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DIN SERIES

20W-60W Slim Type Single Output Models
30W-100W Slim Shape Class II Models
45W-480W Single Phase Models
120W-960W High Input Voltage Models
Redundancy and DC UPS Modules



Current Automation
POWER SOLUTION PROVIDERS

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120~480W Wide Input Range



120W Series (WDR-120)

Model	Output	Tol.	R&N	Efficiency
WDR-120-12	12V, 0-10A	±1.5%	120mV	89.5%
MDR-120-24	24V, 0-5A	±1.0%	120mV	91.0%
MDR-120-48	48V, 0-2.5A	±1.0%	150mV	92.0%

Features

- Single and two phase wide input
- Build-in active PFC
- UL508 approved

240W Series (WDR-240)

Model	Output	Tol.	R&N	Efficiency
WDR-240-24	24V, 0-10A	±1.0%	100mV	90%
WDR-240-48	48V, 0-5A	±1.0%	120mV	90%

480W Series (WDR-480)

Model	Output	Tol.	R&N	Efficiency
WDR-480-24	24V, 0-20A	±1.0%	100mV	92%
WDR-480-48	48V, 0-10A	±1.0%	150mV	93%

General specifications

Model no.		WRD-120	WRD-240	WRD-480
AC input voltage range		180-550VAC (single and two phase); 254-780VDC		
DC adjustment range		12V: 12-15V, 24V: 24-29V, 48V: 48-58V	24V: 24-28V, 48V: 48-55V	
Overload protection	Range	100°C ± 5°C (TSW1: detect on heatsink of power switch)	105°C ± 5°C	95°C ± 5°C
	Type	Shut down output voltage, recovers automatically after temperature goes down		
Working temperature		-25 – +70°C (Refer to output derating curve)	-30 – +70°C (Refer to output derating curve)	
DC OK signal		Relay contact		



120W Series (SDR-120)

Model	Output	Tol.	R&N	Efficiency
SDR-120-12	12V, 0-10A	±1.0%	100mV	89.0%
SDR-120-24	24V, 0-5A	±1.0%	100mV	91.0%
SDR-120-48	48V, 0-2.5A	±1.0%	120mV	90.5%

Features

- High efficiency up to 94% (SDR-240/480)
- Universal AC input/full range
- Cooling by free air convection
- 150% peak load capability

240W Series (SDR-240)

Model	Output	Tol.	R&N	Efficiency
SDR-240-24	24V, 0-10A	±1.0%	100mV	94%
SDR-240-48	48V, 0-5A	±1.0%	120mV	94%

480W Series (SDR-480)

Model	Output	Tol.	R&N	Efficiency
SDR-480-24	24V, 0-20A	±1.2%	100mV	94%
SDR-480-48	48V, 0-10A	±1.0%	150mV	94%

General specifications

Model no.		SDR-120	SDR-240	SDR-480
AC input voltage range		88-264VAC; 124-370VDC		90-264VAC; 127-370VDC
DC adjustment range		12V: 12-14V (only for SDR-120), 24V: 24-28V, 48-55V		
Overload protection		> 150% rated power or short circuit, constant current limiting with outp-recovery within 2 seconds and may cause to shut down if over 2 seconds		
Over voltage protection	Range	14-17V for 12V model (SDR-120 only), 29-33V model, 56-65V for 48V model		
	Type	Shut down o/p voltage, re-power on to recover		Shut down o/p voltage with auto-recovery
Working temperature		-25 – +70°C (Refer to output derating curve)		
EMC standards		Compliance to EN55022 Class B, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, SEMI F47, GL		

20W ~ 60W Slim Type Single Output Models



20W Series (MDR-20)

Model	Output	Tol.	R&N	Efficiency
MDR-20-5	5V, 0-3.00A	±2%	80mV	76%
MDR-20-12	12V, 0-1.67A	±1%	120mV	80%
MDR-20-15	15V, 0-1.3A	±1%	120mV	81%
MDR-20-24	24V, 0-1.00A	±1%	150mV	84%

Features

- Universal AC input/ Full range
- No load power consumption <0.75W
- Protections: Short circuit/overload/over voltage
- LED indicator for power on

40W Series (MDR-40)

Model	Output	Tol.	R&N	Efficiency
MDR-40-5	5V, 0-6.00A	±2%	80mV	78%
MDR-40-12	12V, 0-3.33A	±1%	120mV	86%
MDR-40-24	24V, 0-1.70A	±1%	150mV	88%
MDR-40-48	48V, 0-0.83A	±1%	200mV	88%

60W Series (MDR-60)

Model	Output	Tol.	R&N	Efficiency
MDR-60-5	5V, 0-10.0A	±2%	80mV	78%
MDR-60-12	12V, 0-5.00A	±1%	120mV	86%
MDR-60-24	24V, 0-2.50A	±1%	150mV	88%
MDR-60-48	48V, 0-1.25A	±1%	200mV	87%

General specifications

Model no.	MDR-20	MDR-40	MDR-60
AC input voltage range	85-264VAC; 120-370VDC		
DC adjustment range	±10% rated output voltage	0 - +20% rated output voltage	
Overload protection	105% - 160% constant current limiting, auto-recovery	105% - 150% constant current limiting, auto-recovery	
Working temperature	-20 - 50°C@100%, 70°C@50% load	-20 - 60°C@100%, 70°C@60% load	-20 - 55°C@100%, 70°C@60% load)5V only; -20 - 45°C@100%, 70°C@50% load)
DC OK signal	Open collector	Relay contact	

30W ~ 100W Step Shape Class II Models



30W Series (DR-30)

Model	Output	Tol.	R&N	Efficiency
DR-30-5	5V, 0-3.0A	±2%	80mV	74%
DR-30-12	12V, 0-2.0A	±1%	120mV	81%
DR-30-15	15V, 0-2.0A	±1%	120mV	82%
DR-30-24	24V, 0-1.5A	±1%	150mV	83%

Features

- Universal AC input/ Full range
- Short circuit/overload/over voltage /over temperature (100W)
- Installed on DIN rail TS-35/7.5 or 15
- Isolation Class II
- 100% full load burn-in test

60W Series (DR-60)

Model	Output	Tol.	R&N	Efficiency
DR-60-5	5V, 0-6.5A	±2%	80mV	76%
DR-60-12	12V, 0-4.5A	±1%	120mV	82%
DR-60-15	15V, 0-4.0A	±1%	120mV	83%
DR-60-24	24V, 0-2.5A	±1%	150mV	84%

100W Series (DR-100)

Model	Output	Tol.	R&N	Efficiency
DR-100-12	12V, 0-7.5A	±1%	120mV	84%
DR-100-15	24V, 0-6.5A	±1%	120mV	85%
DR-100-24	48V, 0-4.2A	±1%	150mV	86%

General specifications

Model no.	DR-30	DR-60	DR-100
AC input voltage range	85-264VAC; 120-370VDC	88 - 264VAC; 124 - 370VDC	
DC adjustment range	±10%	±10%	12V: 12 - 15V 15V: 15 - 18V, 24V: 24 - 29V
Overload protection	105 - 160% constant current limiting, auto-recovery		105 - 135% constant current limiting, auto recovery
Working temperature	-20 - +60°C (please refer to output derating curves)		
Safety standards	UL60950-1, TUV EN60950-1 approved		
EMC standards	EN55022 class B, EN61000-3-2-3, ENV50204, EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61204-3 EN61000-6-2 heavy industry level		
Connection	I/P: 2 poles, O/P: 4 poles screw DIN terminal		

45W ~ 480W Single Phase



45W Series (DR-45)

Model	Output	Tol.	R&N	Efficiency
DR-4505	5V, 0-5.0A	±2%	80mV	74%
DR-4512	12V, 0-3.5A	±1%	120mV	81%
DR-4515	15V, 0-2.8A	±1%	120mV	82%
DR-4524	24V, 0-2.0A	±1%	150mV	83%

75W Series (DR-75)

Model	Output	Tol.	R&N	Efficiency
DR-75-12	12V, 0-6.3A	±2%	100mV	76%
DR-75-24	24V, 0-3.2A	±1%	150mV	80%
DR-75-48	48V, 0-1.6A	±1%	240mV	81%

120W Series (DR-120)

Model	Output	Tol.	R&N	Efficiency
DR-120-12	12V, 0-10A	±2%	80mV	80%
DR-120-24	24V, 0-5.0A	±1%	80mV	84%
DR-120-48	48V, 0-2.5A	±1%	100mV	85%

240W Series (DRP-240)

Model	Output	Tol.	R&N	Efficiency
DRP-240-24	24V, 0-10A	±1%	80mV	84%
DRP-240-48	48V, 0-5.0A	±1%	150mV	85%

480W Series (DRP-480/DRP-480S)

Model	Output	Tol.	R&N	Efficiency
DRP-480-24	24V, 0-20A	±1%	120mV	89%
DRP-480-48	48V, 0-10A	±1%	120mV	89%
DRP-480S-24	24V, 0-20A	±1%	120mV	89%
DRP-480S-48	48V, 0-10A	±1%	120mV	89%

Features

- Universal AC input/full range (DR-45/75, DRP-240) AC input 180 - 264V only (DRP-480)
- Build-in active PFC function, PF>0.95 (DRP-240)
- Build-in passive PFC function
- Protections: Short circuit/overload/over voltage/over temperature
- Cooling by free air convection

General specifications

Model no.	DR-45	DR-75	DR-120	DRP-240	DRP-480	DRP-480S
AC input voltage range	85-264VAC (DR-45/75, DRP-240); 90-132/180-264 VAC selectable by switch (DR-120, DRP-120S) 180 - 264VAC only (DRP-480)					
DC adjustment range	±10%		12V: 12 ~ 14V, 24V: 24~28V, 48V: 48~53V			
Overload protection	105 - 150% constant current limiting, auto-recovery					
Over voltage protection	Range	115% - 142% rated output voltage		30-36V for 24V model, 54-60V for 48V model		
	Type	Shut off, AC recycle to re-start (DR-75: hiccup mode, auto recovery)				
Working temperature	-10 - +50°C	-10 - +60°C		-10 - +70°C	-20 - +70°C	
EMC standards	EN55022 class B, EN61000-3-2,3, ENV50204, EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61000-6-2 heavy industry level					

120W ~ 960W High Input Voltage & 3 Phase



120W Series (DRH-120)

Model	Output	Tol.	R&N	Efficiency
DRH-120-24	24V, 0-5.0A	±1%	80mV	85%
DRH-120-48	48V, 0-2.5A	±1%	80mV	86%

240W Series (DRT-240)

Model	Output	Tol.	R&N	Efficiency
DRT-240-24	24V, 0-10A	±1%	80mV	89%
DRT-240-48	48V, 0-5.0A	±1%	80mV	89%

480W Series (DRT-480)

Model	Output	Tol.	R&N	Efficiency
DRT-480-24	24V, 0-20A	±2%	80mV	890%
DRT-480-48	48V, 0-10A	±1%	80mV	90%

960W Series (DRT-960)

Model	Output	Tol.	R&N	Efficiency
DRT-960-24	24V, 0-40A	±1%	80mV	91%
DRT-960-48	48V, 0-20A	±1%	80mV	92%

Features

- Input 340-550VAC, 3-phase 4 wires (single phase for 120W)
- High efficiency and low dissipation
- Protections: Short circuit/overload/over voltage/over temperature
- Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- Optional parallel function (1 + 1) (960W only)

General specifications

Model no.	DRH-120	DRT-240	DRT-480	DRT-960
AC input voltage range	340-550 VAC, single phase	340-550 VAC, 3-phase 4 wires (dual-phase operation possible)		
DC adjustment range	24V: 24-28V, 48V: 48-55V			
Overload protection	105 - 160% rated output power; Constant current limiting, auto recovery		105 - 150% rated output power; Constant current limiting, auto recovery	
			105 - 125% constant current limiting, delay shut off after 3 sec.	
Over voltage protection	Range	24V: 30-36V, 48V: 59-66V		125 - 155% rated output voltage
	Type	Shut off, AC recycle to re-start		
Working temperature	-20 - +60°C	-20 - +70°C		-20 - +60°C
EMC standards	EN55022 class B, EN61000-3-2,3, ENV50204, EN61000-4-2,3,4,5,6,8,11, EN61204-3, EN61000-6-2 heavy industry level			

Please refer to www.rectifier.co.za for detailed specifications.

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