ETC

ArcLamp Drivers

ArcSystem Series

Type(s)

Project

Date

Notes

GENERAL INFORMATION

Specifically designed for use with the 24 V ArcLamp, these advanced drivers provide a fast and simple retrofit installation solution in a compact, wall mounting enclosure. Available in 150, 350, and 700 options and including four uniquely addressable outputs per unit, the ArcLamp Driver is typically installed in the same location as an existing house light dimmer, meaning existing building load wiring can be used without any need for destructive wall or ceiling work.

FEATURES

- Three versions of driver: 150, 350 and 700
- Smooth dimming to zero
- Auto load balancing power supplies
- Smart load limit indicators (350 and 700 only)
- Four independently addressable outputs
- Option to combine output channels to cater for larger circuit loads

GENERAL INFORMATION

APPLICATIONS

- Auditoriums
- Lobbies
- Houses of worship
- Museums
- Retail

FEATURES

- Designed for use with ArcLamp
- Smooth dimming to zero
- Silent operation
- Rack and Wall mounted options
- Operates Fixed White, Fade to Warm, and Flicker ArcLamp

ORDERING INFORMATION

ArcLamp Driver

PRODUCT	CONTROL	MODEL	OUTPUT TYPE	OUTPUT VOLTAGE	MOUNTING	REGULATORY
ARCLMD - ArcLamp Driver Standard **ARCLEMD -** ArcLamp Driver Emergency	**RDM -** RDM	**150 -** 150 Driver **350 -** 350 Driver **700 -** 700 Driver	**CV -** Constant Voltage	**24 -** 24 VDC	**R -** Rack **W -** Wall **Note:** 150 model is wall-mount only	**-UL -** UL **-CE -** CE

Example: ARCLMDRDM350CV24R-UL - ArcLamp Driver, 350, Constant Voltage, 24 V, Rack Mounting, UL

PRODUCT SPECIFICATIONS

Control

	RDM MODEL
Protocols	DMX and RDM
RDM configuration	Yes
UI type	None
DMX footprint	4 channels
Local control	No
Input method	DMX-512 via RJ45 etherCON connector

Electrical

Voltage Input	150 - 100–277 VAC 50/60 Hz 350 - 100–240 VAC 50/60 Hz 700 - 100–240 VAC 50/60 Hz
Output	Four 24 VDC Constant Voltage outputs with PPW data technology
Volt Drop Compensation	Ensures ArcLamp will work with as little as 21 VDC at the lamp
Inrush	150 - 15 A at all rated voltages 350 - 15 A at all rated voltages 700 - 15 A at all rated voltages
Wattage (max / standby)	150 max 115 W/standby 11 W 350 max 264 W/standby 10 W 700 max 528 W/standby 15 W
Current draw at 120 VAC	150 - 1.5 A 350 - 2.2 A 700 - 4.4 A
Power factor	> 0.9

Thermal

Ambient operating temp	0°–40°C (32°–104°F)
Fan (controllable)	150 - N/A (convection cooled) 350 / 700 - thermally regulated integral cooling fans
BTUs/hour (120 V/ 240 V)	150 - 361 BTU/hr 350 - 829 BTU/hr 700 - 1658 BTU/hr

Physical

Materials	Galvanized steel construction
Color options	Black
Mounting options	4 screw holes in rear plate
IP rating	IP-20 (dry locations only)
Weight	150 : 1.9 kg (4.2 lb) 350 : 4.3 kg (9.4 b) 700 : 5.0 kg (11.1 lb)

Warranty

Driver	5 years
Website	etcconnect.com/Support/Warranty.aspx

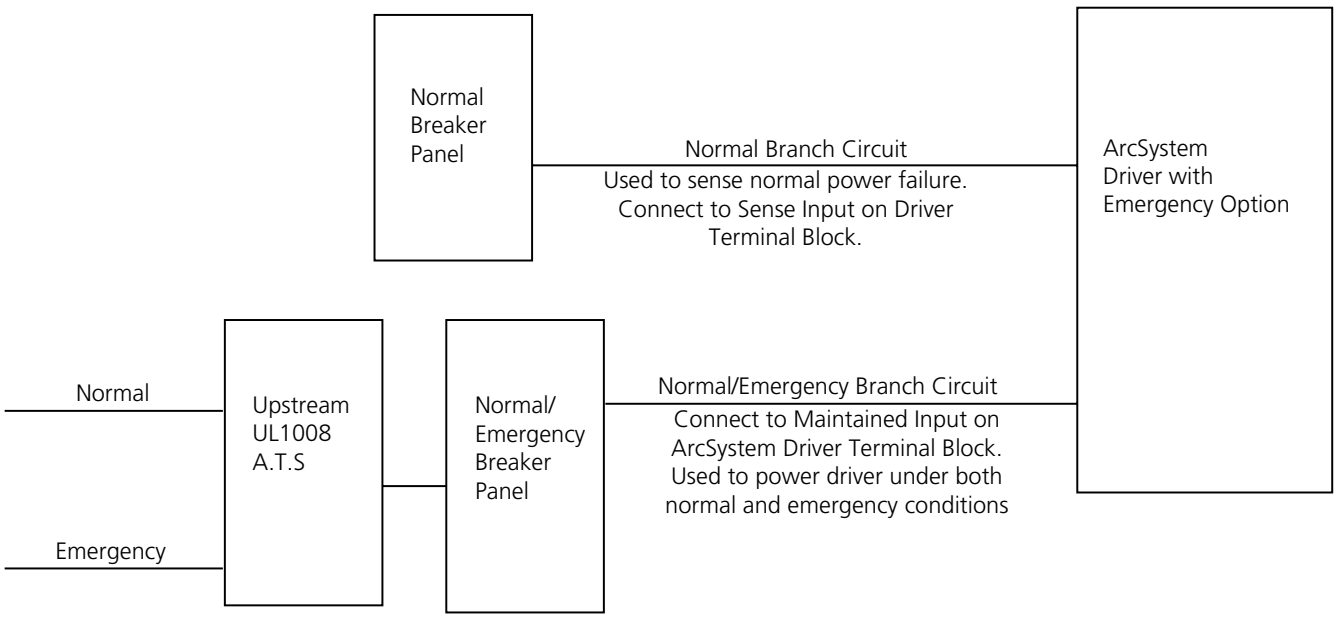
Regulatory and Compliance

Approved regulatory standards	Standard version cULus - UL8750 and CSA C22.2 No. 250.13 cULus - Classification Retrofit Kit to UL1598C and CSA TIL B-79A CE Compliant UKCA Compliant EAC Compliant Emergency version cULus – UL924 and CSA C22.2 No. 141 cULus – Classified Retrofit Kit, UL924 and CSA C22.2 No. 141 CE Compliant UKCA Compliant EAC Compliant Wall mount version Suitable for use in air handling systems by NEC 300.22(C)(3)

EMERGENCY CONNECTION

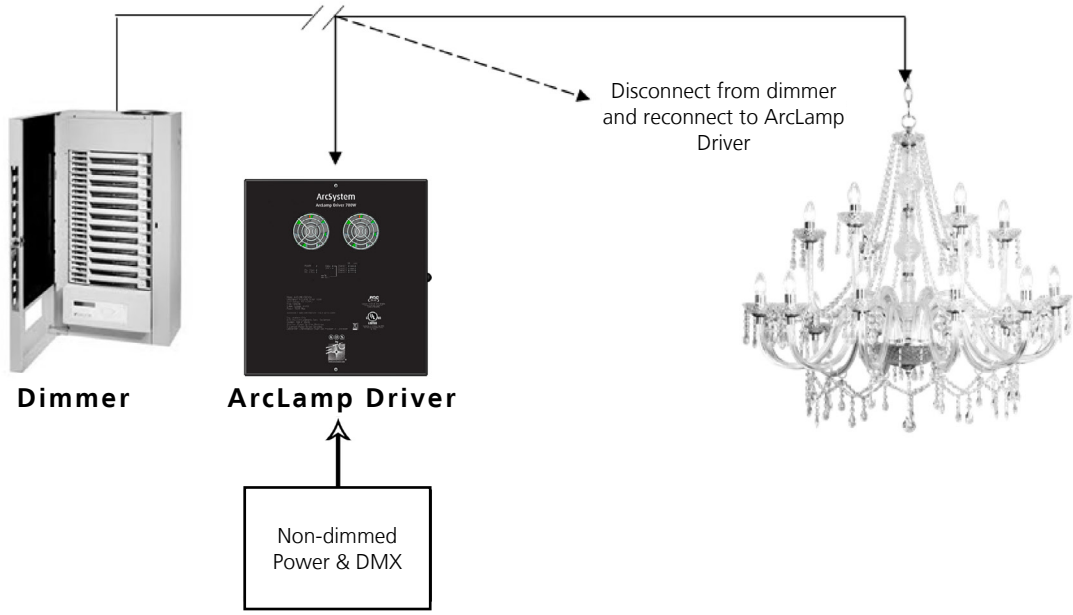
A dual-input emergency version of this driver is available. Emergency drivers have two line-voltage leads that are wired to the product and have the following functions:

- Normal power/emergency power
- Normal power sense input



If normal power to the sense input is lost, the driver will force the luminaire on at 100% overriding all other control signals. There is no control of the driver/luminaire via wired DMX until normal power is restored at the sense input.

LAMP CONNECTION



ArcLamp Maximum System Limits

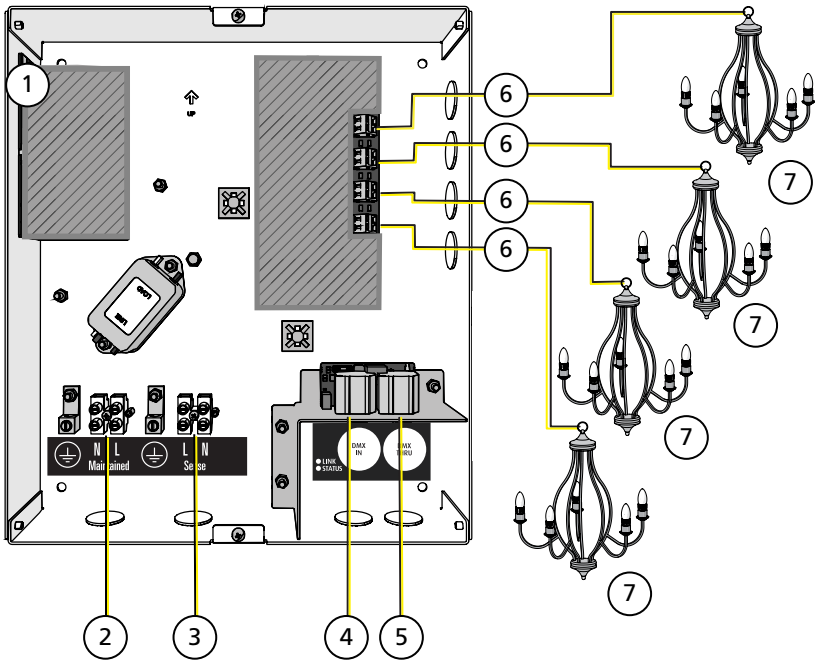
	150 DRIVER	350 DRIVER	700 DRIVER
Maximum ArcLamps	25	60	120
Channels per unit	4	4	4
Max current per channel	1.5 A	3.5 A	7 A
Max power per channel	36 W	80 W	160 W
Lamps per channel	6, plus additional one on a single channel	15	30

Note: Kits to bridge driver outputs are provided with each driver. See ArcLamp installation manual for more details

ArcLamp Driver Bridge Specifications

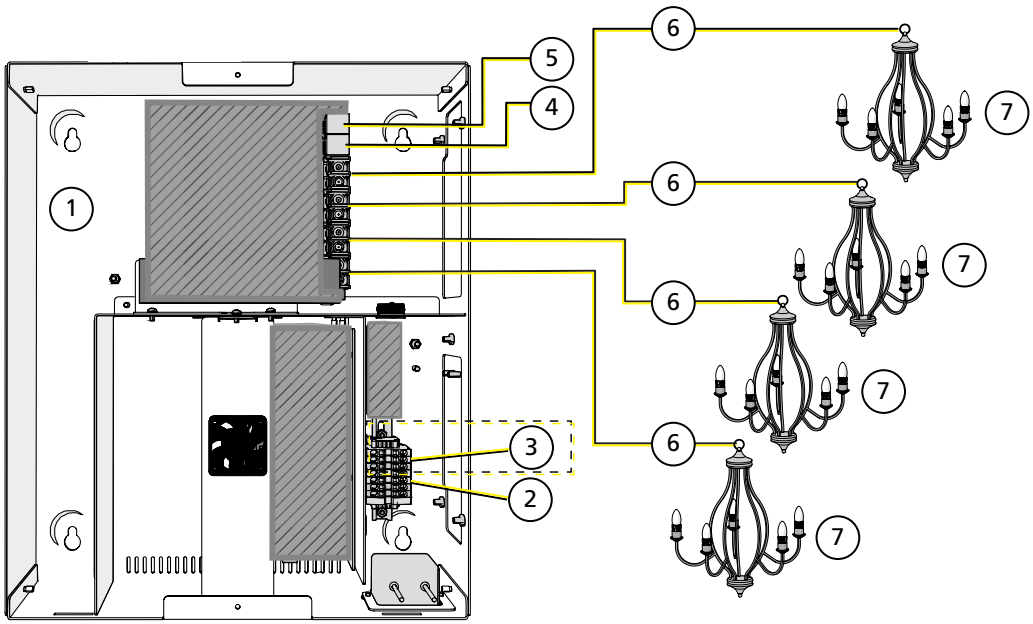
ARCLAMP DRIVER MODEL	BRIDGE CONFIGURATION	MAX ARCLAMPS PER CHANNEL	MAX CURRENT PER CHANNEL	MAX POWER PER BRIDGED CHANNEL
ArcLamp Driver 150 standard or emergency	2 channels bridged into 1	12	2.2 A	53 W
	3 channels bridged into 1	18	3.4 A	79 W
	4 channels bridged into 1	25	4.4 A	110 W
Wall-Mount ArcLamp Driver 350 standard or emergency	2 channels bridged into 1	30	5.8 A	139 W
	3 channels bridged into 1	45	8.3 A	199 W
	4 channels bridged into 1	60	11 A	264 W
Rack-Mount ArcLamp Driver 350 standard or emergency	2 channels bridged into 1	30	5.6 A	134 W
	3 channels bridged into 1	45	8.6 A	206 W
	4 channels bridged into 1	60	11 A	264 W
Wall-Mount ArcLamp Driver 700 standard or emergency	2 channels bridged into 1	60	12 A	288 W
	3 channels bridged into 1	Not supported		
	4 channels bridged into 1			
Rack-Mount ArcLamp Driver 700 standard or emergency	2 channels bridged into 1	60	11 A	264 W
	3 channels bridged into 1	Not supported		
	4 channels bridged into 1			

WALL-MOUNT ARCLAMP 150 DRIVER WIRING DIAGRAM



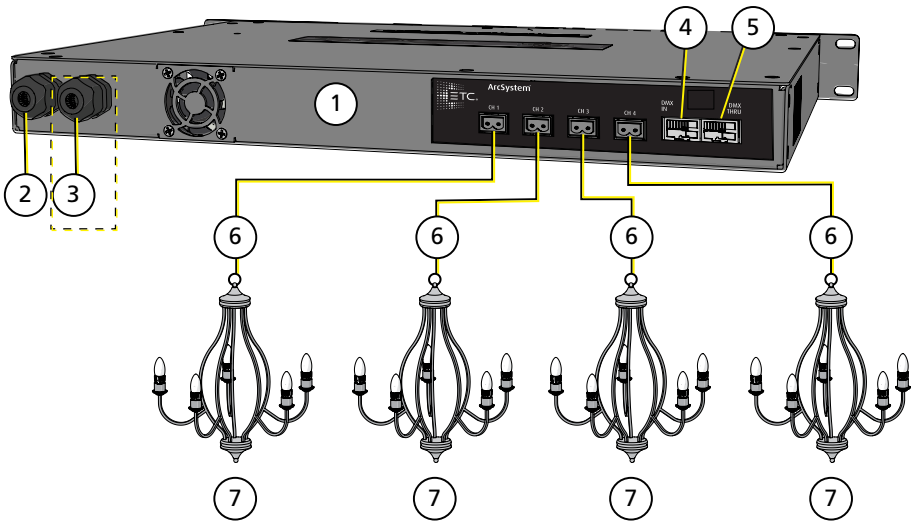
	DESCRIPTION	NOTES
1	ArcLamp 150 Driver	ARCLMDRDM150CV24W ARCLEMDRDM150CV24W (Emergency)
2	Maintained input power	2.5–4 mm² (14–12 AWG) line/neutral/ground 100–277 VAC, 50/60 Hz ARCLMDRDM150CV24W: normal branch circuit ARCLEMDRDM150CV24W: normal/emergency branch circcuit from UL1008 automatic transfer switch (ATS) by others
3	Sense input power (emergency models only)	2.5–4 mm² (14–12 AWG) line/neutral/ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCLEMD150CV24W only)
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) with 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard
5	DMX thru to another ArcLamp Driver or other device	RJ45 connector, Cat5e (or equivalent) with 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard
6	Class 1 wiring	2.5 mm² (14–12 AWG)*
7	Up to 6 ArcLamps per output	It is possible to add a seventh ArcLamp to one output for a total of 25 ArcLamps per driver.
*2.5 mm² (14 AWG) is the largest gauge the output terminals accept. Smaller gauges are not recommended for use with ArcLamp. See https://www.etcconnect.com/ArcLampCalculator/ to calculate supported number of ArcLamps based on wire gauge and run length.		
Note: The illustration is not drawn to scale.		

WALL-MOUNT ARCLAMP 350/700 DRIVER WIRING DIAGRAM



	DESCRIPTION	NOTES
1	Wall-Mount ArcLamp 350 Driver or ArcLamp 700 Driver	ARCLMDRDM350CV24W ARCLMEDRDM350CV24W (Emergency) ARCLMDRDM700CV24W ARCLMEDRDM700CV24W (Emergency)
2	Maintained input power	0.5–1.5 mm^2 (22–16 AWG) line/neutral/ground 100–240 VAC, 50/60 Hz, normal/emergency branch circuit, ARCLMDRDM350CV24W or ARCLMDRDM700CV24W: normal branch circuit ARCLMEDRDM350CV24W or ARCLMEDRDM700CV24W: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others
3	Sense input power (emergency models only)	0.5–1.5 mm^2 (22–16 AWG) line/neutral/ground 100–240 VAC, 50/60 Hz, normal branch circuit (ARCLMEDRDM350CV24W or ARCLMEDRDM700CV24W only)
4	DMX input from external DMX source	Cat5e (or equivalent) with 0.2 mm^2 (24 AWG) or larger conductors terminated to T568B standard on RJ45 connectors or Belden 9729 on eight-pin connectors (not shown)
5	DMX thru to another ArcLamp Driver or other device	Cat5e (or equivalent) with 0.2 mm^2 (24 AWG) or larger conductors terminated to T568B standard on RJ45 connectors or Belden 9729 on eight-pin connectors (not shown)
6	Class 1 wiring	2.5 mm^2 (14–12 AWG)*
7	Up to 15 ArcLamps per channel for ARCLMDRDM350CV24W or ARCLMEDRDM350CV24W	Up to 30 ArcLamps per channel for ARCLMDRDM700CV24W or ARCLMEDRDM700CV24W
*Output wire gauges smaller than 2.5 mm^2 (14 AWG) are not recommended for use with ArcLamp. See https://www.etcconnect.com/ArcLampCalculator/ to calculate supported number of ArcLamps based on wire gauge and run length.		
Note: The illustration is not drawn to scale.		

RACK-MOUNT ARCLAMP 350/700 DRIVER WIRING DIAGRAM



	DESCRIPTION	NOTES
1	Rack-Mount ArcLamp 350 Driver or ArcLamp 700 Driver	ARCLMDRDM350CV24R ARCLEMDRDM350CV24R (Emergency) ARCLMDRDM700CV24R ARCLEMDRDM700CV24R (Emergency)
2	Maintained input power	Use provided power cable†. 100–240 VAC, 50/60 Hz ARCLMDRDM350CV24R or ARCLMDRDM700CV24R: normal branch circuit ARCLEMDRDM350CV24R or ARCLEMDRDM700CV24R: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others
3	Sense input power (emergency models only)	Use provided power cable†. 100–240 VAC, 50/60 Hz, normal branch circuit (ARCLEMDRDM350CV24R or ARCLEMDRDM700CV24R only)
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) with 0.2 mm^2 (24 AWG) or larger conductors terminated to T568B standard
5	DMX thru to another ArcLamp Driver or other device	RJ45 connector, Cat5e (or equivalent) with 0.2 mm^2 (24 AWG) or larger conductors terminated to T568B standard
6	Class 1 wiring	2.5 mm^2 (14–12 AWG)*
7	Up to 15 ArcLamps per channel for ARCLMDRDM350CV24R or ARCLEMDRDM350CV24R	Up to 30 ArcLamps per channel for ARCLMDRDM700CV24R or ARCLEMDRDM700CV24R

†Note: The driver in the illustration is an emergency driver. Rack-mount ArcLamp Emergency Drivers sold in North America have hard-wired power input cables with plugs. Rack-mount ArcLamp Emergency Drivers sold outside of North America have hard-wired power input cables with bare ends for direct connection to your maintained/emergency and normal sense power supplies. Non-emergency models have a single, maintained input power socket and compatible cable.

*2.5 mm^2 (14 AWG) is the largest gauge the output connectors accept. Smaller gauges are not recommended for use with ArcLamp. See https://www.etcconnect.com/ArcLampCalculator/ to calculate supported number of ArcLamps based on wire gauge and run length.

Note: The illustration is not drawn to scale.

PHYSICAL

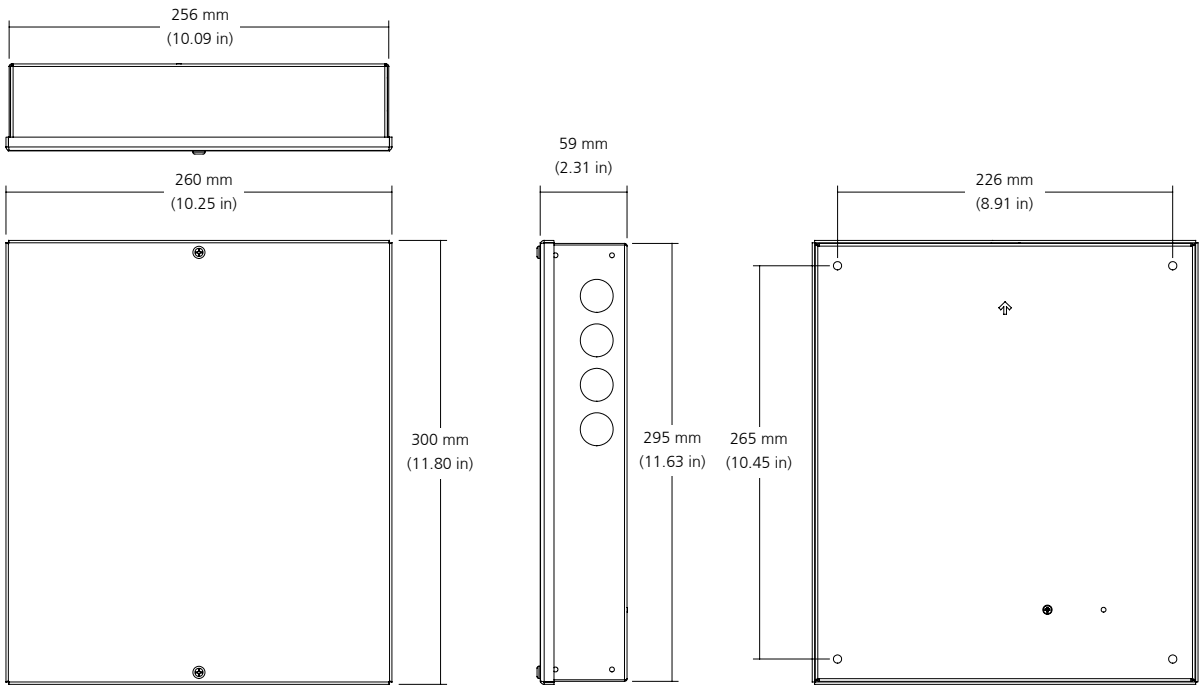
Product Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
ArcLamp Driver 150	11.09	282	8.20	209	2.28	58
ArcLamp Driver Wall 350/700	15.26	388	12.76	324	3.08	78
ArcLamp Driver Rack 350/700	1.74	44	19.00	483	9.63	245

Product Weight

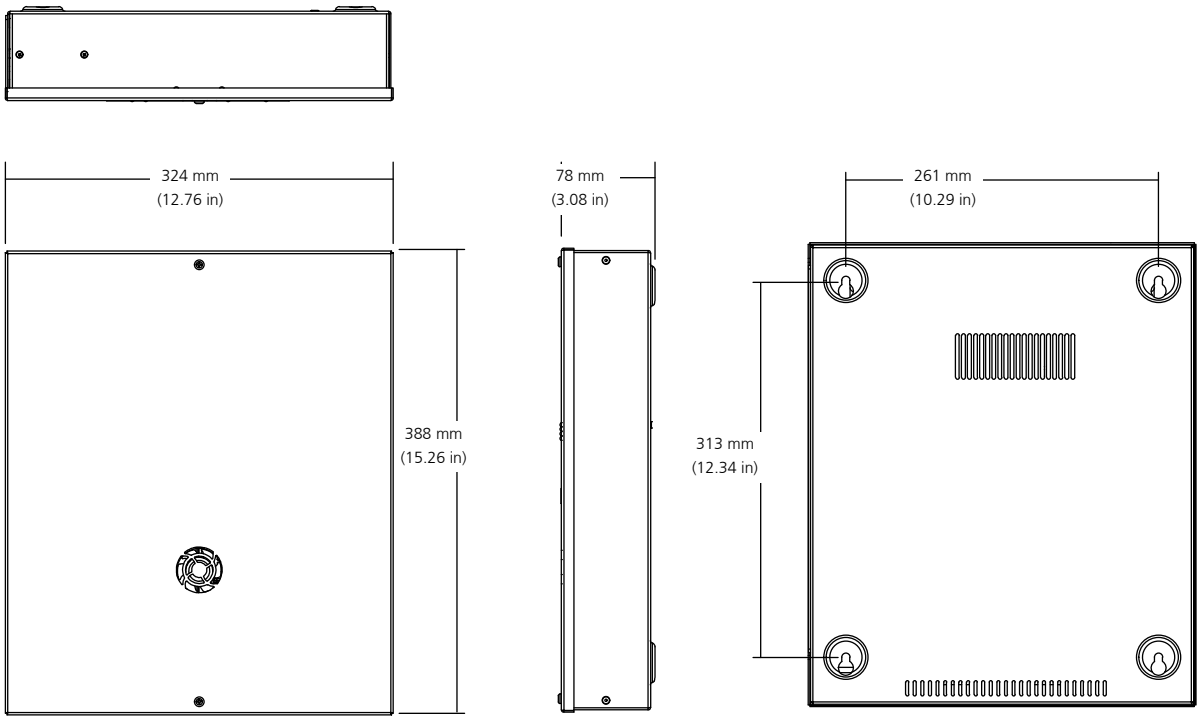
MODEL	WEIGHT		SHIPPING WEIGHT	
	lb	kg	lb	kg
ArcLamp Driver Wall 150	4.2	1.9	5.2	2.3
ArcLamp Driver Wall 350	9.4	4.3	10.6	4.8
ArcLamp Driver Wall 700	11.1	5	12.3	5.6
ArcLamp Driver Rack 350	12.0	5.5	14.3	6.5
ArcLamp Driver Rack 700	14.8	6.7	17.1	7.8

ARCLAMP DRIVER 150 - WALL MOUNT

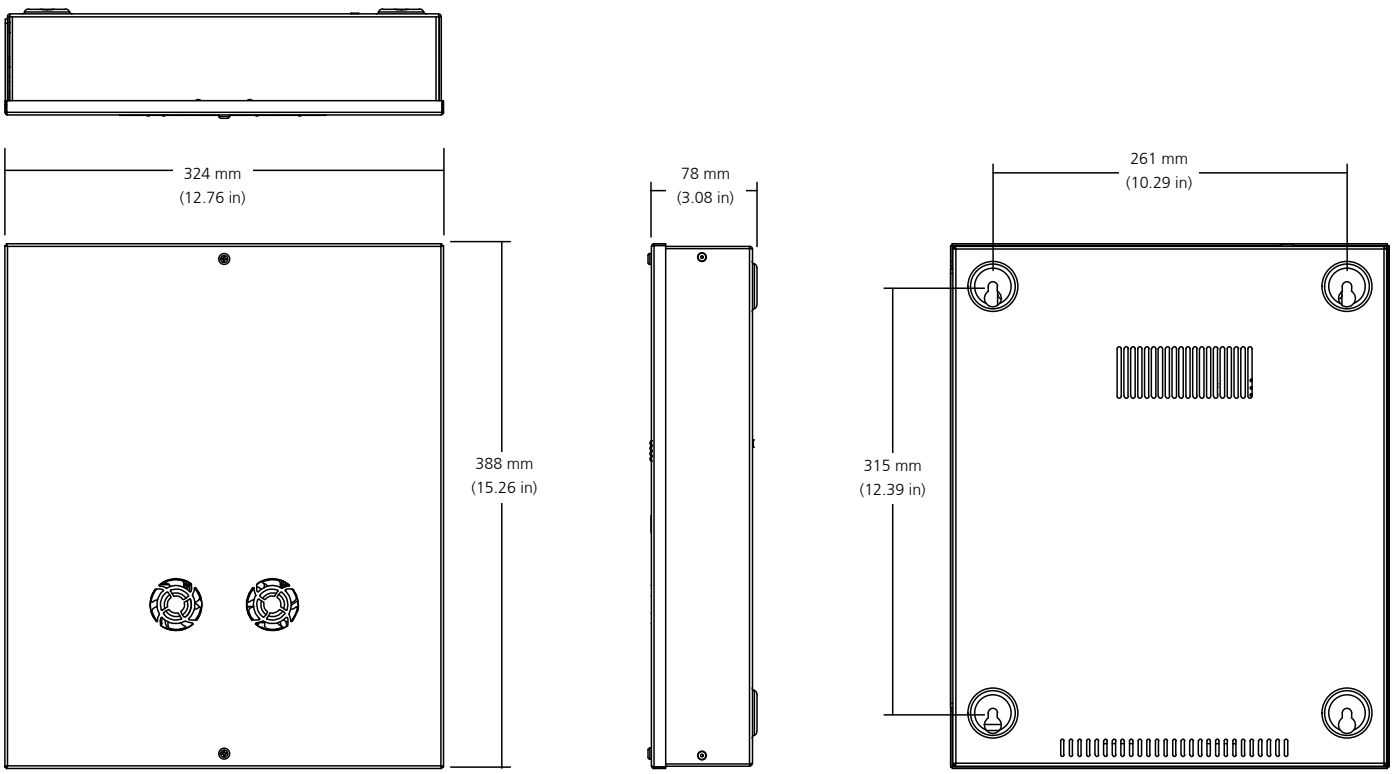


PHYSICAL

ARCLAMP DRIVER 350 - WALL MOUNT

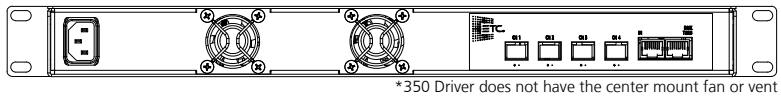


ARCLAMP DRIVER 700 - WALL MOUNT

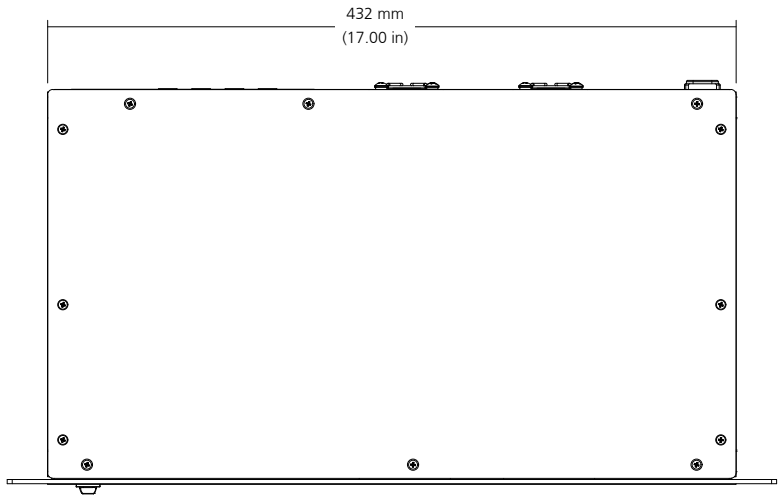


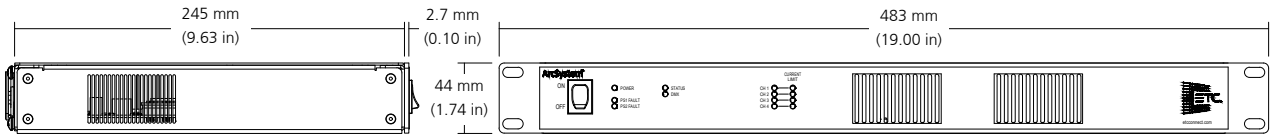
PHYSICAL

ARCLAMP DRIVER 350/700 - STANDARD RACK MOUNT



*350 Driver does not have the center mount fan or vent





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