

NDR-480-48 NDR-240-48 NDR-120-24 NDR-120-48
 DR-120-24 MDR-40-24 MDR-40-48 MDR-20-24



Having reliable and stable power for your industrial grade switches or converters is the best way to improve reliability and keep any down time to a minimum. CTC Union's safety certified AC to DC power supplies that are 100% compatible with all of our industrial grade switches and converters.

Features

- The series of industrial grade power supply have been fully tested with our industrial product for guaranteed compatibility and performance
- Universal AC input voltage range
- Protections: Short circuit / Overload / Over voltage/Over temperature
- Cooling by free air convection
- UL508, TUV, CB, CE safety approved
- Heavy industry grade EMS EN61000-6-2 approved
- 3 years warranty

Specifications

Model Name		NDR-480-48	NDR-240-48	NDR-120-24 & NDR-120-48
Output	Dc Voltage	48V	48V	24V / 48V
	Rated Current	10A	5A	5A / 2.5A
	Current Range	0~5A	0~5A	0~5A / 0~2.5A
	Rated Power	480W	240W	120W
	Output Voltage Adj. Range	48~55VDC	48~55VDC	24~28V / 48~55V
Input	Voltage Range	90 ~ 264VAC / 127 ~ 370VDC	90 ~ 264VAC / 127 ~ 370VDC	90~264VAC / 127~370VDC
	Frequency Range	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
	Efficiency (Typ.)	92.5%	90%	89%
Protection	Overload	105 ~ 130% rated output power Protection type : Constant current limiting, , unit will shut down after 3 sec, re-power on to recover	105 ~ 130% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	105 ~ 130% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	56 ~ 65V Protection type : Shut down o/p voltage, re-power on to recover	56 ~ 65V Protection type : Shut down o/p voltage, re-power on to recover	29 ~ 33V / 56~65V Protection type : Shut down o/p voltage, re-power on to recover
	Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down	Shut down o/p voltage, recovers automatically after temperature goes down	Shut down o/p voltage, re-power on to recover

Industrial SFP Transceiver

Model Name		NDR-480-48	NDR-240-48	NDR-120-24 & NDR-120-48
Indicator	LED	DC OK	DC OK	DC OK
Housing	Dimension	128.5 x 85.5 x 125.2mm (D x W x H)	113.5 x 63 x 125.2 mm (D x W x H)	113.5 x 40 x 125.2mm (D x W x H)
	Installation Mounting	DIN Rail	DIN Rail	DIN Rail
Environment	Working Temp	-20 ~ 70°C	-20 ~ 70°C	-20 ~ 70°C
	Working Humidity	20 ~ 95% RH non-condensing	20 ~ 95% RH non-condensing	20 ~ 95% RH non-condensing
	Storage Temp., Humidity	-40 ~ 85°C , 10 ~ 95% RH	-40 ~ 85°C , 10 ~ 95% RH	-40 ~ 85°C , 10 ~ 95% RH
	Vibration	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6
Safety & EMC	Safety Standards	UI508, TUV BS EN/EN62368-1	UI508, TUV BS EN/EN62368-1	UI508, TUV BS EN/EN62368-1
	Withstand Voltage	I/P-O/P:3KVAC, I/P-FG:2KVAC, O/P-FG: 0.5KVAC	I/P-O/P:3KVAC, I/P-FG:2KVAC, O/P-FG: 0.5KVAC	I/P-O/P:3KVAC, I/P-FG:2KVAC, O/P-FG: 0.5KVAC
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG >100M Ohm /500VD@25°C/ 70% RH	I/P-O/P, I/P-FG, O/P-FG >100M Ohm /500VD@25°C/ 70% RH	I/P-O/P, I/P-FG, O/P-FG >100M Ohm /500VD@25°C/ 70% RH
	EMC Emission	Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3	Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55035, EN61000-6-2, EN61204-3, heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55035, EN61000-6-2, EN61204-3, heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55035, EN61000-6-2, (EN50082-2), heavy industry level, criteria A
Others	PFC	PF>0.98/115VAC, PF>0.94/230VAC at full load	Built in Active PFC	
	MTBF	146.8K Hours MIL-HDBK-217F (25°C)	230.2K Hours MIL-HDBK-217F (25°C)	453.3K Hours MIL-HDBK-217F (25°C)
	Waranty	3 Years	3 Years	3 Years

Model Name		DR-120-24	MDR-40-24 & MDR-40-48	MDR-20-24
Output	Dc Voltage	24V	24V / 48V	24V
	Rated Current	5A	1.7A / 0.83A	1A
	Current Range	0~5A	0~1.5A / 0~0.83A	0~1A
	Rated Power	120W	39.8W	24W
	Output Voltage Adj. Range	24~28VDC	24~30V / 48~56VDC	21.6~26.4VDC
Input	Voltage Range	85 ~ 132VAC / 176~264VAC	85 ~ 264VAC / 120 ~ 370VDC	85 ~ 264VAC / 120 ~ 370VDC
	Frequency Range	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
	Efficiency (Typ.)	84%	88%	84%
Protection	Overload	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	105 ~ 160% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed
	Over Voltage	29 ~ 33V Protection type : Shut down o/p voltage, re-power on to recover	31.2 ~ 36V / 57.6~64.8V Protection type : Shut off o/p voltage, re-power on to recover	27.6~32.4V Protection type : Shut down o/p voltage, re-power on to recover
Alarm Relay	DC OK Relay		DC OK Relay will Close In Normal, Relay contact rating(max.) : 30V/1A resistive	DC OK Relay will Close In Normal, Relay contact rating(max.) : 30V/1A resistive
Indicator	LED		DC OK	DC OK
Housing	Dimension	100 x 65.5 x 125.2mm (D x W x H)	100 x 40 x 90mm (D x W x H)	100 x 22.5 x 90mm (D x W x H)
	Installation Mounting	DIN Rail	DIN Rail	DIN Rail
Environment	Working Temp	-10 ~ 60°C	-20 ~ 70°C	-20 ~ 70°C
	Working Humidity	20 ~ 90% RH non-condensing	20 ~ 90% RH non-condensing	20 ~ 90% RH non-condensing
	Storage Temp., Humidity	-20 ~ +85, 10 ~ 95% RH	-20 ~ 85°C , 10 ~ 95% RH	-40 ~ 85°C , 10 ~ 95% RH
	Vibration	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6	Compliance to IEC60068-2-6

Model Name	DR-120-24	MDR-40-24 & MDR-40-48	MDR-20-24	
Safety & EMC	Safety Standards	UL508, UL60950-1, TUV EN60950-1 approved	UL508, UL62368-1, TUV EN62368-1, Class I, Div. 2 Group A, B, C, D Hazardous Locations T4	UL508, TUV EN62368-1
	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:2KVAC, O/P-FG:0.5KVAC	I/P-O/P:3KVAC, I/P-FG:2KVAC, O/P-FG:0.5KVAC
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH	I/P-O/P, I/P-FG, O/P-FG >100M Ohm /500VD@25°C/ 70% RH	I/P-O/P, I/P-FG, O/P-FG >100M Ohm /500VD@25°C/ 70% RH
	EMC Emission	Compliance to EN55011, EN55022 (CISPR22) Class B, EN61000-3-2, -3	Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3	Compliance to EN55011, EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55035, EN61000-6-2 (EN50082-2), heavy industry level, criteria A	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55035, EN61000-6-2, EN61204-3, heavy industry level, criteria A
Others	PFC			
	MTBF	136.8Khrs min MIL-HDBK-217F (25°C)	301.7K hrs MIL-HDBK-217F (25°C)	236.9K Hours MIL-HDBK-217F (25°C)
	Waranty	3 Years	3 Years	3 Years

Ordering Information

Model Name	Input Voltage Range	Output Voltage	Output Voltage Adj. Range	Output Power	Operating Temperature
NDR-480-48	90 ~ 264VAC / 127 ~ 370VDC	48VDC	48~55VDC	480W	-20 ~ 70°C
NDR-240-48	90 ~ 264VAC / 127 ~ 370VDC	48VDC	48~55VDC	240W	-20 ~ 70°C
NDR-120-24	90 ~ 264VAC / 127 ~ 370VDC	24VDC	24~28VDC	120W	-20 ~ 70°C
NDR-120-48	90 ~ 264VAC / 127 ~ 370VDC	48VDC	48~55VDC	120W	-20 ~ 70°C
DR-120-24	88 ~ 132VAC / 176 ~ 264VAC	24VDC	24~28VDC	120W	-10 ~ 60°C
MDR-40-24	85 ~ 264VAC / 120 ~ 370VDC	24VDC	24~30VDC	40W	-20 ~ 70°C
MDR-40-48	85 ~ 264VAC / 120 ~ 370VDC	48VDC	48~56VDC	40W	-20 ~ 70°C
MDR-20-24	85 ~ 264VAC / 120 ~ 370VDC	24VDC	21.6~26.4VDC	24W	-20 ~ 70°C