Power Distribution Panel
KT-PDP-B400

FEATURE SUMMARY

The Kerem Technology Power Distribution Panel KT-PDP-B400 provides protected power distribution at up to 300A total per Rack Feed side (400A over reduced Temperature range – see specifications) with basic supervisory functions. Functionality is summarised below.

- Flexible mounting options for installation in 19" and 21" racks with mounting rails in front, mid-depth 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

- Direct connection Rack Feed supply inputs, using Crimp Lug terminated Bus cable, directly bolted to the PDP connection terminals

- Tail Cable option for pluggable connection to rack Feed supplies is available

- High-power subrack load capability - each Rack Feed side has 8 outputs - each rated at 75A max (100A max over reduced temperature range).

- Up to two 'Dual' Circuit Breakers per Rack Feed side, for up to 130A, each occupying two of the 8 high power subrack feed outputs, with a jumper link to combine the two output Cage Clamps

- Plug-in load circuit breakers, swappable without de-powering the PDP

- CBs available in single-pole 0.1A to 100A for each load positions using 'Single' Circuit Breaker, or 100A to 130A for 'Dual' Circuit Breakers

- Circuit breakers have 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 $1mm^2$ to $16mm^2$. Jumper Link available to combine a Cage Clamp pair when equipping with a 'Dual' Circuit Breaker

- Connection of larger cable cross section is possible by using Crimp Pin termination for the cable

- 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

- 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 top and rear panel with tie points for cable management

- Field-replaceable, hot-swappable alarm & display boards and auxiliary power supply board

- Front cover supplied with plastic pockets for circuit breaker labels

- Flexible mounting options allowing wall-mounting or installation in 19" and 21" racks with mounting rails in front, middle or rear-mount positions

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	300A maximum continuous. (400A possible for reduced temperature range)	300A @ max. Ambient Temp. of +60ºC 400A @ max. Amb. Temp. of +30 ºC (Airconditioned environment)
Input Power Connections	Direct connection by crimp lug terminated bus cables to the PDP RF1 and RF2 busbars	
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	Each load feed up to 75A max. for a total of up to 300A per Rack Feed. (100A max per load for max Rack Feed of 400A over reduced Temperature range). Two Load Feed pairs per Rack Feed may be equipped with 'Dual' Circuit breakers for 130A max
Load Connections	Lever operated Cage Clamp Terminals for cables from 1mm^2 to 16mm^2	Jumper Links to combine a Terminal pair for use with the Dual Circuit Breaker
Load Circuit Breaker Type	AIRPAX Series LMLBXK1 plug-in magnetic circuit breakers with rocker actuator and SPDT mid-trip contacts	AIRPAX LMLBXPB11 Dual circuit breaker may be equipped in two terminal pairs per Rack Feed side.
Load Circuit Breaker Ratings	0.1A ~ 100A for any CB positions (Note Temperature range restriction for max current)	100A ~130A for Dual Circuit Breaker, if used
Circuit Breaker Trip Indication	Visual via CB rocker actuator & LED indicator. Electrical via SPDT contact on CB. Earth output via PDP-B400 IDT field.	For all CBs, NO & NC sides are both output via IDT field.
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 CB trip, input under-voltage detected, 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 LEDs	RF1 under-voltage indicator RF2 under-voltage indicator	Small red LEDs operate if monitoring is enabled
Operating Temperature Range	-10℃ to +60℃ -10℃ to +30℃ for higher current ratings	
Body Dimensions	Height 135mm Width 435mm (body only) Depth 260mm	
Mounting Arrangements	21" : 515mm mounting centres 19" : 465mm mounting centres Four (4) depth positions on side panels for mounting brackets	
Weight	6.5Kg	

ENQUIRIES

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

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