



## Universal single phase switching power supply

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DPE1-75W-D24-01A(H)    DPE1-120W-D24-01A(H)

CE    RoHS

#### Features

- Wide input voltage range: 90-264VAC / 120-370vdc
- Operating temperature range: -30 °C - +70 °C
- 4000vac high isolation voltage
- Low ripple noise
- Output short circuit, overcurrent, overpressure and over temperature protection
- Can be installed on ts-35/7.5/15

#### Specification

Product Name	DPE1-75W-D24-01A(H)	DPE1-120W-D24-01A(H)
<b>Input Parameter</b>		
Input voltage range	Single Phase, 90...264 VAC/127...370 VDC	
Input frequency range	47...63Hz	
Input Current	2A (115Vac) 1A (230Vac)	2.7A (115Vac) 1.6A (230Vac)
Power consumption	<1W	<1W
Connection Mode	PCB universal screw terminal blocks	
<b>Output Parameter</b>		
Output efficiency	89% (230Vac@24V/3.2A,25°C )	88% (230Vac@24V/5A, 25°C )
Output rated voltage	24VDC ±1%	24VDC ±1%
Range of output voltage	24...28VDC	24...28VDC
Output rated current	3.2A	5A
Rated power	76.8W	120W
Voltage Ripple (20MHz)	< 120mVp-p	< 120mVp-p
Load variation and current slope	10%~100%, 0.032A/μs	10%~100%, 0.05A/μs
Rise time	<3000ms	<3000ms
Capacitive load	1500μF	1200μF
Dynamic recovery time	≤1ms	≤1ms
Linear rate of adjustment	±0.5%	±0.5%
Load regulation	±1%	±1%
Impulse current	25A (115Vac) 45A (230Vac)	30A (115Vac) 55A (230Vac)
Leakage current	<0.5mA (240Vac)	<1mA (240Vac)
Coefficient of temperature drift	±0.03% / °C	±0.03% / °C
Power-down hold time	12ms (115Vac) 60ms (230Vac)	8ms (115Vac) 16ms (230Vac)
Switching frequency	65KHZ	65KHZ
Connection Mode	PCB universal screw terminal blocks	



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#### Mechanical Parameter

Size (L X W X D)	87.5 x 32 x 125 mm	100 x 36 x 125 mm
Weight	0.35 kg	0.41 kg
Shell material	Metal (Al1100, SGCC)	
DC light	YES	

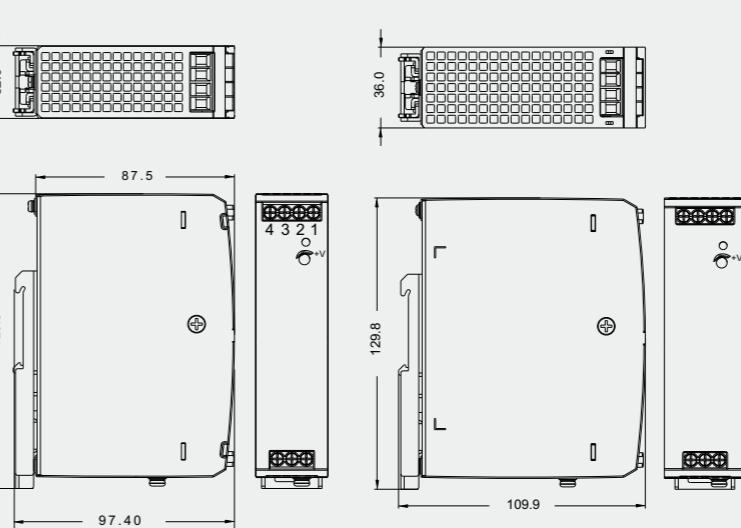
#### Environmental Parameter

Working temperature	-30°C to + 70°C	-20°C to + 60°C
Storage temperature	-40°C to + 85°C	
Storage humidity	10...95%	
Working Humidity	20...90%	
Impact test	IEC 60068-2-27(bearing 30G)	
Vibration test	IEC 60068-2-6(X, Y, Z axis, 2g)	
Pollution level	2	
Operational altitude	0~2000m	

#### Security Parameter

Overcurrent protection range	105%... 150%, which can be recovered automatically after the abnormal load conditions are removed
Oversupply protection	≤ 33V (output voltage off, input restart recovery)
Overheat protection	The output voltage is turned off, the abnormal over temperature is removed and the output can be restored after the power is restarted
Short circuit protection	Can be short-circuited for long periods of time, self-recovery
Safety Standard	IS13252(Part1) & EN62368-1
Security level	CLASS I
Mean Time between failures	> 300,000 hours

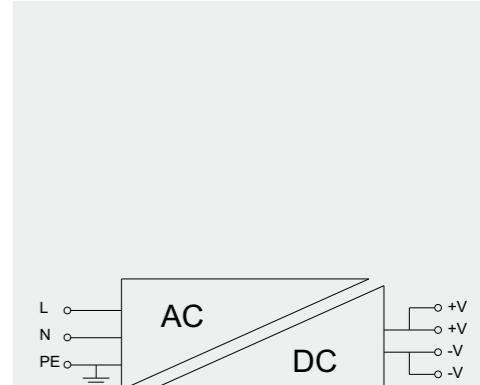
#### Dimensional Drawing



DPE1-75W-D24-01A(H)

DPE1-120W-D24-01A(H)

#### Wiring Diagram



DPE1-75W-D24-01A(H)  
DPE1-120W-D24-01A(H)

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DPS1-120W-D24-01A(H) DPS1-240W-D24-01A(H) DPS1-480W-D24-01A(H)

## Features

- Wide Input Voltage Range: 100-260VAC/120-370VDC
- Operating temperature range: -30 °C + 70 °C
- Efficiency up to 94%
- DC OK function,
- Active PFC 150%
- Peak power sustainable 1s output
- Output short-circuit, over-current, overpressure, over-temperature protection,
- Can be installed on TS-35/7.5/15

## Specification

	DPS1-120W-D24-01A(H)	DPS1-240W-D24-01A(H)	DPS1-480W-D24-01A(H)
<b>Input Parameter</b>			
Input voltage range	Single Phase, 100... 240 VAC/100... 370 VDC	Single Phase, 100... 240 VAC/120... 370 VDC	Single Phase, 85... 264 VAC/120... 370 VDC
Input frequency range	47...63Hz		
Input Current	1.5A (115Vac) 0.75A (230Vac)	3A (115Vac) 1.5A (230Vac)	5A (115Vac) 2.5A (230Vac)
Power consumption	<2W	<4W	<8W
Connection Mode	PCB universal screw terminal blocks		
<b>Output Parameter</b>			
Output efficiency	94% (230Vac@24V/5A, 25°C )	94% (230Vac@24V/5A, 25°C )	94% (230Vac@24V/5A, 25°C )
Output rated voltage	24VDC ±1%	24VDC ±1%	24VDC ±1%
Range of output voltage	23.5VDC...28VDC	23.5VDC...28VDC	23.5VDC...28VDC
Output rated current	5A	10A	20A
Rated power	120W	240W	480W
Voltage Ripple (20MHz)	< 100mVp-p	< 120mVp-p	< 100mVp-p
Load variation and current slope	10%~100%, 0.05A/μs	10%~100%, 0.05A/μs	10%~100%, 0.05A/μs
Rise time	≤1000ms	≤3000ms	≤3000ms
Capacitive load	50000μF	40000μF	2700μF
Power factor	0.98 (115Vac) 0.94 (230Vac)	0.98 (115Vac) 0.94 (230Vac)	0.99 (115Vac) 0.95 (230Vac)
Startup delay time	≤1000ms	≤3000ms	≤3000ms
Dynamic recovery time	≤1ms	≤1ms	≤1ms
Linear rate of adjustment	±0.5%	±0.5%	±0.5%
Load regulation	±1%	±1%	±1%
Impulse current	15A (115Vac) 30A (230Vac)	15A (115Vac) 30A (230Vac)	20A (115Vac) 40A (230Vac)
Leakage current	< 1mA (240Vac)	< 0.5mA (240Vac)	< 0.8mA (240Vac)
Coefficient of temperature drift	±0.03% / °C	±0.03% / °C	±0.03% / °C
Power-down hold time	20ms	20ms	20ms
Switching frequency	100KHZ	100KHZ	100KHZ
Connection Mode	PCB universal screw terminal blocks		

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## Mechanical Parameter

Size (L X W X D)	110 x 32 x 124 mm	110 x 41 x 124 mm	131.5 x 48 x 125 mm
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Weight	0.49 kg	0.65 kg	0.98 kg
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Shell material	110 x 32 x 124 mm	110 x 41 x 124 mm	131.5 x 48 x 125 mm
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DC light	YES
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## Environmental Parameter

Working temperature	-40°C to + 70°C	-30°C to + 70°C
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Storage temperature	-40°C to + 85°C
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Storage humidity	10...95%
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Working Humidity	20...90%
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Impact test	IEC 60068-2-27(bearing 30G)
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Vibration test	10~500hz, 5g, 10 minutes / cycle
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Pollution level	2
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Operational altitude	5000m	2000m
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## Security Parameter

Overcurrent protection range	105% ... 150%, automatically recovers after the abnormal load condition is removed
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Oversupply protection	≤ 33V (output voltage off, input restart recovery)
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Overheat protection	Start temperature: 90 °C, release temperature: 60 °C	Start temperature: 80 °C, release temperature: 60 °C	Start temperature: 90 °C, release temperature: 60 °C
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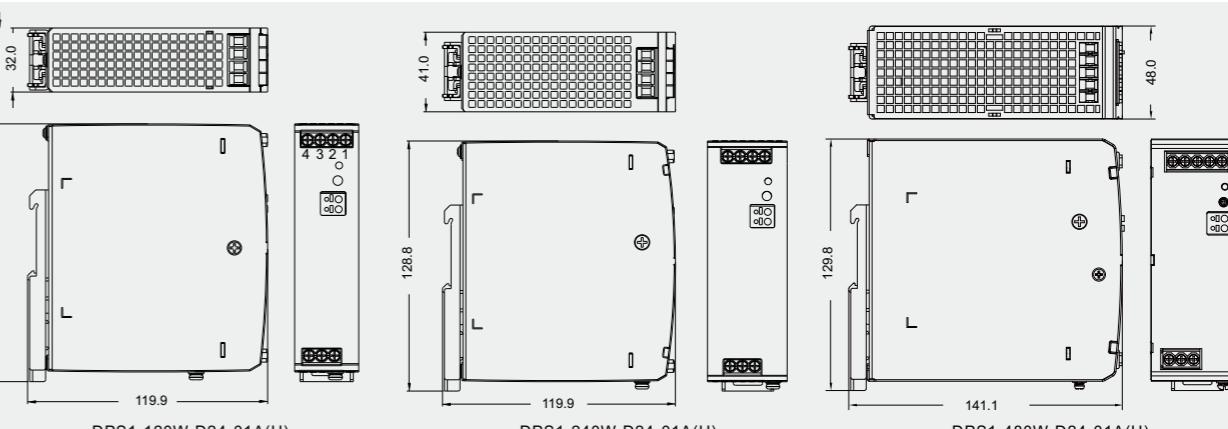
Short circuit protection	Can be short-circuited for long periods of time, self-recovery
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Safety Standard	UL61010-1 & UL61010-2-201 & EN62368-1
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Security level	CLASS I
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Mean Time between failures	> 300,000 hours
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## Dimensional Drawing



## Wiring Diagram

