

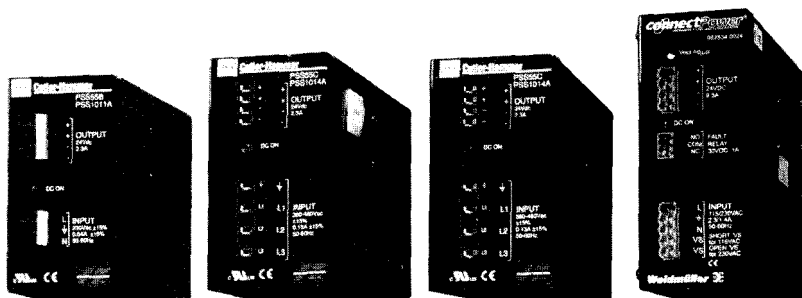
March 2002

Distribution & Control Transformers

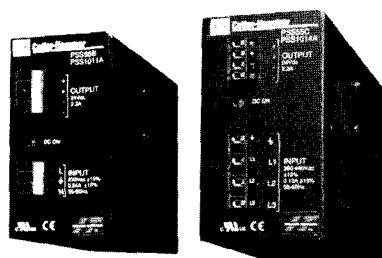
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Note: Supplement to Publication No. CA08102001E.



IT. Power Supply



IT. Power Supplies

Product Description

The Intelligent Technologies line of Power Supplies is designed to work in a variety of applications. These include as the power supply to the /T. line of power control products. They also work in most industrial control applications which require 24V DC. All of the /T. power supplies are designed to provide the highest outrush current in the industry for units of their size. It is also the only line to provide 360 – 480V AC input voltage down to the smallest current units.

Application Description

The /T. line of Power Supplies is specifically designed to work with the S801 and Intelligent Technologies electro-mechanical devices. They can also serve in a variety of other applications including support of sensors, operator interfaces, PLCs, communication networks, heaters and lights and in many other industrial applications where 24V DC power supplies are required. With the widest operating temperature range in the industry, rugged design and a long list of advanced features, they are able to be applied in a very wide range of applications.

The higher input voltage ranges are designed to allow users to eliminate the need for a control power transformer in the enclosure or cabinet, thus saving space, wiring and money.

Features

- Wide range voltage input (110 – 480V AC operating)
- High current outrush capability in all units
- Long ride-through capability designed in
- IP20 finger protection
- Wide operating temperature range
- Power Supplies can be used in parallel (6.5A and greater)
- Multiple 24V DC terminals for easy wiring
- DIN rail and panel mount available in most units
- Removable terminal connections
- IP20 fingerproof design
- Larger units have —
 - Active power factor correction
 - Adjustable output voltages
 - Fault contacts
 - Analog outputs

Benefits

- 24V DC control enhances personnel and equipment safety.
- IP20 design improves personnel safety.
- Removable terminal connectors make installation and repair quick and easy.
- Wide operating temperature range allows for installation in most areas where standard control products can be installed today.
- High current outrush capability allows use of smaller power supplies in many applications and ensures stable output during high power demand cycles.
- Due to long ride-through time, the Power Supply can maintain the control power system during brown out and black out conditions.

Standards and Certifications

- UL Listed 508
- CSA Certified
- CE Marked
- F47 Certified

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IT. Intelligent Technologies

Technical Data

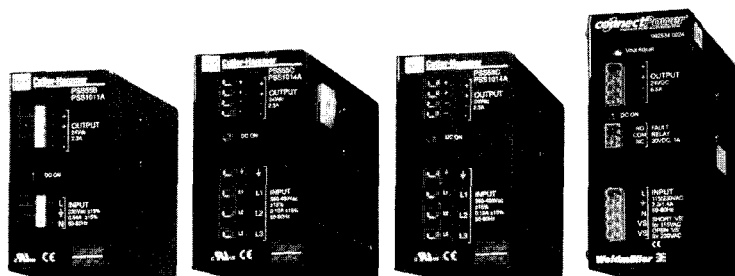
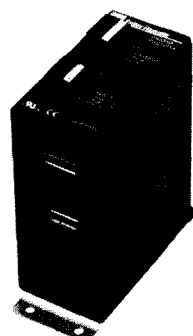
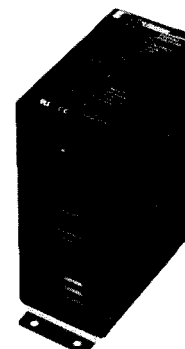


Table 44-1. Power Supply Specifications

Description	PSS10E	PSS10F	PSS25E	PSS25F	PSS55A	PSS55B	PSS55C
Input Specifications							
Input Voltage Range (V AC)	90 – 260	360 – 500	90 – 260	360 – 500	90 – 140	180 – 260	360 – 500
Input Frequency (Hz)	50/60		50/60		50/60		
Input Protection	Fuse		Fuse		Fuse		
Impulse Withstand	6 kV		6 kV		2 kV	2 kV	4 kV
Output Specifications							
Output Voltage	24V DC		24V DC		24V DC		
Regulation	± 10%	± 10%	± 10%	± 10%	± 1%	± 1%	± 1%
Ripple	.1% RMS		.1% RMS		.1% RMS		
Switching Frequency	60 kHz		60 kHz		100 kHz		
Efficiency @ Full Load	85%	85%	85%	85%	80%	80%	85%
Maximum Outrush — Current (amps) Time (msecs)	1 30		6.5 90		10 200		
Monitoring Signals/Indications							
Status Indicators	Green LED DC ON		Green LED DC ON		Green LED DC ON		
Fault Relays	No		No		No		
Monitor Signals	No		No		No		
Environmental Performance							
Temperature — Operating (no derate) – Derating (Max. 65°C) – Storage	23° – 122°F (-5° – 50°C) None -13° – 176°F (-25° – 80°C)		23° – 122°F (-5° – 50°C) None -13° – 176°F (-25° – 80°C)		-22° – 122°F (-30° – 50°C) .5% per Degree C -40° – 185°F (-40° – 85°C)		
Humidity	95% RH Non-condensing		95% RH Non-condensing		95% RH Non-condensing		
Altitude (meters)	2000		2000		2000		
Vibration	3G		3G		3G		
Shock	15G		15G		15G		
Physical Data							
Wire Size	26 – 12 AWG		26 – 12 AWG		26 – 12 AWG		
Ingress Protection	IP20		IP20		IP20		
Dimensions in Inches (mm) (Width x Height x Depth)	1.9 x 4.5 x 4.5 (50 x 114 x 114)		1.9 x 4.5 x 4.5 (50 x 114 x 114)		2.1 x 3.8 x 5.6 (53 x 98 x 142)		.3 x 4.2 x 6 (9 x 107 x 152))
Weight in lbs (kg)	.79 (.36)		.79 (.36)		1.05 (.48)		1.16 (.53)
Mounting – Standard	Panel/DIN		Panel/DIN		Panel (DIN kit Available)		
Approvals/Certifications							
	cULus/Ce		cULus/Ce		cULus/Ce		



PSS160E



PSS300E

Table 44-1. Power Supply Specifications (Continued)

Description	PSS160E	PSS160C	PSS300E	PSS600C
Input Specifications				
Input Voltage Range (V AC)	90 – 260	360 – 500	90 – 260	360 – 500
Input Frequency (Hz)		50/60	50/60	50/60
Input Protection		Fuse	Fuse	Fuse
Impulse Withstand	2 kV	4 kV	2 kV	4 kV
Output Specifications				
Output Voltage		24V DC	24V DC	24V DC
Regulation	± 1%	± 1%	± 1%	± 1%
Ripple		.1% RMS	.1% RMS	.1% RMS
Switching Frequency	65 kHz	100 kHz	100 kHz	100 kHz
Efficiency @ Full Load	85%	85%	85%	85%
Maximum Outrush — Current (amps) Time (msecs)	13 1000	20 200	20 200	50 1000
Monitoring Signals/Indications				
Status Indicators		Green LED DC ON		Green LED DC ON Yellow LED Current Limit, Red LED Fault
Fault Relays		Form C		Form C
Monitor Signals		No		Output Voltage Output Current Internal Temperature
Environmental Performance				
Temperature — Operating (no derate) – Derating (Max. 65°C) – Storage		-4° – 122°F (-20° – 50°C) .5% per Degree C -40° – 185°F (-40° – 85°C)		-4° – 122°F (-20° – 50°C) .5% per Degree C -40° – 185°F (-40° – 85°C)
Humidity		95% RH Non-condensing		95% RH Non-condensing
Altitude (meters)		2000		2000
Vibration		3G		3G
Shock		15G		15G
Physical Data				
Wire Size		26 – 12 AWG		26 – 12 AWG
Ingress Protection		IP20	IP20	IP20
Dimensions in Inches (mm) (Width x Height x Depth)	2.2 x 5.0 x 6.8 (57 x 127 x 175)	TBD	9.5 x 4.1 x 6.1 (242 x 104 x 155)	TBD
Weight in lbs (kg)	1.93 (.88)	TBD	2.6 (1.18)	TBD
Mounting – Standard		Panel/DIN	Panel/DIN	Panel/DIN
Approvals/Certifications				
		cULus/Ce		cULus/Ce

Accessories

DIN Rail Mounting Kit

Table 44-2. Kits

Description	Catalog Number	Price U.S. \$
DIN Rail Mounting Kit	PSSDIN	21.50

24V DC Demo Case

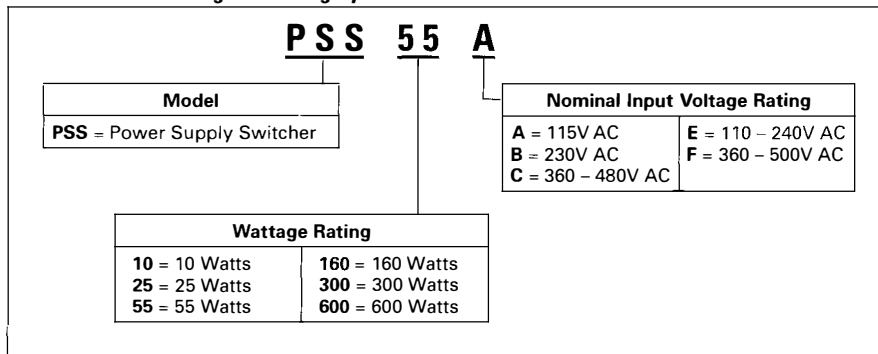
This demo case is designed to help explain the advantages and features of a 24V DC control voltage.

Table 44-3. Kits

Description	Catalog Number	Price U.S. \$
Demo Case	EM24VDEMO	567.00

Catalog Number Selection

Table 44-4. PSS Catalog Numbering System



Product Selection

Table 44-5. Power Supply Product Selection

Steady State Current (Amps)	Steady State Wattage	Input Voltage	Catalog Number	Price U.S. \$
.4	10W	90 – 264 360 – 500	PSS10E PSS10F	96.00 116.00
1.0	25W	90 – 264 360 – 500	PSS25E PSS25F	120.00 144.00
2.3	55W	90 – 140 190 – 264 360 – 480	PSS55A PSS55B PSS55C	225.00 225.00 269.00
6.5	160W	90 – 264 360 – 500	PSS160E PSS160C	330.00 385.00
12.5	300W	90 – 264	PSS300E	455.00
25.0	600W	360 – 500	PSS600C	585.00

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