

ECB Series

BACnet BTL Listed Programmable Controllers



	ECB-103	ECB-203	ECB-253	ECB-300	ECB-350	ECB-400	ECB-403	ECB-410	ECB-413	ECB-450	ECB-453	ECB-600	ECB-610	ECB-650	ECx-400	ECx-410	ECx-420
General																	
Controller Status LED	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Interactive color operator interface			■		■						■	■		■			
Real-Time Clock				■	■	■	■	■	■	■	■	■	■	■			
DIN-Rail Mounting		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Operating Temperature Range:																	
- 32 to 122°F; 0 to 50°C	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
- -40 to 158°F; -40 to 70°C		■ ¹															
Optional Models																	
UL 864 Listed, 10 th Edition, UUKL Smoke Control Equipment ⁴		ECB-203 UUKL		ECB-300 UUKL		ECB-400 UUKL						ECB-600 UUKL			ECx-400 UUKL		
Inputs																	
Universal (Software Configurable)	4	6	6	10	10	12	12	12	12	12	12	16	16	16	12	12	12
0-20mA/4-20mA (external 249Ω Resistance)	■	■	■														
0-20mA/4-20mA (built-in 249Ω Resistance, Jumper Selectable)				■	■	■	■	■	■	■	■	■	■	■	■	■	■
50 Hz Pulse				■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²	■ ²
Analog/Digital Converter (Bits)	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Allure™ Series Communicating Sensor	4	4	4	12	12	12	12	12	12	12	12	12	12	12			
Wireless inputs ³	18	24	24	28	28	28	28	28	28	28	28	28	28	28			
15VDC Power Supply	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Outputs																	
Universal (Analog)	2	3	3	8	8	12	4	12	4	12	4	12	12	12	12	12	0
Digital/Analog Converter (Bits)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
0-20mA/4-20mA (Jumper Selectable)				■	■	■	■	■	■	■	■	■	■	■	■	■	■
Digital (Triac)	4	5	5				8		8		8						
Output LED Status Indicator		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HOA Switch								■	■				■	■		■	
Power Input																	
24 VAC	■																
24 VAC/VDC		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Power Status LED Indicators	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

1. Also available with the environmental protection (conformal coating) option.
 2. The first four inputs are software configurable for pulse counting; 50 Hz maximum frequency.
 3. All controllers are Open-to-Wireless™ ready. Available when an optional Wireless Receiver is connected to the controller. Some wireless sensors may use more than one wireless input from the controller.
 4. The UL 864 Listed, UUKL Smoke Control Equipment are used only in Distech Controls' UUKL Smoke Control System. For detailed requirements and procedures for installing and operating UL 864 Listed equipment, refer to the Distech Controls UUKL Smoke Control System [Design Guide](#).



Programming – Configuration

EC-gfxProgram	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
Pre-Loaded Application																	

Communication

BTL Listing Profile	B-ASC	B-ASC	B-ASC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC	B-AAC			
BACnet MS/TP	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
MAC Addressing																	
- Allure EC-Smart-Vue sensor	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
- Dip Switch		■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Rx LED Indicators	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Tx LED Indicators	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■

Objects

Calendar Objects	1	1	1	2	2	2	2	2	2	2	2	2	2	2			
Schedule Objects	2	2	2	10	10	10	10	10	10	10	10	10	10	10			
Loop (PID)	8	8	8	30	30	30	30	30	30	30	30	30	30	30			
BACnet Input Objects (AI, BI, MSI)	30	38	38	62 ²	62 ²	64 ²	64 ²	64 ²	64 ²	64 ²	64 ²	68 ²	68 ²	68 ²	12 ^{4 5}	12 ^{4 5}	12 ^{4 5}
BACnet Output Objects (AO, BO)	6	8	8	8 ³	8 ³	12 ³	4 ³	12 ³	4 ³	12 ³	4 ³	12 ³	12 ³	12 ³	12 ^{3 5}	12 ^{3 5}	
BACnet BV Objects																	
- Commandable ¹	10	10	10	20	20	20	20	20	20	20	20	20	20	20			
- Non-Commandable	40	40	40	55	55	55	55	55	55	55	55	55	55	55			
BACnet MSV Objects																	
- Commandable ¹	10	10	10	20	20	20	20	20	20	20	20	20	20	20			
- Non-Commandable	40	40	40	55	55	55	55	55	55	55	55	55	55	55			
BACnet AV Objects																	
- Commandable ¹	25	25	25	35	35	35	35	35	35	35	35	35	35	35			
- Non-Commandable	75	75	75	115	115	115	115	115	115	115	115	115	115	115			
BACnet Alarm Notification Classes				5	5	5	5	5	5	5	5	5	5	5	5	5	5

1. Supports object internally-generated alarms (intrinsic reporting).
2. Supports object internally-generated alarms (intrinsic reporting). This consists of Hardware Inputs, Allure Series Communicating Sensors inputs, and Open-To-Wireless inputs.
3. Supports object internally-generated alarms (intrinsic reporting). This consists of Hardware Outputs.
4. Supports object internally-generated alarms (intrinsic reporting). This consists of Hardware Inputs.
5. Objects are in the connected ECB-600, ECB-610, or ECB-650 controller (master).

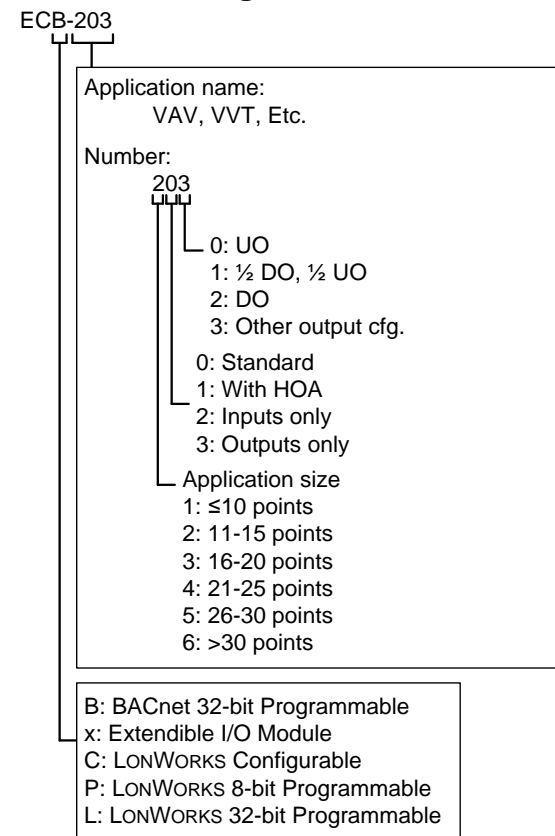


Recommended Applications

	ECB-103	ECB-203	ECB-253	ECB-300	ECB-350	ECB-400	ECB-403	ECB-410	ECB-413	ECB-450	ECB-453	ECB-600	ECB-610	ECB-650	ECx-400	ECx-410	ECx-420
2 pipe Fan Coil	■	■	■														
2 pipe Fan Coil with Changeover Sensor	■	■	■														
4 pipe Fan Coil	■	■	■														
Chilled Ceiling	■	■	■														
Heat Pump	■	■	■														
Unit Ventilator	■	■	■														
Small Roof Top		■ ¹	■														
Medium Roof Top		■ ¹	■				■		■			■					
Large Roof Top							■		■			■					
Small Air Handling Unit		■	■	■	■												
Medium Air Handling Unit				■	■	■	■	■	■	■	■	■	■	■			
Large Air Handling Unit				■	■	■	■	■	■	■	■	■	■	■			
Multi-Zones Application				■	■	■	■	■	■	■	■	■	■	■			
Chillers				■	■	■	■	■	■	■	■	■	■	■			
Boiler				■	■	■	■	■	■	■	■	■	■	■			
Cooling Tower				■	■	■	■	■	■	■	■	■	■	■			
Central Plant												■	■	■	■	■	■

1. Also available with the environmental protection (conformal coating) option.

Controller Naming Conventions:



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