



## 60ACDRSS\_4 Series

60W - Single Output AC-DC Converter - Universal Input - Isolated & Regulated Industrial DIN Rail Power Supply

### AC-DC Converter 60 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 60ACDRSS\_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:	52mm x 90mm x 58mm
Weight:	190g 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			1.2	A
	230VAC			0.8	A
Inrush Current (Cold start)	115VAC		30		A
	230VAC		60		A

#### Isolation specifications

Item	Test condition	Min	Typ	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			80	mVp-p
	• 12V Output			120	mVp-p
	• 15V Output			120	mVp-p
	• 24V Output			150	mVp-p
Voltage adj. Range		5.0		5.5	V
		10.8		13.8	V
		13.5		18.0	V
		21.6		29.0	V
		43.2		55.2	V
Temperature coefficient	RH non-condensing		±0.03		%/°C (0-50 °C)
Setup, rise time (at full load)	115VAC		50	500	ms
	230VAC		50	500	ms
Hold-up time (at full load)	115VAC			12	ms
	230VAC			30	ms

#### Example:

##### 60ACDRSS\_24S4

60 = 60 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 ~ 6.75V 14.2 ~ 16.2V 18.8 ~ 22.5V 30.0 ~ 36V 56.5 ~ 64.8V 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 in this datasheet are based on our company corporate standards;
- We can 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.

# 60ACDRSS\_4 Series

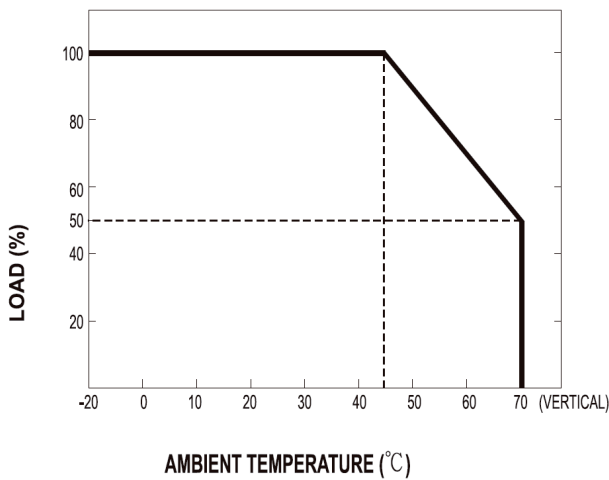
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## Product Selection Guide

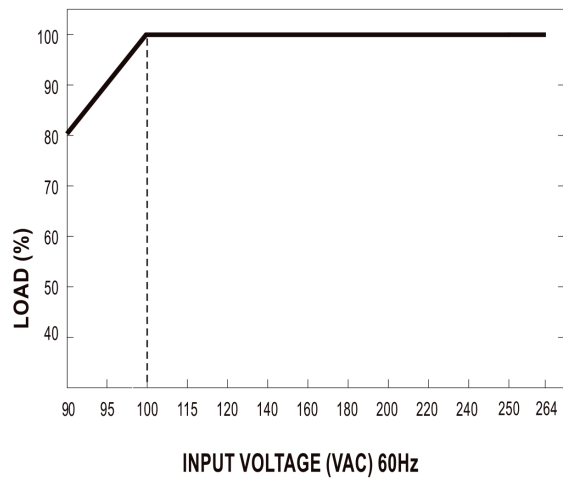
Part Number	Power [W]	Output [Vo, VDC]	Rated Current [A]	Output Voltage Adjustable [Range, V]*	Efficiency at 230VAC [%, typ.]
60ACDRSS_05S4	22.5	5	4,5	5 ~ 5.5	85%
60ACDRSS_12S4	54	12	4,5	10.8 ~ 13.8	88%
60ACDRSS_15S4	60	15	4	13.5 ~ 18	89%
60ACDRSS_24S4	60	24	2.5	21.6 ~ 29	90%
60ACDRSS_48S4	60	48	1.25	43.2 ~ 55.2	91%

## Typical characteristics

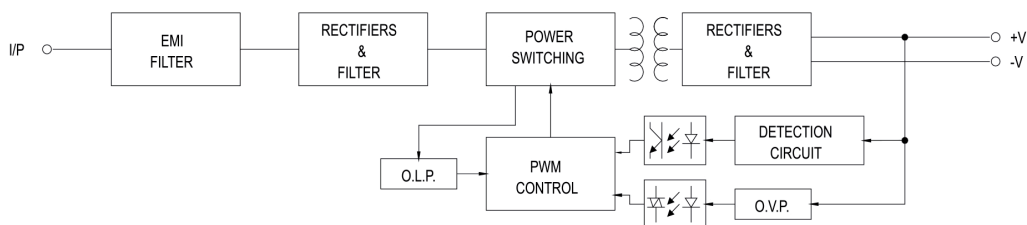
Deduction Curve and Temperature



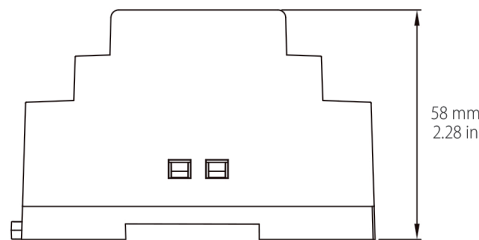
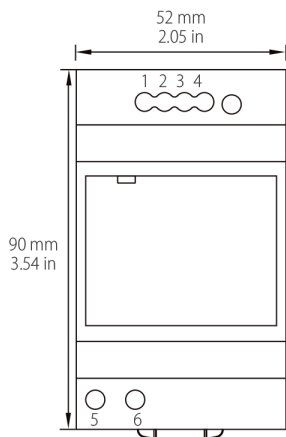
Minus Output and Input Voltage Curves



## Functional diagram



## Mechanical dimensions



PIN connection	1,2	3,4	5	6
	-V	+V	AC/L	AC/N