

“Duo Series”



Product Highlights:

- Designed for LED lighting and signage applications
- Unique Duo Dim™ technology – TRIAC and 0-10V
- Ideal for retrofit applications where there are different dimmer types already installed
- Universal AC input (90~305Vac)
- Built-in active PFC provide PF>0.90 over entire input range
- Class II power supply
- Metal case cooled by air convection
- Suitable for placement in standard electrical junction box
- Protections: Short circuit / Over voltage / Over Current / Over temperature
- Dimmable output with flexible architecture
 - Single unit provides both 0-10 and TRIAC dimming function
 - DC Dimming (0-10V) (2 wire dimming input)
 - PWM Dimming
 - TRIAC Based Dimming (AC Wires)
- 5 year warranty



Compliance:

- Safety: UL, cUL, CE
- EMI: FCC Part 15/18 Class B and EN55015 Compliant
- Suitable for indoor and outdoor applications in dry and damp locations
- Materials: RoHS Compliant
- Noise Rating: Class A

Orderable Part Numbers

Constant Current Variants

Part Number	Output Current (mA)	Output Voltage Range Max (V)	Line / Load Reg. ¹	Max. Effic.	Max. Output Power (W)
XEL-A040D-024-C1X40-D	1400	12 ~ 24	±5%	84%	33.60
XEL-A040D-024-C1X25-D	1250	12 ~ 24	±5%	85%	30.00
XEL-A040D-042-C1X05-D	1250	20 ~ 32	±5%	85%	40.00
XEL-A040D-042-C1X05-D	1050	26 ~ 38	±5%	86%	40.00
XEL-A040D-042-CX800-D	800	26 ~ 38	±5%	86%	32.00
XEL-A040D-052-CX800-D	800	42 ~ 52	±5%	86%	40.00
XEL-A040D-042-CX700-D	700	26 ~ 38	±5%	86%	28.00
XEL-A040D-052-CX700-D	700	42 ~ 52	±5%	86%	36.40
XEL-A040D-042-CX500-D	500	26 ~ 38	±5%	86%	20.00
XEL-A040D-052-CX500-D	500	42 ~ 52	±5%	86%	26.00
XEL-A040D-042-CX350-D	350	26 ~ 38	±5%	86%	14.00
XEL-A040D-052-CX350-D	350	42 ~ 52	±5%	86%	18.50

-N instead of -D means non dimming version. -Z instead of -D means 0-10V dimming only.
 -T instead of -D means TRIAC dimming only. cUL is only applicable to units with Output Voltage below 42V. If you need a current/voltage variant that is not listed, please contact Xenerqi for orderable part number.

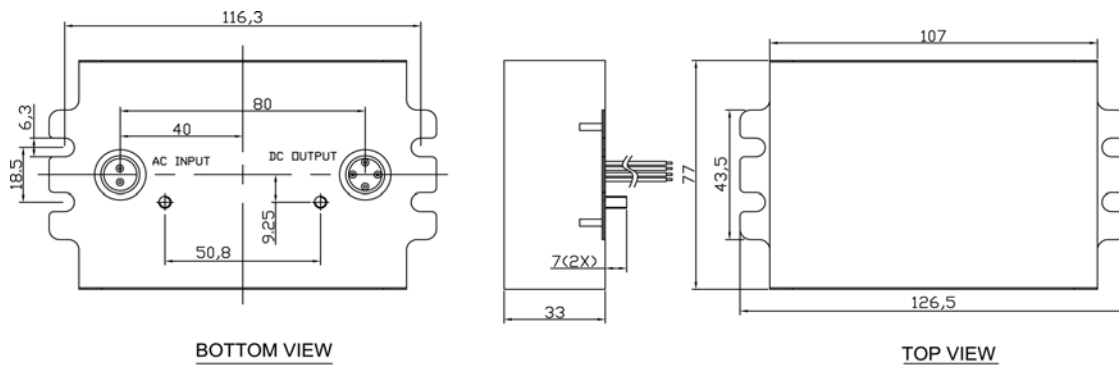
General Specification

SERIES	XEL-A040D		
OUTPUT	DC VOLTAGE RANGE	12 ~ 52 Vdc (see orderable parts table for details)	
	RATED CURRENT RANGE	350mA ~ 1.40A (see orderable parts table for details)	
	RATED POWER	up to 40W	
	LINE/LOAD REGULATION ¹	±3%	
	TURN ON TIME	< 800ms	
INPUT	VOLTAGE RANGE	90 ~ 305Vac	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	PF ≥ 90% at full load	
	EFFICIENCY (Typ.)	84 ~ 86% at full load	
	AC CURRENT	0.6A @ 120Vac	
	INRUSH CURRENT (Typ.)	< 30A @ 25°C, 230Vac cold start	
	LEAKAGE CURRENT	< 500µA (400µA typical)	
	THD (TOTAL HARMONIC DIST.)	< 20%	
DIMMING	MODES	DC Dimming Control: 0-10 Vdc PWM Dimming Control Input: Duty 0%-100% (PWM frequency 200HZ-1KHZ, 10-24V Range) TRIAC Dimming is based on forward or reverse phase dimmer Unit is intended to operate with either dimmer type, but not both simultaneously	
	PROTECTION	SHORT CIRCUIT	Hiccup mode protection. Recovers automatically after fault condition is removed
		OVER VOLTAGE	< 30% above the maximum output voltage listed for the specific part number
OVER CURRENT		< 10% above the maximum output current listed for the specific part number	
OVER TEMPERATURE		Unit automatically dims to 10% of maximum output when TC >90°C (±5°C)	

ENVIRONMENT	WORKING TEMPERATURE	-30°C ~ + 70°C at full load Ambient (Tcase Rated at 90°C)
	WORKING HUMIDITY	5% ~ 95% RH non-condensing (suitable for DRY and DAMP locations)
	STORAGE TEMPERATURE	-40°C ~ + 85°C Ambient
	STORAGE HUMIDITY	5% ~ 95% RH non-condensing
	IMPACT RESISTANCE	1 g/s
	VIBRATION	5-500Hz 5G, 12min/1 cycle, period for 30 minutes each along X,Y,Z axes
SAFETY & EMC	SAFETY STANDARDS	UL8750, UL1310, CE, FCC
	EMI CONDUCTION & RADIATION	Compliance to CISPR 22 CLASS B, CISPR 14-1 CLASS B, GB4343.1-2003, GB17625.1-2003, GB4343-2003+A1, CISPR 14-1:1997, EN55014-1:1997-5, EN55012-1:1997-6
	HARMONIC CURRENT	Compliance to GB4343-2003+A1, CISPR 14-1:EN61000-3-2:1995
	EMS IMMUNITY	Compliance to GB/T13926.3, IEC61000-4-3 & 4-4, PrEN55014-2 Section 6.2 & 6.5, IEC61000-4-11.
	TRANSIENT SUPPRESSION (Surge)	2.5kV (100kHz ring wave at 2.5kV common mode and differential)
OTHERS	LIFETIME	50,000 hours at up to 70C ambient temperature

Note 1: Load Regulation includes line regulation, load regulation and set-up tolerance
 Note 2: All specifications not specifically mentioned are measured at 230Vac and 25°C ambient temperature

Mechanical Details



Drawing not to scale

Wires	Colors	Type
Input	White (Neutral)	UL1015
	Black (Line)	AWG18
Output	Red (Positive)	UL1430
	Black (Ground)	AWG18
Dimming (optional)	Purple (Dim +)	UL1430
	Grey (Dim -)	AWG18

Case	
Material	Metal
Unit Weight	400g
Dimensions	126.5mm(L) x 77.0mm (W) x 33.0mm (H)

**For more detailed information about this product
 please contact XenerQi (sales@xenerqi.com)**

Xenerqi Limited

Email: Sales@Xenerqi.com

Website: www.xenerqi.com

Phone: +1 (704) 746-9246

+ (852) 3050-9292

+ (65) 6494-8832

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