

# panel products



# IMO

## DIN Rail Mount Power Supplies

Distributed By  
**INDUSTRIAL CONTROL DIRECT**

### DPS Series

IMO have introduced a new range of Din Rail Power Supplies, in both rugged plastic and metal case versions, the range is suitable for mounting on 35mm DinRail.

Power rating of 5W to 480W and supply voltages of 85-264VAC the units are supplied with screw terminals.

Standard O/P voltage 24VDC, 5, 12 VDC version available on request.



### Product Features

- 5, 10 and 18W versions:
  - 22.5mm wide plastic housing
  - up to 77% efficiency rating on 24VDC models
- 30 and 60W versions:
  - 40.5mm wide plastic housing
  - power ready relay O/P
  - 89% efficiency rating on 24VDC models
- 120W version:
  - 63.5mm wide metal housing
  - Power ready relay O/P
  - Up to 86% efficiency rating on 24VDC models
- 240W version:
  - 83mm wide metal housing
  - Power ready relay O/P
  - Up to 89% efficiency on 24VDC models
- 480W version:
  - 175mm wide metal housing
  - Power ready relay O/P
  - Up to 89% efficiency on 24VDC models

### Ordering Code

Part No.	I/P Supply	O/P	P / I
DPS-1-005-24	85 - 264VAC 47 to 63Hz	24VDC	5W, 0.2A
DPS-1-010-24	85 - 264VAC 47 to 63Hz	24VDC	10W, 0.4A
DPS-1-018-24	85 - 264VAC 47 to 63Hz	24VDC	18W, 0.75A
DPS-1-030-24	85 - 264VAC 47 to 63Hz	24VDC	30W, 1.25A
DPS-1-060-24	85 - 264VAC 47 to 63Hz	24VDC	60W, 2.5A
DPS-1-120-24	85 - 264VAC 47 to 63Hz	24VDC	120W, 5A
DPS-1-240-24	85 - 264VAC 47 to 63Hz	24VDC	240W, 10A
DPS-1-480-24	85 - 264VAC 47 to 63Hz	24VDC	480W, 20A

[www.imopc.com](http://www.imopc.com)

[www.icontrolldirect.com](http://www.icontrolldirect.com)

# DPS Series 5W, 10W, 18W AC/DC DIN Rail Power Supplies

AC - DC din rail mountable 5W, 10W  
and 18W class 2 power supplies

- UL, cUL, CE
- Universal input 90~265VAC
- High efficiency up to 72%
- Short circuit protection
- Internal input filter
- 3 Year warranty



## Specifcaton

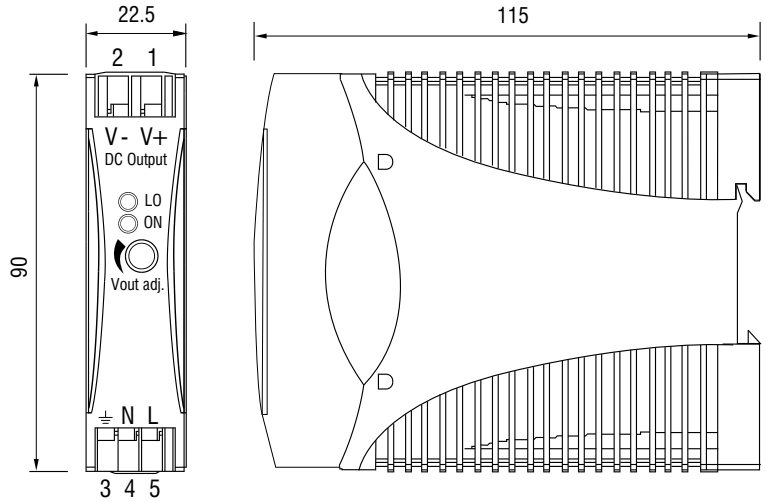
Model	DPS-1-005-24	DPS-1-010-24	DPS-1-018-24
Input Voltage	90~265VAC		
Output Wattage	5W	10W	18W
Output Voltage	24VDC (Other output voltages available on request)		
Output Current	210mA	420mA	750mA
Efficiency (min/typ)	70/72%	74/76%	75/77%
<b>General Specification</b>			
Switching frequency	100kHz		
Isolation voltage	3000VAC		
Isolation resistance	100MΩ @ 500VDC		
Ambient temperature	-10 to +71°C		
Derating (from 61 to 71°C)	2.5%/°C	3%/°C	3%/°C
Storage temperature	-25 to +85°C		
Relative humidity	20 to 95% RH		
Cooling	Free air convection		
Dimensions	L90 x W22.5 x D115 mm		
Weight	115g	120g	150g
Case material	Plastic		
<b>Input Specifications</b>			
Rated input voltage	100 to 240VAC		
Input voltage range	90 to 265VAC, 120 to 370VDC		
Line frequency	47 to 63Hz		
Inrush current	10A @ 115VAC, 18A @ 230VAC		
<b>Output Specifications</b>			
Output voltage accuracy	±1%		
Minimum load	0%		
Line regulation	±1%		
Load regulation	±2%		
Transient recovery time	300μS @ 50% load, step changed		
Temperature coefficient	±0.02%/°C		
Ripple & noise	50mV		
Hold up time	30mS @ 115VAC, 130mS @ 230VAC		
Voltage trim range	-10 to +20%		
DC ON indicator threshold at start up	21.6VDC		
DC LOW indicator threshold after start up	18 to 21.6VDC		
<b>Control and Protection</b>			
Input fuse	T2A / 250VAC internal		
Rated over load protection	110 to 135%		
Over voltage protection	125 to 145%		
Output short circuit	Hiccup mode		
<b>Approvals and Standards</b>			
CE, UL/cUL			

# DPS Series 5W, 10W, 18W AC/DC DIN Rail Power Supplies



## Dimensions (mm)

Key	Description
V+ (1)	Positive output terminal
V- (2)	Negative output terminal
⊥ (3)	Ground this terminal to minimize high-frequency emissions
N (4)	Input terminals (neutral conductor, no polarity at DC input)
L (5)	Input terminals (phase conductor, no polarity at DC input)
ON	Operation indicator LED
LO	DC LOW indicator LED
Vout adj.	Trimmer-potentiometer for Vout adjustment



## Construction

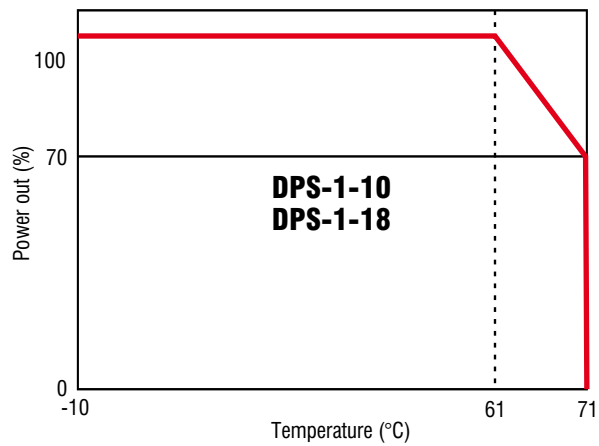
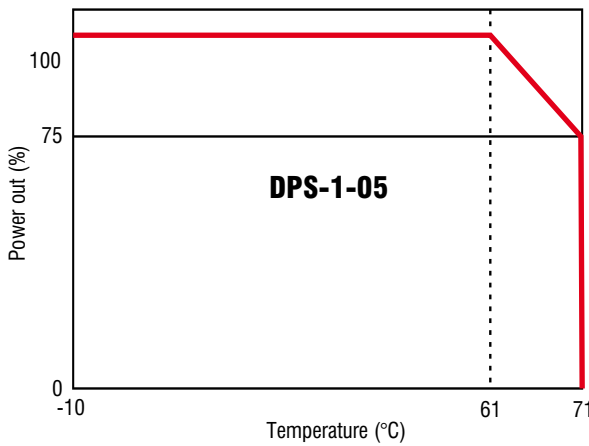
Easy, safe and secure snap-on, snap-off DIN-Rail mounting (TS35/7.5 or TS35/15)

## Installation

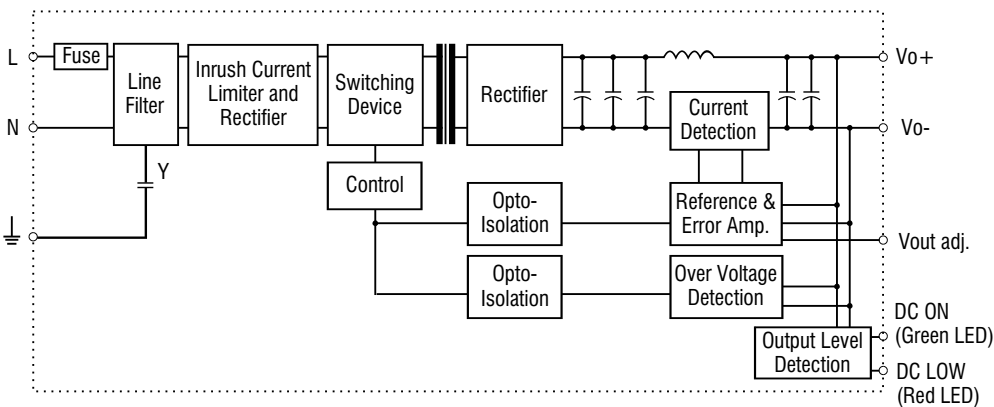
**Ventilation/Cooling**  
Normal convection  
All sides 25mm free space for cooling recommended

**Terminal size range**  
2 Solid:0.2-2.0mm (AWG24-14)  
(use copper conductors only)

## Derating



## Connections



# DPS Series 30W, 60W AC/DC DIN Rail Power Supplies



AC - DC DIN rail mountable 30W and 60W class 2 power supplies

- UL, cUL, CE
- Universal input 85~264VAC
- High efficiency
- Short circuit protection
- Internal input filter
- 3 Year warranty



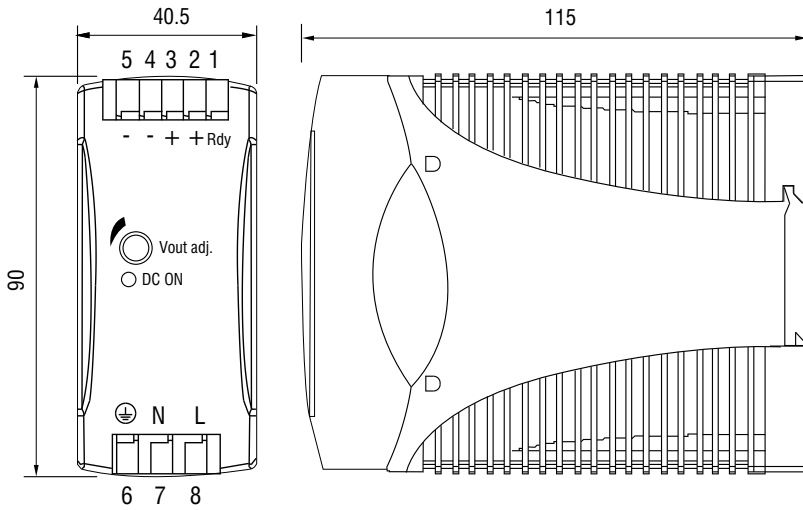
## Specifacaton

Model	DPS-1-030-24	DPS-1-060-24
Input Voltage	85~264VAC	
Output Wattage	30W	60W
Output Voltage	24VDC (Other output voltages available on request)	
Output Current	1250mA	2500mA
Efficiency (min/typ)	83/86%	86/89%
<b>General Specification</b>		
Isolation voltage	3000VAC	
Isolation resistance	100MΩ @ 500VDC	
Ambient temperature	-10 to +71°C	
Derating (from 61 to 71°C)	2.5%/°C	
Storage temperature	-25 to +85°C	
Relative humidity	20 to 90% RH	
Cooling	Free air convection	
Dimensions	L90 x W40.5 x D115 mm	
Weight	290g	360g
Case material	Plastic	
<b>Input Specifications</b>		
Rated input voltage	100 to 240VAC	
Input voltage range	85 to 264VAC, 90 to 375VDC	
Line frequency	47 to 63Hz	
Inrush current	20A @ 115VAC, 40A @ 230VAC	30A @ 115VAC, 60A @ 230VAC
<b>Output Specifications</b>		
Output voltage accuracy	±1%	
Minimum load	0%	
Line regulation	0.5%	
Load regulation	0.5%	
Turn on time	1000mS after AC applied to input at full resistive load	
Voltage fall time	150mS	
Voltage rise time	150mS at full resistive load	
Hold up time	20mS @ 115VAC, 30mS @ 230VAC	
Temperature coefficient	±0.02%/°C	
Ripple & noise	50mV	
Voltage trim range	24 to 28VDC	
DC ON indicator threshold at start up	19.2VDC	
<b>Control and Protection</b>		
Rated over load protection	110 to 140%	110 to 150%
Over voltage protection	30 to 33VDC	
Output short circuit	Fold forward	
<b>Approvals and Standards</b>		
CE, UL/cUL		

# DPS Series 30W, 60W AC/DC DIN Rail Power Supplies



## Dimensions (mm)



## Pin connections

Key	Description
Rdy (1)	DC OK output for relay (24V models only)
+	(2) Positive output terminal
+	(3) Positive output terminal
-	(4) Negative output terminal
-	(5) Negative output terminal
⊕	(6) Ground terminal to minimize high-frequency emissions
N	(7) Input terminals (neutral conductor, no polarity at DC input)
L	(8) Input terminals (phase conductor, no polarity at DC input)
DC ON	Operation indicator LED
Vout adj.	Trimmer-potentiometer for Vout adjustment

## Installation

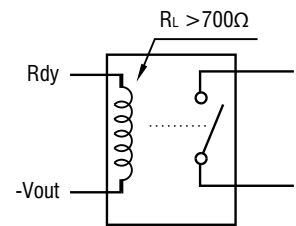
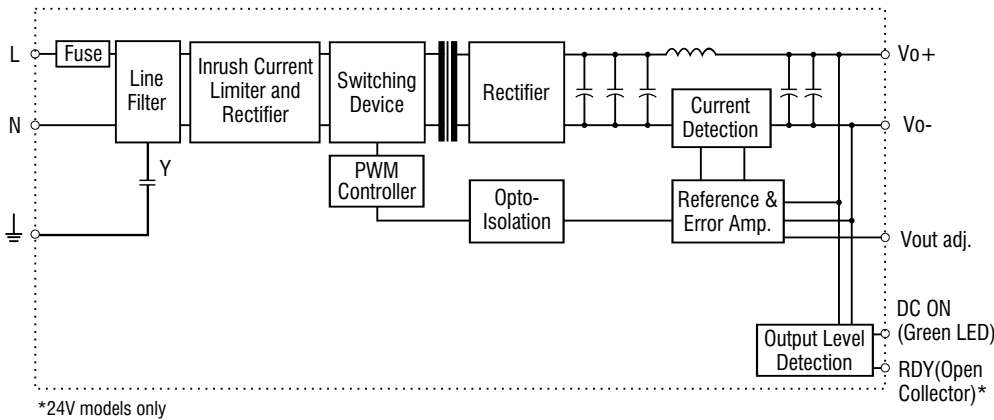
**Ventilation/Cooling**  
Normal convection  
All sides 25mm free space  
for cooling recommended

**Terminal size range**  
2 Solid: 0.2-2.0mm (AWG24-14)  
(use copper conductors only)

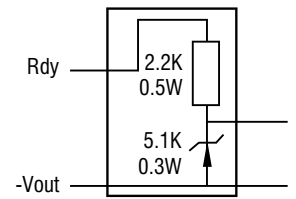
## Construction

Easy, safe and secure  
snap-on, snap-off  
DIN-Rail mounting  
(TS35/7.5 or TS35/15)

## Connections

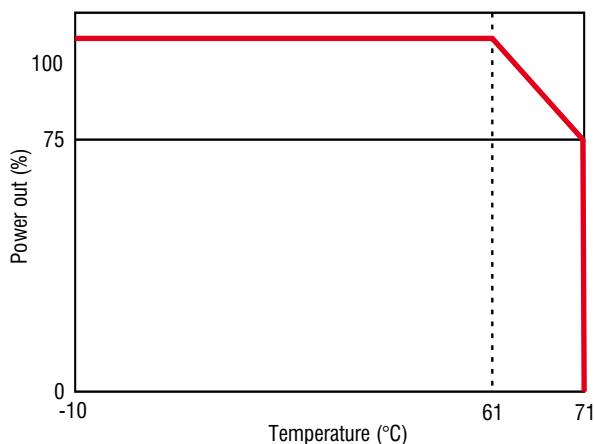


a) Relay



b) 5V signal

## Derating



## Rdy connections

# DPS Series 120W AC/DC DIN Rail Power Supplies

**IMO**

AC - DC DIN rail mountable  
120W power supplies



- Compact design
- High efficiency up to 86%
- PFC function available
- Parallel function available (switch)
- Input voltage 115/230VAC auto select
- 3 Year warranty



## Specifcaton

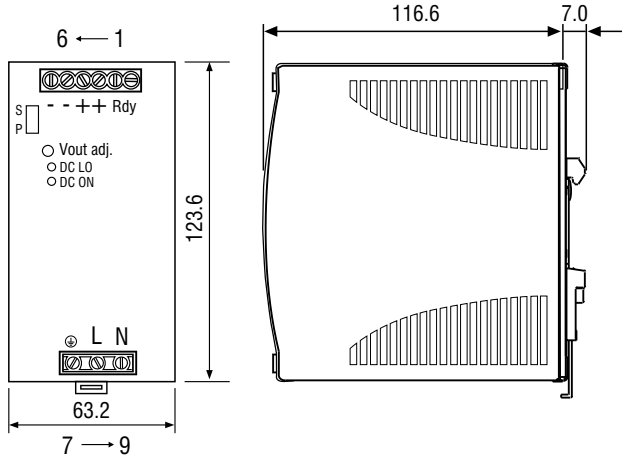
Model	DPS-1-120-24
Input Voltage	115/230VAC
Output Wattage	120W
Output Voltage	24VDC (Other output voltages available on request)
Output Current	5A
Efficiency (min/typ)	84/86%
<b>General Specification</b>	
Isolation voltage	3000VAC
Isolation resistance	100MΩ @ 500VDC
Ambient temperature	-25 to +71°C
Derating (from 61 to 71°C)	2.5%/°C
Storage temperature	-25 to +85°C
Relative humidity	20 to 95% RH
Cooling	Free air convection
Dimensions	L123.6 x W63.2 x D123.6 mm
Weight	920g
Case material	Metal

<b>Input Specifications</b>	
Rated input voltage	115/230VAC
Input voltage range	115V: 90 to 132VAC, 230V: 186 to 264VDC
Rated input current	2.8/1.4A
Line frequency	47 to 63Hz
Inrush current	24A @ 115VAC, 48A @ 230VAC
PFC	0.7 @ 230VAC
<b>Output Specifications</b>	
Output voltage accuracy	0 to 1% (adjusted pre-shipment)
Minimum load	0%
Line regulation	±0.5%
Load regulation	±1% single mode, ±5% parallel mode
Hold up time	25mS @ 115VAC, 30mS @ 230VAC
Temperature coefficient	±0.3%/°C
Ripple & noise	50mV
Voltage trim range	22.5 to 28.5VDC
DC ON indicator threshold at start up	17.6 to 19.4VDC
DC LO indicator threshold after start up	17.6 to 19.4VDC
Parallel operation	up to 3 units
<b>Control and Protection</b>	
Input fuse	T3.15A/250VAC internal
Rated over load protection	110 to 145%
Power Rdy (24V model only)	Electrical isolation: 500VDC Threshold volt. contact closed (start up): 17.6 to 19.4VDC Contact rating: 0.3A @ 60VDC
Over voltage protection	125 to 145%
Output short circuit	Current limited
<b>Approvals and Standards</b>	
	CE, UL/cUL

# DPS Series 120W AC/DC DIN Rail Power Supplies



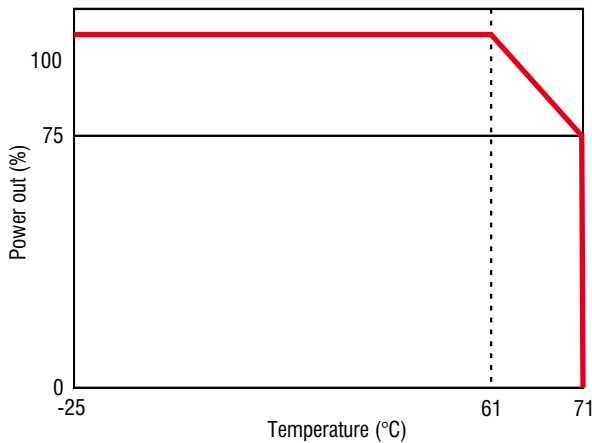
## Dimensions (mm)



## Pin connections

Key	Description
Rdy(1,2)	DC ON output for relay (24V models only)
+	(3) Positive output terminal
+	(4) Positive output terminal
-	(5) Negative output terminal
-	(6) Negative output terminal
⊕	(7) Ground terminal to minimize high-frequency emissions
L	(8) Input terminals (phase conductor, no polarity at DC input)
N	(9) Input terminals (neutral conductor, no polarity at DC input)
DC ON	Operation indicator LED
DC LO	DC low voltage indicator LED
Vout adj.	Trimmer-potentiometer for Vout adjustment
S/P	Single/Parallel select switch

## Derating



## Installation

### Ventilation/Cooling

Normal convection  
All sides 25mm free space  
for cooling recommended

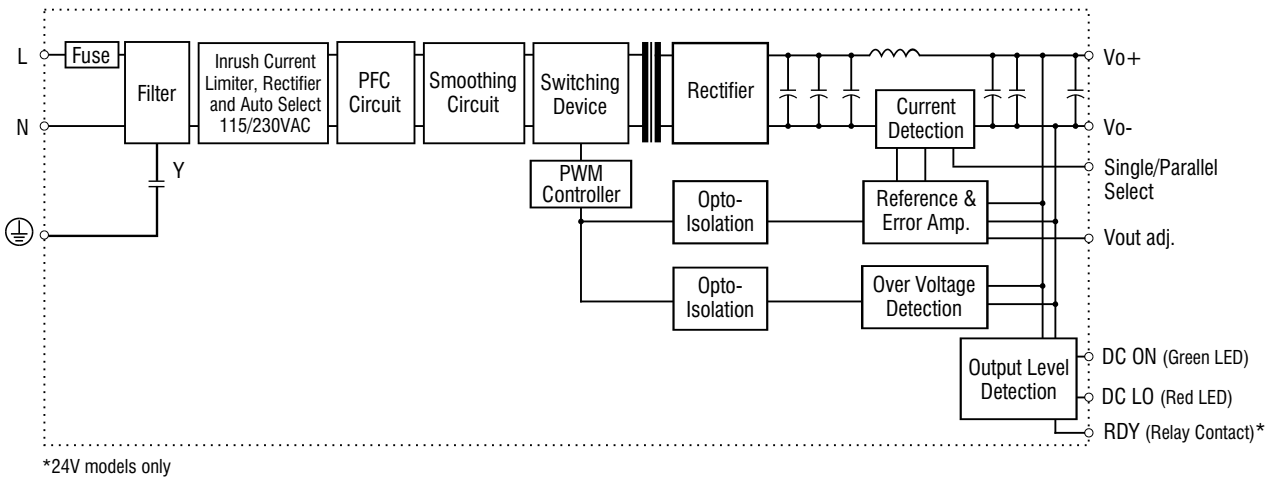
### Screw Terminal

10-24AWG flexible/solid cable  
Strip cable ends by 8mm

## Construction

Easy, safe and secure  
snap-on, snap-off  
DIN-Rail mounting  
(TS35/7.5 or TS35/15)

## Connections



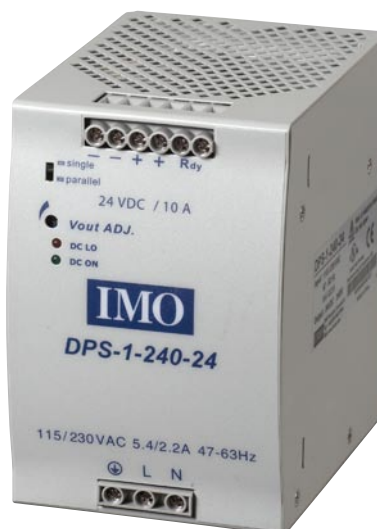
# DPS Series 240W AC/DC DIN Rail Power Supplies

**IMO**

AC - DC DIN rail mountable  
240W power supplies



- Compact design
- High efficiency up to 89%
- PFC function available
- Parallel function available (switch)
- Input voltage 115/230VAC auto select
- 3 Year warranty



## Specifcaton

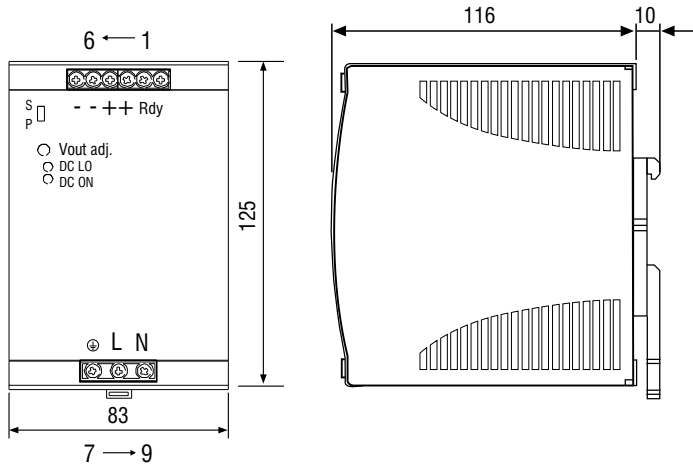
Model	DPS-1-240-24
Input Voltage	115/230VAC
Output Wattage	240W
Output Voltage	24VDC
Output Current	10A
Efficiency (min/typ)	87/89%
<b>General Specification</b>	
Isolation voltage	3000VAC
Isolation resistance	100MΩ @ 500VDC
Ambient temperature	-10 to +71°C
Derating (from 61 to 71°C)	2.5%/°C
Storage temperature	-25 to +85°C
Relative humidity	20 to 95% RH
Cooling	Free air convection
Dimensions	L125 x W83 x D126 mm
Weight	1000g
Case material	Metal

<b>Input Specifications</b>	
Rated input voltage	115/230VAC
Input voltage range	115V: 93 to 132VAC, 230V: 186 to 264VDC
Rated input current	5.4/2.2A
Line frequency	47 to 63Hz
Inrush current	30A @ 115VAC, 60A @ 230VAC
PFC	0.7 @ 230VAC
<b>Output Specifications</b>	
Output voltage accuracy	0 to 1% (adjusted pre-shipment)
Minimum load	0%
Line regulation	±0.5%
Load regulation	±1% single mode, ±5% parallel mode
Hold up time	25mS @ 115VAC, 30mS @ 230VAC
Temperature coefficient	±0.02%/°C
Ripple & noise	100mV
Voltage trim range	22.5 to 28.5VDC
DC ON indicator threshold at start up	17.6 to 19.4VDC
DC LO indicator threshold after start up	17.6 to 19.4VDC
Parallel operation	up to 3 units
<b>Control and Protection</b>	
Input fuse	T6.3A/250VAC internal
Rated over load protection	120 to 145%
Power Rdy	Electrical isolation: 500VDC Threshold volt. contact closed (start up): 17.6 to 19.4VDC Contact rating: 0.3A @ 60VDC
Over voltage protection	120 to 145%
Output short circuit	Current limited
<b>Approvals and Standards</b>	
	CE, UL/cUL

# DPS Series 240W AC/DC DIN Rail Power Supplies



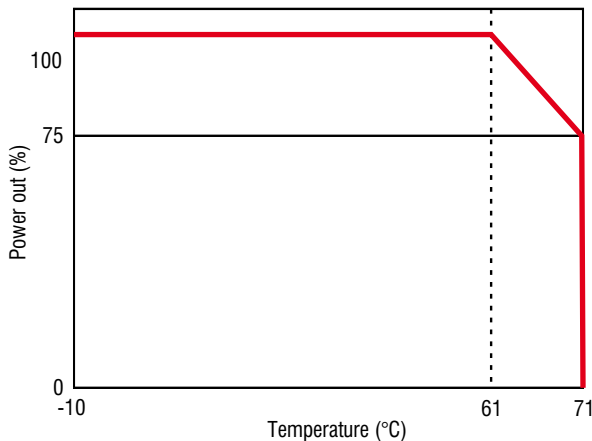
## Dimensions (mm)



## Pin connections

Key	Description
Rdy(1,2)	DC ON output for relay (24V models only)
+	(3) Positive output terminal
+	(4) Positive output terminal
-	(5) Negative output terminal
-	(6) Negative output terminal
⊕	(7) Ground terminal to minimize high-frequency emissions
L	(8) Input terminals (phase conductor, no polarity at DC input)
N	(9) Input terminals (neutral conductor, no polarity at DC input)
DC ON	Operation indicator LED
DC LO	DC low voltage indicator LED
Vout adj.	Trimmer-potentiometer for Vout adjustment
S/P	Single/Parallel select switch

## Derating



## Installation

### Ventilation/Cooling

Normal convection  
All sides 25mm free space  
for cooling recommended

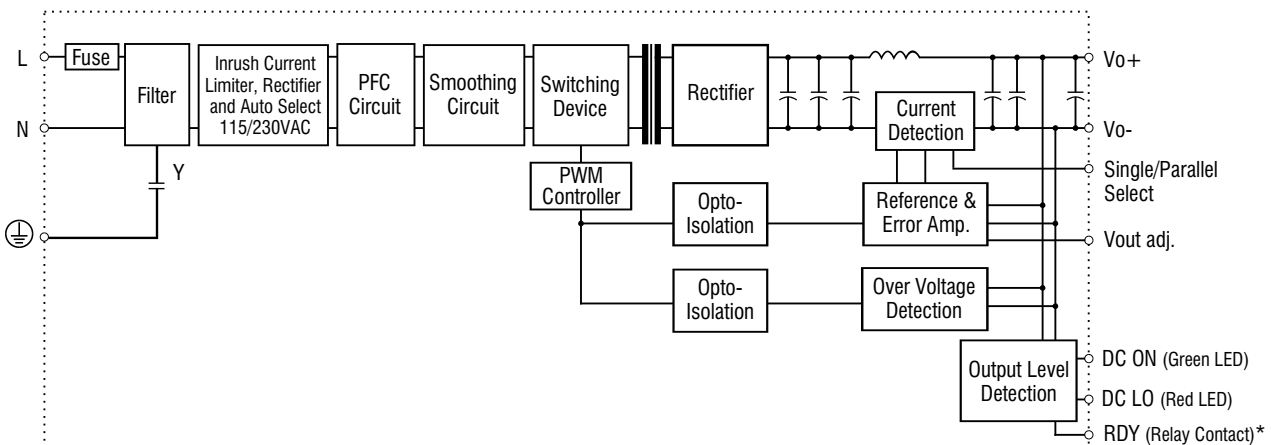
### Screw Terminal

10-24AWG flexible/solid cable  
Strip cable ends by 8mm

## Construction

Easy, safe and secure  
snap-on, snap-off  
DIN-Rail mounting  
(TS35/7.5 or TS35/15)

## Connections



\*24V models only

# DPS Series 480W AC/DC DIN Rail Power Supplies



AC - DC DIN rail mountable  
480W power supplies

- Compact design
- High efficiency up to 89%
- PFC function available
- Parallel function available (switch)
- Universal input voltage
- 3 Year warranty



## Specificton

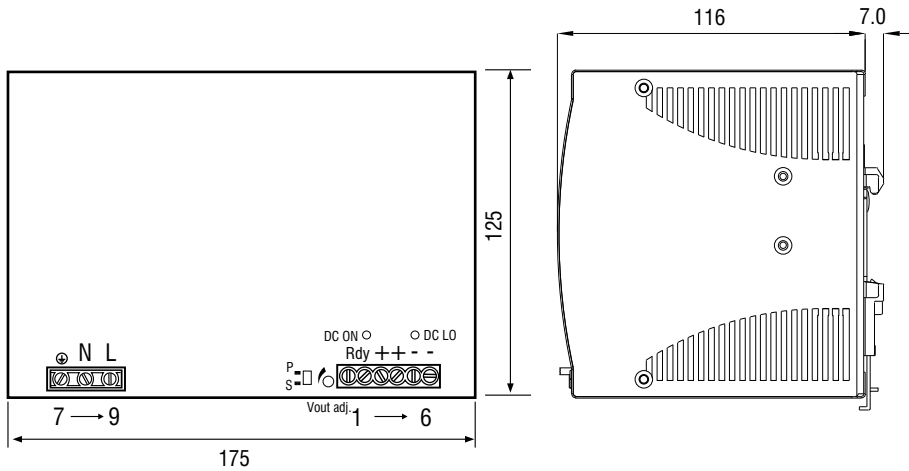
Model	DPS-1-240-24
Input Voltage	90~264VAC
Output Wattage	480W
Output Voltage	24VDC
Output Current	20A
Efficiency (min/typ)	86/89%
<b>General Specification</b>	
Isolation voltage	3000VAC
Isolation resistance	100MΩ @ 500VDC
Ambient temperature	-25 to +71°C
Derating (from 56 to 71°C)	2.5%/°C
Storage temperature	-25 to +85°C
Relative humidity	20 to 95% RH
Cooling	Free air convection
Dimensions	L125 x W175 x D123 mm
Weight	1920g
Case material	Metal

<b>Input Specifications</b>	
Rated input voltage	115/230VAC
Input voltage range	90 to 264VAC (230VAC typ.), 120 to 370VDC
Rated input current	7A @ 115VAC, 3.5A @ 230VAC
Line frequency	47 to 63Hz
Inrush current	25A @ 115VAC, 50A @ 230VAC
PFC	0.99 @ 230VAC
<b>Output Specifications</b>	
Output voltage accuracy	0 to 1% (adjusted pre-shipment)
Minimum load	0%
Line regulation	±0.5%
Load regulation	±0.5% single mode, ±5% parallel mode
Hold up time	30mS
Temperature coefficient	±0.02%/°C
Ripple & noise	100mV
Voltage trim range	22.5 to 28.5VDC
DC ON indicator threshold at start up	17.6 to 19.4VDC
DC LO indicator threshold after start up	17.6 to 19.4VDC
Parallel operation	up to 3 units
<b>Control and Protection</b>	
Input fuse	10A/250VAC internal
Rated over load protection	120 to 140%
Power Rdy	Electrical isolation: 500VDC Threshold volt. contact closed (start up): 17.6 to 19.4VDC Contact rating: 0.3A @ 60VDC
Over voltage protection	30 to 33V
Output short circuit	Continuous current limited
<b>Approvals and Standards</b>	
	CE, UL/cUL

# DPS Series 480W AC/DC DIN Rail Power Supplies



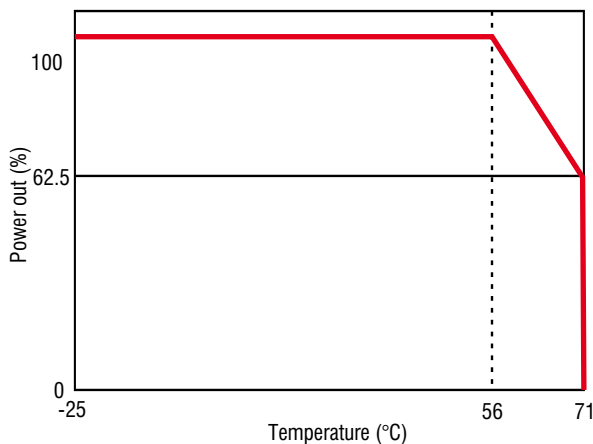
## Dimensions (mm)



## Pin connections

Key	Description
Rdy(1,2)	DC ON output for relay (24V models only)
+	(3) Positive output terminal
+	(4) Positive output terminal
-	(5) Negative output terminal
-	(6) Negative output terminal
⊥	(7) Ground terminal to minimize high-frequency emissions
N	(8) Input terminals (neutral conductor, no polarity at DC input)
L	(9) Input terminals (phase conductor, no polarity at DC input)
DC ON	Operation indicator LED
DC LO	DC low voltage indicator LED
Vout adj.	Trimmer-potentiometer for Vout adjustment
S/P	Single/Parallel select switch

## Derating



## Installation

### Ventilation/Cooling

Normal convection  
All sides 25mm free space for cooling recommended

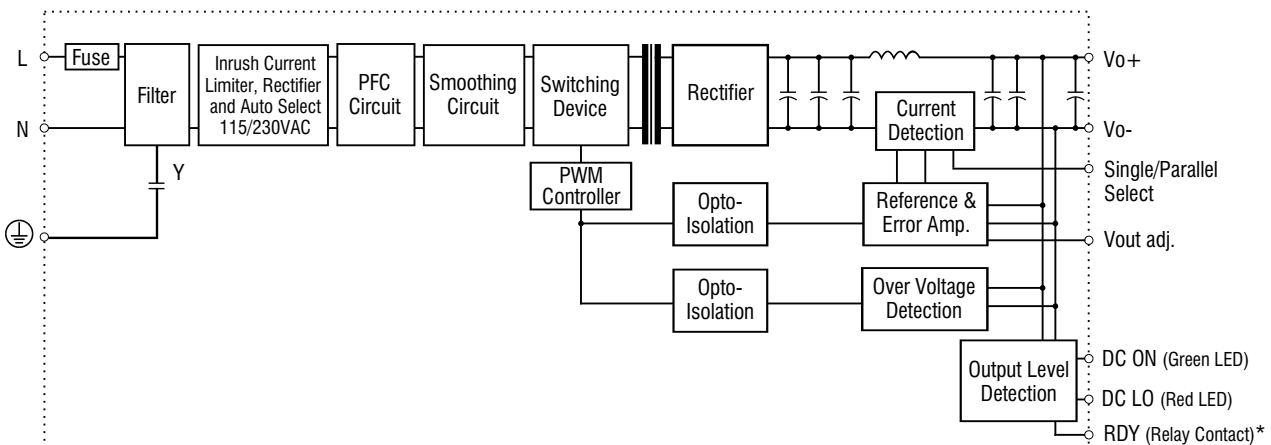
### Screw Terminal

10-24AWG flexible/solid cable  
Strip cable ends by 8mm

## Construction

Easy, safe and secure snap-on, snap-off  
DIN-Rail mounting (TS35/7.5 or TS35/15)

## Connections



\*24V models only