

• Linear or switched-mode version

DC or AC 50Hz - 60Hz - 400Hz input

• Fully protected

short-circuits, overload, thermal

Limited output current for sensor safety

• 1 to 4 isolated outputs

Fix or adjustable from 1V to 96V by coupling

single: 3v, 5v, 9v, 10v, 12v, 15v, 18v, 24v

symmetrical: +/-5V, +/-12V, +/-15V, ...

Adjustable version from 1V to 24V

• Applications

4..20 mA loop power supply,

instrumentation, sensors, ...



These power supplies are available in 1 to 4 outputs and are suitable for the implementation of two wires technology converters (4-20mA current loop powered). The isolation between each outputs eliminates ground loop problems that may affect the measurement. Each output being independent and of low power, the risk of damage to the material is discarded compared to the use of a single high output power supply. The independence of each loop strongly increases the reliability of the system. The outputs allow all coupling to suit specific needs, their use in serial or parallel can achieve symmetrical output, increase the output current or voltage.

Description:

- The SMPS (switched-mode supply) version allow high power density without heating due to its high efficiency. It also adapts to a wide range of input voltage (AC or DC)
- The linear version is particularly suitable for applications requiring a very stable output voltage or noise-free.

specifications:

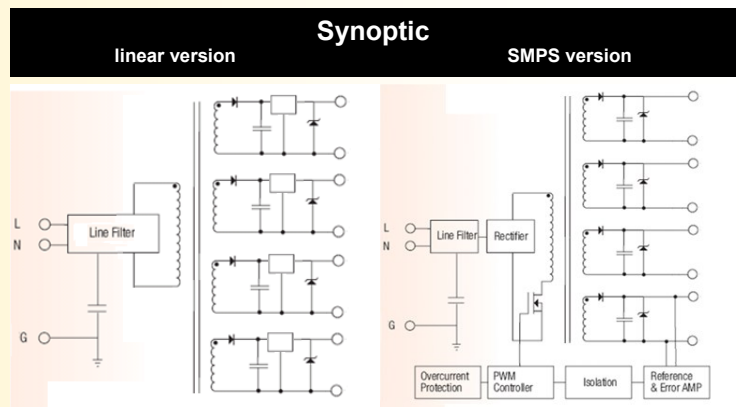
- 1, 2, 3 or 4 isolated outputs allowing serial or parallel coupling, in order to obtaining exotic or symmetric output voltages, or to increase the available output current.
- Output voltage : 24 Vdc typical
- any output voltage available on request from 0 to 24Vdc and up to 96 volts by coupling
- permanent short circuits protection,
- overload protection,
- thermal protection (output power limitation),
- natural convection cooling,
- embedded EMC filter in accordance with EN55022 class A,
- regulated output voltage,
- output protection with 24V transient voltage limiter.

Features:

- DIN rail mounting,
- Protection rating IP20,
- Conformal coating,
- Green LED for main voltage presence,
- Connection by screw terminals, wire section up to 2.5 mm².

Implementation and installation recommendations:

- primary protection with fuse recommended (delayed 2A),
- maintain a spacing of 2 mm between devices for natural convection.



Version and order code:

linear versions: (35 mm width case)

AL35Lin-x : x : from 1 to 4 outputs
voltage output: 5v, 10v, 15v, 24v 30mA, 230Vac or 115Vac input
others output voltage on request (+/-15v,...)

SMPS versions: (23 mm width case)

AL35Dec-x : x : form 1 to 4 outputs
output 24V 30mA, wide input range 20...265 Vac-dc

Hybrid versions: (SMPS + linear regulation) : (35 mm width case)

AL35HYB-x : x : from 1 to 4 outputs
voltage output: 5V, 10V, 15V, 24V 50mA, wide input range 20...265Vac-dc
other output voltage on request (+/-15V, ...)

special versions: (35 mm width case)

AL35adj : - 2 adjustable outputs 1.2Vdc...24 Vdc, 30 mA.

- Input: 230 Vac +/- 10 % standard

(any input voltage available from 11 to 265 Vac or dc)

AL35-200 : - 24 Vdc single output, 200 mA

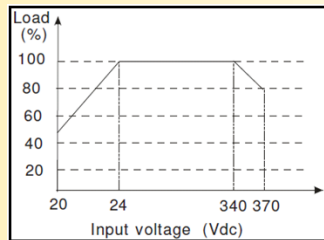
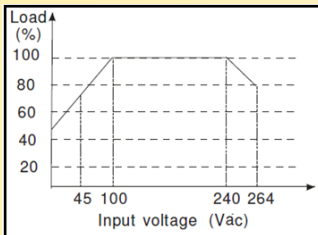
- Input: 230 Vac +/- 10 % standard

(any input voltage available from 11 to 265 Vac or dc)

Power Supply**switched-mode (SMPS) version:**

Input voltage 45...265VAC / 20...370VDC
 Input frequency 47...440Hz
 Typical efficiency 85%
 Inrush current 2A typical

Output power characteristics vs input voltage

**Linear version:**

Input voltage 230VAC or 115Vac +/-15%
 Input frequency 45...65Hz

Outputs**SMPS version:**

Accuracy ±2% max. (no load)
 Regulation -5% max. (full load)
 Ripple < 1% Vout max (limited to 20MHz)
 Continuous short circuit protection, automatic restart.
 Overload protection 110% typ.
 Switching frequency 100kHz typ.
 Output hold time Typical 50 ms.

Linear version:

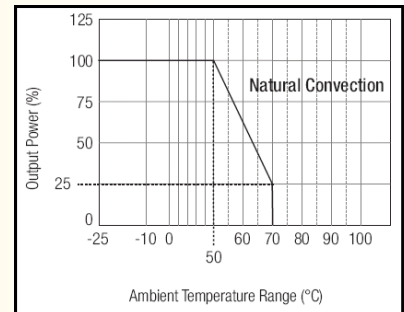
Voltage (standard) 24 Vdc (+/- 2 %)
 Output current 30 mA max (at 24V)
 the output current is a function of the voltage
 the maximum power for each output is 1Watt

Load influence 0.1 % max 0.001 % typ.
 noise < 20 mV p. to p.
 Thermal drift 1 mV / °C

ENVIRONMENT

Operating temperature -25 °C to 60 °C
 (natural convection)
 Thermal protection 100°C internal
 Storage -25 °C to 105 °C
 Humidity 85 % (not condensed)
 Temperature coefficient ±0.02%/°C typical
 Insulation resistance 100 MΩ min.
 Dielectric strength 2000VAC (input / output)
 Weight 100g to 400 g model dependant
 MTBF SMPS version > 1 000 000 hours @ 25°C
 MTBF linear version > 4 000 000 hours @ 25°C
 Life time > 200 000 hrs @ 25°C

Output power characteristics vs ambient temperature

**Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE****Immunity standard for industrial environments
EN 61000-6-2**

EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

**Emission standard for industrial environments
EN 61000-6-4**

EN 55011
 group 1
 class A

**WIRING AND OUTLINE DIMENSIONS:**