

D+H

RAICO



+ *PLANNING MANUAL
DRIVES FOR RAICO*

CONTENTS

General information	3
Applications in vertical areas	
CDC chain drive	5
KA chain drive	10
VLD lock drive	15
VFD ventilation flap drive	17
Applications in roof areas	
KA chain drive	18
CDP / CDP-TW chain drive	22
ZA rack and pinion drive	28
DXD rack and pinion drive	34
VLD lock drive	40
Minimum sash dimensions	42



GENERAL INFORMATION

Efficiency

- » Time-saving installation thanks to optimal matching of the bracket sets to the profile system

Voltage

- » All drives available as 24V and 230V versions

Applications in indoor swimming pools

- » Some drives are also suitable for use in indoor swimming pools and high-humidity atmospheric conditions. If this is the case, please contact us.

Fast installation

- » Brackets are immediately ready for installation – without requiring additional work to adjust the fitting

Functional safety

- » Optimal matching of the brackets to the drive types ensures absolute functional safety of the system

NSHEV, SHEV and ventilation

- » All drives are tested and approved for use in NSHEV systems in accordance with EN12101-2, as well as being suitable for SHEV and ventilation purposes.

NSHEV applications are in part restricted by certain specifications such as size, weight, opening angle, installation situation, positioning in the building and wind deflectors. If this is the case, please contact us.

For inward-opening windows, the maximum opening angle or the placement of the chain and the opening curve must generally be observed. For inward-opening side-hung windows, the design of the motors in particular must be observed. For rack and pinion drives, the swivel range of the rack or the tube (rack housing) must be observed.

Please note: The specifications in this folder are only for pre-selection of the motors. The sash sizes and weights relating to the profile groups, opening type and fitting design, as well as the arrangement of the motors and fitting accessories, can be found in the relevant fitting diagrams in the RAICO planning documents. The motors are to be dimensioned using myCalc.

Simple chain decoupling

- » Chain can be decoupled for servicing even when sash is closed

Complete scope of supply

- » All fastening materials for installation are included in the scope of supply of the bracket sets

Special colours

- » The brackets and drives are optionally available in special colours in accordance with the RAL Classic colour chart (RAL-K5 colour guide) (painted or powder-coated). DB and other colours available on request

Documentation

- » Application drawings suitable for window and façade manufacturers available

Crush protection

- » Various options available. The specifications of the Machinery Directive must be observed

BRIEF EXPLANATION OF OPTIONS



HS (High Speed)

The drive's high-speed function when using SHEV. When using SHEV, the drives must have reached the defined opening position within a maximum of 60 s, in accordance with DIN standard EN 12101-2.



Function programming

Option for customised configuring of drive parameters (e.g. stroke) via software and associated service tools for drives equipped with PLP, BSY or BSY+ electronics.



ACB (Advanced Communication Bus)

Enables direct bus communication between the controller and the drive, e.g. for control with perfect positioning or drive feedback. Communication is via the open source Modbus protocol, and it enables the drive to be combined with an ACB-capable control panel or directly connected to higher-level controllers such as a building management system.



BSY+ (synchronisation of drives)

BSY+ enables different components in the window to communicate and synchronise with each other. For example, the chain drives during synchronous operation, or the window and lock drives (e.g. FRA 11 BSY+ or VLD-BSY+).



SKS (closing edge protection)

Drive option, which enables an anti-trap strip or presence detector to be connected directly to the drive (terminal resistor 5.6 kΩ).



SBD (Side Bow Chain)

Drive chain with rigid backing, bends in the direction of the hinge. Drive is fixed in place (not rotatable).



SBU (Side Bow Chain)

Drive chain with rigid backing, bends in the direction of the hinge. Drive is fixed in place (not rotatable).



WS (use in swimming pool)

Available as an option for rack and pinion drives to make them suitable for use in swimming pools. The drive is equipped with an A4 rack and pinion, A4 eyebolt and a gearbox with hardened stainless steel pinion.



W (use outdoors)

Available as an option for rack and pinion drives to make them suitable for outdoor use. The drive is equipped with a pressure release vent (depending on installation), condensate protective coating on the electronics and a gearbox with hardened stainless steel pinion.



Audible signal (corresponding to protection class)

AS2 corresponding to protection class 2 in accordance with ZVEI risk assessment through an audible warning signal in the CLOSED direction. AS3 corresponding to protection class 3 in accordance with ZVEI risk assessment, in addition to AS2, stops the drive for 11 s with a remaining stroke of 28 mm.

BRIEF EXPLANATION OF PICTOGRAMS



Trapezoidal application



Drawbridge application

Applications in vertical areas

CDC CHAIN DRIVE

- » 24 V and 230 V
- » 250 N force
- » Up to 800 mm stroke for NSHEV in accordance with DIN EN 12101-2
- » Up to 1300 mm stroke for smoke exhaust and ventilation



Product overview

CDC-0252-1-ACB / CDC-0252-5-ACB

- » Inward-opening window: bottom- and side-hung windows
- » Mounted installation as well as installation integrated in the profile
- » Outward-opening window: bottom-, top-, side-hung and projected top-hung windows
- » Mounted installation
- » Single and multiple drives, with and without lock drive

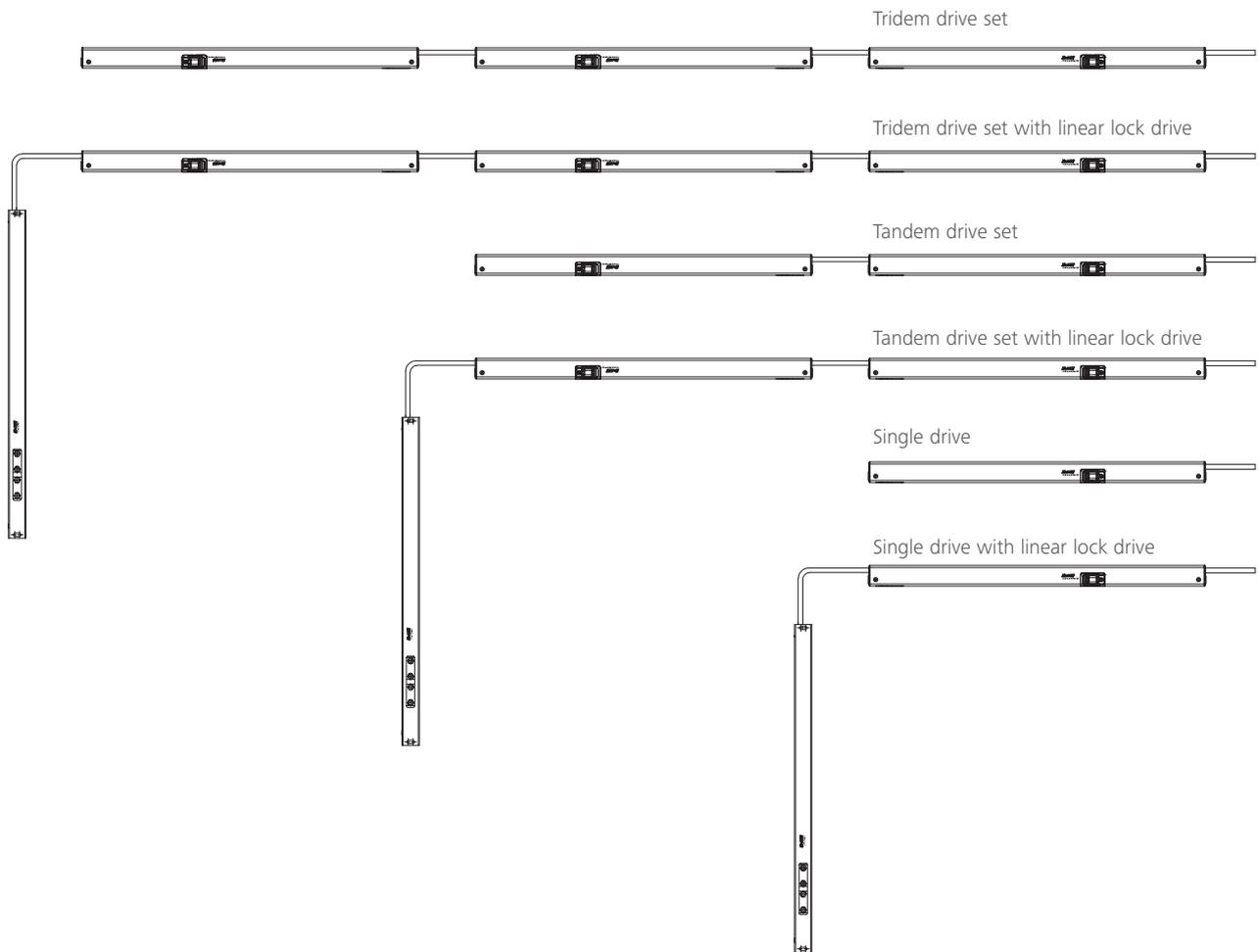
Options

- » R "right" design / L "left" design
- » HP Stroke programming
- » SBD/U Side bow chain
- » Trapezoidal application
- » ZB Drawbridge application
- » VP Signal programming for connecting with lock drive VLD BSY+
- » KM Powerful 400 N motor gearbox unit in opening range O1 and closing range C1
- » LS Low-speed programming in CLOSED direction (5 mm/s) – corresponding to protection class 3
- » AS2 Audible signal – corresponding to protection class 2
- » AS3 Audible signal – corresponding to protection class 3
- » SKS connection of an external sensor for closing edge protection – corresponding to protection class 4
- » Longer connection cable max. 10 m for 24 V motors, max. 7.5 m for 230 V motors
- » Cable colours light grey, black and white



Examples of motor arrangement / wiring

24 V and 230 V CDC drives with and without lock drive



INSTALLATION SOLUTIONS

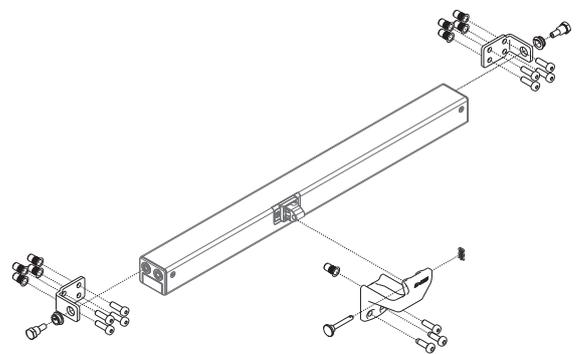
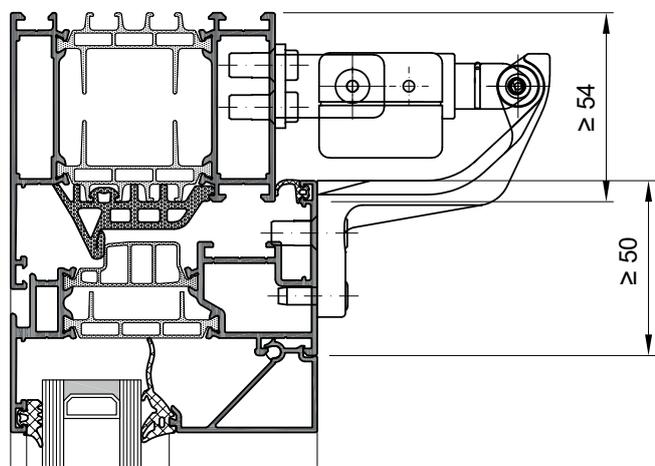
Bottom-hung and side-hung windows, inward-opening, mounted installation

Series: FRAME+ 75 / 90

Bracket: CDC-BS089-VFI (D+H article number: 25.AHG.KS)

Installation type: Frame mounting

Raico drawing number: 75WI-0205



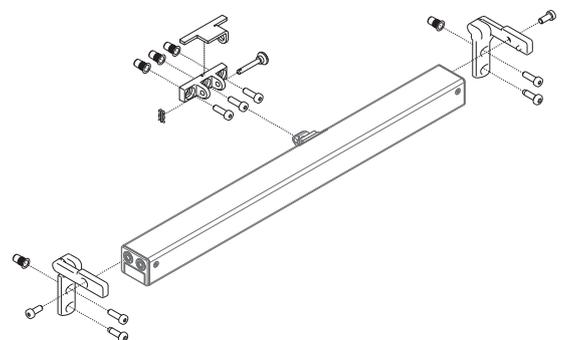
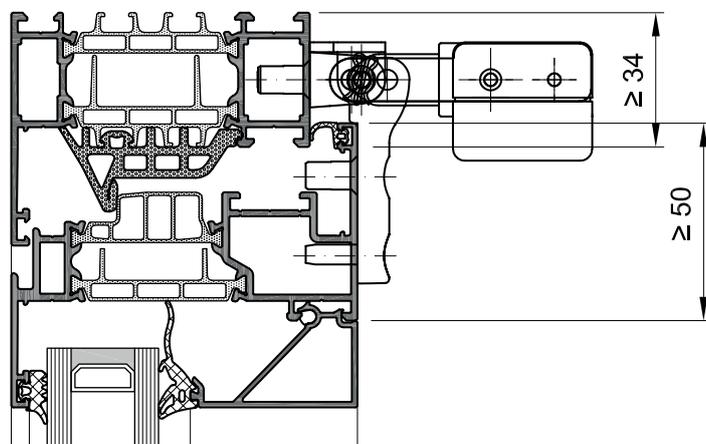
[Download instruction for use CDC-BS089-VFI](#)

Series: FRAME+ 75 / 90

Bracket: CDC-BS091-VSI (D+H article number: 25.AHJ.KS)

Installation type: Sash mounting (cable transition required)

Raico drawing number: 75WI-0206



[Download instruction for use CDC-BS091-VSI](#)

Side-hung windows, inward-opening, mounted installation

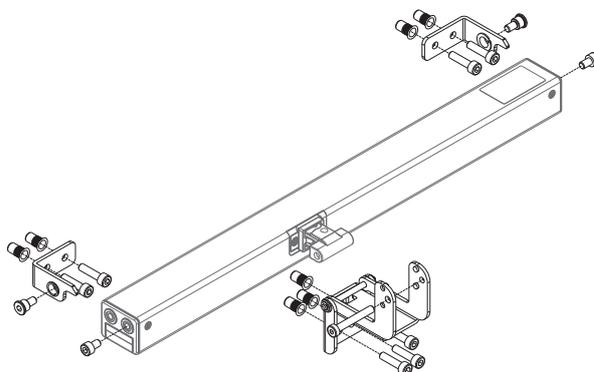
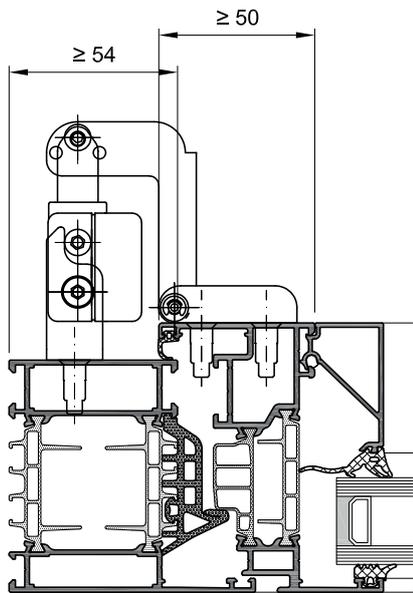
Series: FRAME+ 75 / 90

Bracket: BS-CDC-PI01-M-VFIS (D+H article number: 26.800.09)

Installation type: Frame mounting, up to max. 60°

Raico drawing number: 75WI-0207

[Download instruction for use BS-CDC-PI01-M-VFIS](#)



Bottom-hung and side-hung windows, inward-opening, profile-integrated installation

Series: FRAME+ 75 / 90

Bracket for 24V CDC drive with 350 mm stroke:

CDC-BS062-IFI (D+H article number: 25.AFM.KS)

Bracket for 24V CDC drive with 600 mm stroke:

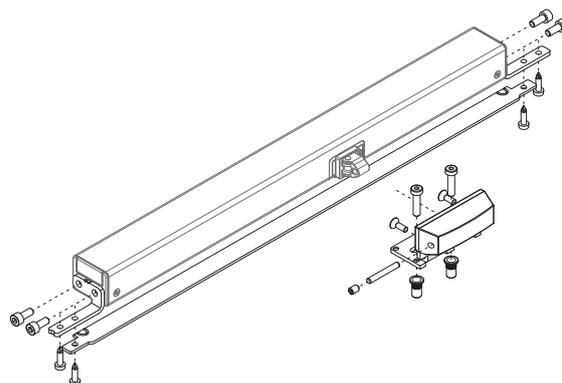
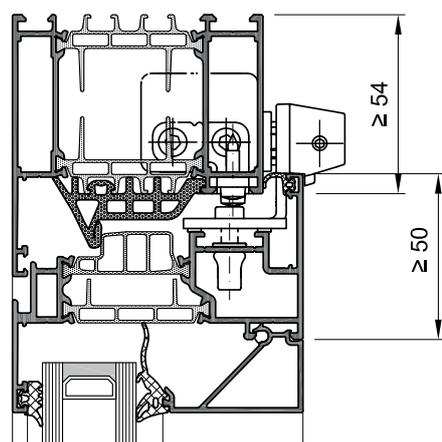
CDC-BS063-IFI (D+H article number: 25.AFN.KS)

Installation type: Profile-integrated installation

Raico drawing number: 75WI-0209

Other stroke lengths with building-specific bracket set

- » Always CDC with side bow chain SBD required, min. sash height 550 mm
- » Side-hung window up to max. 350 mm stroke
- » Centre seal preservation: motor cover plate provided guarantees optimal fastening of the centre seal
- » Simple chain decoupling: chain can be decoupled for servicing even when sash is closed



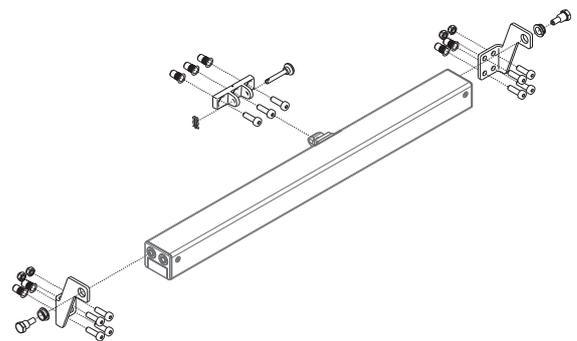
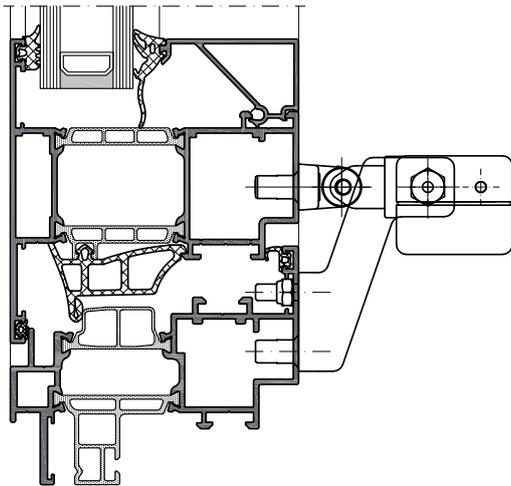
[Download instruction for use CDC-BS062-IFI, CDC-BS063-IFI](#)

Bottom-, top-, side-hung and projected top-hung windows, outward opening, mounted installation

Series: FRAME+ 75 WA

Bracket: CDC-BS090-VFO (D+H article number: 25.AHH.KS)

Raico drawing number: 75WA-0205

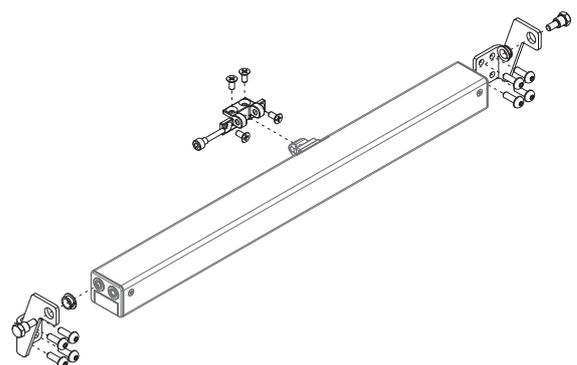
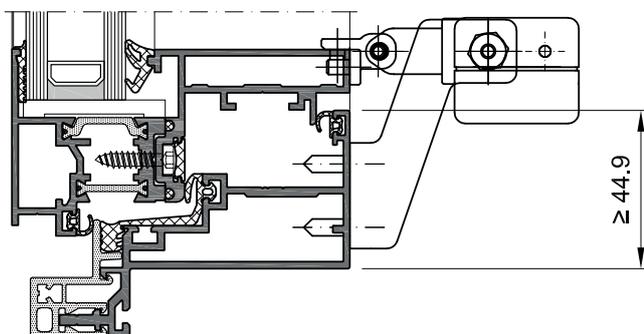


[Download instruction for use CDC-BS090-VFO](#)

Series: WING 50 A/SK

Bracket: CDC-BS065-VFO (D+H article number: 25.AFL.KS)

Raico drawing number: 50SK-0055



[Download instruction for use CDC-BS065-VFO](#)

KA CHAIN DRIVE

- » 24 V and 230 V
- » 350 N or 500 N force
- » Up to 1000 mm stroke for NSHEV in accordance with DIN EN 12101-2
- » Up to 1300 mm stroke for smoke exhaust and ventilation



Product overview

KA 34-BSY+ / KA 54-BSY+ / KA 34-K-BSY+ / KA 54-K-BSY+

- » Inward-opening window: bottom- and side-hung windows
- » Mounted installation
- » Outward-opening window: bottom-, top-, side-hung and projected top-hung windows
- » Mounted installation
- » Single and multiple drives, with and without lock drive

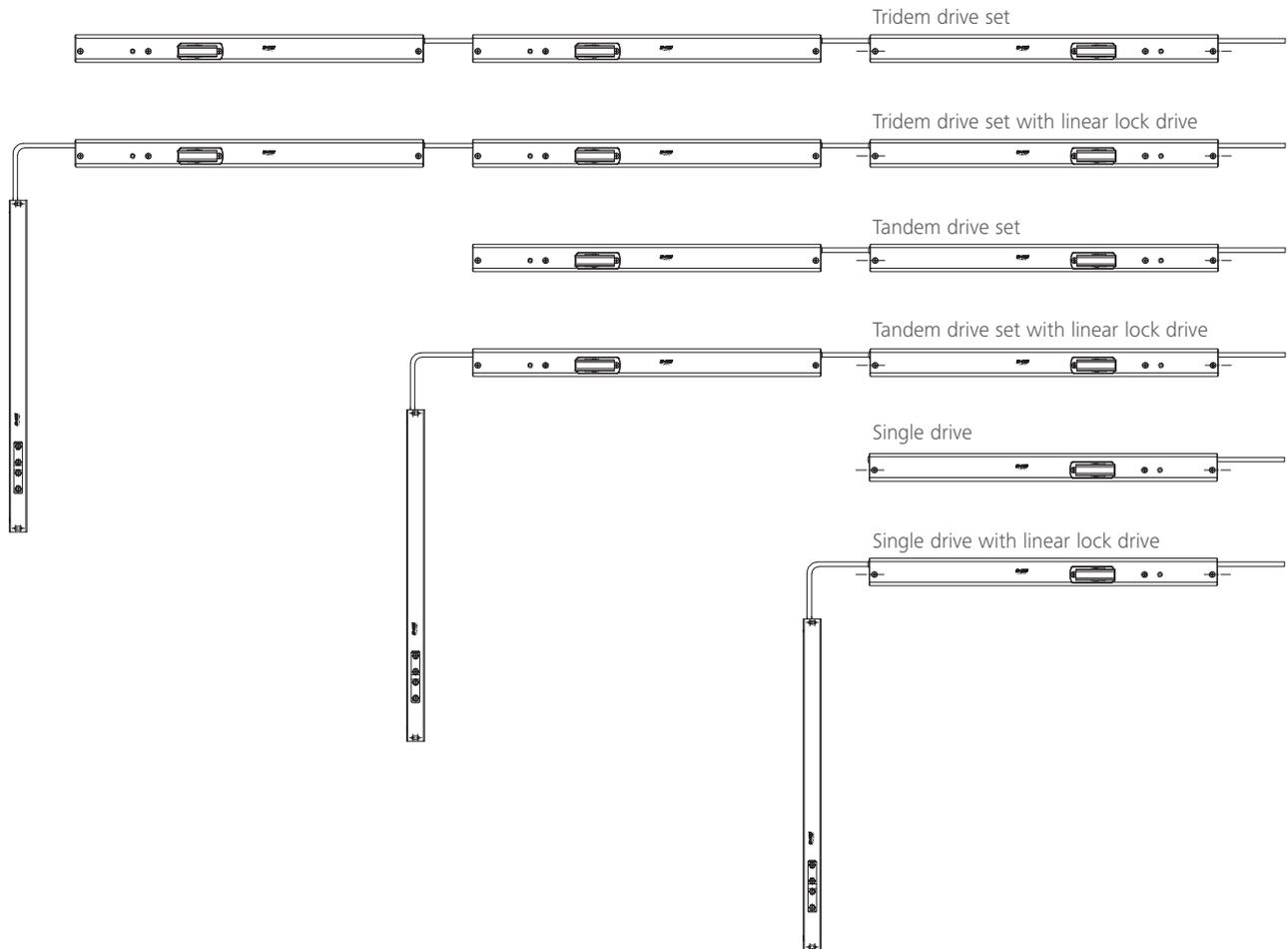
Options

- » KA 34 (300N) and KA 54 (500N) design
- » R "right" design / L "left" design
- » HP Stroke programming
- » SBD/U Side bow chain
- » ZB Drawbridge application
- » VP Signal programming for connecting with lock drive VLD BSY+
- » SA-SZ OPEN and CLOSED signal
- » LS Low-speed programming in CLOSED direction (5 mm/s) – corresponding to protection class 3
- » AS2 Audible signal – corresponding to protection class 2
- » AS3 Audible signal – corresponding to protection class 3
- » SKS connection of an external sensor for closing edge protection – corresponding to protection class 4
- » Longer connection cable max. 12.5 m for 24V PLP motors, max. 15 m for 24V BSY+ motors, max. 8 m for 230V motors
- » Cable colours light grey, black and white



Examples of motor arrangement / wiring

24 V and 230 V KA drives with and without lock drive



INSTALLATION SOLUTIONS

Bottom-hung and side-hung windows, inward-opening, mounted installation

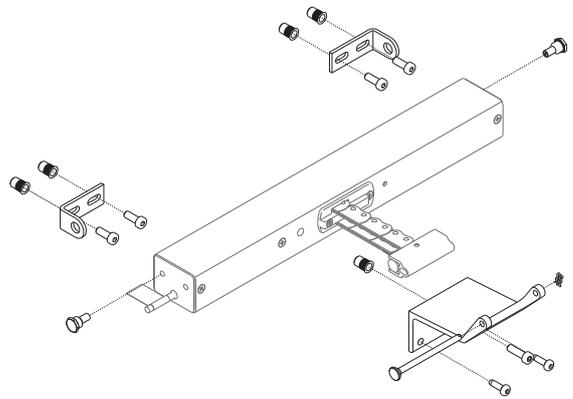
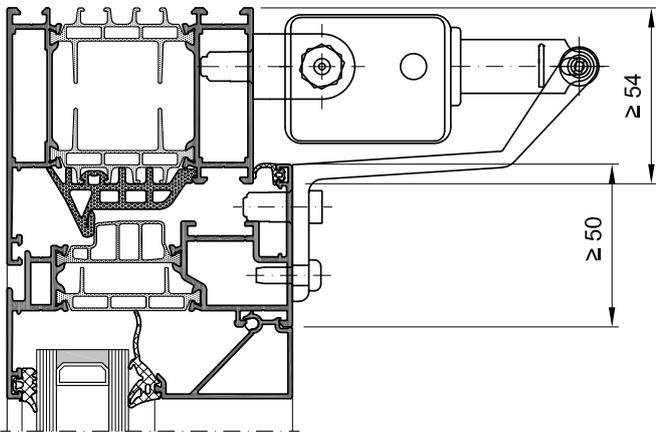
Series: FRAME+ 75 / 90

Bracket: KA-BS092-VFI (D+H article number: 26.AFW.KS)

Installation type: Frame mounting

Raico drawing number: 75WI-0210

[Download instruction for use KA-BS092-VFI](#)



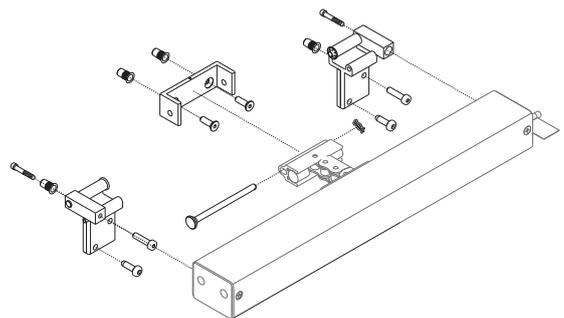
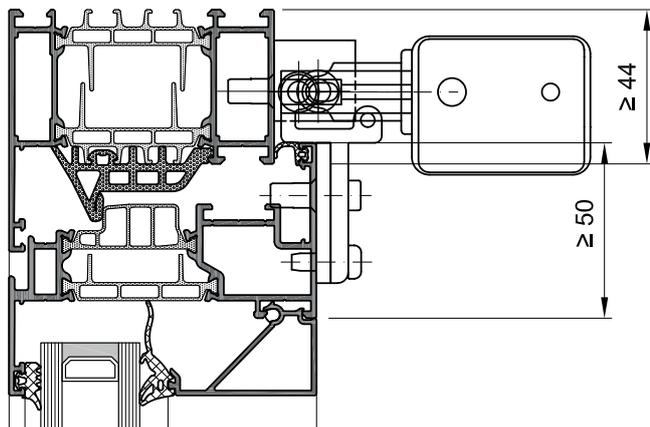
Series: FRAME+ 75 / 90

Bracket: KA-BS094-VSI (D+H article number: 26.AFY.KS)

Installation type: Sash mounting (cable transition required)

Raico drawing number: 75WI-0211

[Download instruction for use KA-BS094-VSI](#)



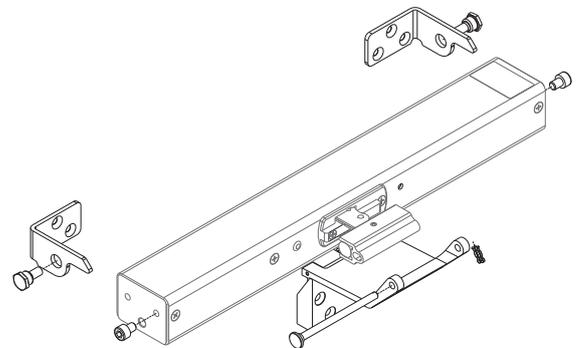
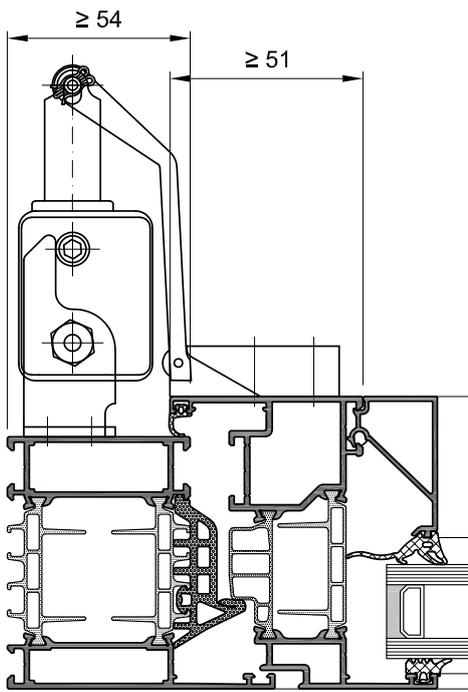
Side-hung windows, inward-opening, mounted installation

Series: FRAME+ 75 / 90

Bracket: KA-BS083-VFIS (D+H article number: 26.AFJ.KS)

Installation type: Frame mounting, up to max. 90°

Raico drawing number: 75WI-0212



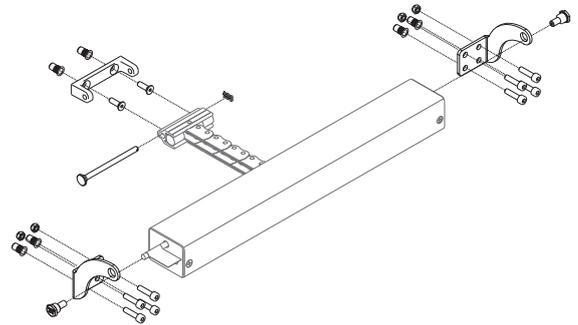
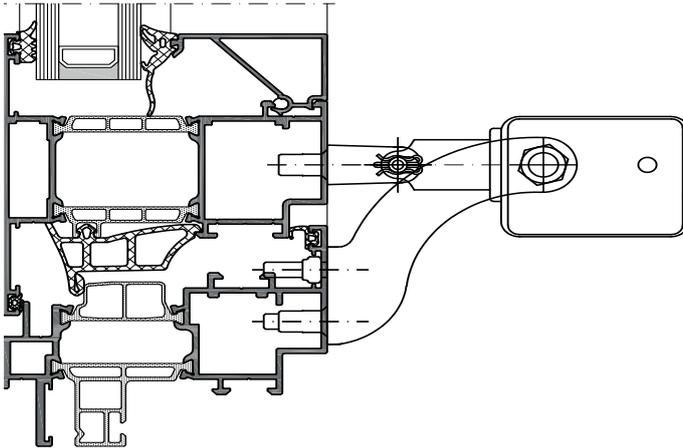
[Download instruction for use KA-BS083-VFIS](#)

Bottom-, top-, side-hung and projected top-hung windows outward-opening, mounted installation

Series: FRAME+ 75 WA

Bracket: KA-BS093-VFO (D+H article number: 26.AFX.KS)

Raico drawing number: 75WA-0206

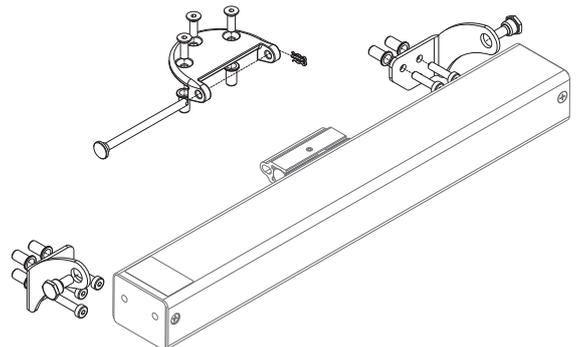
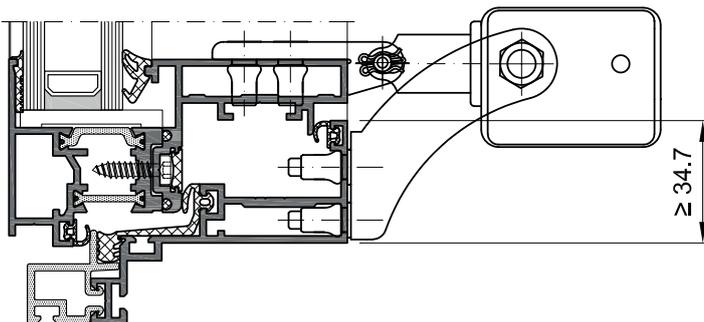


[Download instruction for use KA-BS093-VFO](#)

Series: WING 50 A/SK

Bracket: KA-BS006-VFO (D+H article number: 26.AAY.KS)

Raico drawing number: 50SK-0056



[Download instruction for use KA-BS006-VFO](#)

VLD LOCK DRIVE 51/038-BSY+

- » 24 V
- » 500 N force
- » Locking stroke 19 mm or 38 mm



Product overview VLD 51/038-BSY+

- » Application in conjunction with 24V and 230V CDC and KA drives
- » Inward-opening window: bottom- and side-hung windows
- » Mounted installation as well as installation integrated in the profile
- » Outward-opening window: bottom-, top-, side-hung and projected top-hung windows
- » Mounted installation

Options

- » HP Stroke programming
- » Longer connection cable max. 12.5 m
- » Cable colours light grey, black and white

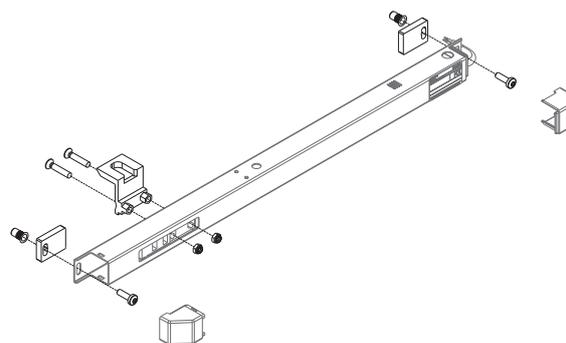
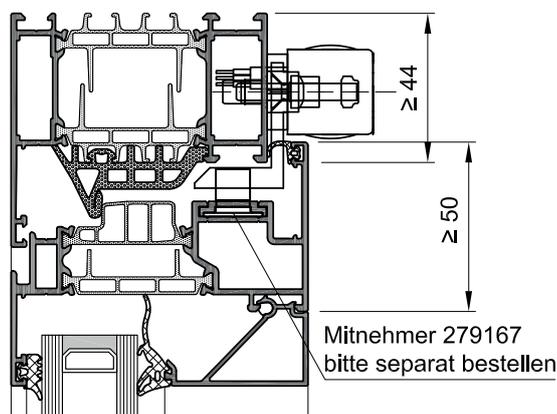
Installation solutions for bottom- and side-hung windows, inward-opening, mounted installation

Series: FRAME+ 75 / 90

Bracket: VLD-BS010 (D+H article number: 23.066.14)

Installation type: surface-mounted

Raico drawing number: 75WI-0213



[Download instruction for use VLD-BS010](#)

INSTALLATION SOLUTIONS

Profile-integrated installation

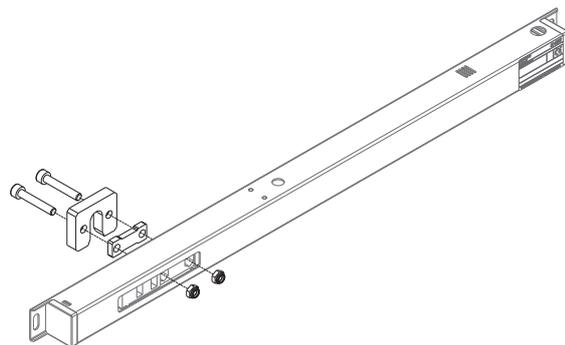
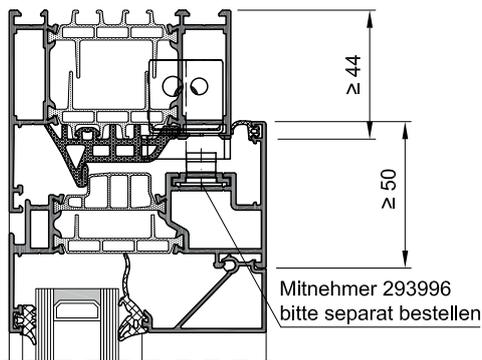
Series: FRAME+ 75 / 90

Bracket: PI-VLD (D+H article number: 23.066.14)

Installation type: integrated

Raico drawing number: 75WI-0214

[Download instruction for use PI-VLD](#)



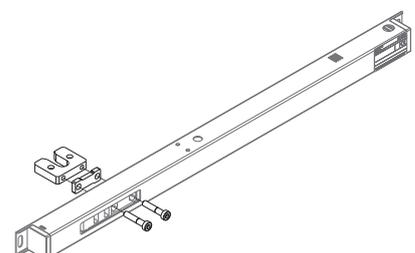
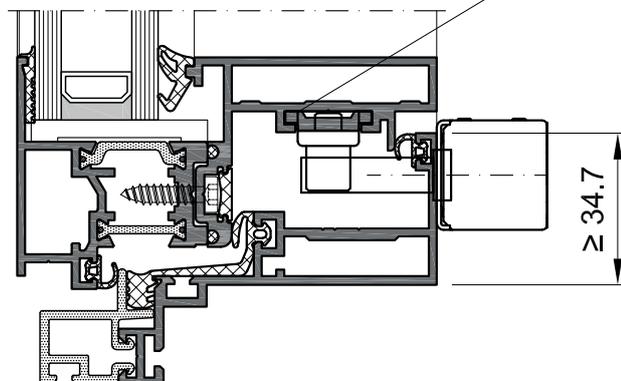
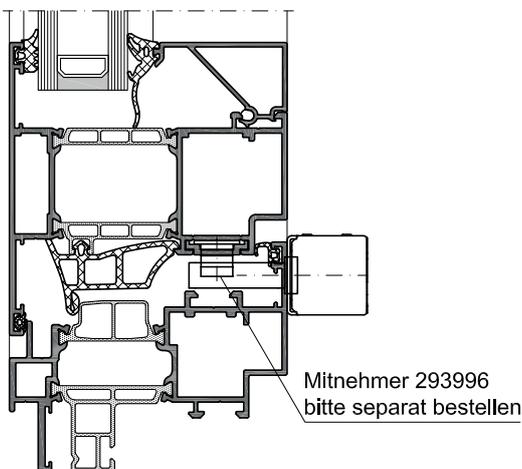
Bottom-, top-, side-hung and projected top-hung windows outward-opening, mounted installation

Series: FRAME+ 75 WA

Bracket: PI-VLD-HK (D+H article number: 23.066.20)

Raico drawing number: 75WA-0207, 50SK-0057

**Mitnehmer 290121
bitte separat bestellen**

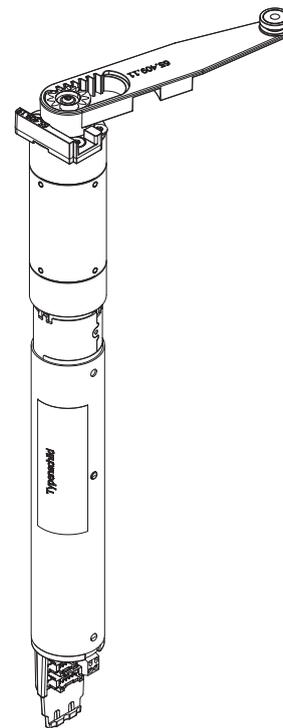
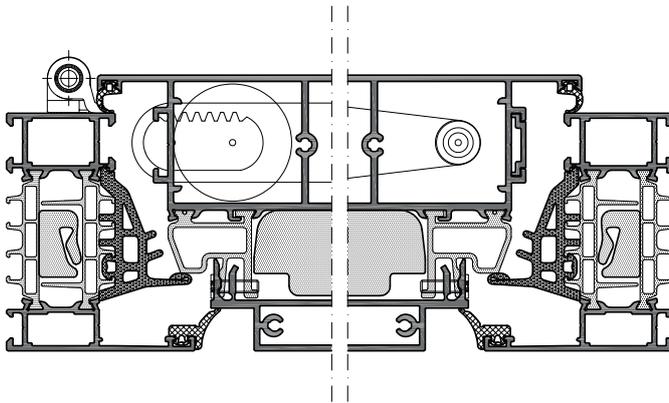


[Download instruction for use PI-VLD-HK](#)

ROTARY AND LOCK DRIVE VFD

- » 24 V
- » For FRAME+ 75 LF series ventilation flap
- » Selection, article numbers, sash sizes, installation instructions, see RAICO planning/installation ventilation flap 170/300

Integrated installation



Applications in roof areas

KA CHAIN DRIVE

- » 24 V and 230 V
- » 350 N or 500 N force
- » Up to 800 mm stroke for NSHEV in accordance with DIN EN 12101-2 and for smoke exhaust and ventilation

Product overview

KA 34-BSY+ / KA 54-BSY+ / KA 34-K-BSY+ / KA 54-K-BSY+



- » Single and multiple drives, with and without lock drive

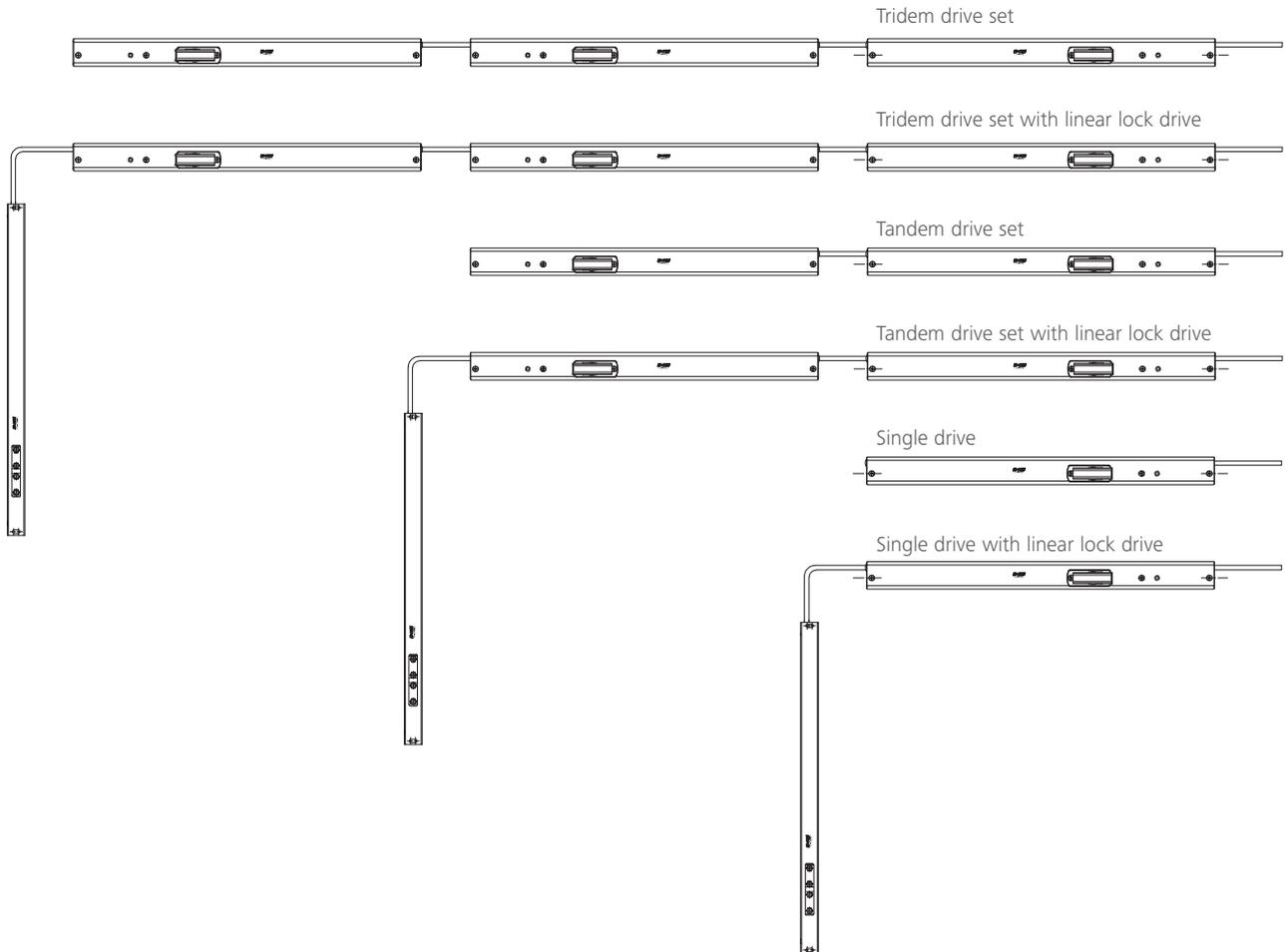
Options

- » KA 34 (300 N) and KA 54 (500 N) design
- » R "right" design / L "left" design
- » HP Stroke programming
- » SA-SZ OPEN and CLOSED signal
- » VP Signal programming for connecting with lock drive VLD BSY+
- » LS Low-speed programming in CLOSED direction (5 mm/s) – corresponding to protection class 3
- » AS2 Audible signal – corresponding to protection class 2
- » AS3 Audible signal – corresponding to protection class 3
- » SKS connection of an external sensor for closing edge protection – corresponding to protection class 4
- » Longer connection cable max. 12.5 m for 24 V PLP motors, max. 15 m for 24 V BSY+ motors, max. 8 m for 230 V motors
- » Cable colours light grey, black and white



Examples of motor arrangement / wiring

24 V and 230 V KA drives with and without lock drive



INSTALLATION SOLUTIONS

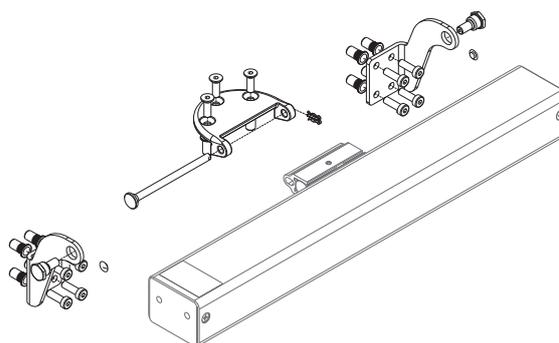
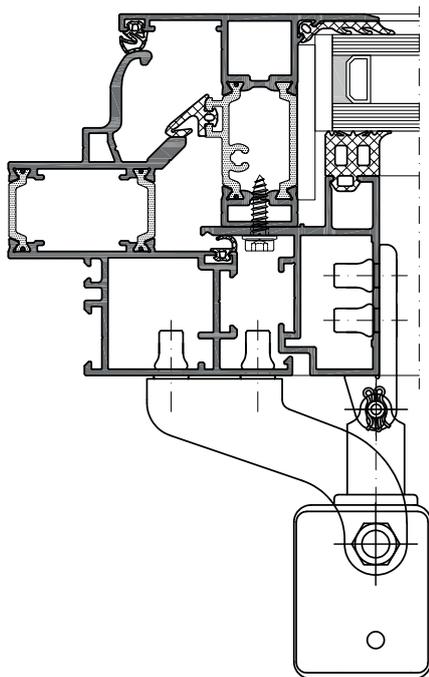
Roof windows for bottom-, top- and side-hung windows

Series: WING 105 DI

Bracket: KA-BS002-VFO (D+H article number: 26.AAJ.KS)

Raico drawing number: 105D-0112

[Download instruction for use KA-BS002-VFO](#)

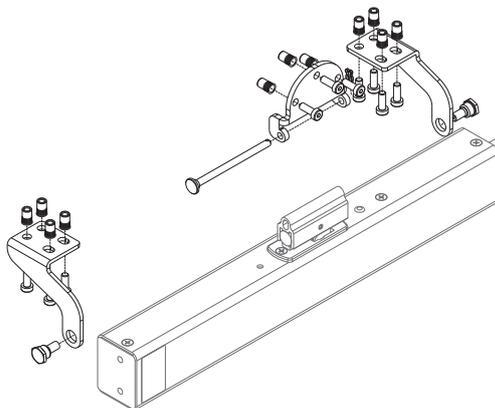
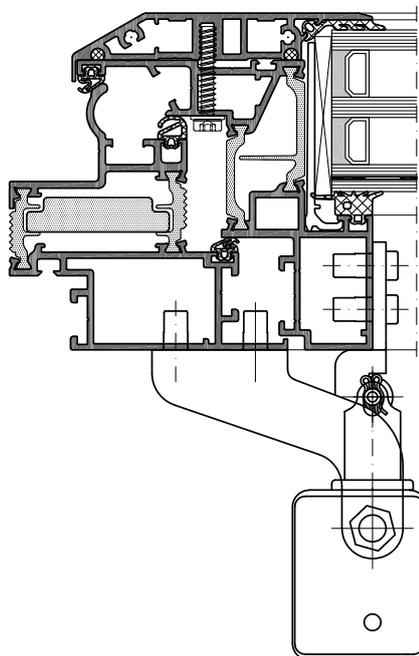


Series: FRAME+ 100/120 RI

Bracket: KA-BS099-VFO (D+H article number: 26.AGG.KS)

Raico drawing number: 100RI-0040

[Download instruction for use KA-BS099-VFO](#)

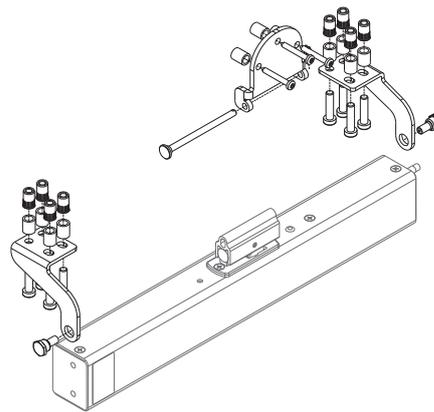
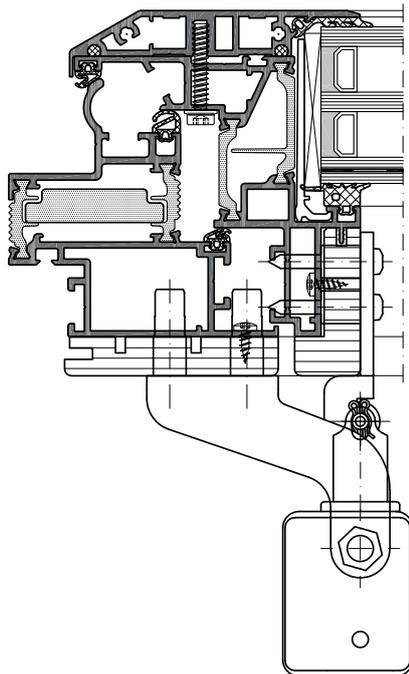


Series: FRAME+ 100/120RI-T

Bracket: KA-BS101-VFO (D+H article number: 26.AGL.KS)

Raico drawing number: 100RI-T-0040

[Download instruction for use KA-BS101-VFO](#)



CDP / CDP-TW CHAIN DRIVE

- » 24 V and 230 V
- » CDP up to 1500 N force, CDP-TW 3000 N force
- » Up to 1000 mm for NSHEV in accordance with DIN EN 12101-2
- » Up to 1500 mm for smoke exhaust and ventilation

Product overview

CDP-BSY+ / CDP-K-BSY+ / CDP-TW-BSY+ / CDP-TW-K-BSY+



- » Single and multiple drives, with and without lock drive for 24 V drives
- » Single and multiple drives for 230 V drives

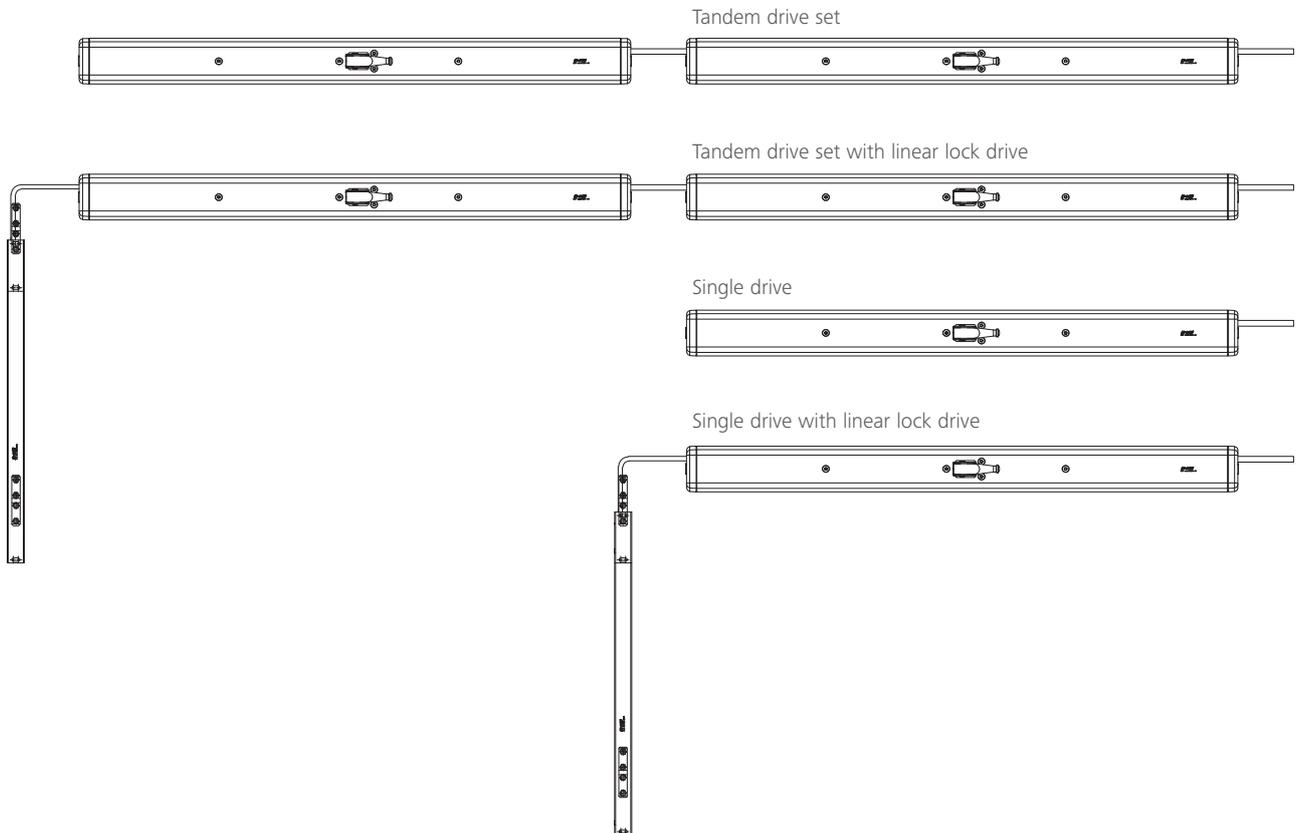
Options

- » HP Stroke programming
- » Trapezoid and triangular application (on request)
- » VP Signal programming for connecting on request with lock drive VLD BSY+
- » Compact design (only 600 mm, 800 mm, 1200 mm stroke)
- » LS Low-speed programming in CLOSED direction (5 mm/s) – corresponding to protection class 3
- » SA-SZ OPEN and CLOSED signal
- » AS2 Audible signal – corresponding to protection class 2
- » AS3 Audible signal – corresponding to protection class 3
- » SKS connection of an external sensor for closing edge protection – corresponding to protection class 4
- » Longer connection cable max. 10 m
- » Cable colour light grey



Examples of motor arrangement / wiring

CDP and CDP-TW drives 24 V with and without lock drive



INSTALLATION SOLUTIONS

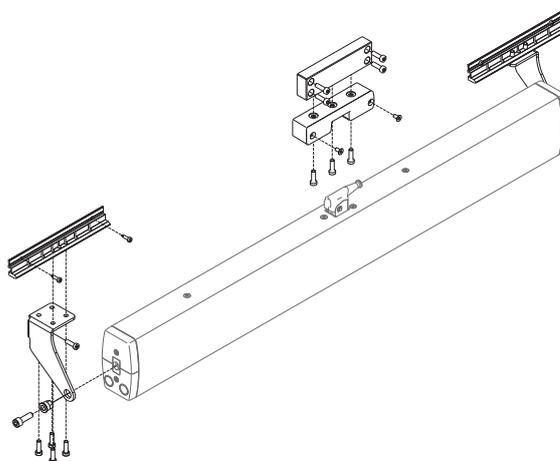
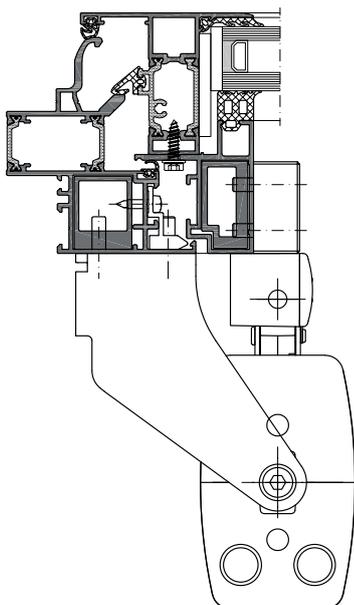
Roof windows for bottom-, top- and side-hung windows

Series: WING 105 DI

Bracket: CDP-BS019-OM (D+H article number: 26.CAS.KS)

Raico drawing number: 105D-0102

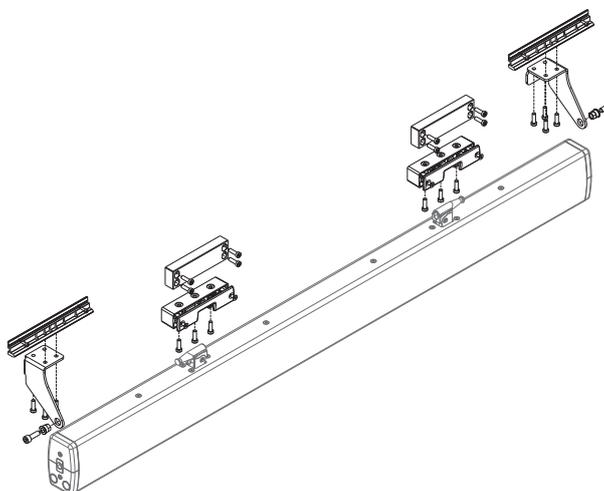
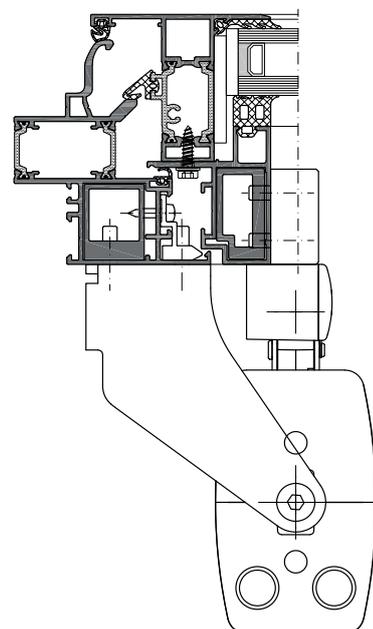
[Download instruction for use CDP-BS019-OM](#)



Series: WING 105 DI

Bracket: CDP-TW- BS020-OM (D+H article number: 26.CBB.KS)

Raico drawing number: 105D-0111

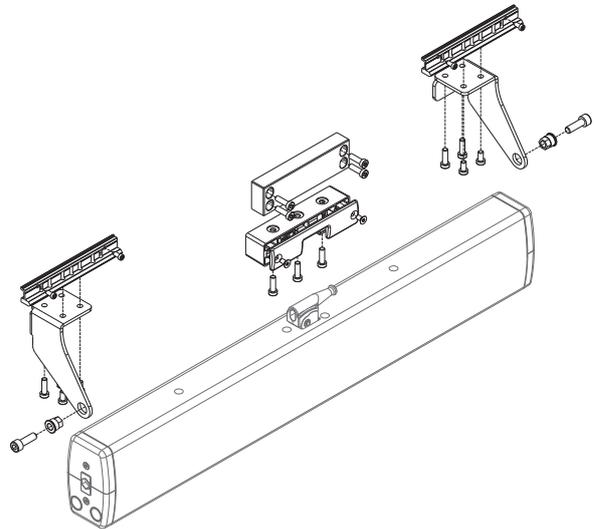
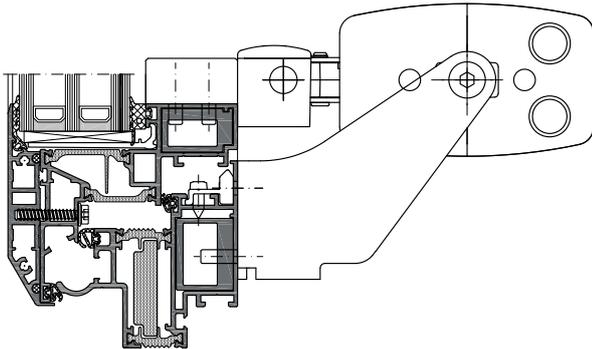


[Download instruction for use CDP-TW-BS020-OM](#)

Series: FRAME+ 100/120 RI

Bracket: CDP-BS024-OM (D+H article number: 26.CBN.KS)

Raico drawing number: 100RI-0041

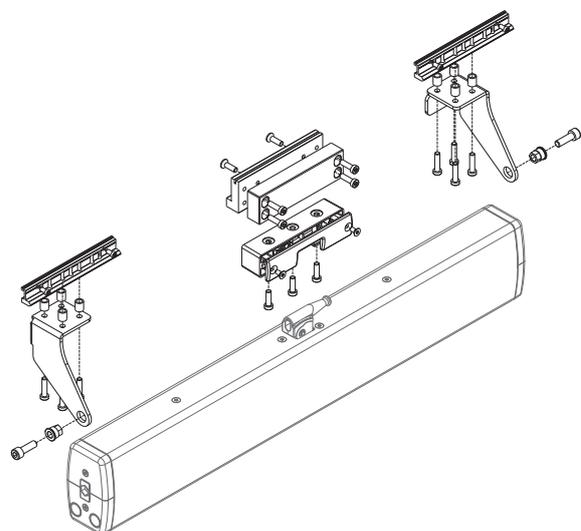
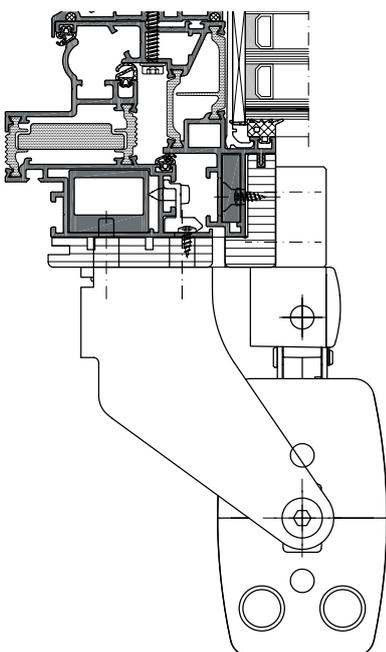


[Download instruction for use CDP-BS024-OM](#)

Series: FRAME+ 100 RI-T

Bracket: CDP-BS026-OM (D+H article number: 26.CBP.KS)

Raico drawing number: 100RI-T-0041

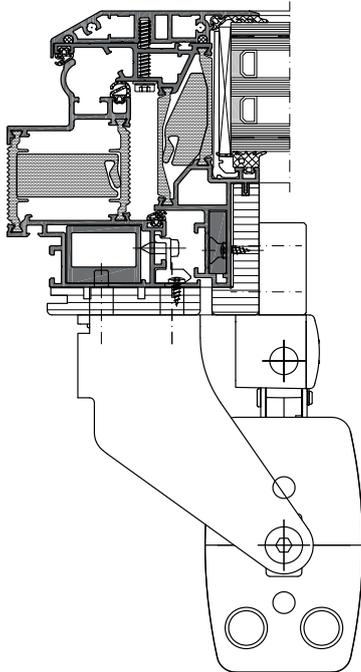


[Download instruction for use CDP-BS026-OM](#)

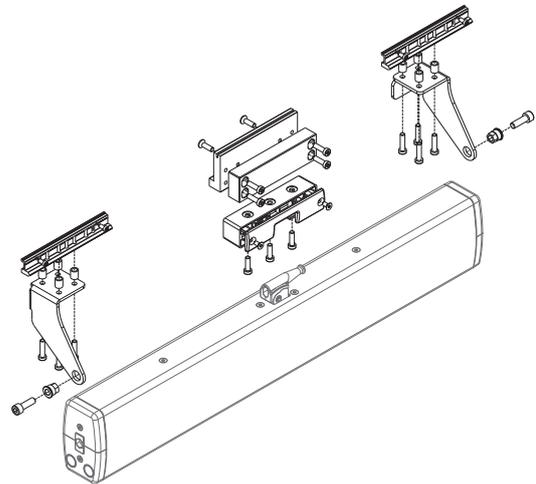
Series: FRAME+ 120 RI-T

Bracket: CDP-BS028-OM (D+H article number: 26.CBR.KS)

Raico drawing number: 120RI-T-0042



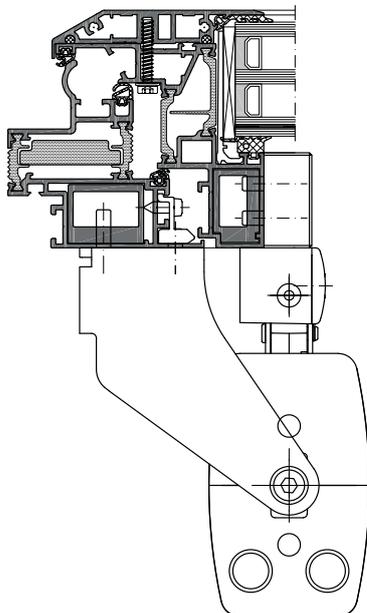
[Download instruction for use CDP-BS028-OM](#)



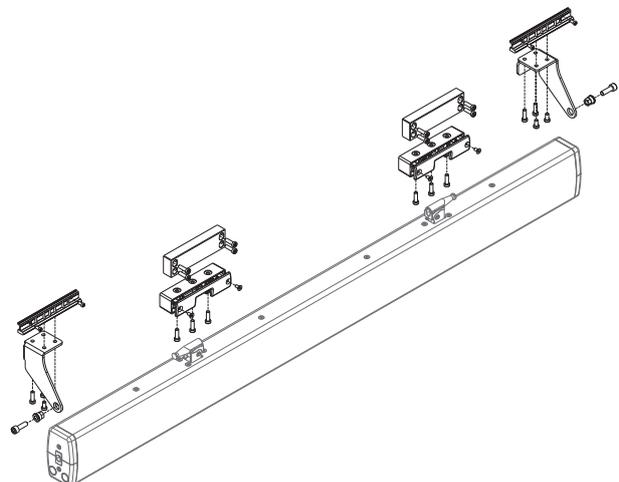
Series: FRAME+ 100/120 RI

Bracket: CDP-TW-BS025-OM (D+H article number: 26.CBO.KS)

Raico drawing number: 100RI-0047



[Download instruction for use CDP-TW-BS025-OM](#)

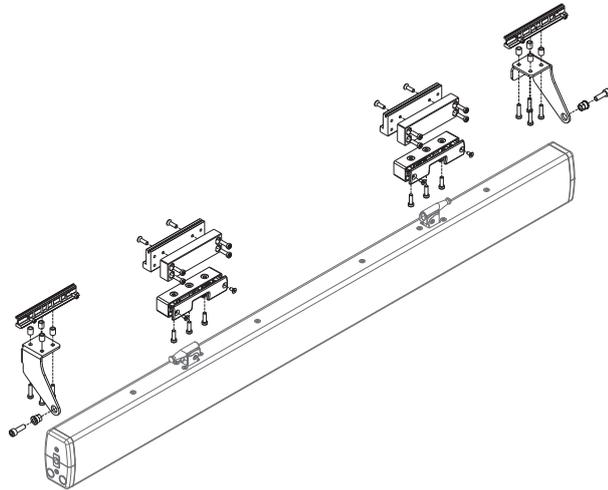
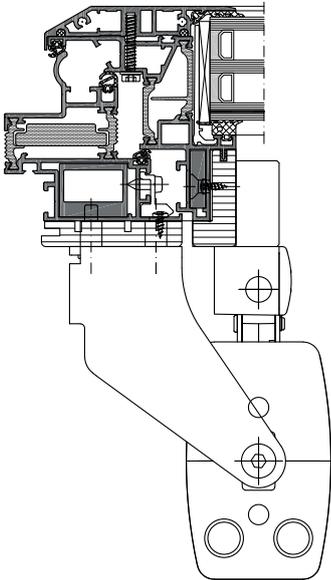


Series: FRAME+ 100 RI-T

Bracket: CDP-TW-BS027-OM (D+H article number: 26.CBQ.KS)

Raico drawing number: 100RI-T-0051

[Download instruction for use CDP-TW-BS027-OM](#)

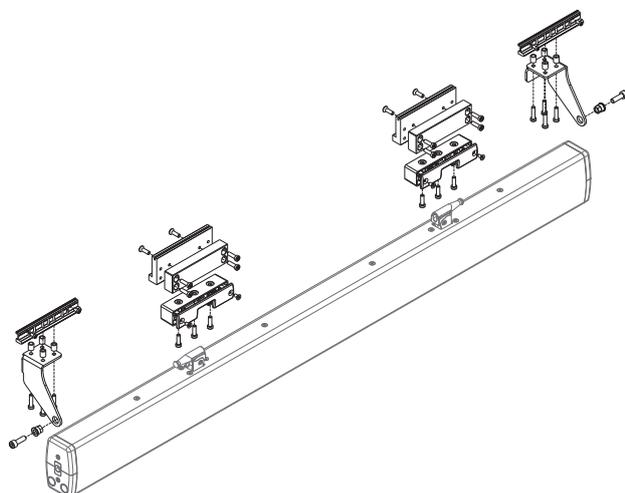
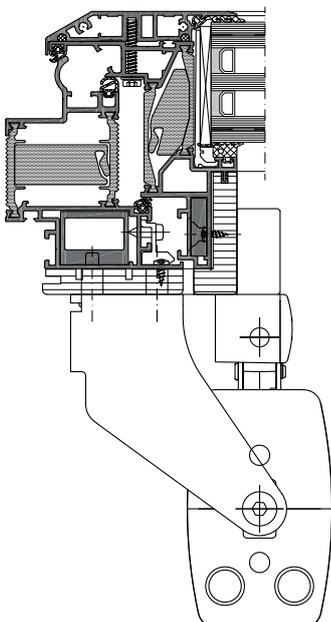


Series: FRAME+ 120 RI-T

Bracket: CDP-TW-BS029-OM (D+H article number: 26.CBS.KS)

Raico drawing number: 120RI-T-0052

[Download instruction for use CDP-TW-BS029-OM](#)



ZA RACK AND PINION DRIVE

- » 24 V and 230 V
- » 300 N up to 1500 N force
- » Up to 1000 mm stroke for NSHEV in accordance with DIN EN 12101-2
- » Up to 1500 mm stroke for smoke exhaust and ventilation



Product overview

ZA-0300 / ZA-0800 / ZA-1000 / ZA-1500 -1-ACB (HS) / ZA 35/85/105/155-K-BSY+ (-HS)

- » Single and multiple drives, with and without lock drive for 24 V drives
- » Single and multiple drives for 230 V drives
- » Trapezoid and triangular application (on request)

Options

- » 300 N, 800 N, 1000 N and 1500 N design
- » R "right" design / L "left" design
- » HS high-speed design
- » OT design without tube
- » HP Stroke programming
- » VP Signal programming for connecting with lock drive VLD BSY+
- » SA-SZ OPEN and CLOSED signal
- » LS Low-speed programming in CLOSED direction (5 mm/s) – corresponding to protection class 3
- » AS2 Audible signal – corresponding to protection class 2
- » AS3 Audible signal – corresponding to protection class 3
- » SKS connection of an external sensor for closing edge protection – corresponding to protection class 4
- » W weatherproof option
- » WS weatherproof special option suitable for use in indoor swimming pools (not ZA-OT)
- » Longer connection cable max. 12.5 m for 24 V motors, max. 8 m for 230 V motors
- » Cable colours light grey, black and white



INSTALLATION SOLUTIONS

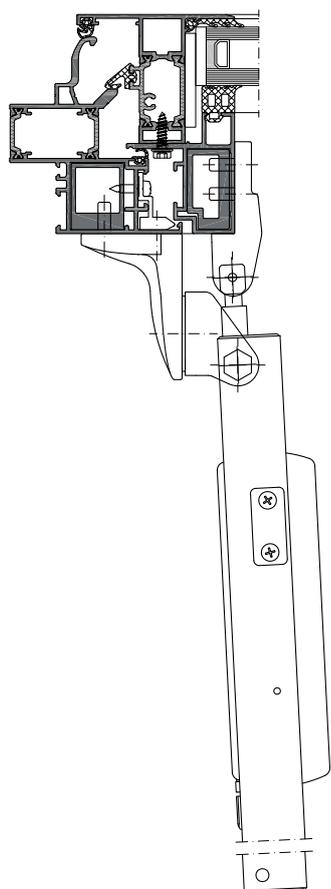
Roof windows for bottom-, top- and side-hung windows

Series: WING 105 DI

Bracket: ZA-BS042-OM (D+H article number: 27.BDA.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 105D-0104

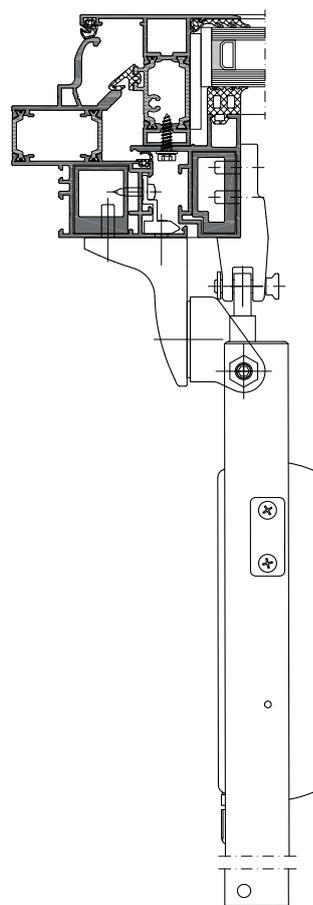


Series: WING 105 DI

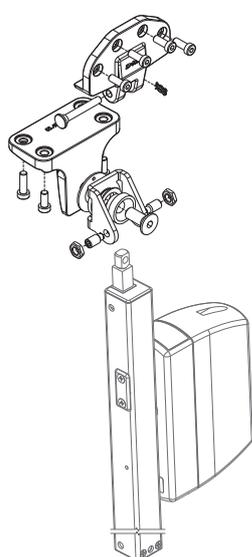
Bracket: ZA-BS043-SM (D+H article number: 27.BCZ.KS)

Installation type: Side installation

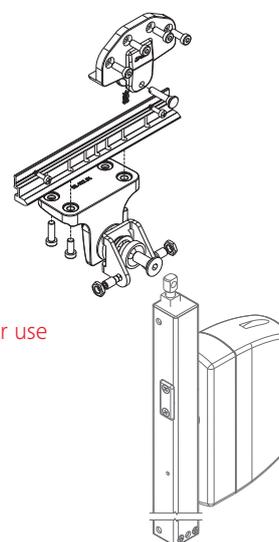
Raico drawing number: 105D-0105



Technical information:
The standard design is with tube. Alternatively, a design without a tube is possible.



[Download instruction for use
ZA-BS042-OM](#)



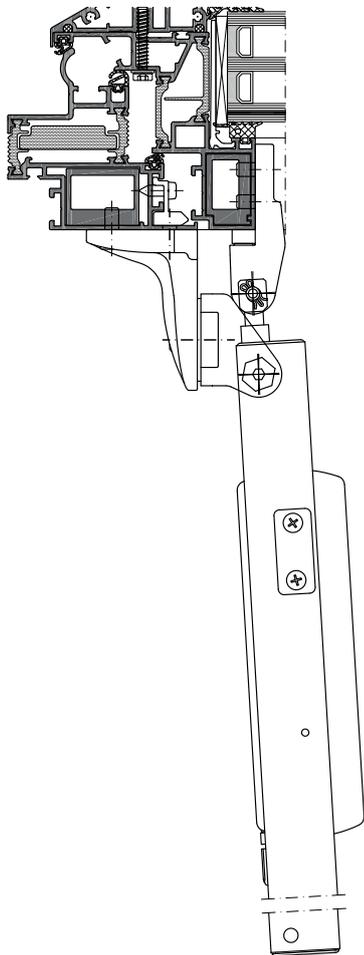
[Download instruction for use
ZA-BS043-SM](#)

Series: FRAME+ 100/120 RI

Bracket: ZA-BS049-OM (D+H article number: 27.BDT.KS)

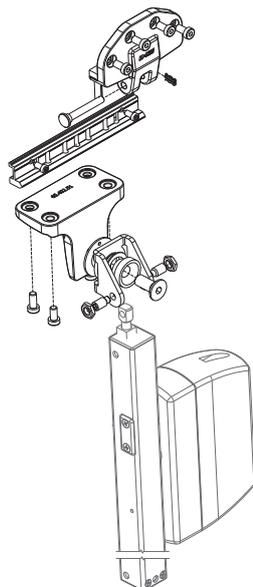
Installation type: Opposite the hinge installation

Raico drawing number: 100RI-0042



[Download instruction for use](#)

[ZA-BS049-OM](#)

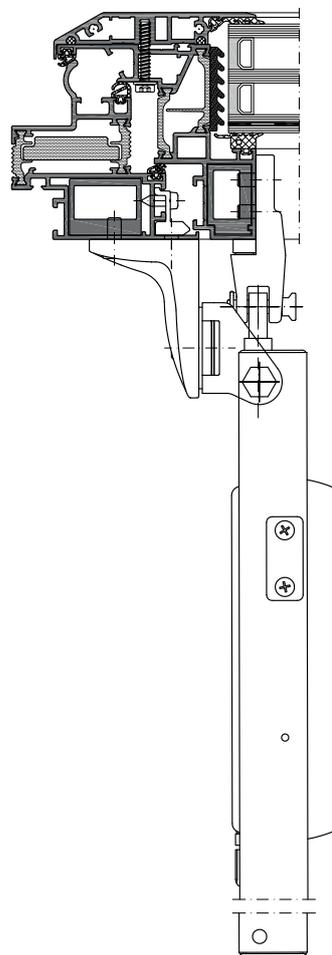


Series: FRAME+ 100/120 RI

Bracket: ZA-BS048-SM (D+H article number: 27.BDS.KS)

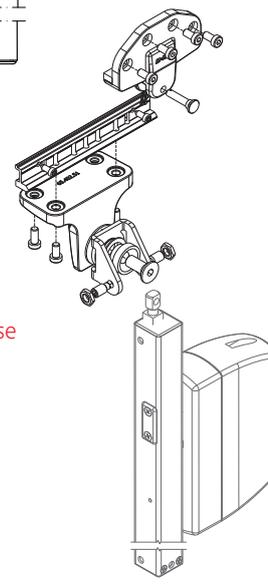
Installation type: Side installation

Raico drawing number: 100RI-0043



[Download instruction for use](#)

[ZA-BS048-SM](#)

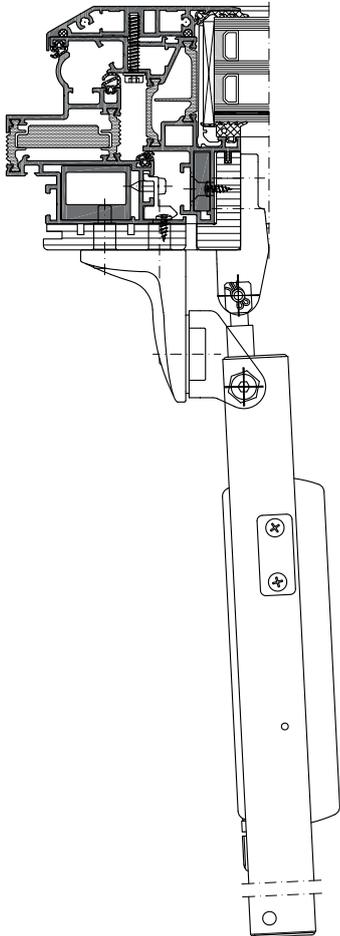


Series: FRAME+ 100 RI-T

Bracket: ZA-BS051-OM (D+H article number: 27.BDV.KS)

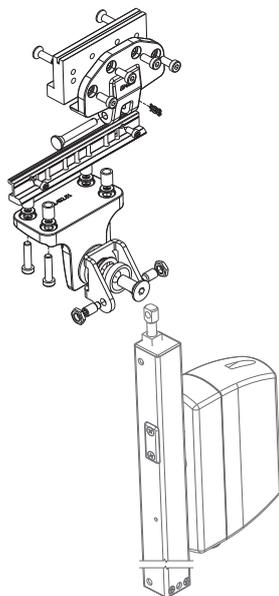
Installation type: Opposite the hinge installation

Raico drawing number: 100RI-T-0043



[Download instruction for use](#)

[ZA-BS051-OM](#)

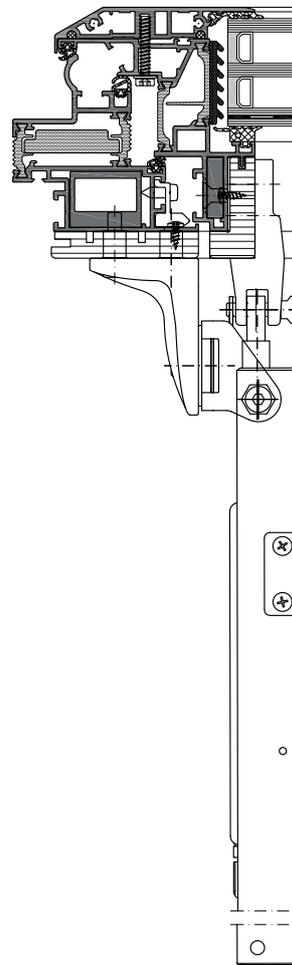


Series: FRAME+ 100 RI-T

Bracket: ZA-BS050-SM (D+H article number: 27.BDU.KS)

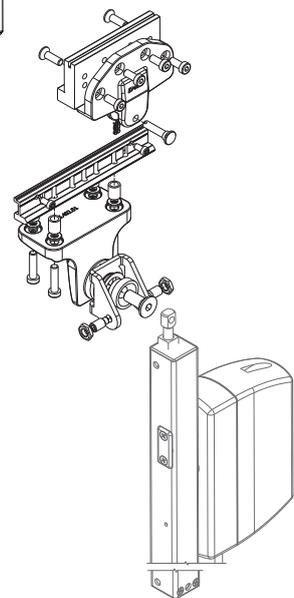
Installation type: Side installation

Raico drawing number: 100RI-T-0044



[Download instruction for use](#)

[ZA-BS050-SM](#)

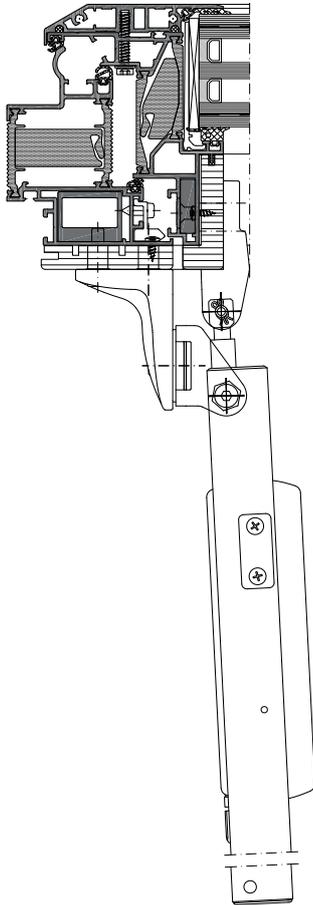


Series: FRAME+ 120 RI-T

Bracket: ZA-BS053-OM (D+H article number: 27.BDX.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 120RI-T-0045

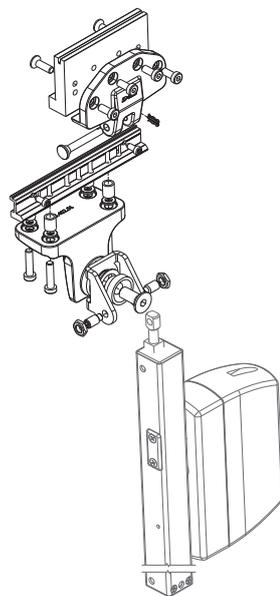
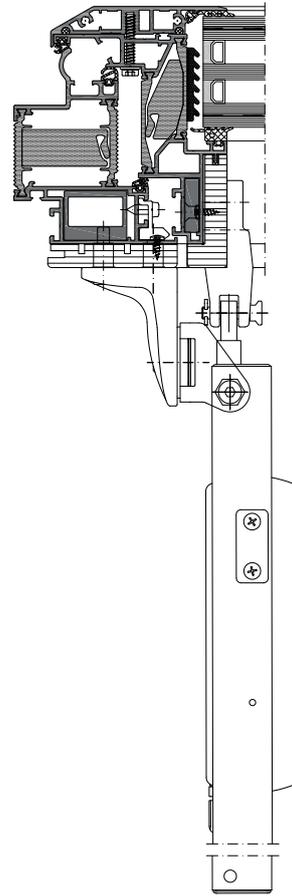


Series: FRAME+ 120 RI-T

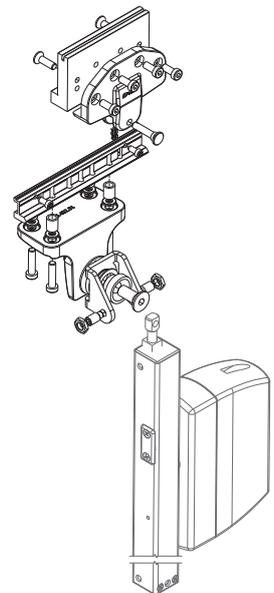
Bracket: ZA-BS052-SM (D+H article number: 27.BDW.KS)

Installation type: Side installation

Raico drawing number: 120RI-T-0046



[Download instruction for use
ZA-BS053-OM](#)



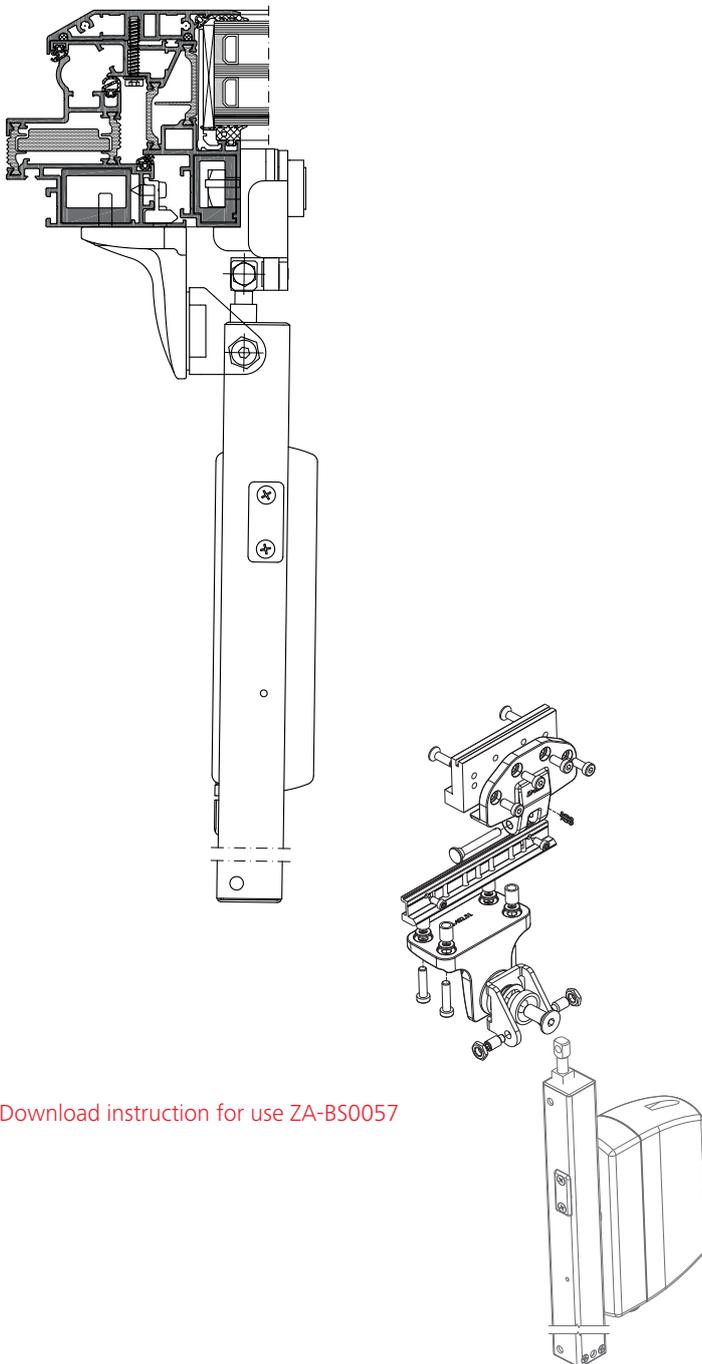
[Download instruction for use
ZA-BS052-SM](#)

Series: FRAME+ 100/120 RI

Bracket: ZA-BS0057 (D+H article number: 27.BEB.KS)

Installation type: 120RI-T-0045

Raico drawing number: 100RI-044



[Download instruction for use ZA-BS0057](#)

DXD RACK AND PINION DRIVE

- » 24 V and 230 V
- » 3000 N force
- » Up to 1000 mm for NSHEV in accordance with DIN-EN 12101-2
- » Up to 1500 mm for smoke exhaust and ventilation



Product overview

DXD 150-BSY+ (-HS) / DXD 300-BSY+ (-HS) / DXD 150-K-BSY+ (-HS) / DXD 300-K-BSY+ (-HS)

- » Single and multiple drives, with and without lock drive for 24 V drives

Options

- » HS high-speed design
- » Design with tube
- » HP Stroke programming
- » VP Signal programming for connecting with lock drive VLD BSY+
- » SA-SZ OPEN and CLOSED signal
- » LS Low-speed programming in CLOSED direction (5 mm/s) – corresponding to protection class 3
- » AS2 Audible signal – corresponding to protection class 2
- » AS3 Audible signal – corresponding to protection class 3
- » SKS connection of an external sensor for closing edge protection – corresponding to protection class 4
- » W weatherproof option
- » WS weatherproof special option suitable for use in indoor swimming pools
- » Longer connection cable max. 12.5 m for 24V motors, max. 8 m for 230 V motors
- » Cable colour light grey



Series: WING 105 DI BLR 208310

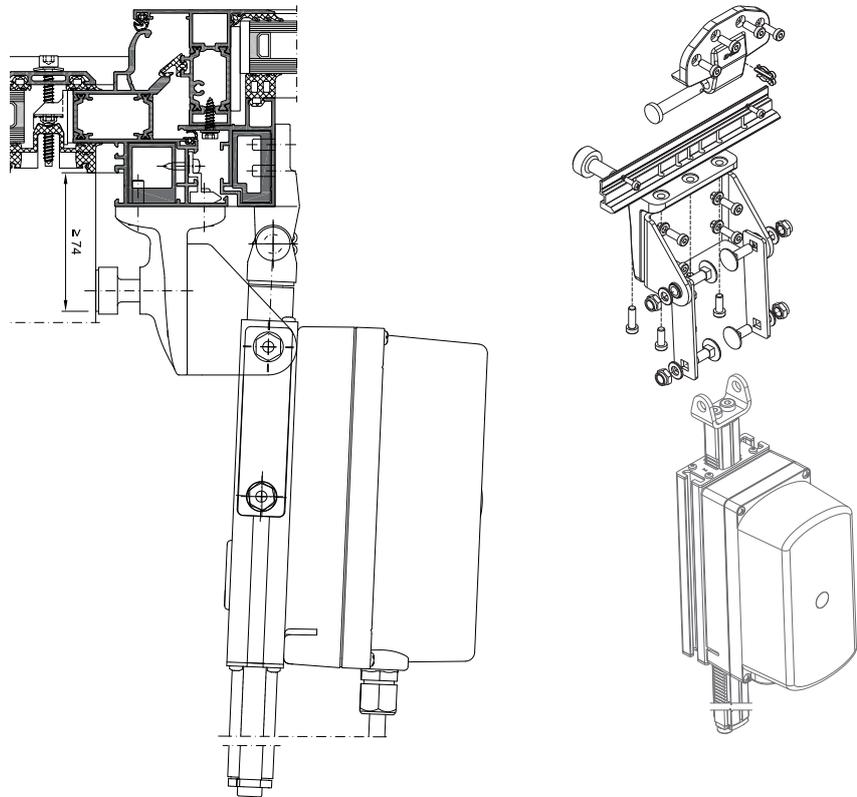
Bracket: DXD-BS036-OM (D+H article number: 27.ADD.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 105D-0106

[Download instruction for use](#)

[DXD-BS036-OM](#)



Series: WING 105 DI BLR 208310

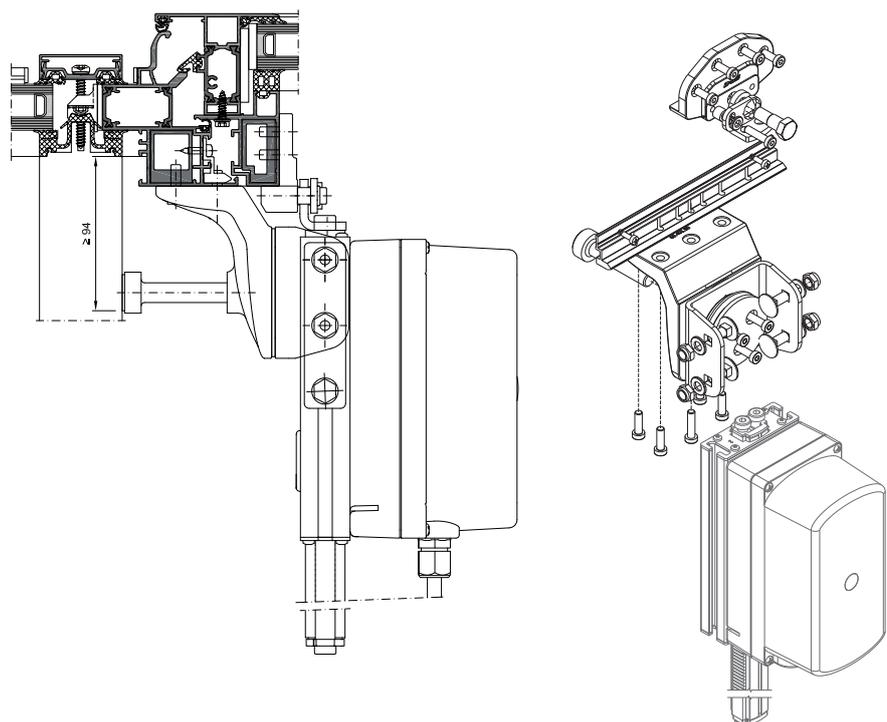
Bracket: DXD-BS034-SM (D+H article number: 27.ADB.KS)

Installation type: Side installation

Raico drawing number: 105D-0107

[Download instruction for use](#)

[DXD-BS034-SM](#)

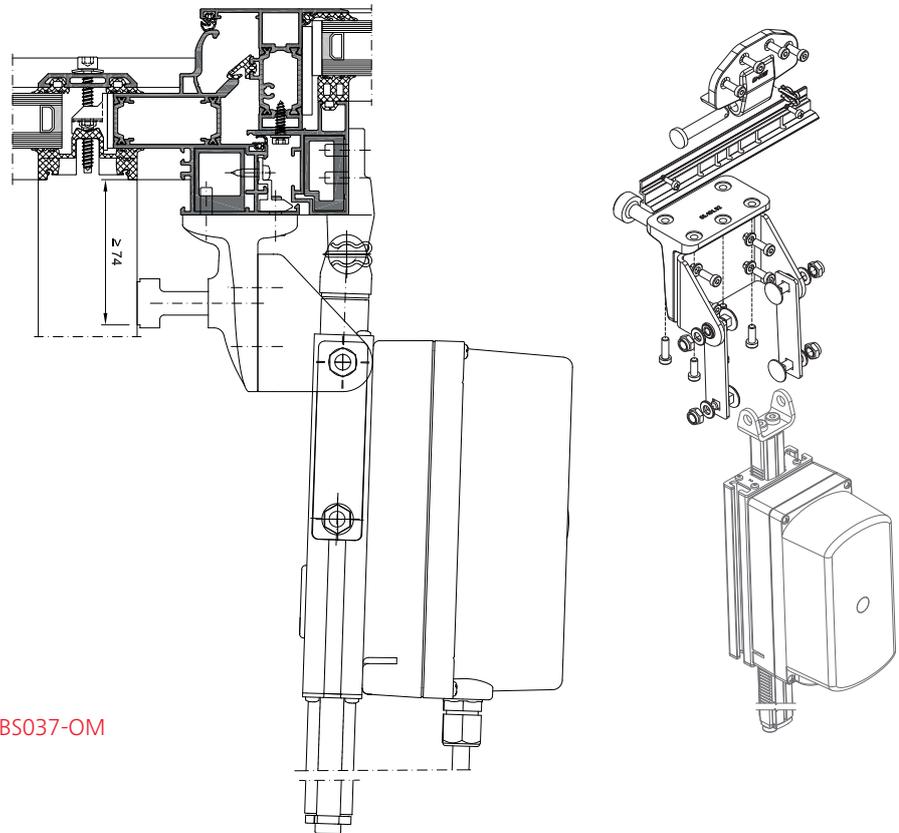


Series: WING 105 DI BLR 208312

Bracket: DXD-BS037-OM (D+H article number: 27.ADE.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 105D-0108



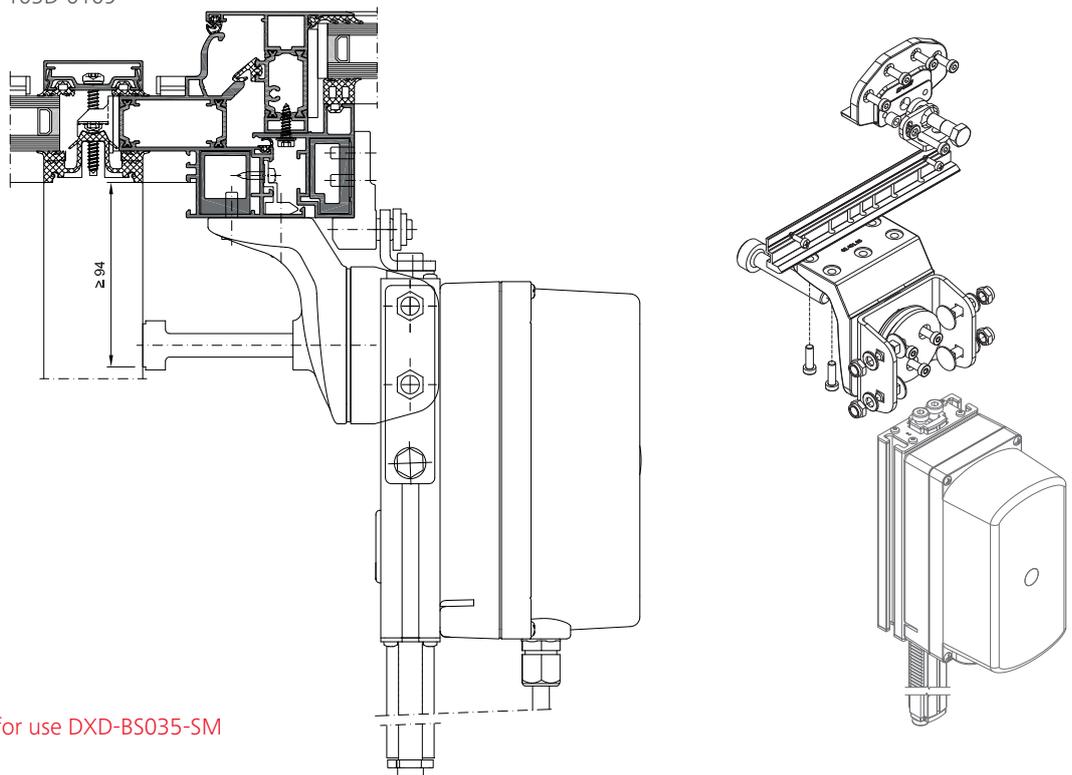
[Download instruction for use DXD-BS037-OM](#)

Series: WING 105 DI BLR 208312

Bracket: DXD-BS035-SM (D+H article number: 27.ADC.KS)

Installation type: Side installation

Raico drawing number: 105D-0109



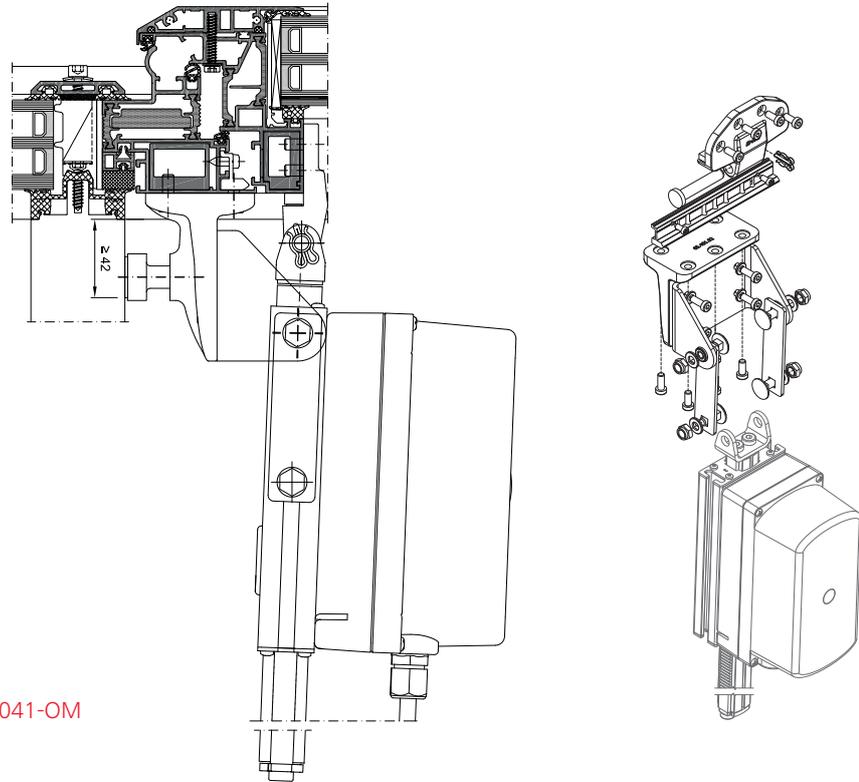
[Download instruction for use DXD-BS035-SM](#)

Series: FRAME+ 100/120 RI

Bracket: DXD-BS041-OM (D+H article number: 27.ADX.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 100RI-0045



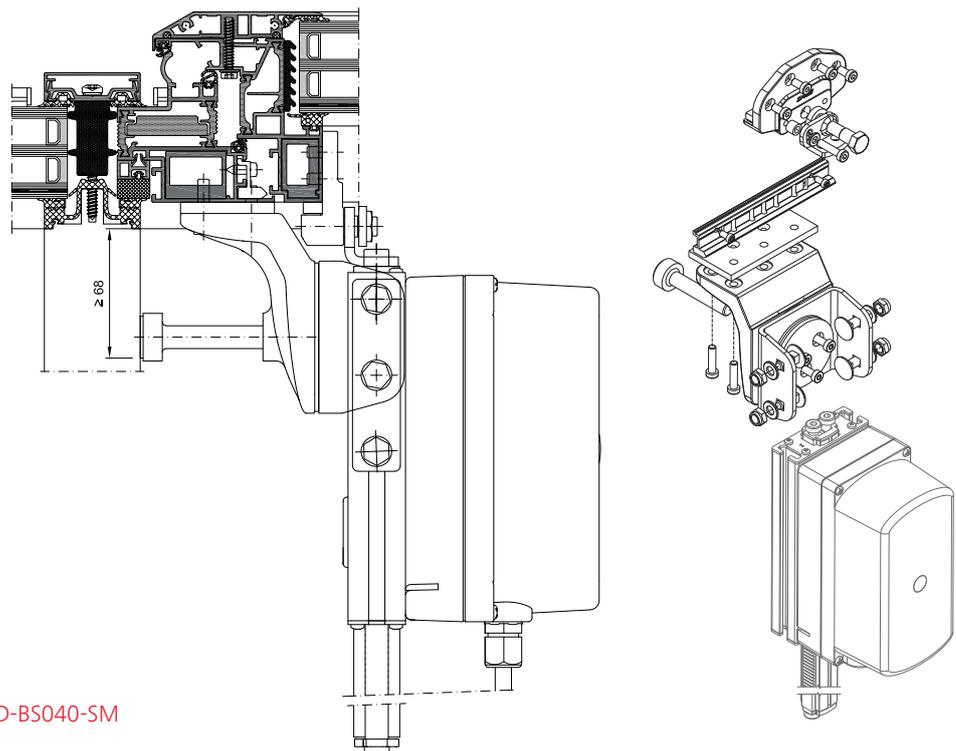
[Download instruction for use DXD-BS041-OM](#)

Series: FRAME+ 100/120 RI

Bracket: DXD-BS040-SM (D+H article number: 27.ADW.KS)

Installation type: Side installation

Raico drawing number: 100RI-0046



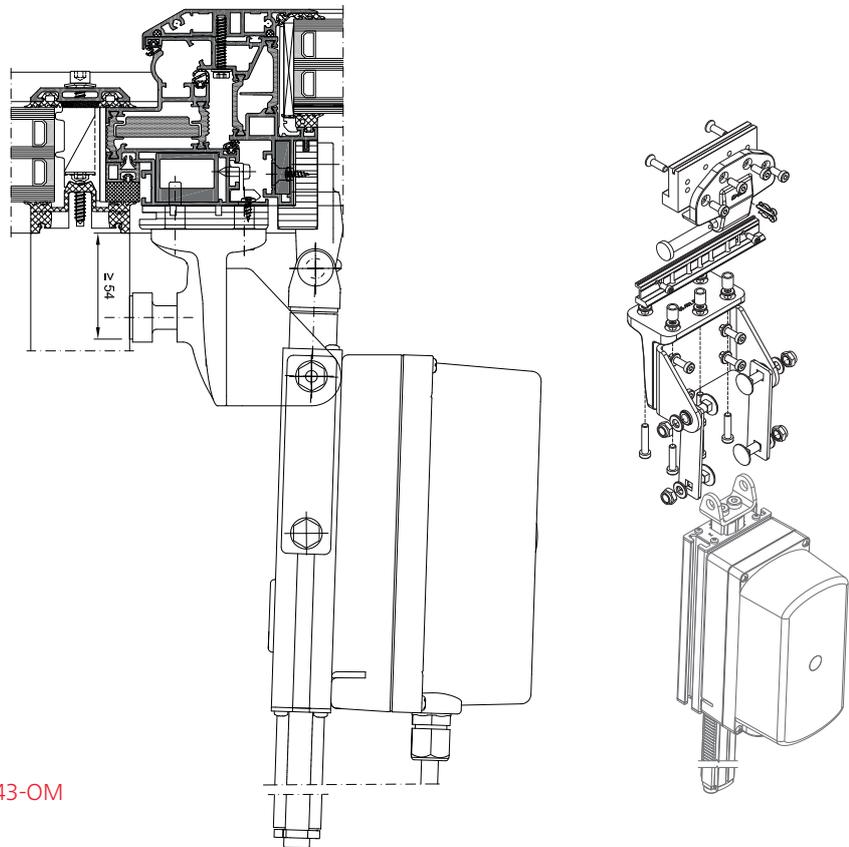
[Download instruction for use DXD-BS040-SM](#)

Series: FRAME+ 100 RI-T

Bracket: DXD-BS043-OM (D+H article number: 27.ADZ.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 100RI-T-0047



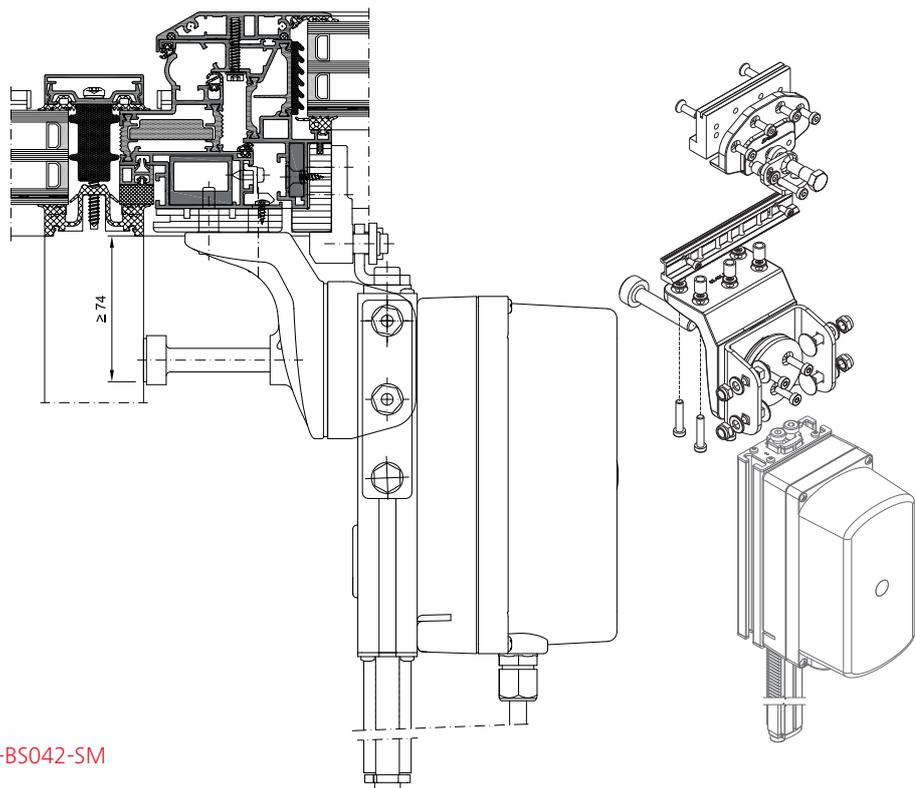
[Download instruction for use DXD-BS043-OM](#)

Series: FRAME+ 100 RI-T

Bracket: DXD-BS042-SM (D+H article number: 27.ADY.KS)

Installation type: Side installation

Raico drawing number: 100RI-T-0048



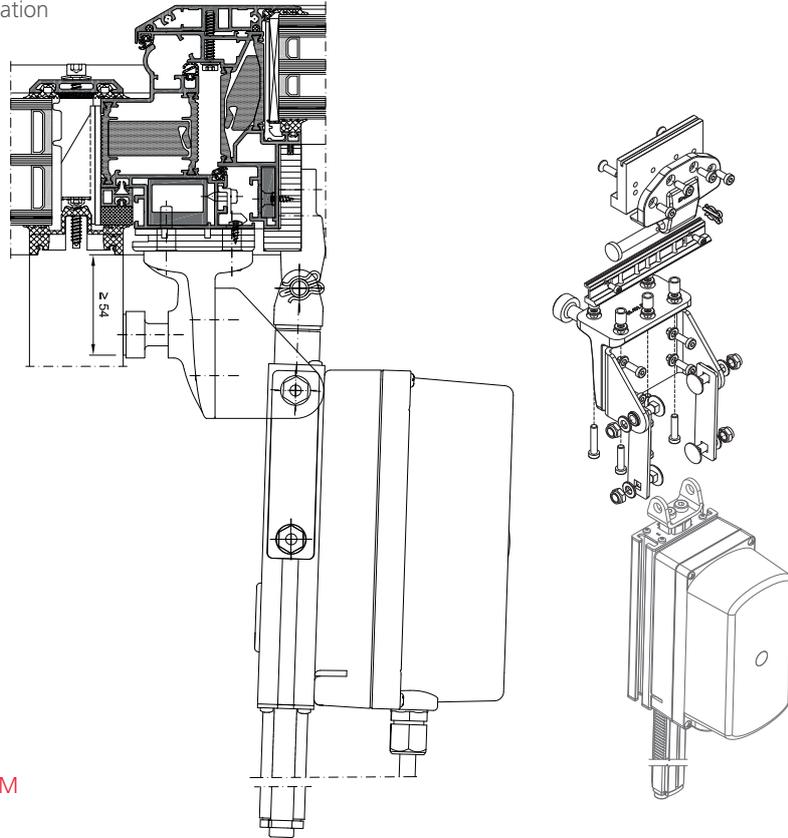
[Download instruction for use DXD-BS042-SM](#)

Series: FRAME+ 120 RI-T

Bracket: DXD-BS045-OM (D+H article number: 27.AEB.KS)

Installation type: Opposite the hinge installation

Raico drawing number: 120RI-T-0049



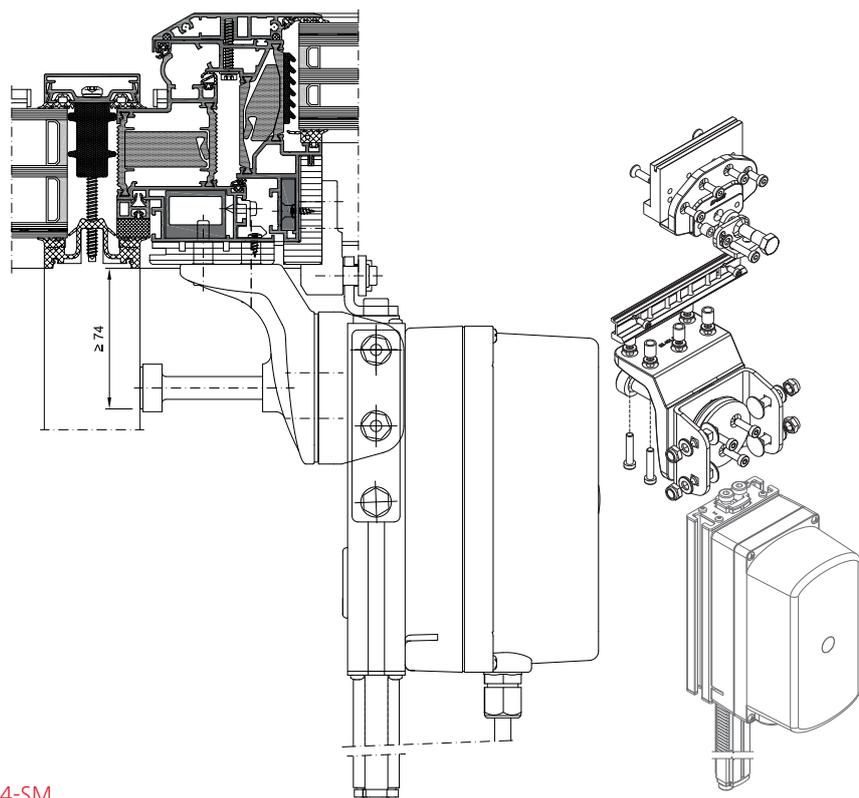
[Download instruction for use DXD-BS045-OM](#)

Series: FRAME+ 120 RI-T

Bracket: DXD-BS044-SM (D+H article number: 27.AEA.KS)

Installation type: Side installation

Raico drawing number: 120RI-T-0050



[Download instruction for use DXD-BS044-SM](#)

VLD LOCK DRIVE 51/038-BSY+

- » 24 V
- » 500 N force



Product overview [VLD 51/038-BSY+](#)

- » Application in conjunction with 24 V and 230 V KA drives and with 24 V CDP, ZA and DXD drives

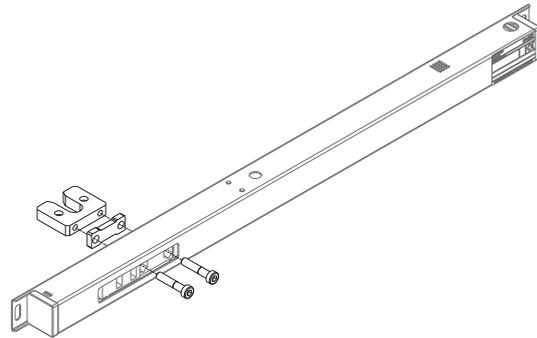
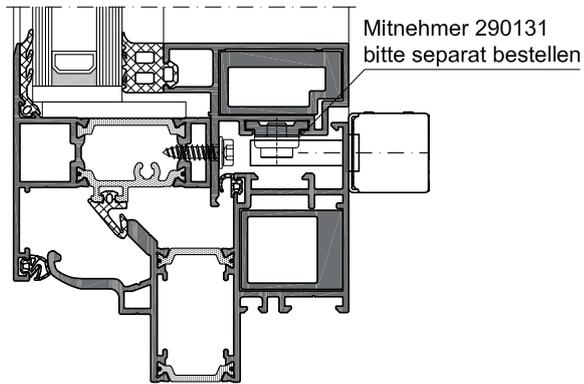
Options

- » HP Stroke programming
- » Longer connection cable max. 12.5 m
- » Cable colours light grey, black and white

Series: WING 105 DI

Bracket: PI-VLD-HK (D+H article number: 23.066.20)

Raico drawing number: 105D-0110



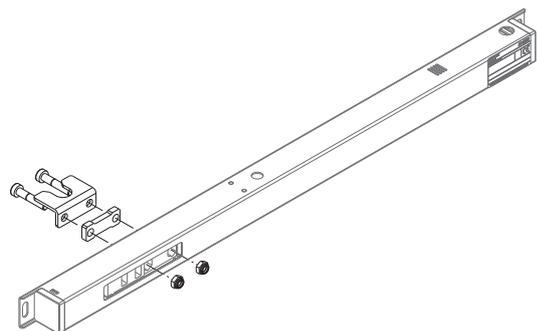
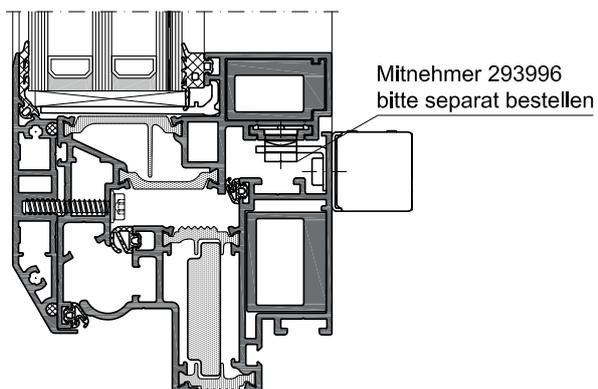
[Download instruction for use PI-VLD-HK](#)

Series: WING 105 DI

Bracket: VLD-B5009-IM (D+H article number: 24.AFK.KS)

Installation type: Side installation

Raico drawing number: 100RI-0048



[Download instruction for use VLD-B5009](#)

MINIMUM SASH DIMENSIONS

CDC Series for vertical areas

FRAME+ 75 / 90 / WI / WB / SF – Window frame mounting

CDC-BS089-VFI – see section 75WI-0205

BS-CDC-PI01-M-VFIS – see section 75WI-0207

CDC	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	Stroke	24 V	230 V	24 V	230 V	24 V
350	515	655	970	1250	1425	1845
500	595	735	1130	1410	1665	2085
600	640	780	1220	1500	1800	2220
700	695	835	1330	1610	1965	2385
800	745	885	1430	1710	2115	2535
900	795	935	1530	1810	2265	2685
1000	840	980	1620	1900	2400	2820
1100	900	1040	1740	2020	2580	3000
1200	945	1085	1730	2110	2715	3135
1300	995	-	1930	-	2865	-

Interior visible width BLR	RAM
34*	FAM + 56
44*	FAM + 76
54	FAM + 96
74	FAM + 136
100	FAM + 188
125	FAM + 238
250	FAM + 488

*Caution: Observe minimum visible width BRL, see sectional drawings.

FRAME+ 75 / 90 / WI / WB / SF – Sash mounting

CDC-BS091-VSI – see section 75WI-0206

CDC	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	Stroke	24 V	230 V	24 V	230 V	24 V
350	639	779	1094	1374	1549	1969
500	719	859	1254	1534	1789	2209
600	764	904	1344	1624	1924	2344
700	819	959	1454	1734	2089	2509
800	869	1009	1554	1834	2239	2659
900	919	1059	1654	1934	2389	2809
1000	964	1104	1744	2024	2524	2944
1100	1024	1164	1864	2144	2704	3124
1200	1069	1209	1954	2234	2839	3259
1300	1119	-	2054	-	2989	-

FRAME+ 75 / 90 / WI / WB / SF – Window frame mounting – Profile-integrated

CDC-BS062-IFI, CDC-BS063-IFI – see section 75WI-0209

CDC	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
350	611	751	1113	1393	1615	2035
500	691	831	1273	1553	1855	2275
600	736	876	1363	1643	1990	2410
700	791	931	1473	1753	2155	2575
800	841	981	1573	1853	2305	2725
900	891	1031	1673	1953	2455	2875
1000	936	1076	1763	2043	2590	3010
1100	996	1136	1883	2163	2770	3190
1200	1041	1181	1973	2253	2905	3325
1300	1091	-	2073	-	3055	-

Frame+ 75 WA – Window frame mounting

CDC-BS090-VFO – see section 75WA-0205

CDC	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
350	487	627	942	1222	1397	1817
500	567	707	1102	1382	1637	2057
600	612	752	1192	1472	1772	2192
700	667	807	1302	1582	1937	2357
800	717	857	1402	1682	2087	2507
900	767	907	1502	1782	2237	2657
1000	812	952	1592	1872	2372	-
1100	872	1012	1712	1992	2552	-
1200	917	1057	1802	2082	2687	-
1300	967	-	1902	-	-	-

Interior visible width BLR	RAM
42	FAM + 86

WING 50 A-SK – Window frame mounting

CDC-BS065-VFO – see section 50SK-055

CDC	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
350	573	713	1028	1308	1483	1903
500	653	793	1188	1468	1723	2143
600	698	838	1278	1558	1858	2278
700	753	893	1388	1668	2023	2443
800	803	943	1488	1768	2173	2593
900	853	993	1588	1868	2323	-
1000	898	1038	1678	1958	2458	-
1100	958	1098	1798	2078	2638	-
1200	1003	1143	1888	2168	-	-
1300	1053	-	1988	-	-	-

Interior visible width BLR	RAM
45	FAM + 57.6

¹Distance between motors for tandem/tridem 50 mm

If the sash section is smaller, +1 mm must be taken into account when calculating the RAM.

These specifications are only for pre-selection of the motors. The sash sizes and weights relating to the profile groups, opening type and fitting design, as well as the arrangement of the motors and fitting accessories, can be found in the relevant fitting diagrams in the RAICO planning documents.

FAM = Sash external dimension

RAM = Window frame external dimension

BLR = Window frame

KA Series for vertical areas

FRAME+ 75 / 90 / WI / WB / SF – Window frame mounting

KA-BS092-VFI – see section 75WI-0210

KA-BS083-VFIS – see section 75WI-0212

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	Stroke	24 V	230 V	24 V	230 V	24 V
350	531	670	1002	1280	1473	1890
500	606	745	1152	1430	1698	2115
600	656	795	1252	1530	1848	2265
700	706	845	1352	1630	1998	2415
800	756	895	1452	1730	2148	2565
1000	860	999	1660	1938	2460	2877
1100	912	1051	1764	2042	2616	3033
1200	962	1101	1864	2142	2766	3183
1300	1012	1151	1964	2242	2916	3333

Interior visible width BLR	RAM
34*	FAM + 56
44*	FAM + 76
54	FAM + 96
74	FAM + 136
100	FAM + 188
125	FAM + 238
250	FAM + 488

*Caution: Observe minimum visible width BRL, see sectional drawings.

FRAME+ 75 / 90 / WI / WB / SF – Sash mounting

KA-BS094-VSI – see section 75WI-0211

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	Stroke	24 V	230 V	24 V	230 V	24 V
350	615	754	1086	1364	1557	1974
500	690	829	1236	1514	1782	2199
600	740	879	1336	1614	1932	2349
700	790	929	1436	1714	2082	2499
800	840	979	1536	1814	2232	2649
1000	944	1083	1744	2022	2544	2961
1100	996	1135	1848	2126	2700	3117
1200	1046	1185	1948	2226	2850	3267
1300	1096	1235	2048	2326	3000	3417

¹Distance between motors for tandem/tridem 50 mm

If the sash section is smaller, +1 mm must be taken into account when calculating the RAM.

These specifications are only for pre-selection of the motors. The sash sizes and weights relating to the profile groups, opening type and fitting design, as well as the arrangement of the motors and fitting accessories, can be found in the relevant fitting diagrams in the RAICO planning documents.

FAM = Sash external dimension
RAM = Window frame external dimension
BLR = Window frame

Frame+ 75 WA – Window frame mounting

KA-BS093-VFO – see section 75WA-0206

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	Stroke	24 V	230 V	24 V	230 V	24 V
350	503	642	974	1252	1445	1862
500	578	717	1124	1402	1670	2087
600	628	767	1224	1502	1820	2237
700	678	817	1324	1602	1970	2387
800	728	867	1424	1702	2120	2537
1000	832	971	1632	1910	2432	-
1100	884	1023	1736	2014	2588	-
1200	934	1073	1836	2114	-	-
1300	984	1123	1936	2214	-	-

Interior visible width BLR	RAM
42	FAM + 86

WING 50 A-SK – Window frame mounting

KA-BS006-VFO – see section 50SK-056

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	Stroke	24 V	230 V	24 V	230 V	24 V
350	589	728	1060	1338	1531	1948
500	664	803	1210	1488	1756	2173
600	714	853	1310	1588	1906	2323
700	764	903	1410	1688	2056	2473
800	814	953	1510	1788	2206	2623
1000	918	1057	1718	1996	2518	-
1100	970	1109	1822	2100	2674	-
1200	1020	1159	1922	2200	-	-
1300	1070	1209	2022	2300	-	-

Interior visible width BLR	RAM
34.7 (only SK)	FAM + 43.6
45	FAM + 57.6

KA Series for roof areas

FRAME+ 100/120 RI – Window frame mounting

KA-BS099-VFO – see section 100RI-0040

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
350	565	704	1036	1314	1507	1924
500	640	779	1186	1464	1732	2149
600	690	829	1286	1564	1882	2299
700	740	879	1386	1664	2032	2449
800	790	929	1486	1764	2182	2599
1000	894	1033	1694	1972	2494	2911
1100	946	1085	1798	2076	2650	3067
1200	996	1135	1898	2176	2800	3217
1300	1046	1185	1998	2276	2950	3367

*Caution: Observe minimum visible width BRL, see sectional drawings.

Interior visible width BRL	Clamping zone length	RAM
64	18	FAM + 40
64	33	FAM + 70

FRAME+ 100 RI-T – Window frame mounting

KA-BS101-VFO – see section 100RI-T-0040

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
350	565	704	1036	1314	1507	1924
500	640	779	1186	1464	1732	2149
600	690	829	1286	1564	1882	2299
700	740	879	1386	1664	2032	2449
800	790	929	1486	1764	2182	2599
1000	894	1033	1694	1972	2494	2911
1100	946	1085	1798	2076	2650	3067
1200	996	1135	1898	2176	2800	3217
1300	1046	1185	1998	2276	2950	3367

WING 105 DI – Window frame mounting

KA-BS002-VFO – see section 105D-0112

KA	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
350	547	686	1018	1296	1489	1906
500	622	761	1168	1446	1714	2131
600	672	811	1268	1546	1864	2281
700	722	861	1368	1646	2014	2431
800	772	911	1468	1746	2164	-
1000	876	1015	1676	1954	2476	-
1100	928	1067	1780	2058	-	-
1200	978	1117	1880	2158	-	-
1300	1028	1167	1980	2258	-	-

Interior visible width BLR	Clamping zone length	RAM
60	22	FAM + 64
60	34	FAM + 88

¹Distance between motors for tandem/tridem 50 mm

These specifications are only for pre-selection of the motors. The sash sizes and weights relating to the profile groups, opening type and fitting design, as well as the arrangement of the motors and fitting accessories, can be found in the relevant fitting diagrams in the RAICO planning documents.

FAM = Sash external dimension

RAM = Window frame external dimension

BLR = Window frame

CDP Series for roof areas

FRAME+ 100/120 RI – Window frame mounting

KA-BS099-VFO – see section 100RI-0040

FRAME+ 100 RI-T – Window frame mounting

CDP-BS026-OM – see section 100RI-T-0041

FRAME+ 120 RI-T – Window frame mounting

CDP-BS028-OM – see section 100RI-T-0042

CDP	FAM Single		FAM Tandem ¹		FAM Tridem ¹	
	24 V	230 V	24 V	230 V	24 V	230 V
Stroke						
600	922	1027	1726	1936	2530	2845
800	1027	1027	1936	1936	2845	2845
1000	1154	1154	2190	2190	3226	3226
1200	1306	1306	2494	2494	-	-
1500	1484	1484	2850	2850	-	-

¹ Distance between motors for tandem/tridem 102 mm due to plug-in unit profile
Smaller sashes are possible on request by shortening the plug-in unit profiles.

Interior visible width BLR	Clamping zone length	RAM
64	18	FAM + 40
64	33	FAM + 70

WING 105 DI – Window frame mounting

CDP-BS019-OM – see section 105D-0102

CDP	FAM Single		FAM Tandem ¹	
	24 V	230 V	24 V	230 V
Stroke				
600	942	1047	1799	2009
800	1047	1047	2009	2009
1000	1174	1174	2263	2263
1200	1326	1326	-	-
1500	1504	1504	-	-

¹ Distance between motors for tandem/tridem 155 mm due to plug-in unit profile
Smaller sashes are possible on request by shortening the plug-in unit profiles.

These specifications are only for pre-selection of the motors. The sash sizes and weights relating to the profile groups, opening type and fitting design, as well as the arrangement of the motors and fitting accessories, can be found in the relevant fitting diagrams in the RAICO planning documents.

Interior visible width BLR	Clamping zone length	RAM
60	22	FAM + 64
60	34	FAM + 88

CDP-TW for roof areas

FRAME+ 100/120 RI – Window frame mounting

CDP-TW-BS025-OM – see section 100RI-0047

FRAME+ 100 RI-T – Window frame mounting

CDP-TW-BS027-OM – see section 100RI-T-0051

FRAME+ 120 RI-T – Window frame mounting

CDP-TW-BS029-OM – see section 100RI-T-0052

CDP	FAM Single		FAM Tandem ¹	
	24 V	230 V	24 V	230 V
Stroke				
Minimum 600	1638	1638	3158	3158
800	1892	1892	-	-
Minimum 800	1766	1766	3414	3414
1000	1892	1892	-	-
1200	2222	2222	-	-
Minimum 1200	2044	2044	-	-
1500	2222	2222	-	-

Interior visible width BLR	Clamping zone length	RAM
64	18	FAM + 40
64	33	FAM + 70

¹ Distance between motors for tandem/tridem 102 mm due to plug-in unit profile
Smaller sashes are possible on request by shortening the plug-in unit profiles.

WING 105 DI – Window frame mounting

CDP-BS019-OM – see section 105D-0102

CDP	FAM Single	
	24 V	230 V
Stroke		
Minimum 600	1658	1658
800	1912	1912
Minimum 800	1786	1786
1000	1912	1912
1200	2242	2242
Minimum 1200	2064	2064
1500	2242	2242

Interior visible width BLR	Clamping zone length	RAM
60	22	FAM + 64
60	34	FAM + 88

¹ Distance between motors for tandem/tridem 155 mm due to plug-in unit profile
Smaller sashes are possible on request by shortening the plug-in unit profiles.

These specifications are only for pre-selection of the motors. The sash sizes and weights relating to the profile groups, opening type and fitting design, as well as the arrangement of the motors and fitting accessories, can be found in the relevant fitting diagrams in the RAICO planning documents.



D+H Mechatronic AG
Georg-Sasse-Strasse 28-32
22949 Ammersbek, Germany
Germany

Tel: +49 40 60565 0
Fax: +49 40 60565 222
E-mail: info@dh-partner.com

WWW.DH-PARTNER.COM