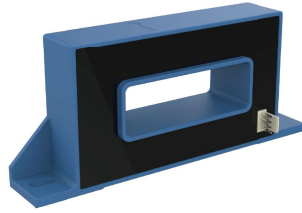


HFCH-P19

OPEN LOOP HALL-EFFECT CURRENT SENSOR



Features

- Low insertion losses
- Easy installation
- Low power consumption
- 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

SCOPE OF APPLICATION

HFCH-P19 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-P19 /500	HFCH-P19 /600	HFCH-P19 /850	HFCH-P19 /1000	HFCH-P19 /1500	HFCH-P19 /2000	HFCH-P19 /2500
Primary nominal rms current	I_{PN}	500A	600A	850A	1000A	1500A	2000A	2500A
Primary current, measuring range	I_{PM}	±1500A	±1800A	±2550A	±3000A	±4500A	±5500A	±5500A
Rated output voltage	V_{OUT}	±4V(RL=10kΩ)@ I_{PN} , T=25°C						
Electrical offset voltage	V_{OE}	≤±20 mV@ $I_P=0$, T=25°C						
Error	X	≤±1% @ I_{PN}						
Linearity error	εL	≤±1% @ I_{PN}						
Temperature coefficient of V_{OE}	TCV_{OE}	≤±1 mV/°C						
Temperature coefficient of V_{OUT}	TCV_{out}	≤±0.1%/°C(-40°C~85°C)						
Response time	T_r	≤5 μs						
Frequency bandwidth (-3 dB)	BW	DC---25kHz						
Load resistance	V_C	≥4.7 kΩ						
Supply voltage (±5 %)	V_C	±15V						
Current consumption@ ±15 V	I_C	<25mA						
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	5kV a.c., 50/60Hz, 1min
Impulse withstand voltage 1.2/50 μs	V_{NI}	8 KV
Clearance	d_{CI}	13 mm
Creepage distance	d_{CP}	16 mm

- Notes:** 1) Recommended fastening torque 1.5 N·m.
2) V_{OUT} is positive when I_P flows in the direction of the arrow.
3) Primary conductor temperature < 100 °C.
4) The primary busbar fixed in the center of aperture is recommended. The position of busbar has impact on the accuracy of transducer.



HONGFA CURRENT TRANSFORMER
ISO9001 CERTIFIED

2024 Rev. 1.00

ORDERING INFORMATION

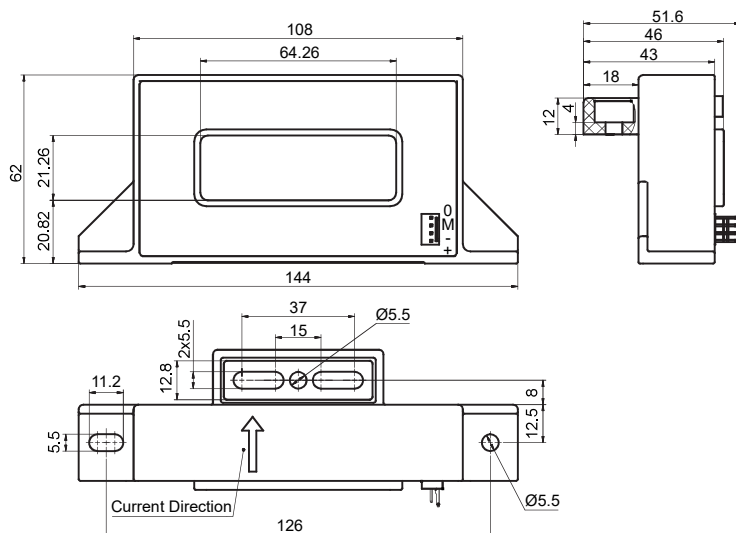
	HFCH	-P	19	□□□	-V	4	-D	15	(XXX)
Product Part NO.	CH:Hall effect sensor								
Working Principle	P: Open Loop Sensor								
Sequence number	19: 19								
Nominal current	500:500A 600:600A 850:850A 1000:1000A 1500:1500A 2000:2000A 2500:2500A								
Output method	V: Voltage output								
Typical output value	4: 4V								
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.

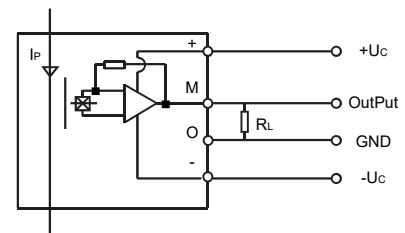
OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

Outline Dimensions



Wiring Diagram



Notes:

+	(+15V)
-	(-15V)
M	V _{out}
O	GND

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.