

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

IMO

3
YEAR GUARANTEE

CE cUL UL

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

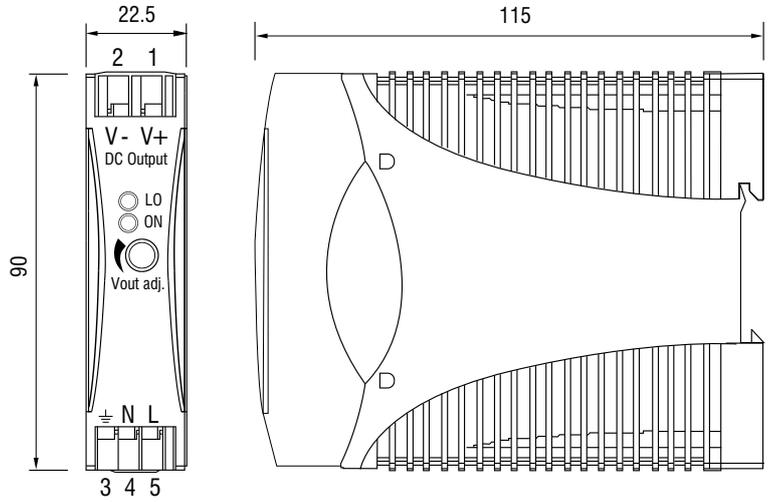
Model	DPS-1-005-24	DPS-1-010-24	DPS-1-018-24
Input Voltage	90 to 265VAC / 120 to 370VDC		
Output Wattage	5W	10W	18W
Output Voltage	24VDC (Other output voltages available on request)		
Output Current	210mA	420mA	750mA
Efficiency (min/typ)	70/72%	74/76%	75/77%
General Specification			
Switching frequency	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		
Input Specifications			
Rated input voltage	100 to 240VAC		
Line frequency	47 to 63Hz		
Inrush current	10A @ 115VAC, 18A @ 230VAC		
Output Specifications			
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		
Control and Protection			
Input fuse	T2A / 250VAC internal		
Rated over load protection	110 to 135%		
Over voltage protection	125 to 145%		
Output short circuit	Hiccup mode		
Approvals and Standards			
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

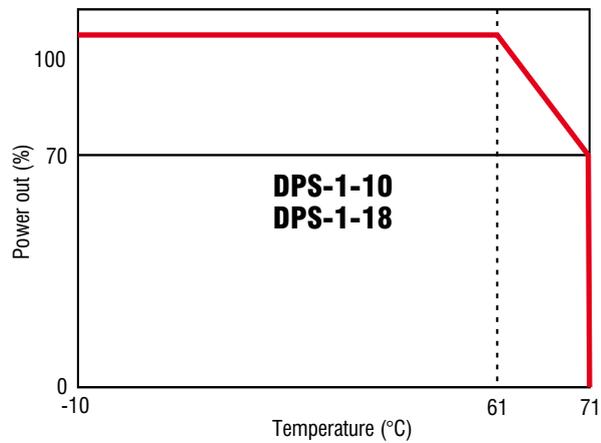
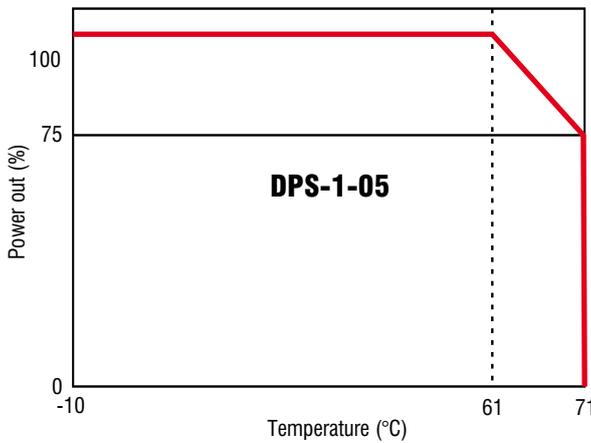
Easy, safe and secure snap-on, snap-off DIN-Rail mounting (TS35/7.5 or TS35/15)

Installation

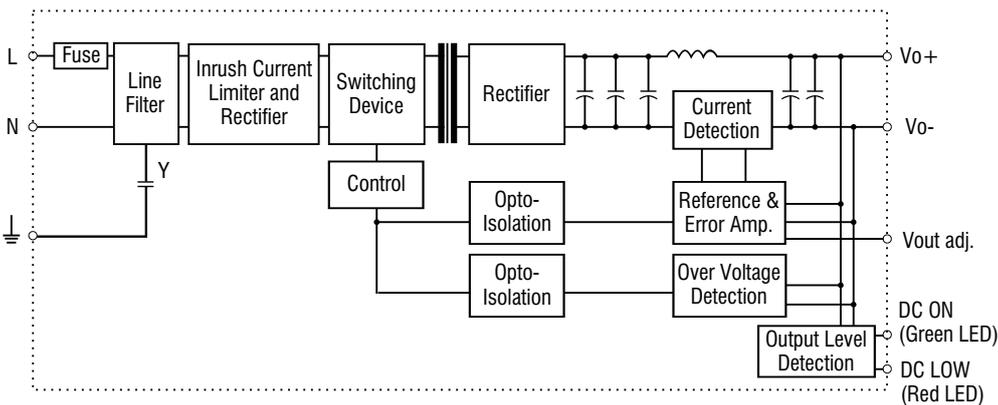
Ventilation/Cooling
Normal convection
All sides 25mm free space for cooling recommended

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

Derating



Connections



DPS Series 120W AC/DC DIN Rail Power Supplies



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

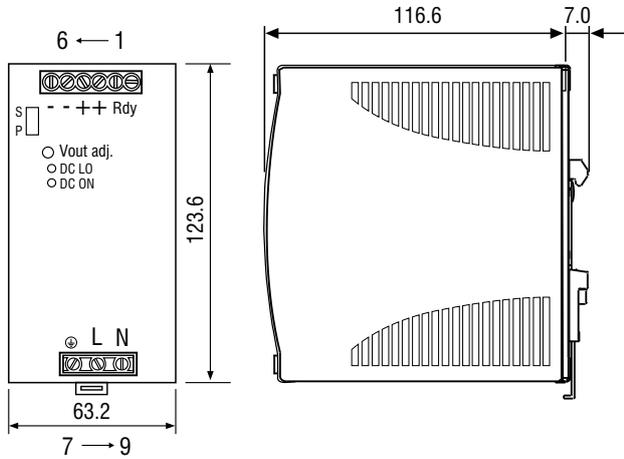
Model	DPS-1-120-24
Input Voltage	115/230VAC
Output Wattage	120W
Output Voltage	24VDC (Other output voltages available on request)
Output Current	5A
Efficiency (min/typ)	84/86%
General Specification	
Isolation voltage	3000VAC
Isolation resistance	100MΩ @ 500VDC
Ambient temperature	-10 to +71°C
Derating (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	L123.6 x W63.2 x D116.6 mm
Weight	920g
Case material	Metal

Input Specifications	
Rated input voltage	115/230VAC
Input voltage range	115V: 90 to 132VAC, 230V: 186 to 264VAC 210 to 370VDC
Rated input current	2.8/1.4A
Line frequency	47 to 63Hz
Inrush current	24A @ 115VAC, 48A @ 230VAC
PFC	0.7 @ 230VAC
Output Specifications	
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
Control and Protection	
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
Approvals and Standards	
	CE, UL/cUL

DPS Series 120W AC/DC DIN Rail Power Supplies



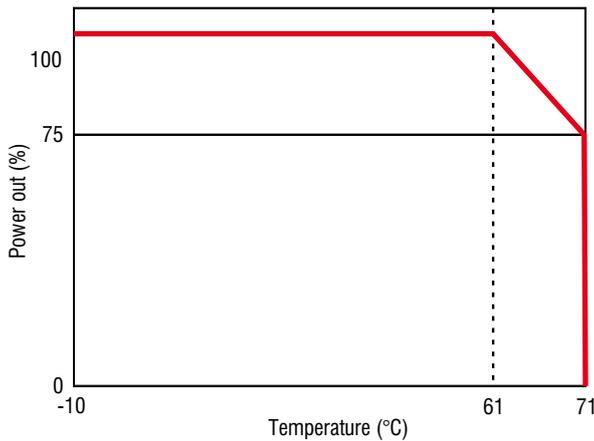
Dimensions (mm)



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

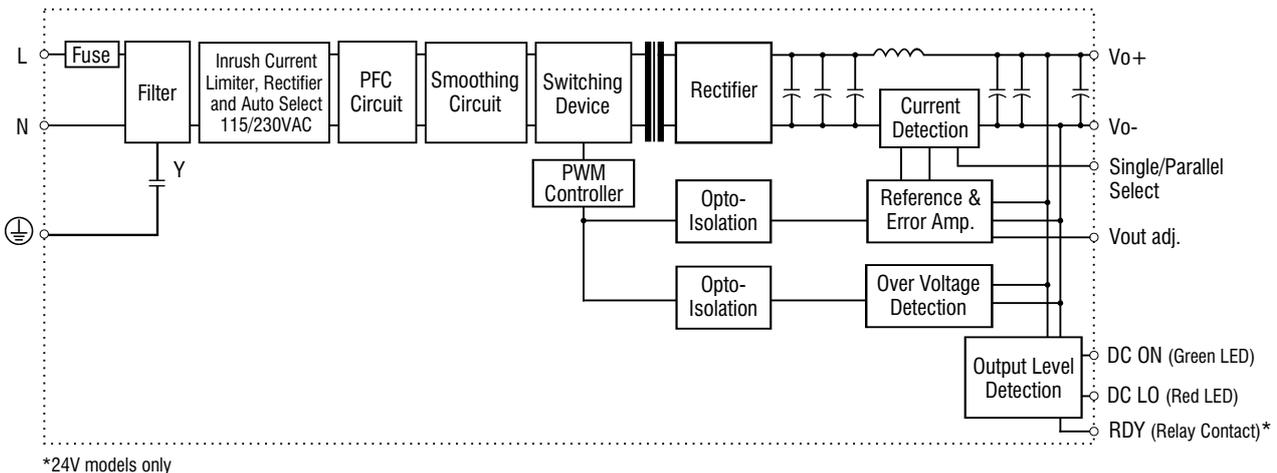
Screw Terminal

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

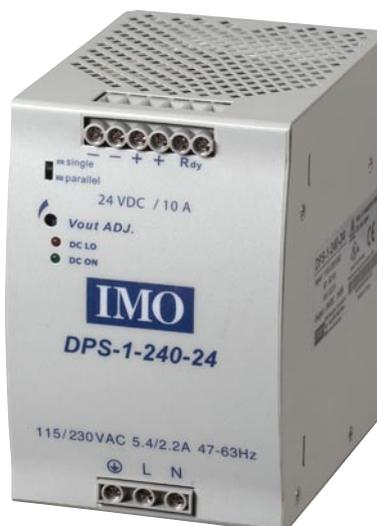


DPS Series 240W AC/DC DIN Rail Power Supplies



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

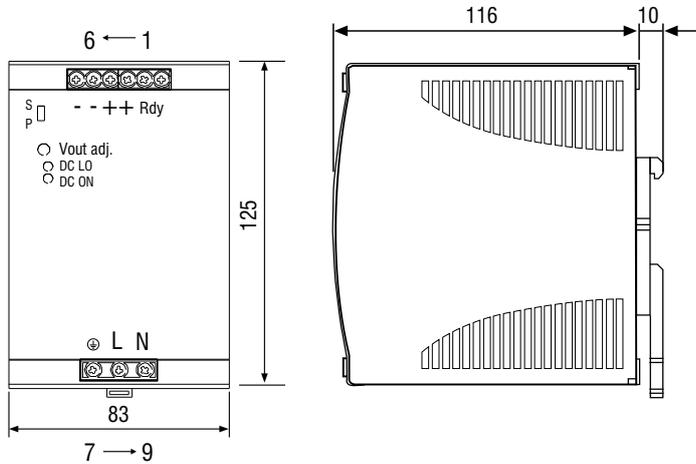
Model	DPS-1-240-24
Input Voltage	115/230VAC
Output Wattage	240W
Output Voltage	24VDC
Output Current	10A
Efficiency (min/typ)	87/89%
General Specification	
Isolation voltage	3000VAC
Isolation resistance	100MΩ @ 500VDC
Ambient temperature	-10 to +71°C
Derating (from 61 to 71°C)	2.5%/°C
Storage temperature	-25 to +85°C
Relative humidity	20 to 95% RH
Cooling	Free air convection
Dimensions	L125 x W83 x D116 mm
Weight	1000g
Case material	Metal

Input Specifications	
Rated input voltage	115/230VAC
Input voltage range	115V: 93 to 132VAC, 230V: 186 to 264VAC 210 to 370VDC
Rated input current	5.4/2.2A
Line frequency	47 to 63Hz
Inrush current	30A @ 115VAC, 60A @ 230VAC
PFC	0.7 @ 230VAC
Output Specifications	
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
Control and Protection	
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
Approvals and Standards	
	CE, UL/cUL

DPS Series 240W AC/DC DIN Rail Power Supplies



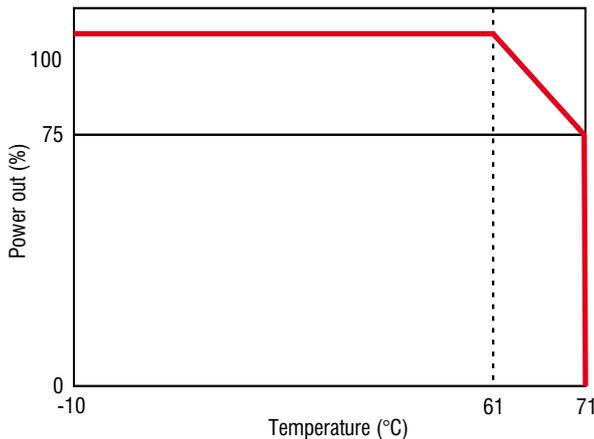
Dimensions (mm)



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

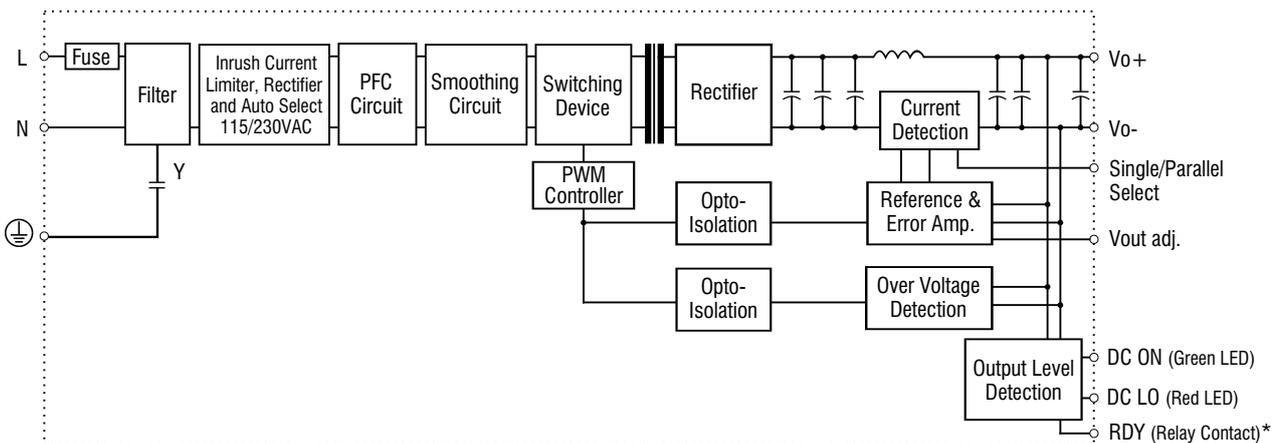
Screw Terminal

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 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



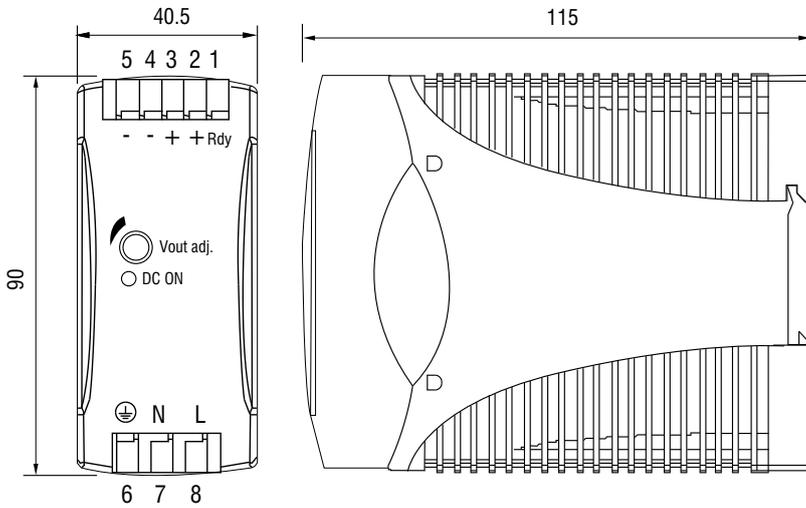
Specification

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%
General Specification		
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	
Input Specifications		
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
Output Specifications		
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	
Control and Protection		
Rated over load protection	110 to 140%	110 to 150%
Over voltage protection	30 to 33VDC	
Output short circuit	Fold forward	
Approvals and Standards		
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

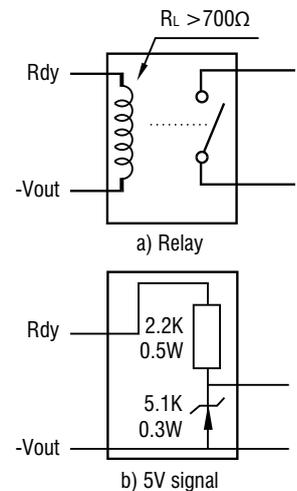
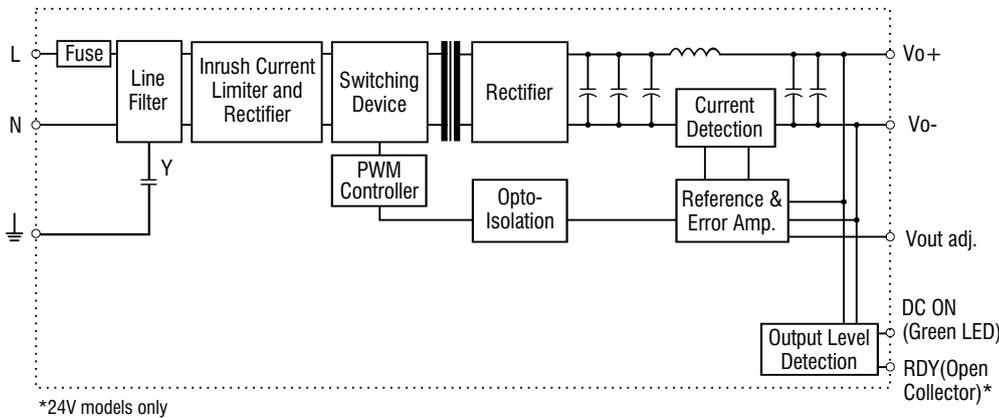
Ventilation/Cooling
Normal convection
All sides 25mm free space
for cooling recommended

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

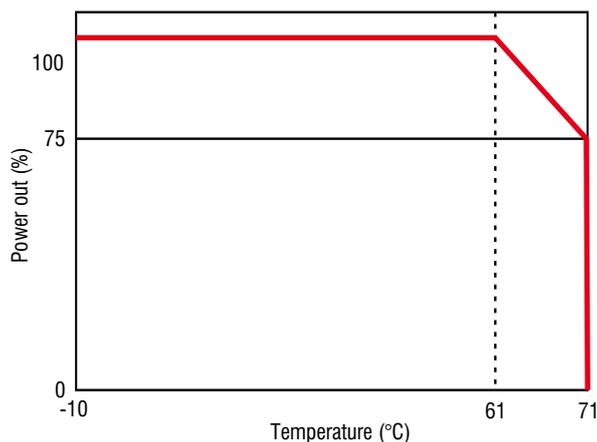
Construction

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

Connections



Derating



Rdy connections

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

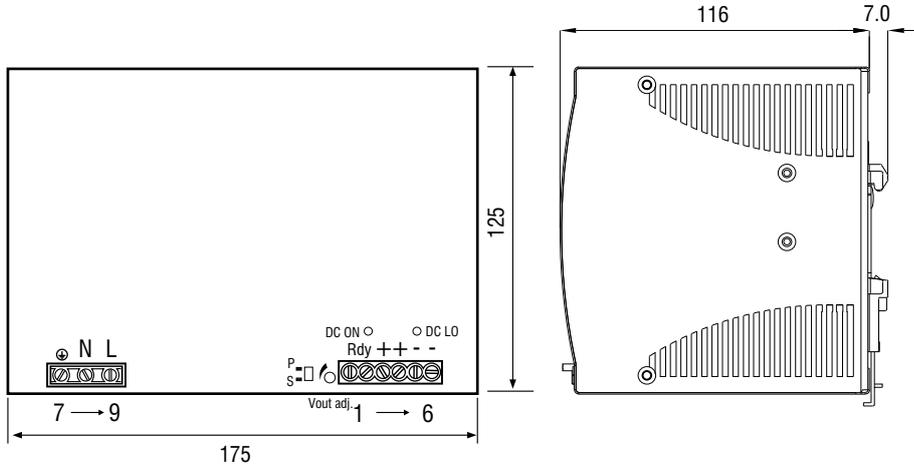
Model	DPS-1-480-24
Input Voltage	90~264VAC
Output Wattage	480W
Output Voltage	24VDC
Output Current	20A
Efficiency (min/typ)	86/89%
General Specification	
Isolation voltage	3000VAC
Isolation resistance	100MΩ @ 500VDC
Ambient temperature	-25 to +71°C
Derating (from 56 to 71°C)	2.5%/°C
Storage temperature	-25 to +85°C
Relative humidity	20 to 95% RH
Cooling	Free air convection
Dimensions	L125 x W175 x D116 mm
Weight	1920g
Case material	Metal

Input Specifications	
Rated input voltage	115/230VAC
Input voltage range	90 to 264VAC, 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
Output Specifications	
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
Control and Protection	
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
Approvals and Standards	
	CE, UL/cUL

DPS Series 480W AC/DC DIN Rail Power Supplies



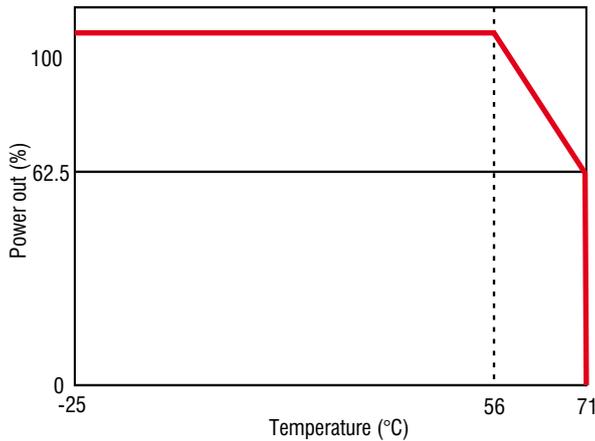
Dimensions (mm)



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

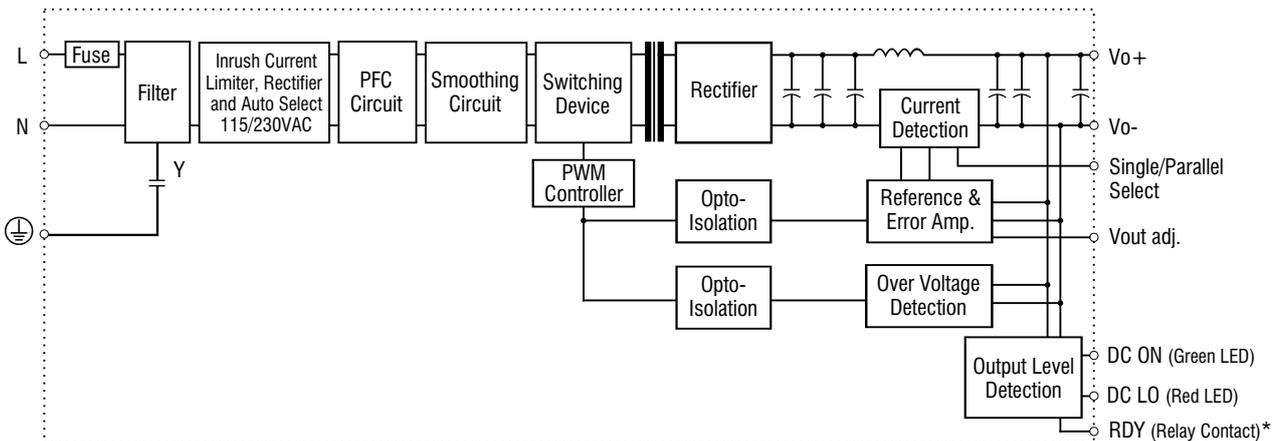
Screw Terminal

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