



Thomas Research Products

SSL Solutions Faster Than The Speed Of Light®

LED-20W Series– Line Voltage Dimmable
Constant Current LED Drivers
ELV & Inc 100-10% Dimmable
Black Magic Thermal Advantage™ Plastic Housing

Total Power: 20 Watts
Input Voltage: 100 - 277 Vac
Outputs: Single from 7 - 40 Vdc
Dust-proof and Water-resistant, IP66
NEMA4 Dry, Damp, Wet Location
UL8750, Class 2

Electrical Specifications

Input Voltage Range: 120-230 Vac Nom. with dimmer, 100-277 Vac Nom. without dimmer (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: <10 Amps max @ 120Vac, cold start 25°C
Input Current: 0.15 A max 120Vac
Maximum Power: 20W
Current Regulation: ± 5% Over input line variation
Load Regulation: ± 8%
THD: ≤ 20% @ 120V, full load (w/o Dimmer), ≤ 35% @ 277V, full load (w/o Dimmer)
Current Accuracy: ± 4%
Typical Efficiency 85% at 120VAC
Protection: Over-Voltage, Over-Current and Short Circuit Protection with Auto Recovery

Environmental Specifications

Operating Temperature: -30°C to +60°C
Maximum Case Temp. 90°C
Storage Temperature: -40°C to +85°C
Humidity: 5% to 95%
Cooling: Convection
Vibration Frequency: 5-55 Hz/2g, 30 minutes
MTBF: 412,000 Hours @ full load per MIL-HDBK-217F Notice 2
Lifetime: 82,000 Hours
EMC: FCC 47CFR Part 15 Class B compliant
Weight: 4.5 oz. (128 g)



ELV Dimming Product Specifications

Model Number	Output Voltage Range (Vdc)	Output Current (mA)	Max. Output Power (W)	Typical Efficiency
LED20W-040-C0350-TE	20-40	350	14	86%
LED20W-040-C0500-TE	20-40	500	20	86%
LED20W-036-C0550-TE	18-36	550	20	88%
LED20W-028-C0700-TE	14-28	700	19.6	86%
LED20W-017-C1050-TE	8-17	1050	17.8	84%
LED20W-017-C1200-TE	8-17	1200	20	84%
LED20W-012-C1660-TE	7-12	1660	20	84%

For use with electronic low voltage dimmers

INC Dimming Product Specifications

Model Number	Output Voltage Range (Vdc)	Output Current (mA)	Max. Output Power (W)	Typical Efficiency
LED20W-040-C0350-LE	20-40	350	14	86%
LED20W-040-C0500-LE	20-40	500	20	86%
LED20W-036-C0550-LE	18-36	550	20	88%
LED20W-028-C0700-LE	14-28	700	19.6	86%
LED20W-017-C1050-LE	8-17	1050	17.8	84%
LED20W-017-C1200-LE	8-17	1200	20	84%
LED20W-012-C1660-LE	7-12	1660	20	84%

For use with standard incandescent dimmers

Class 2: US/Canada



Note:
LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED driver, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.
Specifications subject to change without notice.



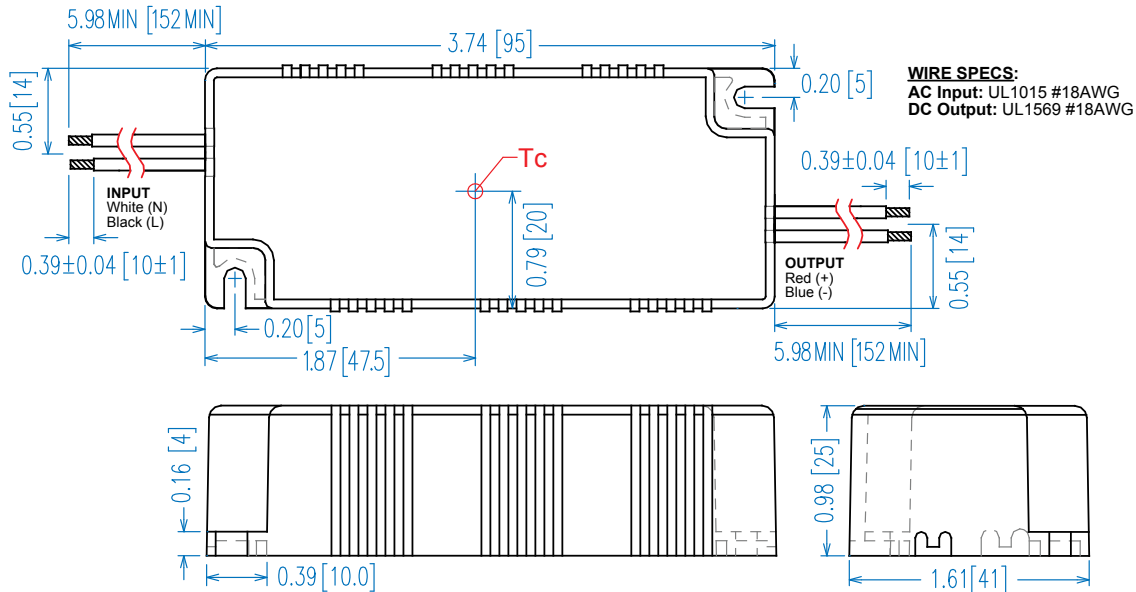
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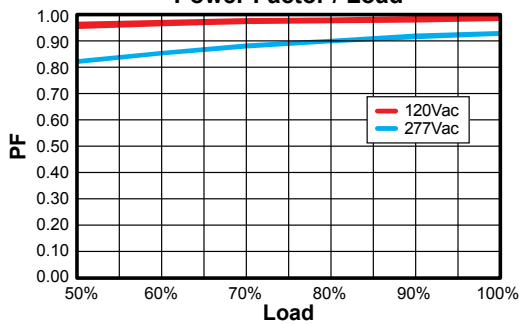
LED20W-LE/TE

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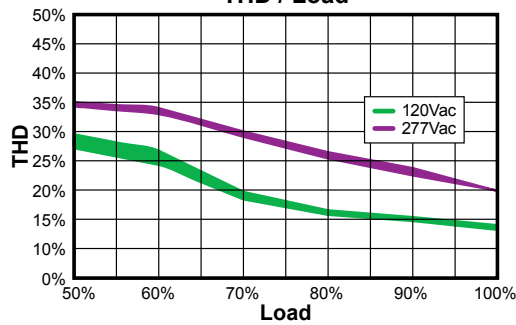
Dimensions - Inches (mm)



Power Factor / Load



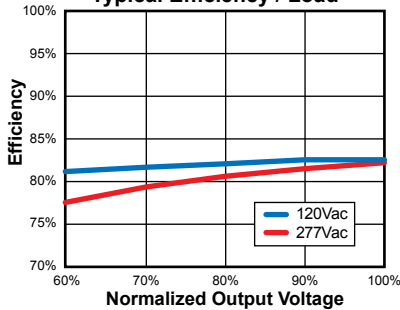
THD / Load



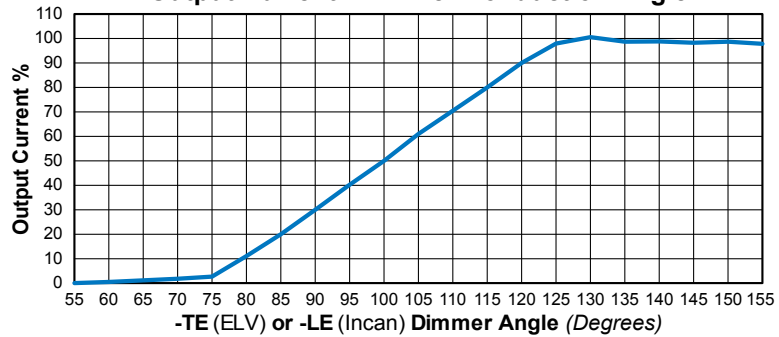
Safety & EMC Compliance

UL/CUL	UL8750, CSA-C22.2
C E	EN 61347
FCC Part 15	Class B
EN61000-3-2	
EN61000-3-3	Class C

Typical Efficiency / Load



Output Current / Dimmer Conduction Angle



UL Conditions of Acceptability

See website for additional information