



75W TRC-075 Dimmable Series

Switch Mode LED Drivers - Constant Current

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
Typical Efficiency	86-92% typical @ maximum load
Inrush Current:	60 Amps @ 230 Vac
Input Current:	0.90 A @ 100 Vac, 0.42 A @ 220 Vac
Maximum Power:	75W
Line Regulation:	± 1%
Load Regulation:	± 3%
Total Harmonic Distortion:	<20%
Turn-on Delay:	0.8S @ 120 Vac, 0.4S @ 220 Vac
Protection:	Output Over-Voltage, Output Over-Current, Output Short Circuit Protection with Auto Recovery, Over-Temperature Protections (110°C)

Environmental Specifications

Max Case Temperature:	87°C
Minimum Starting Temp:	-40°C
Storage Temperature:	-40°C to +85°C
Humidity:	10% to 100%
Cooling:	Convection
Sound Rating:	Class A
MTBF:	320,000 Hours @ 25°C ambient, 80% load, 110Vac
Lifetime:	107,000 Hours @ Tc=60°C, 80% load, 110Vac
Weight:	1.65 lbs (750 g)



- Total Power: 75 Watts
- Input Voltage: 100-277 Vac Nom.
- UL Dry & Damp Location Rated
- IP67
- High Efficiency
- High Power Factor with Active Correction
- Output and Lightning Protection

Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Max Efficiency
TRC-075S035DT	350	107-214	75	90%
TRC-075S045DT	450	83-166	75	90%
TRC-075S070DT	700	54-108	75	90%
TRC-075S105DT	1050	36-72	75	89%
TRC-075S140DT	1400	27-54	75	89%
TRC-075S210DT	2100	18-36	75	88%
TRC-075S280DT	2800	13-27	75	88%
TRC-075S375DT	3750	10-20	75	87%
TRC-075S500DT	5000	7-15	75	87%

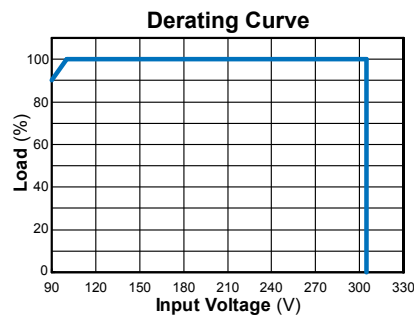
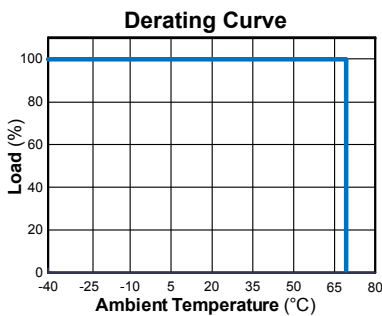
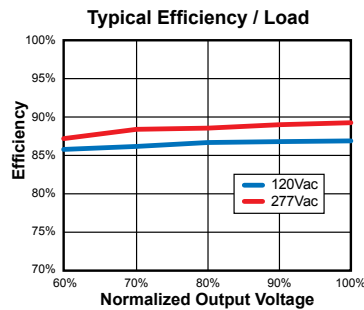
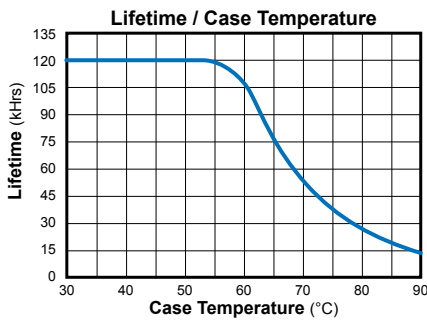
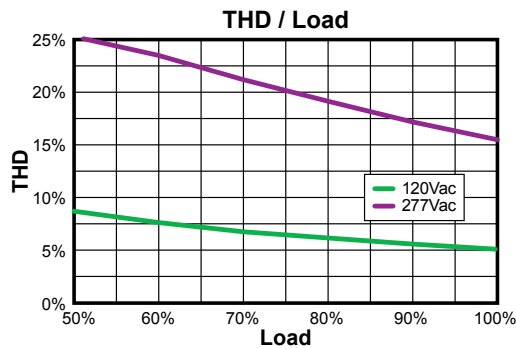
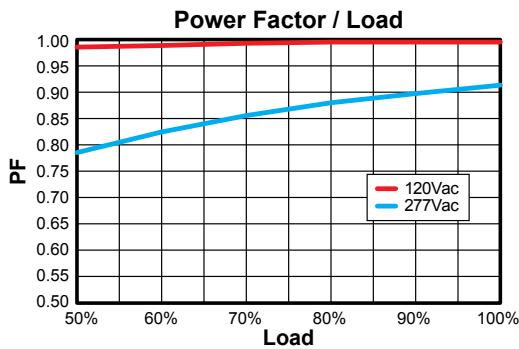
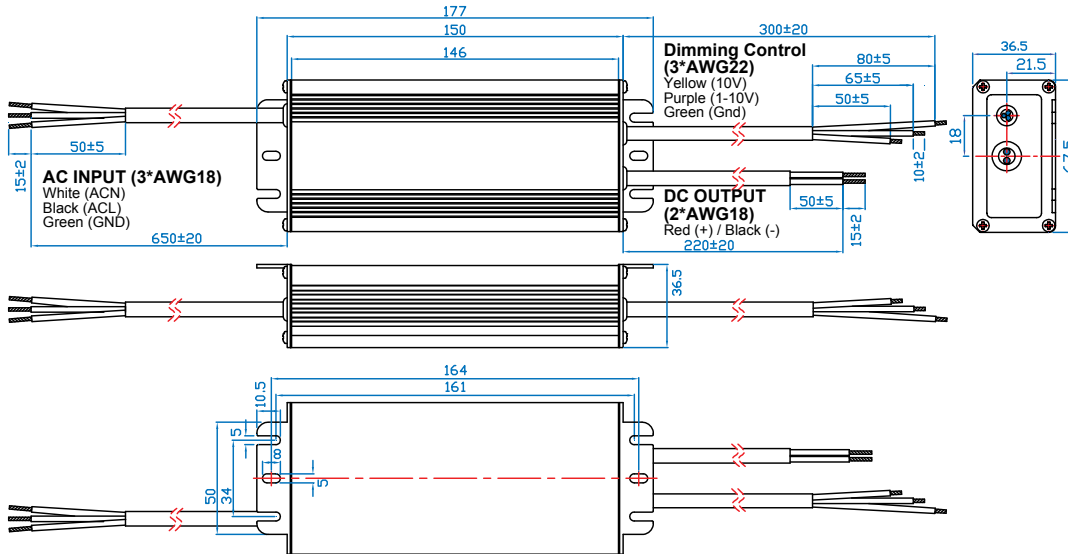
Class 2: US/Canada US Only



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.

Specifications subject to change without notice.

Rev 9-1-15



Safety and EMC Compliance

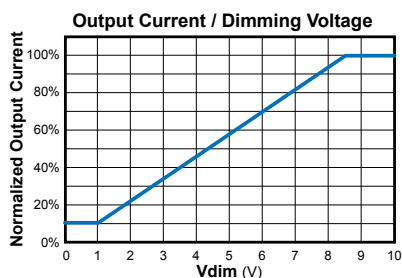
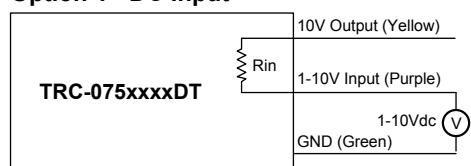
UL/CUL CE	UL 8750, UL923, IL1012, UL1310 Class 2 EN 61347-1, EN61347-2-13
EN 55015	Conducted emission
EN 61000-3-2	Harmonic current emissions
EN 61000-3-3	Voltage fluctuations and flicker
EN 61000-4-2	Electrostatic discharge
EN 61000-4-3	RFE Field Susceptibility test
EN 61000-4-4	Electrical Fast Transient
EN 61000-4-5	Surge Immunity Test, AC Power Line: line to line 4 kV; line to earth 6 kV
EN 61000-4-6	Conducted Radio Frequency
EN 61000-4-8	Power Frequency Magnetic Field Test
EN 61000-4-11	Voltage Dips
EN 61547	Electromagnetic Immunity
ANSI/IEEE C62.41-1991	Transient Protection. The line transient shall consist of seven strikes of a 100 kHz ring wave, 2.5 kV level, for both common mode and differential mode.

Dimming Control Details

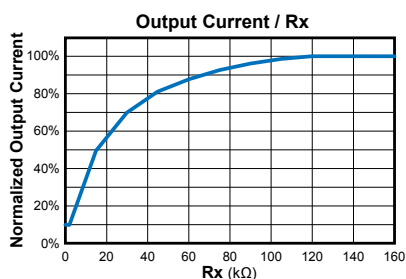
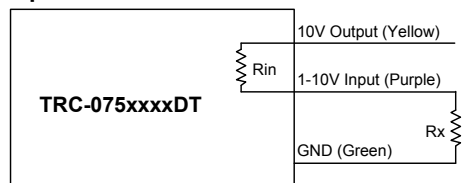
Parameters	Minimum	Typical	Maximum
10V output voltage	9.8 V	10 V	10.2 V
10V output source current	0 mA	—	10 mA
Absolute maximum voltage on the 0-10V input pin	-2 V	—	12 V
Source current on 0-10V input pin	0 uA	—	0.5 mA
Value of Rin (the resistor inside the LED driver which is located between the 1-10V input pin and the 10V output pin)	19.8K	20K	20.2K

The dimmer control is operated from either a potentiometer or from an input signal of 1 – 10 Vdc. Recommended implementations are provided below.

Option 1 - DC Input



Option 2 - External Resistor



Notes:

1. If the dimming function is not used, the dimming leads should be floated.
2. Io is actual output current and Ir is rated current without dimming control.
3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (approx. 50% of the max. output voltage for any given model).
4. If the output voltage is maintained above 50% of the maximum output voltage, the dimming control may be operated over the entire 1-10V range with output current varying from 100% down to practically 10%.
5. The dimming signal is allowed to be less than 1V, however, when 0-1V, the output current can maintain about 10%Ir. When 8.5-10V, the output current can maintain about 100%Ir.
6. Do not connect the GND of dimming to the output; otherwise the LED driver will not function properly.