



12 OR 24 V



HARDENED



DIN RAIL



The ComNet™ PS-AMR Series offer a complete range of high quality, low noise switching mode power supplies of various output sizes ideally suited to the entire ComNet industrial product range that require either 12 or 24VDC power input. These rugged units are DIN rail mountable, providing an ideal mounting configuration to a mating ComNet industrial switch or any product using our range of DIN rail mounting adapters. The wide ambient operating temperature range permits installation in most out of plant and unconditioned environments, such as those found in intelligent transportation systems or factory automation/industrial control applications. Unconditional line and load protection is provided.

FEATURES

- › Universal AC input: 90 to 264 VAC, 47-63Hz
- › Mounts on standard 7.5 or 15 mm DIN-rail
- › Adjustable output voltage range support
- › High operating efficiency; up to 89%
- › Small package for limited space installations
- › Natural convection cooling; no troublesome fans
- › Wide operating temperature range: -40° to +71° C
- › 3 Year Warranty

APPLICATIONS

- › Power Supplies for ComNet Industrial Products



SPECIFICATIONS

All Specifications Typical at Nominal Line, Full Load, 25°C Unless Otherwise Noted

Power Input

Rated Input Voltage	90 to 264 VAC or 120 to 375 VDC
Input Current	115 / 230 VAC PS-AMR1-12: 200 / 135 mA PS-AMR2-12: 450 / 270 mA PS-AMR3-12: 680 / 410 mA PS-AMR4-12: 1.1 / 0.6 A PS-AMR5-12: 1.35 / 0.72 A PS-AMR1-24: 1.35 / 0.72 A PS-AMR2-24: 450 / 270 mA PS-AMR3-24: 680 / 410 mA PS-AMR5-24: 1.8 / 0.9 A PS-AMR4-24: 1.1 / 0.6 A
Line Frequency	47 to 63 Hz
Inrush current	115 / 230 VAC PS-AMR1: 15 / 30 A PS-AMR2: 20 / 40 A PS-AMR3: 25 / 50 A PS-AMR4/5: 30 / 60 A
Power Dissipation	230 VAC PS-AMR1-12: 2.3 W PS-AMR2-12: 4.3 W PS-AMR3-12: 7.3 W PS-AMR4-12: 10.2 W PS-AMR5-12: 12.9 W PS-AMR1-24: 2.3 W PS-AMR2-24: 4.0 W PS-AMR3-24: 7.1 W PS-AMR4/24: 9.9 W PS-AMR5-24: 12.2 W

Power Input

Voltage Accuracy	+1%
Minimum Load	0%
Line Regulation	±1%
Voltage Trim Range	For all except the PS-AMR1 models 12 V: 12 to 14 VDC 24 V: 24 to 28 VDC
Hold up time	115 / 230 VAC PS-AMR1: 10 / 30 ms PS-AMR2: 20 / 80 ms PS-AMR3: 20 / 100 ms PS-AMR4-12: 16 / 60 ms PS-AMR5-12: 16 / 60 ms PS-AMR4-24: 12 / 60 ms PS-AMR5-24: 10 / 60 ms
DC ON / LOW indicator threshold	12 V: 9 to 10.8 VDC 24 V: 19.2 to 21.6 VDC

General

Isolation Resistance	Input-Output, @ 500VDC, 100 MΩ
Derating	PS-AMR1/2/5: +61° to 71°C, max 2.5% / °C PS-AMR3/4: +56° to 71°C, max 2.5% / °C
Cooling	Normal convection (Recommend all sides 25mm free space)

Control and Protection

Input fuse	250 VAC internal PS-AMR1: T1A PS-AMR2/3/4: T2A PS-AMR5: T3.15A
Internal Surge Protection	IEC 61000-4-5
Rated Over Load Protection	PS-AMR1: 110 - 165 % PS-AMR2: 120 - 160 % PS-AMR3/4/5: 110 - 150 %
Over voltage protection	Auto Recovery 12 V: 15 to 16.5 VDC 24 V: 30 to 33 VDC
Degree of protection	IP20

Connector

AWG24-12 (0.2 - 2.5mm²) flexible / solid cable

Indicating LEDs

DC ON	At Start Up (Green)
DC LOW	After Start Up (Red)

Electrical & Mechanical

Size	PS-AMR1	3.58 × 0.71 × 2.22 in (9.1 × 1.8 × 5.65 cm)
	PS-AMR2	3.58 × 1.38 × 2.22 in (9.1 × 3.5 × 5.65 cm)
	PS-AMR3	3.58 × 2.09 × 2.22 in (9.1 × 5.3 × 5.65 cm)
	PS-AMR4	3.58 × 2.8 × 2.22 in (9.1 × 7.1 × 5.65 cm)
	PS-AMR5	3.58 × 3.54 × 2.24 in (9.1 × 9.0 × 5.7 cm)
Weight	PS-AMR1	0.14 lb / 65 g
	PS-AMR2	0.29 lb / 130 g
	PS-AMR3	0.42 lb / 190 g
	PS-AMR4	0.55 lb / 250 g
	PS-AMR5	0.84 lb / 380 g

Environmental

MTBF	>500,000 hours @ 40°C
Operating Temp	-40° C to +71° C
Storage Temp	-40° C to +85° C
Relative Humidity	20% to 90% (non-condensing)

Approvals & EMC Compliance

UL / cUL	UL 508 Listed UL 60950-I, UL 1310 Class 2 Power (24LS model only) recognized ISA 12.12.01 (Class I, Div 2, Groups A, B, C, & D)
TUV	EN 60950-I, CB scheme
CE	EN 61000-6-3, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 55024, EN 61000-4-2 Level 4, EN 61000-4-3 Level 3, EN 61000-4-4 Level 4, EN 61000-4-5 L-N Level 3, EN 61000-4-6 Level 3, EN 61000-4-8 Level 4, EN 61000-4-11, ENV 50204 Level 2, EN 61204-3
Vibration	Meets IEC 60068-2-6 Rail Mount: 10 - 500 Hz, 2G, 60 min for each Axis
Shock	Meets IEC 60068-2-27 15G, 11ms, 3 Axis, 6 Faces, 3 times for each Face

PIN ASSIGNMENTS

PS-AMR1

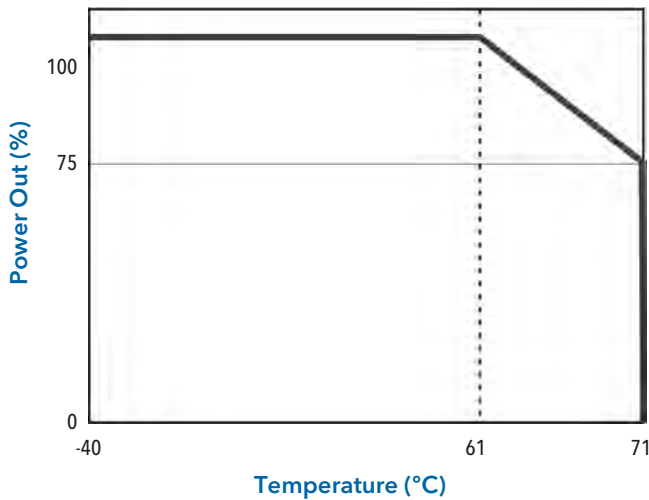
PIN	Designation	Description
1	OUT	- Negative output terminal
2		+ Positive output terminal
3	IN	L Input terminals (phase conductor, no polarity at DC input)
4		N Input terminals (neutral conductor, no polarity at DC input)
	OTHER	DC ON Operation indicator LED
		DC LO DC Low indicator LED

PS-AMR2/3/4/5

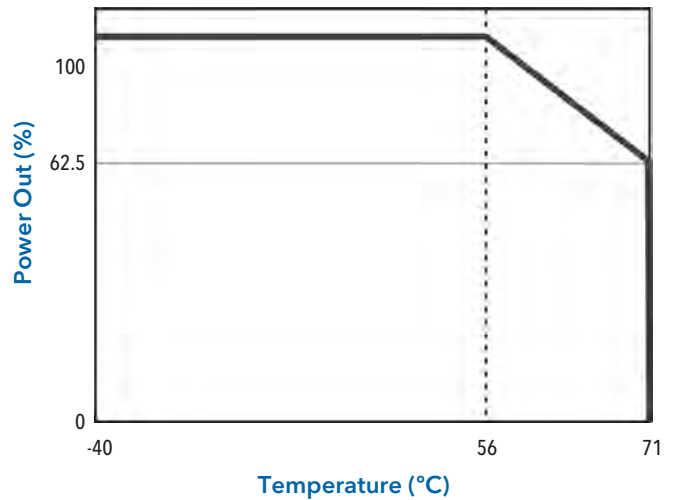
PIN	Designation	Description
1	OUT	- Negative output terminal
2		- Negative output terminal
3		+ Positive output terminal
4		+ Positive output terminal
5	IN	L Input terminals (phase conductor, no polarity at DC input)
6		N Input terminals (neutral conductor, no polarity at DC input)
	OTHER	Vout ADJ. Trimmer-potentiometer for Vout adjustment
		DC ON Operation indicator LED
		DC LO DC Low indicator LED

DERATING CURVES

PS-AMR1/2/5



PS-AMR3/4



ORDERING INFORMATION

Part Number	Input Voltage	Output Wattage	Output Voltage	Output Current	Eff. (min)	Eff. (typ)
PS-AMR1-12	90 to 264 VAC	10 Watts	+ 12 VDC	830 mA	76%	78%
PS-AMR2-12	90 to 264 VAC	24 Watts	+ 12 VDC	2000 mA	82%	84%
PS-AMR3-12	90 to 264 VAC	33 Watts	+ 12 VDC	2750 mA	80%	80%
PS-AMR4-12	90 to 264 VAC	54 Watts	+ 12 VDC	4500 mA	82%	84%
PS-AMR5-12	90 to 264 VAC	72 Watts	+ 12 VDC	6000 mA	83%	86%
PS-AMR1-24	90 to 264 VAC	10 Watts	+ 24 VDC	420 mA	78%	80%
PS-AMR2-24	90 to 264 VAC	24 Watts	+ 24 VDC	1000 mA	83%	85%
PS-AMR3-24	90 to 264 VAC	36 Watts	+ 24 VDC	1500 mA	81%	84%
PS-AMR4-24	90 to 264 VAC	60 Watts	+ 24 VDC	2500 mA	84%	86%
PS-AMR5-24	90 to 264 VAC	100 Watts	+ 24 VDC	4200 mA	86%	89%

