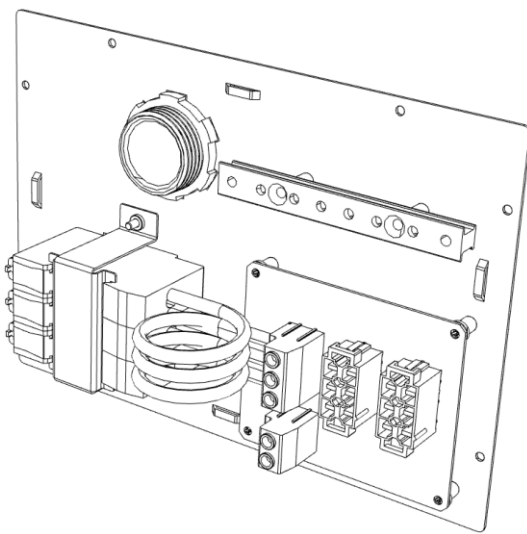


YSU.00213

AC Power Distribution Unit for SPSTET4-02

Bel Power Solutions AC Power Distribution Unit (PDU) is used for 54.5 VDC output power shelf.

This device has been designed to supply SPSTET4-02 shelf (54.5 VDC power shelf). AC PDU converts 3phase input to 3x single phase output. The main power is fed from a 3phase delta (3W+PE) or 3phase wye (3W+N+PE) configuration. Single phase AC output is configured with respect to AC input configuration, Delta to Delta or Wye to Wye. AC PDU is protected by 50A C curve UL1077 circuit breaker.



Key Features & Benefits

- Input voltage range from 200 to 415 VAC
- Can accommodate 3-phase Delta or Wye configuration
- AC output is manually selected based from input configuration

1. ORDERING INFORMATION

MODEL	DESCRIPTION
YSU.00213	50 A C Curve UL1077 circuit breaker Output connector for Delta or Wye configuration The PDU does not include input and output mating connector/lugs/cables

2. TECHNICAL DATA

PARAMETER	DESCRIPTION / CONDITION
Input Voltage	3Phase (Delta or Wye) 200-415 VAC Line to Line input.
Output Voltage	3pcs single phase from Delta or Wye input configuration
Input Max Current	49 A (sum per phase)
Circuit Breaker	50 A C curve, UL 1077
Output Connection	Molex: 43915-1206

3. 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.

4. REFERENCE DOCUMENTS

DOCUMENT NUMBER	DESCRIPTION
BCM.00477	YSU.00213 Installation Instruction
BCD.00906	SPSTET4-02 Datasheet
BCM.00473	SPSTET4-02 Installation Instruction

5. OVERVIEW

This device has been designed to supply SPSTET4-02 shelf (54.5 VDC power shelf). The main power is fed from a 3phase delta or 3phase wye configuration. Single phase AC outputs are configured with respect to AC input configuration, Delta to Delta or Wye to Wye. AC PDU is protected by 50 A C curve UL1077 circuit breaker.

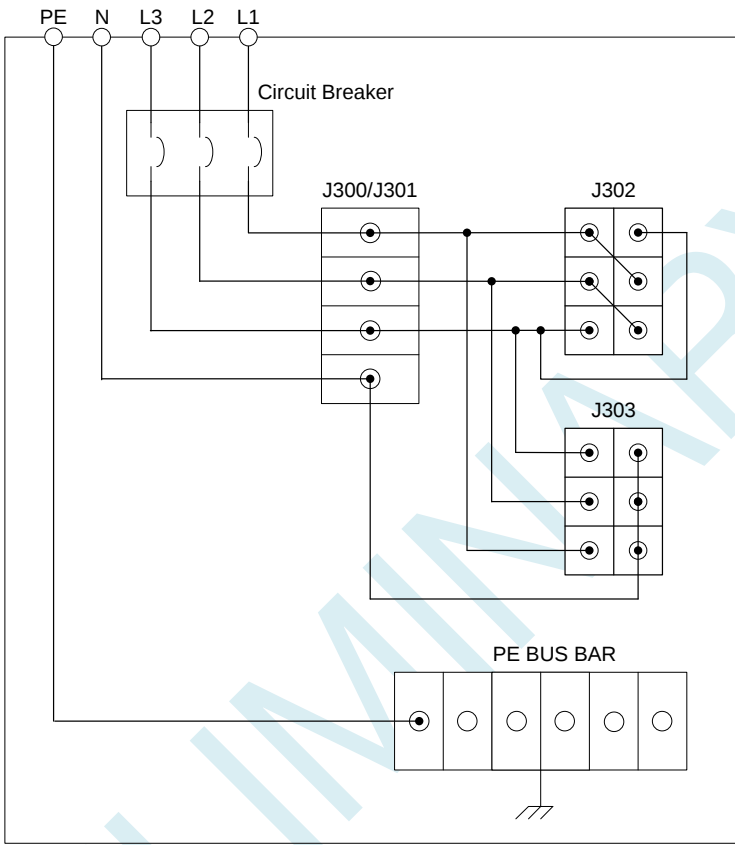


Figure 1: Electrical Schematic

6. INPUT SPECIFICATIONS

The PDU can handle 28 A (sum per phase) of output current and a maximum of 50 A for each input circuit.

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
AC Nominal Input Voltage	3phase Delta Configuration (3W+PE)		208		VAC
AC Input Voltage Ranges		200		240	VAC
Max Input Current	Sum per phase			49	Arms
Input Frequency		47	50 / 60	63	Hz

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
AC Nominal Input Voltage	3phase Wye Configuration (3W+N+PE)		400		VAC
AC Input Voltage Ranges		350		415	VAC
Max Input Current	Sum per phase			28	Arms
Input Frequency		47	50 / 60	63	Hz

6.1 INPUT CIRCUIT BREAKER

DESCRIPTION	REFERENCE DESIGNATOR	MPN	MFN	RECOMMENDED CABLING
50 A C curve UL1077	Circuit Breaker	2CDS253001R0504	ABB	8 AWG / 8 mm ² UL Type-W or equivalent

6.2 PROTECTIVE EARTH CONNECTION

DESCRIPTION	REFERENCE DESIGNATOR	MPN	MFN	RECOMMENDED CABLING
6 port ground bus bar	PE 	UGB2/0-414-6	PANDUIT	8 AWG / 8 mm ² UL Type-W or equivalent

7. OUTPUT SPECIFICATIONS

The PDU can handle maximum of 28 A (sum per phase) for each main output circuit.
The PDU provides 2 terminal connectors. Each of the connectors correspond to either Delta or Wye input configuration.

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
Nominal AC Input Voltage	DELTA Configuration		208		VAC
Output Voltage Range	Use J302		208		VAC
Output Current	sum per phase			28	Arms

PARAMETER	CONDITIONS / DESCRIPTION	MIN	NOM	MAX	UNITS
Nominal AC Input Voltage	WYE Configuration		400		VAC
Output Voltage Range	Use J303		230		VAC
Output Current	sum per phase			28	Arms

7.1 OUTPUT CONNECTIONS

DESCRIPTION	REFERENCE DESIGNATOR	MPN	MATING PART MPN	RECOMMENDED CABLING
DELTA Config Output Connector	J302	Molex 43915-1206	Molex 43914-1101	8 AWG / 8 mm ² UL Type-W or equivalent
WYE Config Output Connector	J303	Molex 43915-1206	Molex 43914-1101	8 AWG / 8 mm ² UL Type-W or equivalent

8. SAFETY AND REGULATORY SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	CRITERION
Agency Approvals Pending	Approved to the latest revisions/amendments of the following standards: UL 60950-1 Second Edition CAN/CSA-C22.2 No. 60950-1-07 Second Edition IEC 60950-1:2005 EN 60950-1:2006	Approved by independent body (see CE Declaration)
Insulation	Primary (L/N) to case (PE)	Basic
Creepage / Clearance (α)	Primary (L/N) to case (PE)	
Electrical Strength Test	Input to case	Min. 2121 VDC

9. 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

10. MECHANICAL SPECIFICATIONS

PARAMETER	CONDITIONS / DESCRIPTION
Dimensions (W x H x D)	282 x 198 x 120 mm
Weight	1.6kg

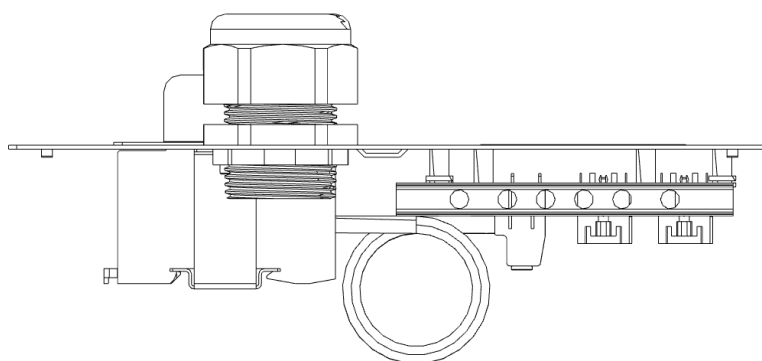


Figure 2. Drawing AC PDU (Top View)

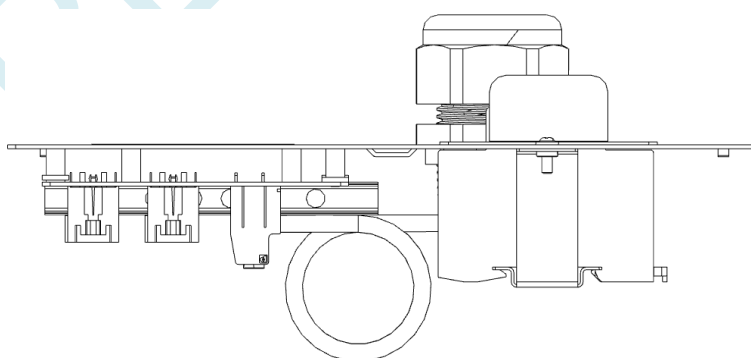


Figure 3. Drawing AC PDU (Bottom View)

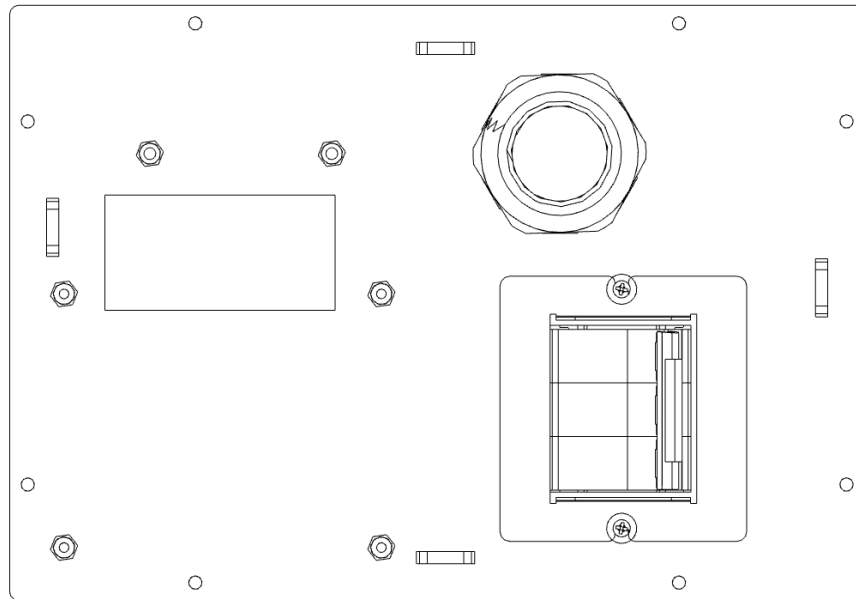


Figure 4. Drawing AC PDU (Front View)

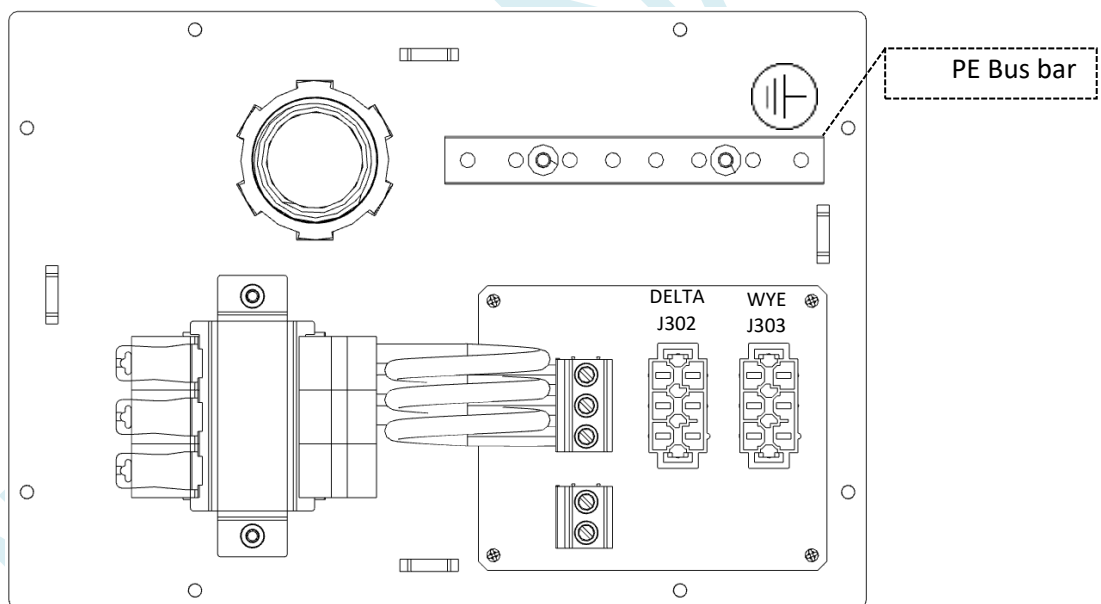


Figure 5. Drawing AC PDU (Back View)

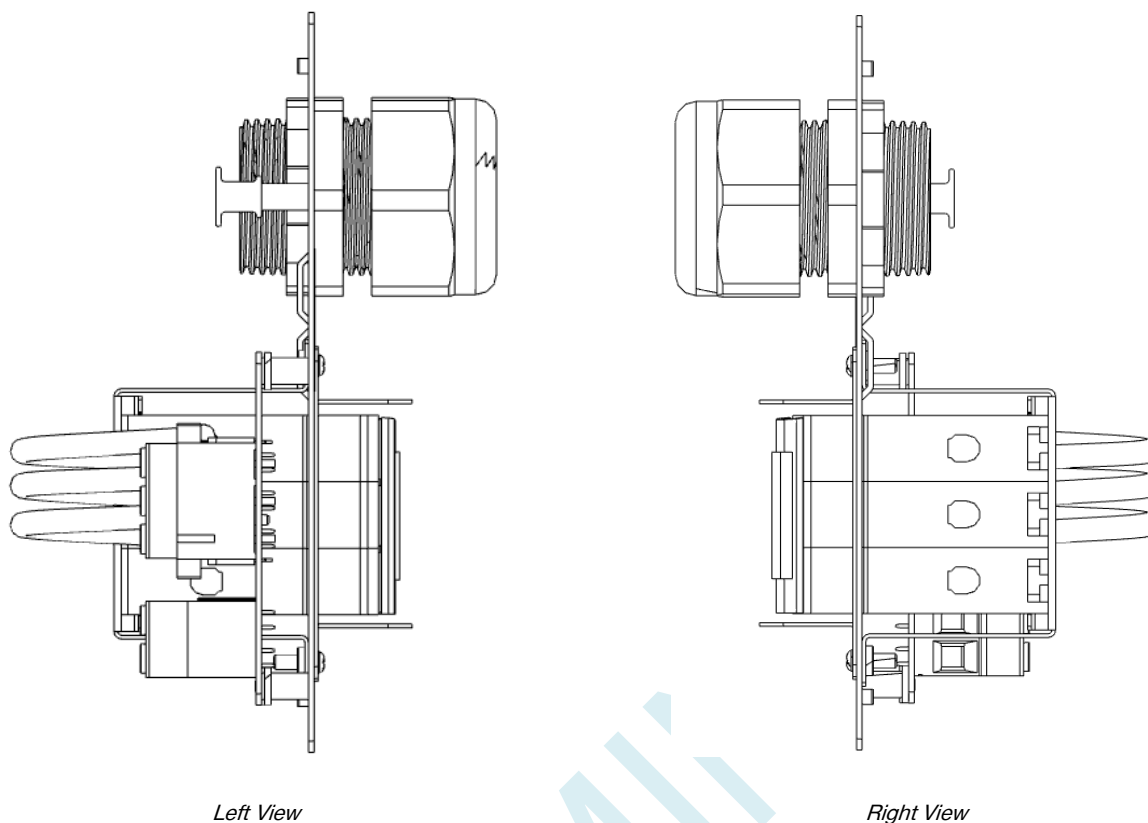


Figure 6. Drawing AC PDU (Side View)

11. REVISION HISTORY

REV	DESCRIPTION	PRODUCT VERSION	DATE	AUTHOR
001	PRELIMINARY: Initial Draft	V001	21-09-2017	GS

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.