

BIA

Variable Geometry Diffuser

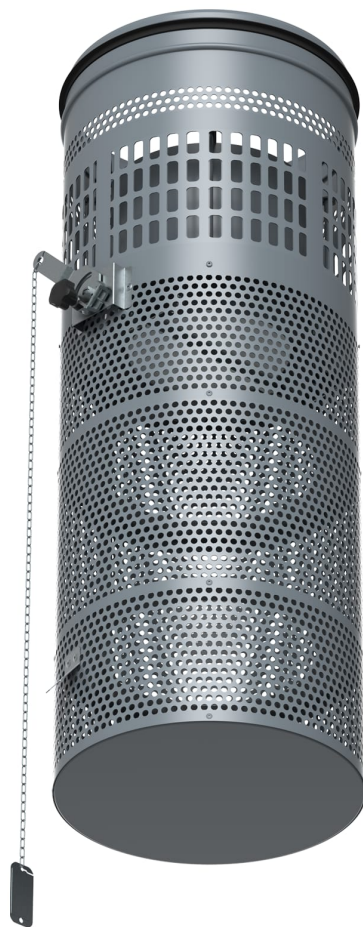


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Description

BIA is a variable geometry diffuser. The product is intended for air supply. The product is installed into circular ducts. Heating and cooling mode available. The field of application is comfort ventilation systems for industrial and public halls.

Highlights

- Constant pressure drop $\Delta P \approx 0$ (Pa)
- Easy and quick installation in elevations from 0 m to 5 m

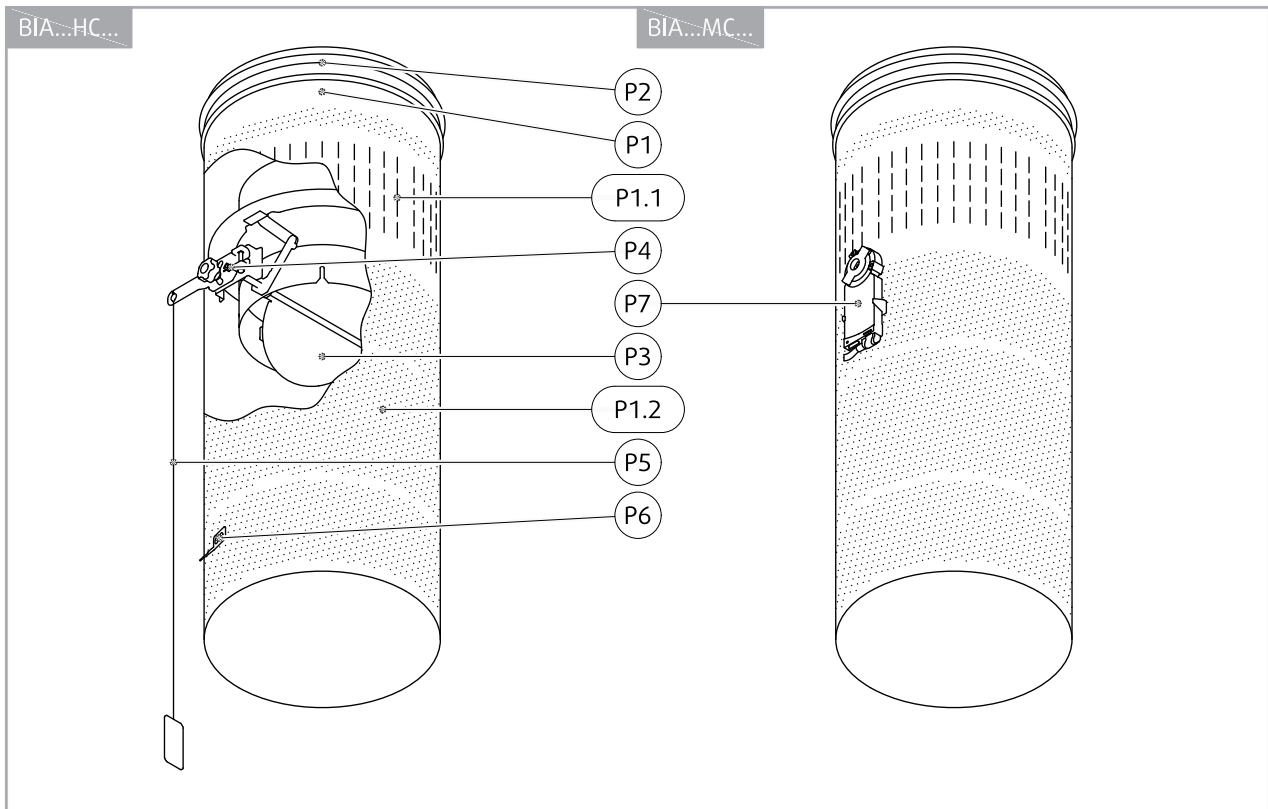
Product Types

- BIA...HC: Variable geometry diffuser with manual mechanism
- BIA...MC: Variable geometry diffuser with actuator (AC/DC 24 V)

Design

BIA is manufactured from galvanized steel sheet. The product consists of a perforated casing with a duct connection and an internal adjustment damper. The internal damper adjusts the ratio between the induction and displacement air discharge. Manual mechanism or actuator version available. The product is powder painted to RAL9003 (signal white) or RAL7001 (silver grey) as standard. Other RAL colours are available upon request.

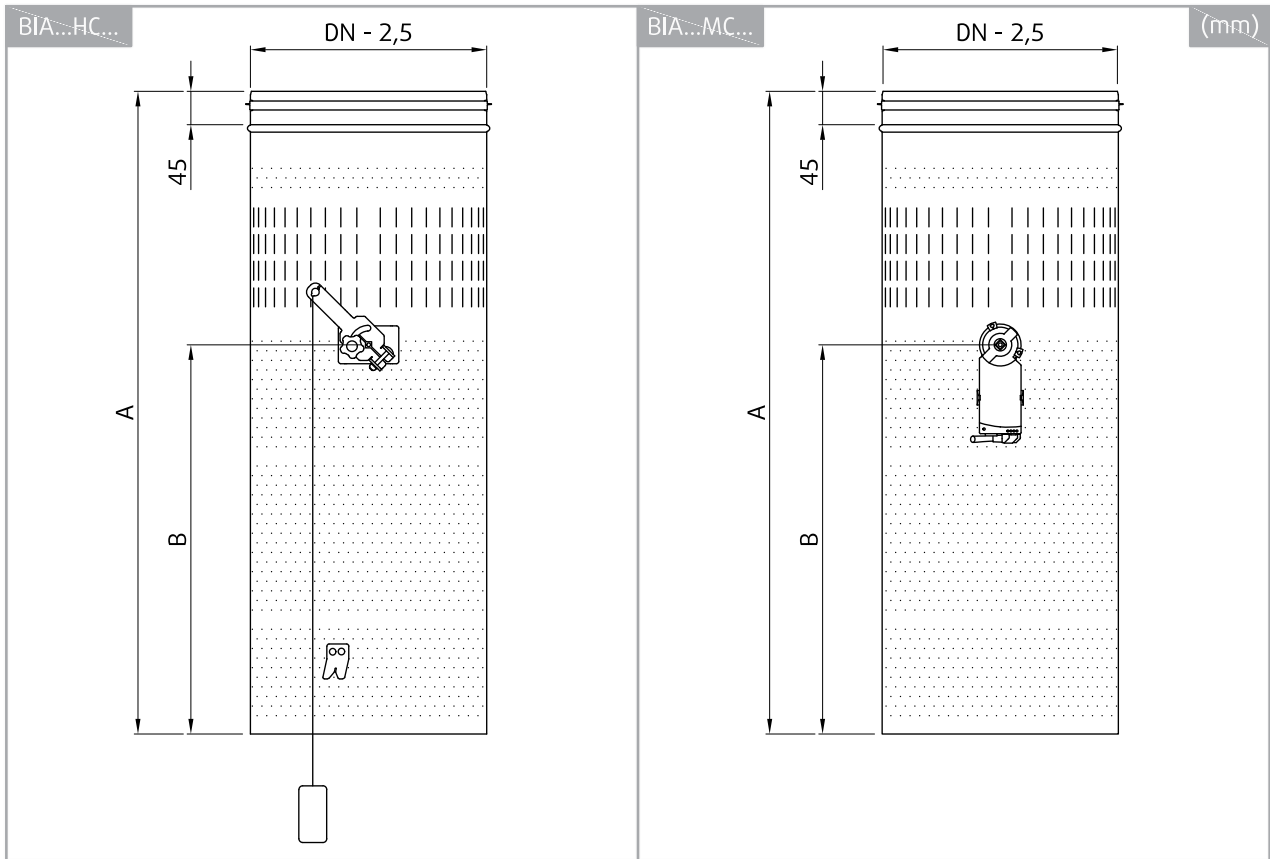
Product Parts



Legend:

- P1** Casing
- P1.1** Perforation for vertical induction discharge
- P1.2** Perforation for horizontal displacement discharge
- P2** Duct connection with rubber gasket
- P3** Internal adjustment damper
- P4** Manual mechanism (BIA...HC...)
- P5** Chain for manual adjustment (BIA...HC...)
- P6** Position arresting holder for manual adjustment (BIA...HC...)
- P7** Actuator (BIA...MC...)

Dimensions & Weights



	A	B	m	
			HC	MC
	mm		kg	
BIA-200	550	330	4,0	4,4
BIA-250	700	440	6,0	6,4
BIA-315	850	515	9,5	10,3
BIA-400	1100	660	15,5	16,3
BIA-500	1350	800	23,0	23,8
BIA-630	1700	970	35,5	36,3

Ordering Codes

BIA-

Size (mm)

200

250

315

400

500

630

Type of actuation

HC Manual

MC Actuator

Surface finish

SG Silver grey (RAL7001)

SW Signal white (RAL9003)

RALXXXX Other RAL colour

Example of Ordering Code

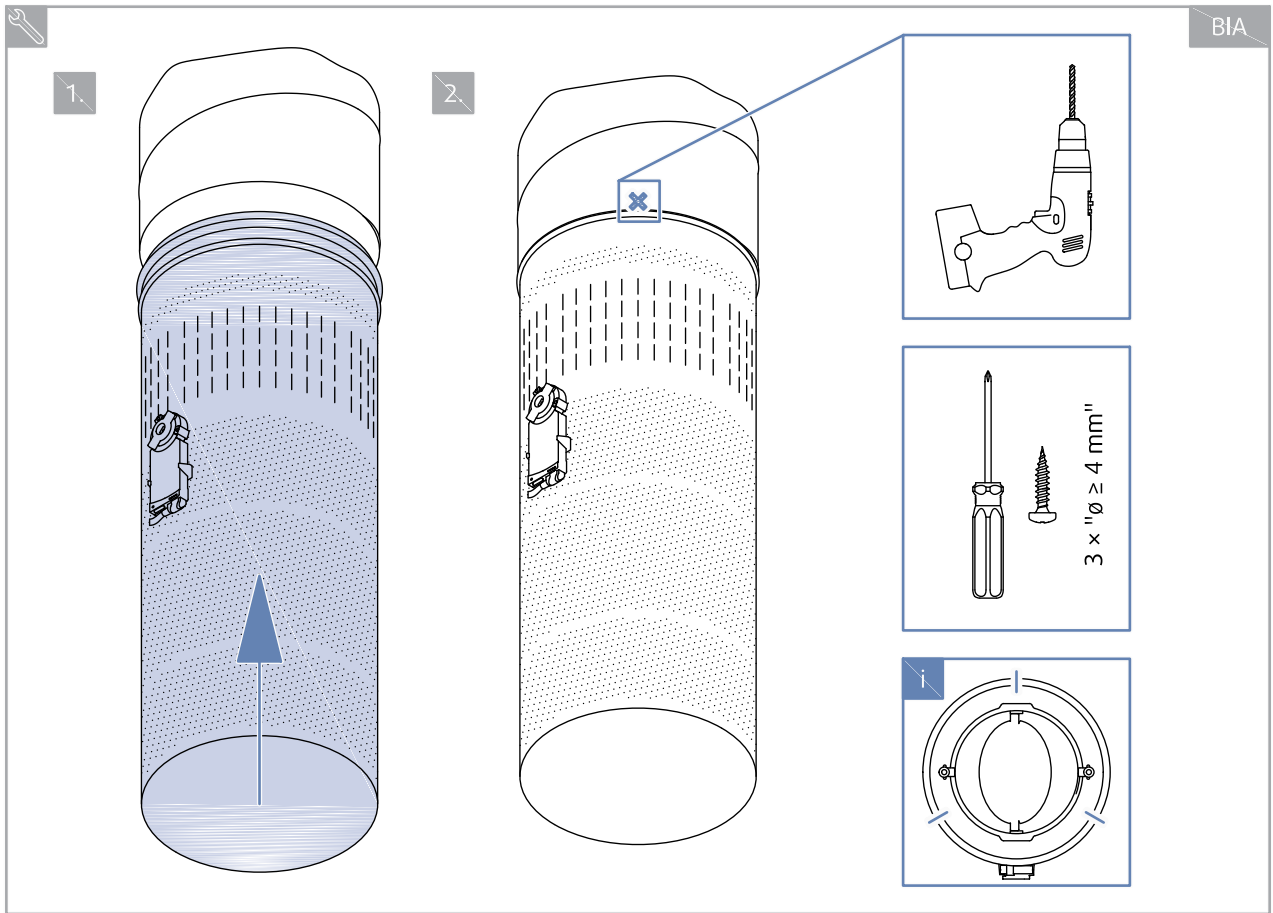
BIA-200-HC-SW

Variable geometry diffuser, size 200 mm, manually adjustable, powder-painted to RAL9003.

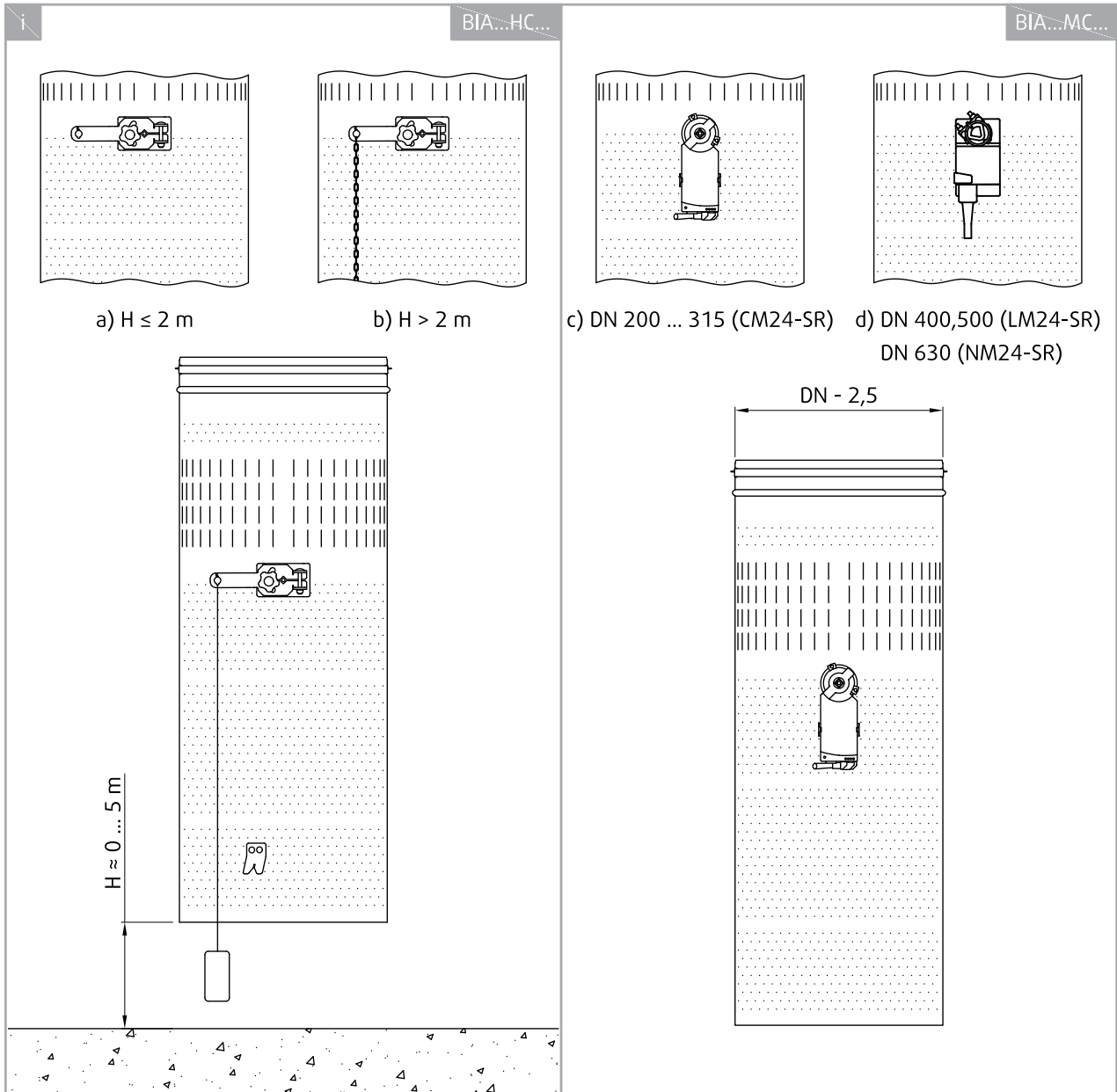
Technical Parameters

Diagrams and technical parameters are available at design.systemair.com (product BIA).

Installation

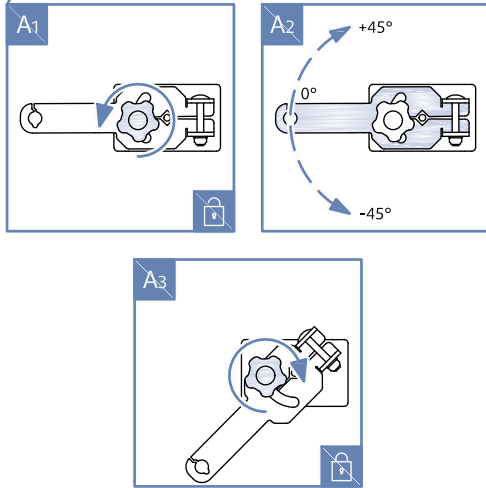
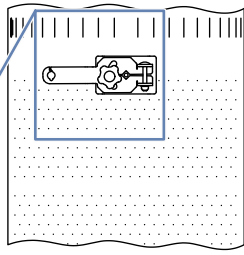


Setup possibilities

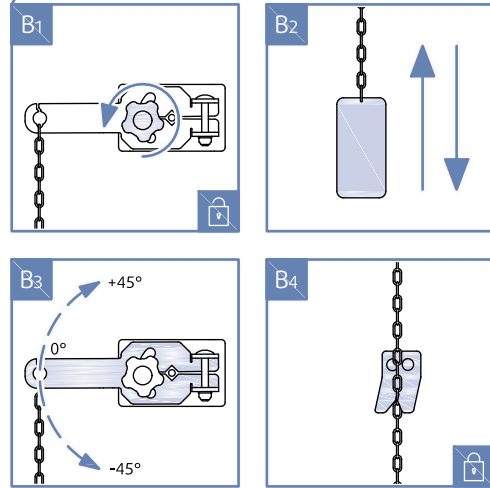
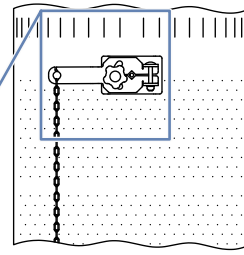




a) $H \leq 2$ m



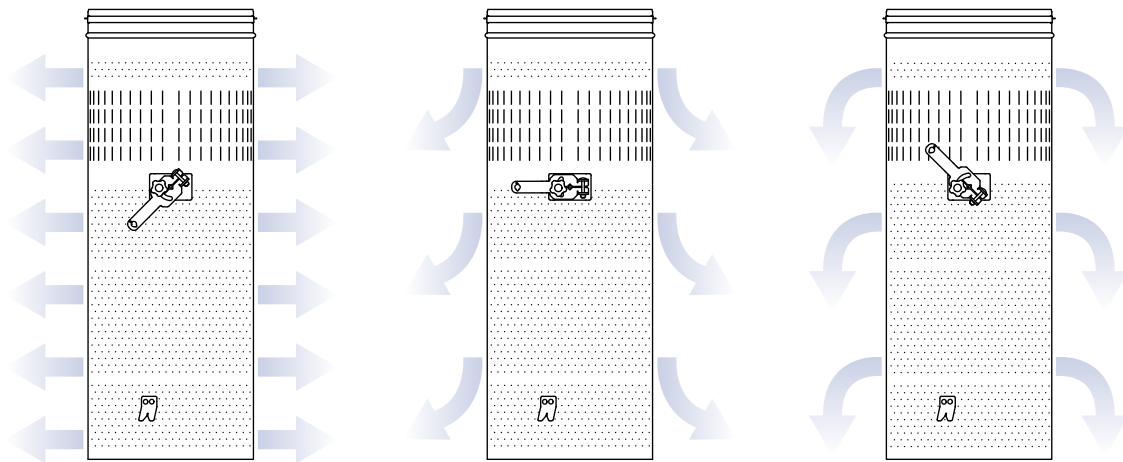
b) $H > 2$ m



-45°

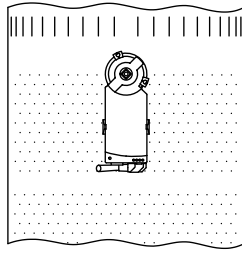
0°

$+45^\circ$

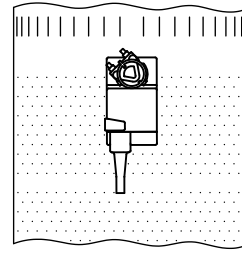




c) DN 200 ... 315



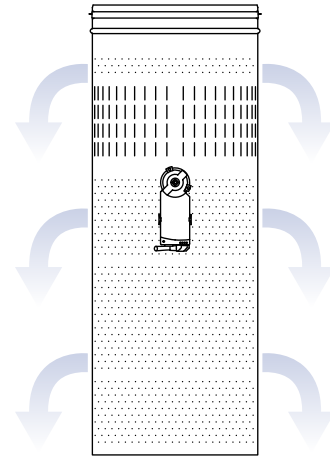
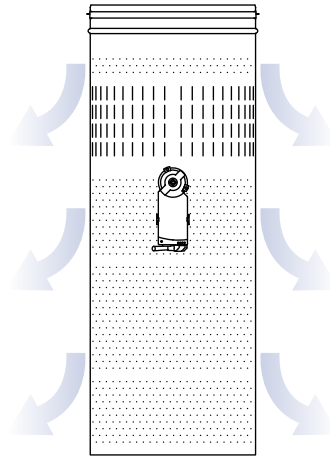
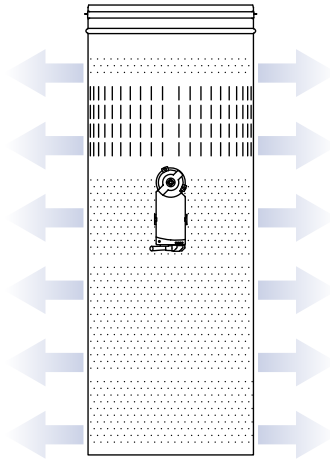
d) DN 400 ... 630



-45°

0°

+45°

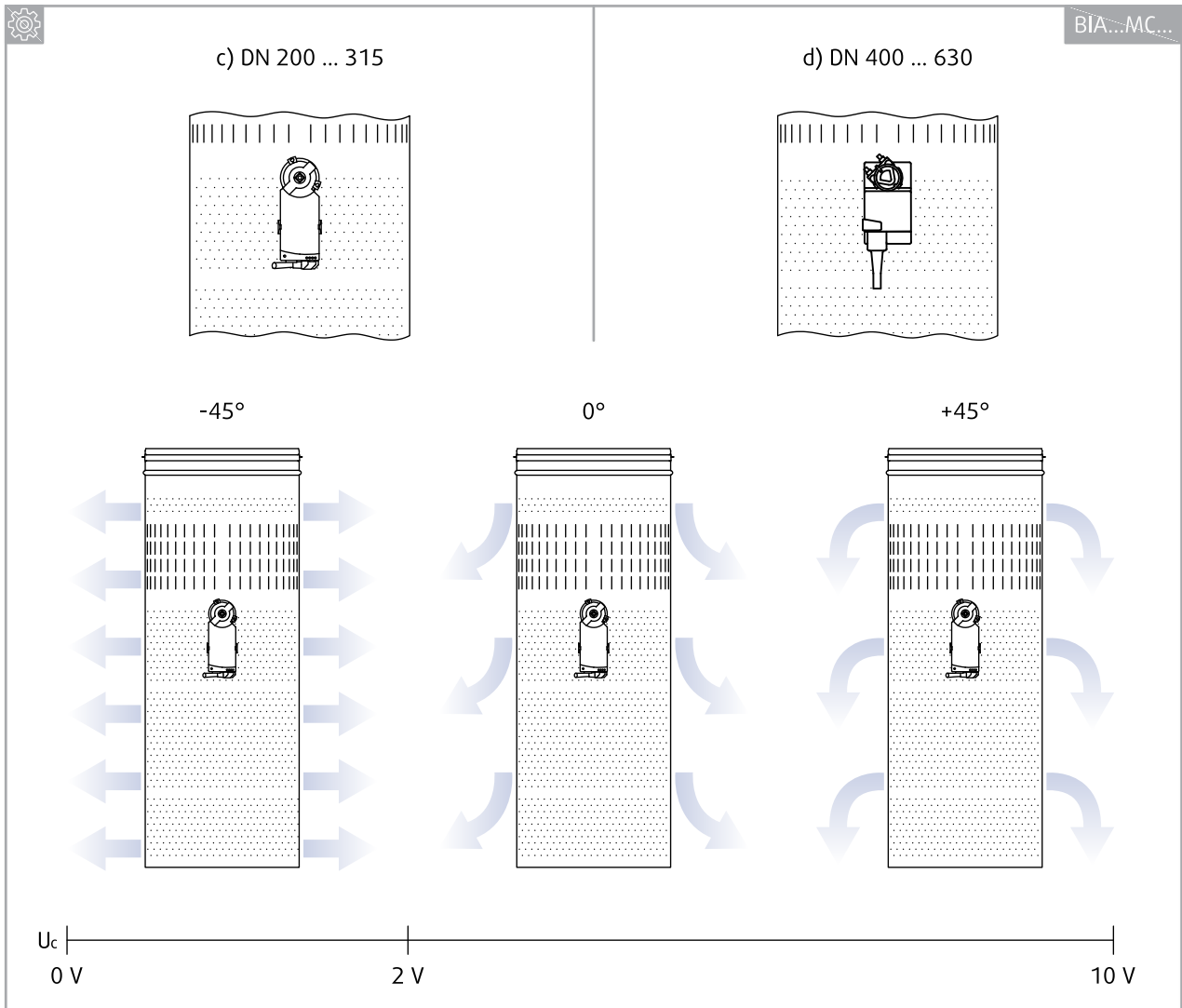
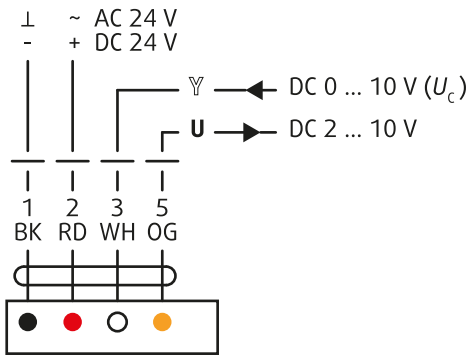


U_c |
0 V

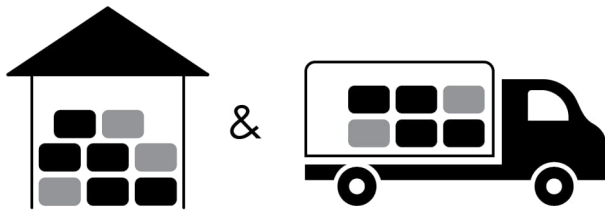
2 V


10 V


Electrical Connections




Transport, Storage and Operation




 °C -40 °C ... +50 °C

 % ≤ 95%



 °C -20 °C ... +50 °C

 % ≤ 95%

Supplement

Any deviations from the technical specifications contained herein and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters. Current information on all products is available on design.systemair.com.



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