LED-20W CC Series
Switch Mode LED Driver

select|SYNC™ classic

Electrical Specifications

Input Voltage Range:	120-277 Vac Nom. (100-305 V Min/Max)
Input Over-Voltage:	Can endure 320Vac for 48 Hrs, 350Vac for 2 Hrs
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	≥ 0.90 at 120/230/277Vac ≥ 50% Load
Inrush Current:	<25.0 Amps max @ 120 Vac, cold start 25℃
Input Current:	0.25 Amps max at 120 Vac
Maximum Power:	20W
Line Regulation:	± 3%
Load Regulation:	± 4%
THD:	≤ 20% @ ≥ 70% load 100-230V, ≥ 80% load 277V
Leakage Current:	300 µA Typical
Hold Up Time:	Half Cycle

Protections

Over-voltage:	No Damage, Auto Recovery after fault is removed
Over-current:	Constant Current Limiting Circuit
Short Circuit:	No Damage, Auto Recovery after fault is removed

Environmental Specifications

Max Case Life Temp: *(5 year warranty)*	62℃
Maximum Case Temp (UL):	90℃
Minimum Starting Temp:	-40℃
Storage Temperature:	-40℃ to +85℃
Humidity:	5% to 95%
Cooling:	Convection
Vibration Frequency:	5 to 55 Hz/2g, 30 minutes
Sound Rating:	Class A
MTBF:	488,000 Hours @ full load & 40℃ ambient conditions per MIL-217F Notice 2
Weight:	5.8 oz. (165 g)

- Total Power: 20 Watts
- Input Voltage: 120-277 Vac Nom.
- UL Dry & Damp Location Rated
- High Power Factor
- UL Type HL Rated for Hazardous Locations
- Constant Current, Dimming with Isolation
- Black Magic Thermal Advantage™ Plastic Housing
- 0-10V Linear Dimming 1% to 100%
- Dims to Zero @ ≤1.0V, Standby Power ≤0.5W

Dimming Standard:
0-10V & Resistance dimmable models include an extra two wires +Violet/-Pink on the output side. "-D" Compatible with most quality 0-10V wall dimmers. See page 3 for dimming specifications.

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 drivers, 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.

Constant Current Models

Model	Output Current (mA ±4%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED20W-57-C0350-XX	350	28-57	20	84%
LED20W-48-C0350-XX	350	24-48	16.8	83%
LED20W-43-C0460-XX	460	21-43	20	83%
LED20W-40-C0500-XX	500	20-40	20	82%
LED20W-36-C0550-XX	550	18-36	20	82%
LED20W-28-C0700-XX	700	14-28	20	81%
LED20W-24-C0700-XX	700	12-24	16.8	81%
LED20W-24-C0830-XX	830	12-24	20	81%
LED20W-22-C0910-XX	910	11-22	20	81%
LED20W-18-C1100-XX	1100	9-18	20	80%
LED20W-15-C1330-XX	1330	8-15	20	80%
LED20W-13-C1540-XX	1540	7-13	20	79%
LED20W-12-C1660-XX	1660	6-12	20	78%

-XX indicates dimming options are available. See options at left. Blank = fixed current output.
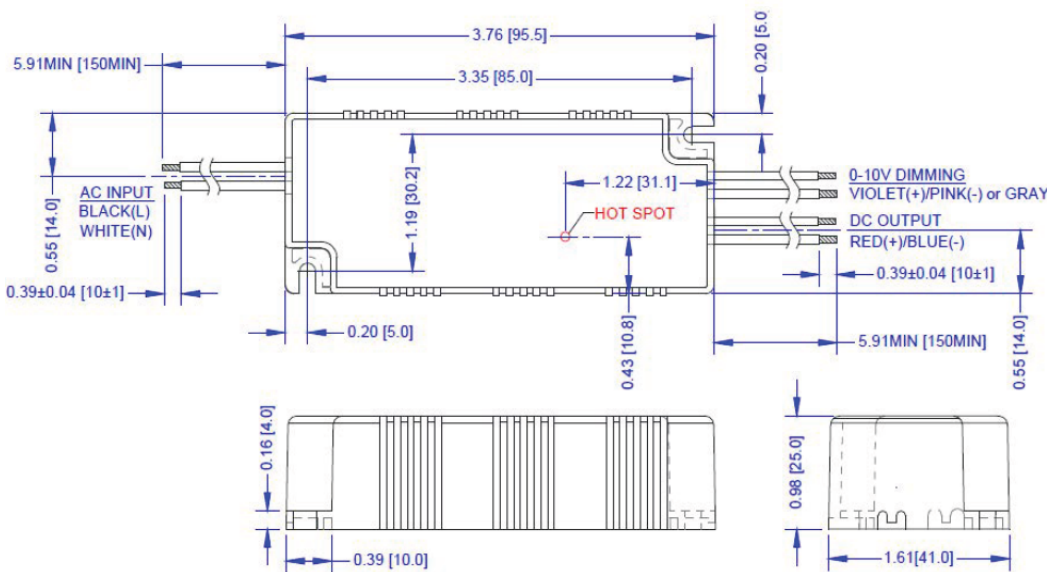
Safety Cert.	Standard
UL/CUL	UL8750
CSA	22.2
CE	EN61347

EMC Standard	Notes
EN61000-3-2	
EN61000-3-3	Class C
FCC, 47CFR Part 15	Class B @120Vac, Class A @ 277Vac

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LED-20W CC Series
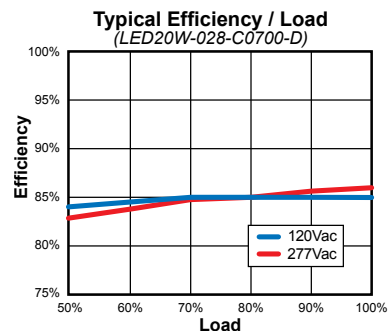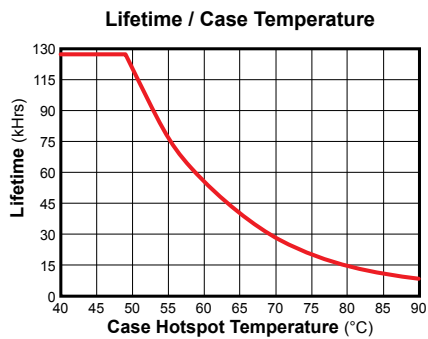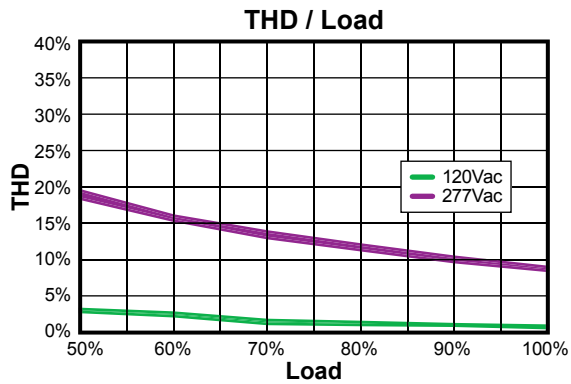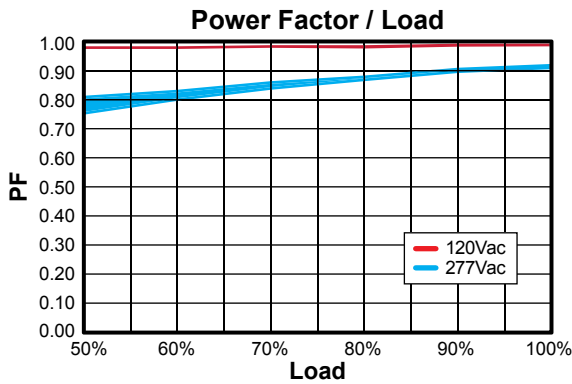## Switch Mode LED Driver

select SYNC classic

Dimensions

IN [mm]

WIRE SPECS:
Input Leads: 18-AWG, Rated 600V, 105℃, min.
Output Leads: 18-AWG, Rated 300V, 105℃, min.
Dimming Leads: 22-AWG, Rated 600V, 105℃.
All wires are stranded with solder dipped ends

Power Characteristics

Power Factor / Load

THD / Load

Lifetime / Case Temperature

Typical Efficiency / Load
(LED20W-028-C0700-D)

Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

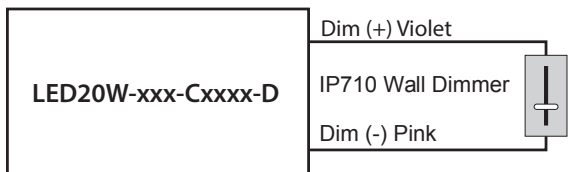**UL Conditions of Acceptability:**
See website for additional information

"-D" Option: 0-10VDC and Resistance Dimming, Dims to Zero at < 1.0V

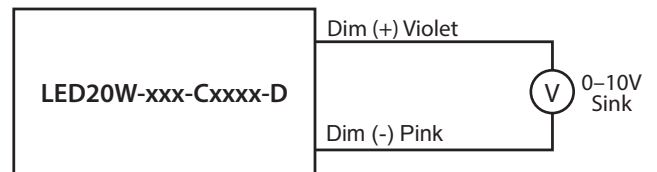| Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Violet Wire	0 mA	—	1mA
AbsoluteVoltage Range on 0-10V (+) Violet Wire	-2.0V	—	+15V

Notes:

1. -D 0-10V dimmable version comes with an extra two wires +Violet/-Pink on the output side.
2. -D version is compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal.
   Recommended wall slide dimmer is Leviton IP710 or equivalent
3. -D 0-1 0V dimmable version is Dim to Zero @ ~1.00V and 1 % Min Dim.
4. -D 0-10V dimmable version output will be 100% with Violet/Pink open and minimum with Violet/Pink Shorted.
5. Dimming wires +Violet/-Pink must not touch any other wires or damage to LED Driver can occur.

-D 2-Wire Resistance Dimming Scheme

LED20W-xxx-Cxxxx-D

Dim (+) Violet

IP710 Wall Dimmer

Dim (-) Pink

-D 2-Wire 0-10V Analog Dimming Scheme

LED20W-xxx-Cxxxx-D

Dim (+) Violet

Dim (-) Pink

0–10V Sink

% Output Current Vs. 0-10V DC Dimming Input

Min Dim 1%
Dim to Zero = YES