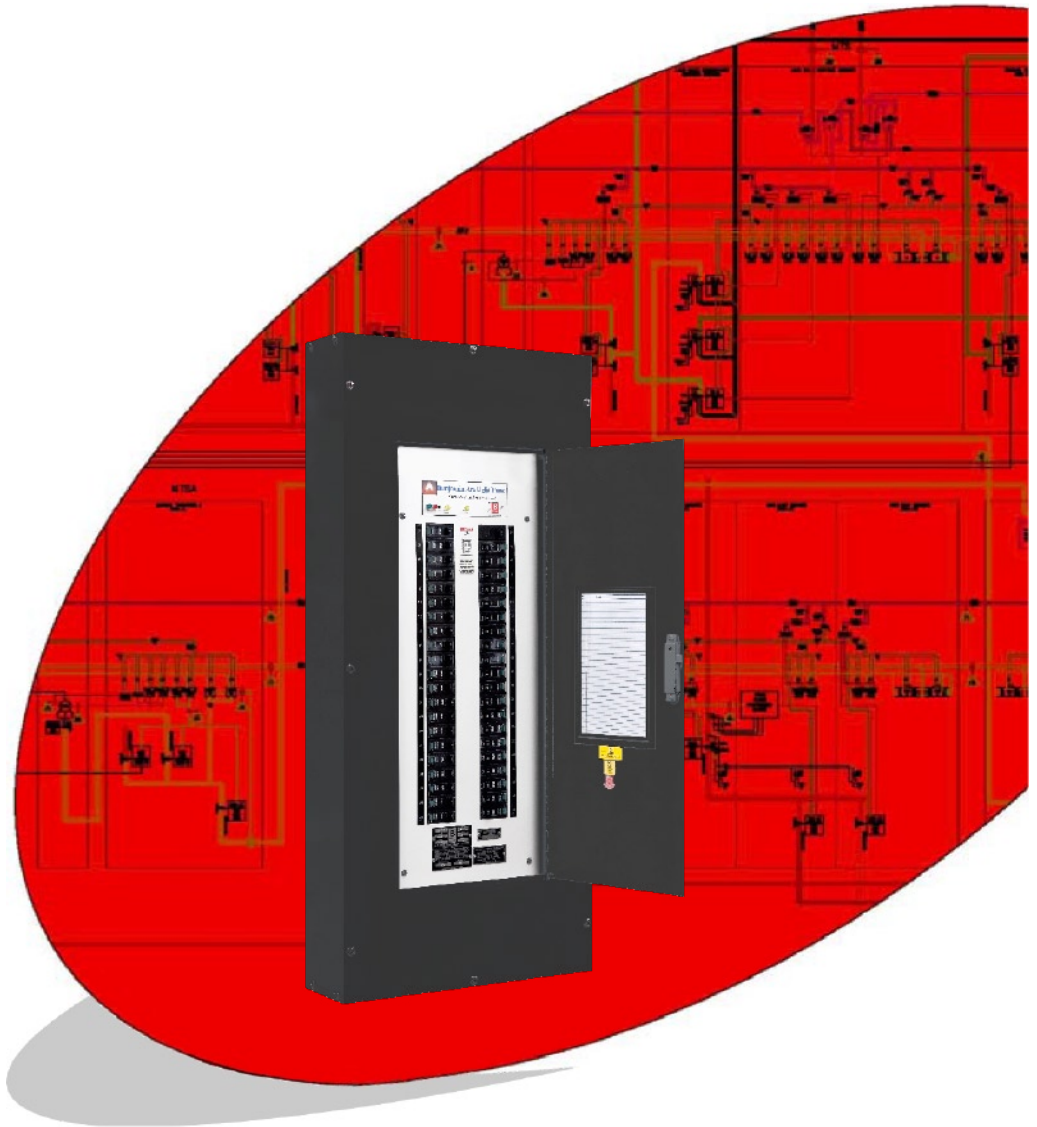


BENJAMIN Breaker Control Panelboard

Controllable Circuit Breaker Panelboard

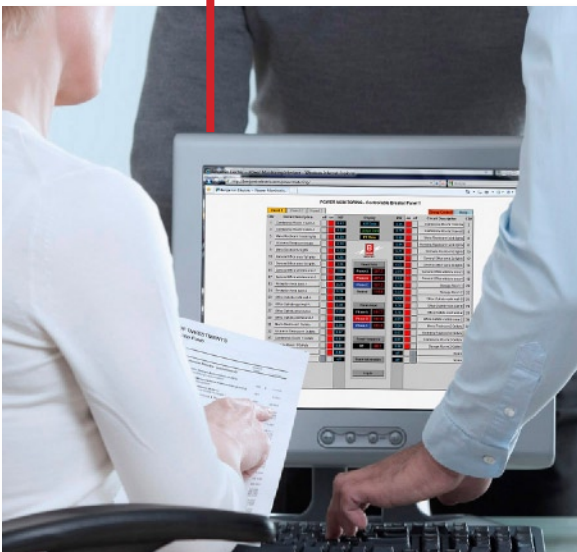
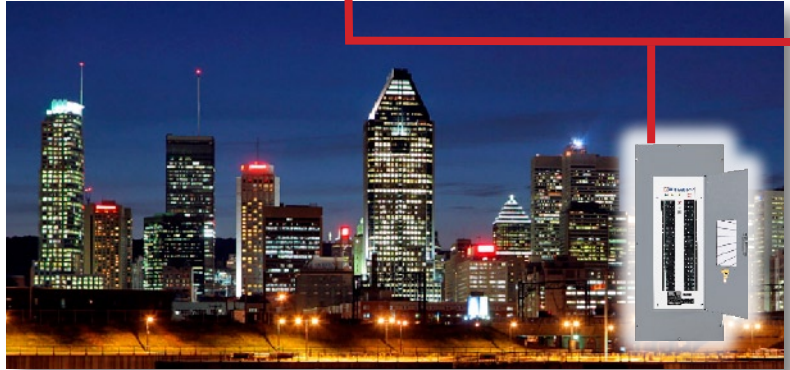
An *efficient addition* to your Lighting Controls and Energy Management Systems



Since 1911

W. A. Benjamin Electric Company

Manufacturers of Quality Electrical Power Distribution Equipment



Breaker Control Panelboard (BCP) Controllable Circuit Breaker Panel

Reduces Energy Costs

The Benjamin Breaker Control Panelboard helps meet new government regulations for reduction of energy usage by providing the ability to easily control the times at which lighting usage occurs.

Comprehensive Communications

Communicates to ALL Energy Management and Building Automaton Controllers. Uses Ethernet, Serial, and wireless communications protocols.

Reduce Installation Costs

By combining the branch circuit breaker protection with a panel of Control Relays into one convenient package, the Benjamin Breaker Control Panelboard reduces wiring costs and saves on wall space.

Retrofits Made Easy

The Benjamin Breaker Control Panelboard uses the same industry standard panelboard sizes allowing direct replacement of existing lighting panels.

Flexible Mounting Options

- Surface or flush wall mount
- Raintight Enclosures
- Integration into Switchboards
- Retrofit to existing installations

Suitable for a Variety of Applications

- Energy Management Systems
- Building Automation
- Daylight Harvesting
- Lighting Control Systems

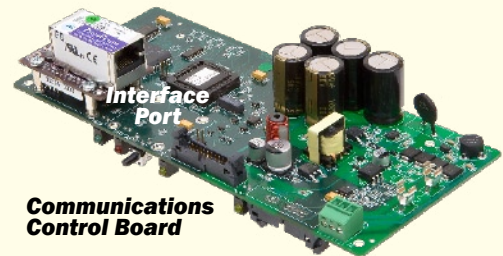


Breaker Control Panelboard Features

Quality - Because W.A. Benjamin Electric Co. manufactures each panelboard to the clients requirements, we are able to offer extensive flexibility in our designs to meet the clients needs. Retrofits into existing enclosures, upgrades, double MLO, sub-main breakers, etc. The possibilities are endless!

Power Supply - The power supply has been designed to accommodate a panel full of controlled circuit breakers

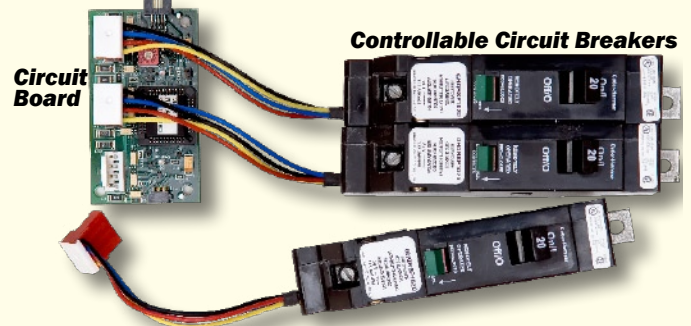
Flexible Communications - The flexibility of the Benjamin Breaker Control Panel is in its' communications controller. It has the capability to communicate, using ALL of the industry-standard serial, Ethernet and wireless protocols. This allows interface to ALL hardware and software Lighting Control and Building Management Systems available on the market.



Communications Control Board

Efficient Modularity - The Breaker Interface Modules (BIM's) use circuit boards in a three breaker modular configuration. This allows the user to purchase only the number of controlled circuit breakers needed. As demand rises, the BIM's are field-upgradable to increase the number of controlled circuit breakers.

Expansion Connector



Circuit Board

Controllable Circuit Breakers

Custom Configurations - The panelboard can be configured with the desired blend of branch circuit overcurrent protection circuit breakers AND controllable branch circuit overcurrent protection circuit breakers. Eaton's Cutler-Hammer innovative solenoid operated remote controlled circuit breakers combine the protective features of the conventional circuit breaker with the switching functions of the contactor. Series ratings up to 100,000 rms amperes, which are designed to handle the demands of today's high short circuit current requirements. They have demonstrated performance of 200,000 operations and have exceeded UL requirements. UL rated for HACR, HID and SWD loads. Single and 2-pole versions are available in ratings up to 30 amperes.

BENJAMIN Breaker Control Panelboard Specifications

| | | | |
|------------------------|----------------|-----------------|-----------------|
| Voltage Ratings | 120/240V 1Ø 3W | 208Y/120V 3Ø 4W | 480Y/277V 3Ø 4W |
|------------------------|----------------|-----------------|-----------------|

| | |
|--------------------|---|
| AIC Ratings | 65kAIC@240V Fully Rated to 100kAIC Series Rated |
| | 14kAIC@480Y/277V Fully Rated to 65kAIC Series Rated |

| | | | | |
|----------------------------|------------------------|------------------------|------------------------|------------------------|
| Mains Configuration | 100 Amp Main Lugs Only | 225 Amp Main Lugs Only | 400 Amp Main Lugs Only | 600 Amp Main Lugs Only |
| | 100 Amp Main Breaker | 225 Amp Main Breaker | 400 Amp Main Breaker | 600 Amp Main Breaker |

| | | | | | |
|--|---------------|-------------------|-------------------|-------------------|---------|
| Circuit Breaker Options (6 to 48 branch circuits) | 1 Pole | 15 Amp Controlled | 20 Amp Controlled | 30 Amp Controlled | 15 Amp |
| | | 20 Amp | 30 Amp | 40 Amp | 50 Amp |
| | | 60 Amp | 70 Amp | 90 Amp | 100 Amp |
| | 2 Pole | 15 Amp Controlled | 20 Amp Controlled | 30 Amp Controlled | 15 Amp |
| | | 20 Amp | 30 Amp | 40 Amp | 50 Amp |
| | | 60 Amp | 70 Amp | 90 Amp | 100 Amp |
| | 3 Pole | 15 Amp | 20 Amp | 30 Amp | 40 Amp |
| | | 50 Amp | 60 Amp | 70 Amp | 90 Amp |
| | | 100 Amp | | | |

| | |
|-------------------------------------|--|
| Power Measurement (optional) | Mains Current Accuracy: 1% of reading from 1% to 100% of nominal rated current |
| | Mains Voltage Accuracy: 0.5% of reading from 90 to 600 VAC Line to Neutral |
| | Mains Power Data: Voltage, Current, Watts, PF, VA, VAR, HZ, Watt-Hrs, VAHrs, VARHrs |
| | Branch Current Accuracy: 1% of reading from 0.15 Amps to 100 Amps |
| | Branch Power Data: Current, Watts, PF, VA, VAR, Watt-Hrs, VAHrs, VARHrs |
| | Data Update Rate: Less than 1 second for all measured values |

| | | | | |
|--------------------------------|---------------|--------------|------------|-------------|
| Communication Protocols | Modbus TCP/IP | Modbus/ASCII | Modbus/RTU | XML-RPC |
| | BACnet/IP | DMX-512 | DMX-RDM | EtherNet/IP |



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