

30W 100-277VAC Input DIN Rail Power Supply

Features

- ◆ Low Profile for Building Automation
- ◆ 24V Output
- ◆ Wide Range AC Input (100-277VAC)
- ◆ Evaluated to NEC NFPA70 Class 2 Output
- ◆ Class II Double Insulation
- ◆ AC Line Frequency Sync Signal
- ◆ -25 to +71°C Operation
- ◆ DIN Rail Mount



Key Market Segments & Applications



Industrial



RoHS

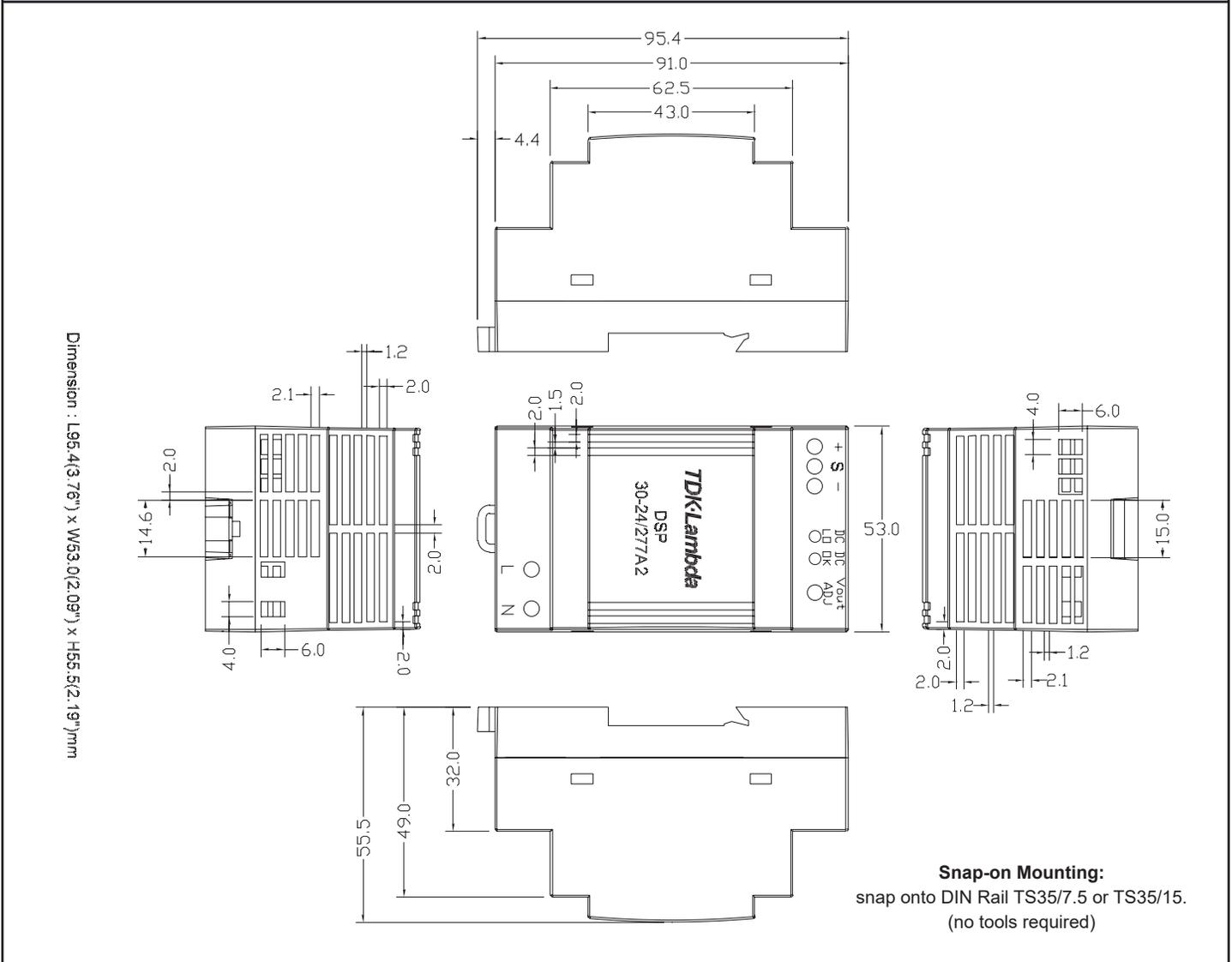
Specifications

Model		DSP30-24/277A2
AC Input Voltage range	VAC	90 - 304VAC, Class II double insulated (No ground connection required)
Input Frequency	Hz	47 - 63Hz
DC Input Voltage range	VDC	120 - 370VDC
Input Current	A	1.5A at 90VAC input
Inrush Current	A	65A at 230VAC, Cold start, 25°C ambient
Power Factor & Flicker	-	Meets EN61000-3-2, EN61000-3-3
Output Voltage Accuracy	%	±1% of Nominal
Line Regulation	mV	240mV
Load Regulation	mV	240mV
Ripple and Noise (20MHz BW)	mV	120mV
Overcurrent Protection (Typ)	-	<160%
Overvoltage Protection	V	30 - 36VDC
Hold Up Time (115VAC input)	ms	25ms
LED Indicators	-	Green LED = On, Red LED = DC Output Low
Operating Temperature	-	-25 to +71°C (Derate linearly 2.5%/°C from 61 to 71°C)
Temperature Coefficient	%/°C	±0.05%/°C
Storage Temperature	°C	-25 to +85°C
Operating Humidity	%RH	20 - 90% RH (non condensing)
Cooling	-	Convection
Withstand Voltage	-	Input to Output 3kVAC for 1 min.
Isolation Resistance	-	>20M at 25°C, 70%RH & 500VDC
Safety Agency Approvals	-	IEC/UL/CSA/EN62368-1, 60950-1. Evaluated to NEC NFPA70 Class 2 output per UL1310, CE Mark
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8 & -11, EN55024
Conducted & Radiated EMI	-	EN55032 class A
MTBF	Hours	> 100,000 Hours
Weight (Typ)	g	200
Size (WxHxD)	in	2.09 x 3.76 x 2.19"
Case material	-	Flame Retardant Polycarbonate (UL94 V-0)
Line sync signal (secondary)	-	24V peak to peak square wave, synchronized to input line frequency
Warranty	yrs	Two years

Model Selector

Model	Voltage (V)	Voltage Adjust (V)	Current (A)	Power (W)	Eff. (Typ %)
DSP30-24/277A2	24V	24 - 28V	1.25A	30W	87%

Outline Drawing



Output Cable Harness

Connector: AMP 3-640440-3
 Cable length 50mm
 Red = +24V, Black = 0V, White = Sync Signal

For additional information, please visit
<https://product.tdk.com/en/power/>

