

Switch Mode Power Supplies

DIN-Rail Mountable

Price List and Specification

PART NUMBER	DESCRIPTION	TRADE PRICE
SINGLE PHASE		
OUTPUT 12 VOLTS DC		
DRA18-12A	1.5 A INPUT: 1PH, 90-264 VAC	\$70.00
DRAN30-12A	2.5 A INPUT: 1PH, 85-264 VAC	\$87.30
DRAN60-12A	5.0 A INPUT: 1PH, 85-264 VAC	\$103.95
DRE240-12A	16 A INPUT: 1PH, 88-264 VAC	\$343.93
OUTPUT 24 VOLTS DC		
DRA10-24A	0.42 A INPUT: 1PH, 90-264 VAC	\$63.00
DRA18-24A	0.75 A INPUT: 1PH, 90-264 VAC	\$70.00
DRAN30-24A	1.25 A INPUT: 1PH, 85-264 VAC	\$87.30
DRAN60-24A	2.5 A INPUT: 1PH, 85-264 VAC	\$103.95
DRA100-24A	4.2 A INPUT: 1PH, 90-264 VAC	\$137.67
DRAN120-24A	5.0 A INPUT: 1PH, 90-264 VAC	\$157.27
DRA240-24A	10 A INPUT: 1PH, 90-264 VAC	\$219.35
DRA480-24A	20 A INPUT: 1PH, 90-264 VAC	\$385.20
OUTPUT 48 VOLTS DC		
DRAN120-48A	2.5 A INPUT: 1PH, 90-264 VAC	\$157.27
DRA240-48A	5.0 A INPUT: 1PH, 90-264 VAC	\$219.35
SINGLE OR 2 PHASE		
OUTPUT 12 VOLTS DC		
VRH100-12	8.4 A INPUT: 1PH or 2PH, 340-575 VAC	\$175.47
OUTPUT 24 VOLTS DC		
VRH100-24	4.2 A INPUT: 1PH or 2PH, 340-575 VAC	\$175.47
3 PHASE		
OUTPUT 24 VOLTS DC		
WRA240-24	10 A INPUT: 3PH, 340-575 VAC	\$287.55
WRA480-24	20 A INPUT: 3PH, 340-575 VAC	\$418.70
WRA960-24L*	40 A INPUT: 3PH, 340-575 VAC	\$679.28
WRA960-24	40 A INPUT: 3PH, 340-575 VAC	\$725.22

Parallel operation (switch selectable) on models:
DRA100 / DRAN120 / DRA240 / DRE240 / DRA480 / VRH100 / WRA240 / WRA480 / WRA960 (* excluding WRA960-24L basic model)
TRADE PRICES ARE SUBJECT TO GST - Sold under our standard Conditions of Sale.

DRAN120-xxA



DRA240-xxA



CHINFA ELECTRONICS IND. CO., LTD.
ISO 9001 Certified

All specifications typical at Nominal Line, Full Load, 25 °C unless otherwise stated.

DRA10-xxA



DRA18-xxA



1 Phase (Refer input below)		Parameter	Conditions			
OUTPUT SPECIFICATIONS						
120 WATTS	240 WATTS	Output Wattage			10 WATTS	18 WATTS
48V model		Output Current	Vi nom	12V model	-	1.5 A
2.5 A	5 A			24V model	0.42 A	0.75 A
45 ~ 55 VDC	47 ~ +56 VDC	Output Voltage	0.8 Io nom, Vi nom	12V model	-	10.8 ~ 13.8 VDC
-	-	Trim Adjust Range	(adjust via control on unit)	24V model	21.6 ~ 28.8 VDC	21.6 ~ 28.8 VDC
50 mV (max)	100 mV (max)	Ripple & Noise	Io nom, Vi nom	BW = 20 MHz	50 mV (max)	50 mV (max)
± 0.5% (max)	± 0.5% (max)	Line Regulation	Io nom, Vi min ~ Vi max		± 1 % (max)	± 1 % (max)
± 1% (max)	± 1% (max)	Load Regulation	Io min ~ Io nom, Vi nom	Single Mode	± 2 % (max)	± 2 % (max)
± 5% (max)	± 5% (max)			Parallel Mode	-	-
500 ms (max)	500 ms (max)	Rise Time	Io nom, Vi nom	With Capacitor	500 ms (max)	500 ms (max)
25 / 30 ms (min)	25 / 30 ms (min)	Hold Up Time	Io nom	Vi: 115 / 230 VAC	25 / 100 ms (min)	20 / 75 ms (min)
-	-			Vi: 380 / 480 VAC	-	-
3 unit	3 unit	Parallel Operation	0.1 Io min ~ 0.9 Io max		-	-
87%	90%	Efficiency	Typical	12V / 24V model	- / 76 %	77 / 77 %
INPUT SPECIFICATIONS						
115V: 90~132 VAC	115V: 90~132 VAC	Input Voltage Range	Io nom, Ta min ~ Ta max	AC in	90 ~ 264 VAC	90 ~ 264 VAC
230V: 180~264 VAC	230V: 180~264 VAC			DC in	120 ~ 375 VDC	120 ~ 375 VDC
210 ~ 375 VDC	210 ~ 375 VDC	Input Current	Io nom	Vi: 115 / 230 VAC	200 / 130 mA	335 / 210 mA
2.2 / 0.83 A	4.0 / 1.55 A			Vi: 400 / 500 VAC	-	-
-	-	Line Frequency	Io nom, Vi nom		47 ~ 63 Hz	47 ~ 63 Hz
47 ~ 63 Hz	47 ~ 63 Hz	PFC (Passive)	Io nom, Vi nom	Vi: 230 VAC	-	-
0.7	0.75					
CONTROL & PROTECTION						
T3.15 A / 250 VAC	T6.3 A / 250 VAC	Input Fuse	Internal (except ¥ = internal/phase)		T2A / 250VAC	T2A / 250VAC
110 ~ 145%	120 ~ 145%	Over Load Protection	Vi nom		110 ~ 165 %	110 ~ 165 %
-	-	Over Voltage Protect	Vi nom, Io nom (Auto Recovery)	12V model	-	15 ~ 17.4 VDC
60 ~ 66 V (48V)	60 ~ 66 V (48V)			24V model	30 ~ 34.8 VDC	30 ~ 34.8 VDC
Fold forward	Fold forward	Output Short Circuit	Continuous		Hiccup Mode	Hiccup Mode
-	-		Discontinuous		-	-
GENERAL						
3000 / 4242	3000 / 4242	Isolation Voltage	Input-Output	VAC / VDC	3000 / 4242	3000 / 4242
1500 / 2121	1500 / 2121		Input-FG	VAC / VDC	1500 / 2121	1500 / 2121
100 Mohm (min)	100 Mohm (min)	Isolation Resistance	Input-Output @ 500 VDC		100 Mohm (min)	100 Mohm (min)
-35 ~ 71 °C	-40 ~ 71 °C	Ambient Temperature	Vi nom		-20 ~ 71 °C	-20 ~ 71 °C
20 ~ 95% RH	20 ~ 95% RH	Relative Humidity	Vi nom, Io nom		20 ~ 95 % RH	20 ~ 95 % RH
124.5 x 64 x 123.6	124.5 x 83.5 x 123.6	Dimensions	Screw Terminal Type: H x W x D (mm)		90 x 22.5 x 114	90 x 22.5 x 114
Metal	Metal	Case Material			Plastic	Plastic
920g	1380g	Weight			120 g	150 g
ORDERING INFORMATION						
-	-	Part Number	12V model	-	DRA18-12A	
-	-		24V model	DRA10-24A	DRA18-24A	
DRAN120-48A	DRA240-48A		48V model			

Key	Abbreviation	Full Description
	Vi nom	Input voltage, nominal
	Io nom	Output current, nominal



1 Phase (Refer input below)

OUTPUT SPECIFICATIONS						
30 WATTS	60 WATTS	100 WATTS	120 WATTS	240 WATTS	192 WATTS	480 WATTS
2.5 A	5 A	-	-	-	16 A	-
1.25 A	2.5 A	4.2 A	5 A	10 A	-	20 A
12 ~ 14 VDC	12 ~ 14 VDC	-	-	-	11.4 ~ 14.5 VDC	-
24 ~ 28 VDC	24 ~ 28 VDC	22.5 ~ 28.5 VDC	22.5 ~ 28.5 VDC	22.5 ~ 28.5 VDC	-	22.5 ~ 28.5 VDC
50 mV (max)	50 mV (max)	50 mV (max)	50 mV (max)	100 mV (max)	100 mV (max)	100 mV (max)
± 0.5 % (max)	± 0.5 % (max)	± 1 % (max)	± 0.5 % (max)	± 0.5 % (max)	± 1 % (max)	± 0.5 % (max)
± 0.5 % (max)	± 0.5 % (max)	± 1 % (max)	± 1 % (max)	± 1 % (max)	± 1 % (max)	± 1 %
-	-	± 5 % (max)	± 5 % (max)	± 5 % (max)	± 5 % (max)	± 5 %
500 ms (typical)	500 ms (typical)	500 ms (max)	500 ms (max)	500 ms (max)	500 ms (max)	500 ms (max)
20 / 30 ms (min)	20 / 30 ms (min)	15 / 30 ms (min)	25 / 30 ms (min)	25 / 30 ms (min)	25 / 30 ms (min)	25 / 30 ms (min)
-	-	-	-	-	-	-
-	-	3 unit	3 unit	3 unit	3 unit	3 unit
84 / 86 %	86 / 89 %	- / 86 %	- / 86 %	- / 89 %	91% / -	- / 89%
INPUT SPECIFICATIONS						
85 ~ 264 VAC	85 ~ 264 VAC	90 ~ 264 VAC	115V: 90~132 VAC 230V: 180~264 VAC	115V: 90~132 VAC 230V: 180~264 VAC	88 ~ 264 VAC	90 ~ 264 VAC
90 ~ 375 VDC	90 ~ 375 VDC	120 ~ 375 VDC	210 ~ 375 VDC	210 ~ 375 VDC	120 / 375 VDC	120 ~ 375 VDC
560 / 330 mA	1060 / 590 mA	1.65 / 0.83 A	2.2 / 0.83 A	4.0 / 1.55 A	2.3 / 1.15 A	4.9 / 2.5 A
-	-	-	-	-	-	-
47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz
-	-	-	0.7	0.75	Active 0.97	Active 0.97
CONTROL & PROTECTION						
T2A / 250VAC	T2A / 250VAC	T3.15A / 250VAC	T3.15A / 250VAC	T6.3A / 250VAC	T5A / 250VAC	T10A / 250VAC
110 ~ 150 %	110 ~ 150 %	110 ~ 140 %	110 ~ 145 %	120 ~ 145 %	120 ~ 150 %	110 ~ 140 %
15 ~ 16.5 VDC	15 ~ 16.5 VDC	-	-	-	15 ~ 16.5 VDC	-
30 ~ 33 VDC	30 ~ 33 VDC	30 ~ 33 VDC	30 ~ 33 VDC	30 ~ 33 VDC	-	30 ~ 33 VDC
Fold Forward	Fold Forward	Fold Forward	Fold Forward	Fold Forward	Auto-Restart	Fold Forward
-	-	-	-	-	-	-
GENERAL						
3000 / 4242	3000 / 4242	3000 / 4242	3000 / 4242	3000 / 4242	3000 / 4242	3000 / 4242
1500 / 2121	1500 / 2121	1500 / 2121	1500 / 2121	1500 / 2121	1500 / 2121	1500 / 2121
100 Mohm (min)	100 Mohm (min)	100 Mohm (min)	100 Mohm (min)	100 Mohm (min)	100 Mohm (min)	100 Mohm (min)
-40 ~ 71 °C	-40 ~ 71 °C	-35 ~ 71 °C	-35 ~ 71 °C	-40 ~ 71 °C	-40 ~ 71 °C	-40 ~ 71 °C
20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH
90 x 40.5 x 114	90 x 40.5 x 114	90 x 54 x 114	124.5 x 64 x 123.6	124.5 x 83.5 x 123.6	124.5 x 64 x 123.6	124.5 x 175.5 x 125
Plastic	Plastic	Plastic	Metal	Metal	Metal	Metal
270 g	340 g	430 g	920 g	1380 g	860g	1920g
ORDERING INFORMATION						
DRAN30-12A	DRAN60-12A	-	-	-	DRE240-12A	-
DRAN30-24A	DRAN60-24A	DRA100-24A	DRAN120-24A	DRA240-24A	-	DRA480-24A



E6616

VRH100-xx



WRA240-xx



WRA480-xx



WRA960-xx



2 PH or Single Phase
(400V)

3 Phase (400V)

OUTPUT SPECIFICATIONS

Output Wattage		100 WATTS	240 WATTS	480 WATTS	960 WATTS
Output Current	12V model	8.4 A	-	-	-
	24V model	4.2 A	10 A	20 A	40 A
Output Voltage Trim Adjust Range	12V model	11.4 ~ 14.5 VDC	-	-	-
	24V model	22.5 ~ 28.5 VDC	22.5 ~ 28.5 VDC	22.5 ~ 28.5 VDC	22.5 ~ 28.5 VDC
Ripple & Noise	BW = 20 MHz	50 mV (max)	100 mV (max)	100 mV (max)	80 mV (max)
Line Regulation		± 1 % (max)	± 1 % (max)	± 1 % (max)	± 1 % (max)
Load Regulation	Single Mode	± 1 % (max)	± 1 % (max)	± 1 % (max)	± 1 % (max)
	Parallel Mode	± 5 % (max)	± 5 % (max)	± 5 % (max)	± 5 % (max)
Rise Time	With Capacitor	500 ms (max)	500 ms (max)	500 ms (max)	500 ms (max)
Hold Up Time	Vi: 115 / 230 VAC	-	-	-	-
	Vi: 380 / 480 VAC	20 ms (min)	20 ms (min)	20 ms (min)	15 ms (min)
Parallel Operation		2 unit	2 unit	2 unit	2 unit*
Efficiency	12V / 24V model	86 / 87 %	- / 90 %	- / 90 %	- / 92 %

INPUT SPECIFICATIONS

Input Voltage Range	AC in	340 ~ 575 VAC	340 ~ 575 VAC	340 ~ 575 VAC	340 ~ 575 VAC
	DC in	480 ~ 820 VDC	480 ~ 820 VDC	480 ~ 820 VDC	480 ~ 820 VDC
Input Current	Vi: 115 / 230 VAC	-	-	-	-
	Vi: 400 / 500 VAC	0.48 / 0.41 A	0.65 / 0.55 A	1.1 / 0.93 A	1.72 / 1.5 A
Line Frequency		47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz
PFC (Passive)	Io nom, Vi nom	0.55	0.55	0.65	0.8

CONTROL & PROTECTION

Input Fuse		2A / 600 VAC	2A / 600 VAC ¥	T3.15A / 500 VAC ¥	T5A / 500 VAC ¥
Over Load Protection		115 ~ 135 %	120 ~ 140 %	110 ~ 135 %	120 ~ 140 %
Over Voltage Protect	12V model	15 ~ 16.5 VDC	-	-	-
	24V model	30 ~ 33 VDC	30 ~ 33 VDC	30 ~ 33 VDC	30 ~ 33 VDC
Output Short Circuit	Continuous	Hiccup Mode	Hiccup Mode	Fold Forward	Hiccup Mode
	Discontinuous	-	-	Yes	-

GENERAL

Isolation Voltage	VAC / VDC	3000 / 4242	3000 / 4242	3000 / 4242	3000 / 4242
	VAC / VDC	1500 / 2121	1500 / 2121	1500 / 2121	1500 / 2121
Isolation Resistance		100 Mohm (min)	100 Mohm (min)	100 Mohm (min)	100 Mohm (min)
Ambient Temperature	H x W x D (mm)	-40 ~ 71 °C	-40 ~ 71 °C	-30 ~ 71 °C	-40 ~ 71 °C
Relative Humidity		20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH	20 ~ 95 % RH
Dimensions		90 x 54 x 114	124 x 89 x 118.8	124 x 150 x 118.8	126.2 x 275.8 x 118.8
Case Material		Plastic	Metal	Metal	Metal
Weight		500 g	1100 g	1720 g	3400 g

ORDERING INFORMATION

Part Number	12V model	VRH100-12	-	-	-
	24V model	VRH100-24	WRA240-24	WRA480-24	WRA960-24

* No parallel option on 24L models

Things you need to know.

- CHINFA offer a wide range of switched mode power supplies with output current ratings ranging from 0.42 to 40 amps in most of the common output voltages 12, 24 and 48 VDC and suitable for use on supply voltages of 95-575 VAC.
- CHINFA offer a paralleling feature in their power supplies in 100 Watts and above. The idea behind the redundant supply concept is to safeguard the entire system supply in the event of a switched mode power supply failure. It is important to use the same model of power supply to ensure the load is evenly shared by each power supply.
- CHINFA 24 VDC output models with a terminal point marked "Rdy", provide an internal relay which closes at start-up to indicate the supply is ready. Refer datasheet for further information.
- The CHINFA power supplies covered in this publication are currently held in stock and are readily available.
- CHINFA manufactures a quality range of reliable power supplies for the industrial market. These products are fully backed by the Electrical Importing Company... a combination you can rely on.

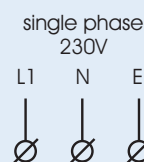
Type DRA & Type DRAN

Single-phase



- 12VDC, 24VDC and 48VDC output models available
- 10 ~ 100W models: 90 ~ 264VAC (universal input)
- 120 ~ 240W models: 115 / 230VAC (auto select)
- Short circuit, over load and over voltage protection
- Internal input filter
- PFC function available (120W and above)
- Parallel function available (100W and above)
- Efficiency 75 ~ 91%

Type DRE

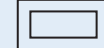


- High efficiency
- Built in Active PFC

Refer Data Sheet for more information

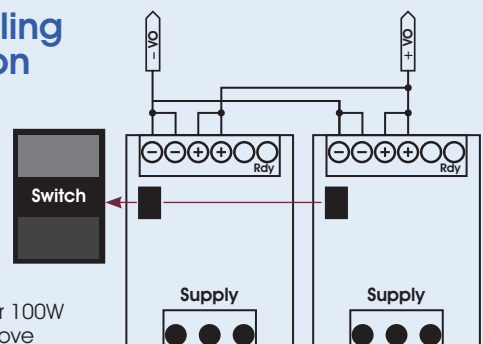
Paralleling Function

Single

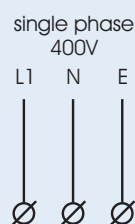
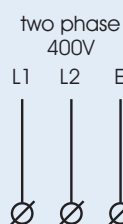


Parallel

Paralleling for 100W
units and above

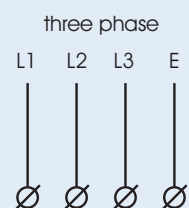


Type VRH & Type WRA



or

Refer Data Sheet for more information



Refer Data Sheet
for more information

Compact economical industrial AC-DC power supplies

Quality Electrical Components for the Industry



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