

30W 100-277VAC Input Power Supply

<https://product.tdk.com/en/power/dsp>
www.emea.lambda.tdk.com/uk/products/dsp



Industrial

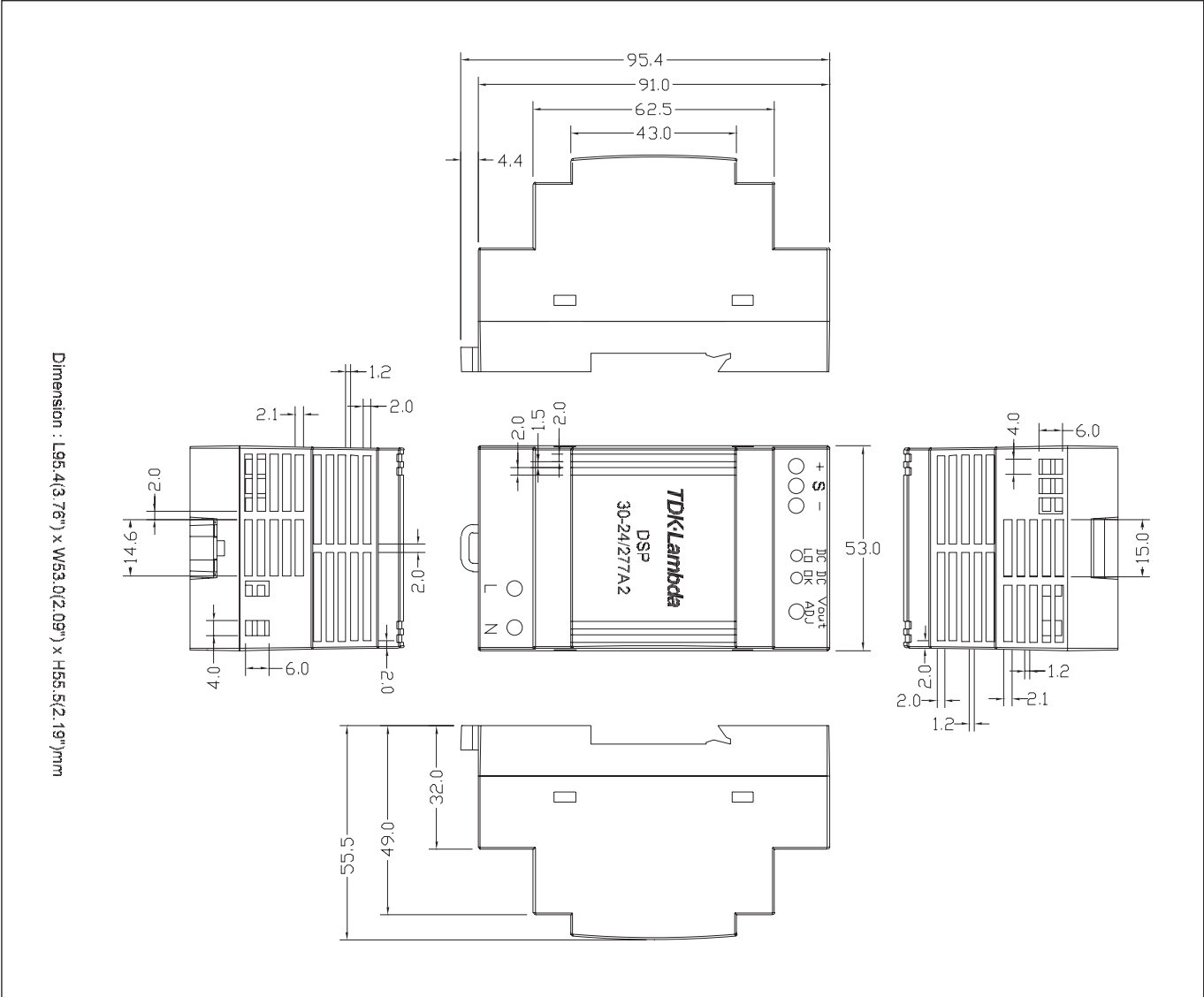


The 30W rated DSP30-24/277A2 AC-DC DIN rail mount power supply can operate from a wide range AC input of 90 up to 305Vac. It is Class II double insulated, requiring no ground connection and has been evaluated to NEC NFPA70 as a Class 2 output. The product also has an isolated AC line frequency synchronizing signal to derive a highly accurate clock signal from for a system timing circuit.

Features	Benefits
• Low 56mm Profile	• Low Profile for Building Automation
• Wide Range AC	• Global use with no input selector switches or transformers
• Class I and Class 2	• No ground wire required, evaluated to NEC NFPA70

Specifications		
Model		DSP30-24/277A2
Input		
Input Voltage range	Vac	90 - 305, Class II double insulated (No ground connection required)
Input Frequency	Hz	47 - 63
DC Input Voltage Range	Vdc	120 - 370 (safety certified for AC only)
Input Current	A	1.5 at 90Vac, 50Hz
Inrush Current (230 Vac cold start)	A	65
Power Factor and Flicker	-	Meets EN61000-3-2, EN61000-3-3
Harmonics	-	Not applicable
Hold Up Time (typ) at 115Vac Input	ms	25
Efficiency (Typical)	%	87
Conducted & Radiated EMI	-	EN55032-B class A, FCC Class A
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8 & -11, EN55024
Safety Agency Certifications	-	IEC/UL/CSA/EN62368-1, 60950-1. Evaluated to NEC NFPA70 Class 2 output per UL1310, UKCA and CE Marks
Output		
Output	-	24V, adjustable from 24 to 28V, 1.25A maximum, 30W maximum
Line Regulation	mV	240
Load Regulation	mV	240
Turn On Time (Maximum)	s	<2.5. when AC input voltage is greater than 115Vac
Temperature Coefficient	%/°C	±0.05
Ripple & Noise (20MHz BW)	mV	120
Minimum Load	A	None
Overcurrent Protection (Typ)	-	<160%
Overvoltage Protection	V	30 - 36
Overtemperature Protection	-	No
Remote Sense	-	No
DC Good	-	No
Indicators	-	Green LED = On, Red LED = DC Output Low
Parallel Operation	-	Not possible
Series Operation	-	Not possible
AC Sync Signal	-	24V peak to peak square wave, synchronized to input line frequency
Environmental		
Operating Temperature	°C	-25 to +71 (derate linearly 2.5%/°C from 55 to 71)
Storage Temperature	°C	-20 to +85
Humidity Operating (non condensing)	%RH	20 - 90
Cooling	-	Convection
Withstand Voltage (For 1 minute)	Vac	Input to Output 3,000
Isolation Resistance	MΩ	>100 at 25°C & 70%RH, Input to Ground 500Vdc
Other		
Weight (Typ)	g	200
Size (WxHxD)	mm	53 x 95.4 x 2.19
Size (WxHxD)	Inches	2.09 x 3.76 x 2.19
Case Material	-	Flame Retardant Polycarbonate (UL94 V-0)
Mating Connector	-	AMP# 3-640440-3 connector (pitch=2.54mm). Cable length 50mm
DIN Rail type	-	Suitable for mounting on TS-35/7.5 or TS35/15 DIN Rails
MTBF	Hours	>100,000 hours, Ground Benign, 25C, nominal input, 100% load
Warranty	Year	2 years

Outline Drawing DSP30-24/277A2



Output Cable Harness

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



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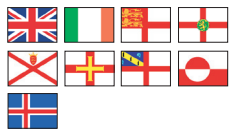
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