

RTK RT-AD range

Dual redundant switch mode power supply

- Flexible dual redundant power supply
- Incorporates two high quality switch mode power supplies
- AC and DC input versions
- Fully protected output
- Typical hold up 20ms at 240VAC
- Input overload and reverse current protection
- Compact and efficient
- Proven reliability



Sold in conjunction with many of our industrial control and instrumentation products these Power Supplies will provide a stable and safe DC working voltage in industrial applications for many years.

The RT-AD range is based on two RT range Power Supplies to give the customer a reliable dual redundant power module together with indication and relay output used to indicate PSU failure.

RTK RT-AD range

September 2016

VARIANTS

Model Number Decode

RT-AD-AB-PWR-24

Where

RT-AD	Model range
A	Power supply 1 input range (L, M or H)
B	Power supply 2 input range (L, M or H)
PWR	Output power in Watts (25, 40, 60, 100, 150, 200 or 320)
24	DC output voltage

Power supply input options are:

- L 48V DC nominal (32-72V DC)
- M 110V DC nominal (72-144V DC)
- H 88-264V AC 47-63Hz (125-270V DC)

Only those combinations listed in the Products table below are available.

Products

Model	Input Range Supply 1	Input Range Supply 2
RT-AD-LH-25-24	36-72VDC	88-264VAC or 125-270V DC
RT-AD-MH-25-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-25-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC
RT-AD-LH-40-24	36-72VDC	88-264VAC or 125-270V DC
RT-AD-MH-40-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-40-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC
RT-AD-LH-60-24	36-72VDC	88-264VAC or 125-270V DC
RT-AD-MH-60-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-60-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC
RT-AD-LL-100-24	36-72VDC	36-72VDC
RT-AD-LH-100-24	36-72VDC	88-264VAC or 125-270V DC
RT-AD-MM-100-24	72-144VDC	72-144VDC
RT-AD-MH-100-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-100-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC
RT-AD-LH-150-24	36-72VDC	88-264VAC or 125-270V DC
RT-AD-MM-150-24	72-144VDC	72-144VDC
RT-AD-MH-150-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-150-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC
RT-AD-MH-200-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-200-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC
RT-AD-MM-320-24	72-144VDC	72-144VDC
RT-AD-MH-320-24	72-144VDC	88-264VAC or 125-270V DC
RT-AD-HH-320-24	88-264VAC or 125-270V DC	88-264VAC or 125-270V DC

SPECIFICATION

POWER INPUTS

AC supply versions

88-264V AC 47-63Hz (125-270V DC)

DC supply versions

48V DC nominal (32-72V DC)

110V DC nominal (72-144V DC)

POWER OUTPUTS

Output voltage

24V DC

Regulation

-1% to +5% of output voltage dependent on load

Ripple and Noise

Typically 100mV

Over-voltage protection

115-135% of output voltage

Hold up time

Typically 20ms at 240V AC

Output isolation

500V AC withstand voltage output to earth (GND) or relay contacts

Output Derating

Some models need to be derated for operating temperature and/or input voltage. For more details see the instruction manual.

RELAY OUTPUTS

Functions

Two relays monitor each internal power supply – contacts operate when the power supply fails. Normally open or normally closed contact available for each relay.

Max switch voltage

30V DC or 250V AC

Max switched current

7A at 30V DC

5A at 250V AC

GENERAL

Compliance

Each internal power supply meets compliance standards as below:

Conduction & Radiation

All variants: EN55022 (CISPR22) Class B

Harmonic Current

All AC input variants: EN61000-3-2,-3

Immunity

All variants: EN61000-4-2, 3, 4, 5, 6, 8

All AC input variants: EN61000-4-11

25W 110V DC and AC input, 40W 110V DC input, 60W 48V and 110V DC input, all 100W through 320W input variants:

ENV50204, EN55024, light industry level, criteria A

25W and 40W 48V DC input: ENV50204, EN55024, heavy industry level, criteria A

40W and 60W AC input: EN61000-6-2 (EN50082-2), heavy industrial level, criteria A

LVD

All variants: EN61010-1:2010 and IEC61010-2-201

Environment

Operating temperature: -10 to 60°C

(Note - Some models need to be derated for operating temperature. For more details see the instruction manual.)

Operating humidity: 20-90% RH non condensing

Storage temperature/humidity: -20 to 85°C

Connections

All connections are terminal blocks for conductors up to 2.5mm².

See instruction manual for further details.

Dimensions

Small case (power range 25-150W):

274 x 113 x 134mm (L,W,H) plus mounting brackets

Large case (power range 200-320W):

320 x 150 x 134mm (L,W,H) plus mounting brackets

Weight

Small case (power range 25-150W) max 3.5kg.

Large case (power range 200-320W) max 4.4kg.

(Actual weights dependent on variant – lower powers are lower in weight)