Product data sheet Characteristics

SY48K48H-PD

Symmetra PX All-In-One 48kW Scalable to 48kW, 400V



Overview

Presentation	Scalable power, runtime & distribution in a high-density, single-frame design. This high-efficiency 3-phase UPS scales as your data center grows up to 48kW/48kVA. Suitable for small & medium data center applications.
Lead time	Usually Ships within 2 Weeks

General

General		-
Provided equipment	Network management card Start-up service	
Product web sub-family	Symmetra PX 48kW	
Bypass wiring configuration	5 wire (3P + N + E)	:
Bypass voltage tolerance	+/- 10 % settable from +/- 4/6/8 and 10 %	
Max bypass input current	80 A	
Bypass current protection	80 A	
Performance multiplier	0.350208	
Number of tare power	490 W	
Number of power module free slots	0	
Number of power module filled slots	3	
Redundant	Yes	
Size UPS version	Internetworking Server Telecom	
UPS size	L	<u>.</u>
Value multiplier	0.81	
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Physical

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Number of rack unit	42U	- <u>y</u>
Colour	Black	<u>»</u> .
Depth	107 cm	iation — — — — — — — — — — — — — — — — — — —
Height	199.1 cm	
Mounting location	Front	<u> </u>
Mounting preference	No preference	

Net weight	796 kg
Mounting mode	Not rack-mountable
Two post mountable	0
USB compatible	No
Width	60 cm

Input

Network frequency	4070 Hz	
Number of input connectors	1 hard wire 5-wire (3P + N + E)	
Input voltage limits	340477 V	
Inputvolt_other	380 V 400 V 415 V	
Maximum input current	98 A	
Switching current capacity	100 A	
Max short time withstand current	30 kA	
Input harmonic distortion	Less than 5 % for full load	
Input protection type	GL fuse	
Input voltage	400 V 3 phases	
Load power factor	0.5 leading to 0.5 lagging	
Cos phi	0.99	

Output

Output		
Rated power in W	48000 W	
Maximum configurable power in W	48000 W	
Harmonic distortion	Less than 2 %	
Output frequency	50/60 Hz +/- 3 Hz user adjustable +/- 0.1 Hz sync to mains 50 Hz +/- 0.1 % for 50 Hz nominal unsynchronised 60 Hz +/- 0.1 % for 60 Hz nominal unsynchronised	
Outputvolt_other	380 V 400 V 415 V	
UPS type	Double conversion online	
Wave type	Sine wave	
Output voltage tolerance	+/- 1% static and +/- 5% at 100% load step	
Output harmonic distortion	< 2% for 0 to 100% linear load and < 6% for full non-linear load	
Output overload operation	10 minutes at 125% and 60 seconds at 150%	
Required output current protection	100 A	
Bypass type	Built-in static bypass	
Curve equation	Efficiency	
Curve fixed loss	0.0105	
Curve load maximum	100 %	
Curve load minimum	2 %	
Curve proportional loss	0.0113	
Curve square loss	0.0314	
Curve X-axis maximum	100 %	
Curve test cond ID	Curve fit to measured efficiency data. All measurements taken in normal operating mode, at typical environmental conditions, with nominal electrical input and balanced resistive load (PF = 1.0) output.	
Curve X-axis minimum	0 %	
Curve X-axis title	Load	
Curve X-axis units	Percentage	
Curve Y-axis maximum	100 %	
Curve Y-axis minimum	50 %	
Curve Y-axis title	Efficiency	

Curve Y-axis units	Percentage	
Efficiency	94 % (in battery operation)	
Graph display	1	
Output voltage	230 V 400 V 3 phases	
Maximum configurable power in VA	48000 VA	
Rated power in VA	48000 VA	

Conformance

Product certifications	EUROBAT
Standards	EN 50091-1
	EN/IEC 62040-1-1
	EN/IEC 62040-2
	EN/IEC 62040-3
	ISO 14001
	ISO 9001
	VFI-SS-111

Environmental

Ambient air temperature for operation	040 °C
Relative humidity	095 %
Operating altitude	03333 ft
Ambient air temperature for storage	-1540 °C
Storage Relative Humidity	095 %
Storage altitude	0.0015240.00 m
Acoustic level	61 dBA
Heat dissipation	7719 Btu/h
Show note OP temperature	No
NEMA degree of protection	NEMA 1

Batteries & Runtime

Battery type	VRLA	
Number of battery filled slots	4	
Number of battery free slots	0	
Battery recharge time	3 h	
Number of battery replacement quantity	4	
Additional information	Configurable for 380 : 400 or 415 V 3 Phase nominal output voltage	
Liquid value	0	
Battery voltage	+/- 192 V (split battery referenced to neutral)	
Discharge battery voltage	+/- 154 V	
Overcurrent protection	1008 A	
Maximum short-circuit current	4 kA	
Max current discharge	165 A	
Battery overload operation	10 minutes at 125% and 60 seconds at 150%	
Battery curve	Р	
Battery charger power	4593 W rated	
Battery design life	58 year(s)	
Battery power in VAH	13824 VAh runtime	
Battery option	SYCFXR48-9 1 44928 VAh SYCFXR48-9 2 76032 VAh SYCFXR48-9 3 107136 VAh SYCFXR48-9 4 138240 VAh	
Extended runtime	1	

Communications & Management

Free slots	2		
Preinstalled device	Network management card with CAN	Network management card with CAN	
Control panel	Multifunction LCD status and control console		
Alarm	Alarm when on battery : distinctive low battery alarm : configurable delays		
Emergency power off	Yes		

Packing Units

Package 1 Weight	858 kg	
Package 1 Height	214 cm	
Package 1 width	84.8 cm	
Package 1 Length	121 cm	

Offer Sustainability

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Optimized Energy Efficiency	Energy efficient product

Contractual warranty

Warranty	1 year on-site repair or replace with factory authorized Start-Up