





# "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
- 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. <sup>1</sup>	Max. Effic.	Max. Outpu t Power (W)
XEL-A040D-024-C1X40-D	1400	12 ~ 24	±5%	84%	33.60
XEL-A040D-024-C1X25-D	1250	12 ~ 24	±5%	84%	30.00
XEL-A040D-042-C1X05-D	1250	20 ~ 32	±5%	84%	40.00
XEL-A040D-042-C1X05-D	1050	26 ~ 38	±5%	83%	40.00
XEL-A040D-042-CX800-D	800	26 ~ 38	±5%	83%	31.00
XEL-A040D-052-CX800-D	800	42 ~ 52	±5%	83%	42.00
XEL-A040D-042-CX700-D	700	26 ~ 38	±5%	85%	27.00
XEL-A040D-052-CX700-D	700	42 ~ 52	±5%	85%	36.40
XEL-A040D-042-CX500-D	500	26 ~ 38	±5%	84%	19.00
XEL-A040D-052-CX500-D	500	42 ~ 52	±5%	84%	26.00
XEL-A040D-042-CX350-D	350	26 ~ 38	±5%	79%	13.50
XEL-A040D-052-CX350-D	350	42 ~ 52	±5%	79%	18.50
XEL-A040D-042-CX315-D	315	26 ~ 38	±5%	78%	12.00

<sup>-</sup>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 EHWZ for orderable part number.

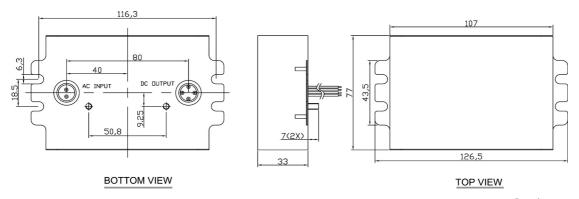
#### **General Specification**

SERIES		XEL-A040D	
ОИТРИТ	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 REGULATION1	±3%	
	TURN OFF TIME	<200ms	
	TURN ON TIME	< 250ms	
	VOLTAGE RANGE	90 ~ 305Vac	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	PF ≥ 90% at full load	
1310117	EFFICIENCY (Typ.)	84 ~ 86% at full load	
INPUT	AC CURRENT	0.6A @ 120Vac	
	INRUSH CURRENT (Typ.)	< 30A @ 25°C, 230Vac cold start	
	LEAKAGE CURRENT	< 500μA (400μA typical)	
	THD (TOTAL HARMONIC DIST.)	< 20%	
		DC Dimming Control: 0-10 Vdc	
DIMMING	MODES	PWM Dimming Control Input: Duty 0%-100% (PWM frequency 200HZ-1KHZ, 10-24V Range)	
DIIVIIVIII		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

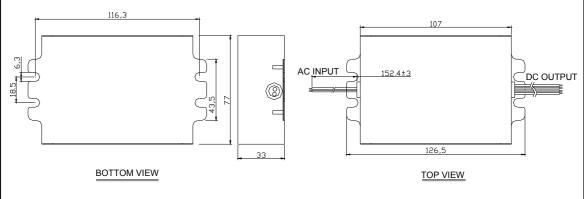
#### **Mechanical Details**



Mechanical drawing with wires coming out from the bottom of the case

Drawing not to scale

# XEL-A040D Series 107



Mechanical drawing with wires coming out from both sides of the case

Wires	Colors	Туре
Input	White (Neutral)	UL1015
	Black (Line)	AWG18
Output	Red (Positive)	UL1430
	Black (Ground)	AWG18
Dimming	Purple (Dim +)	UL1430
(optional)	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 EHWZ (sales@EHWZ.com)

#### **EHWZ Limited**

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