



## **Power Distribution Panel KT-PDP-A100**

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## FEATURE SUMMARY

The Kerem Technology Power Distribution Panel KT-PDP-A100 provides protected power distribution at up to 125A total per Rack Feed side (150A over reduced Temperature range – see specifications) with basic supervisory functions. Functionality is summarised below.

- Flexible mounting options allowing wall-mounting or installation in 19” and 21” racks with mounting rails in front, middle or rear-mount positions
- Distribution of power from the site power system via two independent Rack Feed supplies to circuit-breaker protected subrack load feeds
- Connectorised Rack Feed supply inputs for ease of installation
- High-power subrack load capability (6 KW total load capacity per Rack Feed, 7.2KW if used at reduced max temperatures -airconditioned environments) - each Rack Feed side has 8 Circuit Breaker protected outputs – 7 rated at 30A max and 1 rated at 50A max for each Rack Feed (40A/65A in airconditioned environments (max +35 °C).
- Plug-in load circuit breakers, swappable without de-powering the PDP
- CBs available in single-pole 0.1A to 65A for load output protection using ‘Single’ Circuit Breakers.
- Circuit breakers have a rocker style actuator that is flush when turned on to avoid accidental turn-off
- Circuit breaker rocker position visually indicates operational status – mid-position indicates tripped, fully out indicates ‘OFF’
- Lever operated Cage Clamp terminals on Subrack feed connections for cables from 0.5mm<sup>2</sup> to 6 mm<sup>2</sup> (one per RF for up to 16 mm<sup>2</sup>).
- Overload protected, redundant auxiliary alarm power supply up to 200mA for external equipment
- Supervision of CB trip, Rack Feed input under-voltage and auxiliary power supply fail with LED alarm display and output via NO & NC relay contacts to earth, extended to IDT field
- Individual circuit breaker trip alarm via NO or NC auxiliary contacts to earth, extended to IDT field.
- Single ‘common’ Alarm output (STN\_U) for any CB ‘Trip’ and/or Rack Feed voltage alarm condition
- Visual indication of Urgent alarm and Rack Feed ‘power supply normal’ status via large red and green LEDs on the front panel
- Visual indication of individual Rack Feed supply under-voltage via red LEDs on the Alarm Board
- Subrack load cable and alarm cable entry from either side, and a clear and uncluttered top panel with tie points for cable management
- Field-replaceable, hot-swappable alarm & display boards
- Front cover supplied with plastic pockets for circuit breaker labels

# SPECIFICATIONS

	Specification	Notes
Nominal Supply Voltage	48Vdc positive earth	
Number of Supply Channel Sides	2	Rack Feed 1 (RF1) Rack Feed 2 (RF2)
Maximum Current per Supply Channel Side	125A maximum continuous. (higher rating possible for reduced temperature range)	125A @ max. Ambient Temp. of +60°C 150A @ max. Amb. Temp. of +35 °C (Airconditioned environment)
Input Power Connections	Anderson SB175 connectors on 25mm <sup>2</sup> X-HF-110 insulated cable tails	
Input Voltage Monitoring	Detection of under-voltage generates alarm condition. Front panel green 'NML' LED indicates normal supply voltage.	Nominal threshold 38V Guaranteed alarm on at 34V Guaranteed alarm clear at 42V (Monitoring can be disabled if required.)
Load Feeds & Current Ratings	8 load feeds each for RF1 & RF2	Seven load feeds up to 22A or 30A (odd or even no.) max and one load feed up to 50A, for a total of up to 125A per Rack Feed (40A/65A in airconditioned environment - +35 °C max. for Rack Feed max of 150A).
Load Connections	Lever operated Cage Clamp Terminals for cables from 0.5mm <sup>2</sup> to 16mm <sup>2</sup>	
Load Circuit Breaker Type	AIRPAX Series LMLBXX1 plug-in magnetic circuit breakers with rocker actuator and SPDT mid-trip contacts	.
Load Circuit Breaker Ratings	0.1A ~ 22A for odd no. CB position 0.1A ~ 30A for even no. CB positions. 0.1A ~ 50A for one position per Rack Feed	Higher Current rating possible for reduced temperature range (40A/65A at +35 °C max)
Circuit Breaker Trip Indication	Visual via CB rocker actuator & LED indicator. Electrical via SPDT contact on CB. Earth output via PDP-A100 IDT field.	For all CBs, NO & NC sides are both output via IDT field – individual output for each CB, as well as one 'Common' alarm output for all alarms (Station alarm)
Alarm Visual Indication	Large red LED on display board is lit for CB trip, input under-voltage detected, or alarm supply fail.	
Station Alarm Output	Earth extended via NO & NC outputs on IDT field for any CB trip, input under-voltage detected, and/or alarm supply fail.	Activates in conjunction with the 'U' LED
Auxiliary (Alarm) Power Supply	-48V at 0.2A max. available via IDT field S- & S+ terminals. Sourced from both input supplies and protected by 'Electronic Circuit Breaker' circuit.	Slide switch provided to turn off auxiliary supply if required. Pushbutton provided to reset a 'tripped' 'Electronic Circuit Breaker' circuit.
Auxiliary Power Supply Fail Alarm	Earth extended via NO & NC outputs on IDT field for failure of auxiliary power supply.	Failure of auxiliary supply may be due to overload trip of the protective circuit device or loss of power to the PDP.
Front Panel LEDs	'U' red LED Urgent alarm indicator for supply under-voltage or CB trip. 'NML' green LED supply voltage normal indicator.	
Alarm Board LED indicators	RF1 under-voltage indicator RF2 under-voltage indicator	Small red LEDs operate if monitoring is enabled
Operating Temperature Range	-10 ~ +60°C	-10 ~ +35°C for higher current rating (air-conditioned environment)
Body Dimensions	Height 135mm Width 435mm (body only) Depth 220mm	
Mounting Arrangements	21" : 515mm mounting centres 19" : 465mm mounting centres Four (4) depth positions on side panels for mounting brackets	
Weight	4.3 Kg	Without Circuit Breakers fitted

## ENQUIRIES

For further information regarding technical aspects, order enquires, or to place an order, please contact Kerem Technology:

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