Product data sheet AIRWIN® NKBD-6

Duct humidifier

The duct humidifier NKBD-6 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, or by a customer-supplied, continuous control signal.

Specification
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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®: 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
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>kg/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. humidification output</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Number of transducers:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>185</td>
<td>VA</td>
</tr>
</tbody>
</table>

Dimensions
- Installation dimensions of humidifier –
  - height x width x depth: 237 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

Scope of delivery
- NKBD-6 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

Product specification
- Brand: AIRWIN®
- Model: NKBD-6
- Item No.: 790016
Product data sheet AIRWIN® NKBD-12

Duct humidifier

The duct humidifier NKBD-12 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, or by a customer-supplied, continuous control signal.

Specification
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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®: 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 | kg/h  |
| Number of transducers:     | 12    |
| Power consumption          | VA    |

Dimensions
- Installation dimensions of humidifier –
  - height x width x depth: 237 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

Scope of delivery
- NKBD-12 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

Product specification
| Brand | AIRWIN® |
| Model | NKBD-12 |
| Item No. | 7900112 |

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Rev 11/2016
The duct humidifier NKBD-18 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, or by a customer-supplied, continuous control signal.

**Specification**
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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**: 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
- Power consumption: 555 VA

**Dimensions**
- Installation dimensions of humidifier – height x width x depth: 237 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

**Scope of delivery**
- NKBD-18 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

**Product specification**
- Brand: AIRWIN®
- Model: NKBD-18
- Item No.: 7900118

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Rev 11/2016
The duct humidifier NKBD-24 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, or by a customer-supplied, continuous control signal.

**Specification**
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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**: 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
- Power consumption: 735 VA

**Dimensions**
- Installation dimensions of humidifier – height x width x depth: 237 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

**Scope of delivery**
- NKBD-24 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

**Product specification**
- Brand: AIRWIN®
- Model: NKBD-24
- Item No.: 7900124
Product data sheet AIRWIN® NKBD-30

The duct humidifier NKBD-30 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, or by a customer-supplied, continuous control signal.

**Specification**
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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**: 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**

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<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Max. humidification output</td>
<td>18 kg/h</td>
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<tr>
<td>Number of transducers</td>
<td>30</td>
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<td>Power consumption</td>
<td>915 VA</td>
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**Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Height x width x depth</td>
<td>237 x 886 x 288 mm</td>
</tr>
<tr>
<td>Hose water inlet</td>
<td>Ø 10 mm</td>
</tr>
<tr>
<td>Hose water overflow/discharge</td>
<td>Ø 14 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>13.7 kg</td>
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**Conditions of use**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>48 / 50 V / Hz</td>
</tr>
<tr>
<td>Conductivity of demineralised water</td>
<td>5...20 µS/cm</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>5...45 °C</td>
</tr>
<tr>
<td>Ambient humidity</td>
<td>0...90 % RH</td>
</tr>
<tr>
<td>Water temperature</td>
<td>5...40 °C</td>
</tr>
<tr>
<td>Water pressure</td>
<td>1...4 bar</td>
</tr>
</tbody>
</table>

**Scope of delivery**
- NKBD-30 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

**Product specification**

<table>
<thead>
<tr>
<th>Brand</th>
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<tr>
<td>Model</td>
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<tr>
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<td>7900130</td>
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Rev. 11/2016

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The duct humidifier NKBD-36 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, or by a customer-supplied, continuous control signal.

**Specification**
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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**: 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
- Power consumption: 1095 VA

**Dimensions**
- Installation dimensions of humidifier – height x width x depth: 237 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

**Scope of delivery**
- NKBD-36 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

**Product specification**
- Brand: AIRWIN®
- Model: NKBD-36
- Item No.: 7900136

**Rev 11/2016**
The duct humidifier NKBD-42 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, or by a customer-supplied, continuous control signal.

**Specification**
- Housing made of demineralised water-resistant stainless steel (shiny surface)
- Exhaust ducts made of plastic with integrated drip catchers
- Control unit with electric and water-side functional elements
- Central electrical control connection to 10-pin connector
- Ultrasonic oscillating circuit with 1.7 MHz exciter frequency with integrated fuse and temperature monitoring of the power transistors
- Power control according to pulse width modulation (PWM)
- Electrical power connection 48 VAC to lead-through terminals for wire up to 25 mm²
- Possibility to connect standard control signals, e.g. 0-10 VDC, 0-10 mA, 4-10 mA
- Possibility to connect a hygrostat – 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**: 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
- Power consumption: 1275 VA

**Dimensions**
- Installation dimensions of humidifier –
  - height x width x depth: 237 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

**Scope of delivery**
- NKBD-42 duct humidifier
- Installation and operating instructions
- Stop cock Ø 10 mm

**Product specification**
- Brand: AIRWIN®
- Model: NKBD-42
- Item No.: 7900142