

Open-Loop Hall Current Sensor

YCOV50..600EKA5



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

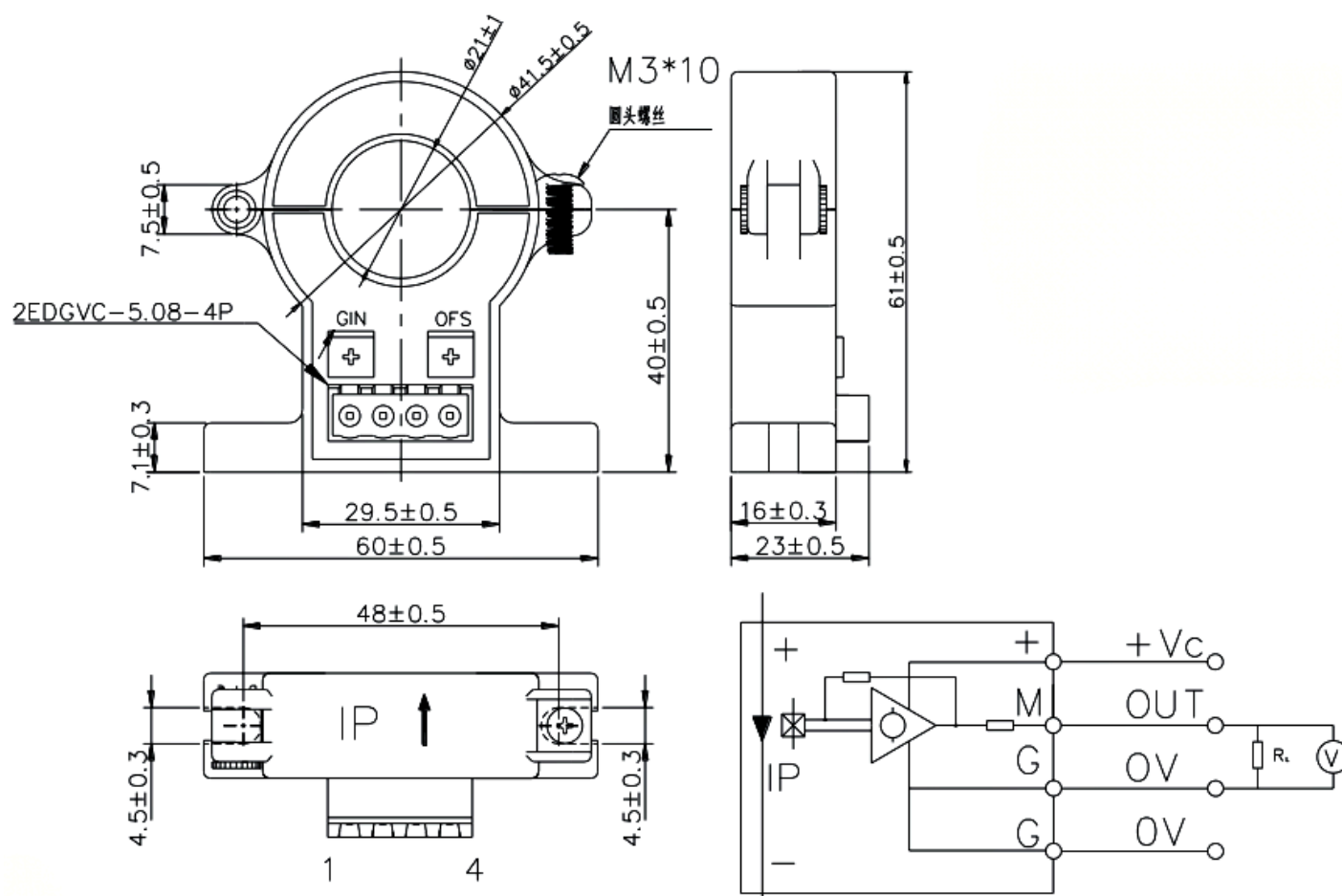
Model No.	Rated Current IPN(A)	Maximum Measuring Range IPM(A)
YCV50EKA51	50	110
YCV100EKA51	100	220
YCV200EKA51	200	440
YCV300EKA51	300	660
YCV400EKA51	400	880
YCV500EKA51	500	900
YCV50EKA52	50	55
YCV100EKA52	100	110
YCV200EKA52	200	220
YCV300EKA52	300	330
YCV400EKA52	400	440
YCV500EKA52	500	550

Application Area
<ul style="list-style-type: none"> Switching Power Supplies
<ul style="list-style-type: none"> AC Variable Speed Drives
<ul style="list-style-type: none"> Uninterruptible Power Supplies (UPS)
<ul style="list-style-type: none"> Testing Equipment
<ul style="list-style-type: none"> 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)



PINS	Definition
1	Positive Power +5V
2	Ground GND
3	Output OUT
4	Ground GND

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

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 Condition	Min	Standard	Max
Power Supply Voltage	VCC	V	@DC	+4.75V	+5V	+5.25V
Power Consumption Current	IC	mA	@IPN	-	15	-
Rated Output	VOUT	V	@RL =10K T=25°C	-	VOE ± 1	-
Static Zero Output	VOE	V	@IP=0A,T=25°C	2.49	2.5	2.51
Hysteresis Voltage	VOM	V	-	-	± 0.01	-
Load Resistance	RL	Ω	@DC+5V, IPN	10K	-	-
Accuracy	XG	%	@IPN,T=25°C	-	± 1	-
Linearity	ε L	%	@IPN,T=25°C	-	± 1	-
Current Following Accuracy	di/dt	A/μs	-	100	-	-
Response Time	TR	μs	@90%IPN	-	-	5
Zero Output Temperature Drift	TCVOE	mV/°C	@-40°C~+85°C	-	± 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	-	-