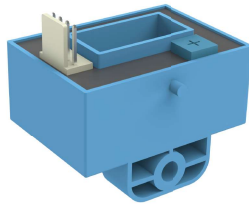


HFCH-L02

CLOSED LOOP HALL-EFFECT CURRENT SENSOR



Features

- Excellent accuracy and very good linearity
- Optimized response time, wide frequency bandwidth
- High immunity to external interference

Applications

Uninterruptible Power Supplies (UPS), Static converters for DC motor drives, AC variable speed drives and servo motor drives, Power supplies for welding, Inverter

SCOPE OF APPLICATION

HFCH-L02 family is suited for the electronic measurement of currents:
DC, AC, pulsed, with galvanic separation between the primary circuit and the secondary circuit.

ELECTRICAL DATA (Ta=25°C)

Parameter	Sym	HFCH-L02/25	HFCH-L02/50	HFCH-L02/100	HFCH-L02/200	HFCH-L02/300
Primary nominal rms current	I_{PN}	25A	50A	100A	200A	300A
Primary current, measuring range	I_P	±50A	±100A	±200A	±400A	±600A
Secondary nominal rms current	I_{SN}	25mA	50mA	50mA	100mA	100mA
Turns ratio	N	1:1000	1:1000	1:2000	1:2000	1:3000
Measuring resistance@ I_{PN}	R_M	0-200Ω	0-100Ω	0-100Ω	0-50Ω	0-50Ω
Measuring resistance@ I_{PM}	R_M	0-100Ω	0-50Ω	0-50Ω	0-20Ω	0-20Ω
Electrical offset current	I_o	≤±0.2mA@ $I_P=0$				
Linearity error	ϵ_L	<±0.1%@ I_{PN}				
Error	X	≤±0.4% @ I_{PN}				
Response time	Tr	1μs max				
Temperature coefficient of I_o	I_{OT}	≤±0.4mA (-40°C ~ 85°C)				
Supply voltage	V_C	±15V DC±5%				
Current consumption	I_C	< 10mA+ I_{SN}				
Frequency bandwidth (-3dB)	BW	DC---100kHz				
Operating temperature	T_A	-40°C ~ +85°C				
Storage temperature	T_S	-40°C ~ +85°C				

INSULATION COORDINATION

Insulation resistance	R_{INS}	DC500V, >1000MΩ
Insulation strength	U_d	2.5kV a.c., 50/60Hz, 1min
Impulse withstand voltage 1.2/50 μs	V_{NI}	8 KV
Clearance	d_{CI}	4.4 mm
Creepage distance	d_{CP}	7.3 mm

- Notes:**
- 1) Connected according to the connection requirements.
 - 2) Temperature of the primary conductor should not exceed 100°C.
 - 3) I_{OUT} is positive when I_P flows in the direction of the arrow.



HONGFA CURRENT TRANSFORMER
ISO9001 CERTIFIED

2024 Rev. 1.00

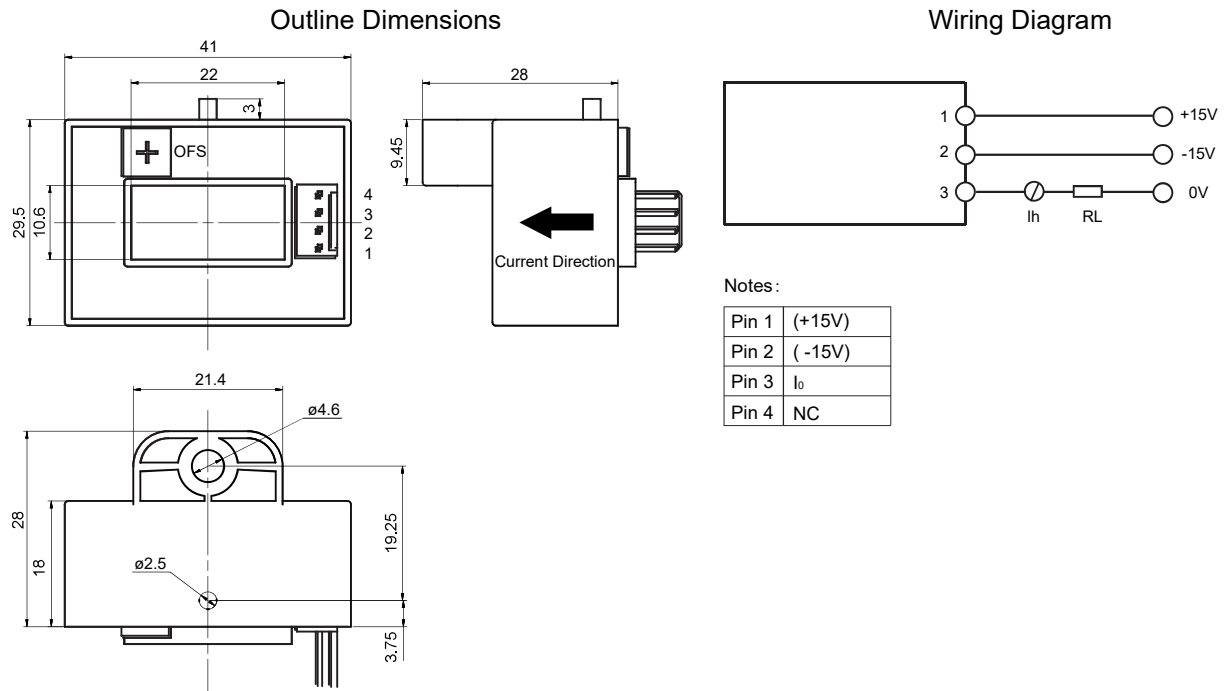
ORDERING INFORMATION

	HFCH	-L	02	/□□□	-C	□□□	-D	15	(XXX)
Product Part NO.	CH: Hall effect sensor								
Working Principle	L: Closed Loop Sensor								
Sequence number	02: 02								
Nominal current	25: 25A 50: 50A 100: 100A 200: 200A 300: 300A								
Output method	C: Current signal								
Typical output value	25: 25mA 50: 50mA 100: 100mA								
Operating Voltage Mode	D: Dual power supplies								
Typical operating voltage	15: 15VDC								
Special code ¹⁾	XXX: Customer special requirement								

Notes: 1) The customer special requirement express as special code after evaluating by Hongfa.

OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm



NOTES:

- 1) To avoid using current transformer under strong magnetic field, the external magnetic field will cause the accuracy of current transformer to change.
- 2) We could not evaluate all the performance and all the parameters for every possible application field and environment. Thus the user should be in a right position to choose the suitable produce for their own application. If there is any query, please contact HKG for the technical service. However, it is the user's responsibility to determine which product should be used only.
- 3) Operating temperature range in this specification refers to the maximum tolerable temperature range under specific load conditions.
- 4) To maintain the performances of current transformers, please do not make the current transformer drop or be shocked strongly.
- 5) All the performance data listed in the datasheet are the initial values tested under standard testing condition.
- 6) HKG reserves the right to change the product, the customer should confirm this specification before placing the order for the first time, may request us to provide the new specification if necessary.