

ECO COOLING UNIT D355 48V DC

V1.0

DATASHEET



	APPLICABLE MODEL(S)
Model:	D355 48V DC
Part Number:	CV00001-48DC

Document Control

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1. Systems and Components

System Item	Part Number	Model/Type	Additional Notes
Eco Cooling Unit Kit	CV00001-48DC	Decon	Bundle Kit
355mm Brushless Fan Unit			
Side Cage Air Filter			
Rear Cage Air Filter			
Fan Cage Unit			

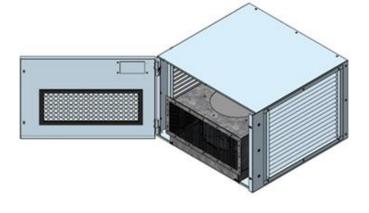
Replace/Repairable Components	Part Number	Model/Type	Additional Notes
355mm Brushless Fan Unit	CV0001-355-48	Decon	Repair/Replace
Side Cage Air Filter	CVPF5040-050		Replace (2x)
Rear Cage Air Filter	CVPF5040-100		Replace (1x)

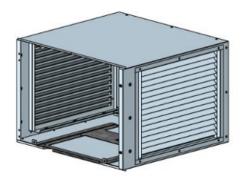
Recommended Products	Part Number	Model/Type	Additional Notes
DC Fan Controller	SCEC0001-DM	Decon	
Gravity Damper - Standalone	CVBD6030MF	Decon	
Gravity Damper – 4way Stacker Compatible	CVBD6629MF	Decon	
DC Motorized Damper	CVAD3060-24DC	Decon	
Internal Temperature & Humidity Sensor	ECTEMP002	Decon	
External Temperature Sensor	ECTEMP001	Decon	

1.1 General Arrangement









2. Technical Specifications

2.1 Hardware Data

Item	WxHxD	Kg	Material	Colour
Fan Enclosure Unit	670 x 455 x 647	27	1.6mm Zi anneal	Jotun RAL7035
355mm Brushless Fan Unit	360 x 168.5	13	Aluminum	-
Side Cage Air Filter	500 x 400 x 50		Pleated Panel	
Rear Cage Air Filter	500 x 400 x 100		Pleated Panel	

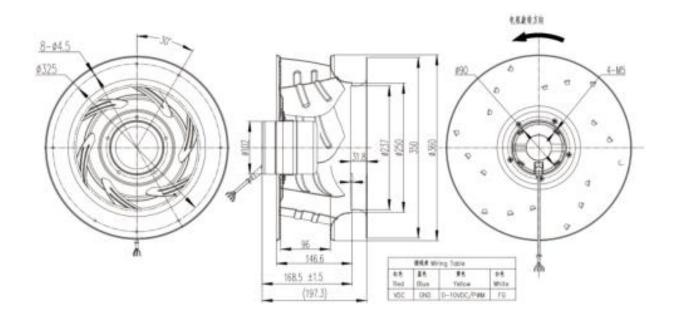
2.2 Technical Data

	Measure	Value	Additional Notes
Average input power	Watts	205 ± 16%	
Average input power	A DC	4.3 ± 16%	
Nominal DC input voltage	V DC	48	
Operating DC voltage range	V DC	36~58	
Maximum noise level	dBA	75	
Maximum operating temperature	°C	+60	
Minimum operating temperature	°C	-25	
Maximum RPM	RPM	1600 ± 10%	
Direction of rotation		Anti-clockwise	
Maximum airflow	m3/h	2350	
Maximum aimow	CFM	1383	
Insulation		Class F	
Speed control (PWM)	V DC	0-10	
Protection type		IP42	
Life expectance	Hrs	20,000 (L10)	At 40°C room, humidity 15% 65%RH

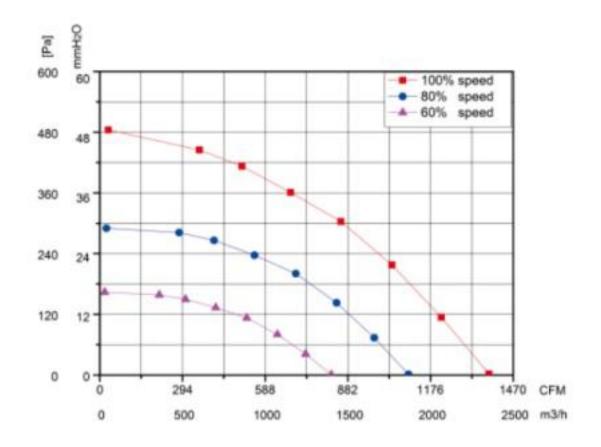
2.3 Electrical Protection

Soft-start protection	Under the working voltage, the motor will gradually accelerate after starting, until it reaches the maximum speed of the actual working conditions. Avoid starting the motor if any signed of damaged by impact.
Undervoltage and overvoltage protection	When the power supply voltage is lower than 36V \pm 1V and high than the limit voltage 61V \pm 1V, the motor will automatically cut off and self-protect.
Stall protection	In the normal running state of the motor, the rotating parts will stop running after being blocked by external resistance, and the motor will automatically power off to protect. After passing the software test, the motor will resume automatically, if the overload resistance continues to exist, the motor will repeat the above start-stop action.

2.4 General Fan Drawing



2.5 Charts: Airflow



2.6 General Electrical Wiring Diagram

Wiring Table					
RED BLUE YELLOW WHITE					
+VDC	GND	PWM 0-10VDC	TACHO		

3. Maintenance Specifications

3.1 General

During air filter replacement, the enclosure should be inspected for the following:

- Debris or obstructions that may hinder the performance of the fan.
- Power leads and sensors for rodent damage or other.
- Rust or damage due to water ingress.

3.2 Air Filter Replacement

Periodic replacement of air filters must be completed to ensure optimal performance and maximum airflow can be achieved. High humidity climate zones must have the air filters inspected for mold and water damaged filters more often.

Filter replacement periods will vary depending on climate zone, average temperature and region.

- Replace 2x side cage filters.
- Replace 1x rear cage filters.

3.3 Repair/Replacement Program

Repairable components can be sent and returned to Decon for refurbishment and held as on-hand stock.

Contact Decon for more information on how we can support your reduction of e-waste for a greener future.

End of Document

CERTIFICATIONS & ACCREDITATIONS

- Decon Corporation holds Federal Safety Commission (FSC) Approval
- Decon Corporation holds ISO 14001:2015 Environmental Management System
- Decon Corporation holds ISO 45001:2018 Safety Management System
- Decon Corporation holds ISO 9001:2015 Quality Management System
- Decon Corporation is a member of the Clean Energy Council
- Decon Technical Services has full accreditation and insured design engineers
- RG Ladd are holders of Type Tested Certificates as certified by NATA and ASTA approved laboratories to comply with AS 3439.1
- RG Ladd hold IP56 & IP34 Test Certificate Kiosk Enclosure
- Decon Industries holds Electrical Contractor Licenses in VIC, NSW, SA, WA, NT, TAS & QLD





