

• High immunity to external

• Current overload capability.

interference

CLOSED LOOP HALL EFFECT CURRENT SENSOR JPC-1000X

For the electronic measurement of currents :

AC/DC current sensor, JPC series has good stability in high currents and a highly insulated primary and secondary.



APPLICATIONS

- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications.

ADVANTAGES

- Excellent accuracy
- Very good linearity
- Low temperature drift
- Optimized response time
- Wide frequency bandwidth
- No insertion losses

FEATURES

- Closed loop (compensated) current transducer using the Hall effect
- Insulated plastic case recognized according to UL 94-V0
- Panel mounting

SPECIFICATION

Model		JPC-1000F		JPC-1000T		
Connector	-	39-28-8040[5566-04A-210] Molex 38-00-6293[6410-03C(102)] Molex			[6410-03C(102)] Molex	
Primary nominal current rms	Α	1000				
Primary current, measuring range	А	0 ± 1500				
Measuring resistance	Ω	± 15V	@±1000A	Ta=70°C: 0~18 Ta=85°C: 0~15		
			@±1200A	Ta=70°C	C: 0~7	Ta=85°C: 0~4
		± 24V	@±1000A	Ta=70°C	2: 5~60.5	Ta=85°C : 10 ~ 57.5
			@±1500A	Ta=70°C	2: 5~24	Ta=85°C : 10 ~ 21
Secondary nominal current rms	mA	200				
Conversion ratio	-	1 : 5000				
Supply voltage (+ 5 %)	V	± 15 24				
Current consumption (\pm 1mV)	mA	28(@ ±24V) + Is				
Overall accuracy	%	± 0.4				
Linearity error	%	< 0.1				
Offset current	mA	Max. ± 0.4				
Magnetic offset current	mA	Max. \pm 0.2(@ I _P = 0 and specified R _M , after an overload of 3 x I _{PN})				
Insulation voltage	VD	AC 3800V / 1min.				
Temperature variation	mA	Typ. ± 0.3, Max. ± 0.5 (- 10°C + 85°C) / Max. ± 0.8 (- 40°C 10°C)				
Reaction time to 90 % of IPN step	μs	< 1 (With a di/dt of 100 A/µs.)				
di/dt accurately followed	A/µs	> 100				
Frequency bandwidth (- 1 dB)	kHz	DC 150				
Ambient Operating temperature	°C	- 40 + 85				
Ambient storage temperature	°C	- 45 + 100				
Secondary coil resistance	Ω	48 (@Ta=70°C) / 51 (@Ta=85°C)				
Mass	g	550				
Standards	-	EN 50178: 1997 / IEC 61010-1				





JPC-1000T







Connector

Manufacturer	Part Number	Old Part Number			
Molex	38-00-6293	6410-03C (102)			

- Primary through-hole 40.5 x 13 mm or \varnothing 38 mm