



CLOSED LOOP HALL EFFECT CURRENT SENSOR

JPC-500X

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.



ADVANTAGES

- Excellent accuracy
- Very good linearity
- Low temperature drift
- Optimized response time
- Wide frequency bandwidth
- No insertion losses
- High immunity to external interference
- · Current overload capability.

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.

FEATURES

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

SPECIFICATION

Model		JPC-500F			JPC-500T		
Connector	-	39-28-8040[5566-04A-210] Molex			38-00-6293[6410-03C(102)] Molex		
Primary nominal current rms	Α	500					
Primary current, measuring range	Α	0 ± 800					
Measuring resistance @	Ω	± 15V	@ ± 500A	0 ~	60	@ ± 800A	0 ~ 11
		± 18V	@ ± 500A	0 ~	92	@ ± 800A	0 ~ 30
		± 24V	@ ± 500A	5 ~ 1	49	@ ± 800A	5 ~ 65
Secondary nominal current rms	mA	100					
Conversion ratio	-	1:5000					
Supply voltage (+ 5 %)	V	± 15 24					
Current consumption @ ± 15 V	mA	24(@ ±18V) + Is					
Overall accuracy	%	± 0.6					
Linearity error	%	< 0.1					
Offset current	mA	Max. ± 0.4					
Magnetic offset current	mA	Max. \pm 0.2 (@ IP = 0 and specified R _M , after an overload of 3 x I _{PN})					
Insulation voltage	VD	AC 3800V / 1min.					
Temperature variation	mA	Typ. ± 0.1, Max. ± 0.4 (- 40°C + 70°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 100					
Ambient Operating temperature	°C	- 40 + 70					
Ambient storage temperature	°C	- 40 + 85					
Secondary coil resistance	Ω	70 (@Ta=70°C)					
Mass	g	230					
Standards	-	EN 50178: 1997 / IEC 61010-1					





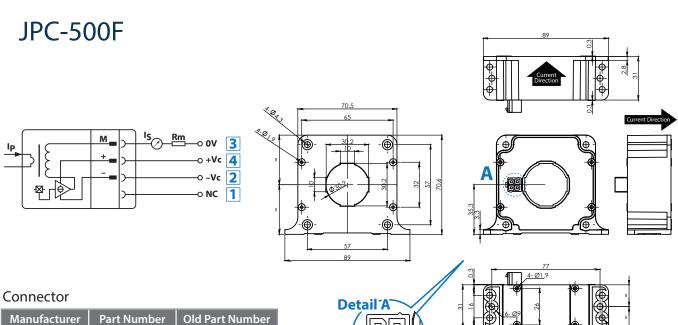
DIMENSIONS(MM)

39-28-8040

• Primary through-hole Ø 30.2 mm

Molex

5566-04A-210



Connector

