

# PDS453

**4 x 50A RCD PROTECTED  
POWER DISTRIBUTION**



## DESCRIPTION

The Jands PDS453 power distribution system is designed for mobile applications where three phase power distribution is required from a supply using "Powerlock" touring connectors.

The unit features four (4) 50A 3 phase socket outlets and three (3) single phase 10A outlets, each with discrete Residual Current Device (RCD) and overcurrent protection.

Supply to the unit is via a set of 400A "Powerlock" inlet connectors, with a busbar connected set of 400A "Powerlock" outlets for connection of a second PDS453.

The PDS453 fits into any standard 19 inch equipment rack, including the Jands "Roobar" system.

The PDS453 facilitates compliance with the mandatory RCD requirement of AS/NZS4249 even when connected to supplies fed from non-RCD protected switchboards or generator sets.

## FEATURES

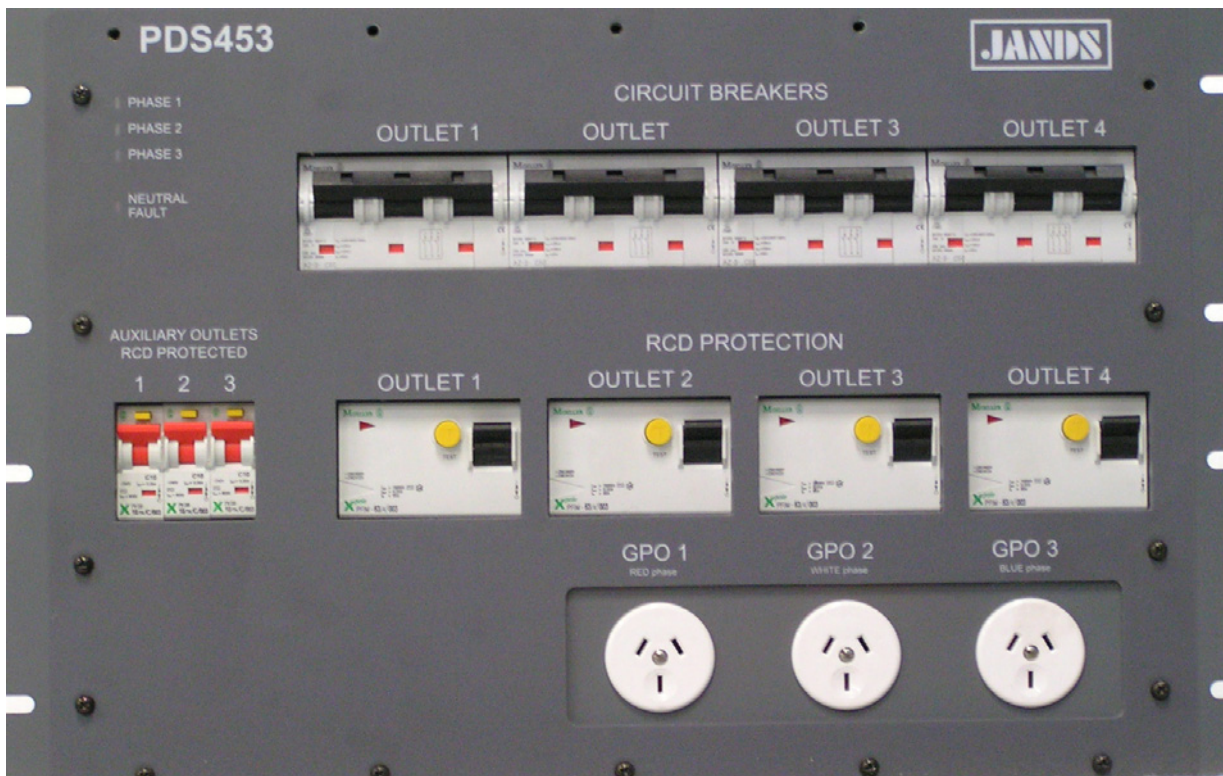
- Four (4) 50A outlets
- Three (3) 10A outlets
- 400A Powerlock NRG inlets
- 400A Powerlock NRG feed-thru outlets for 2nd unit
- Circuit breaker protection per outlet
- RCD protection per outlet
- Phase Power indicators - 3 Blue LEDs
- Neutral/Earth Fault indicator - Red LED
- Powder coated steel & aluminium construction

## OVERALL SPECIFICATIONS

Supply type	:	3 phases +N +E
Supply voltage	:	230/400VAC 50Hz
Supply input	:	
Rating	:	400A/ phase
Connectors	:	5 x 400A Powerlock NRG
Supply Feed-thru	:	
Rating	:	400A/ phase
Connectors	:	5 x 400A Powerlock NRG
Output Circuits	:	4 x 50A 3 phase + N
	:	3 x 10A single phase
Output connectors	:	4 x 50A 5 pin
	:	3 x 10A 3 pin
Output protection	:	
per 3 phase outlet	:	50A MCB + 30mA RCD
per 1 phase outlet	:	10A/30mA RCCB
Diversity Factor	:	0.77
Temperature range	:	0 °C min to 40 °C max
IP Rating	:	IP2X
I <sub>CP</sub>	:	35kA
I <sub>CC</sub> (3P/1P)	:	25kA/6kA
Dimensions (mm)	:	482W x 400D x 309H (7RU)
Net/shipping weight	:	22 /30kg

## ORDERING INFORMATION

MODEL/PART	PART NUMBER
PDS453 Power Distribution System	JND-PDS453
Roobar 7RU stackable equipment rollcage	JND-ROOBAR7RU



Jands Pty Ltd 40 Kent Road Mascot NSW 2020 Australia

Specifications subject to change without notice. Manufactured by Jands Pty Ltd ABN 45 001 187 837.  
Note: While all due care and attention has been taken in the preparation of this document, Jands Pty Ltd shall not be liable for any inaccuracies or omissions which may occur therein

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TSS JND-PDS453-0607-02

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### ARCHITECT & ENGINEER'S SPECIFICATION

#### Mechanical

The Power Distribution Unit shall be designed to rack mount in a standard 19 inch equipment rack. The Power Distribution Unit shall be 482mm wide x 400mm deep x 309mm high (7RU).

The Power Distribution Unit shall be constructed of 1.2 mm steel. The power inlet/feed-thru panel shall be constructed of 3mm aluminium. All metal surfaces shall be properly treated and finished in durable powdercoat paint.

All operator controls shall be provided on the front panel of the unit. The control surface shall be scratch-resistant Lexan with legends silkscreen printed from behind.

#### Electrical

The Power Distribution Unit shall operate from a three-phase, neutral and earth supply of 230/400 volts (nominal) phase-to-neutral/phase-to-phase, with a supply frequency of 50Hz.

Connection of the Power Distribution Unit to the 3 phase supply shall be by means of a set of rear mounted Powerlock NRG 400A plugs. A set of rear mounted Powerlock NRG 400A sockets shall be connected to the Powerlock NRG plugs via internal busbars to facilitate the connection of a second PDS453.

The Power Distribution Unit shall be rated for connection to a supply with a prospective fault current ( $I_{CP}$ ) of  $\leq 35kA$  and shall limit output conditional fault current ( $I_{CC}$ ) to 25kA for 50A 3 phase outlets and 6kA for 10A single phase outlets.

The Power Distribution Unit shall draw 210 amps per phase when all output channels are fully loaded and shall be designed for continuous operation with a diversity of 0.77 (162A/phase).

The front panel shall indicate with three blue LEDs the presence of phase voltages at the inputs to the unit.

A red Neutral/Earth fault LED shall indicate when a neutral to earth voltage in excess of approximately 20 volts is present.

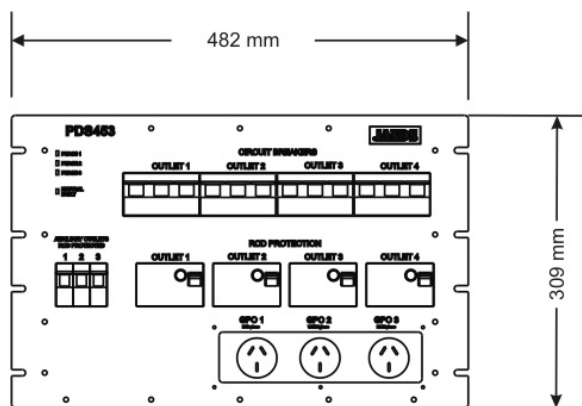
The Power Distribution Unit shall have four (4) 50A 5 pin 3 phase outlets and three (3) 10A 3 pin single phase outlets.

3 phase outlets shall be individually protected by a 3 pole 50A/25kA overcurrent circuit breaker and a 30mA Residual Current Device (RCD).

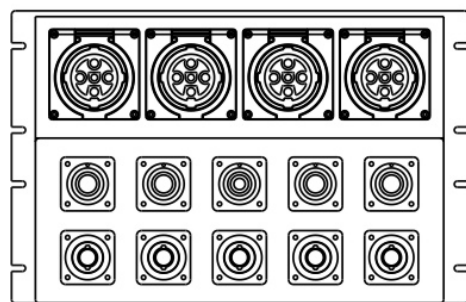
Single phase outlets shall be individually protected by a 10A/30mA/10kA combination overcurrent/RCD device.

The Power Distribution Unit shall be designed and tested to comply with AS3439.1:2002

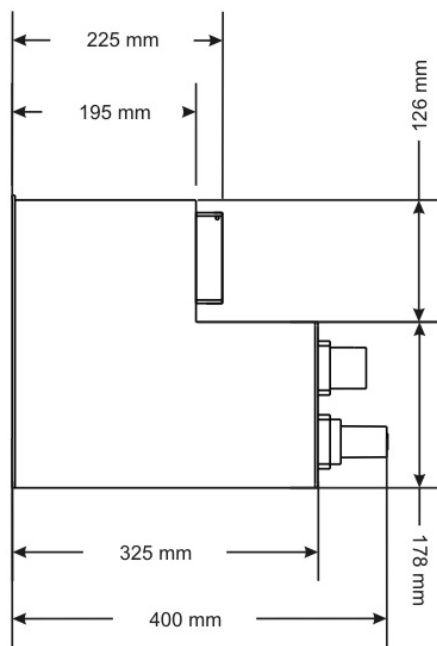
The Power Distribution Unit shall be the JANDS PDS453 power distribution system.



FRONT VIEW



REAR VIEW



SIDE VIEW

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