

Open-Loop Hall Current Sensor

YCOV50..600EKA



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

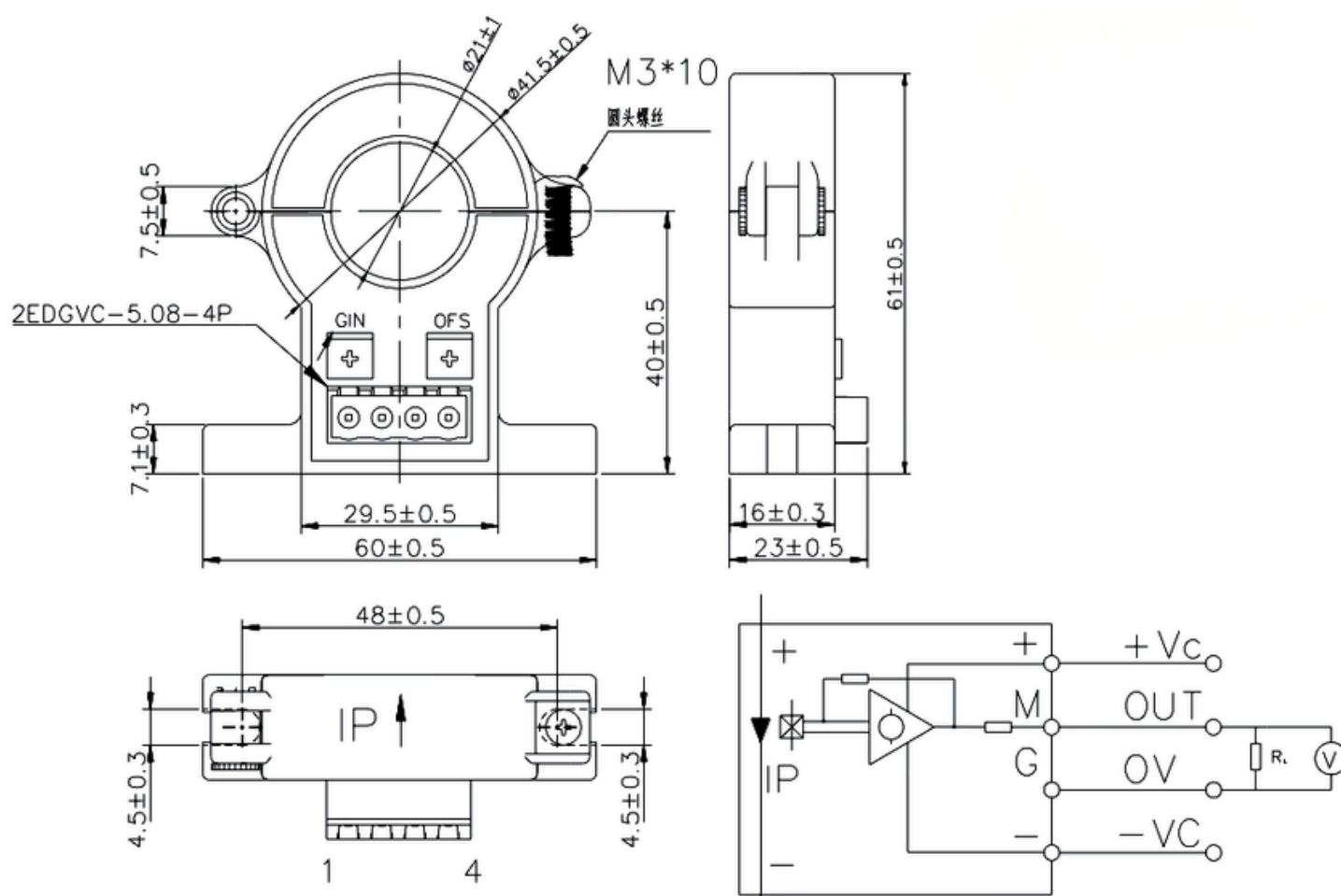
Product Model	Rated Current IPN (A)	Maximum Measuring Range IPM (A)
YCOV50EKA	50	150
YCOV100EKA	100	300
YCOV150EKA	150	450
YCOV200EKA	200	600
YCOV300EKA	300	900
YCOV400EKA	400	900
YCOV500EKA	500	900
YCOV600EKA	600	900

Application Area
• Switching Power Supplies
• AC Variable Speed Drives
• Uninterruptible Power Supplies (UPS)
• Testing Equipment
• Instruments and Meters

Executive Standards

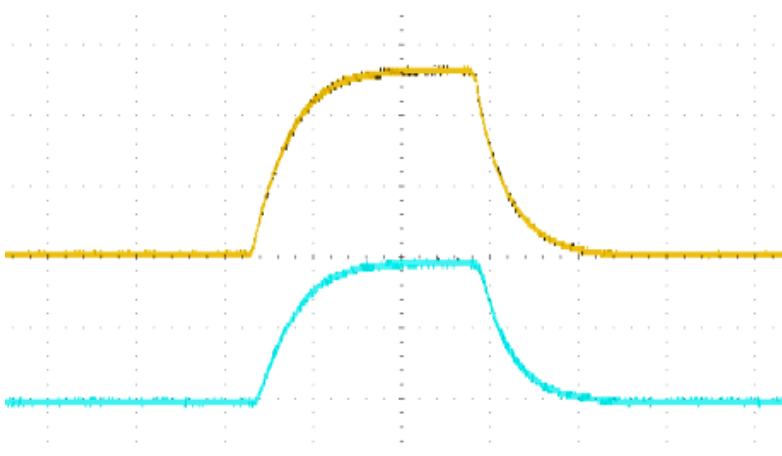
- JB/T 7490-2007 Hall Effect Current Sensors
- SJ20790-2000 General Specification for Current and Voltage Sensors

Outline Dimensions and Pin Definition (Unit: mm)

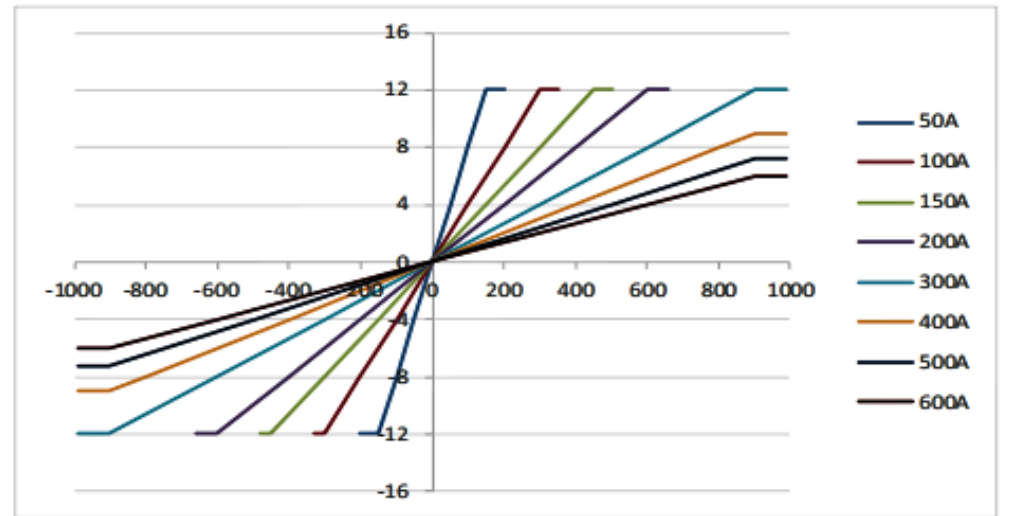


- General Tolerance : ± 1 mm
- Other Tolerances Standard : GB/T 1804-2000-M

Response Time Characteristics



Output Linearity Relationship



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.

Electrical Parameter Characteristics @ Ta = 25°C

Parameter Description	Symbol	Unit	Test Conditions	Min.	Typ.	Max.
Power Supply Voltage	VCC	V	@DC	±12V	±15V	±18V
Power Consumption Current	IC	mA	@IPN	-	±25	-
Rated Output	VOUT	V	@RL=10K, T=25°C	-	±4	-
Static Zero Output	VOE	mV	@IP=0A, T=25°C	-20	0	20
Magnetic Hysteresis Voltage	VOM	mV	@IP=0A, T=25°C	-20	0	20
Load Resistance	RL	Ω	@DC ±15V, IPN	-	10K	-
Output Resistance	ROUT	Ω	-	-	100	-
Accuracy	XG	%	@IPN, T=25°C	-	±1	-
Linearity	ε B	%	@IPN, T=25°C	-	±1	-
Current Follow Accuracy	di/dt	A/us	-	100	-	-
Response Time	TR	μs	@90%IPN	-	-	5
Zero Output Temperature Drift	TCVOE	mV/°C	@-40°C~+85°C @50A @-40°C~+85°C @100A~600A	-	±2.0 ±1.0	-
Rated Output Temperature Drift	TCVOUT	%/°C	@-40°C~+85°C	-	±0.1	-
Operating Bandwidth	BW	KHz	@DC	-	20	-
Operating Temperature Range	TA	°C	-	-40°C	-	+85°C
Storage Temperature Range	TS	°C	-	-45°C	-	+105°C
Withstand Voltage	Vd	V	@AC50/60Hz, 1 minute	-	3000	-
Insulation Resistance	-	Ω	@DC500V	1000M	-	-