

Sirius Cooling Control Unit (CCU)

PRODUCT OVERVIEW



General:

The Cooling Control Unit offers intelligent standalone control of dual redundant air-conditioning systems together with emergency ventilation control and provides site cooling system related digital alarm outputs. When the CCU is used with its optional three-way switching block, it will control three air-conditioning units in one environment.

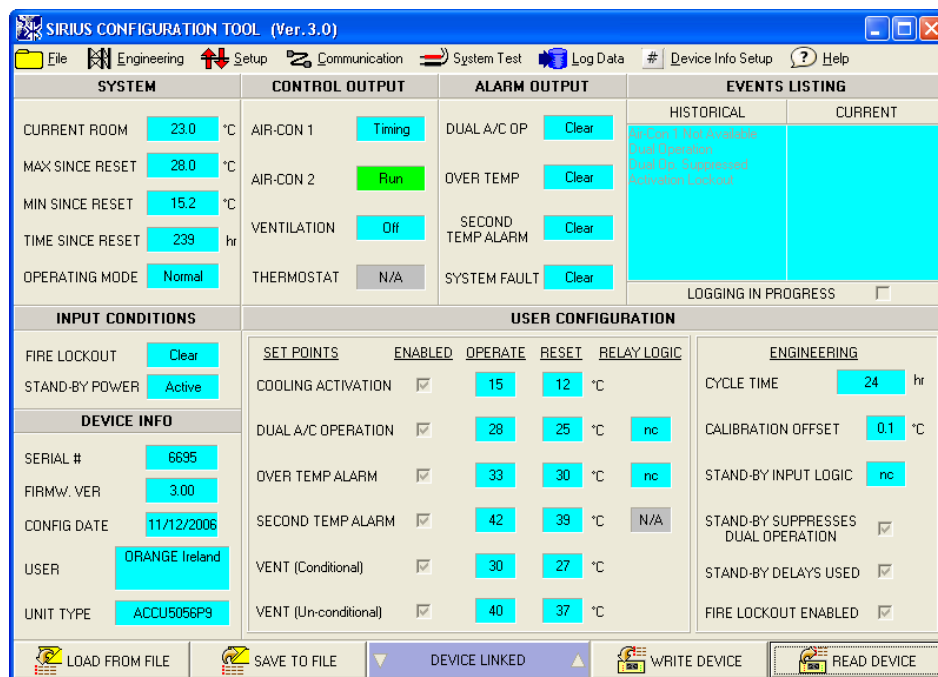
The CCU is generally applied in duty cycling type of active cooling plant control with stepped type control possible according to the configuration. Different control strategies for optional stand-by emergency ventilation equipment are further provided for. In small telecommunications applications such as GSM, the active cooling plant will typically be commercial cooling only type air-conditioning units of the through the wall or split unit type according to the requirements of a network operator while an emergency ventilation system will be a stand-by DC powered fan/filter arrangement. While the CCU operating principles remain valid for any required capacity of cooling plant the standard solutions operating on the direct switching principle are suitable for active cooling plant up to 7kW total capacity. Larger capacity switching is achieved by way of indirect switching obviating the need for expensive three-phase contactors.

Application:

Cooling control in unmanned equipment room environments including:

- * Radio Base Stations
- * Remote Subscriber Switches
- * Transmission Systems
- * Server Rooms
- * Medical and Industrial Applications

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Main Window in PC Configuration Tool

Features:

- ✦ Flexible design allows for network specific application;
- ✦ Suitable for through wall type or split type air-conditioning installations;
- ✦ Allows for direct control of cooling plant rated 2,6 to 7 kW class and larger units;
- ✦ Accepts auxiliary power supply at 24 or 48V DC or optional internal AC power pack;
- ✦ Incorporates integral fire lock-out feature;
- ✦ Designed for manual push button or PC Configuration Tool menu driven setup;
- ✦ Optional modified response by Stand-by power running control Input.

Advantages:

- Systems are delivered pre-assembled in required configuration allowing for quick commissioning;
- While pre-configured to customer requirements, systems remain fully field configurable to allow for changed requirements or enhanced functionality to meet alternative network requirements;
- Robust power switching module;
- Large customer base with proven service and reliability record;
- High reliability due to maturity of designs;
- Designed for easy modular first line maintenance;
- Electrical safety compliance IEC 60950.

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Product Variants:

MODEL	ACCU50	ACCU70	ACCU73
Application	2,6 to 5kW class Trough Wall Type A/C	2,6 to 7kW class Split Type A/C direct or any larger indirectly	5 to 7kW class Through Wall Type A/C

Specifications:

Temperature sensing:	Digital
Temperature sensing accuracy:	0,5°C
Temperature sensing range:	-10 to 99°C
Temperature settings range:	-10 to 60°C
Cycling time period adjustment:	1 to 99h
Cycling suppression:	Programmable
Dual A/C operation suppression:	Programmable or with Stand-by control Input
Liquid crystal display:	Full Functional
Room Over Temp alarm:	Integral
Second Room Temp alarm:	Optional (Independently programmable)
Peak site temperature recording:	Integral
Minimum site temperature recording:	Integral
Historical alarms:	Events listing
A/C Restart delays:	Integral or user programmable extended delays with Stand-by control Input
Fire Lock-out functionality:	Integral
PC Configuration interface:	RS232

Emergency Vent. Control:	Mains power fail Conditional & Mains Power fail Un-conditional
Alarms output logic:	pot free n/c or n/o
Thermostat Output:	Optional (Alternative to second temp alarm)
Reverse polarity protected:	Yes
System test mode:	Artificial temperature swing and forced temp mode
Uptime service timer:	Yes
Logging functionality:	Temperature and full Events listing to .csv file

Ratings:

Rated Voltage:	400V Ph to Ph; 230V Ph to N
Dielectric strength:	1500VAC, 1 min
Rated Current:	ACCU50 16A ACCU70/73 25A
Rated frequency:	50Hz
Auxiliary supply voltage:	22 to 60V DC
Aux supply current consumption:	40mA@48V DC
Emergency Ventilation Switching Capacity:	Control type 0,5A
Optional Thermostat output:	2A
Alarms Output switching:	Relay type 1A Electronic type 50mA

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