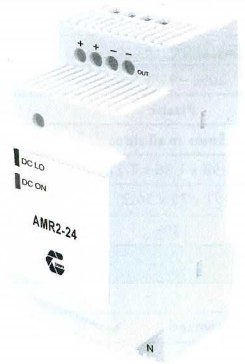
Building Automation
Switching Power Supply

DEFINITION OF MODELS

AMR2-24

24 : Output Voltage
- 05 .... 05V output
- 12 .... 12V output
- 15 .... 15V output
- 24 .... 24V output



Technical Data
Installation and Operation

Fig. 1

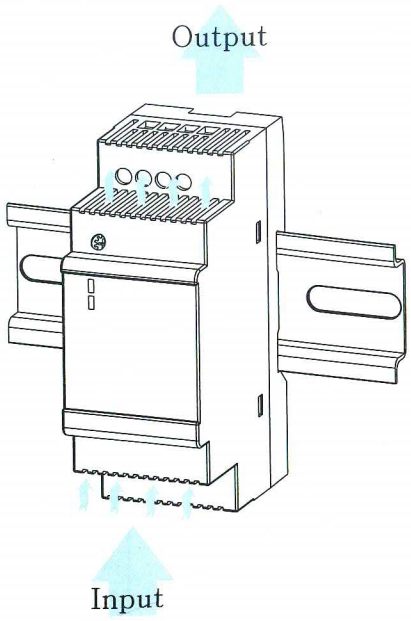


Fig. 2

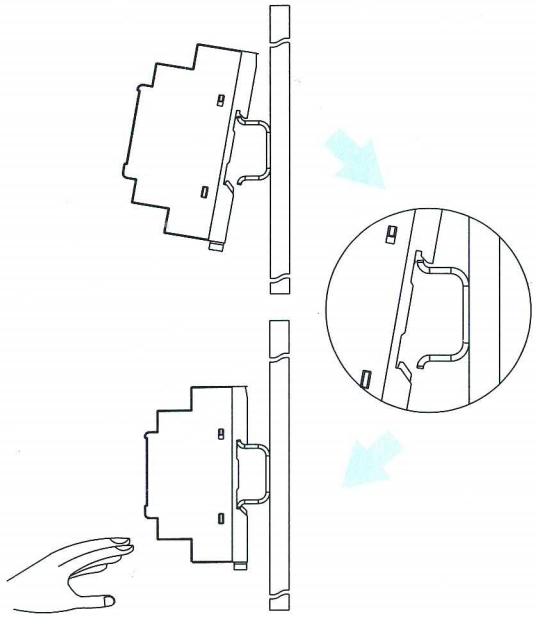
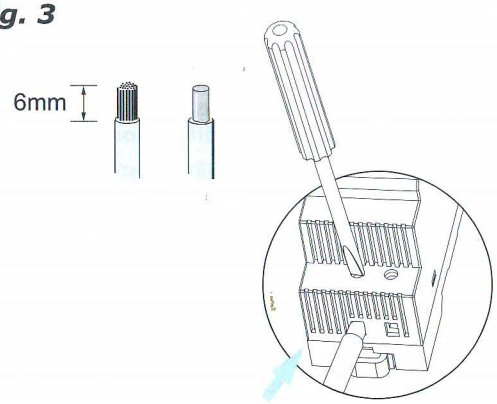


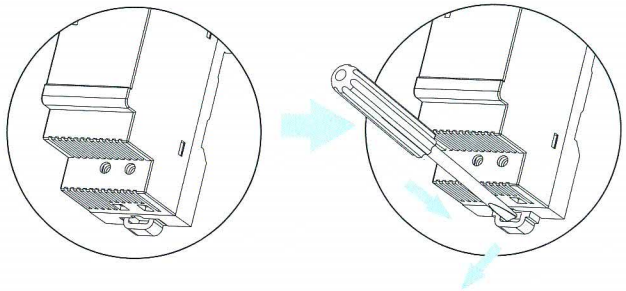
Fig. 3



Connector size range
* AWG24 - 12
  - Connector can withstand torque at maximum 6 pound-inches

use copper conductors only, 60/75 °C
Max. surrounding air temperature 50 °C for UL508

Fig. 4



⚠ Safety and warning notes

Before operation, ensure you have read and understood all the information and instructions in this leaflet.

Disconnect the system from the supply network before undertaking any installation, maintenance, modification or removal.

CAUTION! This unit is a built-in and Electrostatically Sensitive Device (ESD), so must be installed in the airtight distributor box that conform to the safety approval. The unit covers/ chassis are designed to protect only skilled personnel from hazards and must not be made user accessible.

After installation, it must be ensured that all the terminals are properly covered.

As a minimum, the following conditions must be met before operation.

- Connection to the main power supply in compliance with VDE0100.
- All wires must be properly secured in terminal blocks.
- Unit and power supply cables must be properly fused.
- All output lines must be correctly rated and connected with the correct polarity.
- Sufficient air cooling must be ensured.
- Use in a pollution Degree 2 environment.

No modification should be made while the unit is in operation.

Only (dis) connect the plug connectors when the power is off.

Do not cover ventilation holds-leave sufficient space for cooling around the unit.

This unit contains unprotected conductors carrying a lethally high voltage. Improper usage or handling may result in electric shock or serious burns.

Do not introduce any object into the unit.

Keep away from fire and water.

Installation

MOUNTING (See Fig. 1)

Ventilation holes must be kept clear recommended min. clearance is 25mm on all sides. To mount, tilt the top of the unit backwards and clip the top edge of the lock onto the metal rail.

Tilt the bottom of the unit backwards and click into place. (Fig. 2)

REMOVAL (See Fig. 4)

To remove from the DIN rail, use an insulated screwdriver to loosen the spring as shown in fig. 4 overleaf then remove.

Connection (See Fig. 3)

Ensure that cables used are suitable for the load see technical data below. Ensure that cables are correctly stripped and fitted. Ensure correct polarity at output terminals.

INTERNAL FUSE

The internal fuse protects the unit and is not user-replaceable. In the event of an internal failure, the unit must be returned to the manufacturer.

Description	Model No.			
	AMR2-05	AMR2-12	AMR2-15	AMR2-24
Input				
Input Internal Fuse	T2A / 250Vac			
Rated input Voltage	100Vac ~ 240Vac			

Input				
AC Voltage Range	90Vac ~ 264Vac			
DC Voltage Range	120-375 Vdc			
Frequency	47-63Hz			
Rated input Current (max)	400mA	600mA		
Inrush Current (115Vac/230Vac)	< 25A / <50A			
Efficiency (Typ)	82%	84%	84%	85%
Power Factor Correction	Meet EN61000-3-2 class A			
Output				
Turn on time	<1000ms after AC is applied to input at full resistive load			
With capacitive load	<1500ms W / 3500 μF			
Voltage Rise Time	<150ms full resistive load			
With capacitive load	<500ms W / 3500 μF			
Over voltage protection	< 6.7 Vdc	< 18 Vdc	< 22 Vdc	< 33 Vdc
Voltage trimmer range	5-5.5 Vdc	12-14 Vdc	13.5-16.5 Vdc	24-28 Vdc
Line regulation	<1.0 %			
Load regulation	<1.0 %			
Time & temp. Drift	<1.0 %			
Initial voltage setting	5V + 1 %	12V + 1 %	15V + 1 %	24V + 1 %
DC ON indicate(Green LED)	>3V	>9V	>11V	>20V
DC LOW indicate(Red LED)	3.2~3.7V	8.8~9.3V	12~12.5V	21.5~22V
Ripple	<50mVp-p			
Nominal Current	3A	2A	1.6A	1A
Rated over load protection	120%~160%			
Output short circuit	Hiccup mode			
Holdup Time(230Vac)	> 80ms			
Voltage fall Time	<150ms from 95% to 10% rated voltage @ full load			
General				
Isolation Voltage	3000Vac / 4242Vdc			
Isolation Resistance	100M			
Cooling	Free air convection			
Temperature	Storage : -25 to + 85 ℃ , Operation : -25 to+ 71℃			
Derating	2.5% / ℃ from 61 to 71℃			
Humidity	20%~95% RH			
Case material	Plastic			
MAX. Required free space	25mm in all sides			
Dimensions H x W x D inches (mm)	3.58 x 1.38 x 2.21			
	(91 x 35 x 56.2)			
Weight	130g			
Approvals And Standard				
UL / cUL	UL508 Listed			
	UL1310 Class 2 power, UL 60950-1 Recognized			
TUV	EN60950-1			
CE	EN61000-6-3 ,EN55022 Class B			
	EN61000-3-2, EN61000-3-3			
	EN61000-6-2, EN55024 , EN61000-4-2 , EN61000-4-3 , EN61000-4-4			
	EN61000-4-5,EN61000-4-6 , EN61000-4-8 ,EN61000-4-11, EN61204-3			