



- Low Profile for Building Automation
- 5V to 24V Outputs
- Wide Range AC Input
- -25°C to +71°C Operation
- Convection Cooled
- UL1310 Class 2
- Class II Double Insulation

## DSP Series

7.5W to 100W Low Profile  
Din Rail Mount Power Supplies

### Key Market Segments & Applications

Building Services      Alarms and Security,  
Automation:            Access and Fire Safety Systems,  
Lighting and Environment Control  
Systems.

### DSP Features and Benefits

#### Features

- Low 56mm Profile
- Wide Range AC
- Convection cooled

#### Benefits

- Fits into wall mounted cabinets
- Global use with no input selector switches
- No system fan required

### Specifications

ITEMS	MODEL	DSP10	DSP30	DSP60	DSP100
AC Input Voltage range	VAC	90 - 264VAC, Class II double insulated (No ground connection required)			
Input Frequency	Hz	47 - 63Hz			
Inrush Current (115 / 230VAC)	A	15 / 30A	25 / 50A	30 / 60A	30 / 60A
Power Factor		Meets EN61000-3-2, EN61000-3-3			
Output Voltage Accuracy	%	±1% of Nominal			
Line Regulation	%	1%			
Load Regulation	%	1%			
Ripple and Noise (20MHz BW)	mV	50mV <sup>(1)</sup>			
Overcurrent Protection (Typ)	-	110 - 160%, fold forward under short circuit (DSP100-24/C2 102-108%)			
Overvoltage Protection	V	120 - 145%			
Hold Up Time (115VAC input)	ms	See Model Selector			
LED Indicators	-	Green LED = On, Red LED = DC Output Low			
Operating Temperature	-	-25 to +71°C (Derate linearly 2.5%/°C from 55 to 71°C)			
Temperature Coefficient	%/°C	±0.02%/°C			
Storage Temperature	-	-25°C to +85°C			
Operating Humidity	-	20 - 95% RH (non condensing)			
Cooling	-	Convection			
Withstand Voltage	-	Input to Output 3kVAC for 1 min.			
Isolation Resistance	Ω	>100MΩ at 25°C & 70%RH, Input to Ground 500VDC			
Vibration *		IEC60068-2-6 (Mounting by rail: Random wave, 100-500Hz, 2G, ea. along X, Y, Z axes 10min/cycle, 60 min)			
Shock **		IEC60068-2-27 (Half sine wave, 4G, 22ms, 3 axes, 6 faces, 3 times for each face)			
Safety Agency Approvals	-	UL508, UL1310 Class 2 <sup>(2)</sup> , IEC/UL/CSA/EN62368-1, 60950-1, CE Mark			
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8 & -11			
Conducted & Radiated EMI	-	EN55022 class B	EN55022 class A		
Weight (Typ)	g	60	200	250	320
Size (WxHxD)	mm	18 x 91 x 55.6	53 x 91 x 55.6	71 x 91 x 55.6	90 x 91 x 56.8
Case material	-	Plastic			
Warranty	yrs	3			

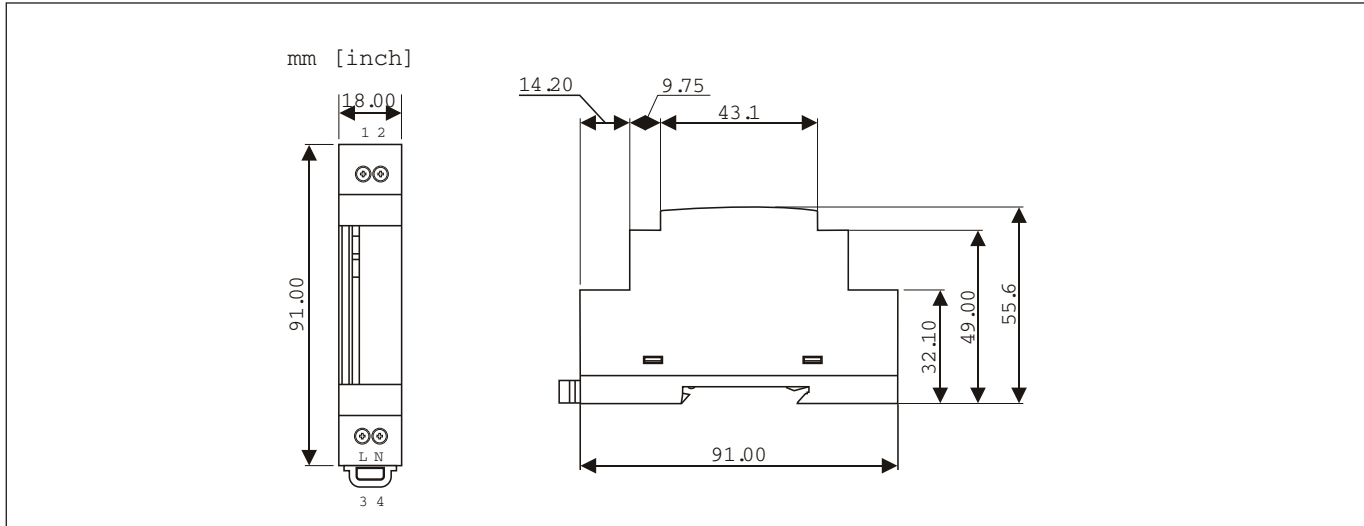
**Note 1:** For DSP100-24/C2 Ripple & Noise measured with Vin 115- 230 Vac.      **Note 2:** Excludes Models: DSP60-5, DSP100-12, DSP100-15, DSP100-24

\* (tested on the rail ) \*\* (tested off the rail)

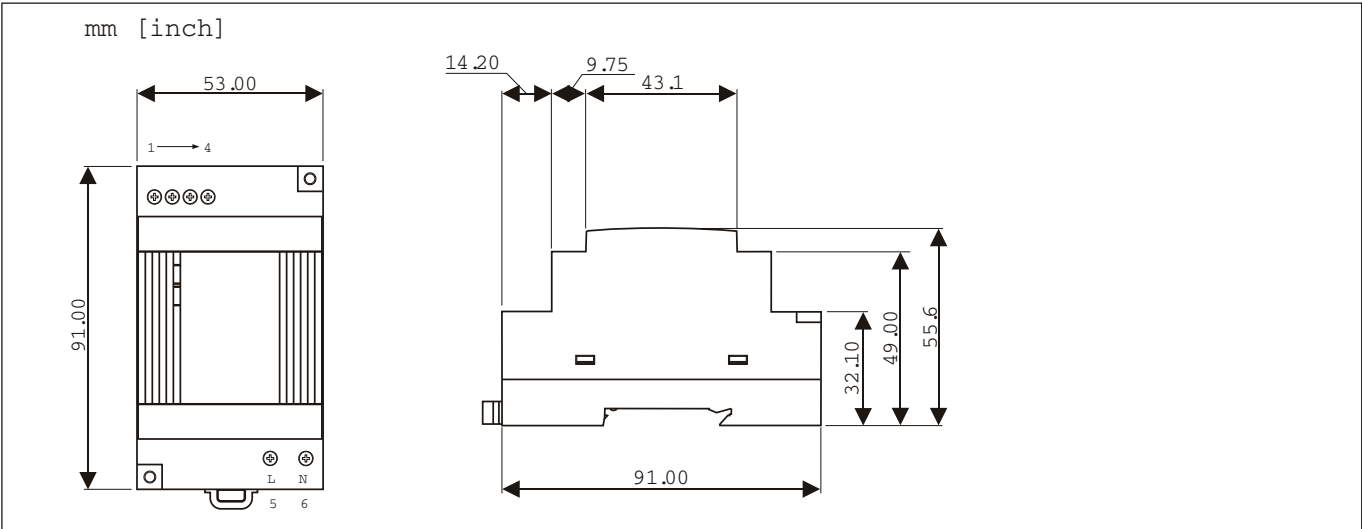
**Model Selector**

Model	Voltage (V)	Voltage Adjust (V)	Current (A)	Power (W)	Efficiency (Typ %)	HoldUp Time 115VAC in (ms)
DSP10-5	5	None	1.5	7.5	74	10
DSP30-5	5	5 - 5.5	3.0	15.0	74	25
DSP60-5	5	5 - 5.5	7.0	35.0	80	16
DSP10-12	12	None	0.83	10.0	78	10
DSP30-12	12	12 - 14	2.1	25.2	82	25
DSP60-12	12	12 - 14	4.5	54.0	84	16
DSP100-12	12	12 - 14	6.0	72.0	82	16
DSP10-15	15	None	0.67	10.1	78	60
DSP30-15	15	13.5 - 16.5	2.0	30.0	83	25
DSP60-15	15	13.5 - 16.5	4.0	60.0	85	12
DSP100-15	15	13.5 - 16.5	5.0	75.0	85	16
DSP10-24	24	None	0.42	10.1	80	60
DSP30-24	24	24 - 28	1.3	31.2	83	25
DSP60-24	24	24 - 28	2.5	60.0	86	12
DSP100-24/C2	24	20 - 24.2	3.8	91.2	89	10
DSP100-24	24	24 - 28	4.2	100.8	85	10

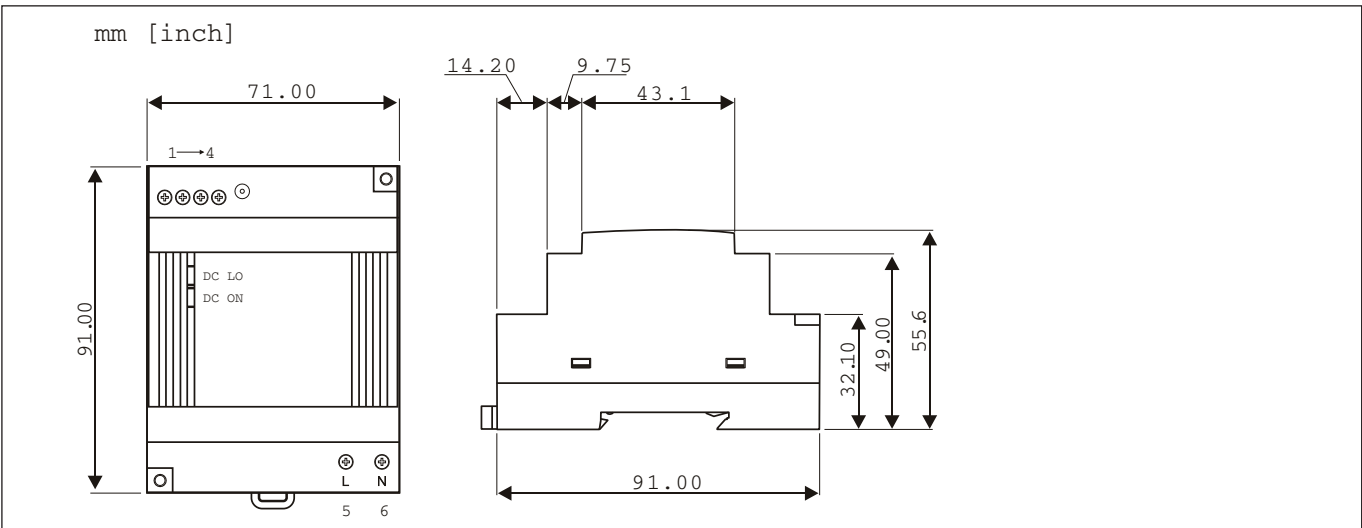
**Outline Drawing DSP10 Series**



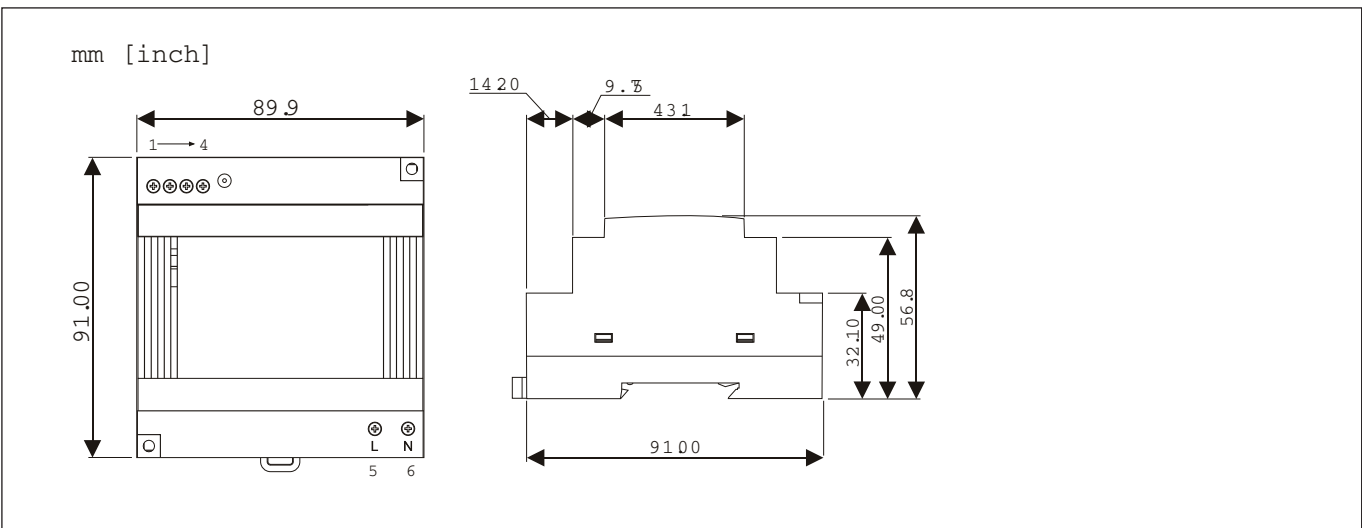
**Outline Drawing DSP30 Series**



**Outline Drawing DSP60 Series**



**Outline Drawing DSP100 Series**





## TDK-Lambda France SAS

Tel: +33 1 60 12 71 65  
tlf.fr.powersolutions@tdk.com  
www.emea.lambda.tdk.com/fr



## Italy Sales Office

Tel: +39 02 61 29 38 63  
tlf.it.powersolutions@tdk.com  
www.emea.lambda.tdk.com/it



## Netherlands

tlf.nl.powersolutions@tdk.com  
www.emea.lambda.tdk.com/nl



## TDK-Lambda Germany GmbH

Tel: +49 7841 666 0  
tlg.powersolutions@tdk.com  
www.emea.lambda.tdk.com/de



## Austria Sales Office

Tel: +43 2256 655 84  
tlg.at.powersolutions@tdk.com  
www.emea.lambda.tdk.com/at



## Switzerland Sales Office

Tel: +41 44 850 53 53  
tlg.ch.powersolutions@tdk.com  
www.emea.lambda.tdk.com/ch



## Nordic Sales Office

Tel: +45 8853 8086  
tlg.dk.powersolutions@tdk.com  
www.emea.lambda.tdk.com/dk



## TDK-Lambda UK Ltd.

Tel: +44 (0) 12 71 85 66 66  
tlu.powersolutions@tdk.com  
www.emea.lambda.tdk.com/uk



## TDK-Lambda Ltd.

Tel: +9 723 902 4333  
tli.powersolutions@tdk.com  
www.emea.lambda.tdk.com/il-en



## TDK-Lambda Americas

Tel: +1 800-LAMBDA-4 or 1-800-526-2324  
tla.powersolutions@tdk.com  
www.us.lambda.tdk.com



## TDK Electronics do Brasil Ltda

Tel: +55 11 3289-9599  
sales.br@tdk-electronics.tdk.com  
www.tdk-electronics.tdk.com/en



## TDK-Lambda Corporation

Tel: +81-3-6778-1113  
www.jp.lambda.tdk.com



## TDK-Lambda (China) Electronics Co. Ltd.

Tel: +86 21 6485-0777  
tlc.powersolutions@tdk.com  
www.lambda.tdk.com.cn



## TDK-Lambda Singapore Pte Ltd.

Tel: +65 6251 7211  
tfs.marketing@tdk.com  
www.sg.lambda.tdk.com



## TDK India Private Limited, Power Supply Division

Tel: +91 80 4039-0660  
mathew.philip@tdk.com  
www.sg.lambda.tdk.com

