



SERIES: VDRS-40

DESCRIPTION: 40 W MINI POWER SUPPLY

FEATURES

- universal AC input
- installs on DIN rail
- brown out protection
- short circuit, over load, over voltage protection
- long life 105°C electrolytic capacitors
- operating temperature up to 70°C
- can withstand 5G's of vibration
- true DC OK signal output
- meets EISA / efficiency level IV regulations



MODEL	output voltage		output current		output wattage	ripple	efficiency level
	nominal (V dc)		min (A)	max (A)	max (W)	max. (mVp-p)	
VDRS-40-12	12		0	3.4	40.8	100	IV
VDRS-40-15	15		0	2.7	40.5	100	IV
VDRS-40-24	24		0	1.7	40.8	120	IV
VDRS-40-48	48		0	0.85	40.8	180	IV

*full load, 230 Vac input, measured at 20MHz bandwidth with a 47 and 0.1 uF parallel cap on the output



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INPUT

parameter	conditions/description	min	nom	max	units
input voltage range	derating may be needed under low input voltages; consult the derating curve for more details (page 3)	88		264	V ac
		124		370	V dc
frequency range		47		63	Hz
rated input current	115 V ac			0.8	A
	230 V ac			0.4	A
inrush current	115 V ac			30	A
	230 V ac			60	A
leakage current	230 V ac			1	mA

OUTPUT

parameter	conditions/description	min	nom	max	units
line regulation			±1		%
load regulation			±1		%
voltage tolerance	includes setup tolerance, line and load regulation		±1		%
over voltage protection	latch-off mode	115		150	%
over load protection	constant current limit, auto recovery	102			%

SAFETY & EMI

parameter	conditions/description	min	nom	max	units
HI-POT	input to output for 1 minute			4242	V dc
	input to case for 1 minute			2121	V dc
insulation resistance	input to output at 500 V dc	100			MΩ
safety approvals	UL 508, TUV EN60950-1, UL1310 NEC class 2 compliant				
EMI standard	EN55022: 2006 class B, EN61204-3: 2000, EN61000-6-3:2007				
RoHS compliant	yes				
LPS power supply	yes				
power good	relay contact (30 V dc/1 A, 120 V ac/ 1 A)				

ENVIRONMENTAL

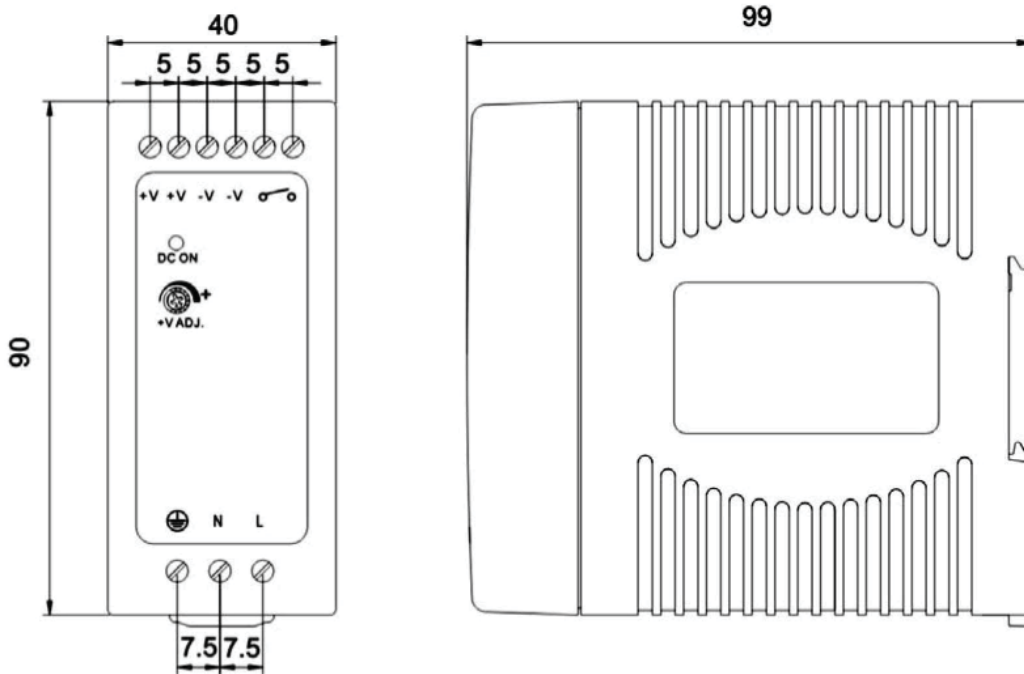
parameter	conditions/description	min	nom	max	units
operating temperature		-20		70	°C
operating humidity		20		90	%
storage temperature		-40		85	°C
storage humidity		10		95	%
cooling	natural convection				
temperature coefficient	0 ~ 50°C		0.03		%/°C



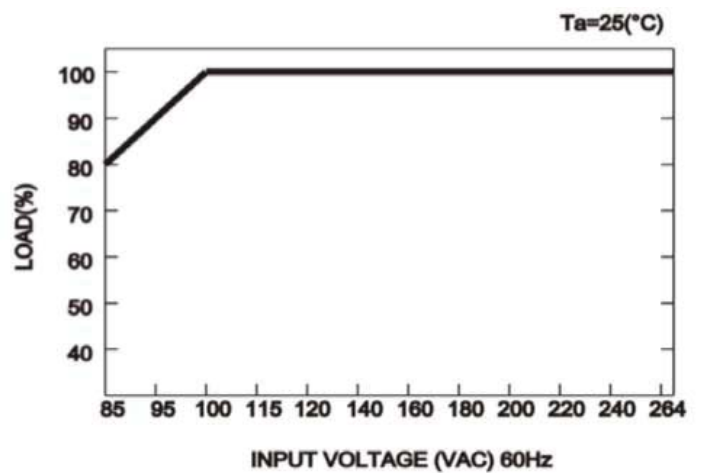
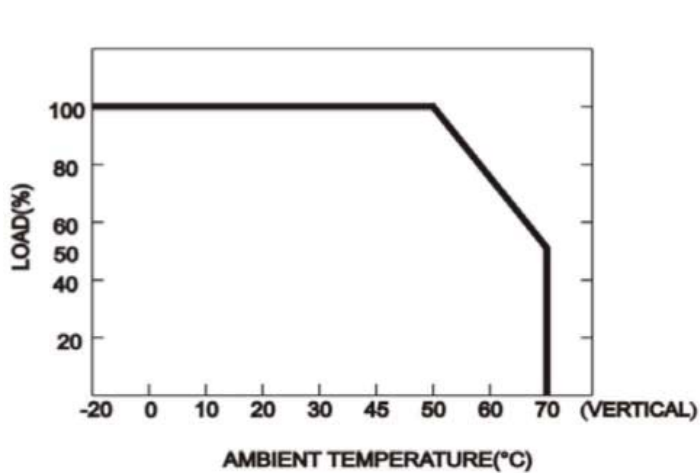
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MECHANICAL DRAWING



DERATING CURVE





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ACTIVE OK RELAY CONTACT

Contact Close	When the output voltage reaches the adjusted output voltage
Contact Open	When the output voltage drop below 90% output voltage
Contact Ratings (max.)	30V / 1A resistive load

BLOCK DIAGRAM

