

The duct humidifier NKBD-6/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	3.6	kg/h
Number of transducers:	6	units
Power consumption	185	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 286 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	6.0	kg

### Conditions of use

Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-6/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90 °

### Product specification

Brand	AIRWIN®
Model	NKBD-6/3.1
Item No.	7900107



Rev 06/2021



The duct humidifier NKBD-12/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	7.2	kg/h
Number of transducers:	12	units
Power consumption	375	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 436 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	7.7	kg

### Conditions of use

Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-12/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90 °

### Product specification

Brand	AIRWIN®
Model	NKBD-12/3.1
Item No.	7900113



Rev 06/2021



The duct humidifier NKBD-18/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	10.8	kg/h
Number of transducers:	18	units
Power consumption	555	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 586 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	9.5	kg

### Conditions of use

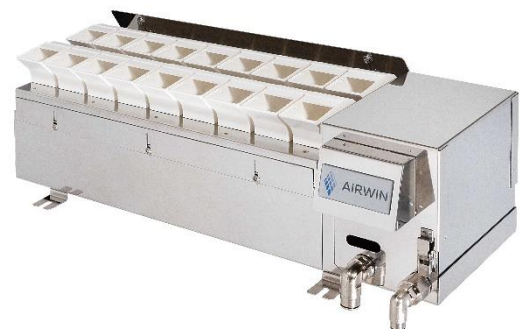
Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-18/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90°

### Product specification

Brand	AIRWIN®
Model	NKBD-18/3.1
Item No.	7900119



Rev 06/2021



The duct humidifier NKBD-24/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	14.4	kg/h
Number of transducers:	24	units
Power consumption	735	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 736 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	11.7	kg

### Conditions of use

Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-24/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90 °

### Product specification

Brand	AIRWIN®
Model	NKBD-24/3.1
Item No.	7900125



Rev 06/2021



The duct humidifier NKBD-30/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	18	kg/h
Number of transducers:	30	units
Power consumption	915	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 886 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	13.7	kg

### Conditions of use

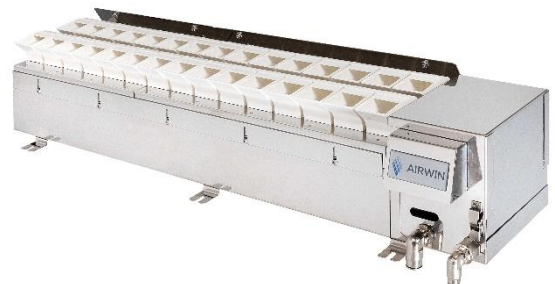
Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-30/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90 °

### Product specification

Brand	AIRWIN®
Model	NKBD-30/3.1
Item No.	7900131



Rev 06/2021





The duct humidifier NKBD-36/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	21.6	kg/h
Number of transducers:	36	units
Power consumption	1095	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 1036 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	15.2	kg

### Conditions of use

Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-36/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90 °

### Product specification

Brand	AIRWIN®
Model	NKBD-36/3.1
Item No.	7900137



Rev 06/2021



The duct humidifier NKBD-42/3.1 is a product of the AIRWIN® brand of BOGA GmbH. It is used for the fully automatic production of aerosol mist from demineralised water according to the ultrasonic principle in air treatment systems and air ducts. The humidifier is controlled by an external ON/OFF signal, MODBUS RTU or by a customer-supplied, continuous control signal.

### Specification

- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Control unit with electric and water-side functional elements
- Central electrical control connection to 9-pin connector
- MODBUS RTU interface designed as D-SUB
- Ultrasonic oscillating circuit with integrated fuse and temperature monitoring of the power transistors
- Stepless power control when operating with analog control signal
- Status messages for humidification and collective fault
- Integrated routines for error detection at water supply and drain
- Redundant level monitoring
- Current measurement of active components
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm<sup>2</sup>
- Possibility to connect standard control signals, e.g. 0-10 VDC, 4-10 mA
- Possibility to connect a hygostat – also 2-stage
- Possibility to connect a safety chain
- Solenoid valve combination for water supply and water drainage
- Water-technical connection without tools by means of hose connectors for metric hoses/pipes
- Automatic level control of the water level, dry-running protection, overheat protection, protection against overvoltage peaks, overflow protection, disconnection protection
- **AquaDrain plus:** integrated hygiene management for cyclical flushing of the water inlet pipe and cyclical or permanent emptying of the fluid tank according to pre-set parameters

### Technical data

Max. humidification output	25.2	kg/h
Number of transducers:	42	units
Power consumption	1275	VA

### Dimensions

Installation dimensions of humidifier – height x width x depth	241 x 1186 x 288	mm
Hose water inlet	Ø 10	mm
Hose water overflow/discharge	Ø 14	mm
Weight	17.2	kg

### Conditions of use

Power supply	48 / 50	V / Hz
Conductivity of demineralised water	5...20	µS/cm
Ambient temperature	5...45	°C
Ambient humidity	0...90	% RH
Water temperature	5...40	°C
Water pressure	1...4	bar
Air velocity	1...4	m/s

### Scope of delivery

- NKBD-42/3.1 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm
- Straight reducing connection Ø10 mm Ø6 mm
- D-SUB adapter 9-pin male / female 90 °

### Product specification

Brand	AIRWIN®
Model	NKBD-42/3.1
Item No.	7900143



Rev 06/2021

