

# CB2D & CMC15 Controller/Alternators (B300)

## CB2D Duplex Pump Controller/Alternator

The most popular product in the CB family, this chassis-mounted two-pump controller provides automatic pump up or pump down level-differential operation of pumps with alternation and high/low alarms. Both the CB2D and the CMC15 have four output relays – two for independent pump control, one for low alarm and one for high alarm.

The CB2D measures 3 inches wide x 10 inches high x 4.5 inches deep.

## CMC15 Duplex Pump Controller/Alternator

Electronically identical to the CB2D, described above, this two-circuit alternator mounts via Snaptrack™. It is available in a plain version and a version with test switches (CMC15A and CMC15B, respectively). The CMC15B includes closed/open/auto test switches and an auto/1-2/2-1 alternator override switch.

The CMC15 measures 3.125 inches wide x 9 inches high x 2 inches deep. The controller incorporates a 1/16-inch thick glass epoxy, solder-masked, printed circuit board and snap-mounts in a UL-recognized plastic track. Its open construction is suited for panel mounting within an electrical enclosure.

## CB2D & CMC15 Features

- 120 VAC (12 VA) or 12 VDC (10.5 to 15 VDC, 250 mA maximum draw) power. The 120 VAC input line is fused on-board with a #3AG, 1-amp fuse snapmounted in a UL-recognized holder.
- A high-speed, Varistor clamp component is arranged with the Controller fuse and used with the isolation transformer to protect against damage due to transients.
- Controls two pumps in pump up or pump down mode, plus high and low alarms.
- Independent turn-ON, common turn-OFF pump control.
- Works with up to five level-sensing float switch or pressure sensors in a “bubbler type” system.
- Low alarm meets state codes requiring both high and low alarm in sewage lift stations.
- The low alarm can optionally cut out submersible sewage pumps in both hand and auto.
- Sensor circuits are powered with low 5 VDC.
- Convenient float circuit Test Switches and LED’s.
- Solid-state automatic pump alternation.
- Alternator override switch with auto or fixed sequences “Auto/1-2/2-1.”
- Controller mounts within a control panel with its front face available through an opening in a front NEMA 1 door or in a dead-interior door of a weatherproof pump station panel.
- Alarm relays can operate ON/OFF (non-differentially) from high/low sensors or can latch in upon alarm and reset at “Lead Pump-On” sensor when operating in differential-level mode.
- SPDT alarm contacts allow use either as “alarm” or “monitor/fail-safe” with N.C. or N.O. sensors.
- Open-collector drive outputs of high and low alarms are available at terminals for special use.
- 120 VAC or 12 VDC input power.
- 120 VAC power circuit transient protection and fusing.
- Includes power-up pump on delays to stagger pump operation after a power failure.
- Can be configured to control a third (non-alternated) pump in place of high alarm.
- Barriercd terminals accept AWG #12-18 wires.
- Heavy-duty load relays rated 10 amps (resistive) at 250 VAC and for motor starter pilot duty.
- Built to UL Industrial Control Panel standards.
- Selection of enclosure types in basic or Powerpack™ versions.
- Compatible with other Siemens Water Technologies Systems controls.
- Powers and interfaces with our IS6 intrinsic safety barrier.
- Reliable, complete, compact, cost effective and time-proven.

**CB2D & CMC15  
Controller/Alternators (B300)**

Description	Part Number
B300 CMC15B controller/alternator w/test switches, float LED's	W2T294136
B300 CB2D open controller/alternator w/test switches, alt override, LED's	W2T294132
Accessory: IS6 six-circuit intrinsic safety module	W2T294110

**The B300 Family**

The CB family of products provides a cost-effective, reliable means of using float switches or control logic inputs to control pumps, valves and alarms. Each unit is UL-approved and can be used as a component of an Industrial Control Panel requiring UL508 or 913 compliance. These controllers are offered either as basic control systems or built into Powerpack™ panels specifically designed to meet exacting job requirements.

The CB family of controllers is supplied with on-board transient protection and 12 VDC power supply. The controllers provide a low-voltage DC output (<8 VDC) to the discrete level sensors. If intrinsic safety is required, the CB controller can be used in conjunction with an IS6 Intrinsic Safety Barrier. The on-board 12 VDC supply is capable of powering the IS6.

**Complete Control Capabilities**

Control Systems offers a single, high-quality source for everything from simple level sensors to telemetry systems to complex system control engineering and software. Based in St. Paul, Minnesota, Control Systems is part of Siemens Water Technologies the leading global provider of industrial, municipal and residential water and wastewater treatment systems, products and services.

As a major manufacturer/integrator with an extensive selection of specialized product lines in the areas of SCADA and telemetry, power equipment integration, automation and measurement, Control Systems is uniquely positioned to provide cost effective, comprehensive solutions for water, wastewater, and process control and telemetry applications.



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