

INDUSTRIAL POWER SUPPLIES



SERIES IPS PRODUCT PROFILE

c3controls' **Industrial Power Supplies** are the clear choice when it comes to providing a regulated power for not only industrial and commercial loads but also residential applications. Designed to fit in panels of almost all sizes, c3 power supplies range from 60 to 480W, and of course, with all the necessary certifications and compliances. Check out all the innovative features these power supplies have to offer!



DELIVERING THE MOST RELIABLE, UNINTERRUPTED & HIGH QUALITY POWER

✓ Proven	Our Series IPS Industrial Power Supplies are UL Listed and CE marked to meet global standards requirements and are compliant to the RoHS directives.
✓ Secure Installation	Quick and simple snap-on installation on a 35mm DIN Rail.
✓ Clear Visibility	LED indication allows you to see the availability of the DC power output, making it very helpful in troubleshooting.
✓ Environmentally Secure	Designed and tested for ensuring operation in extreme temperatures, to keep your application running.
✓ Visible Certifications	Product certifications and electrical ratings are clearly marked on the outside of the device for easy reference during installation.
✓ Limited Lifetime Warranty*	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ Guaranteed Same-Day Shipping*	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ Advantage Pricing	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

UNIQUE FEATURES

Best in class efficiency

- c3controls' Industrial power supplies are designed to deliver the power with up to 93% efficiency!

Reliability

- Unmatched protection against short circuit, overload, overvoltage and over temperature, along with Auto-recovery functionality.

Flexibility

- Adjustable output voltage from 100 to 116%.

Easy monitoring

- Power supplies from 240W to 480W come with DC OK Relay Contacts to provide status signals to the monitoring system.

Compact

- Ultra-compact design to save valuable panel space.



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SPECIFICATIONS

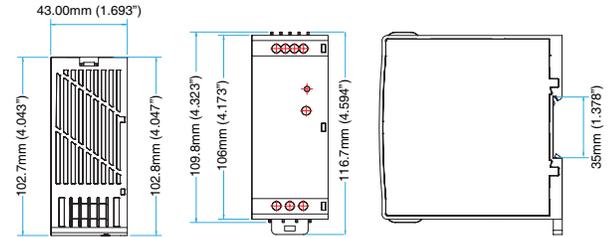
	UNITS	IPS1-120-12	IPS1-120-24	IPS1-120-48
OUTPUT				
Nominal DC Voltage	V	12	24	48
Rated Current	A	8	5	2.5
Current Range	A	0 - 8	0 - 5	0 - 2.5
Rated Power	W	96	120	120
Ripple & Noise (Max.)		<1% of Vout		
Voltage Adjustment Range	V	12 to 14	24 to 28	48 to 56
Voltage Tolerance		± 1 %		
Line / Load Regulation		± 1 %		
Turn On Time		< 1 sec @ 230 VAC & < 3 sec @ 115 VAC, Full load		
Hold Up Time		≥ 60 ms at 230 VAC & ≥ 15 ms at 115 VAC, Full load		
Rise Time	ms	< 100		
INPUT				
Voltage Range	VAC	90 - 264		
Frequency Range	Hz	50 / 60		
Efficiency @ 230V AC		Up to 89 %		
AC Current		2.2 A @ 115 VAC; 1.5 A @ 230 VAC		
Inrush Current		< 48 Amps; Measured at 264 VAC, 25°C Ambient, Cold Start		
Leakage Current		< 1 mA; 264 VAC Input		
PROTECTION				
Overload		> 110 % of Rated Output Current; Hiccup Type; Auto-recovery		
Overvoltage	VDC	17 ±1	31.5 ±1	61 ±2
		Latched Type; Input AC power to be recycled to recover the power supply		
Output Short Circuit		Hiccup mode when output is shorted; Auto-recovery type		
Over Temperature		Power supply shuts down when the temperature of PCB below main transformer reaches typically 120°C. Turns on only after the temperature falls below 90°C typically and AC power is recycled thereafter.		
ENVIRONMENT				
Operating Temperature		-25°C to +70°C; de-rate linearly above 50°C from 100% load at 50°C to 50% load at 70°C. -25°C to 0°C startup is guaranteed with specification deviation (Output ripple can be more than 10% of the output voltage)		
Storage Temperature	°C	- 40 to +85		
Cooling		Natural Convection Cooled		
Humidity	RH	5 to 95 %, Non-condensing		
Altitude	m	2000		
Vibration		Component : 10 ~ 500 Hz, 2 G 10 min. / 1 cycle, period for 60 min. each along X, Y, Z axes		
SAFETY & EMC				
Dielectric Withstand Voltage	VAC	I/P to Earth: 2500 I/P to O/P: 4000 O/P to Earth: 1500		
OTHERS				
Dimension (W x H x D)	mm	43 x 109.8 x 102.7		
Weight	gms	350		
Mounting		35mm DIN Rail		
ROHS COMPLIANCE		For documentation by product, refer to c3controls.com		

For complete ratings and detailed specifications refer to c3controls.com.

Also Available in 60W[®] / 240W[®] / 480W[®]

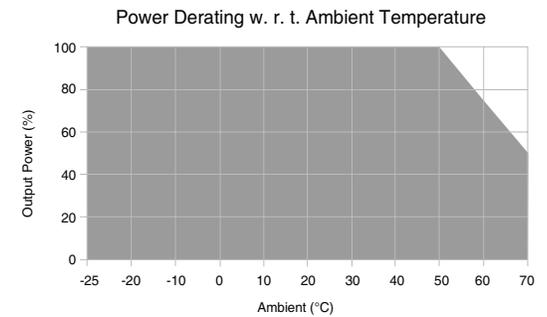
DIMENSIONS

IPS1-120-**



DERATING CURVE

IPS1-120-**



COMPLIANCES

APPLICABLE EMI / EMC STANDARDS

CATEGORY	REFERENCE STANDARDS	TESTING LEVEL
Conducted Emission	CISPR11	CLASS A (for 60W & 120W) CLASS B (for 240W & 480W)
Radiated Emission	CISPR22	CLASS A
Electrostatic Discharge	IEC 61000-4-2	Level 4, Criteria A Level 3, Criteria A
Radiated Susceptibility	IEC 61000-4-3	Level 3, Criteria B
Electrical Fast Transient/Burst	IEC 61000-4-4	Level 3, Criteria A
Surge	IEC 61000-4-5	Level 3, Criteria A
Conducted Susceptibility	IEC 61000-4-6	Level 3, Criteria B
Power Frequency Magnetic Field	IEC 61000-4-8	Level 4, Criteria A
Voltage Dips & Interruption	IEC 61000-4-11	Criteria A & B

CERTIFICATIONS

Conformity to Standards:

UL 508
CSA C22.2 NO. 107.1-01
IEC 62368-1



Certifications:

UL File #: E336563

CE Marked (per EU Low Voltage Directive 2014/35/EC and RoHS Directive 2011/65/EU)

