

## 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 the 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.



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### RTK RT-AD range

January 2016

#### **VARIANTS**

#### **Model Number Decode**

RT-AD-AB-PWR-24

#### Where

RT-AD	Model range	
Α	Power supply 1 input range (L, M or H)	
В	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:

48V DC nominal (32-72V DC) L 110V DC nominal (72-144V DC) M Н 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



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#### **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

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 2.5mm<sup>2</sup>. 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)



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