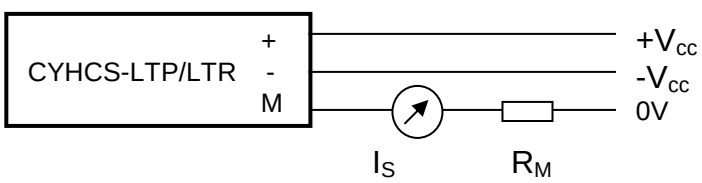
GENERAL DATA

Operating temperature	-40 ~ +85	°C
Storage temperature	-40 ~ +100	°C

Dimensions (mm)

With Terminal Connector (part number CYHCS-LTPxxxx)

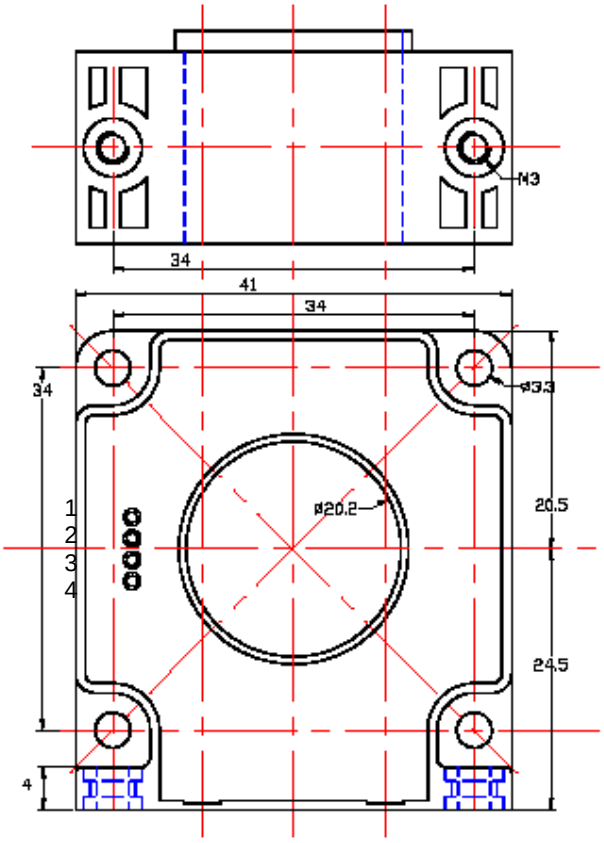




Pin & Terminal Arrangement

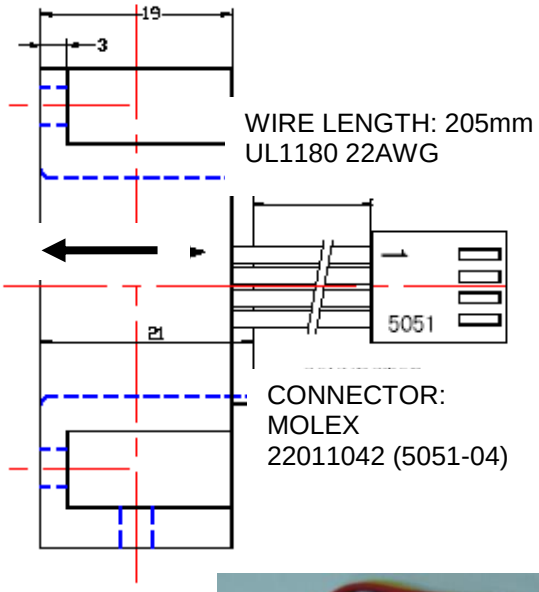
+: +12 ~ +18VDC
-: -12 ~ -18VDC
M: Output Current
N: NC

With Cable and Molex Connector (part number CYHCS-LTRxxxx)



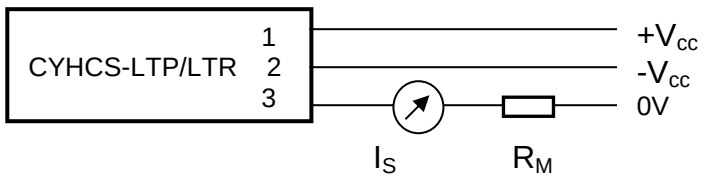
Cable Definition:

1 RED (+):..	+12~+18VDC
2 YELLOW (-):	-12 ~ -18VDC
3 BLUE (M):	Output current
4 BLACK (N):	NC



WIRE LENGTH: 205mm
UL1180 22AWG

CONNECTOR:
MOLEX
22011042 (5051-04)



Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 120 °C.
3. Dynamic performances (di/dt and the response time) are the best if the primary hole is completely filled with the bus bar.
4. The in-phase output can be obtained when the direction of primary current is the same as the direction of arrow marked on the transducer

Hall Effect AC/DC Current Sensor CYHCS-D5

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-D5S/M100A	CYHCS-D5S/M200A	CYHCS-D5S/M300A	
Nominal current	100	200	300	A
Measuring range	300 (±18V, 20 Ω)	600(±18V, 30 Ω)	900 (±18V, 20 Ω)	A
Turns ratio	1:2000	1:2000	1:2000 or 1:3000	
Measuring resistance	with±12V DC			
	@±100Amax 80(max)	@±200Amax 80(max)	@±300Amax 76(max)	Ω
	@±200Amax 25 (max)	@±500Amax 20(max)	@±600Amax 22(max)	Ω
	with±15V DC			
	@±100Amax 110(max)	@±200Amax 120(max)	@±300Amax 100(max)	Ω
	@±200Amax 40(max)	@±500Amax 30(max)	@±600Amax 36(max)	Ω
Nominal analogue output current	50±0.5%	100±0.5%	150 ±0.5%or 100±0.5%	mA
Secondary internal resistance	25	21	32	Ω
Supply voltage	±12 ~ ±18			V
Current consumption	±15VDC, 20 + output current			mA
Galvanic isolation	50HZ, 1min, 6			KV

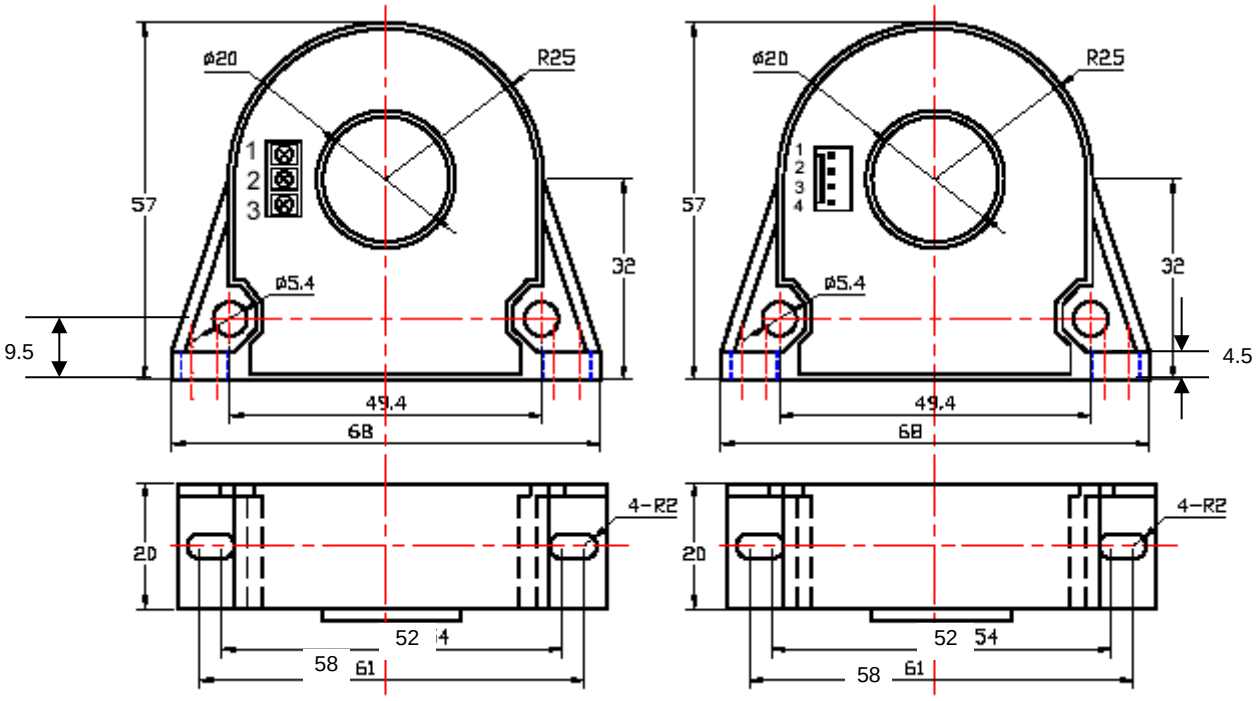
ACCURACY DYNAMIC PERFORMANCE

Zero offset current	±0.2	mA
Thermal drift of offset current	-25°C ~ +85°C, ±0.5	mA
Response time	<1	μs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…100	kHz
di/dt following accuracy	>200	A/μs

GENERAL DATA

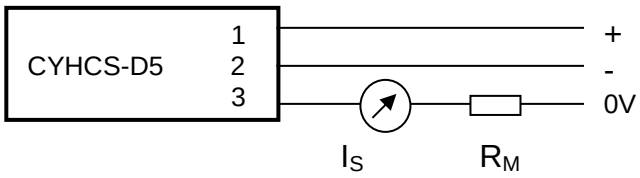
Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C

Dimensions (mm)



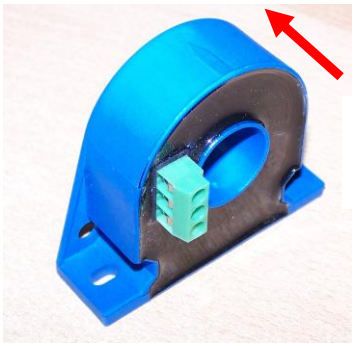
Screw Connector (P/N: CYHCS-D5Sxxxx)
DG300-5.0 Screw terminal block

Molex Connector (P/N: CYCS-D5Mxxxx)
Molex 22011042, 5045-04AG, 5051-04



Pin & Terminal Arrangement

1(+): +15V
2(-): -15V
3(M): Output
4: NC



Current direction

Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 120 °C.
3. Dynamic performances (di/dt and the response time) are the best if the primary hole is completely filled with the bus bar.

High Accurate Hall Effect AC/DC Current Sensor CYHCS-LTHA

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-LTHA-100A	CYHCS-LTHA-200A	CYHCS-LTHA-300A	
Nominal current	100	200	300	A
Measuring range	300 (±18V, 20 Ω)	600(±18V, 30 Ω)	900 (±18V, 20 Ω)	A
Turns ratio	1:2000	1:2000	1:3000	
Measuring resistance	with±12V DC			
	@±100Amax 80(max)	@±200Amax 80(max)	@±300Amax 76(max)	Ω
	@±200Amax 25 (max)	@±500Amax 20(max)	@±600Amax 22(max)	Ω
	with±15V DC			
	@±100Amax 110(max)	@±200Amax 120(max)	@±300Amax 100(max)	Ω
	@±200Amax 40(max)	@±500Amax 30(max)	@±600Amax 36(max)	Ω
Nominal analogue output current	50±0.2%	100±0.2%	100±0.2%	mA
Secondary internal resistance	25	21	32	Ω
Supply voltage	±12 ~ ±18			V
Current consumption	20 + output current			mA
Galvanic isolation	50Hz, 1min, 6			KV

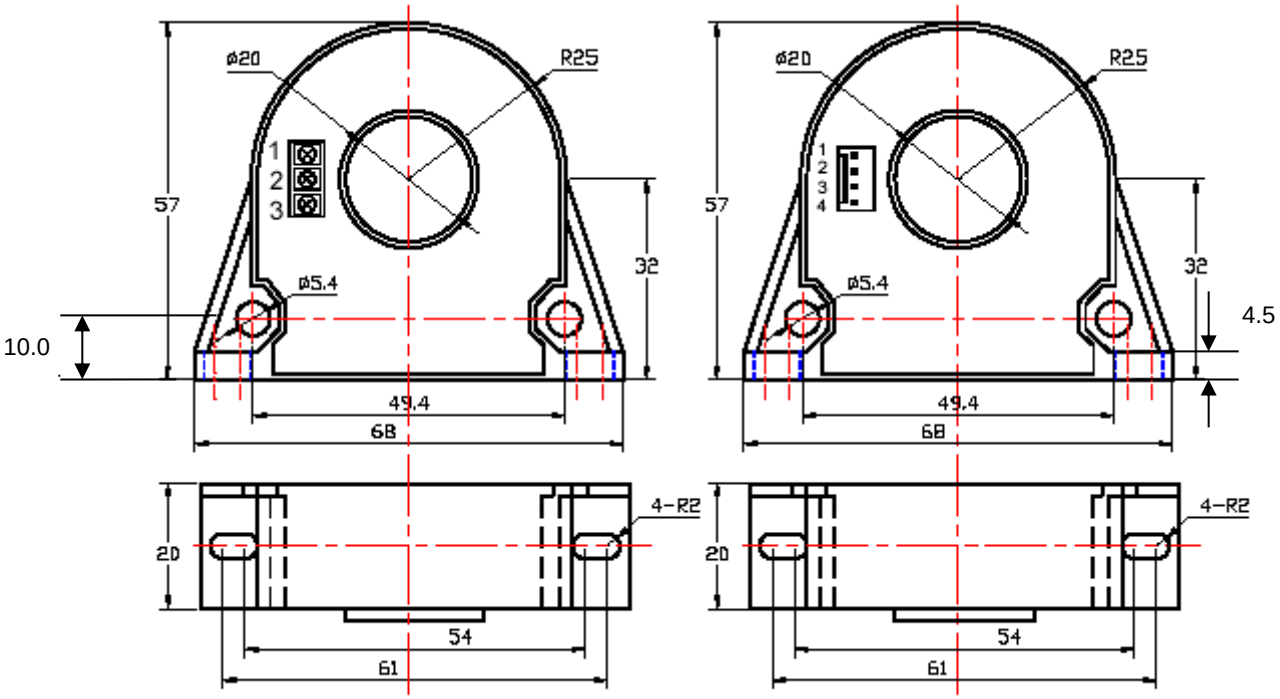
ACCURACY DYNAMIC PERFORMANCE

Zero offset current	±0.2	mA
Thermal drift of offset current	-25°C ~ +85°C, ±0.5	mA
Response time	<1	μs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…150	kHz
di/dt following accuracy	>200	A/μs

GENERAL DATA

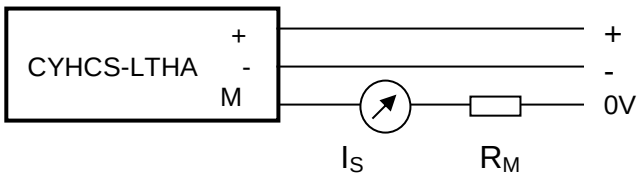
Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C

Dimensions (mm)



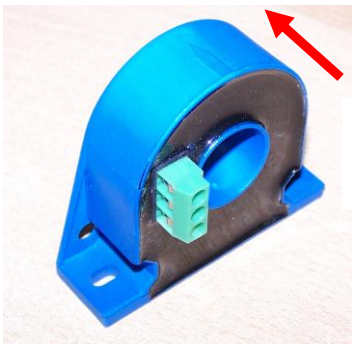
Screw Connection (P/N: CYHCS-LTHA2-xxxx)
DG300-5.0 Connector

Molex Connection (P/N: CYCS-LTHA1-xxxx)
Molex 22011042, 5045-04AG, 5051-04



Pin & Terminal Arrangement

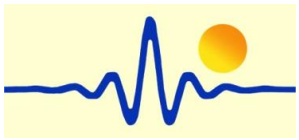
1(+): +15V
2(-): -15V
3(M): Output
4: NC



Current direction

Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 120 °C.
3. Dynamic performances (di/dt and the response time) are best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.



Hall Effect AC/DC Current Sensor CYHCS-D6

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Good current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-D6-300A (CYHCS-D6M-300A)	CYHCS-D6-500A (CYHCS-D6M-500A)	
Nominal current	300	500	A
Measuring range	600(±18V, 50 Ω)	1000 (±18V, 36 Ω)	A
Turns ratio	1:3000	1:5000	
Measuring resistance	with±15V DC	with±12V~15V DC	
	@±300A max 110(max)	@±500Amax , 60~90(max)	Ω
	@±600A max 36(max)	@±1000Amax, 10~ 25(max)	Ω
	with±18VDC		
	@±300Amax 120(max)	@±500Amax 120(max)	Ω
	@±600Amax 50(max)	@±1000Amax 36(max)	Ω
Nominal analogue output current	100±0.5%	100±0.5%	mA
Secondary internal resistance	31	45	Ω
Supply voltage	±15 ~ ±24		V
Current consumption	±15VDC, 20 + output current		mA
Galvanic isolation	50HZ, 1min, 6		kV

ACCURACY DYNAMIC PERFORMANCE

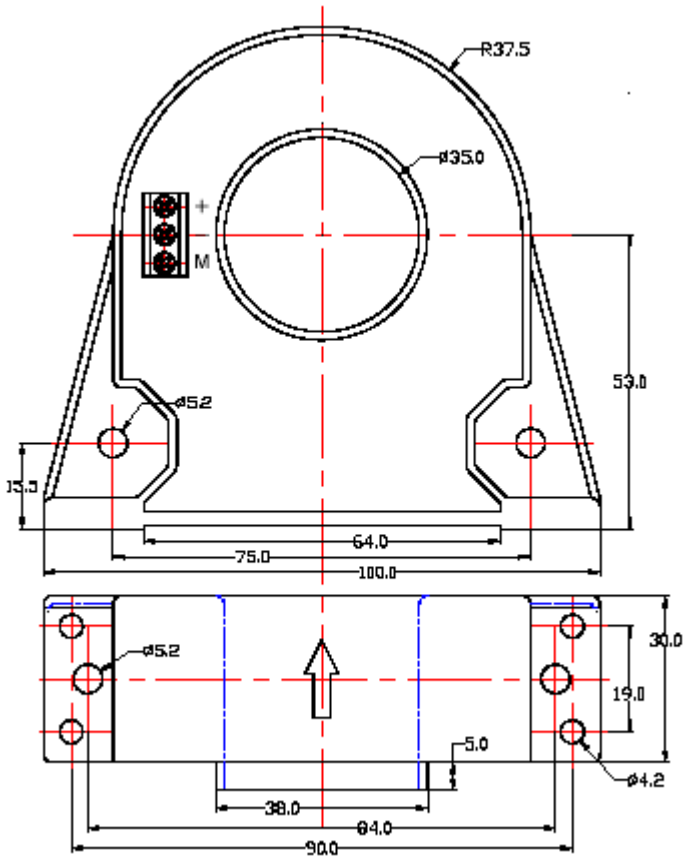
Zero offset current	±0.2	mA
Thermal drift of offset current	-25°C ~ +85°C, ±0.5	mA
Response time	<1	μs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…100	kHz
di/dt following accuracy	>100	A/μs

GENERAL DATA

Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C

Dimensions (mm)

CYHCS-D6-xxxx

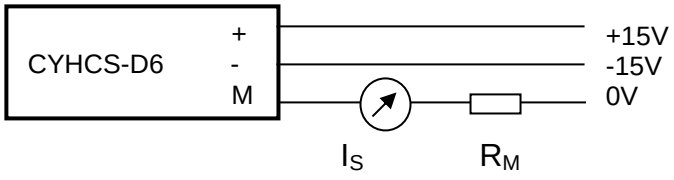


Current direction

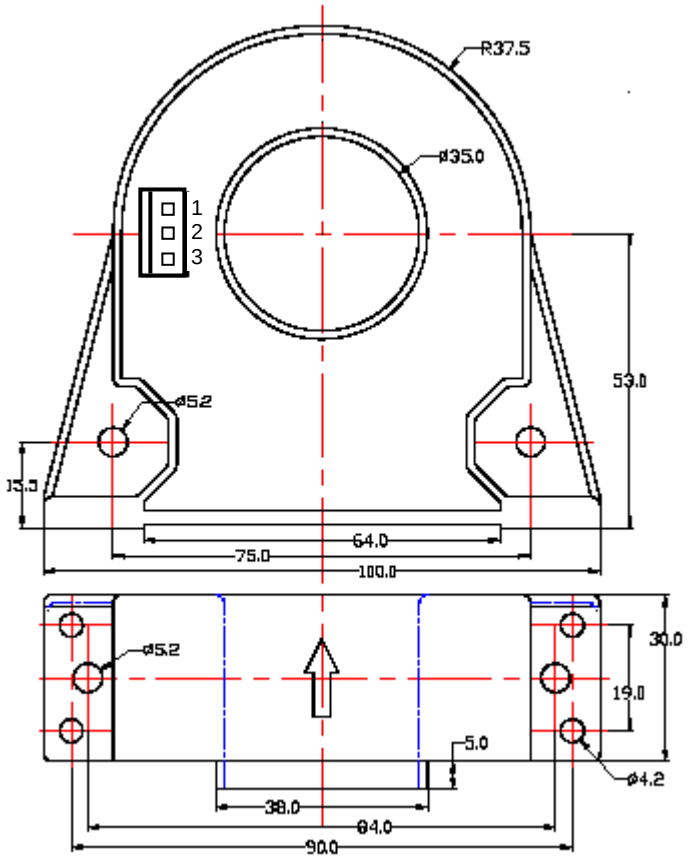
Terminal Arrangement

+: +15V
-: -15V
M: Output

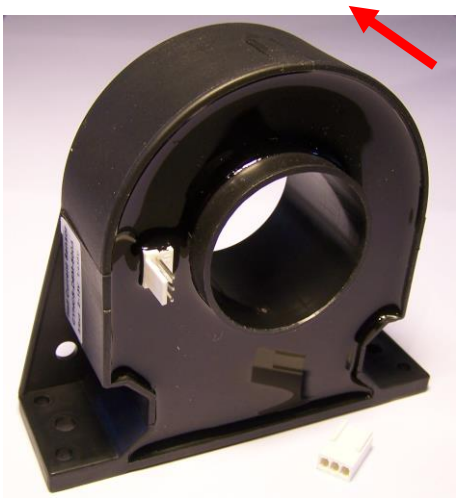
Screw connector: DG300-5.0 Screw terminal block



CYHCS-D6M-xxxx



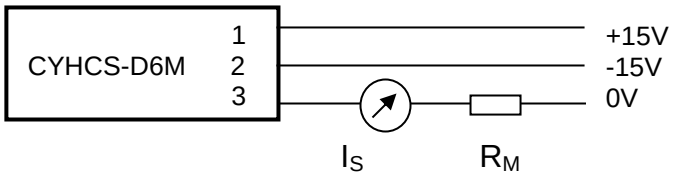
Current direction



Terminal Arrangement

1: +15V
2: -15V
3: Output

Molex Connector: Molex 22011042, 5045-04AG, 5051-04



Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 120 °C.
3. Dynamic performances (di/dt and the response time) are best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

High Accurate Hall Effect AC/DC Current Sensor CYHCS-LTHB

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-LTHB-300A	CYHCS-LTHB-400A	CYHCS-LTHB-500A	
Nominal current	300	400	500	A
Measuring range	900(±24V, 43 Ω)	1200 (±24V, 39Ω)	1500 (±24V, 30Ω)	A
Turns ratio	1:3000	1:4000	1:5000	
Measuring resistance	with±15V DC			
	@±300A max 110(max)	@±500Amax 110(max)	@±500Amax 100(max)	Ω
	@±600A max 36(max)	@±1000Amax 36(max)	@±1000Amax 25(max)	Ω
	with±18VDC			
	@±300Amax 130(max)	@±500Amax 130(max)	@±500Amax 120(max)	Ω
	@±600Amax 51(max)	@±1000Amax 51(max)	@±1000Amax 39(max)	Ω
Nominal analogue output current	100±0.2%	100±0.2%	100±0.2%	mA
Secondary internal resistance	31	35	45	Ω
Supply voltage	±15 ~ ±24			V
Current consumption	20 + output current			mA
Galvanic isolation	50HZ, 1min, 6			kV

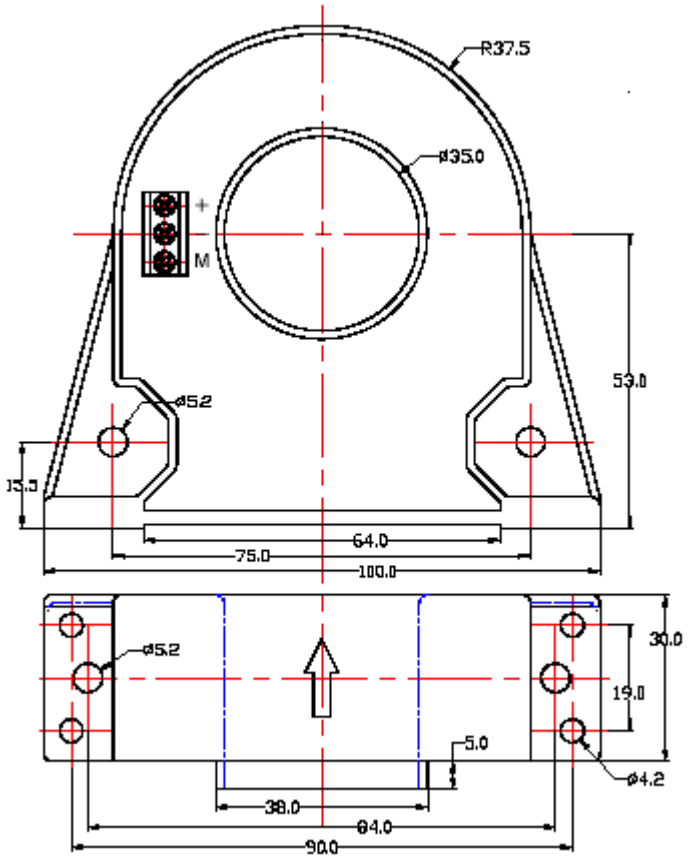
ACCURACY DYNAMIC PERFORMANCE

Zero offset current	±0.2	mA
Thermal drift of offset current	-25°C ~ +85°C, ±0.5	mA
Response time	<1	μs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…150	kHz
di/dt following accuracy	>100	A/μs

GENERAL DATA

Operating temperature	-25 ~ +85	°C
Storage temperature	-40 ~ +100	°C

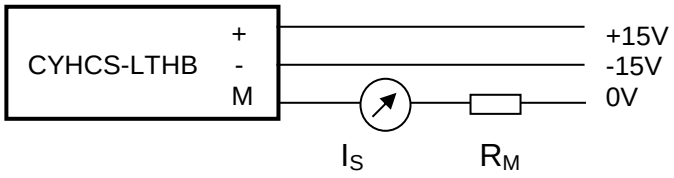
Dimensions (mm)



Current direction

Terminal Arrangement

+: +15V
-: -15V
M: Output



Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances (di/dt and the response time) are best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

Hall Effect AC/DC Current Sensor CYHCS-D7

This Hall Effect current sensor is based on closed loop compensating principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-D7-100A	CYHCS-D7-200A	CYHCS-D7-300A	CYHCS-D7-400A	
Nominal current	100	200	300	400	A
Measuring range	300 (±18V, 30 Ω)	600(±18V, 30 Ω)	600 (±18V, 30 Ω)	900 (±18V, 22 Ω)	A
Turns ratio	1:1000	1:2000	1:2000	1:3000	
Nominal output current	100±0.5%	100±0.5%	150±0.5%	133.3±0.5%	mA
Secondary internal resistance	25	25	21	35	Ω
Supply voltage	±12 ~ ±18				V
Current consumption	20 + output current				mA
Galvanic isolation	50Hz, 1min, 6				kV

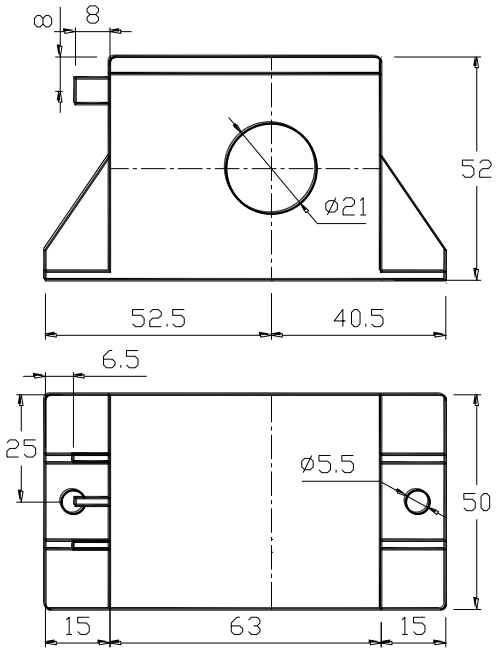
ACCURACY DYNAMIC PERFORMANCE

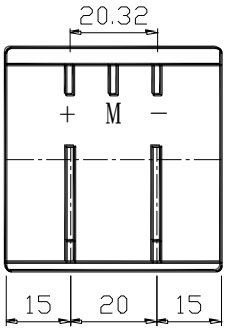
Zero offset current	±0.2	mA
Thermal drift of offset current	-10°C ~ +85°C, ±0.5	mA
Response time	<1	µs
Linearity	≤0.1	%FS
Bandwidth(-3dB)	DC…150	kHz
di/dt following accuracy	>200	A/µs

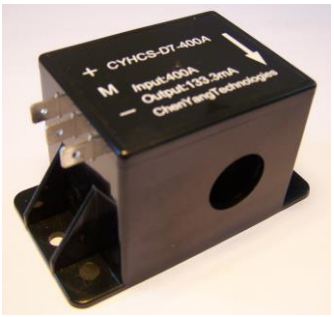
GENERAL DATA

Operating temperature	-10 ~ +85	°C
Storage temperature	-25 ~ +100	°C

Dimensions (mm)

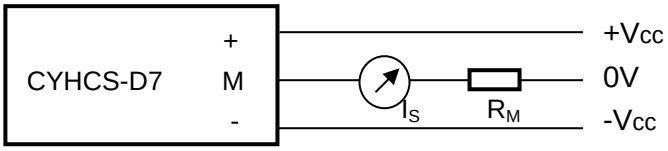






Pin & Terminal Arrangement

+: +12V ~ +18VDC
-: -12V ~ -18VDC
M: Output



Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.

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

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

4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

Hall Effect AC/DC Current Sensor CYHCS-D8

This Hall Effect current sensor is based on closed loop compensating principle and can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current in the carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-D8-500A	CYHCS-D8-1000A
Nominal input current	500A	1000A
Measuring range	800A	0-1500A ~ 0-2000A
Turns ratio	1:5000	1:5000
Measuring resistance	with Vc=±15V, @±500Amax, 0-60Ω, @±800Amax, 0-12Ω,	with Vc=±15V, @±1000Amax, 0-15Ω, @±1200Amax, 0-4Ω
	with Vc=±24V, @±500Amax, 5-150Ω, @±800Amax, 5-65Ω	with Vc=±24V, @±1000Amax, 5-55Ω, @±1500Amax, 5-24Ω @±2000Amax, 5-16Ω
Nominal output current	100mA ± 0.5%	200mA ± 0.5%
Supply voltage	±15VDC ~ ±24VDC	
Current consumption	≤30mA + Output current at Vc=±15V	
Galvanic isolation	50Hz, 1min, 6KV	
Secondary internal resistance	Ta=25°C, 40 Ω	

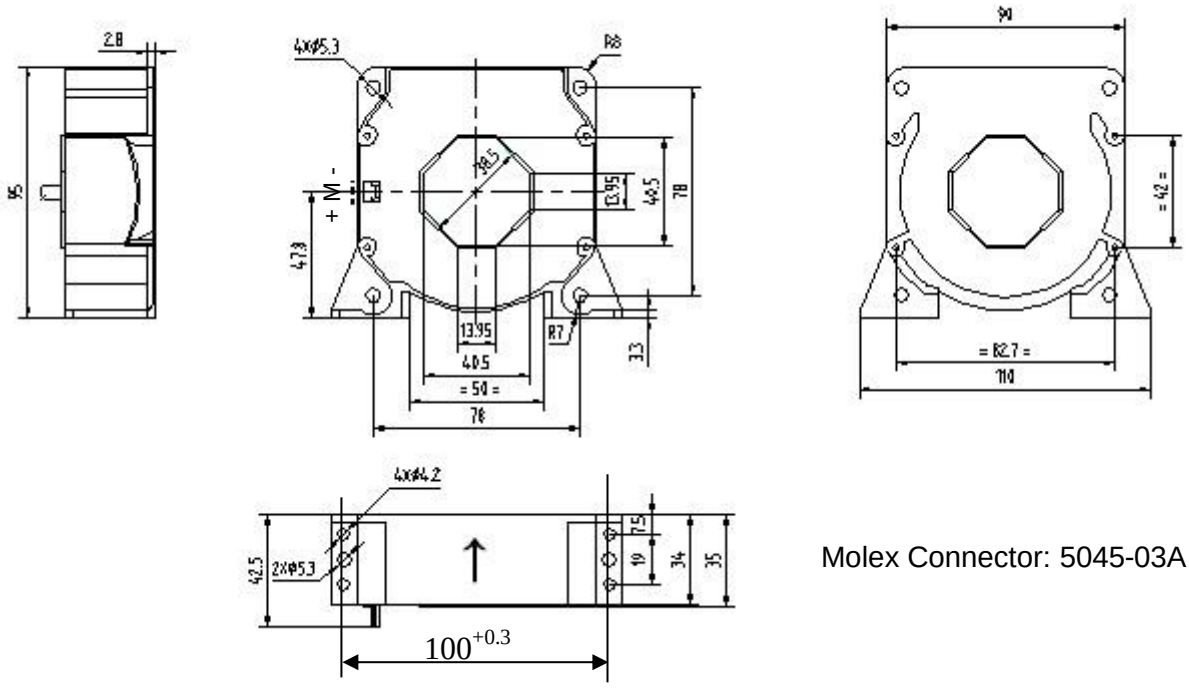
ACCURACY DYNAMIC PERFORMANCE

Zero offset current Ta=25°C	< ±0.4mA
Magnetic Offset current IP→0	< ±0.2mA
Thermal drift of offset current	IP=0, Ta=-25°C ~ +85°C, ±0.8mA
Response time	<1μs
Linearity	≤0.1%FS
Accuracy at +25°C	± 0.5% FS
Bandwidth(-3dB)	DC…150kHz
di/dt	>100A/μs

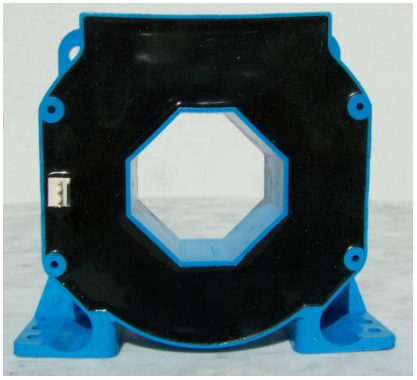
GENERAL DATA

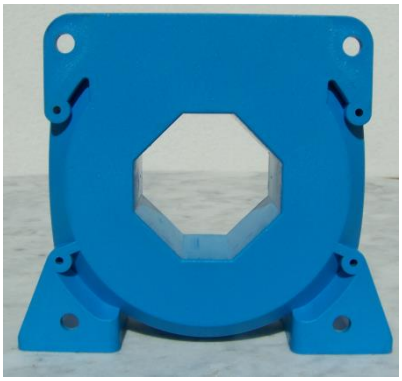
Operating temperature	-25°C ~ +85°C
Storage temperature	-40°C ~ +100°C
Unit weight	510g

Dimensions (mm)



Molex Connector: 5045-03A





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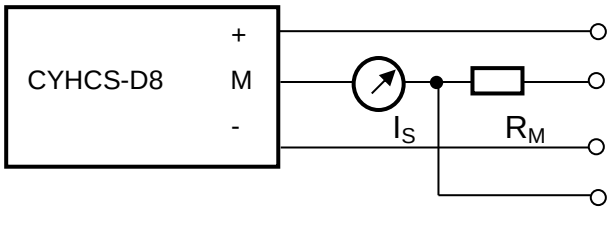
Sensor Connections

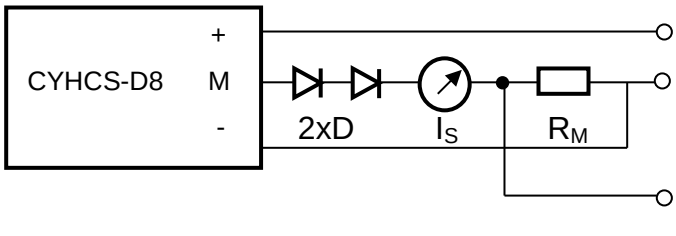
1) For Measurement of Bidirectional Current



Pin Definition:

+	V+: +15~+24VDC
-	V-: -15~ -24VDC
M:	Output current

2) For Measurement of Unidirectional Current



Pin Definition:

+	V+: +15~+24VDC
-	0V (GND)
M:	Output current

Two diodes for instance IN4007 must be connected at the output of the sensor in order to guarantee the sensor to work well.

Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances (di/dt and the response time) are the best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

Precise Hall Effect AC/DC Current Sensor CYHCS-SH

This Hall Effect current sensor is based on closed loop compensating principle and can be used for measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Accuracy independent on the position of premiary cable • Lager measuring range	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies • Switched Mode Power Supplies

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ELECTRICAL DATA

Part number	CYHCS-SH500A	CYHCS-SH1000A
Nominal input current	500A	1000A
Measuring range	0-1500A	0-3000A
Turns ratio	1:5000 (1:4000 custom made)	
Measuring resistance	with Vc=±15V, @±1000Amax, 0-30Ω, @±1500Amax, 0-5Ω,	
	with Vc=±24V, @±1000Amax, 0-68Ω, @±3000Amax, 0-3Ω,	
Supply voltage	±15VDC ~ ±24VDC	
Nominal output current	100mA (125mA for 1:4000)	200mA (250mA for 1:4000)
Accuracy at +25°C	0.2%FS	
Current consumption	≤30mA + Output current at Vc=±15V	
Galvanic isolation	50Hz, 1min, 6KV	
Secondary internal resistance	Ta=25°C, 47 Ω (37 Ω for turns ratio 1:4000)	

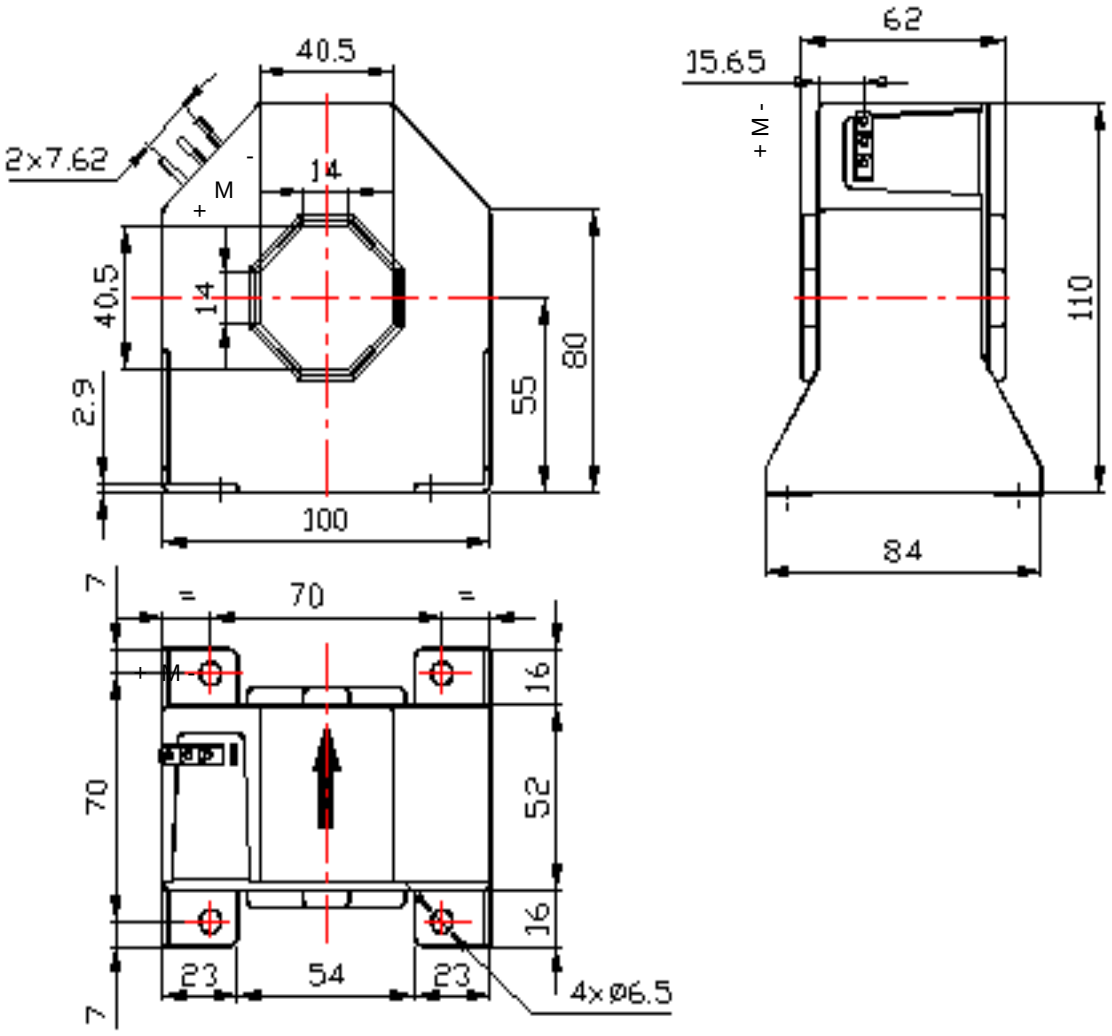
ACCURACY DYNAMIC PERFORMANCE

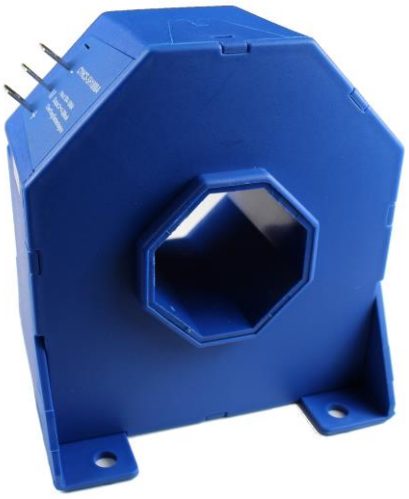
Zero offset current Ta=25°C	< ±0.2mA
Magnetic Offset current IP→0	< ±0.2mA
Thermal drift of offset current	IP=0, Ta=-40°C ~ +85°C, ±0.5mA
Response time	<1μs
Linearity	≤0.1%FS
Accuracy	± 0.2% for rated current 100A ~1000A
Bandwidth(-3dB)	DC…150kHz
di/dt	>100A/μs

GENERAL DATA

Operating temperature	-40°C ~ +85°C
Storage temperature	-40°C ~ +100°C

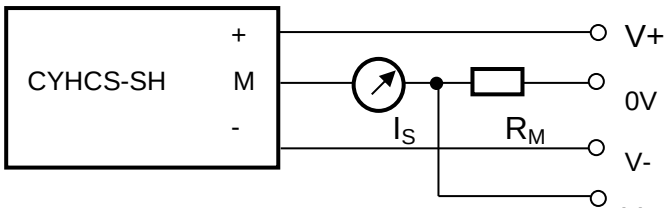
Dimensions (mm)





Sensor Connections

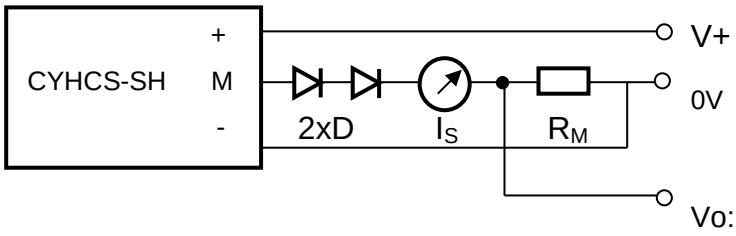
3) For Measurement of Bidirectional Current



Pin Definition:

+	V+: +15~+24VDC
-	V-: -15~ -24VDC
M:	Output current

4) For Measurement of Unidirectional Current



Pin Definition:

+	V+: +15~+24VDC
-	0V (GND)
M:	Output current

Two diodes for instance IN4007 must be connected at the output of the sensor in order to guarantee the sensor to work well.

Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances (di/dt and the response time) are the best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

Precise Hall Effect AC/DC Current Sensor CYHCS-LF

This Hall Effect current sensor is based on closed loop compensating principle and can be used for accurate measurement of DC and AC current, pulse currents etc. The output of the transducer reflects the real wave of the current carrying conductor.

Product Characteristics	Applications
• Excellent accuracy • Very good linearity • Small size and encapsulated • Less power consumption • Current overload capability	• **Photovoltaic equipment** • General Purpose Inverters • AC/DC Variable Speed Drivers • Battery Supplied Applications • Uninterruptible Power Supplies (UPS) • Switched Mode Power Supplies

ELECTRICAL DATA

Part number	CYHCS-LF1000A	CYHCS-LF2000A
Nominal input current	1000A	2000A
Measuring range	0-2000A	0-3000A
Turns ratio	1:5000	
Measuring resistance	with Vc=±15V, @±2000Amax, 0-5.0Ω, @±2500Amax, 0-2.0Ω,	
	with Vc=±24V, @±2000Amax, 0-25Ω, @±3000Amax, 0-10Ω,	
Supply voltage	±15VDC ~ ±24VDC	
Nominal output current	200mA	400mA
Accuracy at +25°C	±0.2% for rated current 1000A~2000A	
Current consumption	≤30mA + Output current	
Galvanic isolation	50Hz，1min，6kV	
Secondary internal resistance	Ta=25°C, 28 Ω	

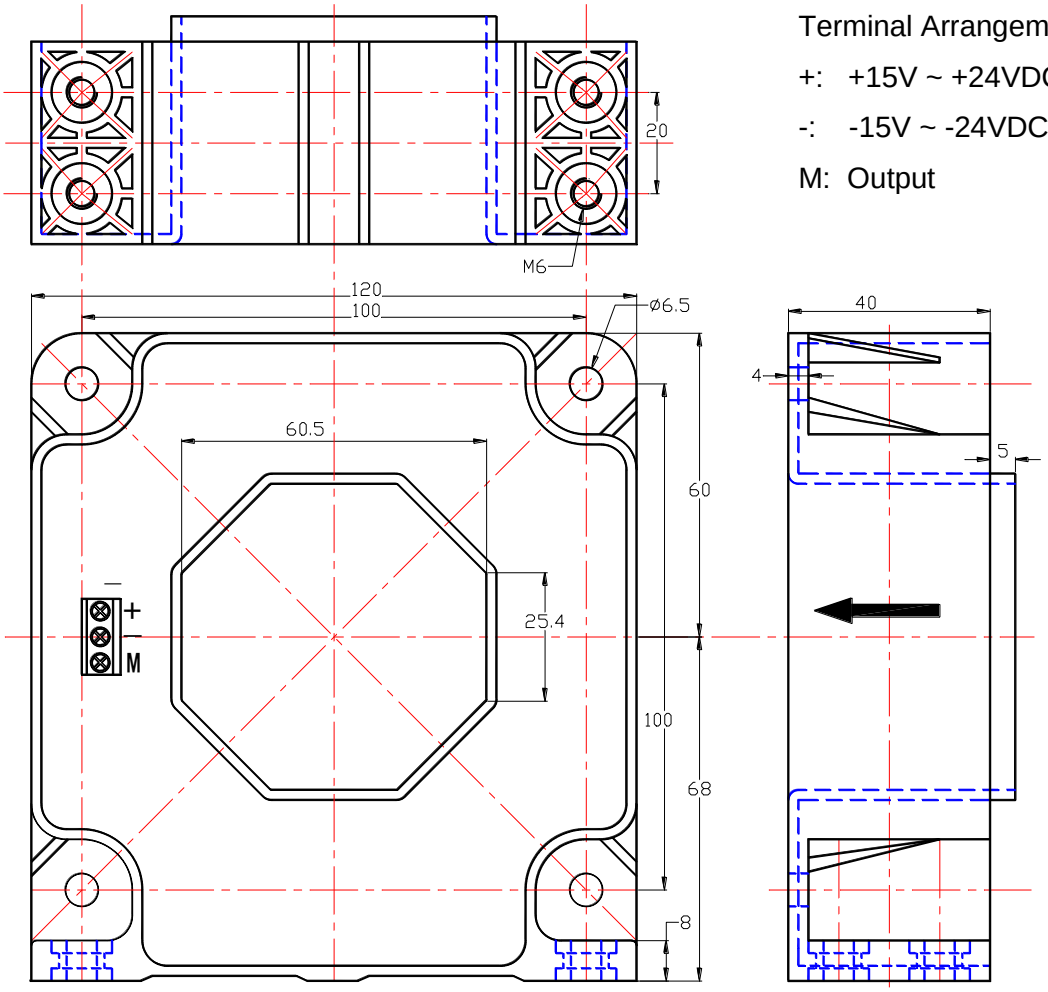
ACCURACY DYNAMIC PERFORMANCE

Zero offset current Ta=25°C	< ±0.2mA
Magnetic Offset current IP→0	< ±0.2mA
Thermal drift of offset current	IP=0, Ta=-25°C ~ +85°C, ±0.5mA
Response time	<1μs
Accuracy	± 0.2% for rated current 1000A~2000A
Linearity	≤0.1%FS
Bandwidth(-3dB)	DC…150kHz
di/dt	>100A/μs

GENERAL DATA

Operating temperature	-25°C ~ +85°C
Storage temperature	-40°C ~ +100°C

Dimensions (mm)



Terminal Arrangement

+: +15V ~ +24VDC

-: -15V ~ -24VDC

M: Output

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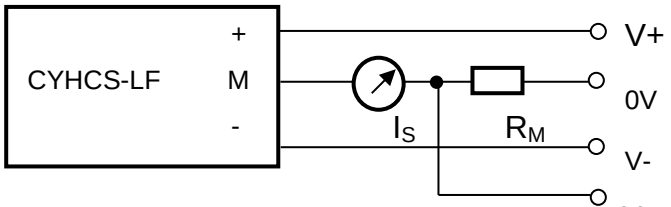
Sensor Connections

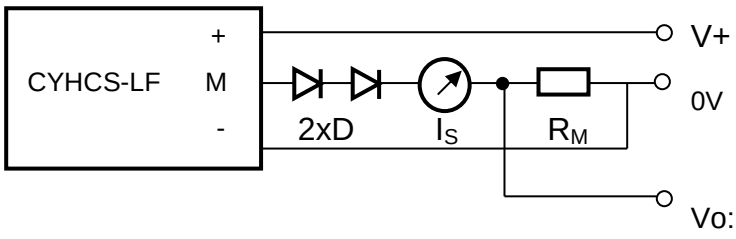
5) For Measurement of Bidirectional Current



Pin Definition:

+	V+: +15~+24VDC
-	V-: -15~ -24VDC
M:	Output current

6) For Measurement of Unidirectional Current



Pin Definition:

+	V+: +15~+24VDC
-	0V (GND)
M:	Output current

Two diodes for instance IN4007 must be connected at the output of the sensor in order to guarantee the sensor to work well.

Operating instructions

1. Connect the terminals of power source, output respectively and correctly, never make wrong connection for DC current.
2. Temperature of the primary conductor should not exceed 100 °C.
3. Dynamic performances (di/dt and the response time) are the best with a single bar completely filling the primary hole.
4. In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.