

BO-CT1 Continuous controller

Item no. 6100101
Purpose Control of humidification performance



BO-CT1 Option board 2 binary inputs

Item no. 002212
Purpose Setpoint switching, limit comparators, program start, status signal



BO-CT1 Option board analog input 2

Item no. 0002213
Purpose external setpoint settings



BO-CT1 Option board interface RS422/485

Item no. 0002214
Purpose Communication GLT, modbus



BO-CSA-6 Isolation amplifier

Item no. 6100114
Purpose Control signal amplifier



BO-WDK Wall bracket

Item no. 6100093
Purpose for humidity sensor with sensor tube Ø 20 mm



BO-SI Sinter filter

Item no. 6100108
Purpose Protection for humidity sensor with sensor tube Ø 20 mm



Rev 11/2016



Product data sheet AIRWIN® Continuous Controller BO-CT1

Accessories AIRWIN®

The Continuous Controller BO-CT1 is a product of the AIRWIN® brand of BOGA GmbH. It takes over continuous proportional power control of humidifiers with the reference variable relative air humidity, which must be supplied by a humidity sensor. The continuous controller is freely configurable and can be adjusted to the requirements of the customer. Its functionality may be extended with optional modules.

Specification

- Continuous proportional control of up to 5 humidifiers
- High-contrast multi-color LCD display for actual value, setpoint and operator guidance
- Operation via four front panel buttons
- Analogous input for sensor signal, control output for control signal, 2 relay outputs, power supply for external humidity sensor, 2 binary inputs

Technical data

Power supply	110...240 / 48...63	V/Hz
Power consumption	13	VA
Voltage output sensor	17 / 20	V/mA
Relay outputs	230 / 3	V/A
Input measuring signal voltage	0 (2)...10	V
resistance	> 100	kΩ
Input measuring signal power	0 (4)...20	mA
resistance	< 100	Ω
Output control signal voltage	0...10 / 2...10	V / V
load resistance	≥ 500	Ω
Output control signal power	0...20 / 4...20	mA / mA
load resistance	≤ 500	Ω
Protection class front / rear	IP 65 / IP 20	

Dimensions

Installation dimensions		
- height x width x depth	57.1 x 99 x 90	mm
Panel cut-out - height x width	48 x 96	mm
Weight	0.55	kg

Conditions of use

Ambient temperature	0...55	°C
Ambient humidity	0...90	% RH
Position	front panel mounting according to DIN IEC 61554	

Scope of delivery

- Continuous controller BO-CT1
- Operating manual
- Seal
- Fastening elements

Product specification

Brand	AIRWIN®
Model	BO-CT1 continuous controller
Item no.	6100101



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The continuous controller BO CT1 serves as continuous proportional controller for ultrasonic humidifiers of the AIRWIN brand® of BOGA GmbH. The functionality of the controller can be extended by a maximum of two function boards. For this purpose, the optional boards come with 2 binary inputs, analog input 2 for external setpoint setting and interface RS422/485.

Specification

- Plug-in board for functional extension of the continuous controller BO CT1
- Inclusion of up to two additional test boards
- Optional board with binary inputs to be used for setpoint switch-over, limit comparators, software start, status message
- Optional board with analog input to be used as an extension of the input signals, e.g. for external setpoint setting
- Optional board interface RS422/RS485 for communication between a master and up to 31 slaves

Technical data

Optional board binary inputs

Number of binary inputs potential-free 2

Optional board for analog input

Voltage	0(2)...10	V
Input resistance voltage	> 100	kΩ
Current	0(4). 20	mA
Input resistance current	< 100	Ω

Optional board interface RS422/485

Interface model	RS422/RS485	
Protocol	Modbus, Modbus Integer	
Baud rate	9600, 19200, 38400	Bd
Device address	0...255	
Max. number of participants	32	

Dimensions

Plug-in board for continuous controller BO-CT1		
- height x width x depth	13 x 68 x 21	mm

Conditions of use

Integration in continuous controller BO CT1

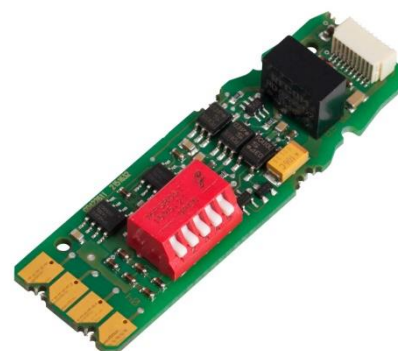
Scope of delivery

- Optional board for use in continuous controller BO CT1

BO-CT1 optional board	Use	Item no.
2 binary inputs	Signal contacts	0002212
Analogous input 2	External setpoint setting	0002213
Interface RS422/485	Communication with BMS	0002214

Product specification

Brand	AIRWIN®
Model	see chart
Item no.	see chart



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Product data sheet AIRWIN® BO-CSA-6 Isolation Amplifier

Accessories AIRWIN®

The isolation amplifier BO-CSA-6 is a product of the AIRWIN® brand of BOGA GmbH. It helps to reinforce the proportional control signal 0-10 VDC and can be integrated in the control cabinet SUR/P and SUR/PT. The reinforcement of the control signal by the isolation amplifier allows the proportionate control of up to six humidifiers. By using five isolation amplifiers up to 30 ultrasonic air humidifiers can be controlled.

Specification

- Add-on housing made of PA / V0
- Unipolar inputs and outputs
- 3-way galvanic isolation between input, output and auxiliary voltage
- Snap-in mounting for standard rail TS35
- High reliability
- Connection with M3 screw terminals 0.14 - 2.5 mm², rigid or flexible

Technical data

Supply voltage	19.2...30	VDC
Power consumption	2	VA
Transmission frequency	25	Hz
Input control signal voltage	0...10	V
Load	100	kΩ
Max overload	50	V
Output control signal voltage	0...10	V
Current max.	20	mA

Dimensions

installation dimensions		
- height x width x depth	70.4 x 17.5 x 90.5	mm
Weight	68	g

Conditions of use

Ambient temperature	0...50	°C
Ambient humidity	0...90	% RH
Protection	IP20	

Scope of delivery

- BO-CSA-6 isolation amplifier
- Installation and operating instructions

Product specification

Brand	AIRWIN®
Model	BO-CSA-6
Item no.	6100114



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The wall console BO-WDK was designed for easy installation of humidity sensors with Ø 20 mm sensor pipe. It is made of plastic and can be installed at the place of operation. It is attached with screws at the console base through three holes.

The sinter filter BO-SI is used to protect the humidity sensors with a Ø 20 mm sensor pipe against mechanical damage caused by particle bombardment at higher air speeds or damaging deposits. It is screwed onto the sensor pipe.

Specification

- Wall console BO WDK made of plastic for housing humidity sensors with Ø20 mm sensor pipe
- Sinter filter BO-SI, with coarse pores made of stainless steel to protect the sensor against foreign particles

Technical data

BO-WDK

Material plastic

BO-SI

Material coarse pores, stainless steel

Permissible air speed 1.5...20 m/s

Temperature range - 50.. + 150 ° C

Dimensions

BO-WDK - height x width x depth 96 x 69 x 61 mm

Mounting holes Ø 6.5 mm

BO SI - height x width x depth Ø 20 x 25 mm

Screw-on thread M18 x 1 mm

Scope of delivery

- BO-WDK wall console for housing humidity sensor
- BO SI sinter filter for the protection of the humidity sensor

Product specification

Brand AIRWIN®
Model BO-WDK
Item No. 6100093



Brand AIRWIN®
Model BO-SI
Item No. 6100108



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AIRWIN
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The art of humidification

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