

PHILIPS

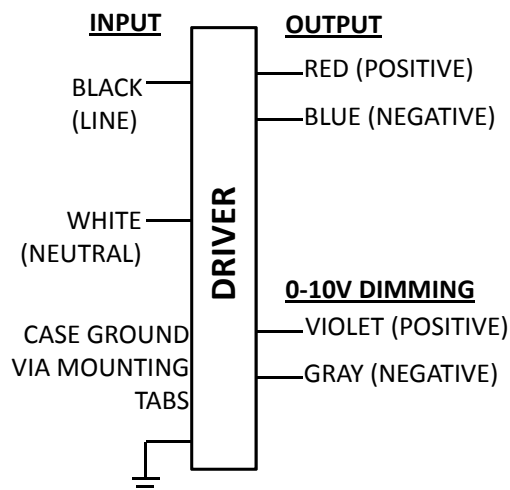
Product Overview

XI040C070V056CNJ1M

Brand Name	XITANIUM
Description	Xitanium 40W 0.70A 0-10V INT-J
Input Voltage	120 - 277V
Input Freq.	50/60Hz
RoHS	Yes
Status	Released

Input Voltage (Vac)	Max Output Power (W)	Output Voltage Range (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W)	Inrush Current (Apk/50%-µs)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection Common/Diff (KV)	Weight (Lbs/kgs)	Envir. Protection Rating
120	40	12 - 54	0.70	86	80 °C	0.36	47	25 / 100	< 8%	>0.95	4/4	1.0/ 0.45	UL damp and dry
277				89		0.16		65 / 100	<12%				

Wire Diagram



Product Data:

Input and output use lead- wires.
Lead-wires are 18AWG 105C/600V solid copper per UL1452.
Lead Length outside enclosure: 270 mm (±30mm) on all wires

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog Class 2 Wiring Only	10% ~ 100%	0.070	Dimming source current: 150 µA (±3%)

Enclosure



	in.	mm
Case Length	5.58	139.50
Case Width	1.83	45.75
Case Height	1.13	28.32
Mounting Length	5.77	144.25
Mounting Width	1.10	27.50
Overall Length	5.93	148.25



Revised 4/11/2013

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance
Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

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Order code	XI040C070V056CNJ1M
Full product code	XI040C070V056CNJ1M
Full product name	XITANIUM 40W 0.70A 0-10V INT-J
Line Voltage	120-277Vac rms
Line Current	0.36A @ 120V, 0.16A @ 277V
Line Frequency	50/60Hz
Min. Mains voltage operational	108 V [min]
Max. Mains voltage operational	305V [max]
THD (total)	Refer to graph
Power Factor (PF)	Refer to graph
Efficiency	Refer to graph
Inrush Current	Per NEMA 410
Input Over-voltage	Can survive input over-voltage stress of 320VAC for 48 hours and 350VAC for 2 hours
Lightning Surge Protection	Per IEEE C62.41.2 2002 (4KV, 1.2/50 μ s.8/20 μ s Combination Wave with 2 Ohms source impedance, L-N, L-PE, N-PE)
Output voltage range	12V to 54Vdc
Maximum open circuit voltage	56 ($\pm$ 5%)
Output Current Ripple (ripple = peak to peak / average)	10% max @ max Iout and max Vout Low frequency ($\leq$ 120 Hz) content < 5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED-
Operating Ambient Temp. Range	-40C to +55C
Max Case Temperature (Tcase)	80C
Encapsulation	Yes, Fully potted
Interfaces	0-10V Dimming
0-10V Dimming Specifications	150 μ A $\pm$ 3% source current from driver. See dim curve for detail.
Environmental Protection Rating	UL damp and dry
Life @ Tcase 70C	refer to graph below
Life @ Tcase 80C	refer to graph below
Agency Approbations	UL8750, UL1310, UL935, CSA-C22.2 No. 250.13-12, CSA C22.2 No. 223
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Isolation	Refer to table

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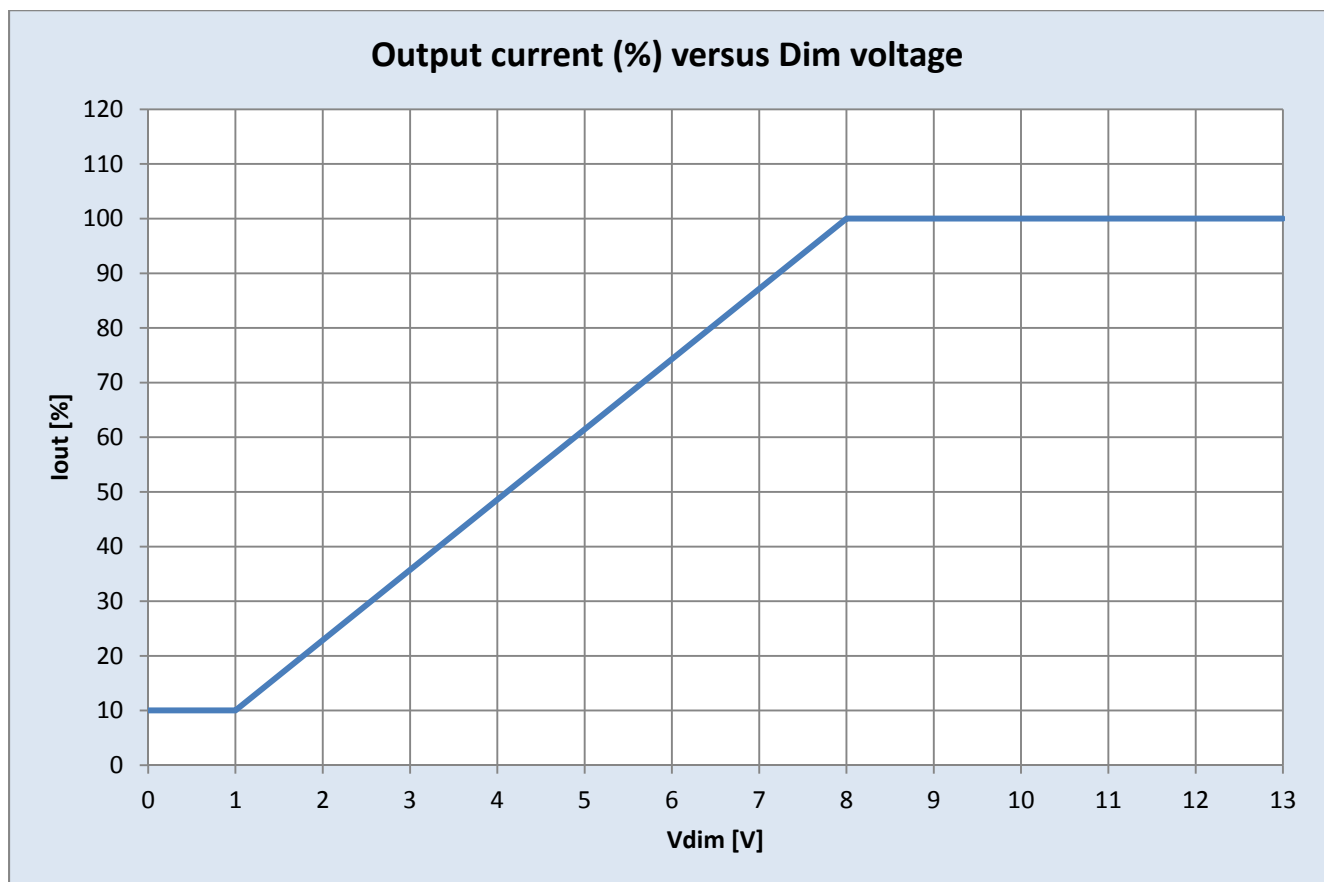
0-10V Dimming Curve:

Dimming source current from the driver: 150 μ A ($\pm$ 3%) (@ 0<Vdim<8V)

LED Current Tolerance at 700mA $\leq$ 5% over temperature and component variations and $\leq$ 10% at any dim level.

Minimum Dim Level: 10% of Iout (minimum 70mA)

Maximum output voltage on the dimming wires: 13V



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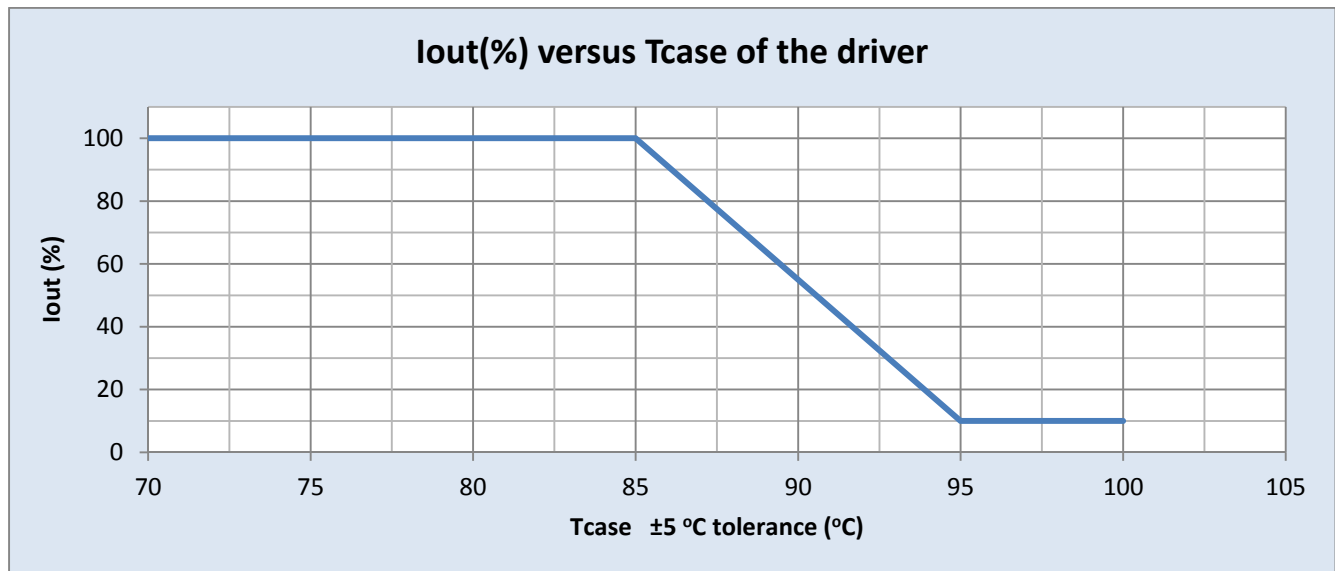


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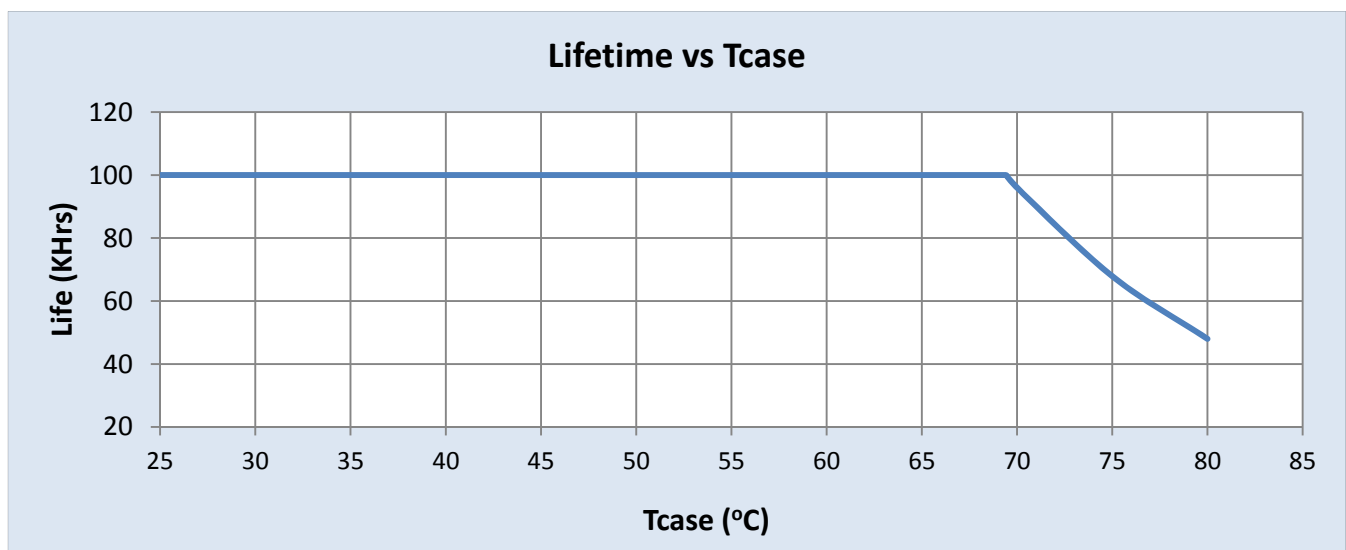
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Iout vs. Tcase of Driver:



Lifetime vs. Tcase of Driver:



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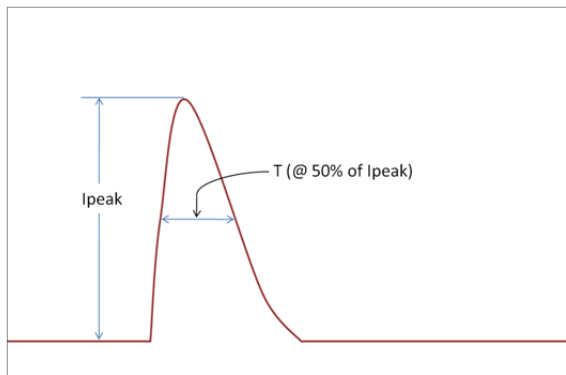
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Failure Rate based upon field call rate data:

- <0.01% per 1 kHr @<= Tcase 70 C

Inrush Current Info:



Vin	Ipeak	T (@ 50% of Ipeak)
120 Vrms	25 A	100 μ s
277 Vrms	65 A	100 μ s

Inrush current is measured at peak of the corresponding line voltage, source impedance per NEMA 410.

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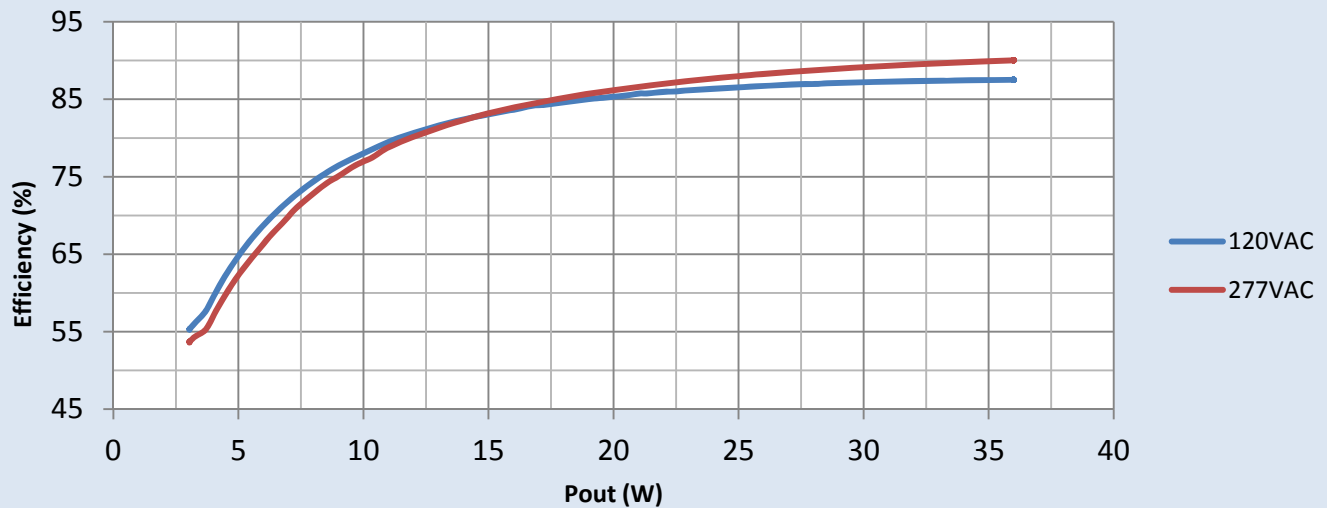
Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

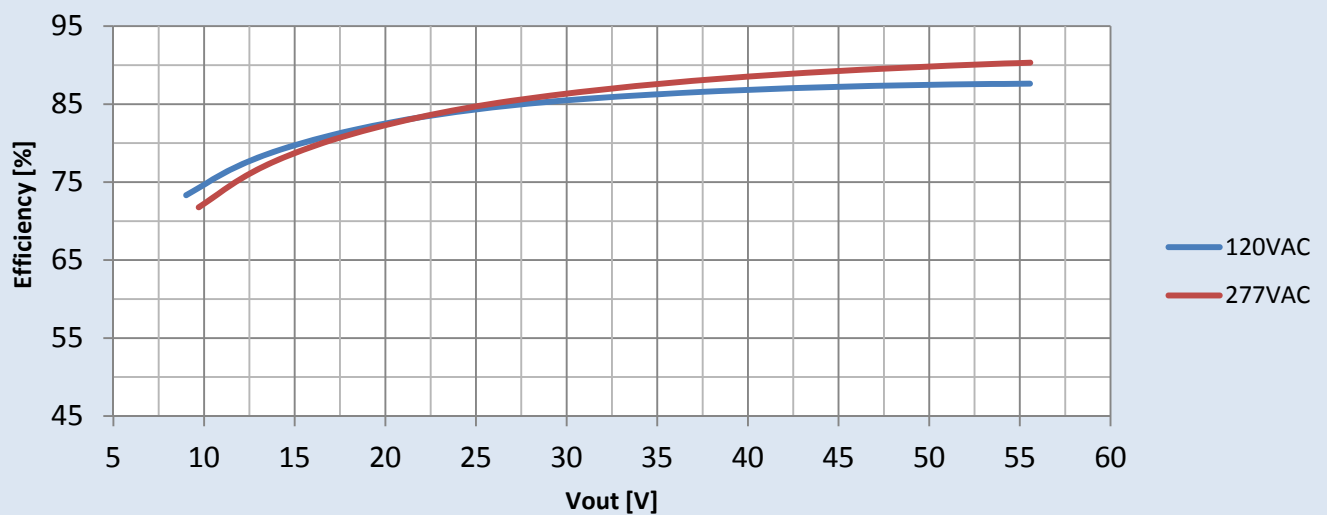
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Efficiency vs Output Power @ 70°C Vout=52V



Efficiency vs Vout @ 70°C Iout=0.70A



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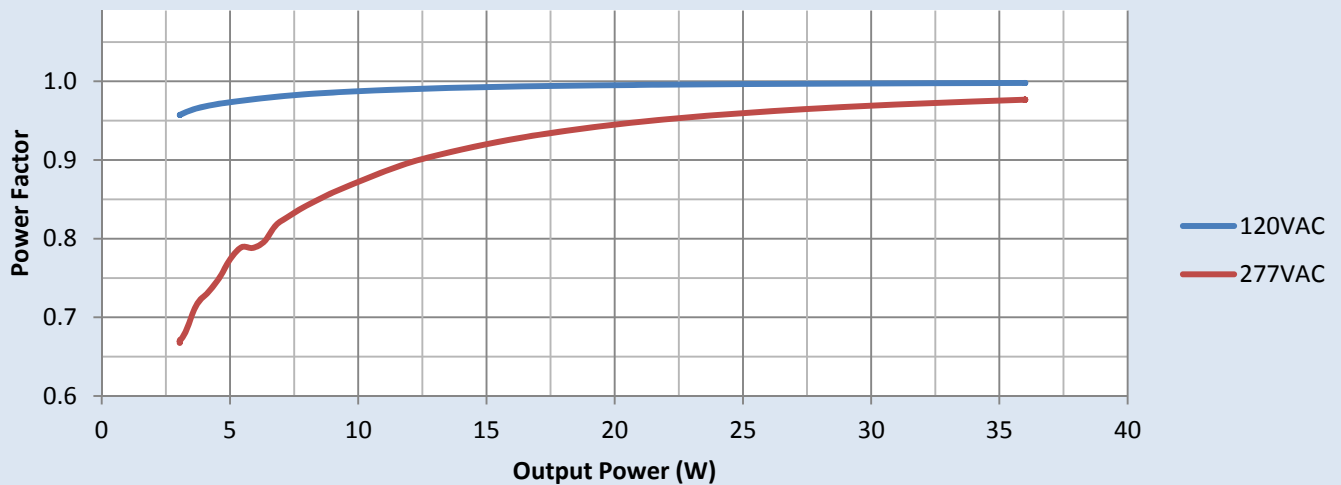


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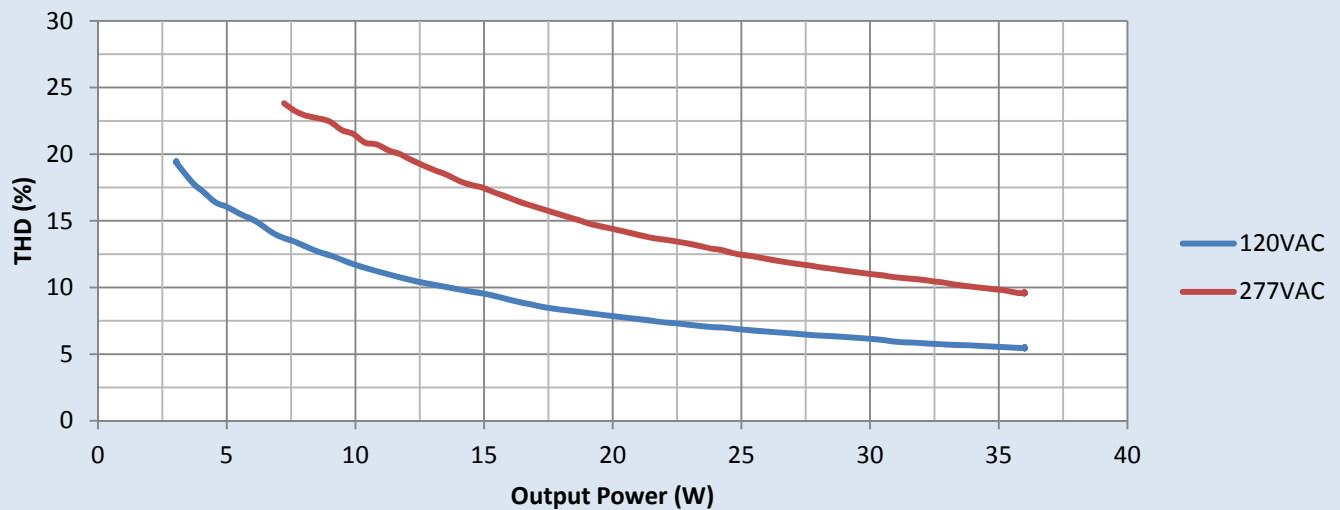
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Power Factor vs Output Power @ 70°C



THD vs Output Power @ 70°C



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Application Notes:

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Isolation:

Isolation	Input Wires	Output Wires	0-10V Wires (class 2)	Enclosure
Input Wires	NA	2xU+1KV	2.5KVac	2xU+1KV
Output Wires	2xU+1KV	NA	NA	500V
0-10V Wires (class 2)	2.5KVac	NA	NA	500V
Enclosure	2xU+1KV	500V	500V	NA

UL Conditions of Acceptability:

Please contact your Philips representative for a copy of the latest UL Conditions Of Acceptability (COA).

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