



AC - DC DIN RAIL MOUNTABLE
36W CLASS 2 OUTPUT
INDUSTRIAL CONTROL EQUIPMENT

FEATURES

- AC/DC POWER MODULE
- UNIVERSAL INPUT 90~264VAC
- HIGH EFFICIENCY UP TO 84%
- SHORT CIRCUIT PROTECTION
- INTERNAL INPUT FILTER
- LOW PROFILE FOR BUILDING AUTOMATION

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (min.)	EFF. (typ.)
Single Output Models						
FDIN3-05	90~264 VAC	22.5 WATTS	+ 5 VDC	4500 mA	72%	75%
FDIN3-12	90~264 VAC	33 WATTS	+ 12 VDC	2750 mA	80%	83%
FDIN3-15	90~264 VAC	36 WATTS	+ 15 VDC	2400 mA	81%	84%
FDIN3-24	90~264 VAC	36 WATTS	+ 24 VDC	1500 mA	81%	84%

SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

GENERAL						
Characteristics	Conditions	min.	typ.	max.	unit	
Isolation voltage	Input / Output	3,000			VAC	
Isolation resistance	Input / Output, @ 500VDC	100			MΩ	
Ambient temperature	Operating at Vi nom	-25		+ 71	°C	
Derating	Vi nom, from +56C to +71 °C			2.5	% / °C	
Storage temperature	Non operational	-25		+ 85	°C	
Relative humidity	Vi nom, Io nom			90	% RH	
Dimension	L91 x W53 x D56.2				mm	
Cooling	Free air convection					
Case material	Plastic					

INPUT SPECIFICATIONS						
Characteristics	Conditions	min.	typ.	max.	unit	
Rated input voltage	Io nom	100		240	VAC	
Input voltage range	Ta min ... Ta max, Io nom	AC in	90	264	VAC	
		DC in	120	370	VDC	
Line frequency	Vi nom, Io nom	47		63	Hz	
Inrush current	Io nom	Vi : 115VAC	20	25	A	
		Vi : 230VAC	40	50	A	

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SPECIFICATION

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OUTPUT SPECIFICATIONS

Characteristics	Conditions	min.	typ.	max.	unit
Output voltage accuracy	Vi nom, lo min ...lo nom			± 1	%
Minimum load	Vi nom	0			%
Line regulation	lo nom, Vi min ...Vi max			± 1	%
Load regulation	Vi nom, lo min ...lo nom			± 1	%
Transient recovery time	50% load step changed		1		ms
Temperature coefficient	Vi nom, lo min			± 0.02	% / °C
Ripple & noise	Vi nom, lo nom, BW = 20MHz			50	mV
Hold up time	Vi = 115VAC, lo nom	20			ms
	Vi = 230VAC, lo nom	100			ms
Voltage trim range	Vi nom, lo nom	5V model	5	5.5	VDC
		12V model	12	14	VDC
		15V model	13.5	16.5	VDC
		24V model	24	28	VDC
DC ON indicator threshold at start up	Vi nom, lo nom	5V model	3		VDC
		12V model	9		VDC
		15V model	11		VDC
		24V model	20		VDC
DC LOW indicator threshold after start up	Vi nom, lo nom	5V model	3.2	3.7	VDC
		12V model	8.8	9.3	VDC
		15V model	12	12.5	VDC
		24V model	21.5	22	VDC
Efficiency	Vi nom, lo nom, Po / Pi	Up to 84%. See model list			

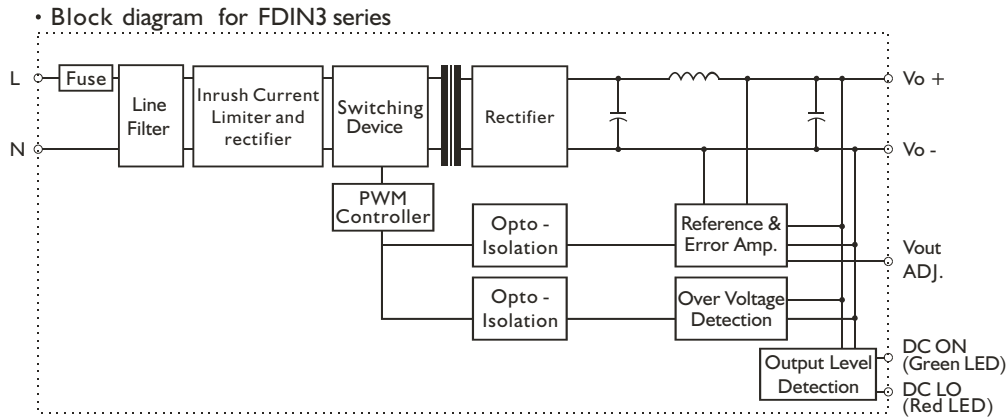
CONTROL AND PROTECTION

Characteristics	Conditions	min.	typ.	max.	unit
Input fuse		T2A / 250VAC internal			
Rated over load protection	Vi nom	110		150	%
Output short circuit	Vi nom	Fold forward			

APPROVALS AND STANDARDS

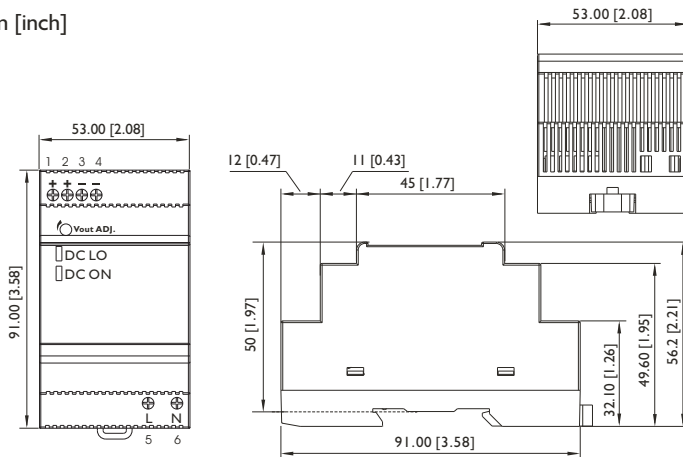
UL / cUL	UL508 Listed UL1310 Class 2 power supply , UL60950-1 Recognized
TUV	EN60950-1
CE	EN61000-6-3, EN55022 Class B EN61000-3-2, EN61000-3-3 EN61000-6-2, EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11 EN61204-3

CIRCUIT SCHEMATIC



MECHANISM & PIN CONFIGURATION

mm [inch]



CONSTRUCTION

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail; no tools required even to remove

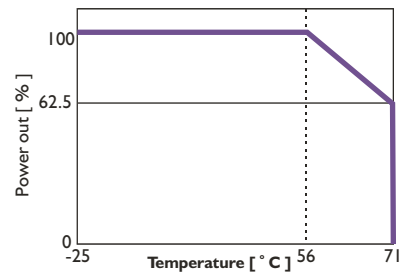
INSTALLATION

Ventilation / Cooling
 Normal convection
 All sides 25mm free space
 For cooling recommended
 Connector size range
 Solid: 0.2-2.0mm² (AWG24-14)
 (use copper conductors only)

PIN ASSIGNMENT

PIN NO.	Designation	Description	
1	OUT	+	Positive output terminal
2		+	Positive output terminal
3		-	Negative output terminal
4		-	Negative output terminal
5	IN	L	Input terminals (phase conductor, no polarity at DC input)
6		N	Input terminals (neutral conductor, no polarity at DC input)
	OTHER	Vout ADJ.	Trimmer-potentiometer for Vout adjustment
		DC ON	Operation indicator LED
		DC LO	DC Low indicator LED

DERATING



PHYSICAL CHARACTERISTICS

CASE SIZE	91 x 53 x 56.2 mm (3.58 x 2.08 x 2.21 inches)
CASE MATERIAL	Plastic
WEIGHT	185g

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