

**+** FLEXIBILITY  
COMFORT



## VCD SERIES

The real ventilation professional

- » Sophisticated and elegant solution for automated opening of bottom-hung windows, top-hung windows, side-hung vents and roof windows
- » Precise control using D+H original ACB bus technology
- » Low operating noise of a maximum of 46 dB(A)

# + DESIGN FUNCTION



Fig.: VCD Series  
Colour finish: RAL 9006

Available as a **cost-effective TMS+ variant**  
or **High End ACB variant**

## The specialist for a fresh breeze

Tried-and-tested D+H technology for natural ventilation with technical and functional refinement. The chain drives of the VCD series are suitable for almost all façade and roof windows. Thanks to optimised brackets, they can be installed quickly and used universally. The window drives are equipped with the Advanced Communication Bus (ACB), which is based on the open modbus RTU. This allows the drives to be integrated directly into the building management system and controlled with precision down to the millimetre. Do you want your windows to open to just a tiny 50 mm gap in the summer? Or would you rather have 300 mm for a strong breeze? All details relating to programming can be found in the ACB planning manual, where you can freely view all ventilation commands for ACB components.

It is not only this bus technology that makes the VCD capable of top-notch ventilation, however – its elegant design is a significant

factor as well. Thanks to its slim construction using solid die-cast zinc, the VCD series features minimal dimensions with high functionality and performance power. The high-performance chain drives made of hardened and galvanised steel offer 200 N of force of pressure and tensile force. If needed, the opening stroke can be configured stepless for the TMS+ variant using a magnet. The ACB drives, on the other hand, can be configured quickly and easily using the D+H SCS software tool.

Thanks to its low operating noise and high level of adaptability, the VCD Series shows its power without being obtrusive. And power consumption is no exception: A current consumption level of just 0.35 A with 24 V drives allows control devices or power supply units to be considerably reduced in size. See for yourself: The VCD makes it incredibly easy to hook your windows up to the chain.



### Reliable drive technology

- » Symmetrical design in the corresponding, state of the art design (VCD 204 and VCD-0204)
- » Convenient, error-free installation thanks to a pre-fabricated pluggable cable connection with 2.5 m cable
- » Available in a 24 V DC or 230 V AC design
- » Solid housing made from powder-coated die-cast zinc
- » Especially long-lasting, maintenance-free chain with lifetime wax
- » Low operating noise of  $\leq 46$  dB(A)
- » Can be combined with lock drives (24 V)
- » Saves energy thanks to outstandingly low current consumption
- » Synchronous operation of up to 8 ACB drives
- » ACB drives can be remotely configured using the connected D+H controller
- » Tandem safety function ensures simultaneous shutdown if overload occurs (TMS+ variant)
- » Low programming effort: Only one TMS+ drive must be configured for tandem applications

## ACB

### Live communication with the drive

- » Less cable to be routed thanks to bi-directional bus communication between D+H controllers and D+H drives using just one BUS cable
- » Synchronous operation of multiple drives on one opening element easy to implement
- » Extension and retraction of the chain using precise control down to the millimetre
- » Quick and easy read-out of all status messages such as the opening stroke in mm or %, end position OPEN or CLOSED, optional messages for connecting closing edge protection, etc.
- » Direct integration into the building management system over an open ModBus RTU protocol
- » Virtual grouping allows up to 32 drives to be controlled on just one cable, either as a group or separately, meaning reduced cabling efforts and a more streamlined control panel system

For the ACB  
planning manual







© FEDERATION TOWER



© FEDERATION TOWER

### **Russian Federation Tower**

Moscow, Russia

Natural Ventilation

VCD Series

The Russian Federation Tower is located in the centre of the new Moscow City business district and houses offices, apartments and the Grand Hyatt Moscow luxury hotel. D+H developed a special application to enable opening and closing of the 560 giant parallel vent windows in both skyscrapers. For the first time, drives from the VCD Series were delivered and installed as synchronised sets. Sets that each consist of four powerful VCD chain drives with a pre-programmed stroke of 135 mm were used for each window. As a result, a total of 2240 small powerhouses were installed. The futuristic building complex consists of two towers, where the higher one is one of the tallest in Europe at a height of 374 metres.

**+** PROJECT  
REALISATION



# + VARIANTS RANGE

## VCD 203/250 (SR)

Stroke: 250 mm  
 Force of pressure: 200 N  
 Tensile force: 200 N  
 W x H x D: 300 x 30 x 47 mm  
 Technology: TMS+

## VCD 204/250-x (SR) \*

Stroke: 250 mm  
 Force of pressure: 200 N  
 Tensile force: 200 N  
 W x H x D: 480 x 30 x 47 mm  
 Technology: TMS+

## VCD 204/350-x (SR) \*

Stroke: 350 mm  
 Force of pressure: 200 N  
 Tensile force: 200 N  
 W x H x D: 480 x 30 x 47 mm  
 Technology: TMS+

## VCD-0203-0250-x-ACB-R

Stroke: 250 mm  
 Force of pressure: 200 N  
 Tensile force: 200 N  
 W x H x D: 300 x 30 x 47 mm  
 Technology: ACB

## VCD-0204-0250-x-ACB-M \*

Stroke: 250 mm  
 Force of pressure: 200 N  
 Tensile force: 200 N  
 W x H x D: 480 x 30 x 47 mm  
 Technology: ACB

## VCD-0204-0350-x-ACB-M \*

Stroke: 350 mm  
 Force of pressure: 200 N  
 Tensile force: 200 N  
 W x H x D: 480 x 30 x 47 mm  
 Technology: ACB

\*Available as a 230 Version.

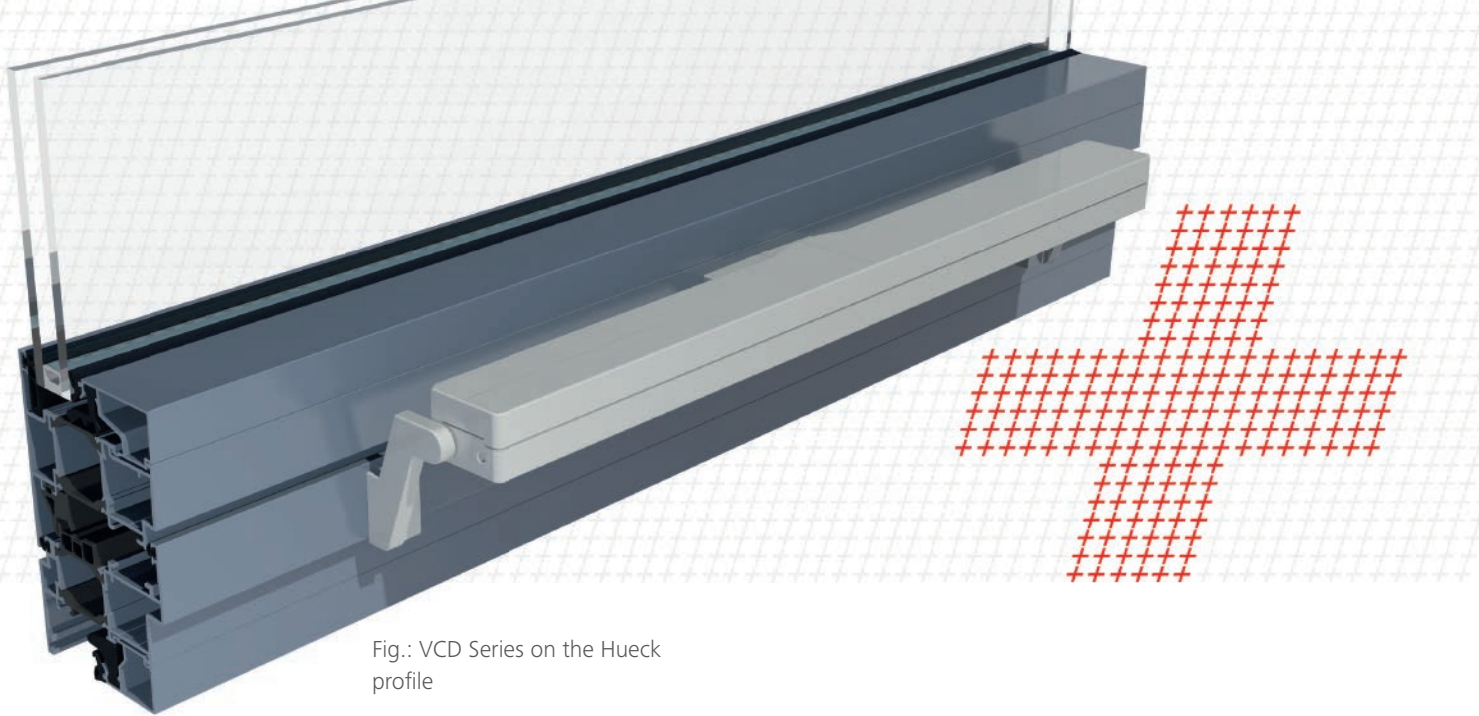


Fig.: VCD Series on the Hueck profile

# + EASY INSTALLATION

The VCD Series is eye-catching for more than just one reason. In addition to looking great, this ventilation drive is a marvel to operate thanks to its bracket sets with the maximum in application options. Whether mounted on sash or frame – the chain drives leave nothing to be desired in terms of flexibility of application. With colour-coordinated bracket covers and many other features, this refined, elegant drive series for the automated opening of bottom-hung, top-hung, side-hung and roof-vents makes a smart, attractive system for ventilating your rooms naturally.







**Frame mounting**  
top-hung window, outward opening



**Frame mounting**  
bottom-hung window, inward opening



**Frame mounting**  
side-hung window, outward opening



**Parallel opening window**  
outward opening

All variants are suitable for frame or sash mounting, opening inwards and outwards.





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

Phone: +49 40 60565 0  
Fax: +49 40 60565 222  
E-mail: [info@dh-partner.com](mailto:info@dh-partner.com)

[WWW.DH-PARTNER.COM](http://WWW.DH-PARTNER.COM)

Your D+H Service and Sales Partner: