Use PowerCover.QXD file

Altech Corporation

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

In response to a growing market for high power regulated Power Supplies, Altech introduced the new Din Rail mountable power supply line. They are reliable, cost effective, space economical and easy to install and maintain. They are able to handle any industrial process requirement. In addition, you do not need to oversize them; they are designed to work on 100% load capacity. The universal input, power factor correction and many approvals proves that Altech Power Supplies will function worldwide on a wide variety of applications. Wide operation temperature range, high efficiency and many protections make Altech Power supplies your best choice.

Our well trained technical experts welcome the opportunity to answer your technical questions and provide solutions to your automation and control needs. Give us a call or visit www.altechcorp.com.

Quality Commitment

Altech's control components meet diverse national and international standards such as UL, NEC, CSA, IEC, VDE and more. Altech provides superior customer service and delivery through Total Quality Management and Continuous Process Improvement. Altech is ISO 9001 approved. We perform these services with honesty and integrity and are committed to achieve these goals.

Altech Corp.®

Serving the Automation & Control Industry since 1984.

Introduction 4-5

20-100W, Single Phase Slimline Power Supplies 6-7

PS-S2005	5 V DC	3A
PS-S2012	12V DC	1.67A
PS-S2015	15V DC	1.34A
PS-S2024	24V DC	1A
PS-S4005	5 V DC	6A
PS-S4012	12V DC	3.33A
PS-S4024	24V DC	1.7A
PS-S4048	48V DC	0.83A
PS-S6005	5V DC	10A
PS-S6012	12V DC	5A
PS-S6024	24V DC	2.5A
PS-S6048	48V DC	1.25A

30-60W, Single Phase Low Profile Power Supplies 8-9

PS-3005	5 V DC	3A
PS-3012	12V DC	2A
PS-3015	15V DC	2A
PS-3024	24V DC	1.5A
PS-4505	5 V DC	5A
PS-4512	12V DC	3.5A
PS-4515	15V DC	2.8A
PS-4524	24V DC	2A
PS-6005	5V DC	6.5A
PS-6012	12V DC	4.5A
PS-6015	15V DC	4.0A
PS-6024	24V DC	2.5A
PS-10012	12V DC	6.5A
PS-10015	15V DC	4.5A
PS-10024	24V DC	4.0A

75-240W, Single Phase Power Supplies 10-11

PS-7512	12V DC	6.3A
PS-7524	24V DC	3.2A
PS-7548	48V DC	1.6A
PS-12012	12V DC	10A
PS-12024	24V DC	5A
PS-12048	48V DC	2.5A
PSH-12024	24V DC	5A
PSH-12048	48V DC	2.5A
PSP-24024	24V DC	10A
PSP-24048	48V DC	5A

480W, Single Phase Power Supplies 12-13

PSP-48024	24V DC	20A
PSP-48048	48V DC	10A
PSP-480S24	24V DC	20A
PSP-480S48	48V DC	10A

240-960W, Three Phase Power Supplies 14-15

PST-24024	24V DC	10A
PST-24048	48V DC	5A
PST-48024	24V DC	20A
PST-48048	48V DC	10A
PST-96024	24V DC	40A
PST-96048	48V DC	20A

NEW PRODUCT

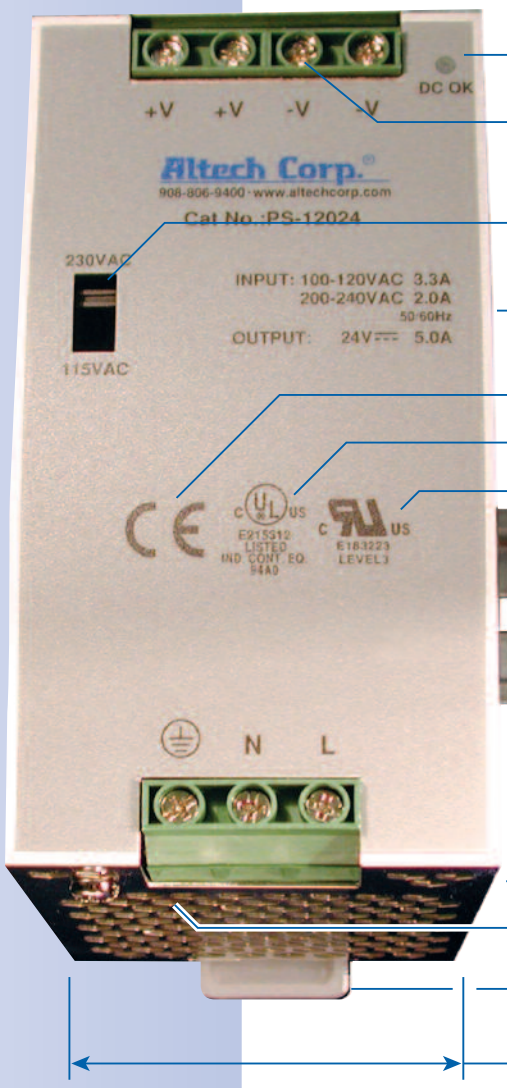
Power Supply Accessories 16-19

NEW PRODUCT

Altech Corp.® • 35 Royal Road • Flemington, NJ 08822-6000 • Phone (908)806-9400 • FAX (908)806-9490 • www.altechcorp.com

DIN Rail Power Supplies
(30-960 watts)

- DIN Rail Mount, 35 x 7.5 mm or 35 x 15 mm
- Wide Power Range (30W-960W)
- Wide Adjustment Range
- Rugged for Industrial Use
- High Efficiency
- Lightweight and Compact Design
- 3 year warranty
- Short Circuit Protection
- Overvoltage Protection
- Overload Protection
- Overtemperature Protection
- Cooling by free air convection
- Worldwide Approvals
- UL508 Listed and/or UL60950-1 Recognized



DC (on) LED Signal

Multiple output connector for easy wiring

Switch Select or Universal Input

Easy to understand Layout Panel

CE compliance

UL508 Listed

UL60950-1 Recognized

DIN Rail Mounting (accessory item)

Rugged metal case

Adjustable DC output voltage

Strong DIN Rail bracket for horizontal and vertical mounting

Narrow for maximized panel space

Altech Power Supplies ...
...Easy to Use & Reliable!

Specifications

Input

- Input Voltage
  - 90-264V AC for the single phase
  - 340-550V AC for the three phase
- Input Frequency: 47-63 Hz
- Input Current: 0.6 A to 8A
- Inrush Current: cold start 60 A max
- Power Factor: All units are EN61000-3-2 compliant

General

- Efficiency: 72-92% (see data sheets)
- Isolation: 3000V AC Input to Output
  1500V AC Input to Ground
  500V AC Output to Ground

Environmental

Power supplies can run at 100% capacity inside the panel, there is no need for oversizing. See derating curves for more information.

- Operating Temperature:
  -20 to +60°C (-4° to +140°F)
- Operating Humidity:
  90% RH, non-condensing
- Storage Temperature:
  -20 °C to +85 °C (-4° to +185°F)
- Vibration: 2 G, 10 Hz to 500 kHz,
  10 min/cycle for 60 minutes each axis

Output

- Output Voltage: 5V; 12V; 15V; 24V; 48V
- Output Voltage Adjustment Range: ±10%
- Initial Set Accuracy: ±2% max
- Ripple & Noise: See data sheet
- Over-voltage Protection: 115-135%
- Overload Protection: 105-150%,
  constant current with auto recovery

EMC & Safety

- Emissions: EN55022/55011, Class B
- EN61000-3-2, -3
- Voltage Flicker: EN61000-3-3
- ESD Immunity: EN61000-4-2, level 3
- Radiated Immunity: EN61000-4-3, 10 V/m
- EFT/Burst: EN61000-4-4, level 3
- Surge: EN61000-4-5, level 3
- Conducted Immunity:
  EN61000-4-6, 10 V rms,
- Safety Approvals:
  EN60950
  UL508
  UL60950
  CE marked
- Military Standard
  MIL-HDBK-217F

20-100W Single Phase
Slimline Power Supplies

Key Features

- Universal AC Input / Full Range
- NEC class 2 / LPS compliant (Only selected models; see data sheet at altechcorp.com)
- LED indicator for power on
- 100% full load burn-in test
- 3 year warranty
- Input voltage range:
  85-264V AC
  120-370V DC
- AC inrush current (*typical*):
  Cold start: 20A at 115V AC,
  40A at 230V DC
- DC adjustment range (*typical*):
  ±10% rated output voltage
- Overload protection (*typical*):
  105%-160% constant current limiting, auto-recovery
- Over-voltage protection (*typical*):
  115%-135% rated output voltage
- Setup, rise, time (*typical*):
  500ms, 30ms/230V AC
  10000ms, 30ms/115V AC,at full load
- Withstand voltage:
  I/P-O/P:3KV AC, I/P-FG:1.5KV AC, O/P-FG:0.5KV AC,
- Working temperature:
  -20 to +70°C (-4° to +158°F), refer to output derating curve
- Safety standards:
  UL508, EN60950-1*
- EMC standards:
  EN55022 class B, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN61000-6-1, EN61204-3 Light Industry Level**, criteria A
- Military Standard
  MIL-HDBK-217F

* Except PS-S20xx

** Heavy for PS-S40xx and PS-S60xx

NEW PRODUCT

20W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-S2005	5V DC	3A	±2%	80 mVp-p	76%
PS-S2012	12V DC	1.67A	±1%	120 mVp-p	80%
PS-S2015	15V DC	1.34A	±1%	120 mVp-p	81%
PS-S2024	24V DC	1A	±1%	150 mVp-p	84%

Universal Input: 85-264V AC, 120-370V DC full range; 0.55A @ 115V AC; 0.35A @ 230V AC
Connection: Input - 3 poles, Output – 2 poles screw terminal + DC OK active signal
Size (WxHxD): 22.5x90x100mm (0.89x3.54x3.94 inches)
Packaging: 1/box; 0.48lbs / 0.19Kg

NEW PRODUCT

40W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-S4005	5V DC	6A	±2%	80 mVp-p	79%
PS-S4012	12V DC	3.33A	±1%	120 mVp-p	86%
PS-S4024	24V DC	1.7A	±1%	150 mVp-p	88%
PS-S4048	48V DC	0.83A	±1%	200 mVp-p	88%

Universal Input: 85-264V AC, 120-370V DC full range; 1.1A @ 115V AC, 0.7A @ 230V AC
Connection: Input - 3 poles, Output – 4 poles screw terminal + DC OK relay contact
Size (WxHxD): 40x90x100mm (1.57x3.54x3.94 inches)
Packaging: 1/box; 0.66lbs / 0.3Kg

NEW PRODUCT

60W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-S6005	5V DC	10A	±2%	80 mVp-p	79%
PS-S6012	12V DC	5A	±1%	120 mVp-p	86%
PS-S6024	24V DC	2.5A	±1%	150 mVp-p	88%
PS-S6048	48V DC	1.25A	±1%	200 mVp-p	89%

Universal Input: 85-264V AC, 120-370V DC full range; 1.8A @ 115V AC, 1A @ 230V AC
Connection: Input - 3 poles, Output – 4 poles screw terminal + DC OK relay contact
Size (WxHxD): 40x90x100mm (1.57x3.54x3.94 inches)
Packaging: 1/box; 0.73lbs / 0.33Kg

NEW PRODUCT

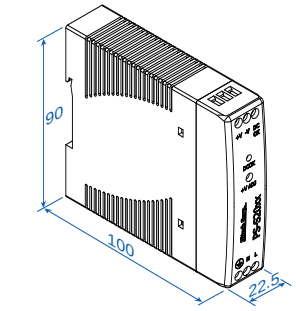
100W Single Output Industrial DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-S10012	12V DC	8A	±1%	120 mVp-p	87%
PS-S10024	24V DC	4A	±1%	150 mVp-p	88%
PS-S10048	48V DC	2A	±1%	200 mVp-p	87%

Connection: Input - 2 poles, Output – 4 poles screw terminal
Size (WxHxD): 55x90x100mm (2.17x3.54x3.94 inches)
Packaging: 1/box; 0.73lbs / 0.33Kg

PENDING

PS-S20 Series



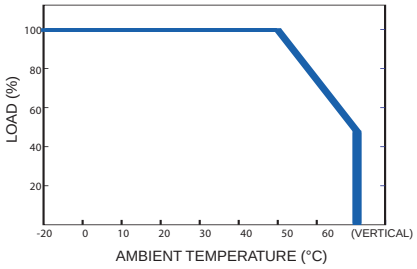
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

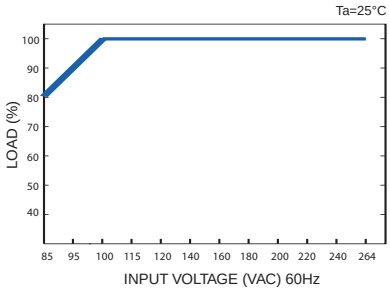
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1	DC OUTPUT +V
2	DC OUTPUT -V
3	DC OK SIGNAL

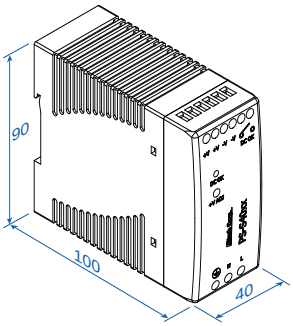
Output Derating



Output Derating Curve vs. Input Voltage



PS-S40 Series



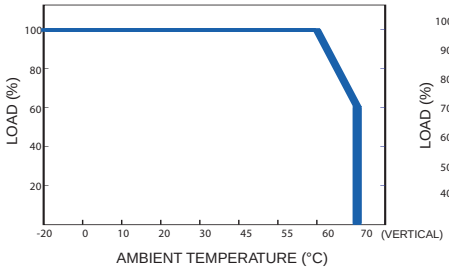
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

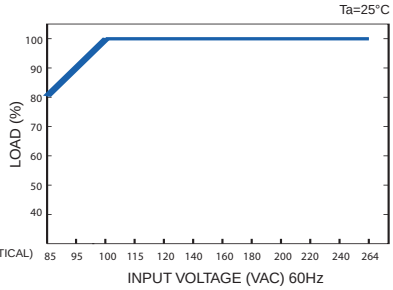
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	DC OK RELAY CONTACT

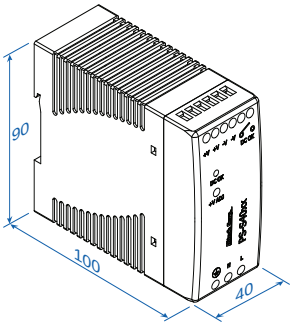
Output Derating



Output Derating Curve vs. Input Voltage



PS-S60 Series



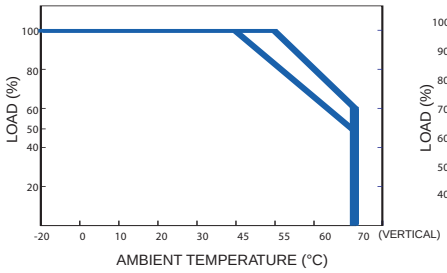
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

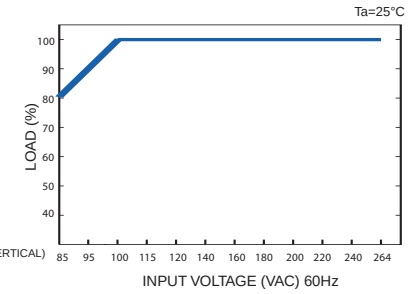
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	DC OK RELAY CONTACT

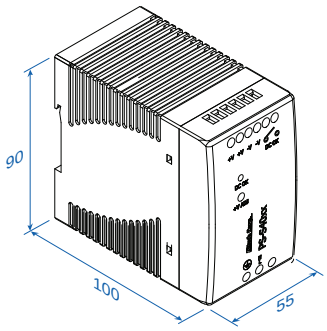
Output Derating



Output Derating Curve vs. Input Voltage



PS-S100 Series



Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	DC OK RELAY CONTACT

Data not available at print time. Please check our website, altechcorp.com, for the latest information.

Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

30-60W
Single Phase Low Profile Power Supplies

Key Features

- Cooling by free air convection
- Universal AC Input / Full Range
- LED indicator for power on
- 100% full load burn-in test
- 3 year warranty
- Input voltage range:
  85-264V AC
  120-370V DC
- AC inrush current (only PS-30xx):
  Cold start: 15A at 115V AC,
  30A at 230V DC
- DC adjustment range:*
  ±10% rated output voltage
- Overload protection:*
  105%-160% constant current limiting, auto-recovery
- Over-voltage protection:*
  115%-135% rated output voltage
- Setup, rise, hold up time:*
  100ms, 30ms, 60ms at full load and 230V AC
- Withstand voltage:
  I/P-O/P:3KV AC, I/P-FG:1.5KV AC*
- Working temperature:
  -20 to +50°C (-4° to +122°F) at 100%, and +60°C (+140°F) at 80% load
- Safety standards:
  UL60950-1
  UL508*
- EMC standards:
  EN55022 class B*
  EN61000-4-2,3,4,5,6,8,11
  ENV50204
  EN61204-3
- Military Standard
  MIL-HDBK-217F

* Except PS-100xx
(see data sheet at altechcorp.com)

NEW PRODUCT

30W Single Output Class II DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-3005	5V DC	3A	±2%	80 mVp-p	74%
PS-3012	12V DC	2A	±1%	120 mVp-p	81%
PS-3015	15V DC	2A	±1%	120 mVp-p	82%
PS-3024	24V DC	1.5A	±1%	150 mVp-p	83%

Universal Input: 85-264V AC, 120-370V DC full range; 0.88A @ 115V AC; 0.48A @ 230V AC
Connection: Input - 2 poles, Output – 4 poles screw terminal
Size (WxHxD): 78x93x56mm (3.07x3.66x2.05 inches)
Packaging: 1/box; 0.59lbs / 0.27Kg

45W Single Output Class II DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-4505	5V DC	5A	±2%	100 mVp-p	72%
PS-4512	12V DC	3.5A	±1%	200 mVp-p	77%
PS-4515	15V DC	2.8A	±1%	240 mVp-p	77%
PS-4524	24V DC	2A	±1%	480 mVp-p	80%

Universal Input: 85-264V AC, 120-370V DC full range; 1.5A @ 115V AC, 0.75A @ 230V AC
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 78x93x67mm (3.07x3.66x2.64 inches)
Packaging: 1/box; 0.69lbs / 0.31Kg

60W Single Output Class II DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-6005	5V DC	6.5A	±2%	80 mVp-p	76%
PS-6012	12V DC	4.5A	±1%	120 mVp-p	82%
PS-6015	15V DC	4.0A	±1%	120 mVp-p	83%
PS-6024	24V DC	2.5A	±1%	150 mVp-p	84%

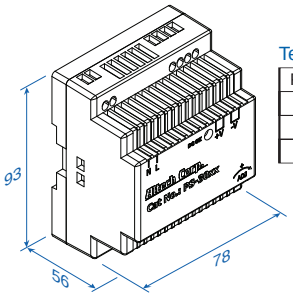
Universal Input: 88-264V AC, 124-370V DC full range; 1.2A @ 115V AC, 0.8A @ 230V AC
Connection: Input - 2 poles, Output – 4 poles screw terminal
Size (WxHxD): 78x93x56mm (3.07x3.66x2.05 inches)
Packaging: 1/box; 0.66lbs / 0.3Kg

100W Single Output Class II DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-10012	12V DC	6.5A	±2%	120 mVp-p	87%
PS-10015	15V DC	4.5A	±1%	120 mVp-p	87%
PS-10024	24V DC	4.0A	±1%	120 mVp-p	89%

Universal Input: 88-264V AC, 124-370V DC full range; 3A @ 115V AC, 1.6A @ 230V AC
Connection: Input - 2 poles, Output – 4 poles screw terminal
Size (WxHxD): 100x93x56mm (3.93x3.66x2.05 inches)
Packaging: 1/box; 0.77lbs / 0.35Kg

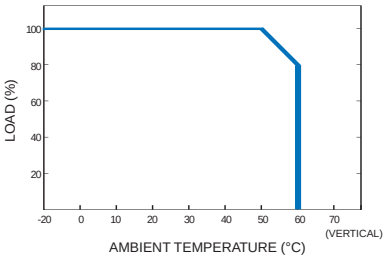
PS-30 Series



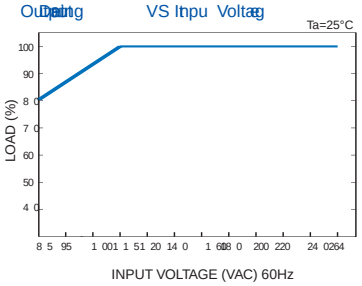
Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5,6	-V
2	AC/N	7	LED
3,4	+V	8	+V ADJ.

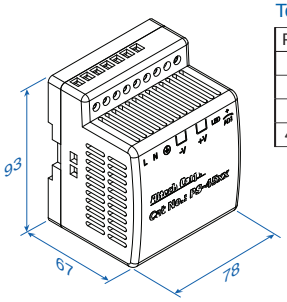
Output Derating



Output Derating VS Input Voltage



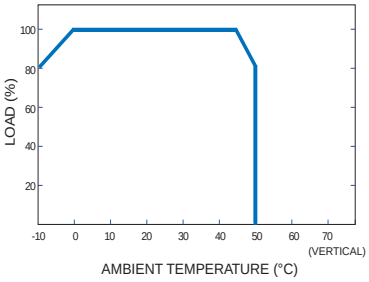
PS-45 Series



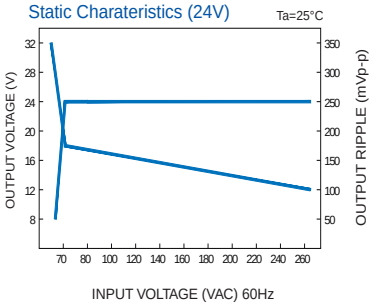
Terminal Pin. No Assignment

Pin	Assignment	Pin	Assignment
1	AC/L	6,7	DC OUTPUT+V
2	AC/N	8	LED
3	FG ⏚	9	+V ADJ.
4,5	DC OUTPUT-V		

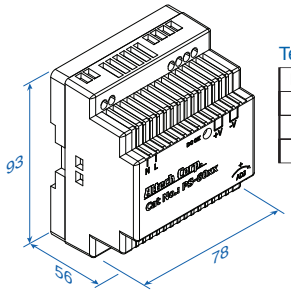
Output Derating



Static Charateristics (24V)



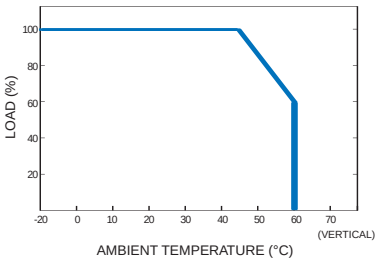
PS-60 Series



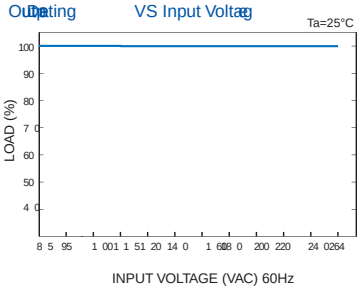
Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5,6	-V
2	AC/N	7	LED
3,4	+V	8	+V ADJ.

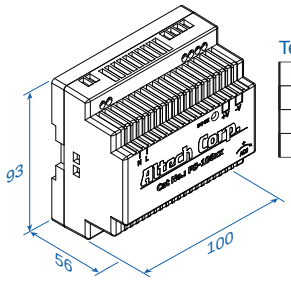
Output Derating



Output Derating VS Input Voltage



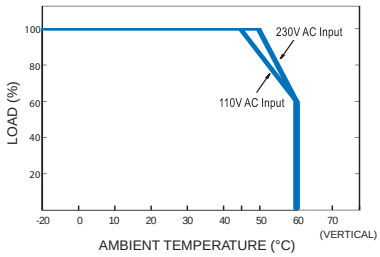
PS-100 Series



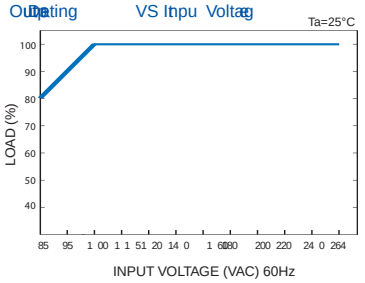
Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5,6	-V
2	AC/N	7	LED
3,4	+V	8	+V ADJ.

Output Derating



Output Derating VS Input Voltage



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

75-240W
Single Phase Power Supplies

Key Features

- Universal AC Input / Full Range or switch select
- LED indicator for power on
- 100% full load burn-in test
- 3 year warranty
- Input voltage range:*
  85-264V AC
  120-370V DC
- AC inrush current:
  Cold start: 20A at 115V AC
  40A at 230V AC
- DC adjustment range:
  ±10% rated output voltage
- Overload voltage protection:
  105%-160% constant current limiting, auto-recovery
- Over-voltage protection:
  115%-135% rated output voltage
- Setup, rise, hold up time:
  500ms; 70ms; 30ms at full load and 230V AC
- Withstand voltage:
  I/P-O/P:3KV AC, I/P-FG:1.5KV AC, O/P-PG: 0.5KV AC
- Working temperature:
  -20 to +50°C (-4° to +122°F) at 100%, and +60°C (+140°F) at 80% load
- Safety standards:
  UL60950-1
  UL508
- EMC standards:
  EN55022 class B,
  EN61000-4-2,3,4,5,6,8,11,
  ENV50204,
  EN61204-3
- Military Standard
  MIL-HDBK-217F

* Except PSH-120xx
(see data sheet at altechcorp.com)

NEW PRODUCT

75W Single Output DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-7512	12V DC	6.3A	±2%	100 mVp-p	76%
PS-7524	24V DC	3.2A	±1%	150 mVp-p	80%
PS-7548	48V DC	1.6A	±1%	240 mVp-p	81%

Universal Input: 85-264V AC, 120-370V DC full range, 1.6A @ 115V AC, 0.96A @ 230V AC
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 55.5x125x100mm (2.20x4.95x3.95 inches)
Packaging: 1/box; 1.35lbs / 0.60Kg

120W Single Output DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PS-12012	12V DC	10A	±2%	80 mVp-p	80%
PS-12024	24V DC	5A	±1%	80 mVp-p	84%
PS-12048	48V DC	2.5A	±1%	100 mVp-p	85%

Switch select Input: 88-132V AC / 176-264 V AC, 248-370V DC range, 2.6A @ 115V AC, 1.6A @ 230V AC
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 65.5x125x100mm (2.56x4.95x3.95 inches)
Packaging: 1/box; 1.75lbs / 0.79Kg

120W *High Input* Single Output DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PSH-12024	24V DC	5A	±1%	80 mVp-p	85%
PSH-12048	48V DC	2.5A	±1%	80 mVp-p	86%

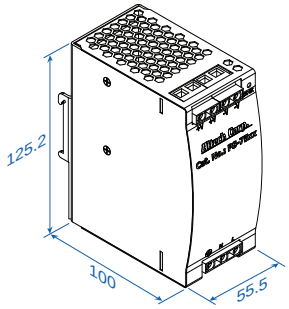
Switch select Input: 340-550V AC, 480-780V DC range, 0.65A @ 400V AC, 0.6A @ 500V AC
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 65.5x125x100mm (2.56x4.95x3.95 inches)
Packaging: 1/box; 1.65lbs / 0.75Kg

240W Single Output DIN Rail Power Supply with PFC Function

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PSP-24024	24V DC	10A	±1%	80 mVp-p	84%
PSP-24048	48V DC	5A	±1%	150 mVp-p	85%

Universal Input: 85-264V AC, 120-370V DC full range, 2.8A @ 115V AC, 1.4A @ 230V AC
Built in active Power Factor Correction function. PF>0.95
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 125x125x100mm (4.95x4.95x3.95 inches)
Packaging: 1/box; 2.7lbs / 1.2Kg

PS-75 Series



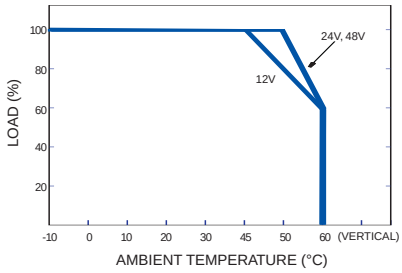
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

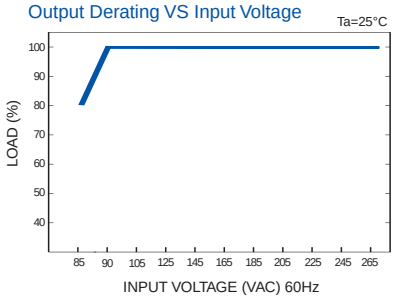
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

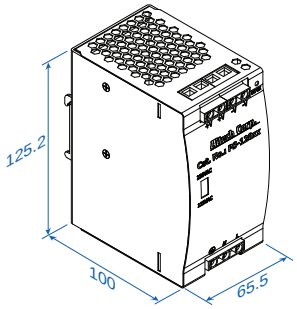
Output Derating



Output Derating VS Input Voltage



PS-120 Series



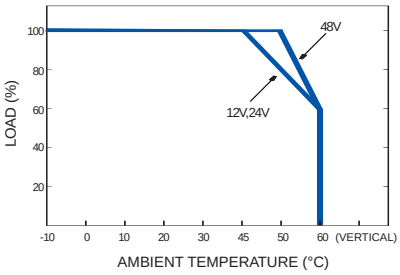
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

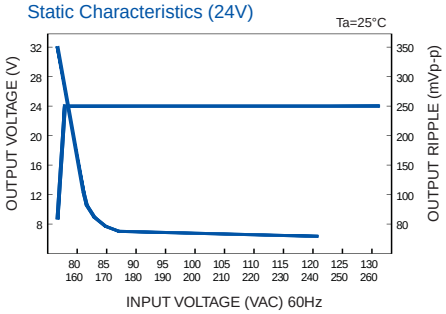
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

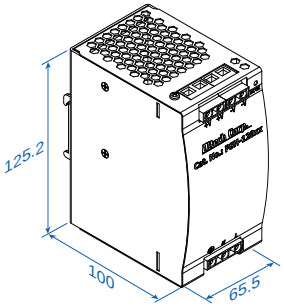
Output Derating



Static Characteristics (24V)



PSH-120 Series



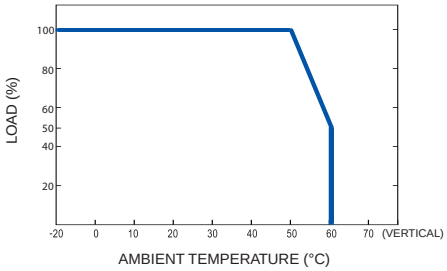
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N(L2)
3	AC/L(L1)

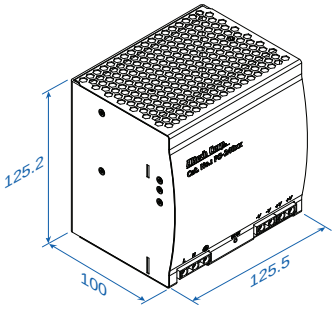
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

Derating Curve



PSP-240 Series



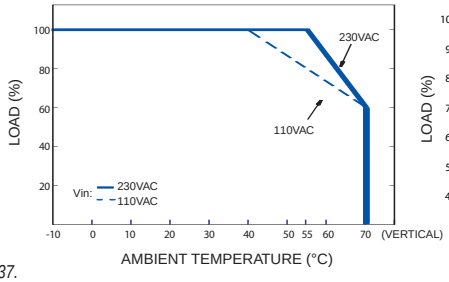
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

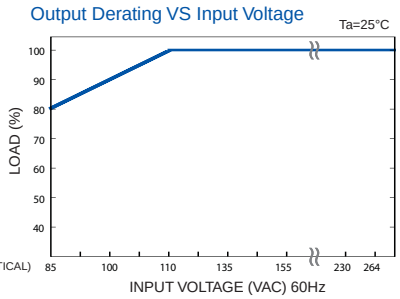
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

Output Derating



Output Derating VS Input Voltage



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

480W
Single Phase Power Supplies

Key Features

- Universal AC Input / Full Range or switch select
- LED indicator for power on
- 100% full load burn-in test
- 3 year warranty
- Input voltage range:
  90-264V AC
  250-370V DC
- AC inrush current:
  Cold start: 27A at 115V AC
  45A at 230V AC
- DC adjustment range:
  ±10% rated output voltage
- Overload voltage protection:
  105%-160% constant current limiting, auto-recovery
- Over-voltage protection:
  115%-135% rated output voltage
- Setup, rise, hold up time:
  1200ms; 40ms; 20ms at full load at 115V AC and 230V AC
- Withstand voltage:
  I/P-O/P:3KV AC, I/P-FG:1.5KV AC, O/P-PG: 0.5KV AC
- Working temperature:
  -20 to +50°C (-4° to +122°F) at 100%, and +60°C (+140°F) at 80% load
- Safety standards:
  UL60950-1
  UL508
- EMC standards:
  EN55022 class B,
  EN61000-4-2,3,4,5,6,8,11,
  ENV50204,
  EN61204-3
- Military Standard
  MIL-HDBK-217F

480W Single Output DIN Rail Power Supply with PFC Function

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PSP-48024	24V DC	20A	±1%	120 mVp-p	89%
PSP-48048	48V DC	10A	±1%	120 mVp-p	89%

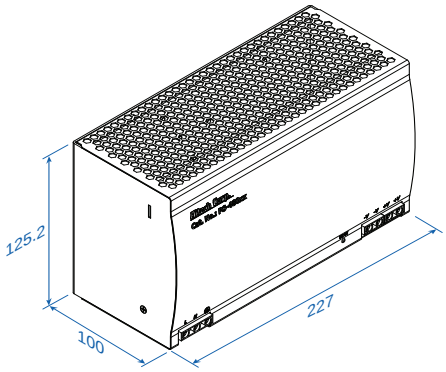
Wide range Input: 180-264V AC only, 250-370V DC, 4A @ 230V AC
Built in passive Power Factor Correction function compliance to EN61000-3-2, PF>0.7
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 227x125x100mm (8.95x4.95x3.95 inches)
Packaging: 1/box; 5.3lbs / 2.4Kg

480W Switch Select Single Output DIN Rail Power Supply with PFC Function

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PSP-480S24	24V DC	20A	±1%	120 mVp-p	89%
PSP-480S48	48V DC	10A	±1%	120 mVp-p	89%

Switch select Input: 90-132V AC / 180-264 V AC, 254-370V DC range
8A @ 115V AC, 3.2A @ 230V AC
Built in passive Power Factor Correction function compliance to EN61000-3-2, PF>0.7/230V AC only
Connection: Input - 3 poles, Output – 4 poles screw terminal
Size (WxHxD): 227x125x100mm (8.95x4.95x3.95 inches)
Packaging: 1/box; 5.8lbs / 2.6Kg

PSP-480 Series (220V AC only)



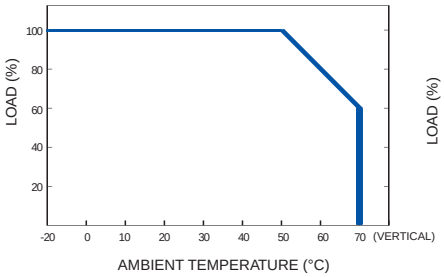
TB1 Terminal Pin. No Assignment

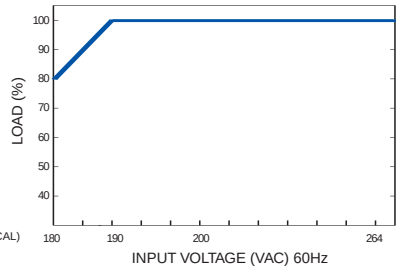
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG ⏚

TB2 Terminal Pin. No Assignment

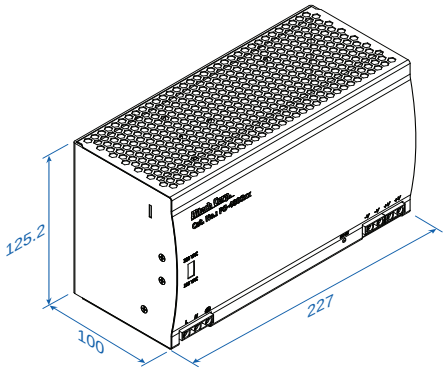
Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

Derating Curve





PSP-480 with Switch Series (110V AC and 220V AC)



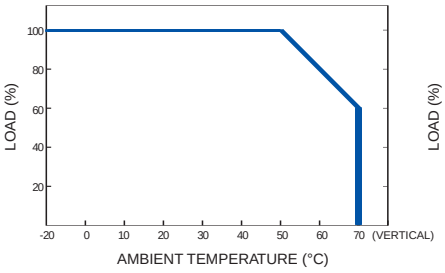
TB1 Terminal Pin. No Assignment

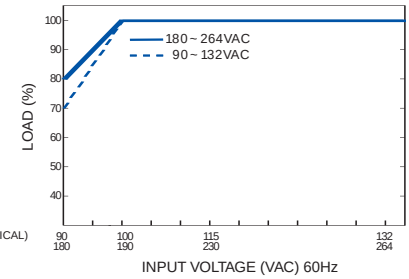
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG ⏚

TB2 Terminal Pin. No Assignment

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

Derating Curve



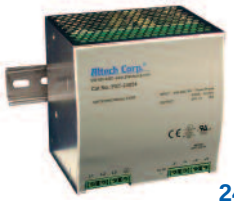


Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

240-960W
Three Phase Power Supplies

Key Features

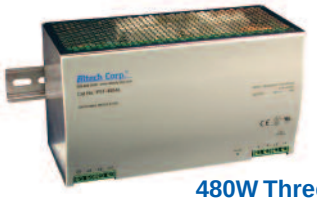
- Three Phase Input
- LED indicator for power on
- 100% full load burn-in test
- 3 year warranty
- Input voltage range:
  340-550V AC
  480-760V DC
- AC inrush current:
  Cold start: 50A
- DC adjustment range:
  ±10% rated output voltage
- Overload voltage protection:
  105%-150% constant current limiting, auto-recovery
- Over-voltage protection:
  115%-135% rated output voltage
- Setup, rise, hold up time:
  1200ms, 40ms, 20ms @ 400V AC
  800ms, 40ms, 40ms @ 500V AC
  full load
- Withstand voltage:
  I/P-O/P:3KV AC, I/P-FG:1.5KV AC, O/P-PG 0.5KV AC
- Working temperature:
  -20 to +70°C (-4 to +158°F) at 100%
- Safety standards:
  EN60950-1
  UL508
- EMC standards:
  EN55022 (CISPR22),
  EN61000-4-2,3,4,5,6,8,11
  ENV50204,
  EN61204-3
  EN61000-6-2 (EN50082-2)
  Heavy Industrial Level, criteria A
- Military Standard
  MIL-HDBK-217F



240W Three Phase Industrial DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PST-24024	24V DC	10A	±1%	80 mVp-p	89%
PST-24048	48V DC	5A	±1%	80 mVp-p	89%

Three phase input: 340-550V AC wide range, 480-780V DC
0.95A @ 400V AC, 0.75A @ 500V AC
Connection: Input - 4 poles, Output – 4 poles screw terminal
Size (WxHxD): 125x125x100mm (4.95x4.95x3.95 inches)
Packaging: 1/box; 2.9lbs / 1.2Kg



480W Three Phase DIN Rail Power Supply

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PST-48024	24V DC	20A	±1%	80 mVp-p	89%
PST-48048	48V DC	10A	±1%	80 mVp-p	90%

Three phase input: 340-550V AC wide range, 480-780V DC
1.7A @ 400V AC, 1.3A @ 500V AC
Connection: Input - 4 poles, Output – 4 poles screw terminal
Size (WxHxD): 227x125x100mm (9.95x4.95x3.95 inches)
Packaging: 1/box; 5.5lbs / 2.5Kg

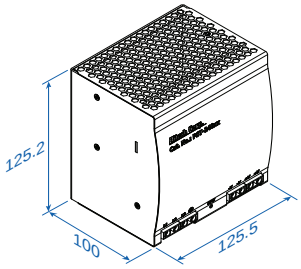
OPTIONAL PARALLEL

960W Three Phase DIN Rail Power Supply
(Also available with Optional Parallel Function (1+1))

Cat. No.	Output V DC	Output A	Tol. %	Ripple & Noise	Efficiency
PST-96024	24V DC	40A	±1%	80 mVp-p	91%
PST-96048	48V DC	20A	±1%	80 mVp-p	92%

Three phase input: 340-550V AC wide range,
2A @ 400V AC, 1.6A @ 500V AC
Connection: Input - 4 poles, Output – 6 poles screw terminal
Size (WxHxD): 276x125x100mm (10.87x4.95x3.95 inches)
Packaging: 1/box; 7.3lbs / 3.3Kg

PST-240 Series



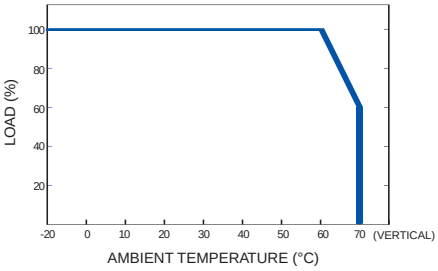
TB1 Terminal Pin. No Assignment

Pin No.	Assignment
1	FG ⏚
2	AC/L3
3	AC/L2
4	AC/L1

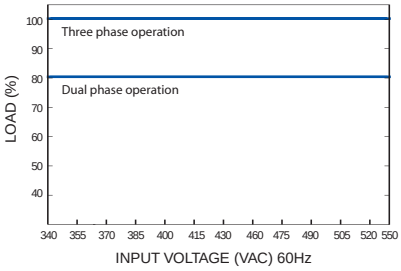
TB2 Terminal Pin. No Assignment

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

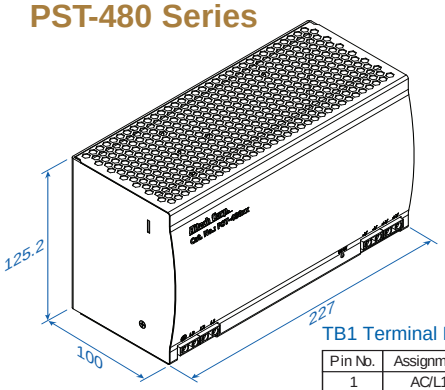
Derating Curve



Static Charaterisitcs



PST-480 Series



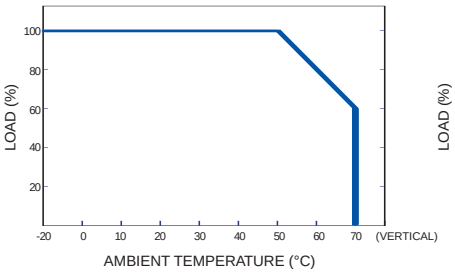
TB1 Terminal Pin. No Assignment

Pin No.	Assignment
1	AC/L1
2	AC/L2
3	AC/L3
4	FG ⏚

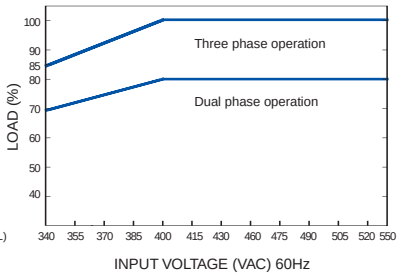
TB2 Terminal Pin. No Assignment

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

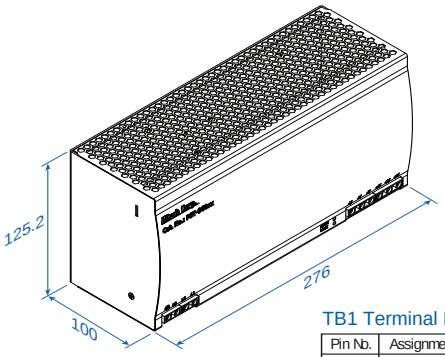
Derating Curve



Static Charaterisitcs



PST-960 Series



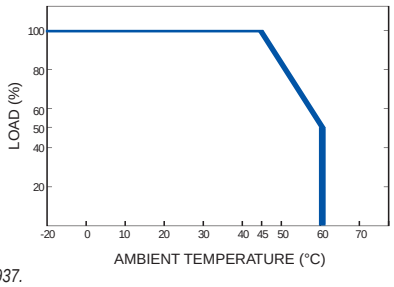
TB1 Terminal Pin. No Assignment

Pin No.	Assignment
1	AC/L1
2	AC/L2
3	AC/L3
4	FG ⏚

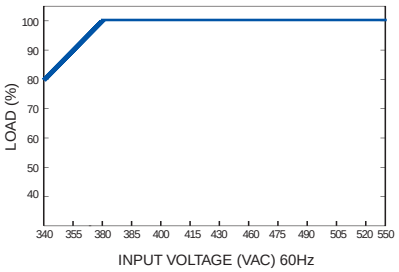
TB2 Terminal Pin. No Assignment

Pin No.	Assignment
1,2,3	DC OUTPUT +V
4,5,6	DC OUTPUT -V

Derating Curve



Static Charaterisitcs



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.

Accesories

- Redundancy Buffer Module
- UPS Module

PS-RDN20 Key Features

- Suitable for redundant operation of 24V system
- Installed on 35 x 7.5 mm or 35 x 15 mm DIN Rail
- Relay contact signal output and LED indicator for input failure alarm
- Cooling by free air convection
- 3 years warranty

Power Supply Redundancy Buffer Module

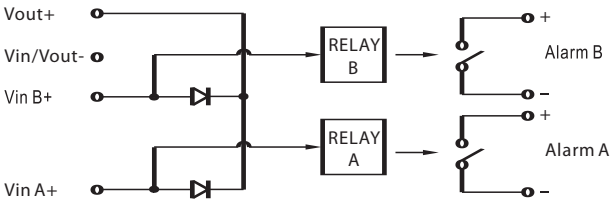
PS-RDN20 is a 20A redundancy (decoupling) module for the 24V DC power system. Containing 2 sets of 20A Oring diodes with excellent heat dissipation deployment. PS-RDN20 give you a new option for safe connection of 1+1 redundant set-up. Not only perfectly decouple power sources from each other as well as from the load, PS-RDN20 also provides users monitoring signals for both input channels through the built-in relays. Since there's no switching components inside the module, PS-RDN20 will not arise additional EMI issues and should provide you a worry-free application platform!

NEW PRODUCT

Cat. No.	Voltage Range	Current Range
PS-RDN20	21-28V DC	0-20A

Connection: Terminal 1 - 4 poles, Terminal 2 - 6 poles
Size (WxHxD): 55.5x125x100mm (2.19x4.95x3.95 inches)
Packaging: 1/box; 1.1lbs / 0.5Kg

DC Fail Block Diagram



PS-UPS40 Key Features

- Battery controller for DIN Rail UPS system
- Installed on 35 x 7.5 mm or 35 x 15 mm DIN Rail
- Parallel connection to DC BUS
- Suitable for 24V system up to 40A
- Built-in battery test function
- Battery polarity protection
- Relay contact signal output and LED indicator for DC BUS OK, Battery Fail, and Battery Discharge
- Cooling by free air convection
- 3 years warranty

40 AMP UPS Battery Controller

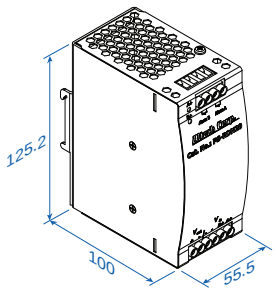
PS-UPS40 is a 40A max. DC UPS (battery control) module for the 24 V DC power system. Accompany with external batteries, it can back-up up to 40A of current to critical loads for certain period of time depending on the capacity of batteries. With complete monitoring signals and LED indicators for DC BUS OK, Battery Fail, Battery Discharge and the repeated Battery Test function to check the situation of external batteries. Users can customize their own DC UPS system to back up critical loads and capture the status of the whole system easily.

NEW PRODUCT

Cat. No.	Voltage Range	Current Range
PS-UPS40	21-29V (Battery) 24-29V (DC)	0 - 40A

Connection: Terminal 1 - 4 poles, Terminal 2 - 6 poles
Size (WxHxD): 55.5x125x100mm (2.19x4.95x3.95 inches)
Packaging: 1/box; 1.21lbs / 0.55Kg

PS-RDN20 Series



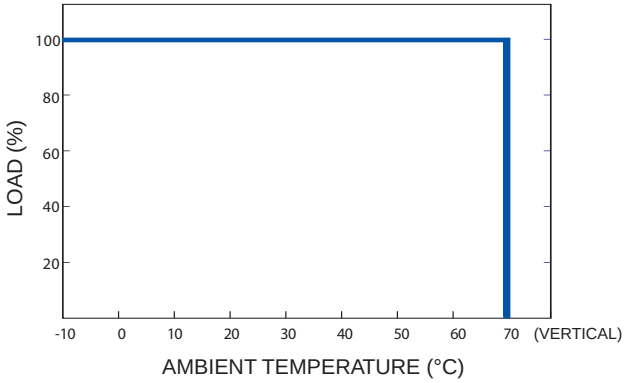
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	Vout+
2	Vout-
3,4	Vin-
5	Vin B+
6	Vin A+

Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1	Alarm B1
2	Alarm B2
3	Alarm A1
4	Alarm A2

Derating Curve

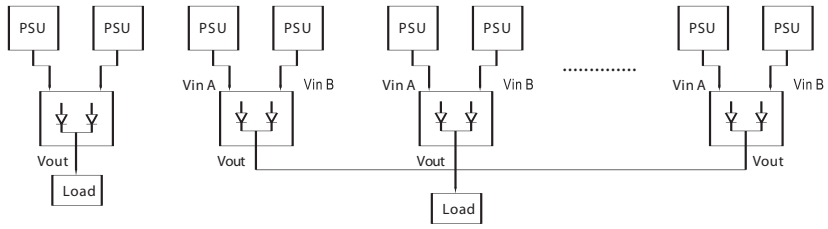


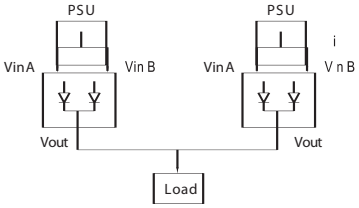
Applications:

1. 1+1 Redundancy
   Using 1 more PSU as the redundant unit

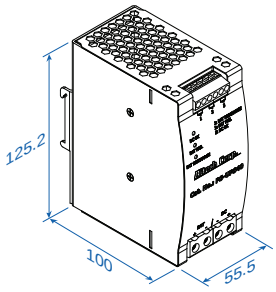
2. 1+N Redundancy: Using more PSUs as the redundant units to increase the reliability

3. Single Use: Connecting only one PSU to one PS-RDN20 to reduce the stress of the diodes and hence increase the reliability





PS-UPS40 Series



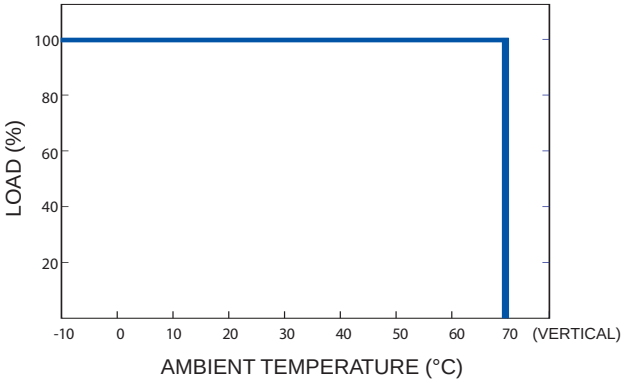
Terminal Pin. No Assign. (TB1)

Pin No.	Assignment
1	BATTERY INPUT +
2	BATTERY INPUT -
3	DC INPUT -
4	DC INPUT +

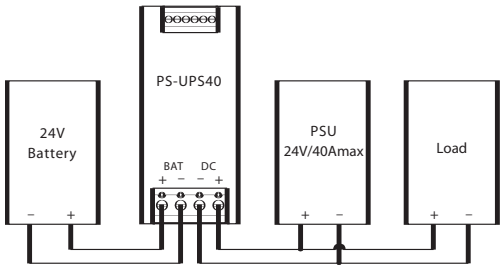
Terminal Pin. No Assign. (TB2)

Pin No.	Assignment
1	BAT DISC 1
2	BAT DISC 2
3	BAT OK 1
4	BAT OK 2
5	DC OK 1
6	DC OK 2

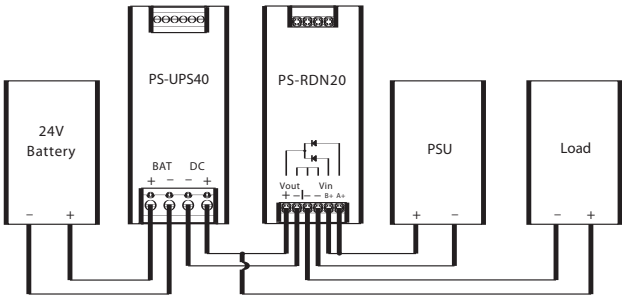
Derating Curve



1. Backup connection for AC interruption



2. Combine redundancy module (PS-RDN20) to back up AC interruption or failure of PSU



Power Supply Accessories

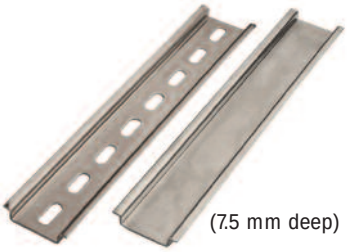
DIN MOUNTING RAILS

Altech DIN Rails comply with DIN 50045, 50022 and 50035 Standards. The use of DIN Rails enhances design capabilities, saves space and reduces labor.

Standard rails are made of steel with zinc plating and chromate passivation and are available in various configurations.

DIN Rails are 35mm wide and available in 7.5 and 15mm depths. They are supplied in 1 m (3'3") and 2 m (6'6") lengths. Upon request they can be cut to custom lengths and punched with holes or perforations.

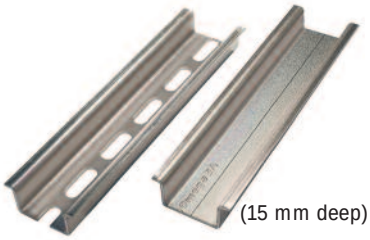
DIN35



(7.5 mm deep)

Type	Cat. No.	Length	Std. Pk.
Perforated Steel	2511120	2m	20
	2511120/1M	1m	40
Unperforated Steel	2511110	2m	20
	2511110/1M	1m	40

DIN35



(15 mm deep)

Type	Cat. No.	Length	Std. Pk.
Perforated Steel	CA701-15/S-2M	2m	12
	CA701-15/S	1m	24
Unperforated Steel	CA701-15-2M	2m	12
	CA701-15	1m	24

SUPPORT BRACKETS

Support Brackets elevate DIN Rails away from the panel to facilitate component mounting and to increase wiring access. Angled brackets tilt the rail by 45° to improve visibility. Straight brackets are available in three heights for optimum positioning of the rail.

Brackets mount with 2 screws to any panel or flat surface and have tapped center holes for rail mounting. Bracket material is steel, zinc plated yellow chromate.

DIN35

Cat. No.	Std. Pk.
CA603	25

DIN35

Height	Cat. No.	Std. Pk.
1"	CA703	25
2"	CA803	25
3"	CA903	25

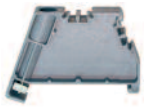
END STOPS and SPACER

End Stops prevent power supplies and other DIN Rail mount components and devices from moving laterally on the rail. They are available in polyamide 6.6 and metal configurations for 35mm DIN rails.

CA802 is a small endstop for the smaller power supplies. CA202 is a large endstop for larger power supplies.

CA302 is used with 7.5mm deep DIN rail and the CA402 is used with 15mm deep rail.

DIN Rail mountable spacers (CASP and 15.960) are generally used to ensure cooling space for the small power supply.

CA202	CA802	CA302	CA402	CASP	15.960
					
Polyamide 6.6	Polyamide 6.6	Steel	Steel	Polyamide 6.6	Polyamide 6.6
44.5 x 50 x 9.5 mm	32 x 45 x 8 mm	27 x 39.5 x 16 mm	27 x 39.5 x 16 mm	29 x 43 x 8 mm	69 x 55 x 9 mm
Cat. No. CA202 / Std. Pk. 50	Cat. No. CA802 / Std. Pk. 50	Cat. No. CA302 / Std. Pk. 50	Cat. No. CA402 / Std. Pk. 50	Cat. No. CASP / Std. Pk. 50	Cat. No. 15.960 / Std. Pk. 10

GROUND BLOCKS for DIN Rail

Use ground blocks instead of grounding studs and wire lugs to terminate ground wires, saving installation and wiring time.

Ground blocks clamp mechanically onto the DIN Rail by tightening the center mounting screw, making a reliable electrical connection between the cage clamp terminals and the DIN Rail. The rail serves as a busbar and automatically distributes ground potential to all other ground terminals on the same rail.

Ground blocks can also be used as end stops, preventing other terminal blocks and components from moving laterally on the DIN Rail.

They are supplied with a standard green/yellow housing for easy identification.

	CGT4N	CGT6N	CGT10U
	CE	CE	CE TÜV AEx eII EEx eII
Terminal Width	6 mm	8 mm	10 mm
Height x Length	45.4 x 54.2 mm	47 x 54.5 mm	49.5 x 45 mm
Stripping Length	9 mm	12 mm	12 mm
Insulation Material	Polyamide 6.6	Polyamide 6.6	Polyamide 6.6
Type of Connection	2 screw clamps	2 screw clamps	2 screw clamps
Approvals	CSA US, IEC, UL US	CSA US, VDE, UL US	CSA US, VDE, UL US
Wire Range	22-10 AWG / 0.5-4 sq.mm / 22-10 AWG	22-8 AWG / 1.5-6 sq.mm / 22-8 AWG	22-6 AWG / 1.5-10 sq.mm / 16-8 AWG
Torque	7 lb-in / 0.8 Nm / 7 lb-in	14 lb-in / 0.8 Nm / 14 lb-in	14 lb-in / 1.2 Nm / 14 lb-in

Use DiscoCover.QXD file