

30ACDRSS_4 Series

30W - Single Output AC-DC Converter - Universal Input - Isolated & Regulated Industrial DIN Rail Power Supply



AC-DC Converter 30 Watt

- ⊕ Isolation Class II
- ⊕ Class 2/Pass LPS
- ⊕ Ultra Slim Step Shape
- ⊕ DC Output Voltage Adjustable
- ⊕ Protection: Short Circuit/ Overload/ Over Voltage
- ⊕ Over Voltage Category II

Introducing our advanced power supply 30ACDRSS_4 series with Isolation Class II and Class 2/Pass LPS certification. Designed in an ultra-slim step shape, this unit features adjustable DC output voltage. It offers robust protection against short circuit, overload, and over voltage, ensuring reliable performance. Additionally, it adheres to Over Voltage Category II standards, making it a versatile and secure choice for various applications.



Common specifications

Short circuit protection:	Hiccup, continuous, self-recovery
Operation temperature range:	-20°C~+70°C
Storage temperature range:	-40°C ~+85°C
Operation humidity range:	20 ~ 95 %RH (Non-condensing)
Storage humidity range:	10 ~ 95 %RH (Non-condensing)
Vibration:	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to EC60068-2-6
Operating altitude:	5000 meters
Over voltage category:	II; According to EN62368-1; altitude up to 2000 meters
Safety regulations:	UL62368-1, BS EN/EN62368-1
Dimensions:	35mm x 90mm x 58mm
Weight:	120g typ.

Input specifications

Item	Test conditions	Min	Typ	Max	Units
Input Voltage Range	AC input	90		264	VAC
	DC input	127		370	VDC
Input Frequency		47		63	Hz
AC Current	115VAC			0.88	A
	230VAC			0.48	A
Inrush Current (Cold start)	115VAC		25		A
	230VAC		45		A

Isolation specifications

Item	Test condition	Min	Max	Units
Isolation Test (Input - Output)	I/P-O/P		4000	VAC
Insulation resistance	I/P-O/P / 500VDC / 25°C / 70% RH	100		M Ohms

EMC specifications

Emissions	BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3
Immunity	BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11

Output specifications

Item	Test conditions	Min	Typ	Max	Units
Voltage tolerance				±2.0	% %
Line regulation				±1	%
Load regulation				±1	%
Ripple & Noise* (peak-to-peak value)	20MHz bandwidth • 5V Output • 12V Output • 15V Output • 24V Output • 48V Output			80	mVp-p
				120	mVp-p
				120	mVp-p
				150	mVp-p
				240	mVp-p
Voltage adj. Range		4.5		5.5	V
		10.8		13.8	V
		13.5		18	V
		21.6		29	V
		43.2		55.2	V
Temp. coefficient	RH non-condensing		±0.03		%/°C (0-50 °C)
Setup, rise time (at full load)	115VAC	50		500	ms
	230VAC	50		500	

Example:

30ACDRSS_24S4

30 = 30 Watts; AC = AC-DC; DR = Din Rail; SS = Step shape; 24 = Vout; S = Single Output; 4 = 4kVAC isolation

Protection

Over load	105 ~ 160% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50%~100% rated output voltage, recovers automatically after fault condition is removed
Over voltage	5.75 ~ 7.5V 15.0 ~ 18.0V 18.8 ~ 22.5V 30.0 ~ 36.0V 57.6 ~ 67.2V Protection type : Shut down o/p voltage, re-power on to recover

Note:

- Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta = 25°C, humidity <75% with nominal input voltage and rated output load;
- All index testing methods are based on our corporate company standards;
- We may provide product customization service, please contact our technicians directly for specific information;
- Specifications are subject to change without prior notice.
- Products are related to laws and regulations: see „Features“ and „EMC“;
- Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.

30ACDRSS_4 Series

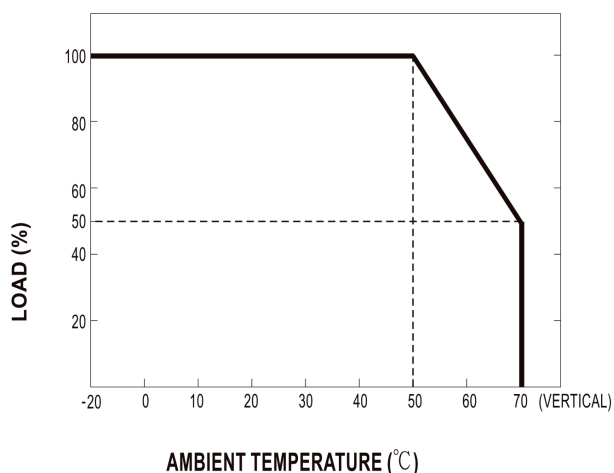
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Product Selection Guide

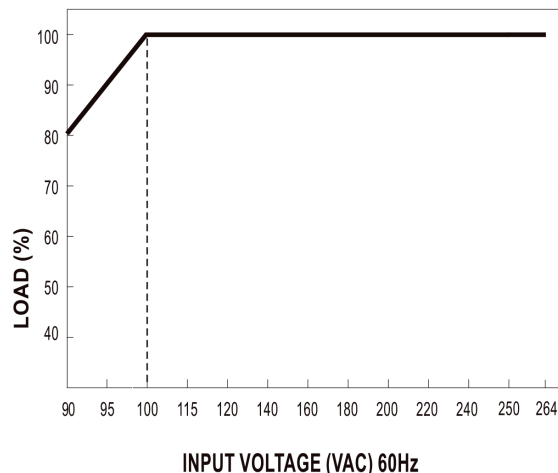
Part Number	Power [W]	Output [Vo, VDC]	Rated Current [A]	Output Voltage Adjustable [Range, V]*	Efficiency at 230VAC [%, Typ.]
30ACDRSS_05S4	15	5	3	4.5 ~ 5.5	82%
30ACDRSS_12S4	24	12	2	10.8 ~ 13.8	88%
30ACDRSS_15S4	30	15	2	13.5 ~ 18	89%
30ACDRSS_24S4	36	24	1.5	21.6 ~ 29	89%
30ACDRSS_48S4	30	48	0.63	43.2 ~ 55.2	90%

Typical characteristics

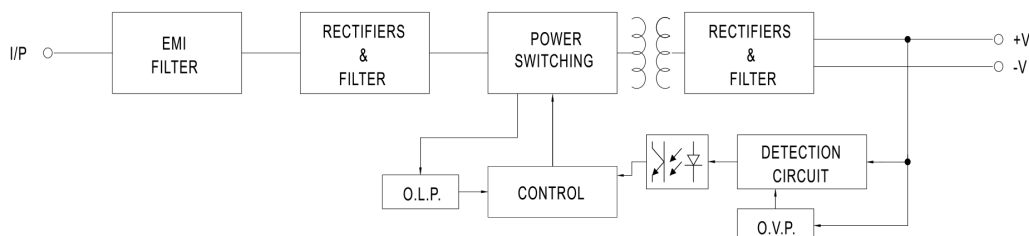
Deduction Curve and Temperature



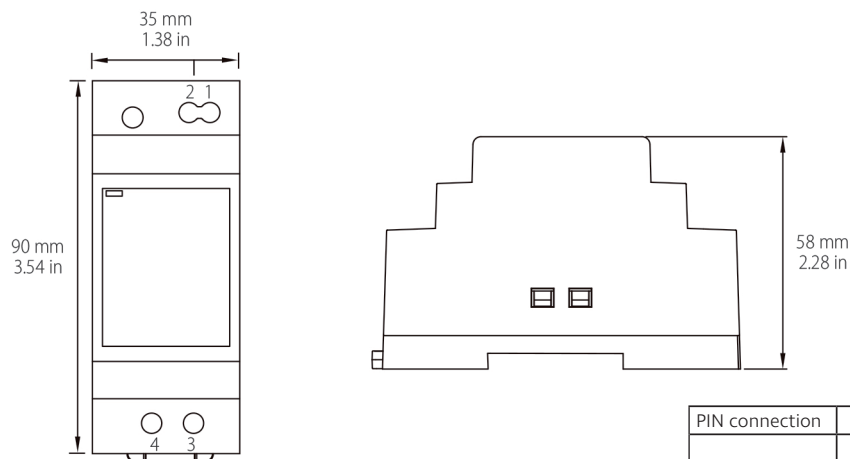
Minus Output and Input Voltage Curves



Functional diagram



Mechanical dimensions



PIN connection	1	2	3	4
	+V	-V	AC/L	AC/N