V10/22

EZI-Set Compact Round In-Track LED Driver

The EZI-Set DITR Series provides a unique round form factor in-track driver suited for the non-track head appilcation, such as pendants, downlights and area lights. The DITR in-track driver offers a wide range of configurable current setting, flicker-free performance that offers high quality of light and reliability.

Product Offering

Power: 27 W
Input: 220-240 V (50/60 Hz)
Output: 400-700 mA (30-38 V)
Color: Available in white, black and grey
IP rating: IP20

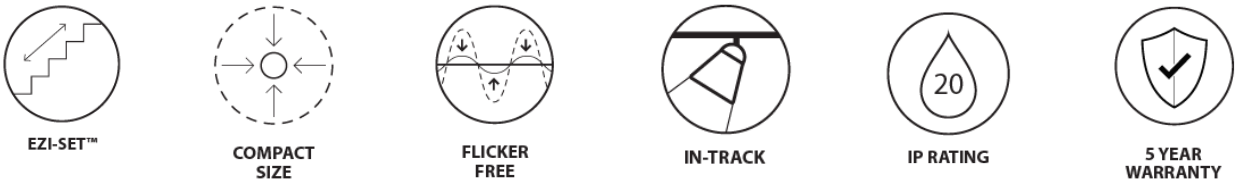
Track Compatibility:

- **Nordic Aluminum (Global Trac Pro / Global Trac Pulse)**
- **Stucchi (OneTrack, 3 Circuit Track)**

27W
(∅56 x 66 mm)

Features and Benefits

EZI-Set™	Currents are easy to set with DIP switch settings
Round Shape	Unique,compact, round package
Flicker Free	World-class flicker free design ensures Percent Flicker less than 3%
In-Track	LED Driver with track adapter provides high density fixture spacing
5 Year Warranty	Backed by the industry leading warranty of 5 years gives confidence in long term and maintenance free performance



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1 - Input Characteristics

Specification item	Value	Condition
Nominal Input Voltage Range AC	220 – 240 VAC	Performance range
Absolute Input Voltage Range AC	198 – 264 VAC	Safety operational range
Maximum Input Current	0.135 A	Full output power @ 230V Input Voltage
Input Frequency	50 / 60 Hz	Performance range
Power Factor with Full Load	0.98	Full output power @ 230V Input Voltage
Efficiency	88 %	Full load @ 230V Input Voltage
THD with Full Load	< 20 %	Full load @ 230V Input Voltage
Maximum Inrush Current	< 3.8A	At 230 input 25°C cold start at 100% conditions. For more details in the attached graph
No-load Power	< 0.5 W	
Start-up Time	< 0.5s	

2 - Output Characteristics

Specification item	Value	Condition
Rated LED Output Power	15 – 27W	
Nominal LED Output Current (3 dip-switch control)	400 – 700 mA	@ 400 / 500 / 600 / 700 mA
LED Output Current Tolerance	±5%	
LED Output Voltage Range DC	30 – 38VDC	
Open Loop (no load) Voltage	< 52VDC	driver will limit the output voltage to <52V if LED load is opened
Output Current Ripple LF	≤ 3%	< 2KHz
Output Pst LM	≤ 1.0	
Output SVM	≤ 0.4	

3 - Environmental Conditions

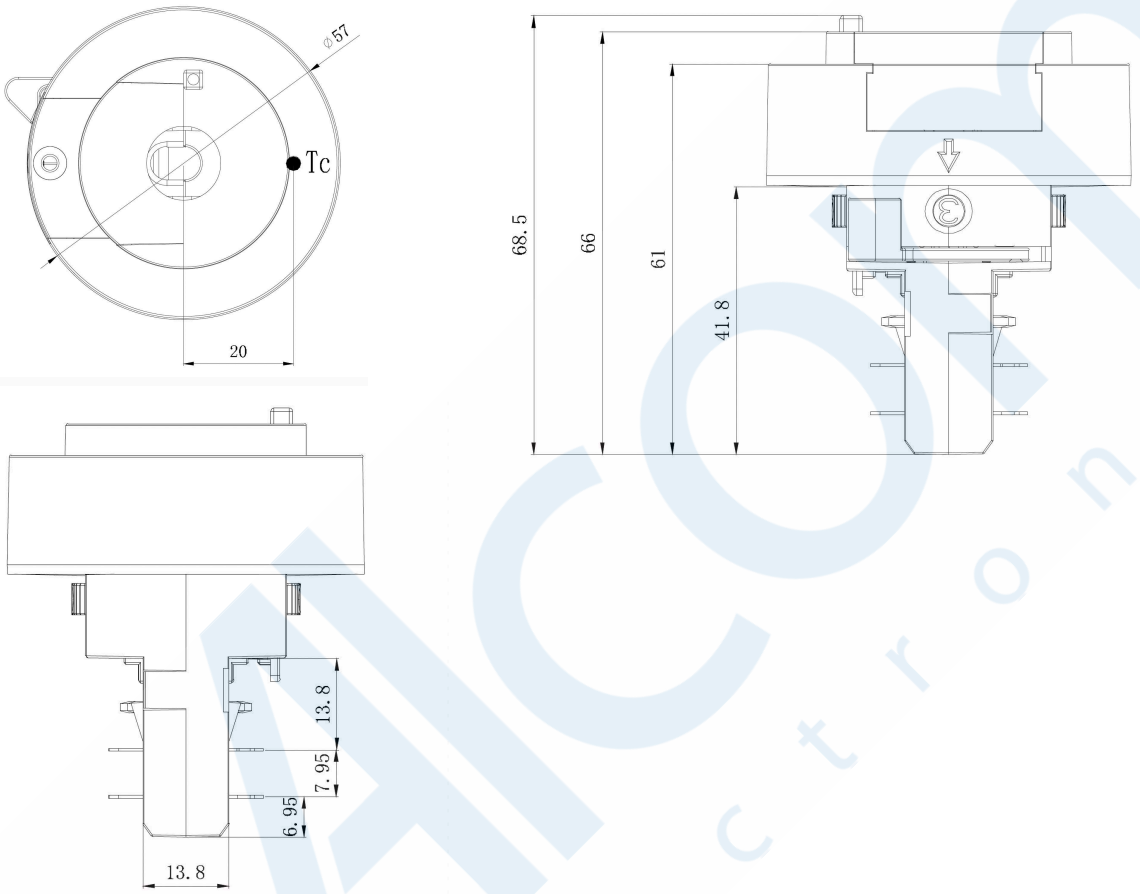
Specification item	Value	Condition
Ambient Temperature (Ta) Range	-20 to 40°C	Higher ambient temperature is possible as long as Tc conforms to the operating case temperature range
Operating Case Temperature (Tc) Range	-20 to 72.5°C	Case Temperature measured at Tc mark on product
Storage Temperature	-40 to 85°C	
Relative Humidity	80%	Non-condensing
Lifetime @ Tc max	50,000 hours	At Tc within Operating Case Temperature Range.
Ingress Protection	IP20	

4 - Protection Features

Specification item	Value	Condition
Over Current Protection (OCP)	YES	Automatic recovery
Over Voltage Protection (OVP)	YES	Automatic recovery
Output Short-Circuit Protection (SCP)	YES	Automatic recovery

5 - Outline Drawing

5.1a - Outline Drawing DITr-END027/1-PC450-38(-CW, -CG)



5.1b - Mechanical Details

Specification item	Value	Condition
Diameter (D)	57.0 mm	
Height (H)	66.0 mm	
Weight	76 g	

5.1c - Wiring and Conditions

Specification item	Value	Condition
Output Connections (Poke-in Connector)	Ø 0.5 – 0.75 mm (22 – 20 AWG)	Solid / strand wire
Output Wire Strip Length	6 – 9 mm	
Max. Output Wire Length	20 cm	Total length of wiring

6 - Nipple Holding Cavity Dimension

Specification item	Value	Condition
Nipple Cavity Internal Diameter	ø 40 mm	
Nipple Cavity Internal Height	5 mm	
Nipple Holder Opening Diameter	ø 13.05 mm	
Nipple Holder Plastic Thickness	1.3 mm	

7 – DIP Switch Operation Instructions and LED Output Terminals Polarity

DIP-Switch Settings		Current Setting
1	2	[mA]
ON	ON	700
ON	•	600
•	ON	500
•	•	400

8 - EMC Compliance Approvals

Specification item	Value	Condition
Conducted and Radiated EMI	EN 55015:2019+A1:2020 (CISPR 15:2018)	
Harmonic Current Emissions	EN IEC 61000-3-2:2019	
Voltage Fluctuations & Flicker	IEC 61000-3-3:2013+A1:2019	
ESD (Electrostatic Discharge)	IEC 61547:2009 Section 5.2 Test des.: IEC 61000-4-2	4 kV contact discharge, 8 kV air discharge, level 3
Continuous Radiated Disturbance	IEC 61547:2009 Section 5.3 Test des.: IEC 61000-4-3	3 V/m, 80 - 1000 MHz, 80% modulated at distance of 3 meters
Electrical Fast Transient	IEC 61547:2009 Section 5.5 Test des.: IEC 61000-4-4	± 1 kV on AC power port for 1 minute,
Surge	IEC 61547 Section 5.7 Test des.: IEC 61000-4-5	± 1 kV (differential mode) ± 2 kV (common mode)
Continuous Conducted Disturbance	IEC 61547:2009 Section 5.6 Test des.: IEC 61000-4-6	3V, 0.15-80 MHz, 80% modulated, Level 2
Voltage Dips	IEC 61547 Section 5.8, 5.9 Test des.: IEC 61000-4-11	70% dip during 25 cycles @ 50Hz, 30 cycles @ 60Hz 0% dip during ½ cycles

9 - Safety Agency Approvals

Specification item	Value	Condition
ENEC / CE / UKCA	EN 61347-1:2015, EN 61347-2-13:2014+A1	

10 - Graphs

Operating Window

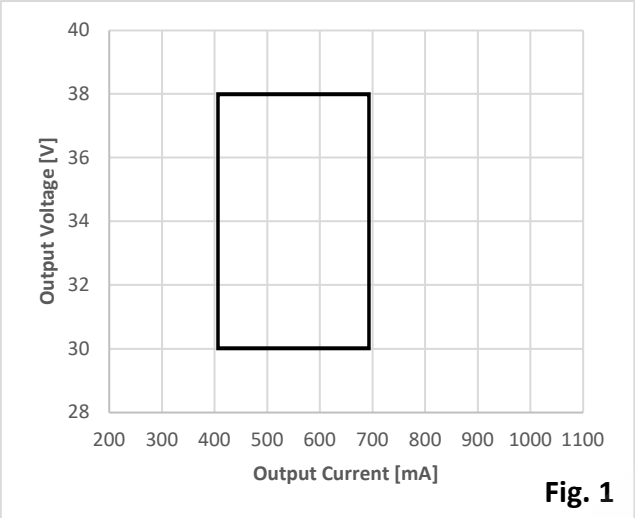


Fig. 1

Power Factor vs Output Power

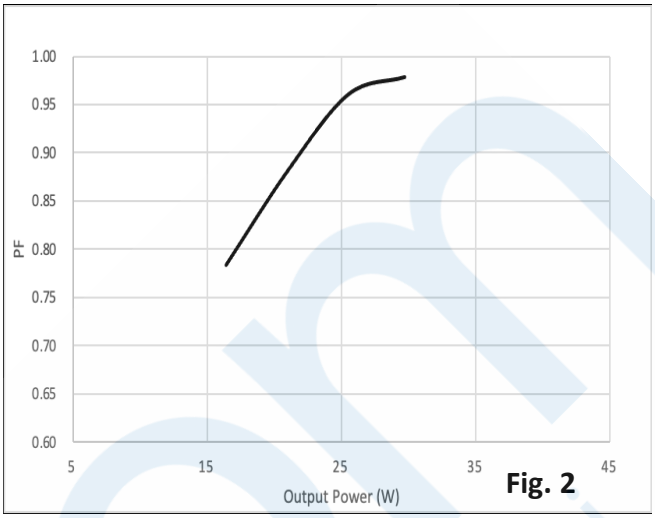


Fig. 2

Efficiency vs. Output Power

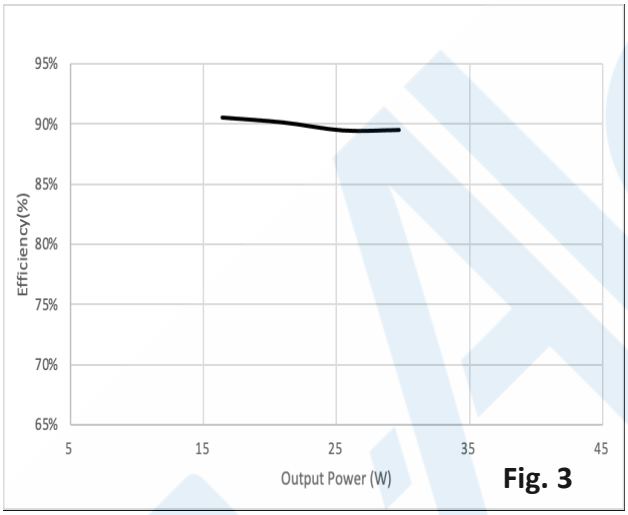


Fig. 3

I-THD vs. Output Power

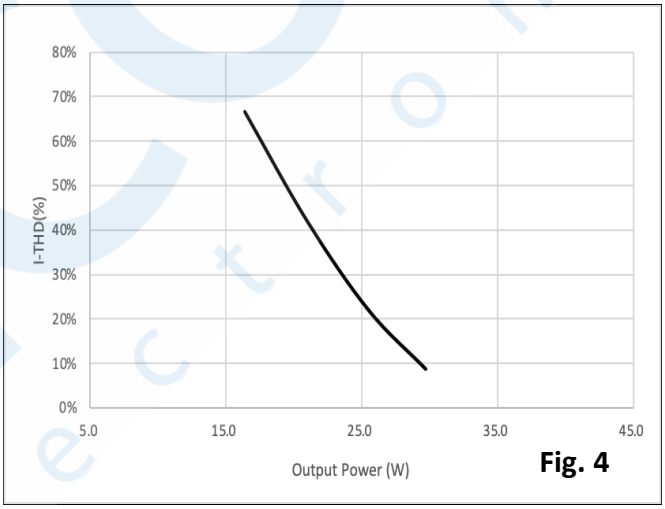


Fig. 4

Input Current vs. Output Power

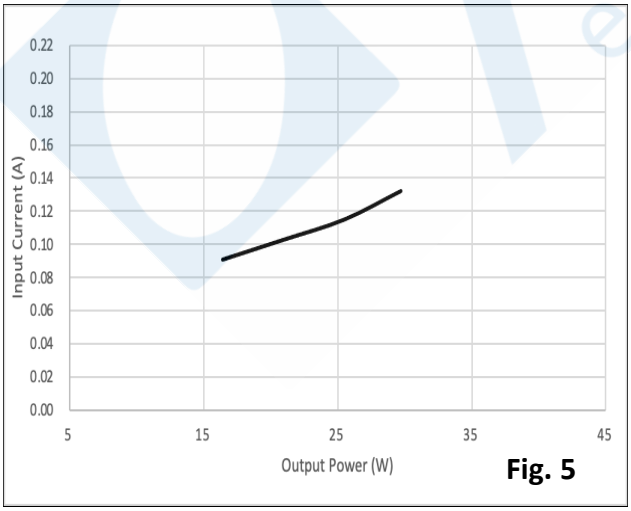
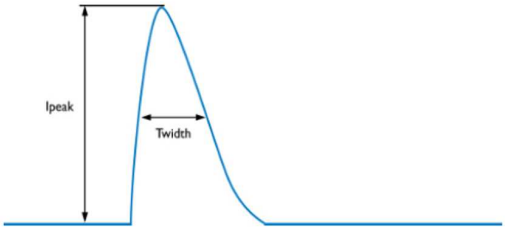


Fig. 5

11 - Inrush Current



P/N	I_{peak} (A)	T_{width} (Time @50% of I_{peak})
DITr-END027/1-PC700-38	3.8 A	145 µs

12 - Estimated Maximum Number of Drivers per Miniature Circuit Breaker (MCB)*

P/N	B10	B13	B16	B20	C10	C13	C16	C20
DITR-END027/1-PC700-38	44	57	71	88	51	67	82	103

13 - Ordering Info

Specification item	Part Number	Condition
27W Round In-Track Driver	DITR-END027/1-PC700-38 DITR-END027/1-PC700-38-CW DITR-END027/1-PC700-38 -CG	Black Color Housing White Color Housing Grey Color Housing

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** Estimation based on typical MCB characteristics; recommend users to calculate the actual number with MCB parameters intended to be used*