ETC

ArcSystem Pro D4 CV Drivers

ArcSystem Series

Type(s)

Project

Date

Notes

GENERAL INFORMATION

The ArcSystem Pro D4 CV Driver is an ideal product for driving a wide range of constant voltage LED loads. The versatile feature set includes optional emergency variants for easy retrofit applications. Designed to simplify and centralize your driver systems the ArcSystem Pro D4 Driver line is the perfect tool for new design installations and retrofit projects alike.

The D4 CV line is available in 150, 350, and 700 variants with maximum load capabilities reaching up to 528 W. The compact 150 version is wall-mounted, while the 350 and 700 versions include both wall-mounting and rack-mounting options.

D4 CV Drivers are compatible with 24 VDC constant voltage LED loads, making them ideal for applications such as linear tape installation. Like all ArcSytem Pro drivers, the D4 CV family is available in a wired DMX version with RDM for hassle-free installation.

GENERAL INFORMATION

APPLICATIONS

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

FEATURES

- Constant voltage designed for use with third party fixtures and tape light
- Smooth dimming to zero
- Silent operation
- Rack- and Wall-mounted options

ORDERING INFORMATION

ArcSystem D4 Driver

PRODUCT	CONTROL	TYPE	MODEL	CONNECTION	MATERIAL	MOUNTING	REGULATORY
ARCPD4D - D4 Standard **ARCPED4D -** D4 Emergency	**RDM -** DMX/ RDM	**CV24 -** Constant Voltage	**(Blank) -** 150 Driver **350 -** 350 Driver **700 -** 700 Driver	**T -** Terminal	**M -** Metal	**R -** Rack-mount **W -** Wall-mount **Note:** 150 model is wall-mount only	**(Blank) -** UL compliant **-CE -** CE Rated

Example: ARCPD4DRDMCV24350TMR - ArcSystem D4 Driver, 24VDC Constant Voltage, 350 Driver, Terminal Connection, Metal Rack-mounted, UL compliant

SPECIFICATION

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 PWM dimming
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 150 W / standby 11 W 350 max 264 W / standby 10 W 700 max 528 W / standby 15 W
Current draw at 120 VAC	150 - 1.0 A 350 - 2.2 A 700 - 4.4 A
Power factor	> 0.9
Maximum cable length from driver to luminaire	100 m (328 ft)

Thermal

Ambient operating temp	0° to 40°C (32° to 104°F)
Fan (controllable)	150 - N/A (convection cooled) 350/700 - thermally regulated integral cooling fans
BTUs/hour (120 V/240 V)	150 - 511 BTU/hr 350 - 900 BTU/hr 700 - 1801 BTU/hr

Physical

Materials	Galvanized steel construction
Color options	Black
Mounting options	Wall-mount - four screw holes in rear plate Rack-mount - 1U Standard rack mounting
IP rating	IP-20 (dry locations only)
Weight	See table on page 5

Warranty

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

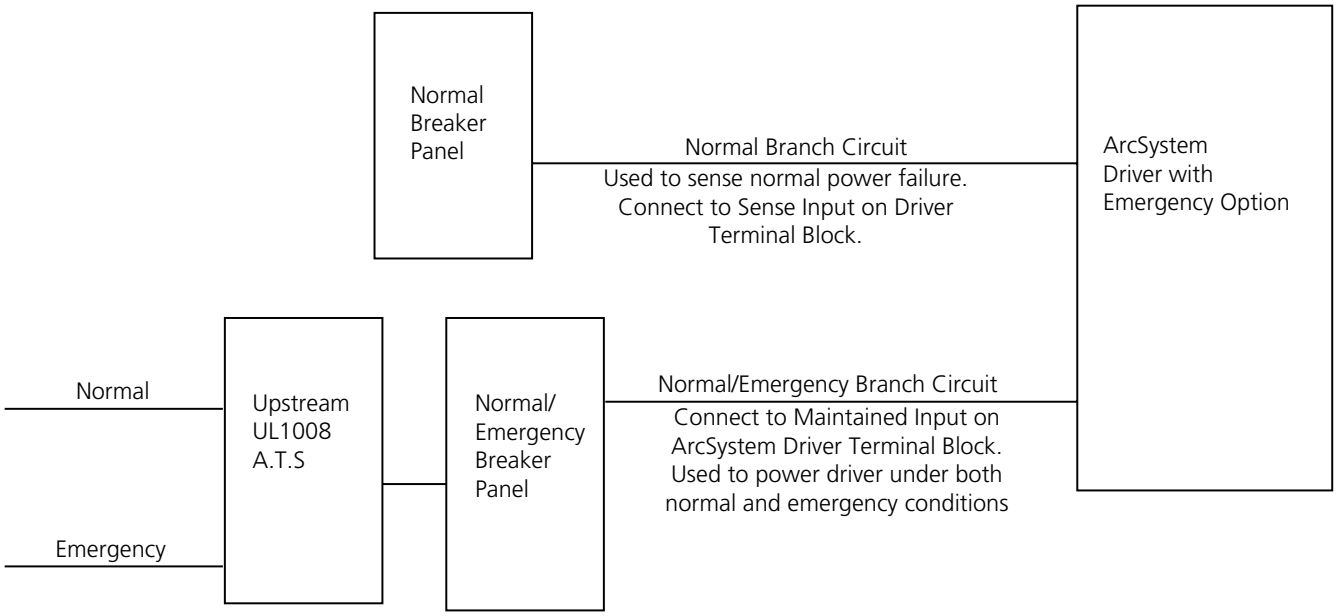
Regulatory and Compliance

Approved regulatory standards	Standard version cULus - UL8750 and CSA C22.2 No. 250.13 CE Compliant UKCA Compliant EAC Compliant Emergency version cULus – UL924 and CSA C22.2 No. 141 CE Compliant UKCA Compliant EAC Compliant Wall mount version Suitable for use in air handling spaces by NEC 300.22(C)(3)

EMERGENCY CONNECTION

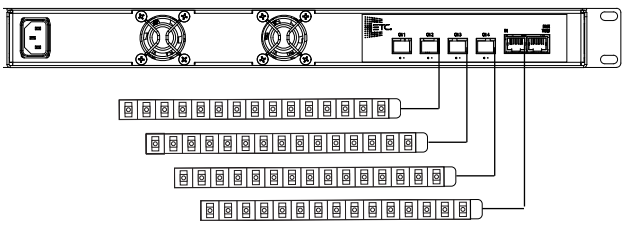
A dual-input emergency version of this driver is available. Emergency drivers have two line-voltage leads that are wired to the product and have the following functions:

- Normal power/emergency power
- Normal power sense input

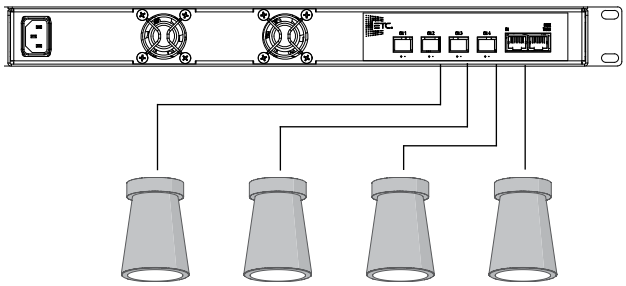


If normal power to the sense input is lost, the driver will force the luminaires on at 100% overriding all other control signals. There is no control of the driver/luminaires via DMX until normal power is restored at the sense input.

LUMINAIRE CONNECTION



ArcSystem Pro D4 CV Drivers can be used within system limits to provide power to a wide range of third party constant voltage loads. Use with LED tape to provide four channels of control, or bridge channels together to provide more power for longer runs



ArcSystem Pro D4 CV Drivers are used with 3rd party constant voltage luminaires to control multiple fixtures from a single driver, reducing system costs, offering easy retrofit, and improving system integration opportunities.

D4 Driver Maximum System Limits

	150 CV DRIVER	350 CV DRIVER	700 CV DRIVER
Output Type	24 VDC constant voltage	24 VDC constant voltage	24 VDC constant voltage
Channels per unit	4	4	4
Max output current per channel	2 A	3 A	6.1 A
Max output power per channel	50 W	72 W	146 W
Max output current for driver	6.25 A	11 A	22 A
Max output power for driver	150 W	264 W	528 W
For use with	Compatible 3rd party luminaires	Compatible 3rd party luminaires	Compatible 3rd party luminaires

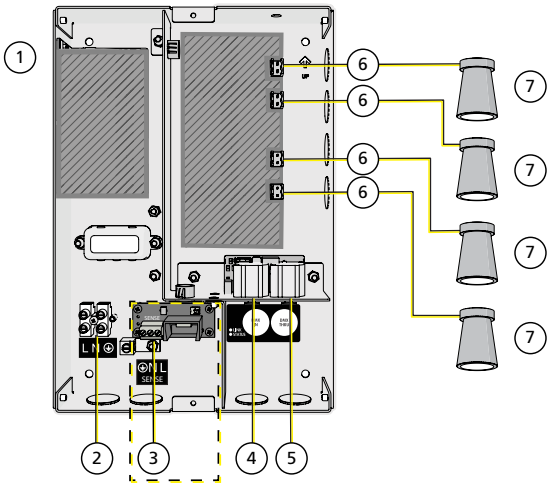
Notes

- Kits to bridge driver outputs are provided with each driver. See installation manual for more details
- For output wiring size refer to the driver installation manual.
- Visit etcconnect.com/compatibility for more information on 3rd party luminaire integration

D4 CV Driver Bridge Specifications

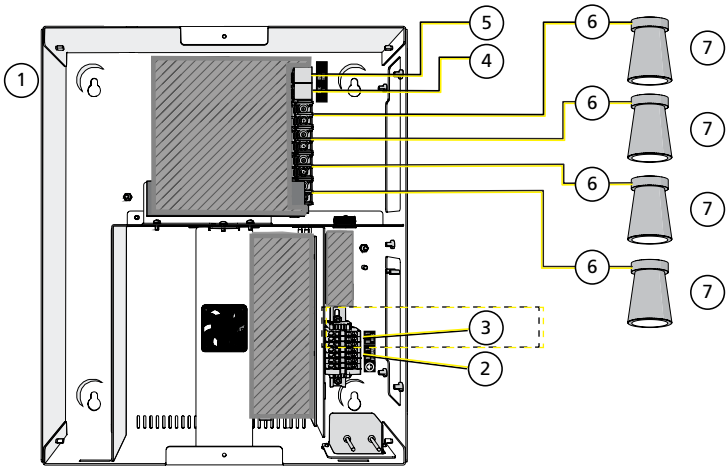
D4 CV DRIVER MODEL	BRIDGE CONFIGURATION	MAX CURRENT PER CHANNEL	MAX POWER PER BRIDGED CHANNEL
D4 Driver 150 CV	2 channels bridged into 1	3.25 A	78 W
	3 channels bridged into 1	4.5 A	108 W
	4 channels bridged into 1	5.75 A	138 W
D4 Driver 350 CV Wall-mount	2 channels bridged into 1	5.8 A	140 W
	3 channels bridged into 1	8.25 A	198 W
	4 channels bridged into 1	11 A	264 W
D4 Driver 350 CV Rack-mount	2 channels bridged into 1	5.6 A	134 W
	3 channels bridged into 1	8.6 A	206 W
	4 channels bridged into 1	11 A	264 W
D4 Driver 700 CV Wall-mount	2 channels bridged into 1	12 A	288 W
	3 channels bridged into 1	Not supported	
	4 channels bridged into 1		
D4 Driver 700 CV Rack-mount	2 channels bridged into 1	11 A	264 W
	3 channels bridged into 1	Not supported	
	4 channels bridged into 1		

WALL-MOUNT D4 CV 150 DRIVER WIRING DIAGRAM



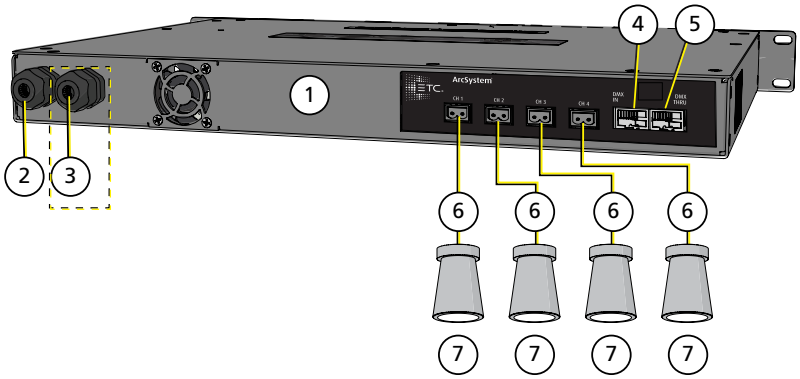
	DESCRIPTION	NOTES
1	ArcSystem Pro D4 CV 150 Driver	ARCPD4DRDMCV24TMW ARCPED4DRDMCV24TMW (Emergency)
2	Input power	0.5–10 mm² (22–6 AWG) line/neutral, 2.5–10 mm² (14–6 AWG) ground 100–277 VAC, 50/60 Hz ARCPD4DRDMCV24TMW: normal branch circuit ARCPED4DRDMCV24TMW: normal/emergency branch circcuit from UL1008 automatic transfer switch (ATS) by others
3	Sense input power (emergency models only)	0.2–2.5 mm² (24–14 AWG) line/neutral/ground 100–277 VAC, 50/60 Hz, normal branch circuit (ARCPED4DRDMCV24TMW only)
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard
5	DMX thru to another ArcSystem Pro Driver or other device	RJ45 connector, Cat5e (or equivalent) 0.2 mm² (24 AWG) or larger conductors terminated to T568B standard
6	Class 1 wiring	1.5 mm² (14 AWG) recommended*
7	24 VDC constant voltage load	For use with third-party constant voltage loads only. Not for use with ArcSystem Pro One-Cell or ArcSystem Navis luminaires.
*See etcconnect.com/compatibility and contact Systems with for assistance with voltage drop calculations based on power required and run length.		
Note: The illustration is not drawn to scale.		

WALL-MOUNT D4 CV 350/700 DRIVER WIRING DIAGRAM



	DESCRIPTION	NOTES
1	Wall-Mount ArcSystem Pro D4 CV 350 Driver or ArcSystem Pro D4 CV 700 Driver	ARCPD4DRDMCV24350TMW ARCPED4DRDMCV24350TMW (Emergency) ARCPD4DRDMCV243700TMW ARCPED4DRDMCV24700TMW (Emergency)
2	Maintained input power	0.5–1.5 mm² (22–16 AWG) line/neutral/ground 100–240 VAC, 50/60 Hz, normal/emergency branch circuit, ARCPD4DRDMCV24350TMW or ARCPD4DRDMCV24700TMW: normal branch circuit ARCPED4DRDMCV24350TMW or ARCPED4DRDMCV24700TMW: normal/emergency branch circuit from UL1008 automatic transfer switch (ATS) by others
3	Sense input power (emergency models only)	0.5–1.5 mm² (22–16 AWG) line/neutral/ground 100–240 VAC, 50/60 Hz, normal branch circuit (ARCPED4DRDMCV24350TMW or ARCPED4DRDMCV24700TMW only)
4	DMX input from external DMX source	Cat5e (or equivalent) 0.2 mm² (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 ArcSystem Pro Driver or other device	Cat5e (or equivalent) 0.2 mm² (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 mm² (14–12 AWG) recommended*
7	24 VDC constant voltage load	For use with third-party constant voltage loads only. Not for use with ArcSystem Pro One-Cell or ArcSystem Navis luminaires.
*See etcconnect.com/compatibility and contact Systems with for assistance with voltage drop calculations based on power required and run length.		
Note: The illustration is not drawn to scale.		

RACK-MOUNT D4 CV 350/700 DRIVER WIRING DIAGRAM



	DESCRIPTION	NOTES
1	Rack-Mount ArcSystem Pro D4 CV 350 Driver or ArcSystem Pro D4 CV 700 Driver	ARCD4DRDMCV24350TMR ARCD4DERDMCV24350TMR (Emergency) ARCD4DRDMCV24700TMR ARCD4DERDMCV24700TMR (Emergency)
2	Maintained input power	Use provided power cable†. 100–240 VAC, 50/60 Hz ARCPD4DRDMCV24350TMW or ARCPD4DRDMCV24700TMW: normal branch circuit ARCPED4DRDMCV24350TMW or ARCPED4DRDMCV24700TMW: 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 (ARCPED4DRDMCV24350TMW or ARCPED4DRDMCV24700TMW only)
4	DMX input from external DMX source	RJ45 connector, Cat5e (or equivalent) 0.2 mm^2 (24 AWG) or larger conductors terminated to T568B standard
5	DMX thru to another ArcSystem Pro Driver or other device	RJ45 connector, Cat5e (or equivalent) 0.2 mm^2 (24 AWG) or larger conductors terminated to T568B standard
6	Class 1 wiring	2.5 mm^2 (14–12 AWG) recommended*
7	24 VDC constant voltage load	For use with third-party constant voltage loads only. Not for use with ArcSystem Pro One-Cell or ArcSystem Navis luminaires.

†Note: The driver in the illustration is an emergency driver. Rack-mount D4 Emergency Drivers sold in North America have hard-wired power input cables with plugs. Rack-mount D4 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.

*See etcconnect.com/compatibility and contact Systems with for assistance with voltage drop calculations based on power required and run length.

Note: The illustration is not drawn to scale.

PHYSICAL

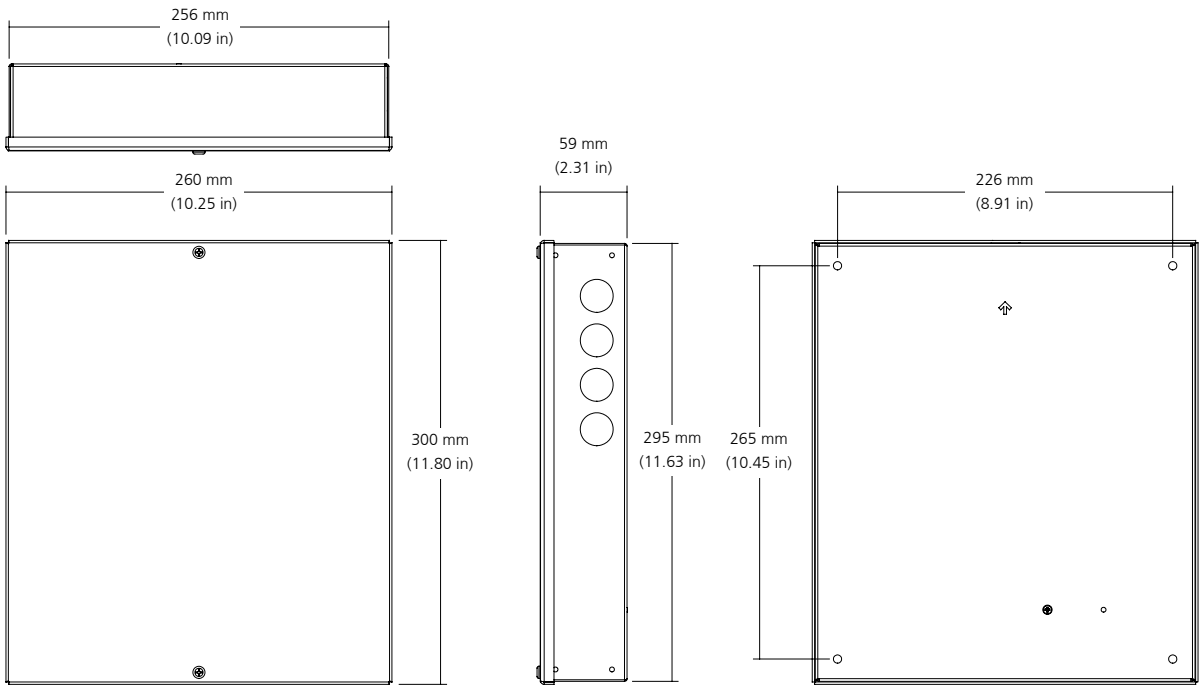
Product Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
D4 Driver 150 Wall	11.09	282	8.20	209	2.28	58
D4 Driver 350/700 Wall	15.26	388	12.76	324	3.08	78
D4 Driver 350/700 Rack	1.74	44	19.00	483	9.63	245

Product Weight

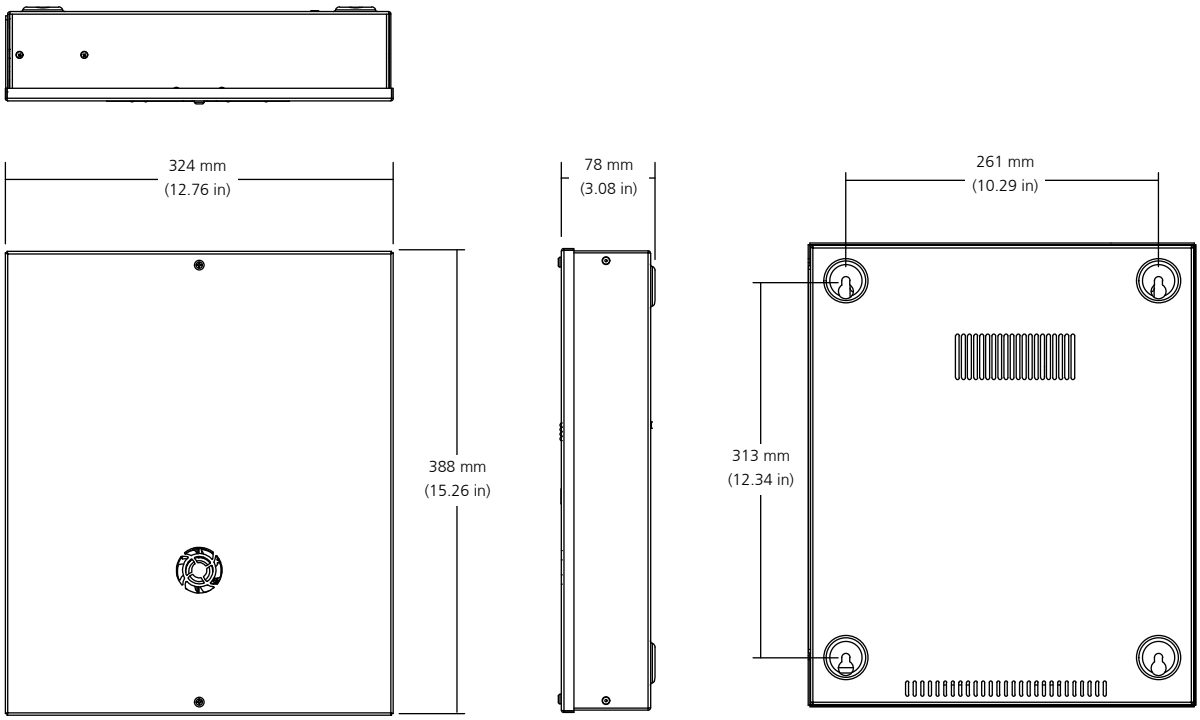
MODEL	WEIGHT		SHIPPING WEIGHT	
	lb	kg	lb	kg
D4 Driver 150 - Wall	4.2	1.9	5.2	2.3
D4 Driver 350 - Wall	9.4	4.3	10.6	4.8
D4 Driver 350 - Rack	12.0	5.5	14.3	6.5
D4 Driver 700 - Wall	11.1	5	12.3	5.6
D4 Driver 700 - Rack	14.8	6.7	17.1	7.8

D4 Driver 150 CV - Wall Mount

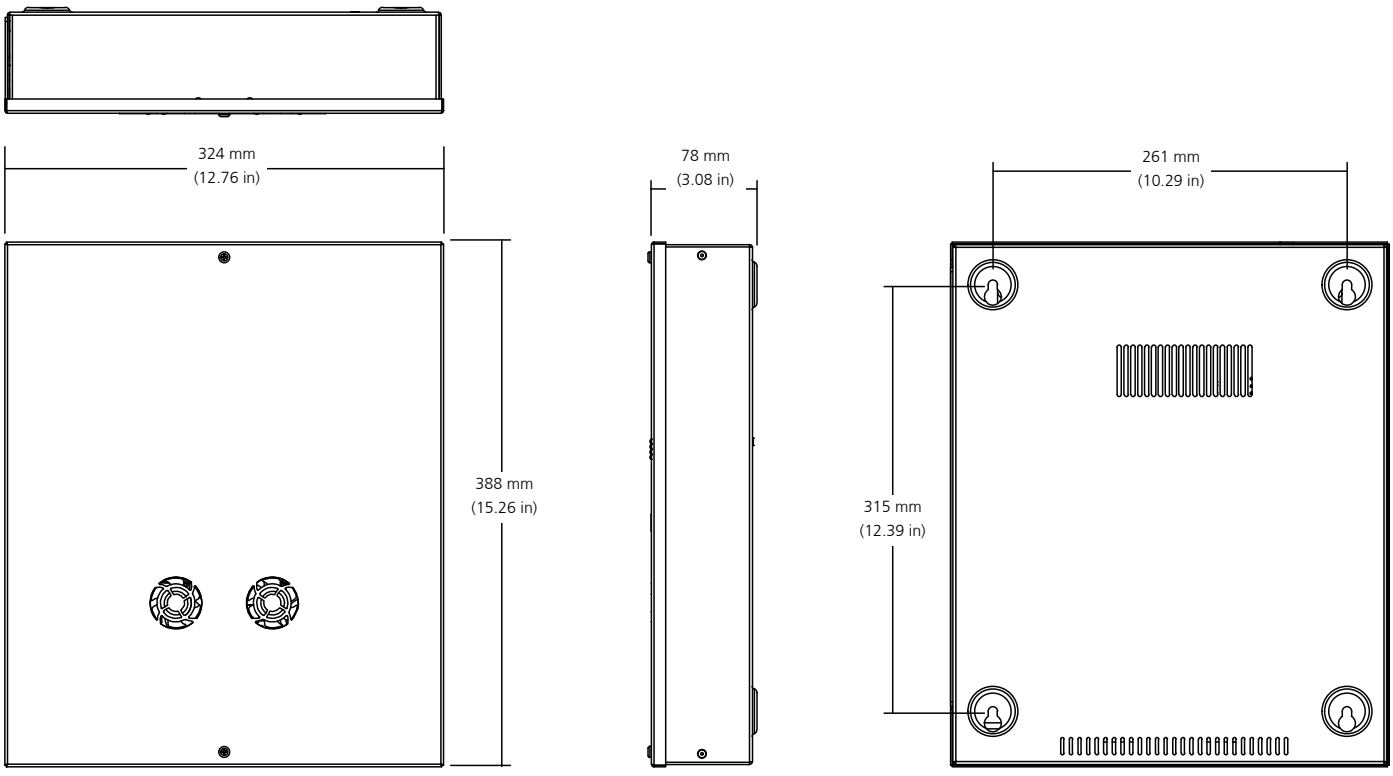


PHYSICAL

ArcSystem Pro D4 Driver 350 CV - Wall Mount

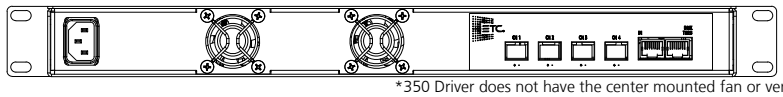


ArcSystem Pro D4 Driver 700 CV - Wall Mount

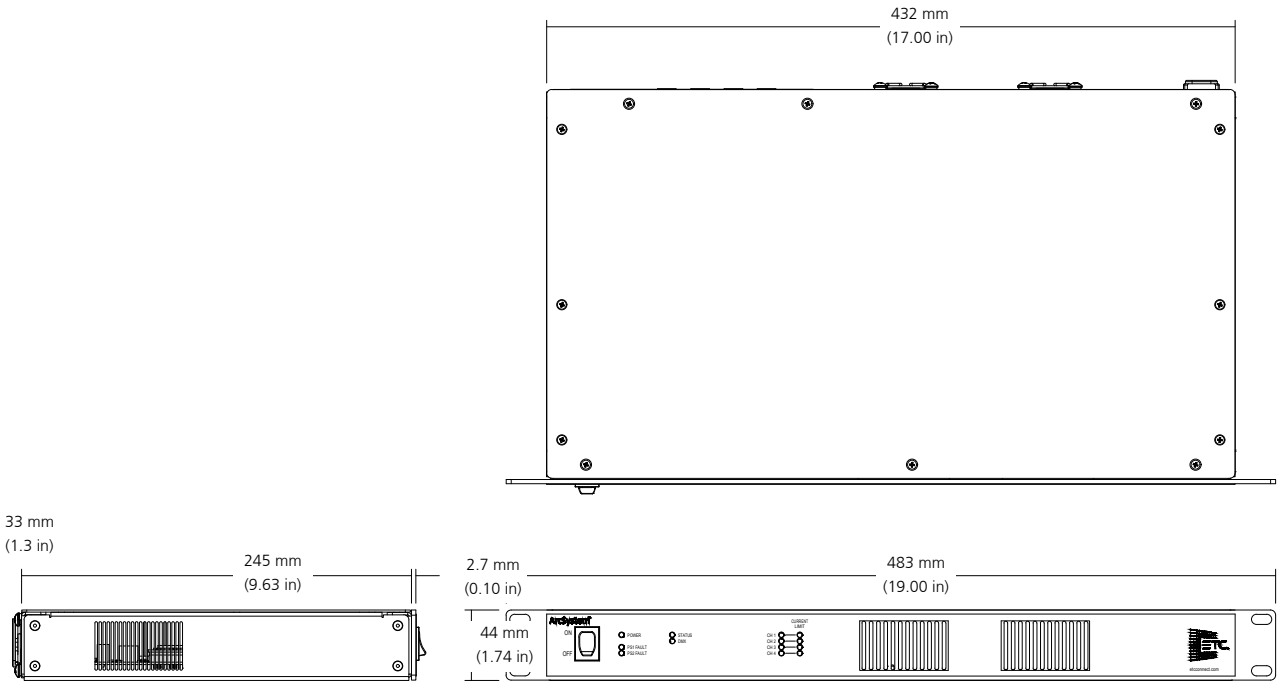


PHYSICAL

ArcSystem Pro D4 Driver 350/700 CV - standard Rack mount



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



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