ASC/3 Series NEMA TS2/Actuated Controllers

The traffic signal controller is one of the most important components of a transportation system. Playing a crucial role in the safety and management of traffic, its importance is undeniable. The controller is also at the heart of any intelligent transportation system (ITS), enhancing transportation efficiency and safety.

The ASC/3 builds upon the proven software, design flexibility, and unique feature set of Econolite’s popular ASC/2 family of controllers. All firmware in the ASC/3 is stored in flash memory. This allows for quick and easy intersection programming and software updates in the field without changing hardware or extensive training. The ASC/3 firmware is easily updated in the background while the intersection remains in operation. Once updated, the controller only needs to be power cycled to allow the new firmware to take control. The majority of the electronic components of the ASC/3 are contained in one easy-to-replace module.

About ASC/3

At A Glance

- Windows-based remote user interface (optional)
- Advanced controller, coordinator, and preemtpr features
- Enhanced transient and environmental protection
- Protocol support for ECPIP, NTCIP, and AB3418
- Software support for Centracs® and Aries®, and any compliant pre-qualified applications
- 16 x 40 LCD display with adjustable contrast

The ASC/3 was designed using the latest electronics technology, which offers the user a controller that is more reliable, easier to maintain, and interchangeable.
Controller Models

The ASC/3 is available in two models. Both share a common enclosure, power supply, processor, keyboard, display and optional data key telemetry and Ethernet modules.

- ASC/3-1000: Dedicated to the TS2 Type-1 environment
- ASC/3-2100: Can operate in any TS1/TS2 Type-1 and TS2 Type-2 environment

ASC/3-1000: NEMA TS2 / Type-1

The ASC/3-1000 meets and exceeds all requirements of the NEMA TS2 Type-1 Standard. Its interface controls all inputs and outputs over a high-speed RS-485 serial bus (Port 1) with digital addressing that simplifies cabinet wiring. This bus also interfaces directly to a TS2 Malfunction Management Unit (MMU) for enhanced intersection monitoring.

ASC/3-2100: NEMA TS2 Type-2 / TS1

The ASC/3-2100 meets and exceeds all the requirements of the NEMA TS2 Type-2 Standard. It also provides downward compatibility to the Econolite KMC-8000, ASC-8000, ASC/2-2100 and ASC/2S-2100 controllers as well as other NEMA TS1 controllers.

An optional 25-pin telemetry connector matches the KMC-8000 and ASC-8000. This allows the ASC/3-2100 to be used as a direct replacement for older controllers.

Control Features

- 16 phases, 8 configurable concurrent groups in 4 timing rings
- All standard NEMA TS1, TS2 and NTCIP functions
- 16 timed vehicle overlaps
- Transit Signal Priority
- 16 pedestrian phases that can be configured as pedestrian overlaps
- Exclusive pedestrian operation
- Soft vehicle recall
- Conditional service
- Dynamic max operation
- Bike minimum green, second walk and pedestrian clear times, plus a walk and pedestrian clearance maximum
- Advanced walk
- Pedestrian clear protect
- Red maximum
- Vehicle extension 2
- Guaranteed minimum green, walk, ped clear, yellow, red, red revert and overlap green
- Redundant monitoring of the MMU status to enhance intersection monitoring
- 4 timing plans selectable on TOD or coordination plan basis or for one cycle following preemption
- Powerful logic processor

Basic Specifications

- Temperature
  - -34°C (-30°F) to +74°C (+165°F)
- Power
  - A built-in, high-efficiency switching power supply generates all required internal voltages as well as 24 VDC for external use.
  - Fuses are mounted on the front of the controller for 120 VAC input and 24 VDC output.
- Dimensions
  - 10 1/2” x 15 1/4” x 9” (H x W x D)