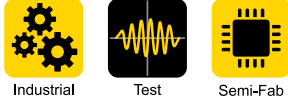


15W - 100W DIN Rail Mount Single Phase Power Supplies

<https://product.tdk.com/en/power/drb>
www.emea.lambda.tdk.com/drb



The DRB series supports the growing trend for simple and economically priced DIN power supplies for industrial and process control applications. The series combines low cost, reliability and compact dimensions with energy saving efficiencies of up to 91%. Conservatively rated electrolytic capacitor temperatures offer improved field life-times of up to 10 years. Available in four power levels, 15W, 30W, 50W, 100W, the series provides a choice of 5, 12, 15, 24 and 48V outputs. UL1310 Class 2 models and Class 1 Div 2 (ISA 12.12.01) certifications are available.

Features	Benefits
• High Efficiency, up to 91%	• Lowers Operating Costs and Improves Thermal Performance
• Narrow Case Widths	• Increases Available Space on the DIN Rail
• Curve B Radiated and Conducted EMI	• Reduced Electrical Noise in the System
• Low No Load Power Draw	• Saves Energy
• UL1310 Class 2 Compliant Models	• Suitable for Building Automation requiring NEC Class 2
• Class 1 Div 2 Compliance	• For Use in Explosive Atmospheres

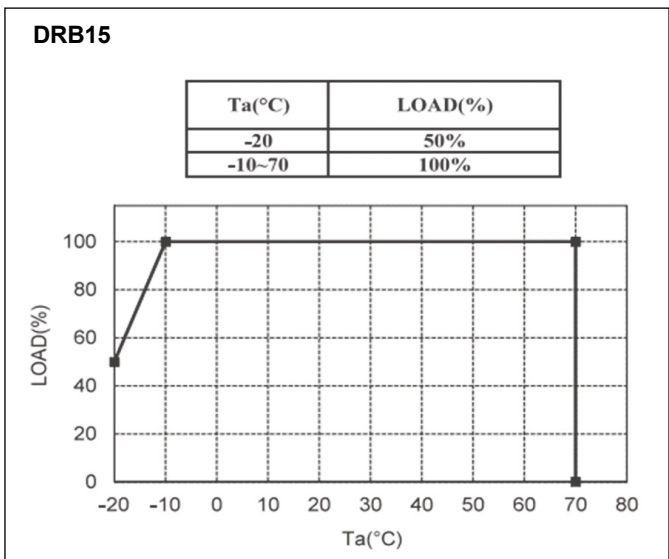
Model Selector								
Model	Output Voltage (V)	Adjustment Range (V)	Maximum Current (A)	Maximum Power (W)	Ripple & Noise (mV)	Overshoot Protection (V)	Efficiency (%) (115/230Vac)	UL1310 Class 2
DRB50-5-1	5	5 - 5.5	6	30	30	5.5 - 6.75	79 / 80	No
DRB30-12-1	12	12 - 15	2.5	30	40	15.96 - 18.72	86 / 88	Yes
DRB50-12-1	12	12 - 15	3.4	51*	20	15.96 - 18.72	88 / 90	Yes
DRB50-15-1	15	12 - 15	3.4	51*	20	15.96 - 18.72	88 / 90	Yes
DRB15-24-1	24	24 - 28	0.63	15.1	20	30 - 33.6	87 / 90	Yes
DRB30-24-1	24	24 - 28	1.25	30	30	30 - 33.6	88 / 90	Yes
DRB50-24-1	24	24 - 28	2.1	50.4	30	30 - 33.6	88 / 90	Yes
DRB100-24-1	24	24 - 28	4.2	100.8	30	30 - 33.6	90 / 91	No
DRB50-48-1	48	48 - 52.8	1.05	50.4	40	53.76 - 68.16	90 / 91	Yes

* Maximum power is 51W at 15V output, 40.8W when set at 12V output

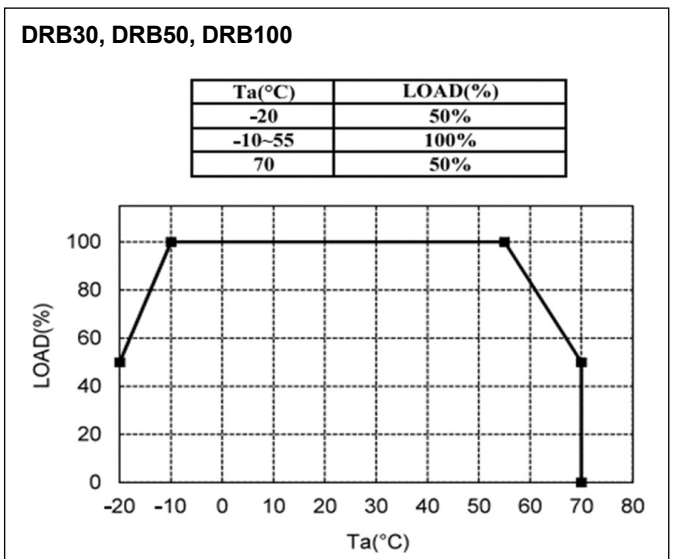
Specifications					
Model		DRB15	DRB30	DRB50	DRB100
Input					
Input Voltage range	Vac	85 - 264, 120 - 373Vdc (1)			
Input Surge Voltage	-	Withstands 300Vac for 5 seconds			
Input Frequency	Hz	47 - 63			
Input Current (110/230Vac)	A	0.27 / 0.17	0.55 / 0.33	0.9 / 0.55	1.2 / 0.6
Inrush Current (Cold Start)	A	35	40	50	40
Leakage Current (240Vac)	mA	<1.5	<1.5	<0.55	<1.5
Power Factor (110/230Vac)	-	0.55 / 0.42	0.56 / 0.46	0.6 / 0.5	0.98 / 0.93
Harmonic Compliance	-	Meets EN61000-3-2 Class A			
No Load Power Consumption	W	<0.3	<0.3	<0.3	<0.5
Hold Up Time (230Vac input)	ms	>20			
Efficiency	-	See model selector table			
Average Efficiency (230Vac)	%	88	87 / 89	87 / 88	87
Conducted & Radiated EMI	-	EN55011-B, EN55032-B, VCCI-B, FCC-B			
Immunity	-	See immunity table			
Safety Agency Certifications	-	IEC/EN/CSA/UL62368-1, 60950-1, UL508 Listed, UL1310 Class 2 (see model selector), CE Mark, Class 1 Div 2, Group A, B, C, D (ISA 12.12.01)			

Immunity				
Test	Standard	Test Level	Criteria	
ESD	EN61000-4-2	4	A	-
Radiated Susceptibility	EN61000-4-3	3	A	-
Electrical Fast Transient Burst	EN61000-4-4	4	A	-
Surge	EN61000-4-5	3	A	-
Conducted Susceptibility	EN61000-4-6	3	A	-
Magnetic fields	EN61000-4-8	4	A	-
Voltage dips and input interruptions	EN61000-4-11	0% for 1 cycle	A	-
		40% for 10/12 cycles	B	-
		70% for 25/30 cycles	B	-
		80% for 250/300 cycles	B	-
SEMI F47 Line Dip	SEMI F47	-	-	> 200Vac input

Output Temperature Derating



Output Temperature Derating



Specifications					
Model		DRB15	DRB30	DRB50	DRB100
Output					
Output Voltage Adjustment	V	See model selector			
Switching Frequency	kHz	100 (Fixed)	100 (Fixed)	75 - 170 (Variable)	100 - 150 (Variable)
Line Regulation	mV	5V: 50, 12-15V: 150, 24V: 240, 48V: 480			
Load Regulation	mV	5V: 50, 12-15V: 150, 24V: 240, 48V: 480			
Ripple & Noise (max) (typ)	mV	See model selector			
Temperature Coefficient	%/°C	<±0.02			
Minimum Load	-	No minimum load required			
Overcurrent Protection	-	Hiccup with auto recovery			
Overvoltage Protection	V	5V: 5.75 - 6.75, 12 and 15V: 15.96 - 18.72, 24V/30 - 33.6, 48V: 53.76 - 68.16. Latching, cycle AC to reset			
Overtemperature Protection	-	-			
Remote Sense	-	-			
Remote On/Off	-	-			
DC Good	-	-			
Indicators	-	Green LED indicates DC is OK			
Parallel Operation	-	Not possible			
Series Operation	-	Possible, see installation manual			
Environmental					
Operating Temperature (2)	°C	-20 to +70 (see derating curves below). For operation below -10°C, start up load is derated linearly to 50% load down to -20°C			
Storage Temperature	°C	-40 to +85			
Humidity (non condensing)	%RH	5 - 95 (Operating & Storage)			
Cooling	-	Convection			
Altitude	m	3,000			
Withstand Voltage (For 1 minute)	Vac	Input to Output 3k (20mA), Input to GND 1.5k (20mA), Output to GND 500 (100mA)			
Isolation Resistance	MΩ	Input-FG, Input-Output & Output-FG: More than 100MΩ (500VDC) at 25°C and 70%RH			
Vibration (Non operating)	-	10-55Hz (sweep for 1min.) 19.6m/s ² (2G) Constant, X, Y, Z each 1hr			
Shock	-	294m/s ² (30G) 11ms half-sine			
Other					
Weight (Max)	g	85	95	175	300
Size (WxHxD)	mm	18 x 75 x 90	21 x 75 x 90	30 x 75 x 90	45 x 75 x 100
Size (WxHxD)	Inches	0.71 x 2.95 x 3.54	0.83 x 2.95 x 3.54	1.18 x 2.95 x 3.54	1.77 x 2.95 x 3.94
Case Material	-	Flame Redardant Polycarbonate (UL94 V-0)			
DIN Rail Type	-	Suitable for mounting on TS-35/7.5 or TS35/15 DIN Rails			
MTBF - JEITA (RCR-9102B) (3)	Hours	451,977	384,855	283,620	210,505
Warranty	Years	3			

Notes

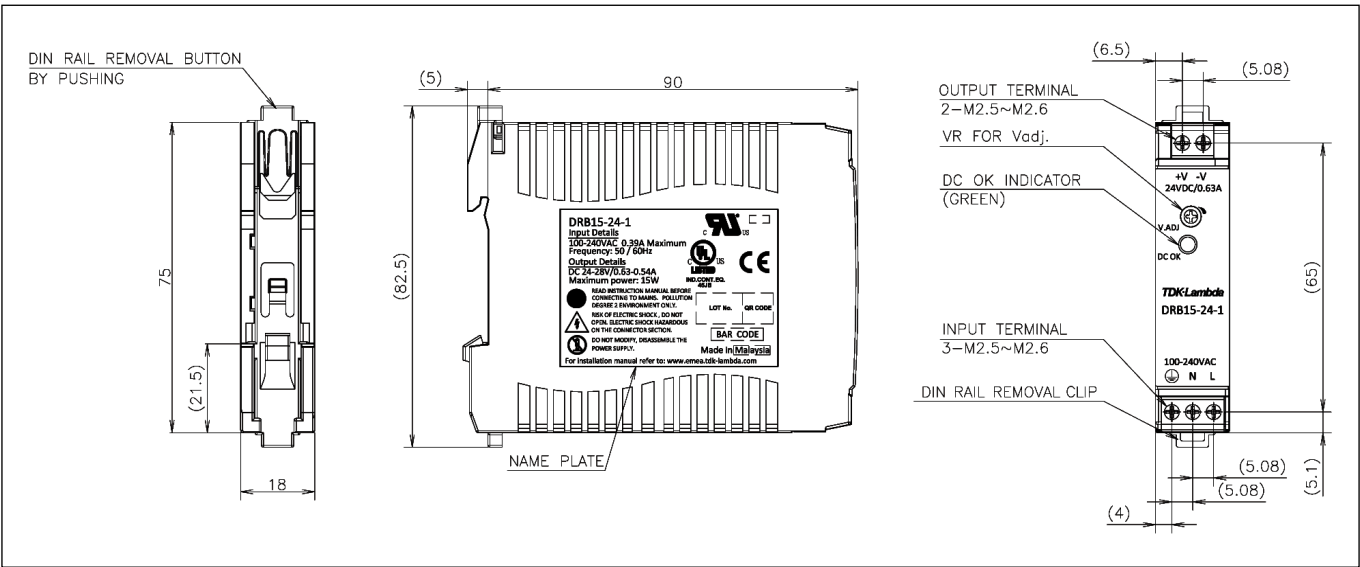
See website for detailed specifications, test methods and installation manual

(1) Consult Tech Support for use under DC input conditions. Safety certified for AC input only

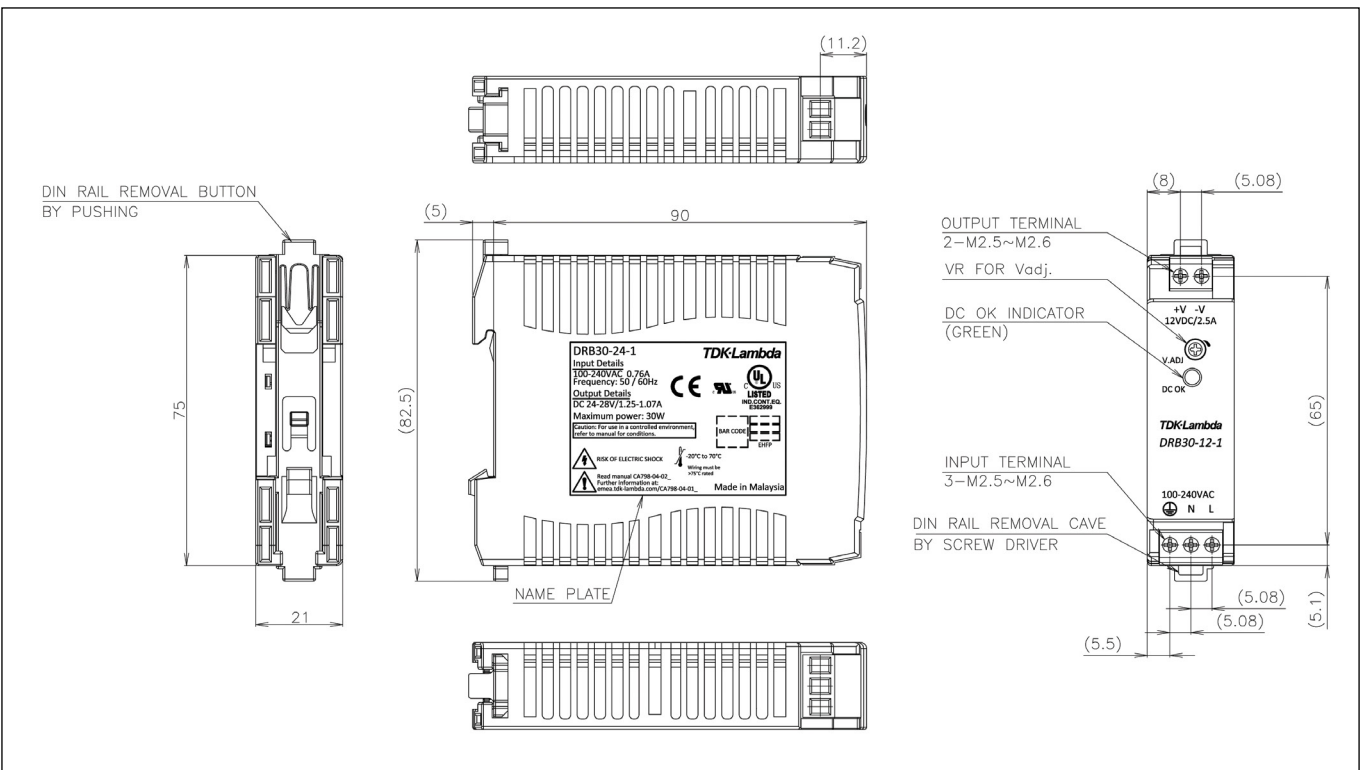
(2) Low temperature start up: -40°C typical

(3) The JEITA RCR-9102B calculation method produces figures significantly lower than Telcordia

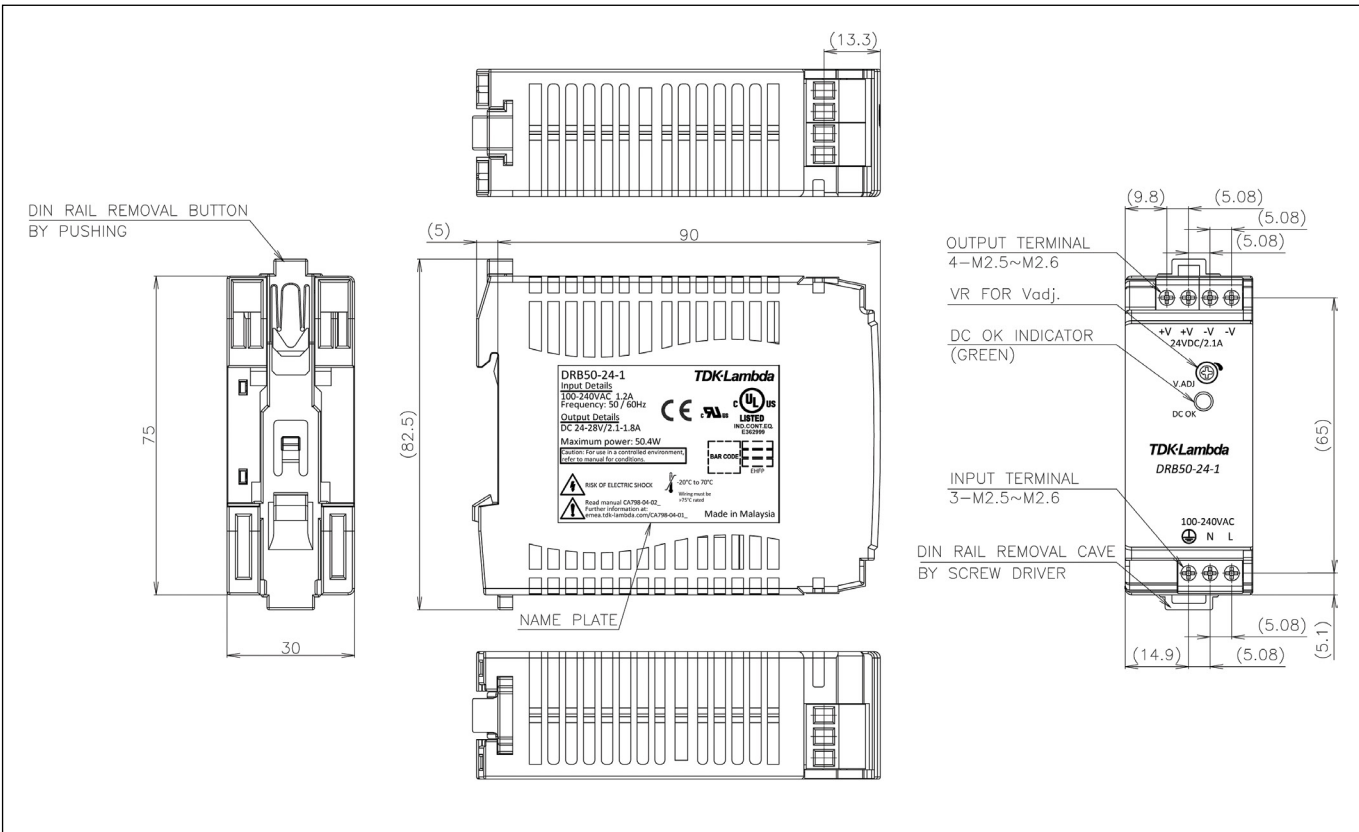
Outline DRB 15



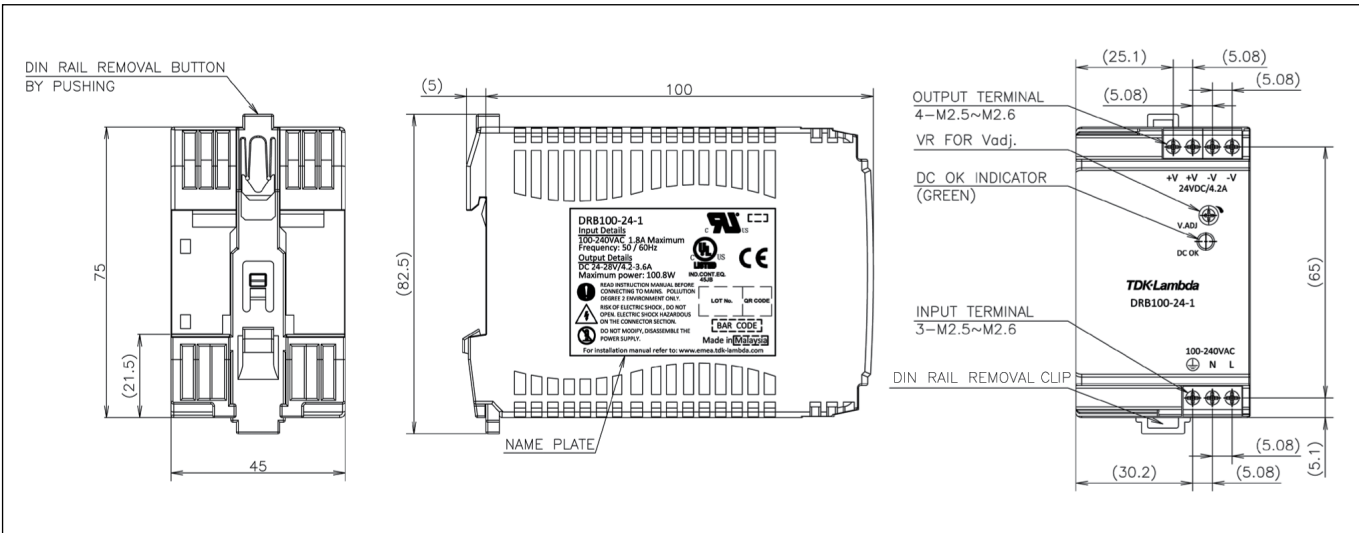
Outline DRB 30



Outline DRB 50



Outline DRB 100





TDK-Lambda France SAS

Tel: +33 1 60 12 71 65
france@fr.tdk-lambda.com
www.emea.lambda.tdk.com/fr



Italy Sales Office

Tel: +39 02 61 29 38 63
info.italia@it.tdk-lambda.com
www.emea.lambda.tdk.com/it



Netherlands

info@nl.tdk-lambda.com
www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH

Tel: +49 7841 666 0
info@de.tdk-lambda.com
www.emea.lambda.tdk.com/de



Austria Sales Office

Tel: +43 2256 655 84
info@at.tdk-lambda.com
www.emea.lambda.tdk.com/at



Switzerland Sales Office

Tel: +41 44 850 53 53
info@ch.tdk-lambda.com
www.emea.lambda.tdk.com/ch



Nordic Sales Office

Tel: +45 8853 8086
info@dk.tdk-lambda.com
www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Tel: +44 (0) 12 71 85 66 66
info@uk.tdk-lambda.com
www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

Tel: +9 723 902 4333
info@tdk-lambda.co.il
www.emea.lambda.tdk.com/il



C.I.S.

Commercial Support:

Tel: +7 (495) 665 2627

Technical Support:

Tel: +7 (812) 658 0463
info@tdk-lambda.ru
www.emea.lambda.tdk.com/ru



TDK-Lambda Americas

Tel: +1 800-LAMBDA-4 or 1-800-526-2324
powersolutions@us.tdk-lambda.com
www.us.lambda.tdk.com



TDK Electronics do Brasil Ltda

Tel: +55 11 3289-9599
sales.br@tdk-electronics.tdk.com
www.tdk-electronics.tdk.com/en



TDK-Lambda Corporation

Tel: +81-3-6778-1113
www.jp.lambda.tdk.com



TDK-Lambda (China) Electronics Co. Ltd.

Tel: +86 21 6485-0777
powersolutions@cn.tdk-lambda.com
www.lambda.tdk.com.cn



TDK-Lambda Singapore Pte Ltd.

Tel: +65 6251 7211
tis.mkt@sg.tdk-lambda.com
www.sg.lambda.tdk.com



TDK India Private Limited, Power Supply Division

Tel: +91 80 4039-0660
mathew.philip@in.tdk-lambda.com
www.sg.lambda.tdk.com

For Additional Information, please visit
<https://product.tdk.com/en/power/>



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [DIN Rail Power Supplies](#) category:

Click to view products by [TDK-Lambda](#) manufacturer:

Other Similar products are found below :

[PS-S6024](#) [DVP01PU-S](#) [DVP06AD-S](#) [DVP06XA-S](#) [DVDPNET-SL](#) [DVPDT01-S](#) [DVPPS01](#) [PS-6012](#) [PS9Z-5R1G](#) [PS-C24024](#)
[DVP08ST11N](#) [DVPACAB530](#) [DVPCOPM-SL](#) [DVPEN01-SL](#) [DVPPF01-S](#) [ADNB008-48-1PM-C](#) [ADNB017-24-1PM-C](#) [ADNB040-24-1PM-C](#) [ADNB034-12-1PM-C](#) [SS14011524](#) [PS-UPS40](#) [PSC-6024](#) [PSD-A60W12](#) [96PS-A120WDIN](#) [PSD-A60W48](#) [PSD-A40W12](#) [PSD-A40W24](#) [SMP21-L20-DC24V-5A](#) [PSD-A40W48](#) [S8T-DCBU-02](#) [PS-S4024](#) [NTPS-24-1.3](#) [PST-96024](#) [S82YVSC4P](#) [PS-S4005](#) [PS-10024](#)
[PS-S10024](#) [PS-C12024](#) [PSP-480S24](#) [PS-C48024](#) [PSC-2024](#) [PSC-4012](#) [PSC-4048](#) [PSC-9615](#) [PSC-15124](#) [PSC-15148](#) [PSC-24148](#) [PSC-48148](#) [TRIO-PS-2G/1AC/12DC/5/C2LP](#) [QUINT4-PS/1AC/12DC/15](#)