

Closed-Loop Hall Current Sensor

YCCV06..50DS5



It can be used to measure DC, AC, and pulse current. The primary and secondary circuits are fully insulated. There is no insertion loss.

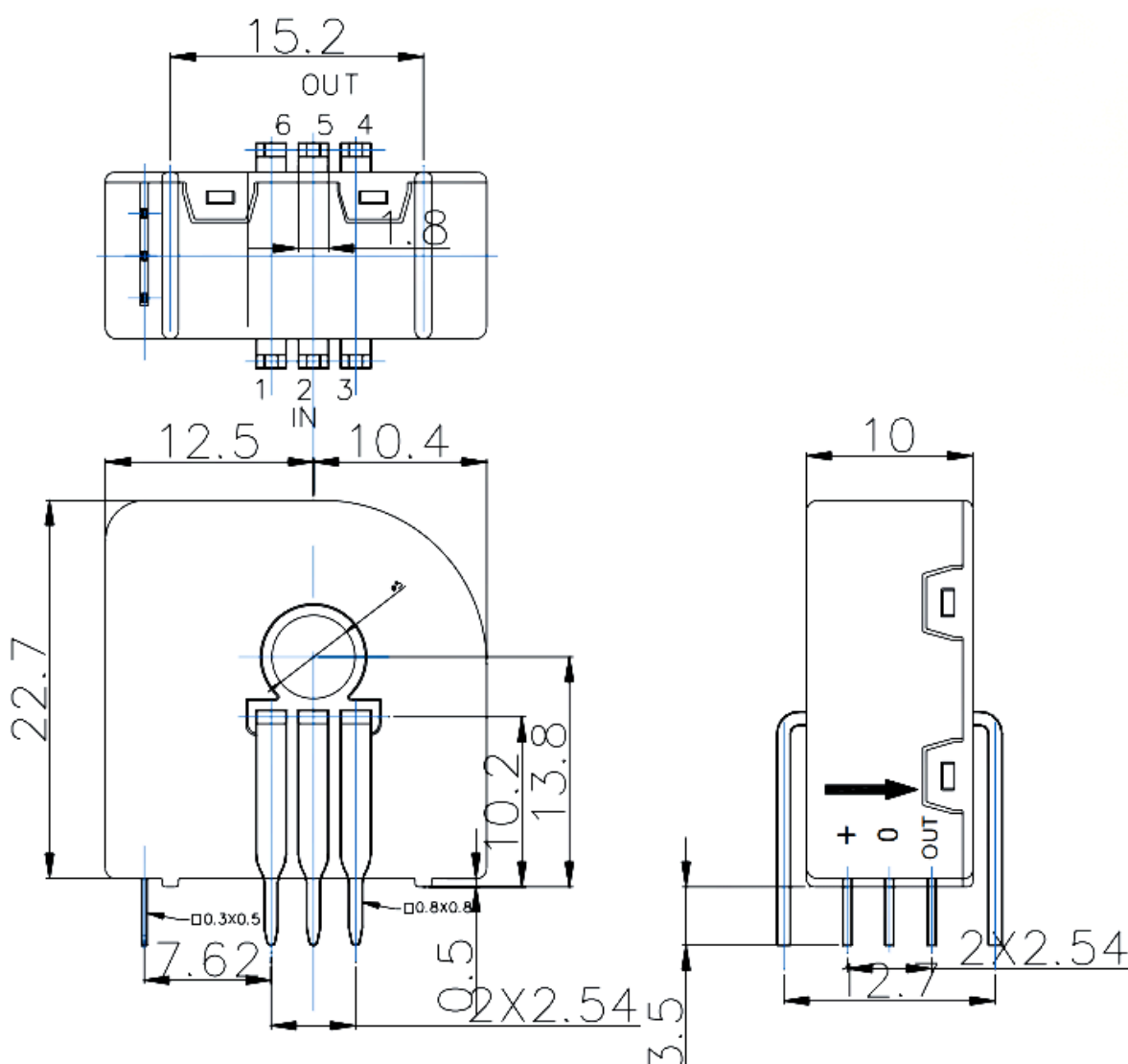
Product Model	Rated Current IPN(A)	Measurement Range IPM(A)	Rated Output VOUT(V)	Turns Ratio KN
YC06DS5	6	± 18	0.625	1 : 960
YC15DS5	15	± 45	0.625	1 : 960
YC25DS5	25	± 75	0.625	1 : 960
YC50DS5	50	± 120	0.625	1 : 960

Application Areas
Switching power supplies
AC drives
Uninterruptible power supplies
Static converters in DC motors

Executive Standards

- JB/T 7490-2007 Hall Effect Current Sensors
- SJ20790-2000 General Specification for Current and Voltage Sensors

Outline Dimensions and Pin Definition (Unit: mm)



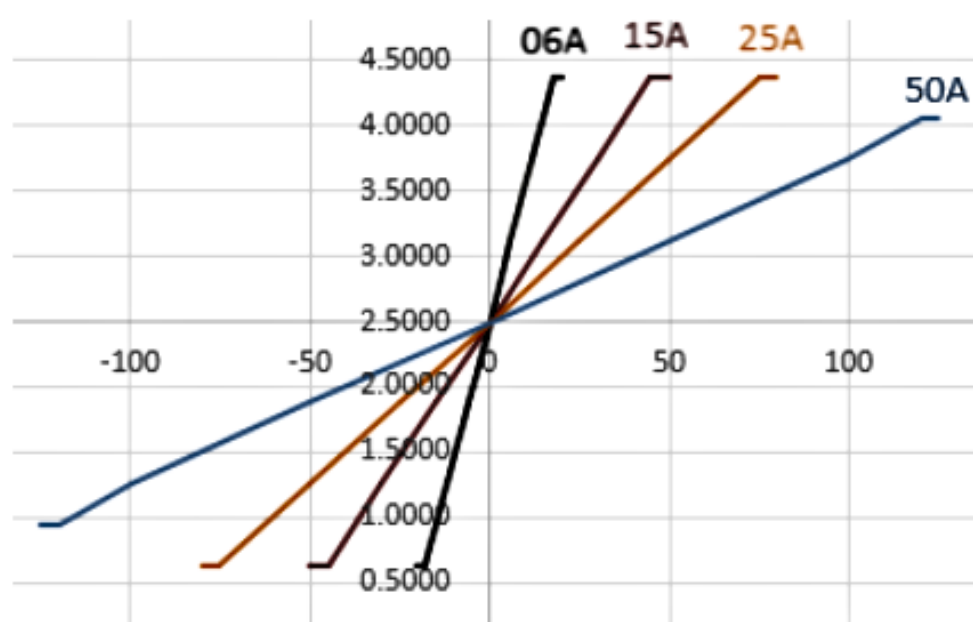
Pin	Description
+	Power Supply +5V
0	Power Ground
OUT	Output Pin

- General Tolerance: ± 1 mm
- Other Tolerances Standard: GB/T 1804-2000-M

Electrical Parameter Characteristics @ Ta = 25°C

Parameter Description	Symbol	Unit	Test Conditions	Min	Standard	Max
Supply Voltage	VCC	V	@DC	4.75	5	5.25
Power Consumption Current	IC	mA	@IPN=0A	-	12	-
Quiescent Output	VOE	V	@IP=0A, T=25 ° C	2.487	2.5	2.513
Magnetic Offset	VOM	V	@IP=0A, T=25 ° C	-0.01	0	0.01
Accuracy	XG	%	@IPN, T=25 ° C	-	± 0.7	-
Linearity	ε L	%	@IPN, T=25 ° C	-	± 0.1	-
di/dt Following Accuracy	di/dt	A/μs		50	-	-
Response Time	TR	μs	@90%IPN	-	-	1
Zero Point Output Drift	TCVOE	mV/ ° C	@-40 ° C ~ +85 ° C	-	± 0.5	-
Rated Output Drift	TCVOUT	mV/ ° C	@-40 ° C ~ +85 ° C	-	± 0.5	-
Operating Bandwidth	BW	KHz	@DC	-	150	-
Operating Temperature Range	TA	° C		-40 ° C	-	+85 ° C
Storage Temperature Range	TS	° C		-45 ° C	-	+105 ° C
Dielectric Withstanding Voltage	Vd	V	@AC50/60Hz 1 min	-	3000	-
Insulation Resistance	Ris	Ω	@DC500V	500M	-	-
Weight	m	g		-	10	-

Output Linearity



Usage Instructions and Precautions

- Refer to the current direction arrow in the structural diagram to connect the current correctly, and pay attention to the forward and reverse directions of the current passing through the sensor.
- Strictly follow the functional pin definitions marked in the structural diagram for wiring (Note: Incorrect wiring may cause damage to the sensor).
- The above specifications are for standard parameter products; products can be customized according to customer requirements.