



Thomas Research Products

SSL Solutions Faster Than The Speed Of Light™

LED-20W Series

Switch Mode LED Drivers
Constant Current & Constant Voltage with Isolation

Total Power: 20 Watts
Input Voltage: 100-277 Vac
Outputs: Single from 7-36 Vdc
Indoor or Outdoor Applications, IP66
High Power Factor
UL1310, Class 2 and UL48 Compliant

Electrical Specifications

Input Voltage Range:	100-277 Vac Nom. (90-305 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90 @ full load, 100V through 277V
Inrush Current:	<5.0 Amps max @ 230 Vac, cold start 25°C
Input Current:	0.23 Amps max at 115 Vac
Efficiency:	85% typical at max load
Maximum Power:	20W
Current Accuracy:	± 1% (when applicable)
Load Regulation:	± 3%
THD:	≤ 20% @ 120 Vac, ≤ 35% @ 277 Vac
Leakage Current:	300 µA Typical
Hold Up Time:	Half Cycle
Protection:	Output Over-Voltage, Output Over-Current, and Output Short Circuit Protection with Auto Recovery

Environmental Specifications

Operating Temperature:	-30°C to +60°C
Storage Temperature:	-40°C to +85°C
Maximum Case Temp.	80°C
Humidity:	5% to 95%
Cooling:	Convection
Vibration Frequency:	5 to 55 Hz/2g, 30 minutes
MTBF:	531,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2
EMC:	Compliant to CISPR 22 Class B, CISPR 14-1 Class B, GB4343 1-2003, GB17625.1-2003



Constant Current - Product Specifications

Model Number	Output Current (mA ±3%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED20W-36-C0550	550	18-36	20	88%
LED20W-24-C0700	700	12-24	17	87%
LED20W-24-C0830	830	12-24	20	88%
LED20W-22-C0910	910	12-22	20	87%
LED20W-18-C1100	1100	10-18	20	86%
LED20W-17-C1250	1250	9-17	20	86%
LED20W-15-C1330	1330	9-15	20	86%
LED20W-13-C1540	1540	7-13	20	85%
LED20W-12-C1660	1660	7-12	20	85%
LED20W-10-C2000	2000	7-10	20	85%

Constant Voltage - Product Specifications

Model Number	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED20W-36	36	138-550	20	88%
LED20W-24	24	208-830	20	87%
LED20W-22	22	228-910	20	87%
LED20W-18	18	275-1100	20	86%
LED20W-17	17	313-1250	20	86%
LED20W-15	15	333-1330	20	86%
LED20W-13	13	385-1540	20	85%
LED20W-12	12	415-1660	20	85%
LED20W-10	10	500-2000	20	85%

Class 2: US/Canada



Specifications subject to change without notice.

3-06-13



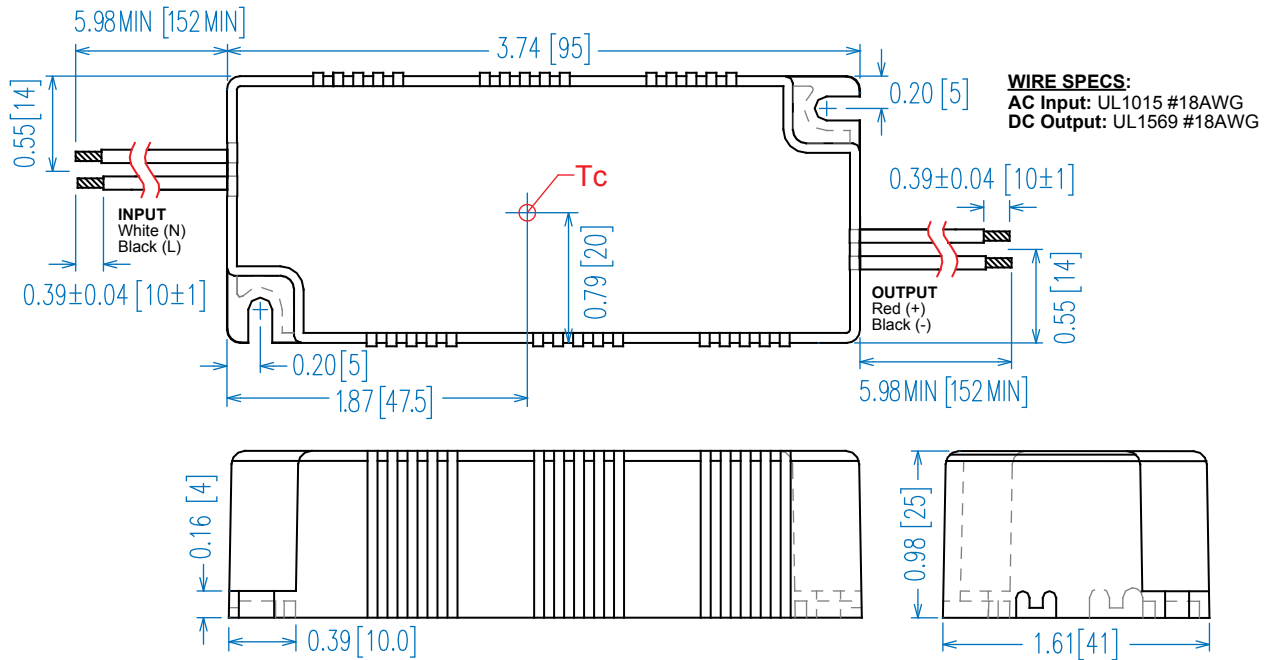
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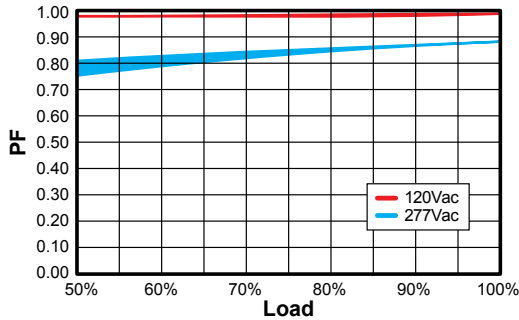
LED20W

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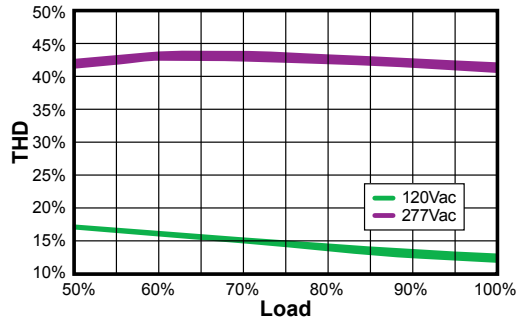
Dimensions - mm



Power Factor / Load



THD / Load



Safety and Regulatory Certifications

UL8750, UL1310, UL47, CSA 22.2, CE, FCC