

Overview

The BA/PDM is a low voltage (12-30V AC/DC) power distribution module designed to take a single power source and distribute that power to multiple circuits. It comes in 3 or 5 circuit models which can be linked together to achieve multiple circuits with a minimum of panel space to customize your circuit needs. A common module On/Off switch and 10amp breaker powers the distributed circuits. Each circuit has an individual On/Off switch and individual field connection terminals. The BA/PDM has individual circuit protection with either a 3amp fuse or 3 amp breaker with an individual power LED and fault LED per circuit.

Product Identification

CKT = Circuit

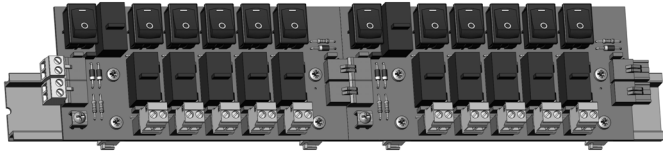


Fig 1: Two, 5 Circuit Interconnected Modules (BA/PDM-5-B-DIN)

Fig 2: One, 3 Circuit Module mounted on Snaptrack (BA/PDM-3-F)

Mounting

The board orientation is horizontal so that the On/Off switches are at the top. All the following descriptions use this orientation. The PDM may be 2.75" snap track mounted or with optional DIN rail mounting brackets. Each PDM may be mounted individually or interconnected to each other via the board connectors on the left and right side of each board. There is a limit of two modules that may be connected together due to the 10A limit of the left and right hand board connectors.

Termination

Main power is supplied to the left hand upper terminals (+, -) and may be 12-30V AC/DC. Main power proceeds to the left hand upper terminals (+, -) for use by the next BA/PDM module if installed at the right. The on board power is distributed to the individual circuit terminals at the bottom of the board labeled (+, -) for each circuit. The ground lug is optionally used and is connected by the left and right hand lower terminals as well as the GND lug on each board. The negative (-) terminals are common and are never interrupted.

- Field terminal strips and safety devices for each circuit are located directly below the associated On/Off rocker switch (SW1-SW5) for that circuit.

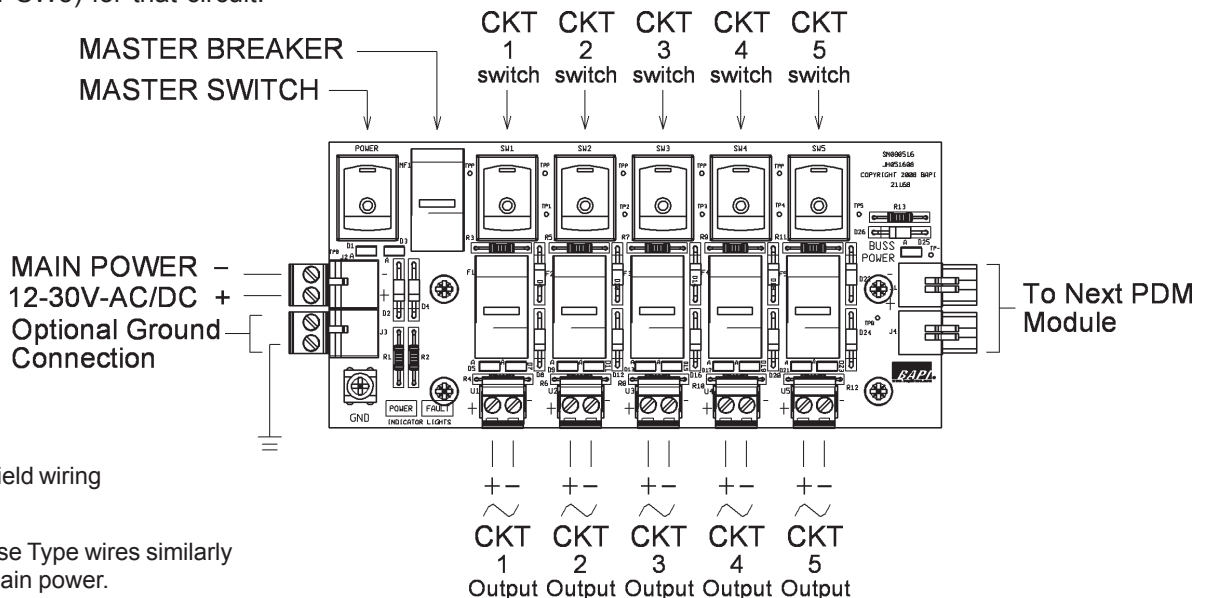


Fig 3: Typical 5 circuit field wiring
CKT = Circuit

Note: 3 Circuit and Fuse Type wires similarly per circuit and main power.

Specifications subject to change without notice.

Operation

When 12-30V AC/DC supply power is applied to the board, the far right hand BUSS POWER green LED illuminates indicating power is available on the board.

When the upper left master switch is turned ON the left green LED illuminates allowing power to flow to the individual distributed circuits. If the master breaker is tripped then the upper left master red LED illuminates preventing + power to flow to any of the distributed circuits.

When the individual switch is turned ON (SW1-SW5) the lower circuit green LED illuminates allowing power to flow to the individual circuit terminals (+,-). If the individual circuit breaker or fuse trips then the individual red LED illuminates indicating circuit interruption and stops current flow to the circuit. The negative (-) of all terminals are common and are never interrupted.

Notes:

- If a circuit is tripped and there is no load on the output terminals then both the red and green circuit output LED's will be illuminated indicating a no load tripped circuit.
- Green LEDs indicate power available, Red LEDs indicate breaker or fuse tripped.
- Field terminal strips and safety devices for each circuit are located directly below the associated On/Off rocker switch (SW1-SW5) for that circuit.

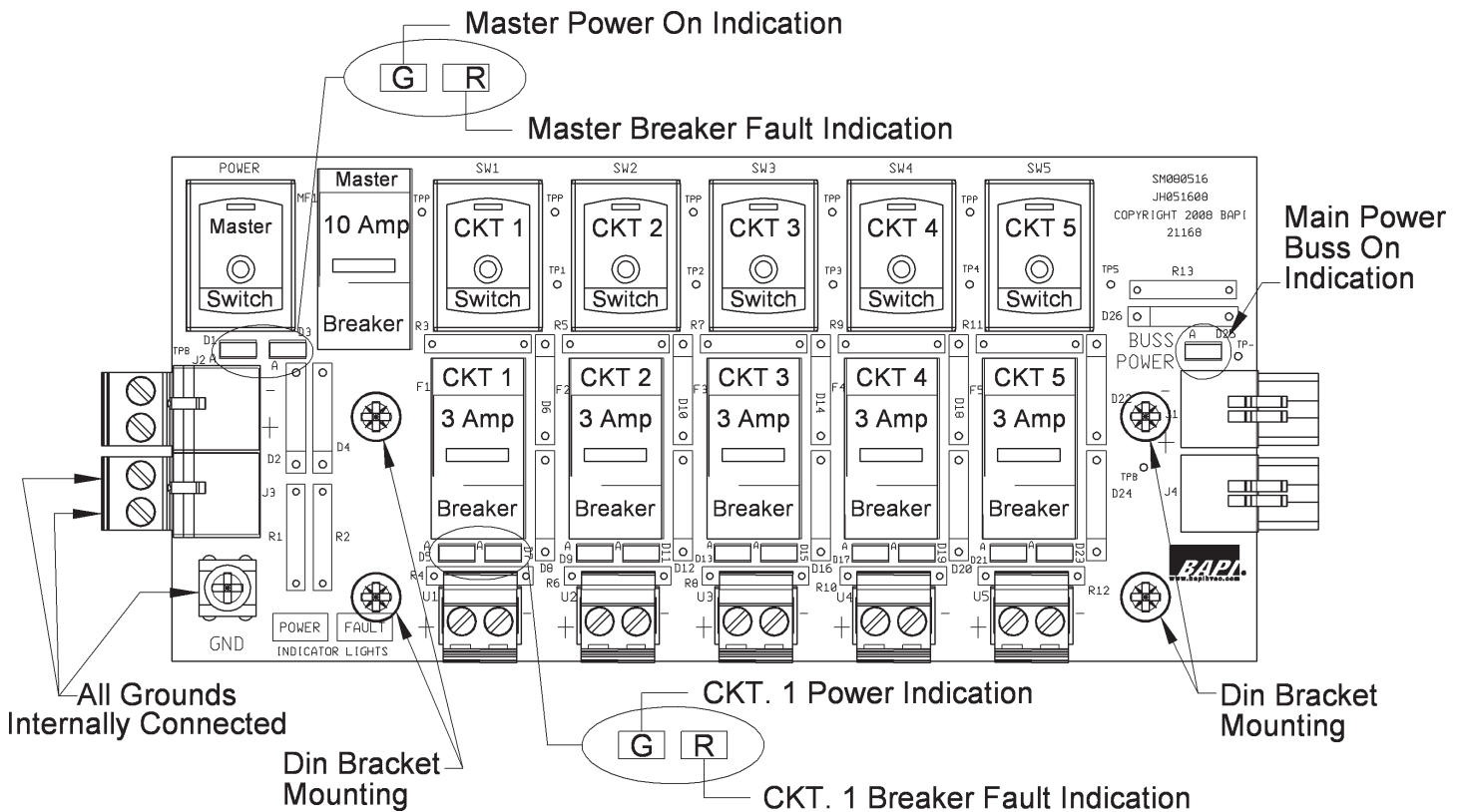


Fig 4: Board Layout Discriptions
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BA/PDM Power Distribution Module

Installation & Operating Instructions

21631_ins_PDM

rev. 1/20/09

Diagnostics

Circuit has no output.	Make sure supply power is available with a volt meter, 12-30V AC/DC. The green LED at the far right hand side of the board should be on. Turn on the master power switch on the upper left of the board. Turn on the individual circuit switch that you need power.
Master Red LED is on.	Reset the master breaker. If the master breaker still trips out, switch off all the individual circuits. Then reset the master breaker. Turn on each circuit one by one to determine which circuit is causing the main failier. Then check out the individual circuit wiring for a short.
Individual Ckt Red LED is on	Check out the individual circuit wiring for a short. Then reset the individual breaker or replace the fuse.
Circuit test pin ID	<p>TPP Power feed input to each individual On/Off switch (SW1-SW5).</p> <p>TP1-5 Power feed after each individual On/Off switch (SW1-SW5).</p> <p>GND Does not connect to any other parts of the power circuits.</p>
LED Indication	<p>Green LED on Power on lamp</p> <p>Red LED on Current protection tripped lamp. (Breaker or Fuse)</p> <p>Red & Green on Current protection tripped & no load on the output.</p>

Specifications

Supply Voltage:	12-30V AC/DC 10 amps maximum	On/Off Switching:	
Circuit Distribution:		Master	Common rocker switch
BA/PDM-3	3 circuits	Circuit	Individual rocker switch
BA/PDM-5	5 circuits	Connection:	Plug in terminal strip
Circuit Protection:			Cage clamp, 28-12 AWG
Master Breaker	10 amp, push to reset	Dimension:	6.26L x 2.75W x 2"H, (16.8x7x5cm)
*Individual Fuse	3 amp, slow blow 20mm fuse	Mounting:	2.75 snap track or DIN rail
Individual Breaker	3 amp, push to reset		Module to module close connection
Visual Indicators:		Ambient:	0° to 120°F (-17° to 49°C)
Power	Green LED, master and individual	Warranty:	2 years
Fault	Red LED, master and individual	Weight:	0.3lb (0.13kg)

***NOTE:** Fuse Replacement of greater than 3 AMPS could cause circuit damage. Do not replace with fuses greater than 3 AMPS.

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