

DPS Series 5W to 480W

Single Phase AC-DC DIN Rail Power Supplies



IMO's range of industrial power supplies have been designed especially for the control and automation marketplace. The single phase DPS range offers the benefits of slim lines, universal input, high efficiency, short circuit protection and the security of our unique 3 year warranty along with an impressive range of international approvals.



Key Features

- Multiple output voltages from 5 to 48 VDC (model dependent)
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2 (selected models)



DPS-1 models from 5W to 60W offer plastic body construction.

DPS-1 models from 100W to 480W offer full metal body construction



DPS Series 5W to 18W AC-DC DIN Rail Power Supplies



Key Features

- 5, 12 & 24 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



Technical Specification - 5W Output

Model	DPS-1-005-5DC	DPS-1-005-12DC	DPS-1-005-24DC
Input Voltage	90-264VAC / 120-375VDC		
Output Wattage	5W		
Output Voltage / Power Dissipation	5VDC / 2.2W	12VDC / 1.9W	24VDC / 1.8W
Output Current	1A	0.42A	0.21A
Efficiency (min/typ)	67/69%	70/72%	70/72%
General Specification			
Approval	cURus - Class 2		
Isolation Voltage	3000VAC/4242VDC		
Isolation Resistance	100MΩ @ 500VDC		
Ambient Temperature	-20 to +71°C		
Derating	(61 to 71°C) 2.5%/°C		
Storage Temperature	-25 to +85°C		
Relative Humidity	20 to 95% RH		
Cooling	Free air convection		
Dimensions	L90 x W22.5 x D114 mm		
Weight	120g		
Case Material	Plastic		
Input Specifications			
Rated Input Voltage	100 ~ 240VAC		
Input Voltage Range	90 to 264VAC, 120 to 375VDC		
Line Frequency	47 ~ 63Hz		
Power Factor @ 115VAC	0.5 Typical (0.5 Measured)		
Power Factor @ 230VAC	0.4 Typical (0.39 Measured)		
Inrush Current (115 / 230VAC)	15 / 30A		
Output Specifications			
Output Voltage Accuracy	+1%		
Minimum Load	0%		
Line Regulation	±1%		
Load Regulation	±2%		
Turn On Time	1000ms after AC applied to input at full resistive load		
Voltage Fall Time	150ms		
Voltage Rise Time	150ms		
Hold Up Time (115 / 230VAC)	30 / 130ms		
Temperature Coefficient	±0.03%/°C		
Ripple & Noise	50mV		
Voltage Trim Range	4.5 ~ 5.75VDC	10.8 ~ 13.8VDC	21.6 ~ 28.8VDC
DC ON & LOW Indicator (Green & Red LED)	3.5 ~ 4.5VDC	9 ~ 10.8VDC	18 ~ 21.6VDC
Control & Protection			
Rated Overload Protection	110 ~ 165%		
Over Voltage Protection	6.5 ~ 7.27VDC	15 ~ 17.4VDC	18.75 ~ 21.75VDC
Output Short Circuit	Hiccup Mode		

DPS Series 5W to 18W AC-DC DIN Rail Power Supplies



Key Features

- 5, 12 & 24 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



Technical Specification - 10W Output

Model	DPS-1-010-5DC	DPS-1-010-12DC	DPS-1-010-24DC
Input Voltage	90-264VAC / 120-375VDC		
Output Wattage	10W		
Output Voltage / Power Dissipation	5VDC / 4.0W	12VDC / 3.4W	24VDC / 2.8W
Output Current	2A	0.84A	0.42A
Efficiency (min/typ)	71/73%	73/75%	74/76%
General Specification			
Approval	cURus - Class 2		
Isolation Voltage	3000VAC/4242VDC		
Isolation Resistance	100MΩ @ 500VDC		
Ambient Temperature	-20 to +71°C		
Derating	(61 to 71°C) 2.5%/°C		
Storage Temperature	-25 to +85°C		
Relative Humidity	20 to 95% RH		
Cooling	Free air convection		
Dimensions	L90 x W22.5 x D114 mm		
Weight	120g		
Case Material	Plastic		
Input Specifications			
Rated Input Voltage	100 ~ 240VAC		
Input Voltage Range	90 to 264VAC, 120 to 375VDC		
Line Frequency	47 ~ 63Hz		
Power Factor @ 115VAC	0.55 Typical (0.55 Measured)		
Power Factor @ 230VAC	0.45 Typical (0.43 Measured)		
Inrush Current (115 / 230VAC)	15 / 30A		
Output Specifications			
Output Voltage Accuracy	+1%		
Minimum Load	0%		
Line Regulation	±1%		
Load Regulation	±2%		
Turn On Time	1000ms after AC applied to input at full resistive load		
Voltage Fall Time	150ms		
Voltage Rise Time	150ms		
Hold Up Time (115 / 230VAC)	30 / 130ms		
Temperature Coefficient	±0.03%/°C		
Ripple & Noise	50mV		
Voltage Trim Range	4.5 ~ 5.75VDC	10.8 ~ 13.8VDC	21.6 ~ 28.8VDC
DC ON (Green) & LOW (Red) Indicator	3.5 ~ 4.5VDC	9 ~ 10.8VDC	18 ~ 21.6VDC
Control & Protection			
Rated Overload Protection	110 ~ 165%		
Over Voltage Protection	6.5 ~ 7.27VDC	15 ~ 17.4VDC	18.75 ~ 21.75VDC
Output Short Circuit	Hiccup Mode		

DPS Series 5W to 18W AC-DC DIN Rail Power Supplies



Key Features

- 5, 12 & 24 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



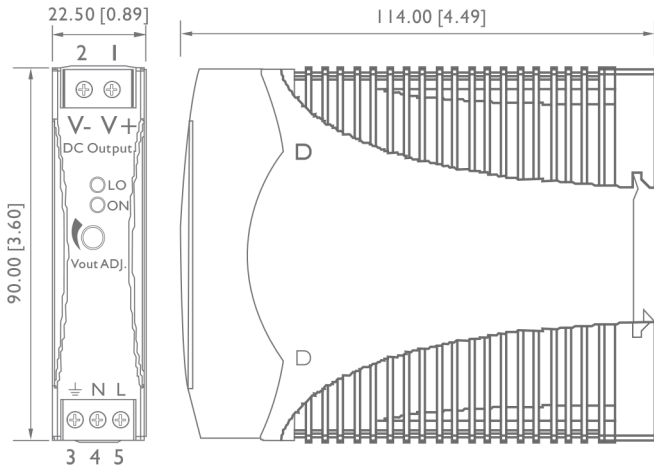
Technical Specification - 15W & 18W Output

Model	DPS-1-015-5DC*	DPS-1-018-12DC	DPS-1-018-24DC
Input Voltage	90-264VAC / 120-375VDC		
Output Wattage	15W	18W	
Output Voltage / Power Dissipation	5VDC / 5.0W	12VDC / 4.65W	24VDC / 4.45W
Output Current	3A	1.5A	0.75A
Efficiency (min/typ)	73/75%	75/77%	75/7%
General Specification			
Approval	cURus - Class 2		
Isolation Voltage	3000VAC/4242VDC		
Isolation Resistance	100MΩ @ 500VDC		
Ambient Temperature	-20 to +71°C		
Derating	(61 to 71°C) 2.5%/°C		
Storage Temperature	-25 to +85°C		
Relative Humidity	20 to 95% RH		
Cooling	Free air convection		
Dimensions	L90 x W22.5 x D114 mm		
Weight	150g		
Case Material	Plastic		
Input Specifications			
Rated Input Voltage	100 ~ 240VAC		
Input Voltage Range	90 to 264VAC, 120 to 375VDC		
Line Frequency	47 ~ 63Hz		
Power Factor @ 115VAC	0.55 Typical (0.58 Measured)		
Power Factor @ 230VAC	0.45 Typical (0.47 Measured)		
Inrush Current (115 / 230VAC)	15 / 30A		
Output Specifications			
Output Voltage Accuracy	+1%		
Minimum Load	0%		
Line Regulation	±1%		
Load Regulation	±2%		
Turn On Time	1000ms after AC applied to input at full resistive load		
Voltage Fall Time	150ms		
Voltage Rise Time	150ms		
Hold Up Time (115 / 230VAC)	30 / 130ms		
Temperature Coefficient	±0.03%/°C		
Ripple & Noise	50mV		
Voltage Trim Range	4.5 ~ 5.75VDC	10.8 ~ 13.8VDC	21.6 ~ 28.8VDC
DC ON (Green) & LOW (Red) Indicator	3.5 ~ 4.5VDC	9 ~ 10.8VDC	18 ~ 21.6VDC
Control & Protection			
Rated Overload Protection	110 ~ 165%		
Over Voltage Protection	6.5 ~ 7.27VDC	15 ~ 17.4VDC	18.75 ~ 21.75VDC
Output Short Circuit	Hiccup Mode		

DPS Series 5W to 18W AC-DC DIN Rail Power Supplies



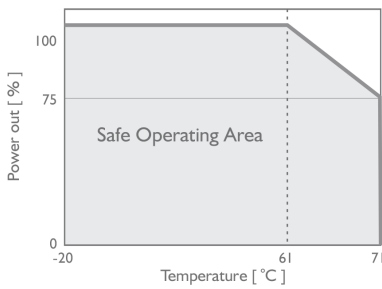
Dimensions (mm)



Pin Connections

Key		Description
1	V+	Positive output terminal
2	V-	Negative output terminal
3		Ground this terminal to minimise high-frequency emissions
4	N	Input terminals (neutral conductor, no polarity at DC input)
5	L	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

Derating



Installation

Ventilation / Cooling

Normal convection
All sides 25mm free space
For cooling recommended

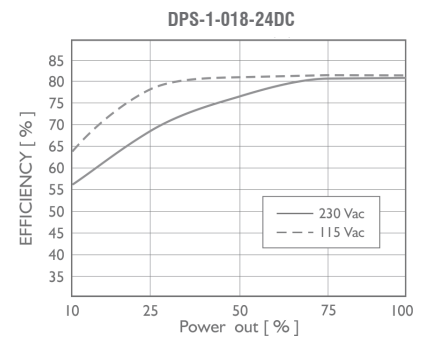
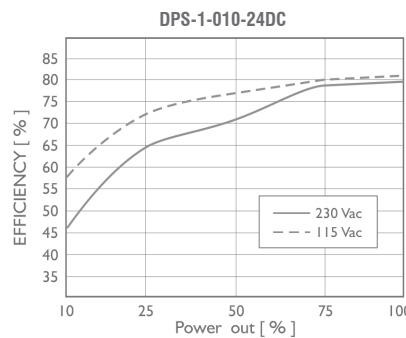
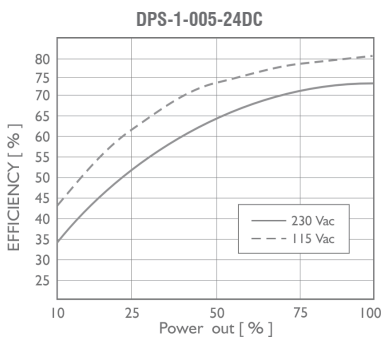
Connector Size Range

AWG26-12 (0.2 ~ 2.5mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 5 pound-inches
- 4-5 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

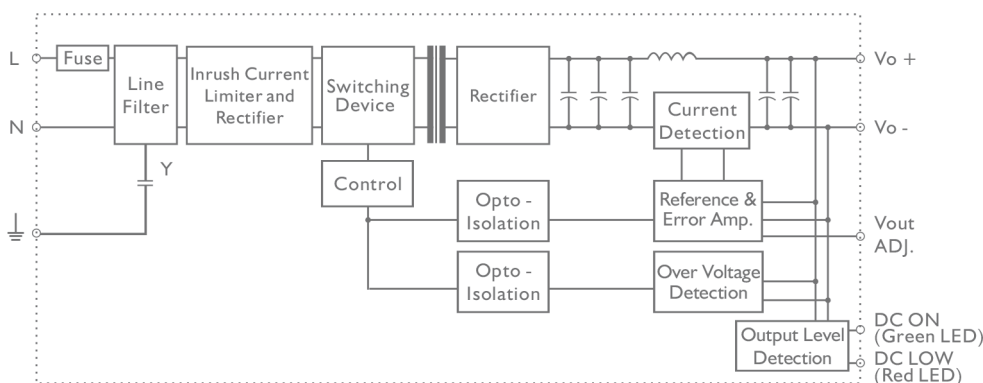
Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

Typ. Efficiency Curve



Circuit Schematic



DPS Series 30W to 60W AC-DC DIN Rail Power Supplies



Key Features

- 5, 12, 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



Technical Specification - 30W Output

Model	DPS-1-030-5DC*	DPS-1-030-12DC	DPS-1-030-24DC	DPS-1-030-48DC
Input Voltage	90-264VAC / 120-375VDC			
Output Wattage	30W			
Output Voltage / Power Dissipation	5VDC / 8.5W	12VDC / 5.6W	24VDC / 5.5W	48VDC / 4.9W
Output Current	6A	2.5A	1.25A	0.625A
Efficiency (min/typ)	77/79%	82/84%	83/86%	83/86%
General Specification				
Approval	cURus - Class 2			
Isolation Voltage	3000VAC/4242VDC			
Isolation Resistance	100MΩ @ 500VDC			
Ambient Temperature	-41 to +71°C			
Derating	(61 to 71°C) 2.5%/°C			
Storage Temperature	-40 to +85°C			
Relative Humidity	20 to 95% RH			
Cooling	Free air convection			
Dimensions	L90 x W40.5 x D114 mm			
Weight	270g			
Case Material	Plastic			
Input Specifications				
Rated Input Voltage	120 ~ 240VAC			
Input Voltage Range	85 to 264VAC, 90 to 375VDC			
Line Frequency	47 ~ 63Hz			
Power Factor @ 115VAC	0.55 Typical (0.57 Measured)			
Power Factor @ 230VAC	0.45 Typical (0.49 Measured)			
Inrush Current (115 / 230VAC)	20 / 40A			
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			
Hold Up Time (115 / 230VAC)	25 / 30ms			
Temperature Coefficient	±0.03%/°C			
Ripple & Noise	50mV			
Voltage Trim Range	5 ~ 5.5VDC	12 ~ 14VDC	24 ~ 28VDC	48 ~ 55VDC
DC ON & LOW Indicator (Green & Red LED)	3.5 ~ 4.5VDC	9 ~ 10.8VDC	18 ~ 21.6VDC	37 ~ 43VDC
Control & Protection				
Rated Overload Protection	110 ~ 150%			
Over Voltage Protection	6 ~ 6.8VDC	15 ~ 16.5VDC	30 ~ 33VDC	60 ~ 66VDC
Output Short Circuit	Fold Forward			

* Not Class 2 listed

DPS Series 30W to 60W AC-DC DIN Rail Power Supplies



Key Features

- 5, 12, 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



Technical Specification - 50W & 60W Output

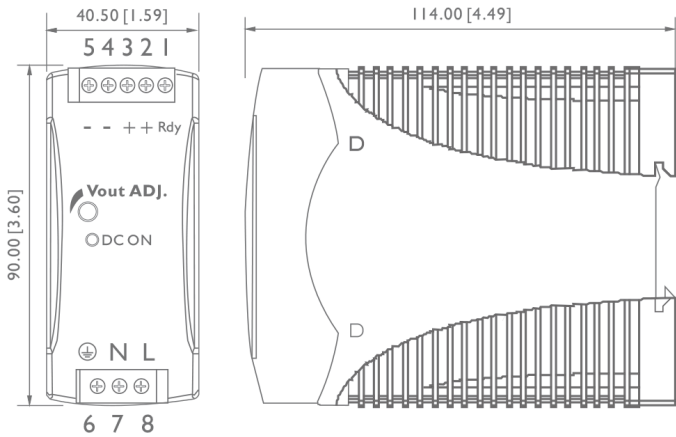
Model	DPS-1-050-5DC*	DPS-1-060-12DC*	DPS-1-060-24DC	DPS-1-060-48DC
Input Voltage	90-264VAC / 120-375VDC			
Output Wattage	50W	60W		
Output Voltage / Power Dissipation	5VDC / 12.5W	12VDC / 9.0W	24VDC / 8.8W	48VDC / 7.8W
Output Current	10A	5A	2.5A	1.25A
Efficiency (min/typ)	77/79%	84/86%	86/89%	86/89%
General Specification				
Approval	cURus - Class 2			
Isolation Voltage	3000VAC/4242VDC			
Isolation Resistance	100MΩ @ 500VDC			
Ambient Temperature	-41 to +71°C			
Derating	(61 to 71°C) 2.5%/°C			
Storage Temperature	-40 to +85°C			
Relative Humidity	20 to 95% RH			
Cooling	Free air convection			
Dimensions	L90 x W40.5 x D114 mm			
Weight	340g			
Case Material	Plastic			
Input Specifications				
Rated Input Voltage	120 ~ 240VAC			
Input Voltage Range	85 to 264VAC, 90 to 375VDC			
Line Frequency	47 ~ 63Hz			
Power Factor @ 115VAC	0.55 Typical (0.56 Measured)			
Power Factor @ 230VAC	0.5 Typical (0.52 Measured)			
Inrush Current (115 / 230VAC)	20 / 40A			
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			
Hold Up Time (115 / 230VAC)	25 / 30ms			
Temperature Coefficient	±0.03%/°C			
Ripple & Noise	50mV			
Voltage Trim Range	5 ~ 5.5VDC	12 ~ 14VDC	24 ~ 28VDC	48 ~ 55VDC
DC ON & LOW Indicator (Green & Red LED)	3.5 ~ 4.5VDC	9 ~ 10.8VDC	18 ~ 21.6VDC	37 ~ 43VDC
Control & Protection				
Rated Overload Protection	110 ~ 150%			
Over Voltage Protection	6 ~ 6.8VDC	15 ~ 16.5VDC	30 ~ 33VDC	60 ~ 66VDC
Output Short Circuit	Fold Forward			

* Not Class 2 listed

DPS Series 30W to 60W AC-DC DIN Rail Power Supplies



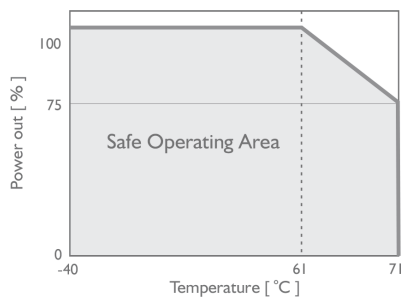
Dimensions (mm)



Pin Connections

Key		Description
1	RDY	DC OK output for relay (not connected except 24V model)
2	+	Positive output terminal
3	+	Positive output terminal
4	-	Negative output terminal
5	-	Negative output terminal
6		Ground this terminal to minimise high-frequency emissions
7	N	Input terminals (neutral conductor, no polarity at DC input)
8	L	Input terminals (phase conductor, no polarity at DC input)
	Vout ADJ.	Trimmer potentiometer for Vout adjustment
	DC ON	Operation indicator LED

Derating



Installation

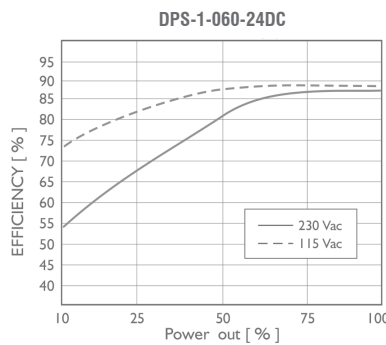
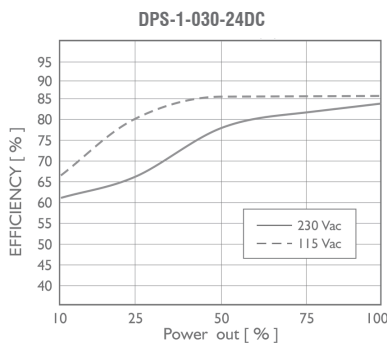
Ventilation / Cooling
Normal convection
All sides 25mm free space
For cooling recommended

Connector Size Range
AWG26-12 (0.2 ~ 2.5mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 5 pound-inches
- 4-5 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

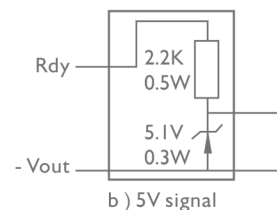
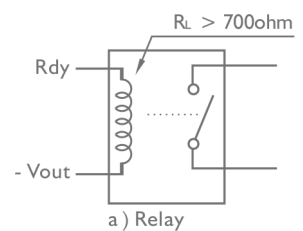
Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

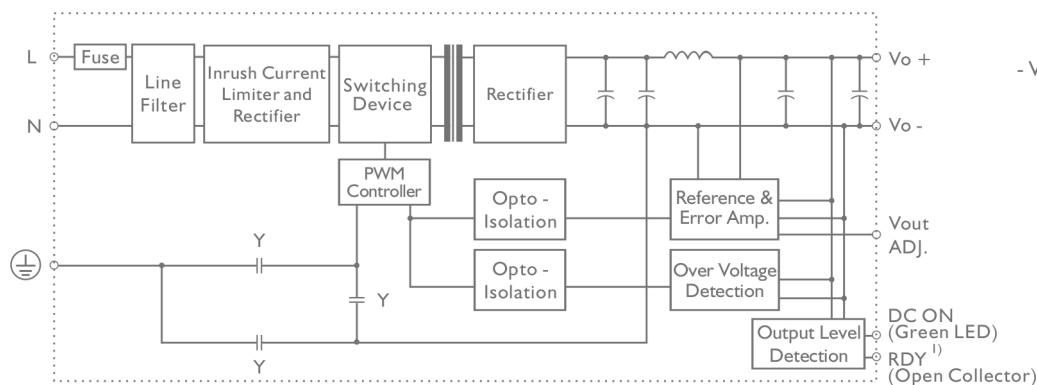
Typ. Efficiency Curve



Rdy Connection



Circuit Schematic



DPS Series 100W AC-DC DIN Rail Power Supplies



Key Features

- 12, 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



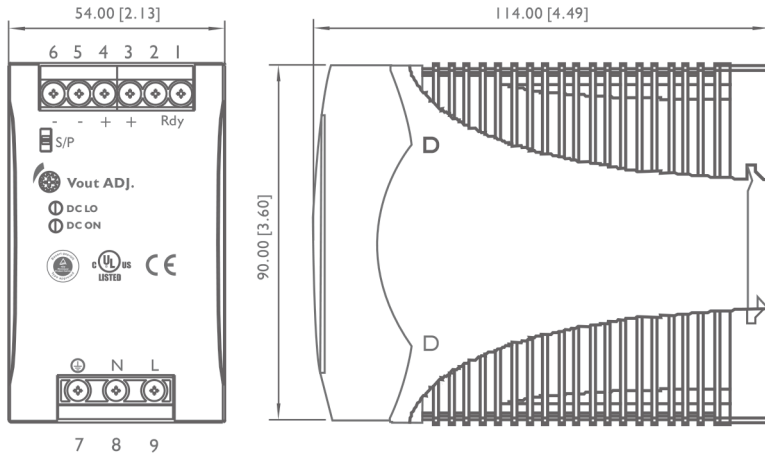
Technical Specification - 100W Output

Model	DPS-1-100-12DC	DPS-1-100-24DC	DPS-1-100-48DC
Input Voltage	90-264VAC / 120-375VDC		
Output Wattage	100W		
Output Voltage / Power Dissipation	12VDC / 18.5W	24VDC / 15W	48VDC / 14W
Output Current	8.4A	4.2A	2.1A
Efficiency (min/typ)	82/84%	84/86%	86/88%
General Specification			
Approval	cURus		
Isolation Voltage	3000VAC/4242VDC		
Isolation Resistance	100MΩ @ 500VDC		
Ambient Temperature	-35 to +71°C		
Derating	(61 to 71°C) 2.5%/°C		
Storage Temperature	-40 to +85°C		
Relative Humidity	20 to 95% RH		
Cooling	Free air convection		
Dimensions	L90 x W54 x D114 mm		
Weight	430g		
Case Material	Metal		
Input Specifications			
Rated Input Voltage	115 ~ 230VAC (auto select)		
Input Voltage Range	90 to 264VAC, 210 to 375VDC		
Line Frequency	47 ~ 63Hz		
Power Factor @ 115VAC	0.55 Typical (0.57 Measured)		
Power Factor @ 230VAC	0.55 Typical (0.54 Measured)		
Inrush Current (115 / 230VAC)	30 / 60A		
Output Specifications			
Output Voltage Accuracy	+1%		
Minimum Load	0%		
Line Regulation	±1%		
Load Regulation	±1%		
Turn On Time	1000ms after AC applied to input at full resistive load		
Voltage Fall Time	150ms		
Voltage Rise Time	150ms		
Hold Up Time (115 / 230VAC)	15 / 30ms		
Temperature Coefficient	±0.03%/°C		
Ripple & Noise	50mV		
Voltage Trim Range	11.4 ~ 14.5VDC	22.5 ~ 28.5VDC	47 ~ 55VDC
DC ON & LOW Indicator (Green & Red LED)	10 ~ 11.2VDC	17.6 ~ 19.4VDC	37 ~ 43VDC
Control & Protection			
Rated Overload Protection	110 ~ 140%		
Over Voltage Protection	15 ~ 16.5VDC	30 ~ 33VDC	60 ~ 66VDC
Output Short Circuit	Fold Forward		

DPS Series 100W AC-DC DIN Rail Power Supplies



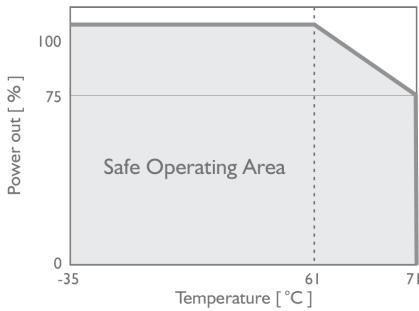
Dimensions (mm)



Pin Connections

Key		Description
1, 2	RDY	DC OK output for relay (24V model only)
3,4	V+	Positive output terminal
5,6	V-	Negative output terminal
7		Ground this terminal to minimise high-frequency emissions
8	N	Input terminals (neutral conductor, no polarity at DC input)
9	L	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

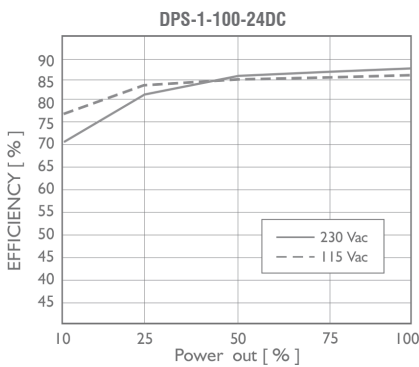
Connector Size Range

AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

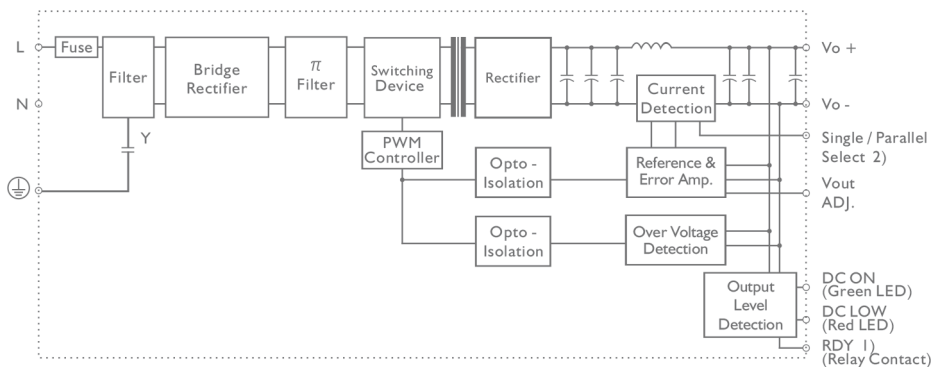
Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

Typ. Efficiency Curve



Circuit Schematic



DPS Series 120W AC-DC DIN Rail Power Supplies



Key Features

- 12, 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



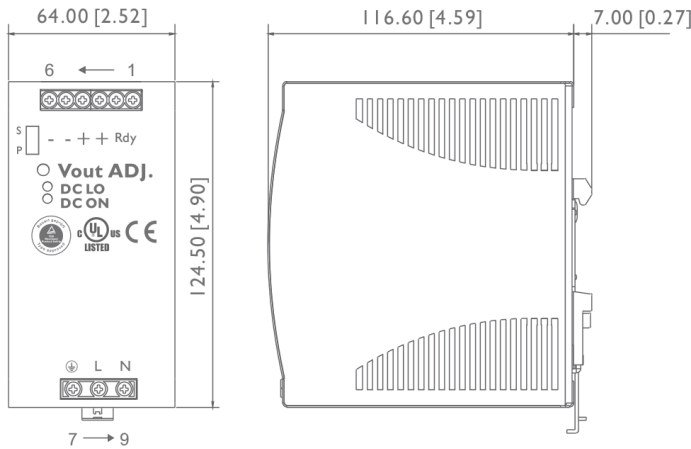
Technical Specification - 120W Output

Model	DPS-1-120-12DC	DPS-1-120-24DC	DPS-1-120-48DC
Input Voltage	90-264VAC / 120-375VDC		
Output Wattage	120W		
Output Voltage / Power Dissipation	12VDC / 24W	24VDC / 20W	48VDC / 19W
Output Current	10A	5A	2.5A
Efficiency (min/typ)	82/84%	84/86%	85/87%
General Specification			
Approval	cURus		
Isolation Voltage	3000VAC/4242VDC		
Isolation Resistance	100MΩ @ 500VDC		
Ambient Temperature	-35 to +71°C		
Derating	(61 to 71°C) 2.5%/°C		
Storage Temperature	-40 to +85°C		
Relative Humidity	20 to 95% RH		
Cooling	Free air convection		
Dimensions	L124.5 x W64 x D123.6 mm		
Weight	920g		
Case Material	Metal		
Input Specifications			
Rated Input Voltage	115 ~ 230VAC (auto select)		
Input Voltage Range	90 to 264VAC, 210 to 375VDC		
Line Frequency	47 ~ 63Hz		
Power Factor @ 115VAC	0.55 Typical (0.58 Measured)		
Power Factor @ 230VAC	0.70 Typical (0.75 Measured)		
Inrush Current (115 / 230VAC)	24 / 48A		
Output Specifications			
Output Voltage Accuracy	+1%		
Minimum Load	0%		
Line Regulation	±0.5%		
Load Regulation	±1%		
Turn On Time	1000ms after AC applied to input at full resistive load		
Voltage Fall Time	150ms		
Voltage Rise Time	150ms		
Hold Up Time (115 / 230VAC)	25 / 30ms		
Temperature Coefficient	±0.03%/°C		
Ripple & Noise	50mV		
Voltage Trim Range	11.4 ~ 14.5VDC	22.5 ~ 28.5VDC	45 ~ 55VDC
DC ON & LOW Indicator (Green & Red LED)	10 ~ 11.2VDC	17.6 ~ 19.4VDC	37 ~ 43VDC
Control & Protection			
Rated Overload Protection	110 ~ 145%		
Over Voltage Protection	15 ~ 16.8VDC	30 ~ 33VDC	60 ~ 66VDC
Output Short Circuit	Fold Forward		

DPS Series 120W AC-DC DIN Rail Power Supplies



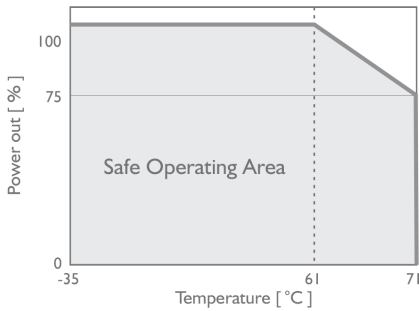
Dimensions (mm)



Pin Connections

Key		Description
1, 2	RDY	DC OK output for relay (24V model only)
3,4	V+	Positive output terminal
5,6	V-	Negative output terminal
7		Ground this terminal to minimise high-frequency emissions
8	L	Input terminals (phase conductor, no polarity at DC input)
9	N	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

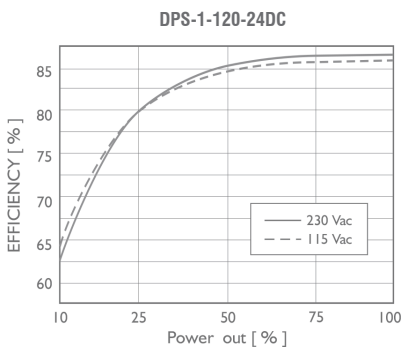
Connector Size Range

AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

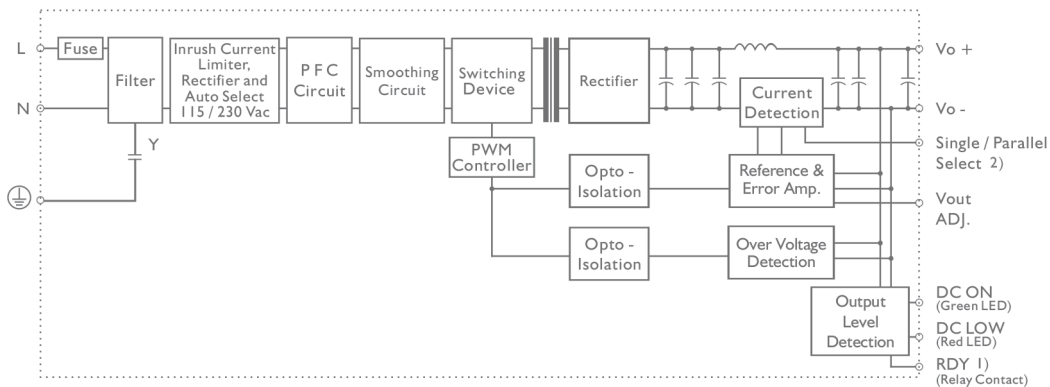
Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

Typ. Efficiency Curve



Circuit Schematic



DPS Series 240W to 300W AC-DC DIN Rail Power Supplies



Key Features

- 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



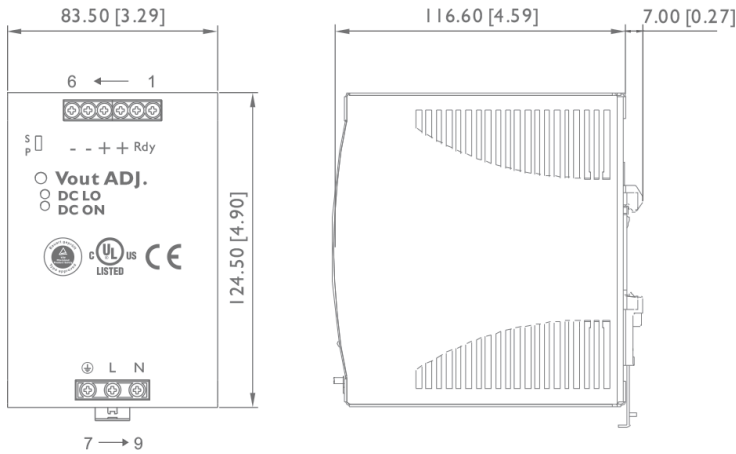
Technical Specification - 240W & 300W Output

Model	DPS-1-240-24DC	DPS-1-300-24DC*	DPS-1-240-48DC	DPS-1-300-48DC*
Input Voltage	90-264VAC / 120-375VDC			
Output Wattage	240W	300W	240W	300W
Output Voltage / Power Dissipation	24VDC / 35W	24VDC / 42W	48VDC / 32W	48VDC / 40W
Output Current	10A	12.5A	5A	6.5A
Efficiency (min/typ)	87/89%	87/89%	88/90%	88/90%
General Specification				
Approval	cURus			
Isolation Voltage	3000VAC/4242VDC			
Isolation Resistance	100MΩ @ 500VDC			
Ambient Temperature	-40 to +71°C	-30 to +71°C	-40 to +71°C	-30 to +71°C
Derating	(61 to 71°C) 2.5%/°C			
Storage Temperature	-40 to +85°C			
Relative Humidity	20 to 95% RH			
Cooling	Free air convection			
Dimensions	L124.5 x W83.5 x D123.6 mm			
Weight	1380g	1400g	1380g	1400g
Case Material	Metal			
Input Specifications				
Rated Input Voltage	115 ~ 230VAC			
Input Voltage Range	90 to 264VAC, 210 to 375VDC			
Line Frequency	47 ~ 63Hz			
Power Factor @ 115VAC	0.6 Typical (0.61 Measured)			
Power Factor @ 230VAC	0.75 Typical (0.77 Measured)			
Inrush Current (115 / 230VAC)	30 / 60A	35 / 65A	30 / 60A	35 / 65A
Output Specifications				
Output Voltage Accuracy	+1%			
Minimum Load	0%			
Line Regulation	±0.5%			
Load Regulation	±1%			
Turn On Time	1000ms after AC applied to input at full resistive load			
Voltage Fall Time	150ms			
Voltage Rise Time	150ms			
Hold Up Time (115 / 230VAC)	25 / 30ms			
Temperature Coefficient	±0.03%/°C			
Ripple & Noise	100mV			
Voltage Trim Range	22.5 ~ 28.5VDC		47 ~ 56VDC	
DC ON & LOW Indicator (Green & Red LED)	17.6 ~ 19.4VDC		37 ~ 43VDC	
Control & Protection				
Rated Overload Protection	120 ~ 145%			
Over Voltage Protection	30 ~ 33VDC		60 ~ 66VDC	
Output Short Circuit	Fold Forward			

DPS Series 240W to 300W AC-DC DIN Rail Power Supplies



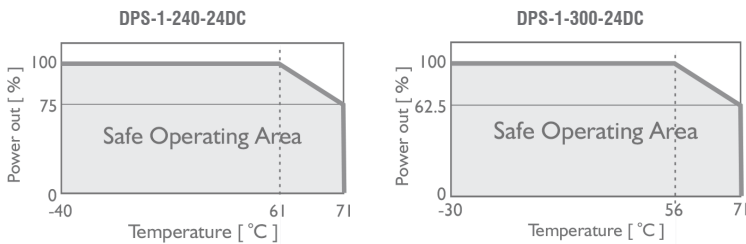
Dimensions (mm)



Pin Connections

Key		Description
1, 2	RDY	DC OK output for relay (24V model only)
3,4	V+	Positive output terminal
5,6	V-	Negative output terminal
7		Ground this terminal to minimise high-frequency emissions
8	L	Input terminals (phase conductor, no polarity at DC input)
9	N	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

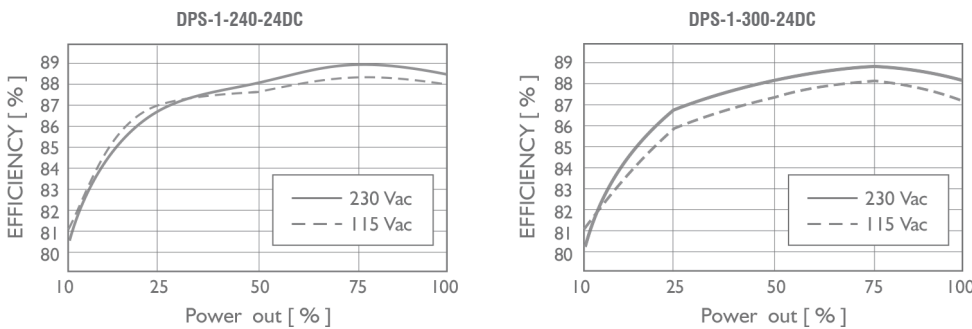
Ventilation / Cooling
Normal convection
All sides 25mm free space
For cooling recommended

Connector Size Range
AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

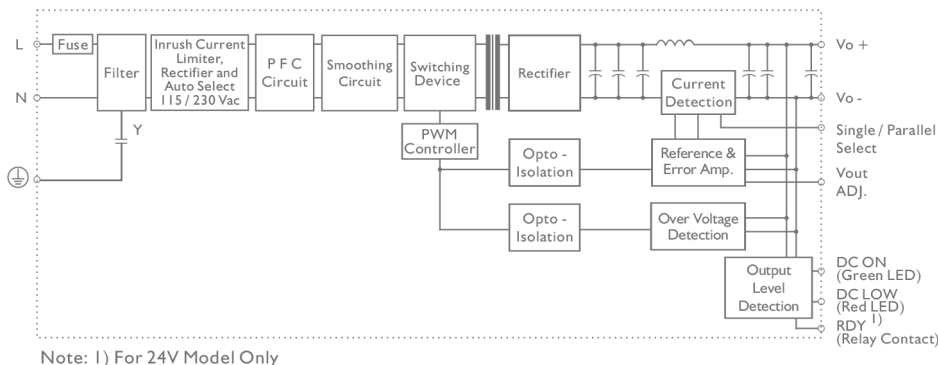
Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

Typ. Efficiency Curve



Circuit Schematic



DPS Series 480W AC-DC DIN Rail Power Supplies



Key Features

- 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



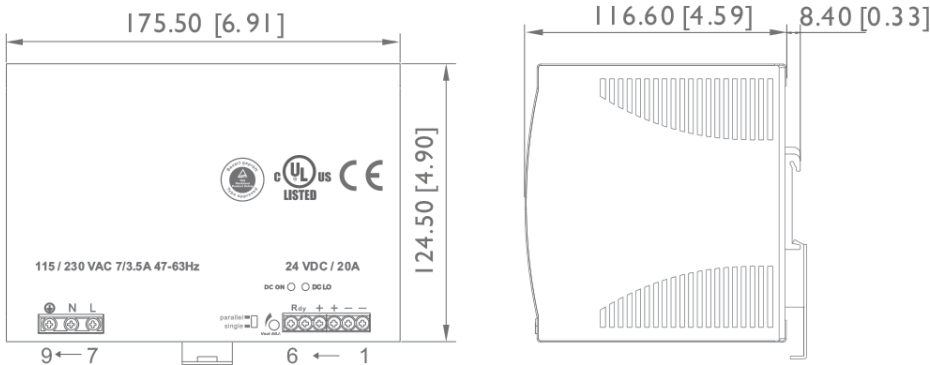
Technical Specification - 480W Output

Model	DPS-1-480-24DC	DPS-1-480-48DC
Input Voltage	90-264VAC / 120-375VDC	
Output Wattage	480W	
Output Voltage / Power Dissipation	24VDC / 63W	48VDC / 60W
Output Current	20A	10A
Efficiency (min/typ)	86/89%	87/90%
General Specification		
Approval	cURus	
Isolation Voltage	3000VAC/4242VDC	
Isolation Resistance	100MΩ @ 500VDC	
Ambient Temperature	-40 to +71°C	
Derating	(56 to 71°C) 2.5%/°C	
Storage Temperature	-40 to +85°C	
Relative Humidity	20 to 95% RH	
Cooling	Free air convection	
Dimensions	L124.5 x W175.5 x D123.6 mm	
Weight	1920g	
Case Material	Metal	
Input Specifications		
Rated Input Voltage	115 ~ 230VAC	
Input Voltage Range	90 to 264VAC, 120 to 375VDC	
Line Frequency	47 ~ 63Hz	
Power Factor @ 115VAC	0.99 Typical (0.99 Measured)	
Power Factor @ 230VAC	0.97 Typical (0.97 Measured)	
Inrush Current (115 / 230VAC)	25 / 50A	
Output Specifications		
Output Voltage Accuracy	+1%	
Minimum Load	0%	
Line Regulation	±0.5%	
Load Regulation	±1%	
Turn On Time	1000ms after AC applied to input at full resistive load	
Voltage Fall Time	150ms	
Voltage Rise Time	150ms	
Hold Up Time (115 / 230VAC)	25 / 30ms	
Temperature Coefficient	±0.03%/°C	
Ripple & Noise	100mV	
Voltage Trim Range	22.5 ~ 28.5VDC	47 ~ 56VDC
DC ON & LOW Indicator (Green & Red LED)	17.6 ~ 19.4VDC	37 ~ 43VDC
Control & Protection		
Rated Overload Protection	110 ~ 140%	
Over Voltage Protection	30 ~ 33VDC	60 ~ 66VDC
Output Short Circuit	Fold Forward	

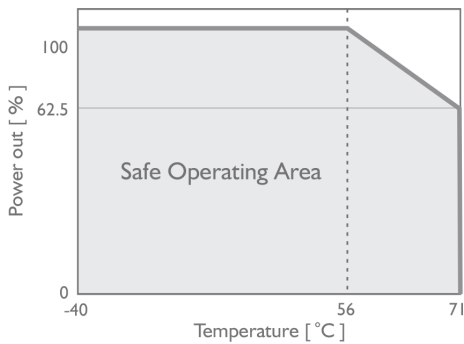
DPS Series 480W AC-DC DIN Rail Power Supplies



Dimensions (mm)



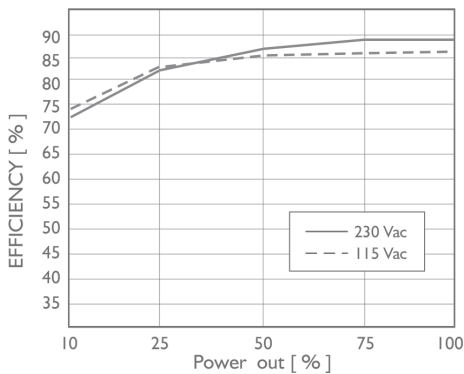
Derating



Pin Connections

Key		Description
1, 2	V -	Negative output terminal
3, 4	V +	Positive output terminal
5, 6	RDY	DC OK output for relay (24V model only)
7	L	Input terminals (phase conductor, no polarity at DC input)
8	N	Input terminals (neutral conductor, no polarity at DC input)
9		Ground this terminal to minimise high-frequency emissions
	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

Typ. Efficiency Curve



Installation

Ventilation / Cooling

Normal convection
All sides 25mm free space
For cooling recommended

Connector Size Range

AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

Circuit Schematic

