

## TRC-040DS Series-Fixed Output and Dimmable **40W Switch Mode LED Drivers Constant Current, Long Life**

## **Electrical Specifications**

Input Voltage Range: 100 - 277 Nom. Vac (90 - 305 V Min/Max)

Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)

>0.90 @ full load 100-220V, >0.80 @ full load 277V Power Factor:

Inrush Current: 60.0 Amps max @ 230Vac

Input AC Current: 0.48 A max 100Vac, 0.23 A max 220Vac

Line Regulation: ± 2% Vac Load Regulation: ± 5%

Typical Efficiency 85-88% typical @ maximum load Protection:

Over-Voltage, Output Over-Current, Output Short Circuit Protection with Auto Recovery

## **Environmental Specifications**

Minimum Starting Temp:

Lifetime:

Maximum Case Temp. 87.5°C for 350 & 450 mA, 83°C for all others

Storage Temperature: -40°C to +85°C 10% to 100% **Humidity:** Cooling: Convection Sound Rating: Class A

MTBF: 487,000 Hours @ 25°C, 80% load, 110Vac input on

3330 mA output model (MIL-HDBK-217F)

77,000 Hours @ 25°C, 80% load, 110Vac input on

3330 mA output model

Weight: 0.79 lbs (360 g)



· Total Power: 40 Watts

• Input Voltage: 100-277 Vac Nom.

• UL Dry & Damp Location Rated

IP66

· High Efficiency

High Power Factor

Constant Current Versions - Product Specifications						
Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency		
TRC-040S035PS	350	38-114	40	88%		
TRC-040S045PS	450	30-89	38	88%		
TRC-040S070PS	700	18-54	37.8	87%		
TRC-040S105PS	1050	12-36	38	87%		
TRC-040S128PS	1280	10-29	36	87%		
TRC-040S140PS	1400	10-25	38	87%		
TRC-040S166PS	1660	8-23	38	86%		
TRC-040S222PS	2220	6-16	36	85%		
TRC-040S333PS	3330	4-11	35	84%		

Dimmable Versions - Product Specifications						
Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency		
TRC-040S035DS	350	38-114	40	88%		
TRC-040S045DS	450	30-89	38	88%		
TRC-040S070DS	700	18-54	37.8	87%		
TRC-040S105DS	1050	12-36	38	87%		
TRC-040S128DS	1280	10-29	36	87%		
TRC-040S140DS	1400	10-25	38	87%		
TRC-040S166DS	1660	8-23	38	86%		
TRC-040S222DS	2220	6-16	36	85%		
TRC-040S333DS	3330	4-11	35	84%		

Class 2: US/Canada US Only







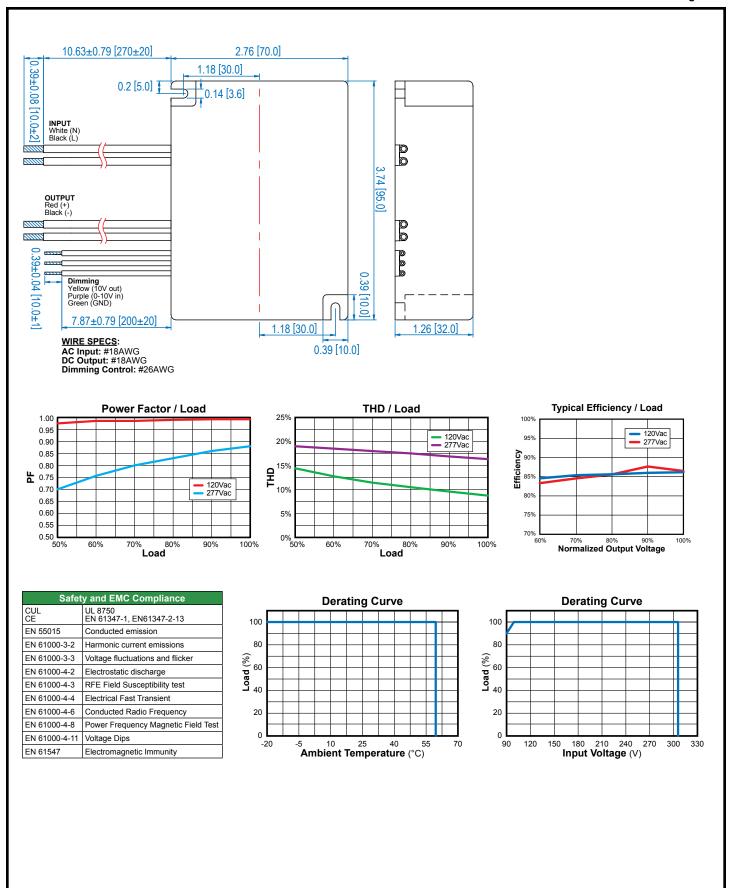
LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

Specifications subject to change without notice.

Rev 8-31-15



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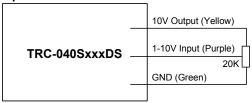


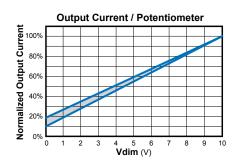
# **Dimming Control Details**

Parameters	Minimum	Typical	Maximum
10V output voltage	9.8 V	10 V	10.2 V
10V output source current	-10 mA	_	2 mA
Absolute maximum voltage on the 0-10V input pin	-2 V	_	15 V
Source current on 0-10V input pin	0 mA		1 mA

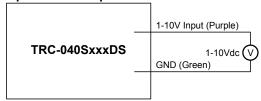
The dimmer control is operated from either a potentiometer or from an input signal of 1-10 Vdc. Recommended implementations are provided below.

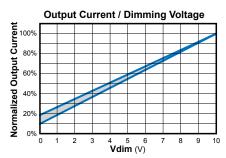
## **Option 1 - Potentiometer Control**





## **Option 2 - DC Input**





### Notes:

- 1. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (approx. 33% of the max. output voltage for any given model).
- 2. If the dimming voltage is varied from 10V down to 0V, the output current can be varied from 100% lo down to 20-30% lo.
- 3. Do not connect the GND of dimming to V(-) or earth ground; otherwise the LED driver will not work properly.
- 4. If dimming is not required, connect yellow and purple leads together to get full current output (100%).
- 5. It is permissible to parallel driver outputs to achieve higher output currents. However, when doing so, it is not permissible to connect dimming control leads in parallel.
- 6. It is permissible to connect dimming control leads of multiple drivers in parallel to allow them to operate from a single 0-10V control. However, when doing so, it is not permissible to interconnect output leads (red and black) across drivers.