

Implementing Low-Carbon Sustainable Development

LUBAN

Powering The Green Transformation Of Intelligent Building Spaces



The logo for Advéco features the company name in a bold, blue, sans-serif font. The letter 'e' is stylized with a green accent mark above it. The text is set against a background of a light blue halftone dot pattern that fades out to the right.

Advéco

Implementing low-carbon sustainable development

Smart Space Solution Provider

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COMPANY PROFILE

About Advenco

Smart Space Solution Provider


Advenco is located in the Wuxi High-tech Development Zone. With intelligent building products as its core, its business covers comprehensive solutions for smart spaces including smart buildings, smart energy, and AIoT. Since its establishment, the company has been committed to becoming a new-generation provider of comprehensive solutions for low-carbon smart building spaces in China. The company has a strong and professional team of experts, R&D personnel, and sales staff. Technologically, Advenco adopts cutting-edge IoT innovation technologies to create a brand-new flat system architecture, making data transmission more real-time and efficient. At the same time, it uses domestic chips and domestic operating systems, and strictly designs products in accordance with international and national standards in the building automation control industry, truly achieving domestic controllability while meeting the technical requirements of overseas markets. Data-wise, Advenco uses machine learning, data analysis, and artificial intelligence algorithms to enable buildings to better understand and meet user needs, creating more efficient, green, environmentally friendly, and low-carbon building spaces. Currently, Advenco is leveraging China as an innovation hub to deepen its presence in the domestic market while accelerating its global expansion. In Southeast Asia, projects have already been successfully implemented in countries such as Thailand and Vietnam. Business operations in the Middle East, Europe, Africa, and other regions are steadily taking shape. In the North American market, strategic groundwork has been laid, and the company is preparing to enter the United States and Canada, progressively building and enhancing a global technology cooperation network.






Innovative Technology

Distributed IoT edge-core framework enabling real-time data processing with deterministic latency, achieving dynamic resource allocation for flexible system scaling.



Domestic Architecture Platform

Adopting China-developed chips and operating systems, our building automation control products strictly comply with international and national standards, ensuring genuine industrial sovereignty and controllability.



User-oriented

Leveraging machine learning, data analytics and AI algorithms, our systems understand and anticipate user needs to create high-efficiency, low-carbon building spaces that advance sustainability.

Sovereign Craftsmanship Independent Leadership

Through proprietary R&D, we break core technological barriers to deliver full-stack domestic solutions, achieving strategic autonomy in critical sectors. With industrial craftsmanship, we ensure product reliability and quality—liberating clients from technical dependencies and pioneering industry self-sufficiency.

Innovation-Propelled Intelligence for Future Leadership

Leveraging cutting-edge technologies, we continuously overcome industry bottlenecks to provide precision-engineered solutions. Powered by AI and coloT, we drive intelligent business transformation for clients, capture emerging market opportunities, and -create next-generation smart ecosystems.

Energy Leapfrogging, Green Pioneering

Innovation-driven high-efficiency products accelerate clients' green transition. Featuring intelligent optimization and energy-conserving design, our solutions reduce energy consumption by 20-30%, align with "Dual Carbon" goals, empower sustainable operations, and spearhead industry-wide eco-development.

People-Oriented And Environmental Coexistence

We design user-focused services around real customer needs. From initial concepts to real-world applications, our solutions deliver both comfort and environmental care. By integrating smart green technologies and proven energy-saving methods, we enable harmony between user needs and environment- turning sustainability commitments into measurable results.



Product Portfolio



Honors And Accreditations



Corporate Positioning

Market Positioning

Smart space solution provider

Centered on intelligent building products, our business scope covers comprehensive solutions for smart spaces including building automation, energy and carbon management, and integrated building control and management.

- Real-time visualization of architectural space data
- Intelligent management of comfortable building spaces
- Low-carbon and sustainable development
- Full lifecycle equipment management

Product Focus

Focus on the intelligence of architectural space and create a brand-new series of domestically produced products.

Adopting cutting-edge Internet of Things (IoT) innovation technologies, we create a brand-new flat system architecture. Adopting domestic chips, operating systems and databases, and strictly following national standards for product design, it truly achieves independent control.

- Edge Controller
- All-in-one machine
- Intelligent building management platform
- Architectural space solutions

Field Applications

Focus on multiple application fields and help customers reduce costs and increase efficiency.

The application is widely covered in vertical markets such as industrial and office parks, hospitals, hotels, biomedicine, laboratories, and energy stations, helping customers achieve cost reduction and efficiency improvement.

- High efficiency and low carbon, precise energy savings
- Real-time monitoring, green operation
- Predictive simulation, one-click deployment of AI strategies
- Combination of local control and cloud management

SMART SPACE SOLUTION PROVIDER



Smart Space Solution Provider



LUBANX Intelligent Building Space Control System

Intelligent Building Management Platform XPlatform

The system is pre-installed in the AI intelligent edge server, offering two options: industrial computers or servers, to meet the demands of different scenarios.

Advantages & Highlights

- AI Large Model Knowledge Engine
- Automatic point binding function
- Open north-south data access and flexible third-party access.
- Over 30,000-point access capability and over 2 years of data storage.
- Domestically developed system & database, full-stack self-developed, comprehensive security assurance.

Basic Functions

- Multi-system integration
- Support system-level programming
- Support graphical configuration
- lightweight energy and carbon management
- Support system-level supervision
- Alarms, trends, schedules
- Supports sub-metering



Visual Configuration Platform XView

- Provide a rich and professional image library.
- Provide multi-level physical model visualization.
- Provide highly available configuration templates.
- Tagging system, enabling rapid configuration of points.

No-code Programming Builder XControl

- Built-in professional program libraries for various industries.
- Support online and offline simulation.
- Support programming for third-party device integration.
- Support for the extension and secondary development of custom modules.
- Support multi-platform deployment such as XNC, PC, and cloud.

PRODUCT PORTFOLIO

XServer Series AI Intelligent Edge Servers

The XServer series AI intelligent edge servers adopt a highly robust fanless system, providing powerful computing performance and flexible scalability through various I/O ports to support IoT connectivity. Meanwhile, the device possesses powerful computing capabilities, optimized I/O ports and expansion options, supports high-speed and low latency wired/wireless connections and NVME storage, used for IoT edge data transmission; The 4K ultra high definition display interface provides high-resolution visual effects of IoT data. Therefore, using this as a carrier for XPlatform can provide users with the dual assurance of stability and high performance.



Model No.	BAC-5431-400	BAC-5441-400	BAC-5451-400	BAC-5451-401
Processor	Core i3-1115G4E dual-core 2.2GHz	Core i5-1145G7E dual-core 1.5GHz	Core i7-1185G7E dual-core 1.8GHz	Core i7-1185G7E dual-core 1.8GHz
Memory	16GB DDR4	32GB DDR4	32GB DDR4	64GB DDR4
Display	Intel® Iris® Xe Graphics			
Ethernet port	LAN A: Intel i219-LM 1Gb/s, IEEE 802.3, 802.1as/1588 LAN B-D: Intel® i226-LM 2.5Gb/s, IEEE 802.3, 802.1as/1588			
Expansion/Storage	1 x M.2 B key slot (USB Signal for 3042/3052 LTE/5G/LTE module, SATA signal for storage) 1 x 2.5" SSD SATA drive bay (Supports SSD/HDD up to 9.5mm in height) Support RAID0/RAID1 with 2.5" SSD and M.2 B key 2242 SSD. 1 x M.2 M key (PCIex4) supports 2280 NVME SSD 2 x mPCIe Slot (PCIe, USB2.0 signal)			
The front I/O port	Display output port: 1 x HDMI 1.4 (3840x2160@30Hz) 1 x DP 1.4a (4096x2304@60Hz) Serial port: 4 x RS-232/422/485 USB ports: 3 x USB 3.2 Gen2, 1 x USB2.0 USB Type-C: 1 x USB3.2 Gen2, supports DP1.4a Alt.Mode Power interface: 1 x 2 pins, terminal block			
Power supply	Input voltage: 10 - 36V DC Power input: 30.2W (Typical), 85W (Max)			
Environmental condition	Operating temperature: -20 ~ 60°C (-4 ~ 140°F) @5 ~ 85% RH, Airflow velocity: 0.7 m/s Storage temperature: -40 ~ 85°C (-40 ~ 185°F) Relative humidity: 10 ~ 95% RH @ 40°C (non-condensing)			
Dimensions (W×H×D) mm	40X200X140			
Certification	CCC			

• The performance specifications are nominal values and comply with acceptable industry standards. If you want to know about applications beyond the above specifications, please consult the company's sales and service personnel. The company is not responsible for any losses caused by misuse or abuse of its products.

XPlatform Intelligent Building Management Platform

XPlatform is a comprehensive building management software that combines aesthetics and efficiency. Through a simple and intuitive interface design, it perfectly integrates equipment configuration diagrams and data panels, achieving graphical configuration and system level programming supervision. It supports multiple mainstream protocols such as BACnet, Modbus, MQTT, and has built-in trend analysis, task planning, and alarm functions, and is equipped with a lightweight energy monitoring system. XPlatform, with its open data interface and flexible docking mode, easily integrates multiple systems to achieve intelligent linkage of various subsystems within the building, providing a comprehensive solution for the intelligent management of modern buildings.



Specifications

- Supports multi-user concurrent access, with no restrictions on the number of accesses;
- The database uses Gauss DB, and the operating system supports Linux, as well as domestic operating systems Euler and Kylin;
- Supports protocol types such as BACnet IP, Modbus TCP, KNX IP, MQTT, and GB/T28847, and supports autonomous search, scanning, mapping, and subscription of BACnet devices;
- Supports direct reading group address tables of CSV file exported from ETS, eliminating the need for manual one-by-one mapping of group address information;
- The north-south data interface is fully open, supporting third-party system access, and supporting upper level data platforms such as cloud platforms to obtain data or counter control;
- Provide mini program software for remote access;
- Graphic with graphical configuration UI, platform and mini program are uniformly adapted to multiple terminals;
- Capable of accessing 30000 points and expanding software and hardware access capabilities as needed;
- Built in hardware level secure encryption, compliant with TPM data security communication specifications
- Supports four-level carbon flow distribution display, allowing users to view carbon emission data by time and export reports, facilitating analysis of carbon emission sources and trends.

Model No.	Description
BAC-5431-400	Core i3-1115G4E dual-core 2.2GHz, 16GB DDR4, 1TB SSD, TPM2.0. Entry-level. Supports up to 5000 points. Must be ordered together with software BAC-SP01-1.
BAC-5441-400	Core i5-1145G7E dual-core 1.5GHz, 32GB DDR4, 1TB SSD, TPM2.0. Standard. Supports up to 9000 points. Must be ordered together with software BAC-SP01-2.
BAC-5451-400	Core i7-1185G7E dual-core 1.8GHz, 32GB DDR4, 2TB SSD, TPM2.0. Standard. Supports up to 15,000 points. Must be ordered together with software BAC-SP01-3.
BAC-5451-401	Core i7-1185G7E dual-core 1.8GHz, 64GB DDR4, 2TB SSD, TPM2.0. Standard. Supports up to 30,000 points. Must be ordered together with software BAC-SP01-4.

Software And Application Service Ordering Information

BAC-SP01-1	Base Edition-1000 points or 1000 KNX group addresses. Supports 10 third-party devices /Opens 2 concurrent access permissions (WEB client & Mini Program).
BAC-SP01-2	Standard Edition-6000 points or 6000 KNX group addresses. Supports 40 third-party devices /Opens 5 concurrent access permissions (WEB client & Mini Program).
BAC-SP01-3	Advanced Edition-10000 points or 10000 KNX group addresses. Supports 60 third-party devices / Opens 8 concurrent access permissions (WEB client & Mini Program)
BAC-SP01-4	Premium Edition-20000 points or 20000 KNX group addresses. Supports 100 third-party devices / Opens 10 concurrent access permissions (WEB client & Mini Program).
BAC-EP01-1	Energy Management Solution Software Module,100 meters.
BAC-EP01-2	Energy Management Solution Software Module,300 meters.
BAC-EP01-3	Energy Management Solution Software Module,500 meters.
BAC-SP01-A1	1000 points Upgrade Package.
BAC-EP01-A1	100 meters Upgrade Package.
BAC-SP01-B2	Main Version Upgrade Service.
BAC-SP01-C1	1-Year Software Maintenance.
BAC-SP01-C2	3-Year Software Maintenance.
BAC-SP01-C3	5-Year Software Maintenance.
BAC-SP01-D1	Hot Standby Function (requires additional purchase of an industrial computer).
BAC-SP01-E1	Open data interface, transmission functionality only.
BAC-SP01-E2	Open data interface, transmission and control functionality.
BAC-SP01-F1	Web Access Permissions (WEB client & Mini Program access license).
BAC-KNX1-1	KNX System Management Module Software License.

XDisplay Series Smart All-In-One Machines



Overview

The XDisplay series smart all-in-one machine is a capacitive touch screen embedded with the edge configuration software of Advenco. It is a device with multiple interaction capabilities for the smart building market. Product design focuses on independent control across industries and vertical fields, as well as multiple applications such as regions/spaces. The product is equipped with a professional level visual effects graphics library for selection, to meet the configuration needs of different customers.

The BAC-4031-070 and BAC-4041-100 models of smart all-in-one machines are equipped with the Android 10 operating system, supporting BACnet IP, Modbus TCP, and Modbus RTU communication protocols, and can be integrated into LUBAN systems or other third-party standard BACnet systems through HTTP or MQTT protocols.

Features

- Equipped with Android 10 mainstream operating system, it has the characteristics of higher system version, lower memory consumption, and higher running efficiency;
- Paired with a 7-inch or 10.1-inch full view LCD screen;
- Anti interference capacitive touch screen;
- Fully enclosed design with IP65 touch surface, dustproof and waterproof;
- Small structural space occupation, simple installation, suitable for flush installation, can meet indoor and semi outdoor environments for use;

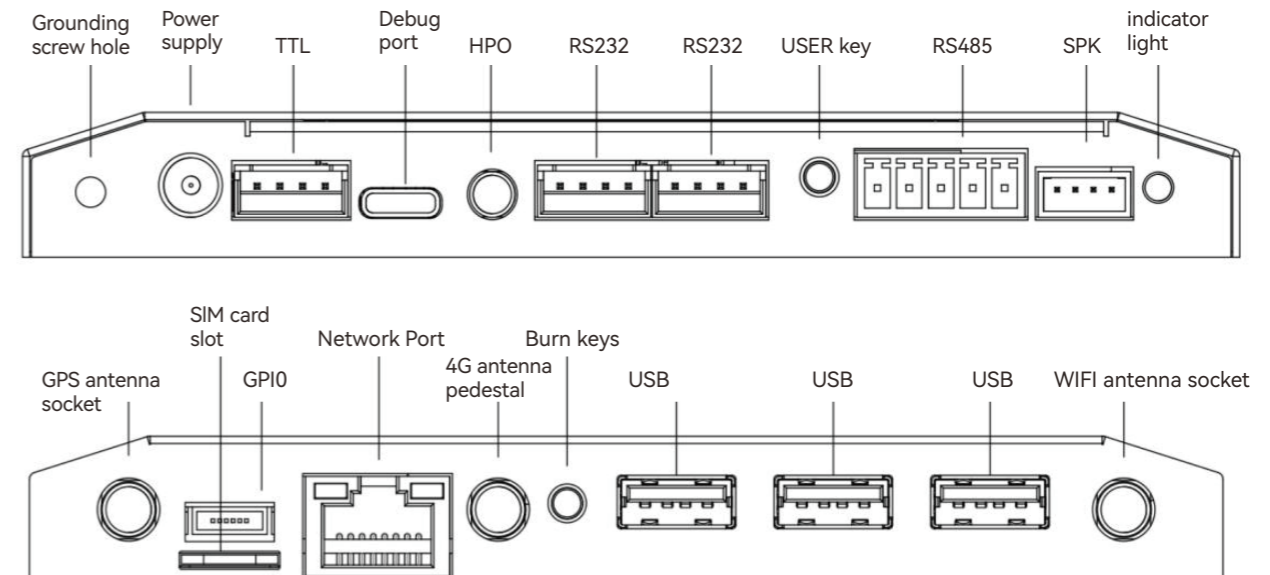
Order Information

Model No.	Description
BAC-4031-070	XDisplay smart all-in-one machine, Android 10 operating system, 7-inch capacitive touch screen
BAC-4041-100	XDisplay smart all-in-one machine, Android 10 operating system, 10.1-inch capacitive touch screen

Technical Specifications

Model No.	BAC-4031-070	BAC-4041-100
CPU processor	A133P/4-core A53 main frequency 1.8GHz	
Running memory	2GB	
EMMC	16GB	
GPU	GE8300	
Operating system	Android 10	
Screen size	7 inch	10.1 inch
Brightness (typical)	400cd/m ²	450cd/m ²
Resolution	1024*600	800*1280
Angle of view	Full perspective	
Touch form	Capacitive type	
Overall dimensions (WxHxD)	195.5*127.3*26.7 mm	262.3*176.3*26.6 mm
Audio	1 mono MIC / stereo HPO, 1 stereo SPK	
Serial port	2 RS485 ports, 2 RS232 ports (optional), 1 TTL port (optional)	
USB	3 USB hosts and 1 USB DEVICE	
Ethernet	1 Adaptive network interface	
WIFI	WiFi 2.4G	
LED	1 route, system indicator light	
Power supply	DC 12V/24V ± 5% power supply	
Power consumption	Maximum power of 36 watts	
Environmental condition	Work: 14 ~ 140°F (-10 ~ 60 °C), 5 ~ 90% RH Storage: -4°F ~ 158°F (-20 ~ 70 °C), 0 ~ 95% RH	

Hardware Interface Description



XDisplay Series Smart All-In-One Machine



Overview

The XDisplay series smart all-in-one machine is a capacitive touch screen embedded with the edge configuration software of Advenco. It is a device with multiple interaction capabilities for the smart building market. Product design focuses on independent control across industries and vertical fields, as well as multiple applications such as regions/spaces. The product is equipped with a professional level visual effects graphics library for selection, to meet the configuration needs of different customers.

The BAC-4051-150 model smart all-in-one machine is equipped with the Android 11 operating system, supports BACnet IP, Modbus TCP, and Modbus RTU communication protocols, and can be integrated into LUBAN systems or other third-party standard BACnet systems through HTTP or MQTT protocols.

Features

- Equipped with the mainstream Android 11 operating system, it has the characteristics of higher system version, lower memory consumption, and higher running efficiency;
- Seamless integration with various building automation systems;
- Paired with a 15.6-inch fully fitted full view LCD screen;
- Anti interference capacitive touch screen;
- Fully enclosed design of the whole machine, IP65 dustproof and waterproof touch surface;
- Embedded Farad capacitor can maintain RTC for 20 days after power failure;
- Small structural space occupation, simple installation, suitable for tablet installation, can meet indoor environment use;

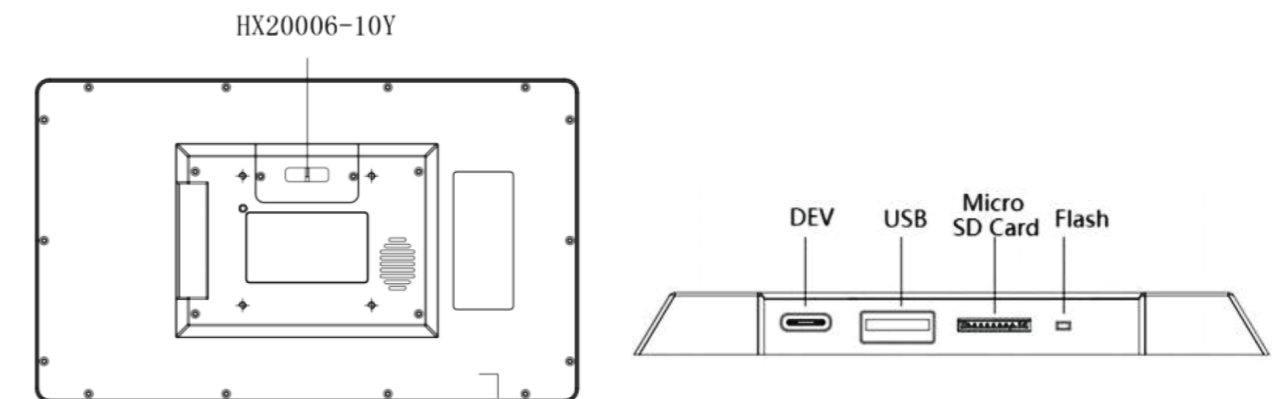
Order Information

Model No.	Description
BAC-4051-150	XDisplay smart all-in-one machine, Android 11 operating system, 15.6-inch capacitive touch screen

Technical Specifications

CPU processor	RK3568/quad core A55, main frequency 2.0GHz
Running memory	2GB
EMMC	32GB
GPU	Mali-G52
NPU	Supports 1Tops computing power
Operating system	Android 11
Screen size	15.6 寸
Brightness (typical)	300cd/m ²
Resolution	1920 x 1080
Angle of view	Full perspective
Touch form	Capacitive type
Overall dimensions (WxHxD)	366.4 x 216.4 x 19.4
Audio	Built in mono speaker 8 Ω/2W, optional dual channel 8 Ω/2W
Serial port	1 default RS485 port, optional TTL, RS232, CAN
USB	1 USB Host 3.0 port, 1 USB Device port
WIFI/BT	Standard WiFi 6 2.4G/5G, standard BT5.4
Ethernet	1 Adaptive network interface
TF card	1 Standard TF card slot
Power supply	DC 12V/24V ± 5% power supply
Power consumption	Maximum power of 24 watts
Super capacitor	It takes up to 30 minutes to fully charge, and shutting down after fully charging can maintain RTC for 20 days
Environmental condition	Work: 14 ~ 122°F (-10 ~ 50 °C), 5 ~ 90% RH Storage: -4°F ~ 140°F (-20 ~ 60 °C), 0 ~ 95% RH

Hardware Interface Description



Edge Controller XNC Professional Series

Overview

The XNC Professional Series edge controllers are advanced IP programmable controllers which are part of Advenco LUBAN solutions. The controllers are designed for a wide variety of complex applications, such as cooling, heating, water supply and drainage, lighting, air handling unit and ventilation systems, etc. These devices feature RS485 ports for BACnet™ MS/TP, Modbus RTU, Ethernet ports for MQTT, BACnet™ IP and Modbus TCP, KNX IP, OPC UA Server/Client devices.

Equipped with built-in real-time clock, the XNC Professional Series controllers enable time-based related functions, such as schedules, calendars, alarms, and trends. The controllers continue to perform time based operations even when disconnected from the system network. Furthermore, the super-capacitor inside of the XNC Professional Series controllers also can retain the clock up to 72 hours after power failure.



Features

- Delivers higher performance with Dual-core ARM Cortex-A7 32-bit CPU.
- BTL tested BACnet communication on BACnet IP or MS/TP, conforms to BACnet™ Standard ANSI/ASHRAE 135 protocol version 1.20 (ISO 16484-5).
- BACnet Auto-Discovery enables seamless integration of new devices with no manual configuration.
- Adaptable to Linux/Open Harmony operating system for diverse market requirements.
- Engineering and commissioning with the XControl tool using graphical function charts.
- 512MB memory and 4GB flash support standard or custom complex applications downloading from XControl.
- Integration of Modbus data points via RTU and / or TCP.
- End-of-Line (EOL) switch enables the controller to act as termination device on the communication bus.
- Pluggable terminal blocks for easy installation and maintenance.
- Modern design LED to show the operational status of the controller.
- Standard DIN rail mounting.

Order Information

Model No.	Point Capacity (Max)	Ethernet Port	RS485 ↓ Port	USB Port	Onboard I/O
BAC-3551-150	1000	2	3	1	9UI 2DO 4AO
BAC-3551-240	1000	2	3	1	16UIO 5DI 3DO
BAC-3451-030	1000	2	3	1	N/A
BAC-3551-151	3000	2	3	1	9UI 2DO 4AO
BAC-3551-241	3000	2	3	1	16UIO 5DI 3DO
BAC-3451-031	3000	2	3	1	N/A

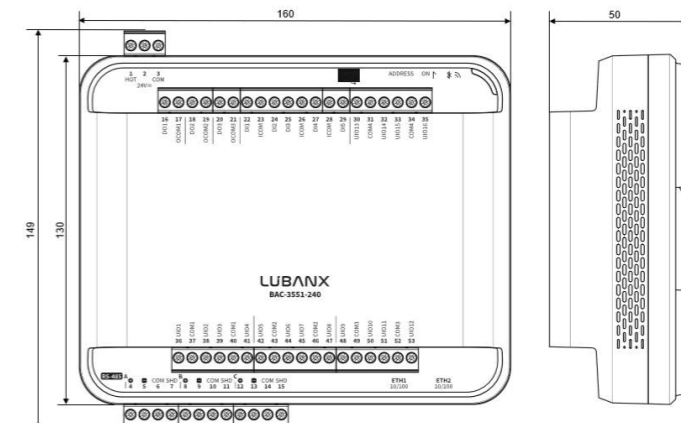
Remark: RS485 ↓ Port means the connected extension port of the controller

Technical Specifications

Processor	Dual-core ARM Cortex-A7 32-bit
Memory	512MB RAM and 4GB flash memory
Operating System	Linux/Open Harmony
Power Requirement	24VAC±20%, 50/60Hz; 24VDC (-10%~+20%)
Power Consumption	12 VA (Typical)
Real-Time Clock (RTC)	Super-capacitor maintains power to the onboard real-time clock for a maximum of 72 hours when supply power to the controller is disconnected.
Environment	Operating: -4°F to 122°F (-20°C to 50°C); 10 to 90% RH non-condensing Storage: -40°F to 158°F (-40°C to 70°C); 5 to 95% RH non-condensing
Communications Protocol	MQTT, BACnet IP, BACnet MS/TP, Modbus TCP, Modbus RTU, KNX IP, OPC UA Server/Client
Terminations and Ports	I/O: Pluggable screw terminal blocks Power Supply & RS485: 2-wire or 3-wire pluggable screw terminal blocks Ethernet: RJ45 ports
Protection	IP20(IEC529)
Housing Material	ABS+PC
Certification	CE, RoHS, REACH, BTL(B-BC)
Mounting	35mm DIN rail mounting (horizontal orientation)
Dimensions (W×H×D)	160mm×149mm×50mm
Weight	0.55kg

Input/Output	
UI	0-10VDC, 4-20mA, Resistance, Dry contact
AO	0-10VDC, 4-20mA
DO	TRIAC output 24 VAC (requires external power supply)
DI	Dry Contact, Pulse counting (Max.50Hz)
UIO	Input: 0-10VDC, 4-20mA, Resistance, Dry contact Output: 0-10VDC, 4-20mA
UI Resolution	24 bit
AO Resolution	16 bit
UIO Resolution	Input: 16 bit Output: 13 bit

Dimensions (mm)



Edge Controller XNC Standard Series

Overview

The XNC Standard Series edge controllers are advanced IP programmable controllers which are part of Advenco LUBAN solutions. The controllers are designed for a wide variety of complex applications, such as cooling, heating, water supply and drainage, lighting, air handling unit and ventilation systems, etc. These devices feature a RS485 port for BACnet™ MS/TP, Modbus RTU, Ethernet ports for MQTT, BACnet™ IP and Modbus TCP devices. The controllers continue to perform time-based operations even when disconnected from the system network.



Features

- Delivers high performance with ARM Cortex-M4 32-bit MCU.
- BTL tested BACnet communication on BACnet IP or MS/TP, conforms to BACnet™ Standard ANSI/ASHRAE 135 protocol version 1.20 (ISO 16484-5).
- BACnet Auto-Discovery enables seamless integration of new devices with no manual configuration.
- Adaptable to Open Harmony operating system for diverse market requirements.
- Engineering and commissioning with the XControl tool using graphical function charts.
- Support standard or custom complex applications downloading from XControl.
- Integration of Modbus data points via RTU and / or TCP.
- End-of-Line (EOL) switch enables the controller to act as termination device on the communication bus.
- Pluggable terminal blocks for easy installation and maintenance.
- Modern design LED to show the operational status of the controller.
- Standard DIN rail mounting.

Order Information

Model No.	Point Capacity (Max)	Ethernet Port	RS485 ↓ Port	Onboard I/O
BAC-3541-100	300	2	1	2UI 6DI 2DO
BAC-3541-460	300	2	1	4UIO 6DI
BAC-3441-020	300	2	2	N/A
BAC-3531-081	300	2	1	8UI
BAC-3531-082	300	2	1	6DI 2DO

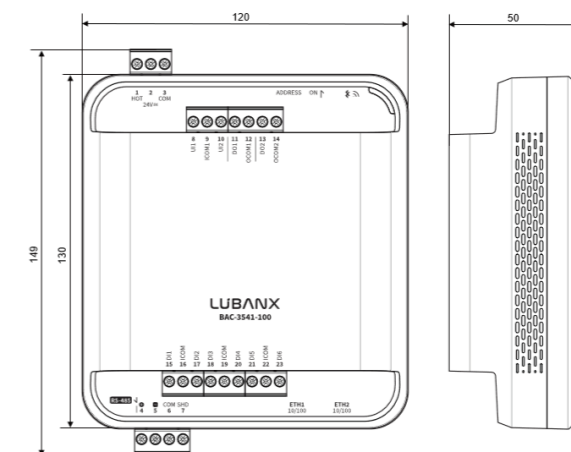
Remark: RS485 ↓ Port means the connected extension port of the controller.

Technical Specifications

Processor	ARM Cortex-M4 32-bit
Memory	2MB RAM and 10MB flash memory
Operating System	Open Harmony
Power Requirement	24 VAC±20%, 50/60Hz; 24 VDC (-10%~+20%)
Power Consumption	12 VA (Typical)
Environment	Operating: -4°F to 122°F (-20 to +50 °C); 10 to 90% RH non-condensing Storage: -40°F to 158°F (-40 to +70 °C); 5 to 95% RH non condensing
Communications Protocol	MQTT, BACnet IP, BACnet MS/TP, Modbus TCP, Modbus RTU
Terminations and Ports	I/O: Pluggable terminal blocks Power Supply & RS485: 2-wire or 3-wire pluggable terminal blocks Ethernet: RJ45 ports
Protection	IP20(IEC529)
Housing Material	ABS+PC
Certification	CE, RoHS, REACH, BTL(B-ASC)
Mounting	35mm DIN rail mounting (horizontal orientation)
Dimensions (W×H×D)	120mm×149mm×50mm
Weight	0.45kg

Input/Output	
UI	0-10VDC, 4-20mA, Resistance, Dry contact
AO	0-10VDC, 4-20mA
DO	TRIAC output 24 VAC (requires external power supply)
DI	Dry Contact, Pulse counting (Max.50Hz)
UIO	Input: 0-10VDC, 4-20mA, Resistance, Dry contact Output: 0-10VDC, 4-20mA
UI Resolution	24 bit
AO Resolution	16 bit
UIO Resolution	Input: 16 bit Output: 13 bit

Dimensions (mm)



Edge Controller XNC Lite Series

Overview

The XNC Lite Series edge controllers are advanced bus programmable controllers which are part of Advenco LUBANX solutions. The controllers are designed for a wide variety of complex applications, such as cooling, heating, water supply and drainage, lighting, air handling unit and ventilation systems, etc.

These devices feature RS485 ports for BACnet™MS/TP, Modbus RTU.

The controllers continue to perform time-based operations even when disconnected from the system network.



Features

- Delivers high performance with ARM Cortex-M4 32-bit MCU.
- BTL tested BACnet communication on BACnet IP or MS/TP, conforms to BACnet™ Standard ANSI/ASHRAE 135 protocol version 1.20 (ISO 16484-5).
- BACnet Auto-Discovery enables seamless integration of new devices with no manual configuration.
- Adaptable to Open Harmony operating system for diverse market requirements.
- Engineering and commissioning with the XControl tool using graphical function charts.
- Support standard or custom complex applications downloading from XControl.
- Integration of Modbus data points via RTU and / or TCP.
- BLE connection for engineering and commissioning.
- End-of-Line (EOL) switch enables the controller to act as termination device on the communication bus.
- Pluggable terminal blocks for easy installation and maintenance.
- Modern design LED to show the operational status of the controller.
- Standard DIN rail mounting.

Order Information

Model No.	Point Capacity (Max)	RS485 ↑ Port	RS485 ↓ Port	Onboard I/O
BAC-3542-100	100	1	1	2UI 6DI 2DO
BAC-3542-460	100	1	1	4UIO 6DI
BAC-3532-081	100	1	1	8UI
BAC-3532-082	100	1	1	6DI 2DO

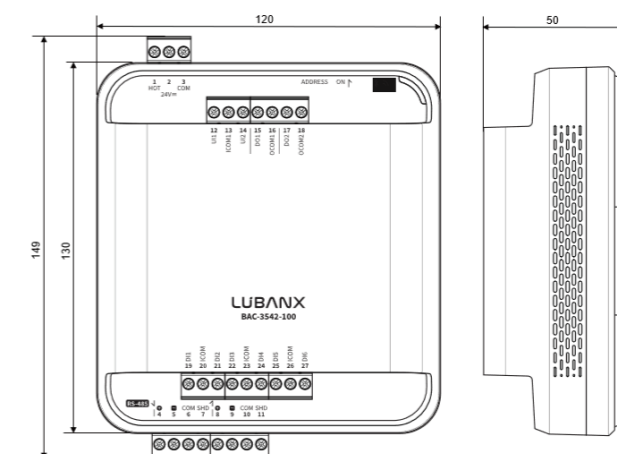
Remark: RS485 ↑ Port means the connected expansion port of the controller.
RS485 ↓ Port means the connected extension port of the controller.

Technical Specifications

Processor	ARM Cortex-M4 32-bit
Memory	2MB RAM and 10MB flash memory
Operating System	Open Harmony
Power Requirement	24 VAC±20%, 50/60Hz; 24 VDC (-10%~+20%)
Power Consumption	12 VA (Typical)
Environment	Operating: -4°F to 122°F (-20 to +50 °C); 10 to 90% RH non-condensing Storage: -40°F to 158°F (-40 to +70 °C); 5 to 95% RH non-condensing
Communications Protocol	BACnet MS/TP, Modbus RTU
Terminations	I/O: Pluggable terminal blocks Power Supply & RS485: 2-wire or 3-wire pluggable terminal blocks
Protection	IP20(IEC529)
Housing Material	ABS+PC
Certification	CE, RoHS, REACH, BTL(B-ASC)
Mounting	35mm DIN rail mounting (horizontal orientation)
Dimensions (W×H×D)	120mm×149mm×50mm
Weight	0.45kg

Input/Output	
UI	0-10VDC, 4-20mA, Resistance, Dry contact
AO	0-10VDC, 4-20mA
DO	TRIAC output 24 VAC (requires external power supply)
DI	Dry Contact, Pulse counting (Max.50Hz)
UIO	Input: 0-10VDC, 4-20mA, Resistance, Dry contact Output: 0-10VDC, 4-20mA
UI Resolution	24 bit
AO Resolution	16 bit
UIO Resolution	Input: 16 bit Output: 13 bit

Dimensions (mm)



XNC I/O Extension Module Series

Overview

The XNC I/O extension modules are I/O points supplement modules of bus type to XNC series Edge Controllers, which are part of Advenco LUBAN solutions. The modules are designed for a wide variety of complex applications, such as cooling, heating, water supply and drainage, lighting, air handling unit and ventilation systems, etc. These devices feature a RS485 port for BACnet™ MS/TP, Modbus RTU.



Features

- Delivers high performance with ARM Cortex-M4 32-bit MCU.
- Standard BACnet MS/TP communications protocol application.
- BACnet auto-discovery enables seamless integration of new devices with no manual configuration.
- Pluggable terminal blocks for easy installation and maintenance.
- Modern design LED to show the operational status of the controller.
- Standard DIN rail mounting

Order Information

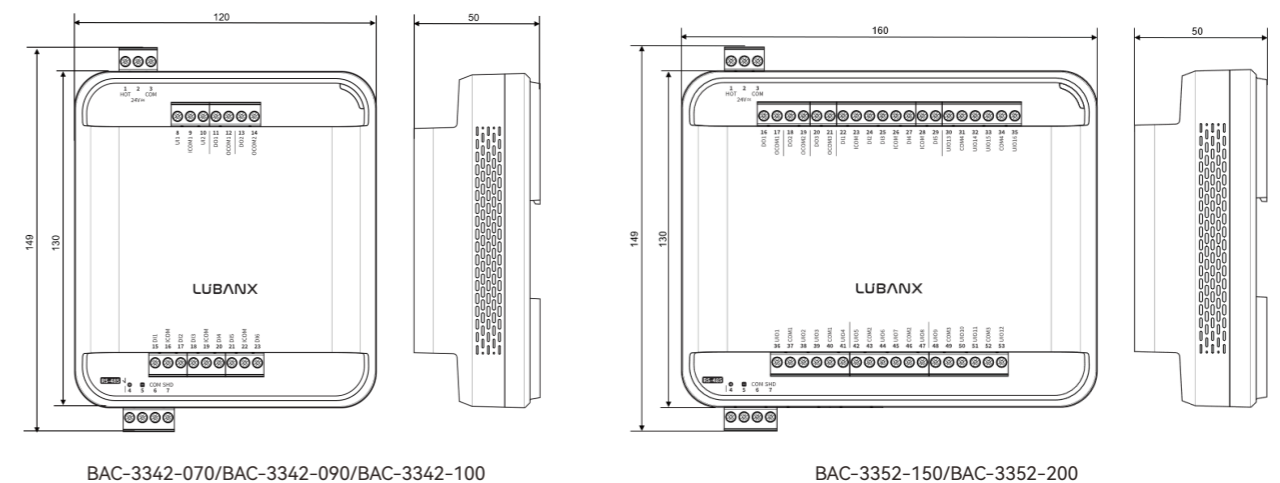
Model No.	RS485 ↑ Port	Onboard I/O
BAC-3342-070	1	7RO
BAC-3342-090	1	6DI 3DO
BAC-3342-100	1	4UI 6DI
BAC-3352-150	1	4UI 8DI 3DO
BAC-3352-200	1	4UI 3AO 10DI 3DO

Technical Specifications

Processor	ARM Cortex-M4 32-bit
Memory	256KB flash memory and 48KB SRAM
Power Requirement	24 VAC±20%, 50/60Hz; 24 VDC (-10%~+20%)
Power Consumption	12 VA (Typical)
Environment	Operating: -4°F to 122°F (-20 to 50°C); 10 to 90% RH non-condensing Storage: -40°F to 158°F (-40 to 70°C); 5 to 95% RH non-condensing
Communications Protocol	BACnet MS/TP, Modbus RTU
Terminations	I/O: Pluggable terminal blocks Power Supply & RS485: 2-wire or 3-wire pluggable terminal blocks
Protection	IP20(IEC529)
Housing Material	ABS+PC
Certification	CE, RoHS, REACH
Mounting	35mm DIN rail mounting (horizontal orientation)
Dimensions (W×H×D)mm	BAC-3342-070/BAC-3342-090/BAC-3342-100: 120×149×50 BAC-3352-150/BAC-3352-200: 160×149×50
Weight	BAC-3342-070/BAC-3342-090/BAC-3342-100: 0.55kg BAC-3352-150/BAC-3352-200: 0.45kg

Input/Output	
UI	0-10VDC, 4-20mA, Resistance, Dry contact
AO	0-10VDC, 4-20mA
DO	TRIAC output 24 VAC (requires external power supply)
RO	Relay output 24V (supporting AC and DC)
DI	Dry Contact, Pulse counting (Max.50Hz)
UI Resolution	12 bit
AO Resolution	16 bit

Dimensions (mm)



BCS-1T Series Temperature Sensor

Overview

The BCS-1T Series Temperature Sensors provide high accuracy solutions for a wide variety of temperature sensing medium needs, including duct mount, pipe mount, and wall mount. It offers plastic enclosure and metal probe rod for all types supports multiple control signal outputs.

Features

- Up to 3 mounting and output options available.
- New quick-install industrial appearance design for rapid installation and deployment.
- Imported Heraeus Class A sensor chip, high accuracy, fast response, and low temperature drift.
- Excellent anti-interference ability and protection function, with IP65, CE and RoHS.

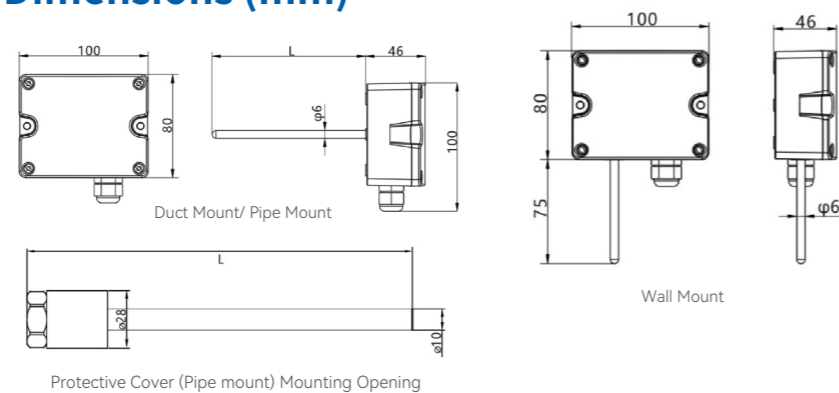


Technical Specifications Order Information

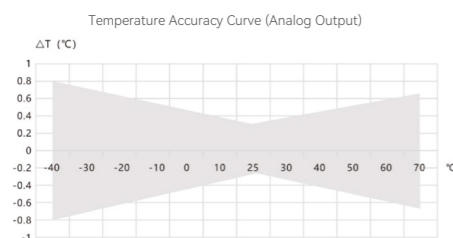
Sensing Element	PT1000 level A
Measuring Range	-40°C ~ 80°C (duct/ wall) -40°C ~ 100°C (pipe)
Temperature Accuracy	Resistance output: ±0.2°C at 0°C Analog output: ±0.3°C at 25°C (see figure 1)
Output Signal	0V~10V, 4mA~20mA, PT1000
Operating Environment	-40°C ~ 70°C, 0~95%RH (non-condensing)
Power Supply	For 0V~10V 15VDC~35VDC / 24VAC±20% For 4mA~20mA 18.5VDC~35VDC (RL=500Ω), 8.5VDC~35VDC (RL=0Ω)
Output Load	≥3KΩ (0V~10V) ≤500Ω (4mA~20mA)
Wiring	Wire Connector M16 waterproof connector suitable for 4~8mm wire Terminal Wire Gauge 20~18AWG
Certifications	CE, RoHS
Protection Class	IP65
Weight	NW: 157.6g (duct), 327.6g (pipe), 186.9g (wall) GW: 305.1g (duct), 440.6g (pipe), 261.7g (wall)
Material	PC housing, stainless-steel probe and protective cover

Model No.	Type	Measuring Range	Measuring Accuracy	Output Signal	Probe Length
BCS-1TDV-001F	Duct mount	-40°C~80°C	±0.3°C@25°C	0V~10V	100xφ6
BCS-1TDV-003F				200xφ6	
BCS-1TDA-001F				4mA~20mA	100xφ6
BCS-1TDA-003F				200xφ6	
BCS-1TDP-001F				PT1000	100xφ6
BCS-1TDP-003F				200xφ6	
BCS-1TPV-0011	Pipe mount	-40°C~100°C	±0.3°C@25°C	0V~10V	150xφ6
BCS-1TPV-0021				200xφ6	
BCS-1TPV-0031				4mA~20mA	100xφ6
BCS-1TPA-0011				150xφ6	
BCS-1TPA-0021				200xφ6	
BCS-1TPA-0031				200xφ6	
BCS-1TPP-0011	Wall mount	-40°C~80°C	±0.2°C@0°C	PT1000	100xφ6
BCS-1TPP-0021				150xφ6	
BCS-1TPP-0021				200xφ6	
BCS-1TEV-000M				0V~10V	75xφ6
BCS-1TEA-000M				4mA~20mA	
BCS-1TEP-000M				PT1000	

Dimensions (mm)



Temperature Accuracy Curve



BCS-1H Series Temperature & Humidity Sensor

Overview

The BCS-1H Series Temperature and Humidity Sensors are applicable for measuring the temperature and relative humidity of gas in air ducts as well as indoor and outdoor air, and support multiple control signal outputs.

Features

- Multiple installation and output options available
- New quick-install industrial appearance design for rapid installation and deployment
- Imported sensors with high accuracy, fast response and excellent long-term stability
- Outstanding anti-interference capability and protection functions



Technical Specifications

Relative Humidity	Measuring Range: 0%~100%RH Measuring Accuracy: ±3% (20°C and 20~80%RH) Response Time: ≤10s (20°C, in slow-flow air)
Temperature	Measuring Range: -40°C~80°C Measuring Accuracy: Duct mount: ±0.3°C (0°C~60°C, see Figure 1) Room: ±0.3°C (20°C, see Figure 2) Outside: ±0.5°C (20°C, see Figure 3)
Output Signal	0V~10V, 4mA~20mA, Modbus RTU (RS485)
Operating Environment	-20°C~60°C, 5%~95%RH (non-condensing)
Power Supply	0V~10V/RS485: 15VDC~35VDC/24VAC±20% 4mA~20mA: Duct/ Outside: 18.5VDC~35VDC (RL=500Ω), 8.5VDC~35VDC (RL=0Ω); Room: 19.5~35VDC (RL=500Ω)/9.5~35VDC (RL=0Ω)
Output Load	≥2KΩ (0V~10V), ≤500Ω (4mA~20mA)
Wiring	Wire Connector: M16 waterproof connector, suitable for 4~8mm wire Terminal Wire Gauge: 20~18AWG
Probe Size	Ø15x200mm (duct mount)
Certifications	CE, RoHS
Protection Class	Room: IP30, Duct mount/ Outside: IP65
Weight	NW: 178g (duct), 636.3g (outside), 97.2g (room) GW: 332g (duct), 733.9g (outside), 148.4g (room)
Material	PC housing, PA6 probe (duct), ABS protective cover(outside)

Order Information

Model No.	Type	Output Signal/ Protocol	Measuring Accuracy	Probe Length
BCS-1HDV-V00F	Duct mount	0V~10V	±0.3°C @0°C~60°C	200mm
BCS-1HDA-A00F		4mA~20mA		
BCS-1TDA-001F		Modbus RTU (RS485)		
BCS-1HRV-V00W	Room	0V~10V	±3%RH @20%~80%RH	N/A
BCS-1HRA-A00W		4mA~20mA		
BCS-1HRR-R00W		Modbus RTU (RS485)		
BCS-1HEV-V00M	Outside	0V~10V	±0.5°C @20°C	N/A
BCS-1HEA-A00M		4mA~20mA		
BCS-1HER-R00M		Modbus RTU (RS485)		

Temperature Accuracy Curves

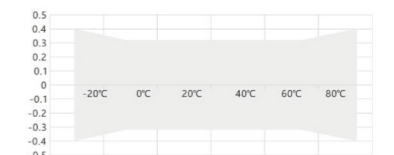


Figure 1: Duct Mount

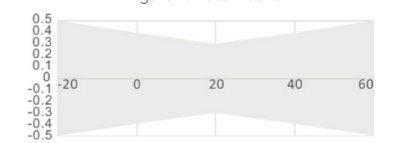


Figure 2: Room

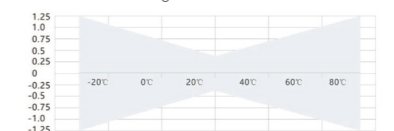
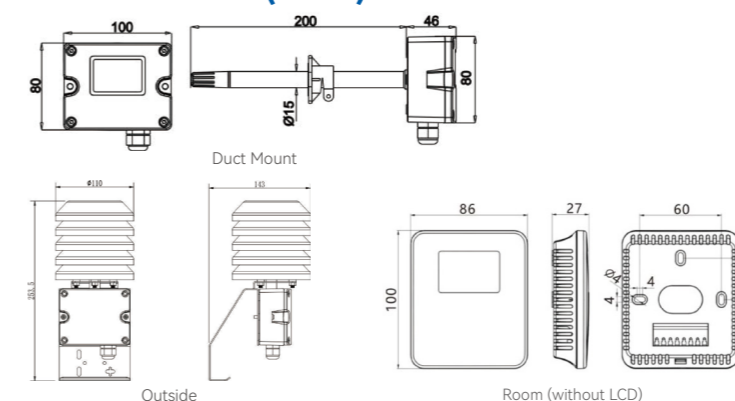


Figure 3: Outside

Dimensions (mm)



Note: For current output, a humidity circuit must be used; otherwise, the product will not function. When the RS485 output type uses an AC power supply, an isolated 24VAC power supply is required.

BCS-1S Series Frost Protection Switch

Overview

The BCS-1S Series Frost Protection Switch is used to give frost protection in safety monitoring systems. It can also be used to detect temperature changes to the target object. When the temperature is higher than (or lower than) the setting temperature, it outputs a switch control signal to turn on or off the target equipment.



Features

- High control accuracy and small minimum temperature difference.
- Easy operation and easy installation.
- Wide operating temperature range.
- Long mechanical life and strong vibration resistance.

Order Information

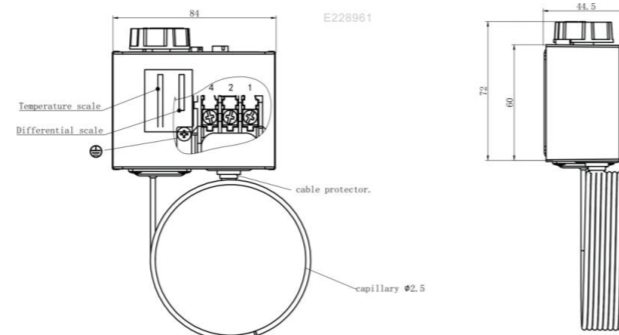
Model No.	Setting Temp. Range	Reset Difference Range	Factory Settings (Temp. & Temp. Difference)
BCS-1SA0-1	-30°C~15°C	2°C~10°C	7.5°C/1°C
BCS-1SB0-1	-5°C~30°C	2°C~12°C	7.5°C/1°C

Technical Specifications

Reset	Automatic
Switch Type	Single-Pole Double-Throw (SPDT)
Switch Capacity	240VAC 10A; 120VAC 20A
Setting Temp. Range	-30~15°C / -5~30°C
Reset Temp. Range	2~10°C / 2~12°C
Repetitive Error	1°C
Medium Temperature	-40°C~120°C
Operating Environment	-25°C~65°C, 0%~95%RH (non-condensing)
Max Overload Temp.	120°C
Capillary Length	1m
Wiring	Wire: Suitable for cables with a diameter of 6~14mm Connection: locking Insert, screw washer and terminal through-hole screw
Protection Class	IP44
Weight	NW: 329g, GW: 505g
Material	ABS Shield + Galvanized Steel Plate Base

Dimensions (mm)

Attention
1. Pls remove the temperature adjustment knob and fixingplate before adjust the temperature. 2. Pls fix the temperature adjustment knob and fixing plate after finishing the temperature adjustment.



BCS-2P Series Pressure Sensor

Overview

The BCS-2P Series Pressure Sensors can be used in central air-conditioning water systems, as well as for pressure measurement of liquids or gases in other applications, and supports multiple control signal outputs.



Features

- Oil-filled diffused silicon with high accuracy and high overload capacity
- Excellent corrosion resistance and wear resistance
- Adopts ASIC technology for digital compensation
- Compact structure
- Convenient installation and simple operation

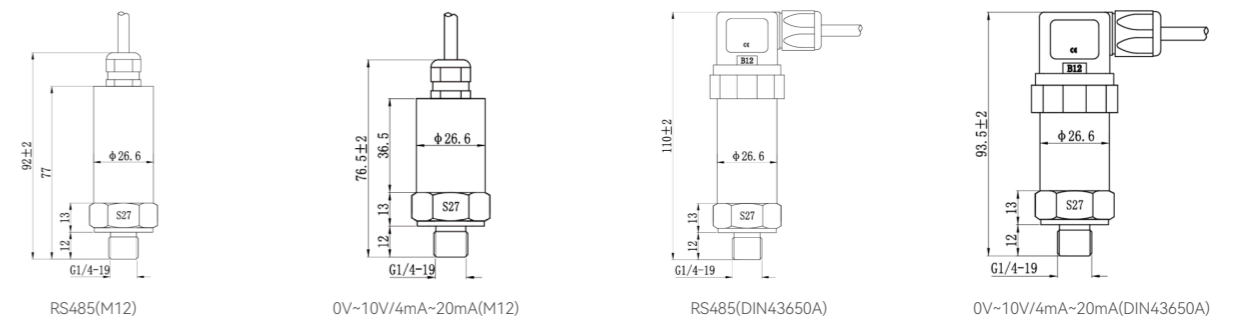
Technical Specifications

Measuring Range	0~10Bar, 0~16Bar, 0~25Bar
Measuring Accuracy	±0.5%FS (default), ±0.25%FS (optional)
Zero Tolerance	±0.5%FS
Span Tolerance	±0.5%FS
Medium Temp.	-20°C~85°C
Compensated Temp.	-10°C~70°C
Operating Environment	-20°C~85°C
Storage Environment	-40°C~100°C
Response Time	≤6ms
Overload Pressure	1.5*FS
Burst Pressure	3*FS
Output Signal	0V~10V, 4mA~20mA, Modbus RTU (RS485)
Power Supply	For 0V~10V output: 12~36VDC For 4mA~20mA output: 8~36VDC For Modbus output: 10~30VDC
Wiring	DIN43650A (Hersman Joint), M12 (Waterproof Connector) 1m extension wire
Certifications	CE, RoHS
Protection Class	IP65
Weight	NW: 201.6g, GW: 237.4g
Material	Housing: stainless steel + PVC + PE O-ring Sealing: Fluor rubber (default)

Order Information

Model No.	Measuring Range	Output Signal/ Protocol	Wiring	Connection	Cable Length
BCS-2P3V-1N21	0~10Bar	0V~10V	M12	G 1/4	1m
BCS-2P3V-2N21	0~16Bar				
BCS-2P3V-3N21	0~25Bar				
BCS-2P3A-1N21	0~10Bar	4mA~20mA	M12	G 1/4	1m
BCS-2P3A-2N21	0~16Bar				
BCS-2P3A-3N21	0~25Bar				
BCS-2P3M-1N21	0~10Bar	Modbus RTU (RS485)	M12	G 1/4	1m
BCS-2P3M-2N21	0~16Bar				
BCS-2P3M-3N21	0~25Bar				
BCS-2P3V-1N11	0~10Bar	0V~10V	DIN43650A	G 1/4	1m
BCS-2P3V-2N11	0~16Bar				
BCS-2P3V-3N11	0~25Bar				
BCS-2P3A-1N11	0~10Bar	4mA~20mA	DIN43650A	G 1/4	1m
BCS-2P3A-2N11	0~16Bar				
BCS-2P3A-3N11	0~25Bar				
BCS-2P3M-1N11	0~10Bar	Modbus RTU (RS485)	DIN43650A	G 1/4	1m
BCS-2P3M-2N11	0~16Bar				
BCS-2P3M-3N11	0~25Bar				

Dimensions (mm)



BCS-2D1 Series Liquid Differential Pressure Sensor

Overview

The BCS-2D1 Series Liquid Differential Pressure Sensors are mainly used for liquid pressure measurement. They adopt silicon piezoresistive sensor chip as their sensitive element, and output standard industrial signals through high-temperature compensation, digital correction, and signal conditioning, while supporting multiple control signal outputs.

Features

- Oil-filled diffused silicon with high accuracy and high overload capacity
- High stability and low drift
- Compact structure
- Convenient installation and simple operation



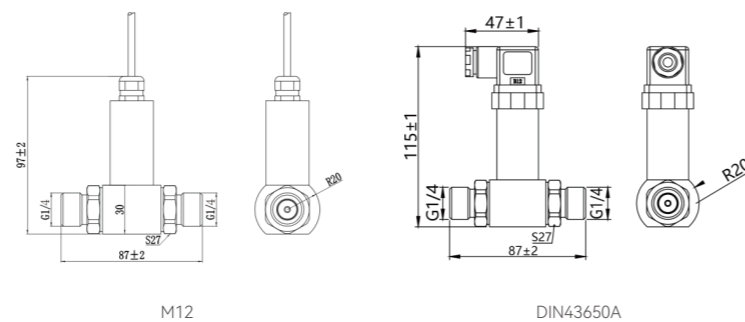
Technical Specifications

Measuring Range	0~100kPa, 0~1000kPa
Measuring Accuracy	±0.5%FS (default), ±0.25%FS (optional)
Stability	<0.5%FS/year
Medium Temp.	-10°C~60°C
Compensation Temp.	0~100kPa: 0~50°C; 0~1000kPa: -10~70°C
Operating Temp.	-20°C~85°C
Storage Temp.	-40°C~100°C
Reaction Time	≤6ms
Max Static Pressure	1.5*FS
Overload Pressure	1.5*FS
Burst Pressure	3*FS
Output Signa	0V~10V, 4mA~20mA, Modbus RTU (RS485)
Power Supply	For 0V~10V output: 12~36VDC For 4mA~20mA output: 10~36VDC For Modbus output: 10~30VDC
Wiring	DIN43650A (Hersman Joint), M12 (Waterproof Wire)1m extension wire
Certifications	CE, RoHS
Protection Class	IP65
Weight	NW: 201.6g, GW: 237.4g
Material	Housing: Stainless steels + PVC +PE O-ring Sealing: Fluor rubber (default)

Order Information

Model No.	Measuring Range	Output Signal/ Protocol	Wiring	Connection	Cable Length	
BCS-2D1V-1N21	0~100kPa	0V~10V	M12	G 1/4	1m	
BCS-2D1V-2N21	0~1000kPa					
BCS-2D1A-1N21	0~100kPa	4mA~20mA				
BCS-2D1A-2N21	0~1000kPa					
BCS-2D1M-1N21	0~100kPa	Modbus RTU (RS485)				
BCS-2D1M-2N21	0~1000kPa					
BCS-2D1V-1N11	0~100kPa	0V~10V				DIN43650A
BCS-2D1V-2N11	0~1000kPa					
BCS-2D1A-1N11	0~100kPa	4mA~20mA				
BCS-2D1A-2N11	0~1000kPa					
BCS-2D1M-1N11	0~100kPa	Modbus RTU (RS485)				
BCS-2D1M-2N11	0~1000kPa					

Dimensions (mm)



BCS-2D2 Series Air Differential Pressure Sensor

Overview

The BCS-2D2 Series Air Differential Pressure Sensors are mainly used for measuring the air differential pressure in air conditioning air systems and support multiple control signal outputs.

Features

- High-precision MEMS micro-pressure core
- Wide compensation temperature range and sensitive pressure response
- A variety of functional parameters can be set by DIP switches, and a wide range of applications
- 5-digit LCD digital display for clear readability
- High stability and long service life
- Manual zero pressure value calibration can be carried out on site
- Screwless clamshell buckle design for easy wiring and setting



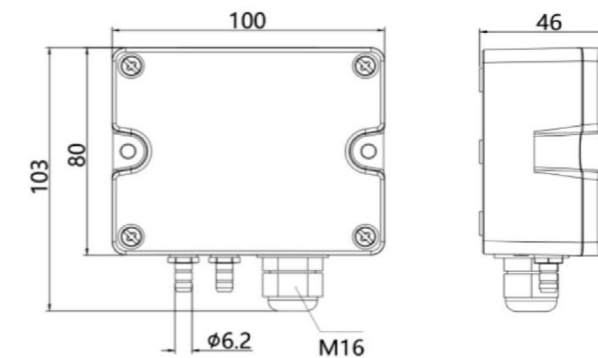
Technical Specifications

Measuring Range	-50~50Pa (default), -100~100Pa (options check DIP setting) -1000~1000Pa (default, see DIP setting for other options) -2500~2500Pa (default), -10000~10000Pa (DIP setting)
Overload Pressure	5kPa, 10kPa, 25kPa
Measuring Accuracy	±2Pa (-50~50Pa), ±1% FS
Stability	±2% FS/Year (-50~50Pa), <0.5% FS/Year (-1000~1000Pa, -2500~2500Pa)
Compensation Temp.	-10°C~60°C
Operating Temp.	-20°C~70°C
Storage Temp.	-40°C~70°C
Reaction Time	0.5s (default), 1s/ 2s/ 4s (DIP setting)
Output Signal	0V~10V & 4mA~20mA, Modbus RTU (RS485)
Power Supply	0V~10V & 4mA~20mA output: 12~30VDC/ 24VAC±20% Modbus RTU (RS485) output: 9~30VDC
Certifications	CE, RoHS
Protection Class	IP65
Weight	NW: 192.1g, GW: 336g
Material Of The Housing	PC

Order Information

Model No.	Measuring Range	Measuring Accuracy	Max Overload Pressure	Output Signal/ Protocol	Display
BCS-2D2U-100W	-50~50Pa	±2Pa	5kPa	0V~10V & 4mA~20mA	N/A
BCS-2D2U-200W	-1000~1000Pa	±1%FS	10kPa		
BCS-2D2U-300W	-2500~2500Pa	±1%FS	25kPa		
BCS-2D2M-100W	-50~50Pa	±2Pa	5kPa	Modbus RTU (RS485)	N/A
BCS-2D2M-200W	-1000~1000Pa	±1%FS	10kPa		
BCS-2D2M-300W	-2500~2500Pa	±1%FS	25kPa		
BCS-2D2U-110W	-50~50Pa	±2Pa	5kPa	0V~10V & 4mA~20mA	LCD Display
BCS-2D2U-210W	-1000~1000Pa	±1%FS	10kPa		
BCS-2D2U-310W	-2500~2500Pa	±1%FS	25kPa		
BCS-2D2M-110W	-50~50Pa	±2Pa	5kPa	Modbus RTU (RS485)	LCD Display
BCS-2D2M-210W	-1000~1000Pa	±1%FS	10kPa		
BCS-2D2M-310W	-2500~2500Pa	±1%FS	25kPa		

Dimensions (mm)



BCS-2L Series Immersion Liquid Level Sensor

Overview

The BCS-2L Series Immersion Liquid Level Sensors are mainly used for water level measurement in fields such as heating, ventilation and air conditioning (HVAC), water pool treatment, water pool, well and etc.

Features

- Adopts an oil-filled diffused silicon core with high precision and high overload capacity.
- Excellent corrosion resistance and wear resistance.
- Built-in temperature compensation, supporting the Modbus-485 communication protocol.
- The bottom stainless steel cap is detachable, which not only prevents accidental damage to the diaphragm but also facilitates regular cleaning.
- The top sensor adopts the latest double-layer waterproof structure, doubling the waterproof effect.



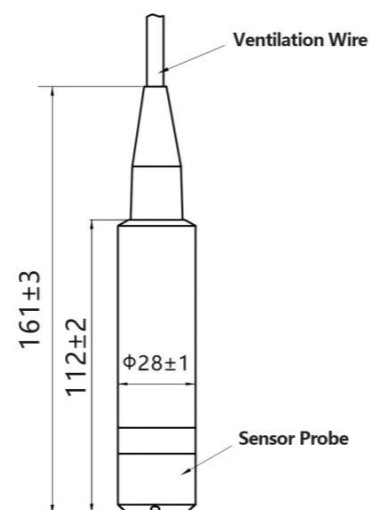
Technical Specifications

Applicable Medium	Water, liquids (compatible with stainless steel, PE, PVC, rubber)
Measuring Range	0~5m H ₂ O (water column)
Overload Pressure	1.5*FS
Medium Temp.	-20~85°C
Measuring Accuracy	±0.5%FS
Operating Temp.	-20°C~85°C
Storage Temp.	-40~100°C
Long-term Stability	<0.5% FS/year
Repeatability	Typical value: 0.05% FS; Maximum value: 0.08% FS
Hysteresis	Typical value: 0.05% FS; Maximum value: 0.08% FS
Zero Drift	Typical value: ±0.4% FS @25°C; Maximum value: ±1% FS @25°C
Sensitivity Drift	Typical value: ±0.4% FS @25°C; Maximum value: ±1% FS @25°C
Output Signal	0V~10V, 4mA~20mA, Modbus RTU (RS485)
Cable Length	6m
Power Supply	For 0V~10V output: 12~36VDC For 4mA~20mA output: 8~36VDC For Modbus output: 10~30VDC
Certifications	CE, RoHS
Protection Class	IP68
Weight	685.3g
Material	Housing: SS304 (stainless steel 304) + PE O-ring Sealing: Fluor rubber (default)

Order Information

Model No.	Measuring Range	Output Signal/ Protocol
BCS-2L1V-5	5m	0~10V
BCS-2L1A-5	5m	4~20mA
BCS-2L1M-5	5m	Modbus RTU (RS485)

Dimensions (mm)



BCS-2S Series Air Differential Pressure Switch

Overview

The BCS-2S Series Air Differential Pressure Switch is mainly used to monitor the status of air flow in components such as filters and fans in ventilation systems.

Features

- Multiple measuring ranges available
- Wide differential pressure range
- Long life cycle
- Easy to install



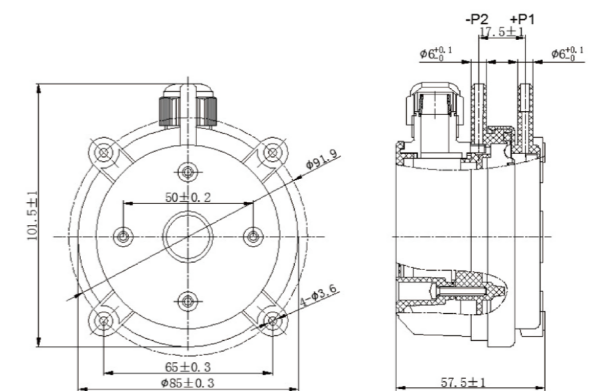
Technical Specifications

Pressure Range	20~200Pa, 40~400Pa, 100~1000Pa
Reset Differential Pressure	10Pa, 20Pa, 50Pa
Max Operating Pressure	10kPa
Accuracy	≤ ±15%FS, min. ±10Pa
Medium	air, non-flammable gases, and non-aggressive gases
Medium Temp.	-20°C~85°C
Storage Temp.	-40°C~85°C
Switch Capacity	1.5A, (0.4A) / 250VAC; 0.1A/24VDC
Conduit Entry	PG11 waterproof connector, outside diameter Φ5~10mm
Electrical Connection	6.35×0.8 AMP or screw wiring terminals
Pressure Connection	2× plastic tubes, outside diameter Φ6 mm; P1 is the positive pressure port, marked with "+"; P2 is the negative pressure port, marked with "-"
Reset Type	Automatic
Mechanical Lifecycle	1,000,000 cycles
Certifications	CE, RoHS
Protection Class	IP54
Weight	NW: 258g, GW: 303g
Material	PC housing cover, PA base, POM lower housing:
Included Accessories	1.5m of PVC hose 2* pressure tubes, 4* mounting screws 3* wiring terminals

Order Information

Model No.	Differential Pressure Range	Switching Differential Pressure (Hysteresis)
BCS-2S2U-1	20~200Pa	10Pa
BCS-2S2U-2	40~400Pa	20Pa
BCS-2S2U-3	100~1000Pa	50Pa

Dimensions (mm)



BCS-3D Series Dust Sensor

Overview

The BCS-3D Series Dust Sensors can be used to measure the concentration of PM2.5 or PM10 in indoor environments and support multiple control signal outputs.

Features

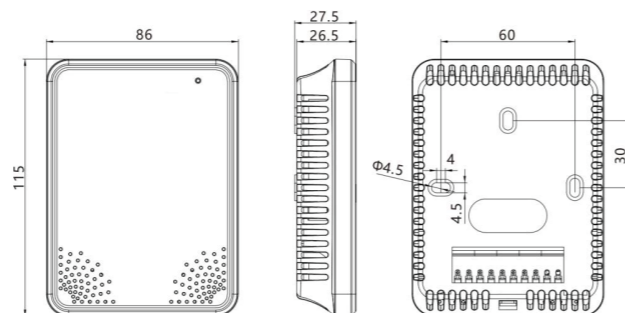
- Adopt laser dust sensor, with a detection particle size range of 0.3~10µm
- Multiple output methods optional to adapt to different scenario requirements
- Complete overvoltage and reverse connection protection, with high long-term reliability
- Optional relay output, enabling comprehensive independent control/alar functions
- Six-color LED indicator can intuitively indicate the degree of environment pollution
- Lightweight and elegant housing design, with standard 86-box installation hole spacing



Order Information

Model No.	Range	Output Signal/Protocol
BCS-3DRU-100W	PM2.5: 0~500µg/m³, Particle size: 0.3~2.5µm;	Modbus RTU (RS485)
BCS-3DRU-200W	PM10: 0~600µg/m³, Particle size: 0.3~10µm	0V~10V&4mA~20mA
BCS-3DRM-300W	PM2.5: 0~500µg/m³, Particle size: 0.3~2.5 & PM10: 0~600µg/m³, Particle size: 0.3~10	Modbus RTU (RS485)

Dimensions (mm)



Technical Specifications

Sensor	Laser dust sensor
Range	PM2.5: 0~500µg/m³, Particle size: 0.3~2.5µm PM10: 0~600µg/m³, Particle size: 0.3~10µm
Accuracy	PM2.5: ±10µg/m³ @0~100µg/m³, ±10%FS @100~500µg/m³ @25°C
Resolution	1µg/m³
Operating Environment	0°C~50°C, 5%~95%RH (no condensation)
Warm-up Time	≤2min
Responding Time	Single response time <1s in continuous measurement mode, comprehensive response time <10s
Output Signal	0V~10V & 4mA~20mA, Modbus RTU (RS485)
Power Supply	15~36VDC / 24VAC±20%
Storage Environment	-20°C~60°C, 5%~95%RH (no condensation)
Wiring	Terminal applicable wire gauge: 14~22AWG
Weight	NW: 142.3g, GW: 194.4g
Certifications	CE, RoHS
Protection Class	IP30
Material	PC housing

BCS-3Q Series Integrated Air Quality Sensor

Overview

The BCS-3Q Series Integrated Air Quality Sensor can be used to measure temperature, relative humidity, PM2.5& PM10, carbon dioxide, and formaldehyde (HCHO) concentration in indoor environments, as well as Volatile Organic Compound (VOC) concentration.

Features

- Built-in high-precision sensors for stable air quality measurement
- LCD display + three-color LED indicator can intuitively indicate air quality status, which can be turned off optionally
- Complete overvoltage and reverse connection protection, with high long-term reliability
- Built-in Modbus protocol, RS485 wiring
- Lightweight and beautiful shell design, standard 86 junction box installation hole spacing



Technical Specifications

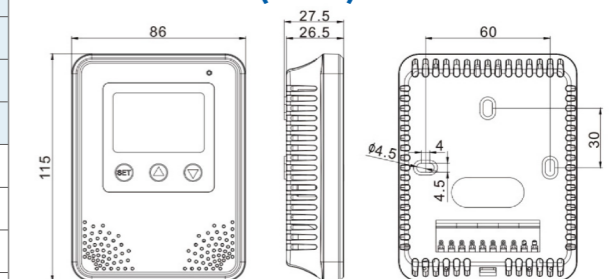
Temperature	Sensor	Digital temperature sensor
	Range	0°C~50°C
	Accuracy	±0.5°C@20°C, ≤±1°C@0~50°C
Relative Humidity	Sensor	Digital temperature sensor
	Range	0%~100%RH
	Accuracy	±3% (20°C and 20~80%RH)
PM2.5/PM10	Sensor	Laser dust sensor
	Range	PM2.5: 0~500µg/m³, Particle size: 0.3~2.5µm PM10: 0~600µg/m³, Particle size: 0.3~10µm
	Accuracy	PM2.5: ±10µg/m³ @0~100µg/m³, ±10%FS@100~500µg/m³@25°C
	Resolution	1µg/m³
Carbon Dioxide	Sensor	NDIR sensor
	Range	0~5000ppm
	Accuracy	± (40ppm + 3%MV) ppm
	Responding Time	2min
HCHO	Sensor	Electrochemical gas sensor
	Range	0~1 ppm
	Accuracy	±10%FS@25°C
VOC	Sensor	Metal oxide semiconductor gas sensor
	Range	0~2 ppm
	Resolution	1 ppb
	Warm-up Time	1 hour for initial power-on, 3 minutes for power-on preheating

Output Signal	Modbus RTU (RS485)
Power Supply	12~36VDC/24VAC±20%
Operating Environment	0°C~50°C, 0%~95%RH (non-condensing)
Storage Environment	-20°C~60°C, 0%~95%RH (non-condensing)
Display	LCD
LED Indicators	Green, yellow, red (three colors)
Protection Class	IP30
Certifications	CE, RoHS
Wiring	Terminal applicable wire gauge 14~22AWG
Material	PC housing
Installation Type	Wall mount

Order Information

Model No.	Output Signal/Protocol
BCS-3QRM-111W	Modbus RTU (RS485)

Dimensions (mm)



BCS-35 Series Carbon Monoxide (CO) Sensor

Overview

The BCS-35 Series Carbon Monoxide Sensors can be used to detect carbon monoxide concentration in indoor environments and support multiple control signal outputs.

Features

Wall-mounted type

- High linearity sensor provides accurate and reliable stability
- Good repeatability, service life > 5 years
- Optional output signals, power reverse connection protection
- Double-layer waterproof membrane design effectively prevents moisture from entering, and the sensing element is non-toxic

Indoor type

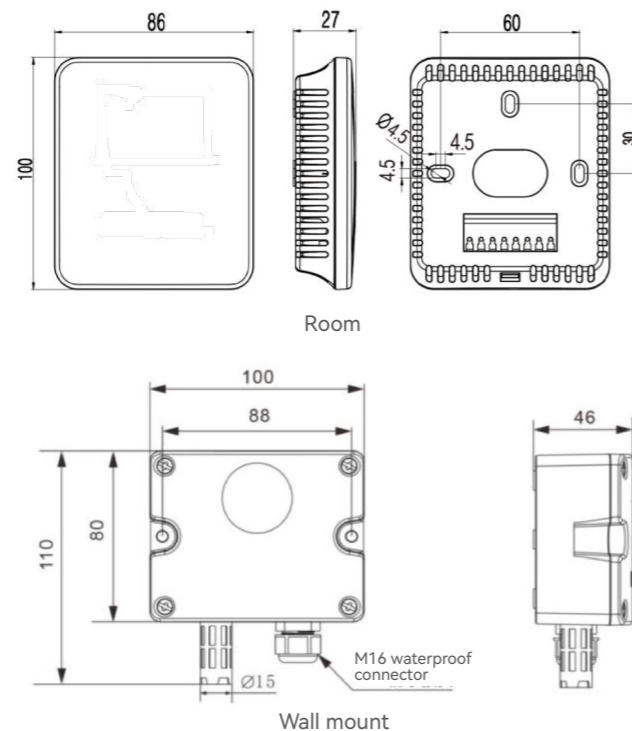
- Adopts imported high-performance electrochemical sensor
- Multiple output methods optional, with LCD backlight display
- Complete overvoltage and reverse connection protection, high long-term reliability
- Configurable relay action points, enabling independent control/alarm functions
- Lightweight and beautiful housing design, standard 86-box installation



Order Information

Model No.	Application / type	Range	Output Signal/ Protocol	Relay	Installation Method
BCS-35RU-101W	Room	0~100ppm	0V~10V&4mA~20mA	1*SPDT	86-Box Wall mount
BCS-35RM-101W			Modbus RTU (RS485)		
BCS-35RV-400M	Wall mount	0~500ppm	0V~10V	N/A	Wall mount
BCS-35RA-400M			4mA~20mA		
BCS-35RM-400M			Modbus RTU (RS485)		

Dimensions (mm)



BCS-36 Series Carbon Dioxide (CO₂) Sensor

Overview

The BCS-36 Series Carbon Dioxide sensors (CO₂) are suitable for detecting carbon dioxide concentration in air ducts and indoor environments, and supports multiple control signal outputs.

Features

- Excellent long-term stability and reliability
- Equipped with ABC self-calibration function
- Long service life
- Easy installation and maintenance-free



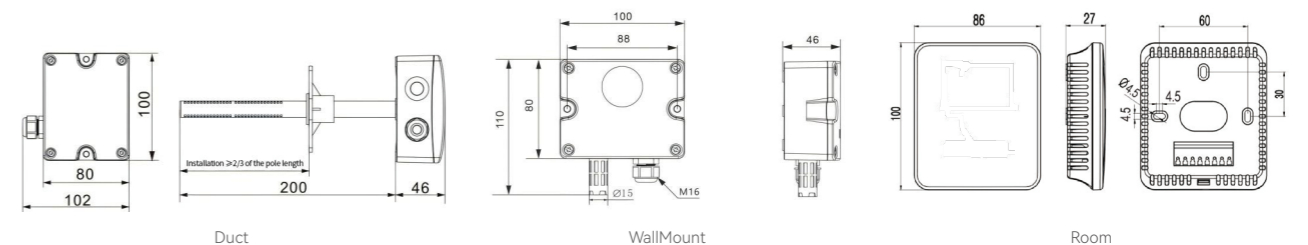
Technical Specifications

Sensing Component	NDIR Sensor
Measuring Range	0~2000ppm
Sensor Accuracy	Duct/ Room ± (40ppm + 3% MV) ppm Wall mount ± (40ppm + 3% FS) ppm
Operating Environment	Duct/ Room 0°C~50°C, 0%~85%RH (non-condensing) Wall mount -10°C~50°C, 0%~90%RH (non-condensing)
Responding Time	≤2 mins
Output Signal	0V~10V, 4mA~20mA, Modbus RTU (RS485)
Power Supply	Duct & Room: 10~30VDC (0~10V: 16~30V) Wall mount: 4mA~20mA & 0V~5V/10V: 15~36VDC/24VAC±20%; Modbus RTU(RS485): 10~36VDC/24VAC±20%
Storage Environment	-20°C~60°C, 0%~90%RH (non-condensing)
Certifications	CE, RoHS
Wiring	Duct Terminal applicable wire gauge 14~22AWG Room Terminal applicable wire gauge 14~22AWG Wall mount Direct outlet, cable length 60cm
Material	PC housing
Weight	NW: 178.8g (duct), 186g (wall), 96.5g (room) GW: 333g (duct), 240g (wall), 120g (room)

Order Information

Model No.	Output Signal/ Protocol	Protection Class	Application Occasion /Installation Method
BCS-36DV-100F	0V~10V	Housing: IP65 Probe: IP30	Duct mount
BCS-36DA-100F	4mA~20mA		
BCS-36DM-100F	Modbus RTU (RS485)		
BCS-36RV-100M	0V~10V	IP6X	Wall mount
BCS-36RA-100M	4mA~20mA		
BCS-36RM-100M	Modbus RTU (RS485)	IP30	Room (wall mount)
BCS-36RV-1D0W	0V~10V&4mA~20mA		
BCS-36RM-1D0W	Modbus RTU (RS485)		

Dimensions (mm)



BCS-4V Series Air Velocity Sensor

Overview

The BCS-4V Series Air Velocity Sensor are mainly used for measuring air velocity in air ducts of heating, ventilation, and air conditioning (HVAC) systems.

Features

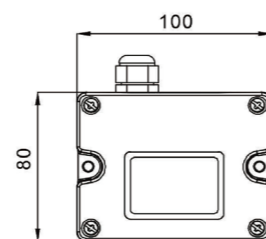
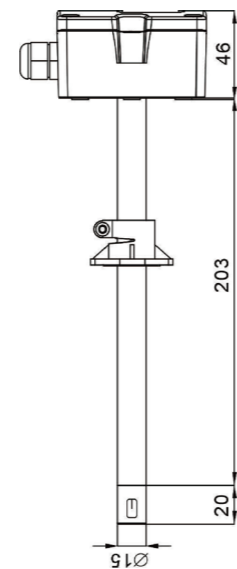
- High-precision MEMS sensors, excellent long-term stability and anti-interference capability.
- Power supply and output feature overvoltage and reverse connection protection.
- Isolated RS485 output available
- Strong anti-pollution performance and easy to install and maintain.



Technical Specifications

Measuring Range	0~10m/s (Default), 0~15m/s, 0~20m/s, 0~30m/s (Optional)
Measuring Accuracy	± (0.2m/s + 3%) of MV (at 20°C, 45%RH and 1013hPa)
Resolution	0.01m/s
Operating Temp.	-10°C~60°C
Storage Temp.	-20°C~80°C
Output Signal	0V~10V/4mA~20mA, Modbus RTU (RS485)
Output Load	≤500Ω (current output), ≥5kΩ (voltage output)
Probe Length	210mm
Wiring	Wire connector: M16 waterproof connector suitable for 4~8mm wire harness Terminal Wire Gauge: 20~18AWG
Certifications	CE, RoHS
Protection Class	Housing: IP65; Probe: IP20
Material	PC housing, PA6 probe
Weight	NW:183.3g, GW:385.2g

Dimensions (mm)



Order Information

Model No.	Output Signal/ Protocol
BCS-4VDU-300F	0V~10V/ 4mA~20mA
BCS-4VDM-300F	Modbus RTU (RS485)

BCS-4S Series Float Liquid Level Switch

Overview

The BCS-4S Float Liquid Level Switch are mainly used for water level control. Float ball switch built-in micro switch, and a weight is provided to ensure precise triggering at the target liquid level. This switch is maintenance-free, non-toxic, and environmentally friendly. It has excellent resistance to sewage and is widely applied in various containers such as civil and industrial-mining water tanks, oil tanks, acid-alkali tanks, barrels, cans, and sinks.



Features

- High protection level
- Wide application range
- Simple operation and easy installation

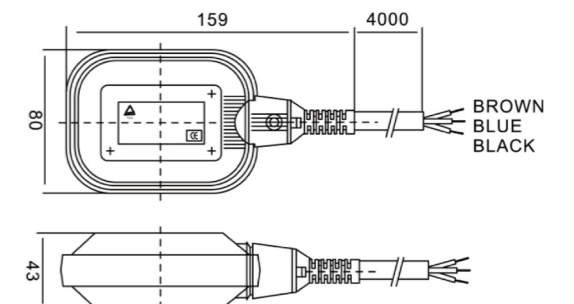
Technical Specifications

Medium Type	Sewage, wastewater, liquid containing solid impurities, etc.
Medium Temp.	0°C~60°C
Medium Density	700~1200kg/m ³
Switch Triggering Angle	45°
Contact Capacity	220VAC, 16A, 50/60Hz
Cable Length	4m
Certifications	CE, RoHS
Protection Class	IP68
Weight	NW:563g, GW:801g
Material	PP

Order Information

Model No.	Cable Length
BCS-4S10-4	4m

Dimensions (mm)



BCS-46 Series Flow Switch

Overview

The BCS-46 Series Flow Switch is mainly used to monitor the changes in the flow rate of the medium in the air - conditioning water system. When the flow rate of the medium exceeds (or is lower than) the set value, it can make one circuit conduct while cutting off another circuit.

Features

- Max liquid pressure up to 1.6MPa, wide-ranging applications
- Stainless steel paddle has 3 segments for use in pipes from 25mm to 200mm diameter
- Paddle segments can be removed or trimmed as needed
- Adjustable set point, the user may according to require to trim the flow value
- Fully enclosed housing and electrical switches, effectively protecting electrical components from dust and water vapor (including minor condensation)
- Spacious wiring space for easy installation



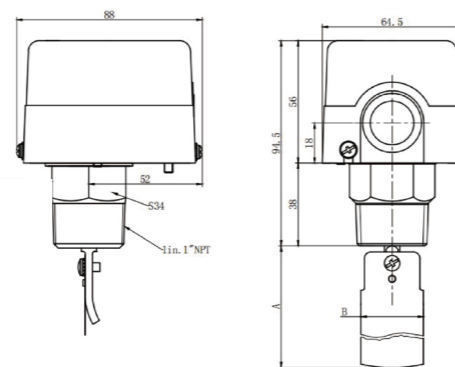
Technical Specifications

Applicable Medium	Water, ethylene glycol, or other liquids suitable for brass
Medium Temp.	0°C-120°C
Medium Temp.	0°C-60°C
Max. Operating Pressure	1.6MPa
Max. Allowable Flow Velocity	3m/s
Switch Type	SPDT
Contact Capacity	250VAC, 10A
Bellows Service Life	500,000 cycles
Connector	1 NPT
Protection Class	IP32
Weight	NW: 400g GW: 460g
Material	Connector: Brass, Paddle: Stainless Steel, Housing: ABS

Order Information

Model No.	Working Pressure	Connector
BCS-4610-0002	1.6MPa	1 NPT

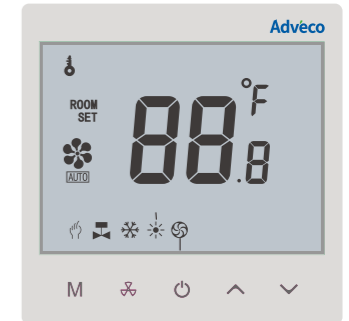
Dimensions (mm)



BCT-ACW Series Digital Thermostat

Overview

The BCT-ACW Series Of Digital Thermostats are suitable for temperature control of HVAC terminal equipment such as fan coil units. They feature a large LCD screen and an NTC temperature sensor inside the controller to detect the indoor temperature. The detected temperature is compared in real time with the temperature set by the user, and the speed of the air conditioner and heater fans and the opening or closing of the pipeline electric valve are automatically adjusted to maintain a constant indoor temperature.



Technical Specifications

Self-Power Consumption	<1.5W
Power Supply Voltage	100-240VAC 50/60HZ
Load Current	1A(Inductive load) 2A(Resistive load)
Temperature Control Range	10°C-30°C
Temperature Control Accuracy	±1°C
External Dimensions	86mmx86mmx15mm (height x width x thickness)

Order Information

Product Series	Model No.	Description
Thermostat	BCT-ACW0-WH1	2. Controlled, standalone version, no communication support
	BCT-ACW2-WH1	2 Control, Communication Edition, Supports Modbus Communication
	BCT-ACW0-4WH1	4 Control, standalone version, does not support communication
	BCT-ACW2-4WH1	4 Control, Communication Edition, Supports Modbus Communication

BCT-ACR Series Room Thermostat

Overview

The BCT-ACR Series Room Thermostat integrate the functions of room temperature correction coefficient setting, upper and lower temperature limit setting, power-off memory, fan coil unit operation mode setting, water valve seizure prevention and programming. They are widely applied in commercial, industrial and civil buildings as well as villa complexes for heating, refrigeration, and the control of fans and water valves at the terminals of year-round central air conditioning systems.



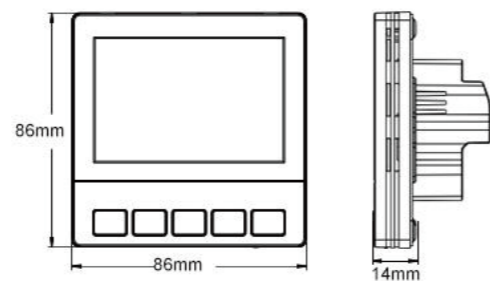
Features

- LCD digital display screen
- Cooling, heating, ventilation, programming, manual modes
- Selectable wind speeds: high, medium, low, automatic
- Remote locking, time setting (minutes/hours/week)
- Room temperature correction coefficient setting
- Upper and lower temperature limits setting, operation mode setting
- Valve seizure prevention, programming function

Technical Specifications

Supply Voltage	100-220VAC, 50/60Hz
Maximum Load Current	Valve: 3(2)A, Fan: 5(3)A Valve & Fan: 3(2)A (2-pipe standalone type)
Temp. Control Range	5-35°C
Temp. Control Accuracy	±1°C
Temp. Detection & Display Range	0-50°C
Temp. Setting Accuracy	±0.5°C
Dimensions	86mm×86mm×14mm
Operating Environment	0-50°C
Storage Environment	-10-60°C
Protection Class	IP20

Dimensions (mm)



Order Information

Model No.	Application	Communication	Description
BCT-ACR0-WH2	2-Pipe	Standalone (no communication)	3-speed fan, 100-240 VAC, LCD screen, Physical buttons, White, (External probe - custom)
BCT-ACR2-WH2	2-Pipe	Modbus(RS485)	3-speed fan, 100-240 VAC, LCD screen, Physical buttons, Modbus, White,
BCT-ACR0-4WH2	2/4-Pipe	Standalone (no communication)	3-speed fan, 100-240 VAC, LCD screen, Physical buttons, White, Schedule programming

BCT-ACT Series Time Billing Thermostat

Overview

The BCT-ACT Series Time-based Billing Thermostat is widely applied in commercial, industrial, residential buildings, and villa complexes for heating, cooling, or controlling the water units and valves at the end of the year-round central air-conditioning system. This thermostat can accurately measure the cooling and heating capacity consumed by the fan-coil unit, which facilitates the apportionment of central AC costs in multi-tenant buildings like commercial complexes and office buildings.



Features

- Time-based billing function
- LCD digital display screen
- Cooling, heating, ventilation, programming, manual modes
- Selectable wind speeds: high, medium, low, automatic wind
- Remote locking, time setting (minutes/hours/week)
- Room temperature correction coefficient setting
- Upper and lower temperature limits setting, operation mode setting
- Function to prevent valve from seizing, programming function
- Support for RS485 communication

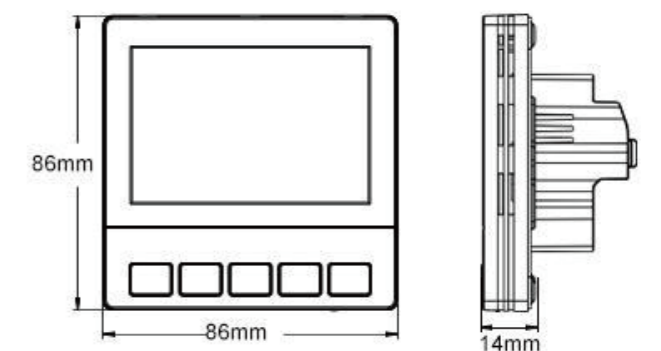
Order Information

Model No.	Description
BCT-ACT2-WH1	2-Pipe, Time-based billing type, 100-240VAC, LCD screen, 3-speed fan, Modbus, white, Programming

Technical Specifications

Supply Voltage	AC/DC 19.2-28.8V
Maximum Load Current	Valve: 3(2)A, Fan: 5(3)A
Temp. Control Range	5-35°C
Temp. Control Accuracy	±1°C
Temp. Detection & Display Range	0-50°C
Temp. Setting Accuracy	±0.5°C
Dimensions	86mm×86mm×14mm
Operating Environment	0 ~ 50°C
Storage Environment	-10-60°C
Protection Class	IP20

Dimensions (mm)



BCA-RD Series Rotary Actuator

Overview

The BCA-RD Series Rotary Actuator is a non-spring reset electric actuator, with control modes including switch (floating point) and adjustment. Can be used for controlling various types of air valves, variable air volume units, air handling units, ventilation grilles, and other objects.

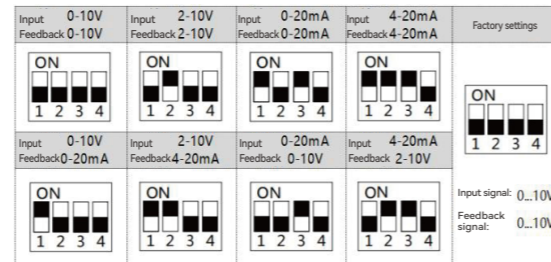


Features

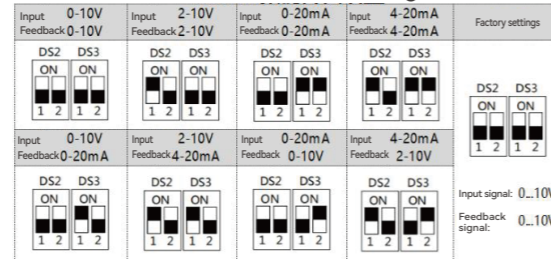
- Equipped with four output torques of 5Nm, 10Nm, 20Nm, and 40Nm;
- The direction of operation can be manually adjusted
- Manual clutch button for easy power-off manual operation
- The mechanical limit within the travel range is adjustable from 0 to 90°, with increments of 4°/5°
- Adjustable control and feedback signals
- Mechanical position indication
- Wiring cable length 1.05m

Control Setting (DIP Switch)

5Nm/10Nm/20Nm Dial switch setting



40Nm Dial switch setting



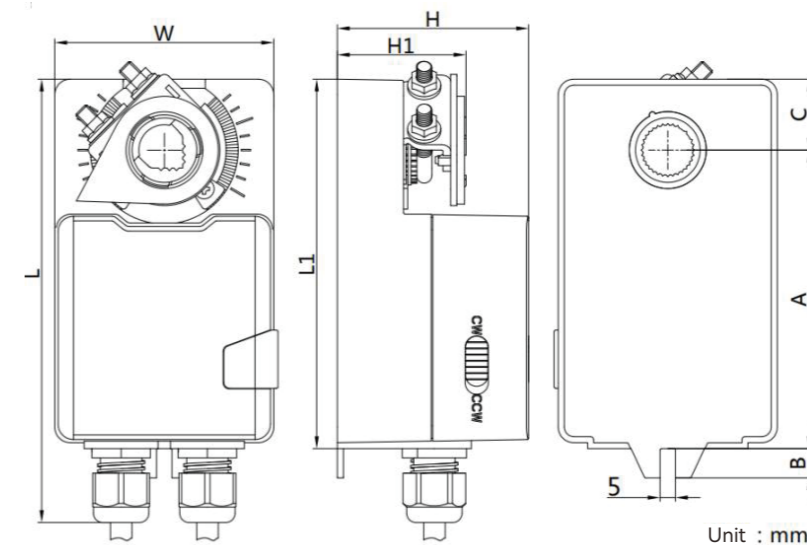
Technical Specifications

Rated output	5Nm, 10Nm, 20Nm and 40Nm
Rotation angle	0°~90°
Travel limit accuracy	5Nm/10Nm: ±5°; 20Nm/40Nm: ±4°
Run time	5Nm/10Nm: < 60s; 20Nm/40Nm: < 150s
Rated operational voltage	AC/DC 24V 50/60Hz
Working voltage range	AC/DC 19.2~28.8V
Power consumption	Refer to the selection table
Adapt to the area of the air valve	Refer to the selection table
Valve shaft size	Refer to the selection table
Work environment	-20°C~50°C, ≤95%RH (No condensation)
Storage environment	-30°C~80°C, ≤95%RH (No condensation)
Operating noise	45dB (Routine) /55dB (Fast type)
Protection grade	IP54
Electrical grade	III (Safe low voltage)
Auxiliary switch	Switch/Floating Point Type: 2xSPDT 3(1.5)A 250VAC Adjustable type: None
Certification	CE, RoHs

Order Information

Model No.	Torque	Run time	Control mode	Power consumption	Adapt to the area of the air valve	Valve shaft size, section&length
BCA-RD05-A10N	5Nm	< 60s	Floating point switch type	3W 7VA	0.5 m ²	5Nm Shaft: Φ6~16mm Square shaft: 5x5~12x12mm
BCA-RD10-A10N	10Nm			4.5W 10VA	1 m ²	
BCA-RD20-A10N	20Nm	4.5W 10VA		2 m ²		
BCA-RD40-A10N	40Nm	5W 12VA		4 m ²		
BCA-RD05-A20N	5Nm	< 60s	Adjustable type	3W 7VA	0.5 m ²	10Nm/20Nm Shaft: Φ10~20mm Square shaft: 10x10~14x14mm
BCA-RD10-A20N	10Nm			4.5W 10VA	1 m ²	
BCA-RD20-A20N	20Nm	4.5W 10VA		2 m ²		
BCA-RD40-A20N	40Nm	5W 12VA		4 m ²		
BCA-RD05-A10F	5Nm	<20s	Floating point switch type	3.5W 8VA	0.5 m ²	40Nm Shaft: Φ10~23mm Square shaft: 10x10~17x17mm
BCA-RD10-A10F	10Nm			5W 12VA	1 m ²	
BCA-RD20-A10F	20Nm	8W 18VA		2 m ²		
BCA-RD05-A20F	5Nm	<20s		3.5W 8VA	0.5 m ²	
BCA-RD10-A20F	10Nm	<20s	Adjustable type	5W 12VA	1 m ²	length: ≥60mm
BCA-RD20-A20F	20Nm	<20s		8W 18VA	2 m ²	

Dimensions (mm)



Product Model	Output torque	L	W	H	H1	L1	A	B	C
BCA-RD05-A□□□	5Nm	144	71	62	42	120	97	9.5	23.1
BCA-RD10-A□□□	10Nm	167.8	86.2	68	49	144.2	115	10	29.1
BCA-RD20-A□□□	20Nm	191.8	103.4	67.8	55.3	169.5	127.2	19	35.2
BCA-RD40-A□□□	40Nm	198.6	110.2	72.5	60.5	175.6	134	15.5	36.6

BCV-EN2A Series Electric Ball Valve

Overview

The BCV-EN2A Series Of Electric Ball Valves are suitable for on-off control in HVAC water systems. They consist of an electric actuator and a valve body. The actuator is driven by a synchronous motor, ensuring stable operation. Built-in limit contacts can cut off power when the valve is fully open or fully closed. The valve body is forged from brass and is suitable for use as an electric ball valve in air conditioning systems.

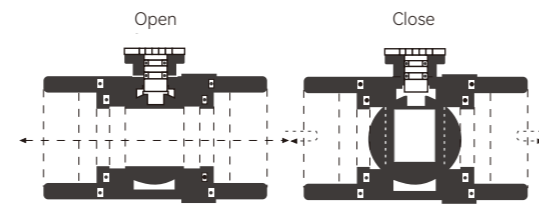
Note: Generally, the valve is installed in the closed position when it leaves the factory.



Technical Specifications

Drive power supply	AC220V+10%/DC24V 50/60HZ
Power consumption	3VA/6VA(only when the valve is open and closed)
Motor category	Synchronous motor/Reversible synchronous motor
Action time	≤16s
Output torque	BCV-EN2A-020G: 1.5N.m BCV-EN2A-025G,BCV-EN2A-032G: 3.0N.m
Locked-rotortorque	≥6N.m
Nominal pressure	1.6Mpa
Closing pressure difference	<0.6Mpa
No leakage	Pressure difference <0.4Mpa
Connection method	Pipe thread G
Applicable medium	Cold, hot water or 50% ethylene glycol solution
Medium temperature	2~90°C
Lead length	700mm

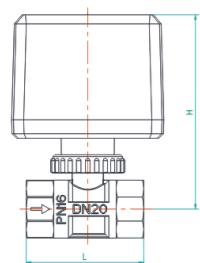
Sectional View



Order Information

	Model No.	Description
Electric ball valve	BCV-EN2A-020G	DN20mm, made of brass
	BCV-EN2A-025G	DN25mm, made of brass
	BCV-EN2A-032G	DN32mm, made of brass

Dimensions



Model No.	Specification		Main dimensions		Kv
	DN(mm)	Internal thread(G)	Height (H)	Length (L)	
BCV-EN2A-020G	20	3/4"	105	68	4.0
BCV-EN2A-025G	25	1"	109	78	6.3
BCV-EN2A-032G	32	1 1/4"	121	90	10.0

BCV-RV Series Electric Ball Valve

Overview

The BCV-RV Series Electric Ball Valve is a flexible solution that combines valve body and actuator hydraulic control. Suitable for cooling, heating, and heating in HVAC systems. Adjust the flow rate of cold and hot water according to the requirements of the controller. This series of valve bodies are forged from high-strength brass or ductile iron to achieve proportional control.

Features

- With various calibers ranging from DN15 to DN150, it has a high flow capacity (Kv) value
- Some calibers correspond to customized backup configurations for multiple flow rates (Kv), with equal percentage flow characteristics
- The matching actuator can be used interchangeably with the water valve actuator, effectively reducing inventory costs
- The valve body is sealed with PTFE graphite reinforced valve body and double EPDM valve stem sealing ring
- Built in integrated valve plate, not afraid of reverse pressure difference, high shut-off force
- Rated working pressure: 2Mpa (brass) 1.6Mpa (ductile iron)

Technical Specifications

Nominal Diameter	DN15~DN150
Flow Coefficient Kv Value	Refer to the selection table
Traffic Characteristics	Equal percentage
Working Medium	Cold, hot water, and ≤ 50% ethylene glycol aqueous solution
Medium Temperature	-5~120°C
Work Environment	-20°C~50°C, ≤95%RH (No condensation)
Storage Environment	-30°C~80°C, ≤95%RH (No condensation)
Operating Noise	45dB (Routine)
Protection Grade	IP54
Electrical Grade	III (Safe low voltage)
Authentication	CE, RoHS

Actuator parameters	
Adaptive Torque	Refer to the selection table
Power Consumption	DN15~DN25: Run 3W/Standby 1W; DN32~DN50: Run 4.5W/Standby 1W DN65~DN80: Run 4.5W/Standby 1W; DN100~DN150: Run 5W/Standby 1W
Rated Operational Voltage	AC/DC 24V 50/60Hz
Working Voltage Range	AC/DC 19.2~28.8V
Run Time	Refer to the selection table
Rotation Angle	Maximum 90°
Manual Operation	Have



Valve Body Parameters	
Nominal Pressure	DN15~DN50: PN20; DN65~DN150: PN16
Connection Method	DN15~DN50: Rp Internal thread; DN65~DN150: Double flange
Material	Valve body: DN15~DN50 Forged brass: HPb59-1; DN65~DN150 Nodular cast iron QT460-10; Valve stem: Stainless steel 304; Sphere: Stainless steel 304; Valve seat: Graphite reinforced type PTFE; O-Ring: EPDM

Control Setting (DIP Switch)

5Nm/10Nm/20Nm Dial switch setting

Input 0-10V Feedback 0-10V	Input 2-10V Feedback 2-10V	Input 0-20mA Feedback 0-20mA	Input 4-20mA Feedback 4-20mA	Factory settings
ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4
Input 0-10V Feedback 0-20mA	Input 2-10V Feedback 4-20mA	Input 0-20mA Feedback 0-10V	Input 4-20mA Feedback 2-10V	Input signal: 0...10V Feedback signal: 0...10V
ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4	

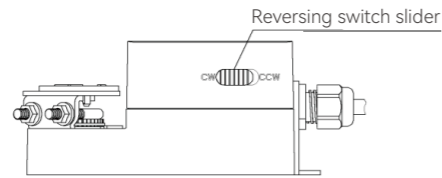
40Nm Dial switch setting

DS2 DS3 ON ON	DS2 DS3 ON ON	DS2 DS3 ON ON	DS2 DS3 ON ON	Factory settings
ON 1 2 1 2	ON 1 2 1 2	ON 1 2 1 2	ON 1 2 1 2	ON 1 2 1 2
Input 0-10V Feedback 0-20mA	Input 2-10V Feedback 4-20mA	Input 0-20mA Feedback 0-10V	Input 4-20mA Feedback 2-10V	Input signal: 0...10V Feedback signal: 0...10V
ON 1 2 1 2	ON 1 2 1 2	ON 1 2 1 2	ON 1 2 1 2	

Instructions For Reversing Switch

Select the rotation direction by adjusting the directional switch slider, as shown in the following figure:

The default setting for the reversing switch at the factory is CW. When the reversing switch is in the CW position, the actuator rotates clockwise as the input signal increases; When the reversing switch is in the CCW position, the actuator rotates counterclockwise as the input signal increases.



Order Information

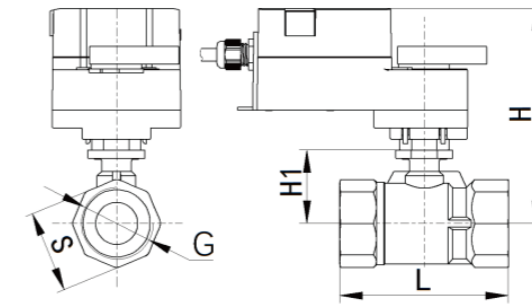
Model No.	Nominal diameter	Kv value	Nominal pressure	Maximum working pressure difference	Valve body channel	Material and connection method	Actuator torque	Actuator running time
BCV-RV15-A20N	DN15	4.0	PN20	0.35Mpa	Two way	Forged brass (internal thread)	5Nm	< 60s
BCV-RV20-A20N	DN20	6.3						
BCV-RV25-A20N	DN25	10						
BCV-RV32-A20N	DN32	16					10Nm	
BCV-RV40-A20N	DN40	25						
BCV-RV50-A20N	DN50	40						
BCV-RV65-A20N	DN65	63	PN16		Ductile iron (double flange)	20Nm	< 150s	
BCV-RV80-A20N	DN80	100						
BCV-RV100-A20N	DN100	160						
BCV-RV125-A20N	DN125	250				40Nm		
BCV-RV150-A20N	DN150	400						

*Note: If you need to customize the valve body with a flow coefficient Kv, please make an additional note when placing the order. Otherwise, the default Kv value will be used for shipment.

Customized Kv Value

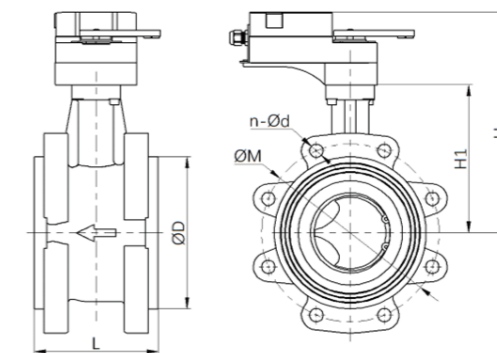
Model No.	Nominal diameter	Customized Kv value
BCV-RV15-A20N	DN15	1.6/2.5/6.3/10.1
BCV-RV20-A20N	DN20	1.6/2.5/4.0/10.1
BCV-RV25-A20N	DN25	16
BCV-RV32-A20N	DN32	25
BCV-RV40-A20N	DN40	40
BCV-RV50-A20N	DN50	63

Dimensions (mm)



Forged brass ball valve

Model No.	G	H	H1	L	S	Net weight(kg)	Gross weight(kg)
BCV-RV15-A20N	G1/2	120	31	60	25	1.4	1.5
BCV-RV20-A20N	G3/4	124	35	68	32	1.6	1.7
BCV-RV25-A20N	G1	128	39	89	39	1.8	1.9
BCV-RV32-A20N	G1-1/4	139	44	102.5	48	2.5	2.6
BCV-RV40-A20N	G1-1/2	144	49	113	56	2.7	2.8
BCV-RV50-A20N	G2	149	54	127	70	3.4	3.5



Ductile iron ball valve

Model No.	L	D	H	H1	M	n-d	Net weight (kg)	Gross weight (kg)
BCV-RV65-A20N	93	105	220	122	145	4-φ18	8.7	8.9
BCV-RV80-A20N	109	125	240	142	160	8-φ18	11.7	11.9
BCV-RV100-A20N	120	148	265	167	180	8-φ18	14.8	15
BCV-RV125-A20N	145	179	278	180	210	8-φ18	20.6	20.8
BCV-RV150-A20N	168	205	298	200	240	8-φ22	29.6	29.8

Vertical Market

Adveco focuses on key vertical sectors, including parks, high-efficiency data centers, factories, hotels, green campuses, commercial buildings, laboratories, data centers, hospitals, and transportation. It offers specialized and customized intelligent solutions tailored to the unique needs of different scenarios, driving energy efficiency improvements, operation and maintenance optimization, and system integration through technological innovation. With industry-leading technical strength and in-depth insights, it empowers customers to achieve intelligent upgrades and sustainable development, working together to create new benchmarks for efficiency, greenness, and intelligence in the industry.



Company Mission

Empowering Spaces with Technology, Reimagining Smart Buildings as Living Organisms

Company Vision

To Be the Global Leader in Intelligent Building Ecosystems

Values

Customer Obsession. Expertise with Integrity
Collaborative Success. Bold Innovation





Smart Space Solution Provider