

YEC55 SERIES



DC-UPS

DIMENSIONS:



OPEN FRAME:
6.26 x 3.82 x 1.5"
(159 x 97 x 38mm)



55W



38.5W

EN55032 LEVEL B

BATTERY CUT OFF

DC ALARM OPTION

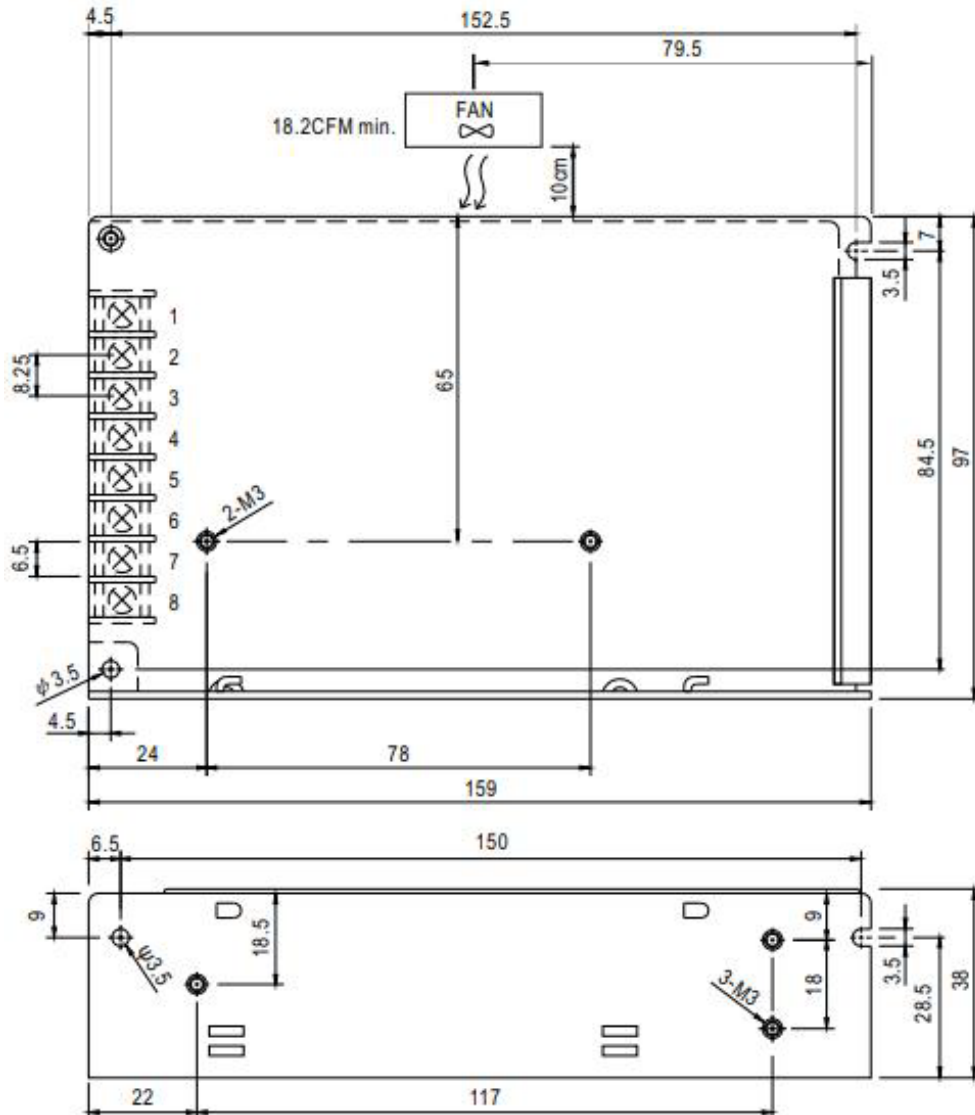
Part numbers

YEC	55	-	138
Series	Power (W)		CH1 Output voltage
			138 = 13.8VDC 276 = 27.6VDC

Key specifications

Input range	Safety certification	Optional Features	Efficiency	Environmental performance
90-264VAC	(Certification available soon) UL/IEC/EN 62368-1	AC fail alarm Battery low	71-74%	Operational: -10 to 60°C

Mechanical



Pin	Function	Pin	Function
1	ACLine	5	DCOut +V
2	ACNeutral	6	BAT +
3	GND	7	BAT -
4	DCOutCOM	8	NC

Weight	500g
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Unit must be mounted on 360 x 360 mm thick metal plate for EMC performance

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Models & Ratings

Model Number	Output voltage CH1 / CH2	Rated Current CH1 / CH2	Rated Power	Current Range	Vout Adjust
YEC55-138	13.8V/13.4V	3.25A/0.23A	51.38W	0-4A	12-14.5V
YEC55-276	27.6V/26.5V	1.8A/0.16A	53.92W	0-2A	24-29V

Input

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Input voltage	90		264	VAC	127-370VDC also accepted. See page 4 for derating curve
Input frequency	47		63	Hz	
Leakage current			<1	mA	240VAC
Input current (rms)		1.6/1		A	115VAC/230VAC
Inrush current		20/40		A	115/230VAC cold start

Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
CH1 Output voltage	13.8		27.6	VDC	See Models & Ratings table
Output voltage adjust					See Models & Ratings table
Set point accuracy		±1		%	
Line regulation		±0.5		%	Rated load
Load regulation		±0.5		%	
Noise and ripple		100		mVp-p	20MHz BW 0.1uF and 47uF cap 12" twisted pair
Hold up	16		80	ms	80ms at 230VAC, 16ms at 115VAC
Setup time	800		1600	mS	800mS at 230VAC 1600mS at 115VAC full load
Rise time		50		mS	At full load

Functions (optional)

Parameter	Notes/Conditions
AC fail	CN1 pin 2. Normal 0.8V Fault 5V
Battery low	82.5% ±2% CN1 pin 1. Normal 0.8V Fault 5V

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Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload	105		150	%	Hiccup mode, recovers automatically after a fault condition is removed. UPS mode protection by internal fuse
Over voltage	15.87		18.63	VDC	YEC55-138 auto recovery
	31.74		37.26	VDC	YEC55-276 auto recovery
Battery Cut off	9.5		11	VDC	YEC55-138
		20		VDC	YEC55-276

EMC: Emissions

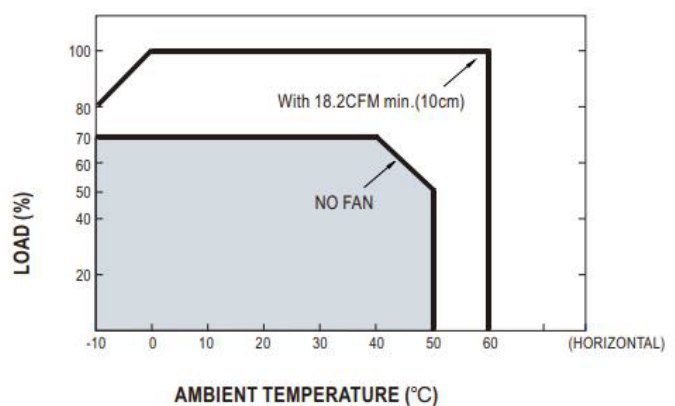
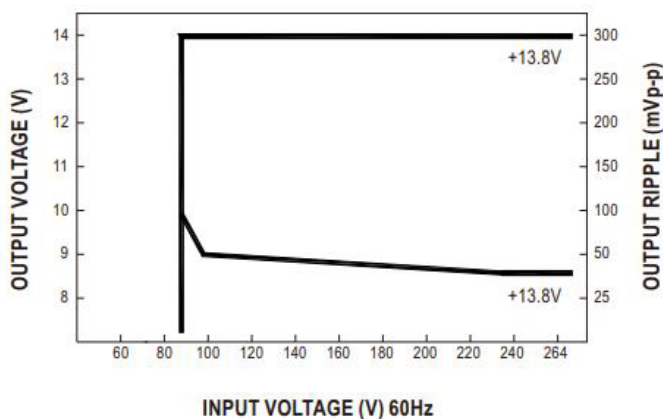
Standard	Notes/Conditions
EN55032	Conducted and radiated level B , harmonics EN6100-3-2 Class A and flicker
EN55035	ESD, EFT, Surge, RS, CS, dips and interruptions, PFMF

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN62368-1				Certification available soon
Isolation: Input to output	3000			VAC	
Isolation: Input to ground	2000			VAC	
Isolation: Output to ground	500			VAC	
Insulation resistance	100			MΩ	25°C ±5, RH <70% at 500VDC

Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-10		60	°C	See derating curve
Storage temperature	-20		85	°C	
Cooling					Free air / 18.2CFM
Temperature coefficient		±0.03		%/°C	0-50°C for CH1
Humidity	20		90	% RH	Non condensing. Storage 10-95%
Vibration	10		500	Hz	2G, 10min/1 cycle 60min, each along X, Y, Z axes
MTBF	2380.9			kHrs	As per Telcordia SR-332 (Bellcore)



19th April 2024