





Meanwell Power Supplies



ORDER NUMBER	MDR 20-24	DR 45-24	DR 75-24	DRT-240-24	
Type					
Output	DC Voltage	24V	24V	24V	24V
	Rated Current	1A	2A	3.2A	10A
	Current Range	0~1A	0~2A	0~3.2A	0~10A
	Rated Power	24W	48W	76.8W	240W
	Ripple & Noise (max.) Note.2	150mVp-p	480mVp-p	150mVp-p	80mVp-p
	Voltage Adj. Range	21.6~26.4V	21.6~26.4V	24~28V	24~28V
	Voltage Tolerance Note.3	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	Line Regulation	± 1.0%	± 1.0%	± 0.5%	± 0.5%
Load Regulation	± 1.0%	± 1.0%	± 1.0%	± 0.5%	
Input	Voltage Range	85 - 264VAC 120 to 370VDC	85 - 264VAC 120 to 370VDC	85-264VAC 120~370VDC	Three-phase 340-550VAC
	Frequency Range	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz
	Efficiency (Typ.)	84%	80%	80%	89%
	AC Current (Typ.)	0.55A/115VAC 0.35A/230VAC	1.5A/115VAC 0.75A/230VAC	1.6A/115V 0.96A/230V	0.95A/400VAC, 0.75A/500VAC
	Inrush Current (Typ.)	Cold Start 20A/115VAC 40A/230VAC	Cold Start 28A/115VAC 56A/230VAC	Cold Start 20A/115VAC 40A/230VAC	Cold Start 50A maximum
	Leakage Current	<1mA/240VAC	<1mA / 240VAC	<1mA/240VAC	<3.5mA/530VAC
Protection	Over Load	105 -160% rated output power	104 -150%	105-150% rated output power	105-150% rated output power
	Over Voltage	Protection type: Constant current limiting, recovers automatically after fault condition is removed. Protection type: Shut down o/p voltage, re-power on to recover	27.6 ~32.4V	29~34V	30~36V
Environment	Working Temp.	-20°C +70°C (Refer to output -18°C +50°C load derating curve)		-10°C +60°C (Refer to output load derating curve)	-20°C +70°C (Refer to output load derating curve)
	Working Humidity	20 - 90% RH non-condensing			
	Storage Temp., Humidity	-40°C to +85°C, 10 - 95% RH		-40°C to +85°C, 10 - 95% RH	
	Temp. Coefficient	0.03%/°C (0~50°C)		0.03%/°C (0 to 50°C)	
	Vibration	Component:10 to 500Hz, 2G 10min./1cycle, 60min, each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		—	10~500Hz, 2G 10 min./1cycle, 60 min. each along X, Y, X axes
Safety & EMC (Note 4)	Safety Standards	UL508, TUV EN 609500-1 approved		UL508, UL60950-1, TUV EN60950-1 Approved	
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC		I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC		I/P-O/P, I/P-FG, O/P-FG:100M OHMS/500VDC	
	EMI Conduction & Radiation	Compliance to EN55011, EN 55022 (CISPR22) Class B		Compliance to EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B	
	Harmonic Current	Compliance to EN61000-3-2, -3		Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61204-3, EN61000-6-2 9EN50082-2) Heavy industry level, criteria A	
EMS Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-1, EN61204-3 Light industry level, criteria A				
Others	MTBF	236.9K hrs min. MIL-HDBK-217F (25°C)	364.6K hrs min. MIL-HDBK-217F (25°C)	123.1K hrs min. MIL-HDBK-217F (25°C)	114.6Khrs min. MIL-HDBK-217F (25°C)
	Dimension	22.5 x 90 x 100mm	93 x 78 x 67mm	55.5 x 125.2 x 100mm	125.5 x 125.2 x 100mm
	Packing	0.19Kg; 72pcs/14.7Kg/0.91CUFT	0.31Kg; 48 pcs/16.1Kg/1.3CUFT	0.6Kg; 20pcs/13kg/1.1CUFT	1.3Kg; 12 pcs/16.6Kg/1.34CUFT
Noted	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance includes set up tolerance, line regulation and load regulation. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 				

Wipos Power Supplies (Single Phase)

	PS1 24-1.25	PS1 24-2.5	PS1 24-3.8	PS1 24-5	PS1 24-10	PS1 24-20
						
Part Number	P1 24-1.25	P1 24-2.5	P1 24-3.8	P1 24-5	P1 24-10	P1 24-20
Input voltage	85 – 264 V AC, 90 – 375 V DC		115/230 V AC auto, 210 – 375 V DC		115/230 V AC auto, 210 – 375 V DC	115/230 V AC auto, 120 – 370 V DC
PFC	Not necessary		Yes		Yes	
Hold up time	> 30 ms at 230 V		> 30 ms at 230 V		> 30 ms at 230 V	
Output voltage	24 – 28 V		22.5 – 24.5 V	22.5 – 28.5 V	22.5 – 28.5 V	
Output current	1.25 A	2.5 A	3.8 A	5 A	10 A	20 A
Parallel operation	No		No	Yes (up to 3)	Yes (up to 3)	
In series connectable	Yes		Yes		Yes	
Temperature range	-40°C to +70°C		-35°C to +70°C		-40°C to +70°C	
Derating	> 60°C		> 60°C		> 60°C	> 55°C
Signal contact	Yes		Yes		Yes	
Dimensions (mm) W x H x D	32 x 90 x 90		40 x 125 x 122.2		60 x 125 x 150	95 x 125 x 150
Weight	290 g	360 g	920 g		1300 g	1920 g
Type of connectors	Screw terminal		Screw terminal		Screw terminal	
Connector size	0.2 – 2.5 mm ²		0.5 – 6 mm ²		0.5 – 6 mm ²	
Efficiency	83 – 86 %	86 – 89 %	83 – 85 %	84 – 86 %	87 – 89 %	86 – 89 %
Approvals	CE  UL 1310 Class 2, Class I Div.2		CE  Class 1, Div.2		CE  Class 1, Div.2	
Order Number	81.000.6510.0	81.000.6520.0	81.000.6535.0	81.000.6530.0	81.000.6540.0	81.000.6550.0

Benefits & Features

- 100 % power up to 60°C
- Automatic or wide-input voltage range for worldwide use
- PFC-technology for high functional reliability
- Outdoor installation possible due to wide temperature range
- Active monitoring with signalling contact
- Can be connected in parallel (from 5 A) to increase power and redundancy
- High operational reliability due to long hold-up times >30 ms
- Compensation of voltage drops via adjustable output voltage
- Easy to commission via LED diagnosis

Wipos Power Supplies (Three Phase)

	PS3 24-5	PS3 24-10	PS3 24-20	PS3 24-40
				
Part Number	P3 24-5	P3 24-10	P3 24-20	P3 24-40
Input voltage	340 – 575 V AC, 480 – 820 V DC		340 – 575 V AC, 480 – 820 V DC	340 – 575 V AC, 480 – 820 V DC
PFC	yes (0.55)	yes (0.6)	yes (0.7)	yes (0.7)
Hold up time	20 ms		20 ms	15 ms
Output voltage	22.5 – 28.5 V		22.5 – 28.5 V	22.5 – 28.5 V
Output current	5 A	10 A	20 A	40 A
Parallel operation	yes (up to 2)		Yes (up to 2)	Yes (up to 2)
In series connectable	yes		Yes	Yes
Temperature range	-40°C to +70 °C		-30°C to +70 °C	-40°C to +70 °C
Derating	> 60°C		> 60°C	> 60°C
Signal contact	Yes		Yes	Yes
Dimensions (mm) W x H x D	40 x 125 x 122.2	40 x 125 x 150	95 x 125 x 150	135 x 125 x 180
Weight	800 g	1100 g	1750 g	3200 g
Type of connectors	Screw terminal		Screw terminal	Screw terminal
Connector size	to 6 mm ²		to 6 mm ²	to 6 mm ² / output to 16 mm ²
Efficiency	88 – 90 %	86 – 89 %	88 – 90%	90 – 92 %
Approvals	CE  UL 1310 Class 2, Class I Div.2		CE  Class 1, Div.2	CE  Class 1, Div.2
Order Number	81.000.6560.0	81.000.6570.0	81.000.6580.0	81.000.6590.0