

Save Time • Save Money • Improve Performance

Introduction

ENVIRCO's ACC7015, ACC7016, and ACC7017 Field Configurable Consoles intelligently monitor and control cleanroom and facility environments. The consoles provide communication (MODBUS-RTU platform), unit control, and system monitoring in one easy-to-use package. Additionally, the ACC7016 and ACC7017 come standard with a remote alarm trigger and remote set-back (shut-down), and the ACC7017 provides Environment Monitoring with up to six analog sensors that can be monitored and data-logged.

The ACC7015 Series consoles support fan control networks consisting of up to 50 FFUs, organized in up to five groups. Plug-and-play, the consoles are field configurable to match most facility layout needs.

The ACC7015, ACC7016, and ACC7017 come standard with a panel box, universal SMPS, and out-of-the-box graphic console controls. The consoles can be supplied in an off-white steel panel box with a 3.5" depth to easily mount on a wall (ACCPNL00 option). Remote access to screen console (ACC-ETH option) and datalog SD card (ACC-DL option; ACC7017 only) are also available.

Features

- » Up to 50 FFUs and five groups per system
- » Alarm for error (dry contact output, standby/setback input, and emergency shutdown on ACC7016/ACC7017 units)
- » Six analog (4-20mA) sensors (ACC7017 only)
- » Seven-day clock/calendar
- » Unit and facility/group speed adjustment
- » Monitor/alarm error types
 - » Communication error with the node
 - » Pressure switch fault (AC)
 - » RPM low or high limit exceeded (EC)
- » Menu-driven configuration options
- » Three levels of user control: View, User, and Master

Environment

- » Panel-mounted console
- » Operational temperature: 0 to 50°C (32 to 122°F)
- » Storage temperature: -20 to 60°C (-4 to 140°F)
- » Relative humidity (RH): 5% to 95% (non-condensing)

Options

- » ACCPNL00 - Enclosure
- » ACC-ETH - Remote access Ethernet
- » ACC-DL - Datalog SD card (ACC7017 only)



Specifications

Power Supply

- » Input voltage: 24 VDC
- » Maximum current consumption: 245mA @ 24V

Display Screen

- » STN, LED, white LED backlit
- » 2.4" viewing area
- » 126 x 64 display resolution

Keyboard

- » 20 keys (10 function, 10 alphanumeric)
- » Metal dome, sealed membrane switch keys

Communication

- » One isolated RS485 serial port (PORT 1)
- » -7 to +12 VDC differential maximum voltage limits
- » 9600 baud rate
- » Supports up to 50 MODBUS addresses
- » Twisted pair (cat5e) cable type

Remote I/O (ACC7016 and ACC7017 only)

- » Alarm output - dry contact
- » Standby/shut-down input - 24VDC input

Enclosure (ACPNL00 Option)

- » Durable 18-gauge cold rolled steel construction
- » Mounts on wall surface
- » Captured hinge cover design for easy access
- » Off-white, textured, powder-coated, and corrosion-resistant
- » Key latch for positive closure and security
- » Raised mounting rails create clean wiring channel
- » Dimensions: 7" W x 11" H x 3 5/16" D
- » RJ45 coupler included for easy FFU daisy chain
- » Din Rail power supply included (100-240 VAC input)

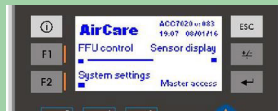


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Example Screens

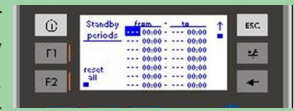
Main Screen

The main screen shows the software version number, system time and date, and current access level in the lower right corner. If the keypad is not used after three minutes, the screen will automatically revert to the “Facility Control” screen.



Seven-Day Clock/Calendar Setback System

This screen allows the operator to define up to seven standby periods. A valid weekday and a time of day (24 hour clock) must be defined for the start and end of each period defined. The periods may overlap.



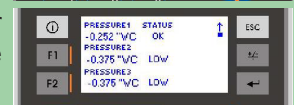
Facility Control

This screen shows the total number of fans and groups defined in the system. It also shows the number of fans found with an error, offline, stopped, running, or in standby. So long as the alarm is activated, if an error is found at anytime, the alarm will turn on, and the screen will automatically go to the Facility Overview screen.



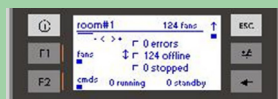
Sensor Configure & Monitor Screens (ACC7017 Only)

Sensor parameter allows users to set up the sensor monitoring. Choose the sensor type, the range, and the alarm limits. Sensor Monitoring screen shows the sensor input.



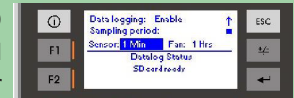
Group Control

This screen shows the total number of fans for a given group. It shows the number of fans found with an error, offline, stopped, running, and in standby, respectively, for that group.



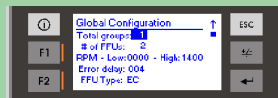
Sensor Datalog - Add Option ACC-DL (ACC7017 Only)

Sensor data is stored on an SD card for future download. Add Ethernet access (ACC-ETH) for network download.



Setup Screen

This screen provides field configurability: # of groups, # of FFUs, RPM low and high limits for ECM motors, Error Delay, and Node. Each FFU can be assigned to a respective group.



Fan/Unit Control

ECM (DC Brushless - ACMXXX) fan control screen shows the fan number, fan status, and group assignment. The fan’s current setpoint (0-100%) and RPM value are shown (along with high/low limits). The fan’s running speed can be adjusted by pressing the button. Note: AC fan control screen is the same without the RPM monitor.



Mechanical Dimensions

