

AHDR-15-12



Elcomtech's step shape power family are designed with ultra-slim plastic housing and for full range AC input from 90V AC to 264V AC. The series are isolation Class II Level, achieving high efficiency and low no-load power consumption. They provide adjustable DC output voltage and operate in wide temperature range. The good performance can be used for building automation, household and industrial control systems etc.

Features



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



Three Years Warranty

Model Information

Elcomtech Part number	DC VOLTAGE	RATED CURRENT	RATED POWER
AHDR-15-12	12V	1.25A	15W

Input

VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC
FREQUENCY RANGE	47 ~ 63Hz
INRUSH CURRENT	COLD START 25A/115VAC 45A/230VAC
AC CURRENT	0.5A/115VAC 0.25A/230VAC
EFFICIENCY	85% AHDR-15-12

Output

RIPPLE & NOISE	120mVp-p AHDR-15-12
VOLTAGE ADJ. RANGE	10.8~13.8V AHDR-15-12
VOLTAGE TOLERANCE	± 2.0% AHDR-15-12
LINE REGULATION	± 1.0%
LOAD REGULATION	± 1.0%
SETUP, RISE TIME	2000ms, 80ms/230VAC at full load 2000ms, 80ms/115VAC at full load
HOLD UP TIME (Typ.)	30ms/230VAC at full load 12ms/115VAC at full load

Protection

OVER LOAD	110 ~ 145% 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	14.2 ~ 16.2V AHDR-15-12 Protection type : Shut off o/p voltage, clamping by zener diode

Environment

WORKING TEMP.	-20 °C ~ +70 °C
Working Humidity	20 ~ 90% RH Non-Condensing
STORAGE TEMP., HUMIDITY	-40 °C ~ +85 °C , 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 50 °C) RH non-condensing
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6
OPERATING ALTITUDE	5000 meters
OVER VOLTAGE CATEGORY	II;According to EN62368-1;altitude up to 2000 meters
MTBF	1000K hrs min. MIL-HDBK-217F (25 °C)

SAFETY & EMC

SAFETY REGULATIONS	UL62368-1, BS EN/EN62368-1
WITHSTAND VOLTAGE	I/P-O/P:4KVAC
INSULATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25 °C / 70% RH
EMC EMISSION	BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3
EMC IMMUNITY	BS EN/EN61000-4-2,3,4,5,6,8,11

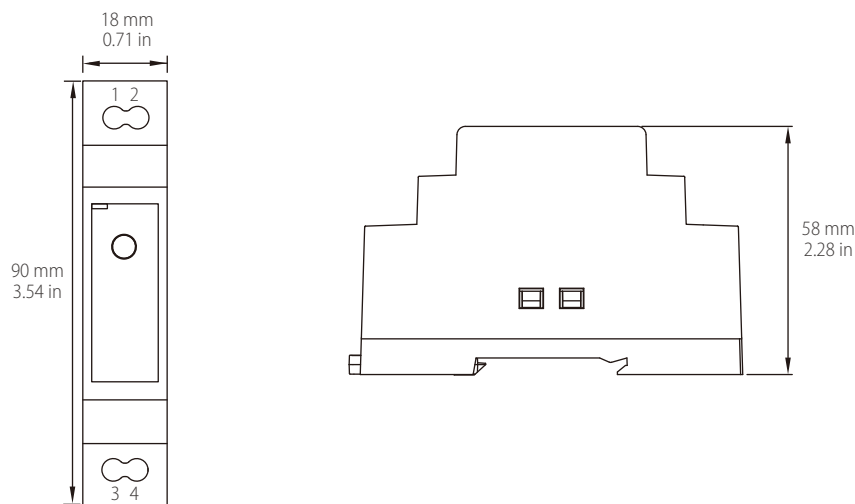
Dimensions & Weight

Length:	18mm / 0.71in
Width:	90mm / 3.54in
Height:	58mm / 2.28in
Weight:	78g

Packing

Carton Size:	33.5 x 25.5 x 21 CM 13.19 x 10.04 x 8.27 in
Master Carton Quantities:	100pcs / Carton

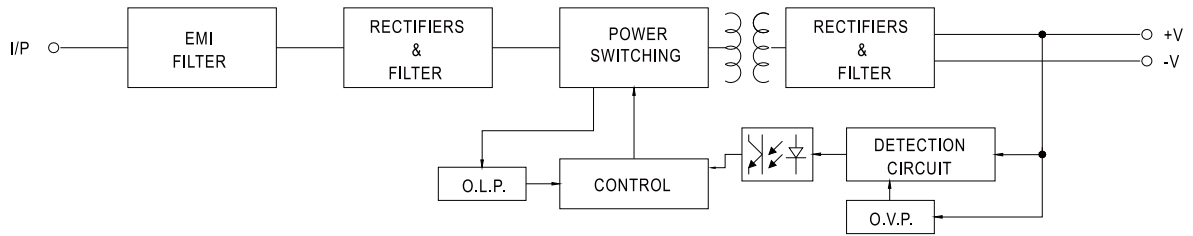
Dimensions and Installation



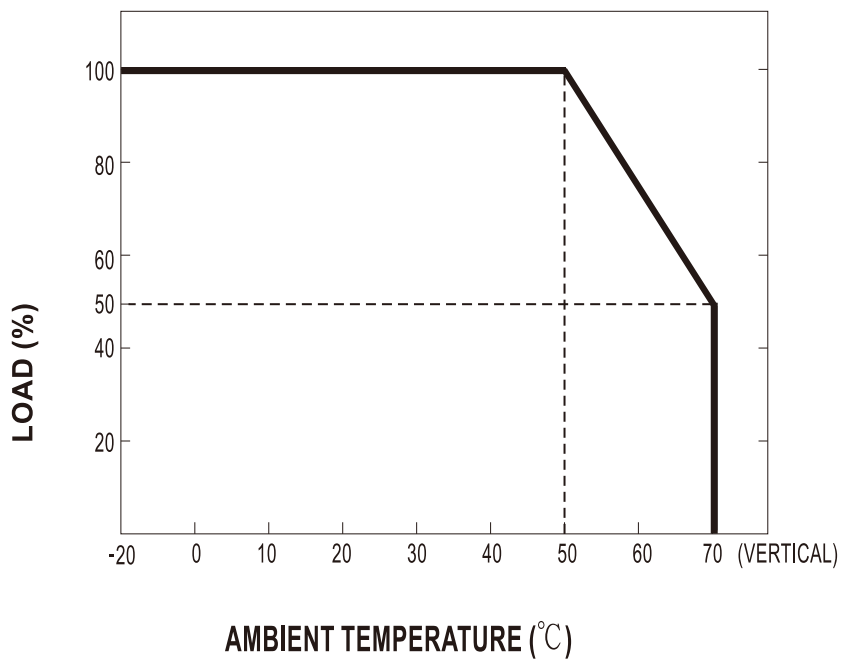
Input	
No.	Description
1	+V
2	-V

Output	
No.	Description
3	AC/N
4	AC/L

Functional Diagram



Deduction Curve and Temperature



Minus Output and Input Voltage Curves

