AC Power Distribution Unit
YSU.00219, YSU.00223

Bel Power Solutions AC Power Distribution Unit (PDU) is used to distribute AC voltage in IT Racks.

This device is installed in an IT Rack.

The AC lines are distributed to the SPSPFE3 series Power Shelves, which provide DC power to the IT devices.

AC PDU is protected by 32A C curve UL1077 circuit breaker.

Key Features & Benefits

- Different AC input voltage connectors for 3-phase systems
- Single AC input and dual 3 AC outputs
- Circuit breaker protection for AC outputs
- Robust mechanical design
- Dimensions (W x H x D): 80 x 870 x 200 mm (3.15 x 34.25 x 7.87 in)

RoHS Compliant

1. ORDERING INFORMATION

MODEL	PART NUMBER	INPUT VOLTAGE	INPUT CURRENT	# of INPUTS	# of OUTPUTS	INPUT PLUG TYPE	MFN
BPS 51 A 277 V 3P AC PDU	YSU.00219	277 / 480 VAC	51 A	1	3 x 2	HBL560P7W	HUBBELL
BPS 51 A 240 V 3P AC PDU	YSU.00223	240 / 415 VAC	51 A	1	3 x 2	563P6W	HUBBELL

2. INPUT SPECIFICATIONS

The table below shows a summary of the PDU input electrical characteristics:

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
AC Input Voltage	YSU.00219 (3-phase WYE) YSU.00223 (3-phase WYE)		277 / 480 240 / 415		VAC
Frequency			50/60		Hz
Nominal Continuous Input Current	YSU.00219 per phase YSU.00223 per phase			51 51	Arms

2.1 INPUT CONNECTIONS

The following pictures show the different connectors used in the different models:

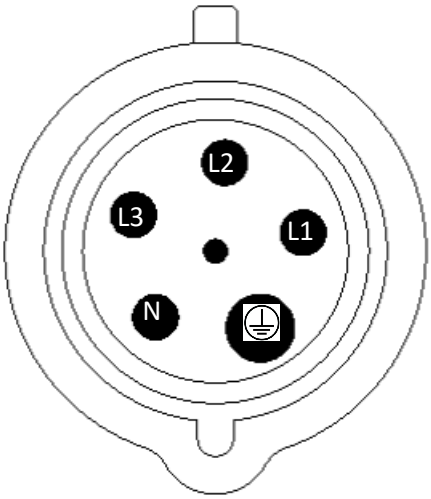

Figure 1. HBL560P7W

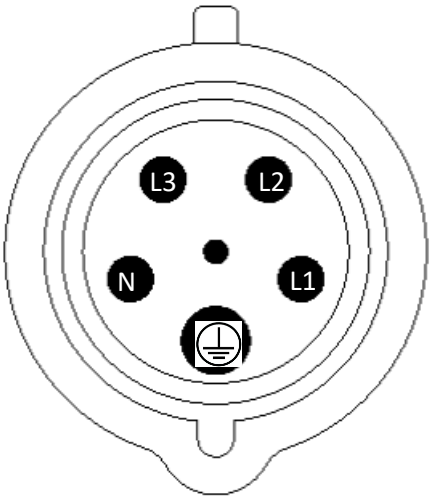

Figure 2. 563P6W

LINE	DESCRIPTION
L1	X (black)
L2	Y (red)
L3	Z (Blue)
N	W (white)
⏚	G (green)

2.2 INPUT CIRCUIT BREAKERS

DESCRIPTION	REFERENCE DESIGNATOR	MPN	MFN	# of POLES
32 A C curve UL1077	OUTPUT A, OUTPUT B	2CDS254001R0324	ABB	4

3. OUTPUT SPECIFICATIONS

The output connectors distribute the AC voltage to the power shelves on the IT Rack.

3.1 OUTPUT CONNECTIONS

The following picture show the output connector and the pin assignment.

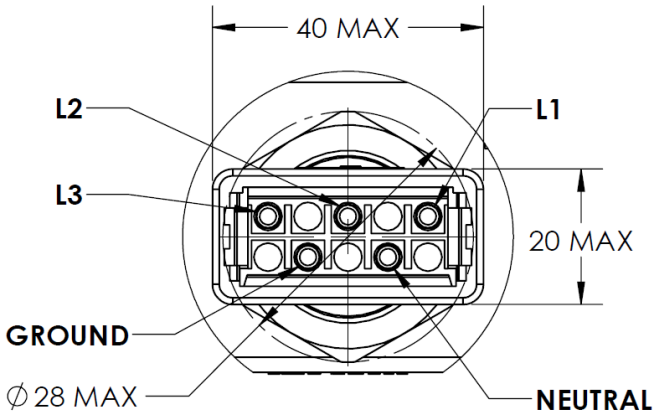

Figure 3. Female Positronic SP5YYE1F0091/AA

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
AC Output Voltage	OUTPUT A, OUTPUT B		277 / 480		VAC
Frequency			50/60		Hz
Nominal Continuous Input Current	sum per phase			25.5	Arms

4. SAFETY WARNING

The user assumes all responsibility and liability for proper and safe handling of the goods. Further, the user indemnifies Bel Power Solutions Inc. from all claims arising from the handling or use of the goods. Persons handling the product(s) must have electronics training and observe good engineering practice standards.

CAUTION: Multiple power source. Disconnect all power cords before servicing.

5. SAFETY, REGULATORY AND EMC SPECIFICATIONS

The table below summarizes the safety approval certificates.

PARAMETER	DESCRIPTION / CONDITION	CRITERION
Agency Approvals	Approved to the latest revisions/amendments of the following standards: UL 62368-1 2nd ed., CAN/CSA-C22.2 No. 62368-1:14	Approved
Insulation	Primary (L/N) to case (PE)	Basic
Creepage / Clearance (*d*c)	Primary (L/N) to case (PE)	
Electrical Strength Test	Input to case	Min. 2121 VDC

6. ENVIRONMENTAL SPECIFICATIONS

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
Operating Ambient Temperature		0		+32	°C
Storage Temperature		-40		+70	°C
Relative Humidity	Operating: @ at 32°C, non-condensing Non-Operating: non-condensing	10 5		90 95	%
Altitude	Operating Non-Operating			TBD TBD	m
Shock	Operating: 11 ms half-sine shocks in Z axis 10+ve, 10-ve Non-Operating: 11 ms half-sine shocks in Z axis 10+ve, 10-ve		5 30		g
Vibration	Operating: 0.2 g_{rms} random Non-Operating: 1 g_{rms} random	5 2		500 200	Hz

7. MECHANICAL SPECIFICATIONS

PARAMETER	CONDITIONS / DESCRIPTION
Dimensions (W x H x D)	80 x 870 x 200 mm (3.15 x 34.25 x 7.87 in)
Weight	20 kg

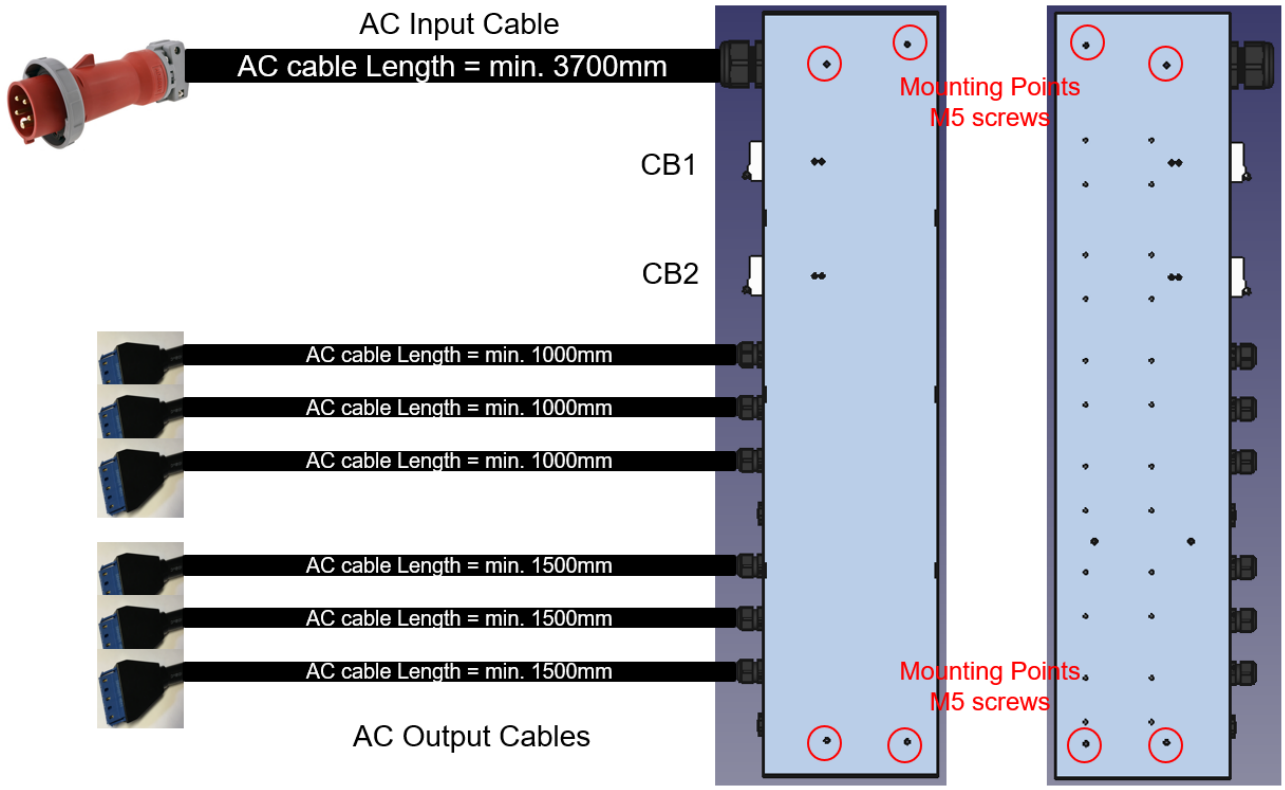

Figure 4. Dimension Drawing AC PDU (Side View) with 1 Input / 3 Output Connectors (x2)
(Connectors may vary)

8. REVISION HISTORY

REV	DESCRIPTION	PRODUCT VERSION	DATE	AUTHOR
001	PRELIMINARY: Initial Draft	V001	22-Apr-2019	GS
002	AC Cable of CB2 change from 1m to 1.5m	V002	14-Jul-2019	GS
003	Update Image of PDU and Agency Approvals	V003	24-Sep-2019	GS
A	Release to A revision	V003	29-Sep-2020	VS

For more information on these products consult: tech.support@psbel.com

NUCLEAR AND MEDICAL APPLICATIONS - Products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.
TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

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