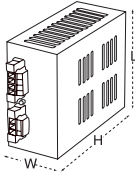


Three Phase Input Supplies – Advanced Features Products



Approvals:



CP SNT 300W 12.5A 3 Phase Input



CP SNT 600W 25A 3 Phase Input



Ordering Data	
Output voltage/maximum current	
Technical Data	
Input voltage	Minimum
	Typical
	Maximum
Input current (Average values for reference only)	Min Vin
	Typ Vin
	Max Vin
Input protection	External Input Breaker
	Inrush Current
	Overvoltage
Switching frequency	
Output	Voltage Nominal
	Voltage Adj. Range
	Current Nominal
	Current Surge
	Current Surge Time
	Surge Cycle Time
Efficiency at maximum load	
Regulation	Load (10-100% load)
	Line
	Overload
Protection	Short Circuit
	Overvoltage
	Undervoltage
	Over Temperature
	Over Current
Max. load capacitance	
Hold time	@380 V
	@480 V
Temperature	Storage
	Operating
Humidity	Storage
	Operating
Galvanic isolation	Input-output
	Input to ground
	Output to ground
Wire size	Input
	Output
	I/O
Dimensions (L x W x H)	
Weight	
Mounts on mounting rail	
Special features	Cooling
	Load Sharing
	Redundancy
	Fault relay
	V _{out}
	T _{out}
	I _{out}
Miscellaneous	Indicator
Approvals/Certifications	
Accessories	
Chassis Mounting Kit	

Type	Order No.
CP SNT 300W 12.5A 3 Phase	7924740324
24 VDC / 12.5 A	
342 V	
380-480 V ± 10%, 50/60 Hz, 3 phase	
528 V	
0.75 A per phase @380 V, 0.6 A per phase @480 V	
2 A, 600 V thermal breaker or	
4 A / 500 V time delay fuse recommended	
Thermistor	
Varistor	
100 kHz	
24 V @ 12.5 A, 28 V @ 10.7 A	
23-28 V	
12.5 A	
19 A	
1 second	
4 seconds	
80%	
5%	
0.5%	
Overcurrent shutdown with automatic restart and overvoltage protection	
Auto restart	
V _{out} > 28 VDC	
V _{out} < 22 VDC	
5000 µF	
12 ms typ (full output current after loss of input)	
28 ms typ (full output current after loss of input)	
Storage	
-40°C...+85°C (-40°F...+185°F)	
Operating	
0°C...+50°C (32°F...+122°F)	
Storage	
20%-90% RH non-condensing	
Operating	
20...85% RH non-condensing	
Input-output	
3 kV RMS	
Input to ground	
1.5 kV RMS	
Output to ground	
500 V RMS	
Wire size	Input
	0.1...4.0 mm ² (26...12 AWG)
	Output
Dimensions (L x W x H)	0.5...16.0 mm ² (22...8 AWG)
	0.08...2.5 mm ² (22...12 AWG)
	I/O
170 x 160 x 82 mm (6.7 x 6.3 x 3.2 in.)	
1.4 kg (3.1 lbs.)	
TS 35 DIN rail or Chassis (Chassis brackets are included)	
Parallel operation for increased current or redundancy ²⁾	
Maximum 2 units	
Form C contacts (1A max @ 30 VDC or 125 VAC; 10 mA min @ 5 VDC)	
Green LED (DC on)	
cULus 508 Listed, CE	
Order No.	
7920560000⁴⁾	

Type	Order No.
CP SNT 600W 25A 3 Phase	7920210324
24 VDC / 25 A	
342 V	
480 V, 50-60 Hz	
528 V	
1.4 A	
1.2 A	
1.1 A	
6 A, 3 pole 480 VAC	
Thermistor	
Varistor	
100 kHz	
24 V	
23-28 V (pot. adj.)	
25 A	
50 A	
1 second	
60 seconds	
88%	
± 4%	
± 1%	
Overcurrent shutdown with automatic restart and overvoltage protection	
Auto restart	
V _{out} > 30.5 VDC	
V _{out} < 20 VDC	
V _{out} heatsink temperature > 100°C (212°F)	
26.5A typical @24 V for >1 second	
10,000 µF	
12 ms typ (full output current after loss of input)	
18 ms typ (full output current after loss of input)	
Storage	
-40°C...+85°C (-40°F...+185°F)	
Operating	
-10°C...+50°C (-4°F...+122°F)	
Storage	
5% -95%	
Operating	
20...85% non-condensing	
Input-output	
3 kVAC	
Input to ground	
1.5 kVAC	
Output to ground	
500 VAC	
Wire size	Input
	0.08...2.5 mm ² (22...12 AWG)
	Output
Dimensions (L x W x H)	0.5...16.0 mm ² (22...8 AWG)
	0.08...2.5 mm ² (22...12 AWG)
	I/O
173 x 238 x 135 mm (6.8 x 9.4 x 5.3 in.)	
3.1 kg (6.75 lbs.)	
TS 35 DIN rail or Chassis (Chassis brackets are included)	
Fan cooled with temp. controlled fan speed ¹⁾	
Maximum 2 units ²⁾	
No maximum ³⁾	
Form C contacts (1A @ 30 VDC or 30 VAC)	
0...10 VDC = 0...30 VDC	
0...10 V = 0°C...+100°C (+32°F...+212°F) (internal temperature)	
0...10 V = 0...50 A	
Green LED (DC on)	
cULus 508 Listed, CE	
Order No.	
7920560000	

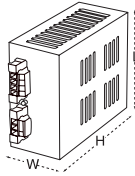
1) This allows for horizontal or vertical mounting without derating.

2) The output voltages of each power supply should be adjusted to within 100mV. Use similar sizes and length of cables to connect the output of each power supply to the load. Consult factory for increased current capacity.

3) No limit to the number of units connected in parallel for redundancy.

4) Order 2 mounting kits for power supply shown above.

Three Phase Input Supplies – Advanced Features Products



Approvals:



CP SNT 1000W 40A 3 Phase Input



Ordering Data		Type	Order No.
		CP SNT 1000W 40A 3 Phase	7918960324
Technical Data			
Input voltage	Minimum	342 VAC	
	Typical	480 VAC $\pm 10\%$ 50/60 Hz, 3 phase	
	Maximum	528 VAC	
Input current	at $V_{min} = 1.9 \text{ A RMS}$	at $V_{nom} = 1.4 \text{ A RMS}$	at $V_{max} = 1.3 \text{ A RMS}$
	Input protection	6A, 3 pole 480 VAC	
	External Input Breaker	6A, 480 VAC Slow Blow	
	External Input Fuse	40A Maximum	
	Inrush Current	Varistor	
	Overvoltage	2 kV	
	Surge Immunity L-L	4 kV	
	L-G	65 kHz	
	Switching frequency	24 VDC	
Output	Voltage Nominal	23...28 VDC	
	Voltage Adj. Range	40 A	
	Current Nominal	70 A	
	Maximum Start-up Current	80 A	
	Current Surge	1 second	
	Current Surge Time	60 seconds	
	Surge Cycle Time	10,000 μF	
	Maximum Load Capacitance	90%	
	Efficiency at Maximum load	< 20 mV RMS	
Output ripple	Load (10-100%)	5%	
	Line	1%	
	Protection	Auto restart	
	Short Circuit	$V_{out} > 30.5 \text{ VDC}$	
	Overvoltage	$V_{out} < 20 \text{ VDC}$	
	Undervoltage	V_{out} heatsink temperature $> 100^\circ\text{C}$ (212°F)	
	Over Temperature	43 A typical @ 24 V for >1 second	
	Over Current	at $V_{min} = 14 \text{ ms}$ at $V_{nom} = 20 \text{ ms}$ at $V_{max} = 28 \text{ ms}$	
	Hold time	$-40^\circ\text{C}...+85^\circ\text{C}$ ($-40^\circ\text{F}...+185^\circ\text{F}$)	
Temperature	Storage	$-10^\circ\text{C}...+50^\circ\text{C}$ ($+14^\circ\text{F}...+122^\circ\text{F}$) (Full Power)	
	Operating	5...95%	
	Humidity	20...85% non-condensing	
	Storage	3k VAC	
	Galvanic Isolation	1.5 kVAC	
	Input to Output	500 VAC	
	Input to Ground	0.08...2.5 mm ² (22...12 AWG)	
	Output to Ground	0.5...16 mm ² (22...6 AWG)	
	Wire Size	0.08...2.5 mm ² (22...12 AWG)	
	Input	182 x 268 x 133 mm (7.2 x 10.6 x 5.3 in.)	
	Output	3800 g (8.35 lbs.)	
	I/O	TS 35 DIN rail, chassis (Recommended Clearance: Leave 4 in. (10 cm) free space on venting sides)	
Dimensions (L x W x H)		Fan cooled ¹⁾	
	Weight	Maximum 2 units ²⁾	
	Mounting	No maximum ³⁾	
Special Features	Cooling	Form C contacts (1A @ 30 VDC or 30 VAC)	
	Load Sharing	0...10 VDC = 0...30 VDC	
	Redundancy	0...10V = $0^\circ\text{C}...+100^\circ\text{C}$ ($+32^\circ\text{F}...+212^\circ\text{F}$) (internal temperature)	
	Fault Relay	0...10V = 0...50A	
	V_{out}	Green LED (DC on)	
	T_{out}	0.9 typical @ 380 VAC 0.87 typical @ 480 VAC	
Miscellaneous	I_{out}		
	Indicator		
	Power Factor		
Approvals/Certifications		cULus 508 Listed, CE	

1) This allows for horizontal or vertical mounting without derating.

2) The output voltages of each power supply should be adjusted to within 100mV. Use similar sizes and length of cables to connect the output of each power supply to the load. Consult factory for increased current capacity.

3) No limit to the number of units connected in parallel for redundancy.

Three Phase Input Supplies – General Purpose Solutions



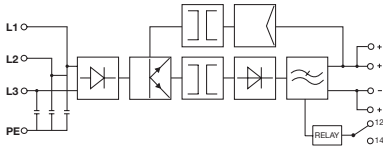
CP SNT3 250W 24V 10A



CP SNT3 500W 24V 20A



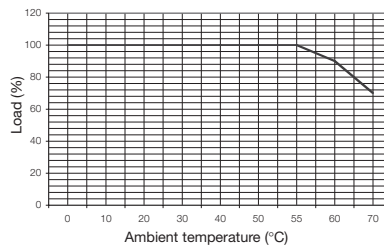
Approvals:



Block diagram

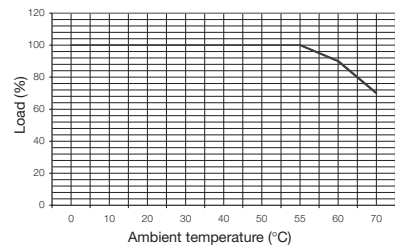
Derating Curves

Output load / ambient temperature



Derating Curves

Output load / ambient temperature



Ordering Data

Technical Data

Input	Input voltage	3 x 400 VAC / 340 min...575 max VAC
	Input current	0.95 A @ 400 VAC
	Input frequency	47...63 Hz
	Recommended mains fuse	external via 3 circuit breakers up to 6 A, trip curve characteristic C
Output	Output voltage	24...28 VDC (adjustable via potentiometer)
	Output current	10 A
	max. output power	250 W
	max. residual ripple	< 100 mV _{p-p} / bandwidth 20 MHz
	Surge capability	105%...130% I _{const.} of max. output power for up to 5 seconds, automatic restart
	Overvoltage protection	29...34 V with automatic restart
Holdup time when 400 VAC mains fail	Load regulation	> 10 ms at nominal load
	Redundancy or load sharing	< 2%
	Status relay/change-over contact	directly with same type (maximum 2 power supplies of same rating), alternatively with diode module
Insulation co-ordination	Galvanic isolation output-ground	250 VAC (max. 30 VDC) / 1 A
	Galvanic isolation input-ground	0.5 kVAC
	Galvanic isolation input-output	1.5 kVAC

General Specifications

Temperature	Operating	-10°C...+55°C (+14°F...+131°F)
	Storage	-20°C...+85°C (-4°F...+185°F)
Efficiency under max. load		88%
Status display		LED green
Standards		EN 60950 (SELV)
EMC standards		EN 55011, EN 55022, EN 55024, EN 61000-6-2,-3
Power factor correction		yes
Mounting position		Horizontal on mounting rail TS 35
Mounting clearance		above/below ≥ 3 cm
Weight		approx. 1.5 kg (3.31 lbs.)
Type of connection		Screw
Clamping area		4 / 0.13 / 6 mm ² (12 / 26 / 10 AWG)
Dimensions (L x W x H)		125 x 125.5 x 110 mm (4.92 x 4.94 x 4.33 in.)

Approvals/Certifications

508 60950

Ordering Data

Technical Data

Input	Input voltage	3 x 400 VAC / 340 min...575 max VAC
	Input current	1.7 A @ 400 VAC
	Input frequency	47...63 Hz
	Recommended mains fuse	external via 3 circuit breakers up to 16 A, trip curve characteristic C
Output	Output voltage	24...28 VDC (adjustable via potentiometer)
	Output current	20 A
	max. output power	480 W
	max. residual ripple	< 100 mV _{p-p} / bandwidth 20 MHz
	Surge capability	105%...130% I _{const.} of max. output power for up to 5 seconds, automatic restart
	Overvoltage protection	29...34 V with automatic restart
Holdup time when 400 VAC mains fail	Load regulation	> 10 ms at nominal load
	Redundancy or load sharing	< 2%
	Status relay/change-over contact	directly with same type (maximum 2 power supplies of same rating), alternatively with diode module
Insulation co-ordination	Galvanic isolation output-ground	250 VAC (max. 30 VDC) / 1 A
	Galvanic isolation input-ground	0.5 kVAC
	Galvanic isolation input-output	1.5 kVAC

General Specifications

Temperature	Operating	-10°C...+55°C (+14°F...+131°F)
	Storage	-20°C...+85°C (-4°F...+185°F)
Efficiency under max. load		88%
Status display		LED green
Standards		EN 60950 (SELV)
EMC standards		EN 55011, EN 55022, EN 55024, EN 61000-6-2,-3
Power factor correction		yes
Mounting position		Horizontal on mounting rail TS 35
Mounting clearance		above/below ≥ 3 cm
Weight		approx. 3.0 kg (6.6 lbs.)
Type of connection		Screw
Clamping area		4 / 0.13 / 6 mm ² (12 / 26 / 10 AWG)
Dimensions (L x W x H)		125 x 227.5 x 110.0 mm (4.92 x 8.96 x 4.33 in.)

Approvals/Certifications

508 60950