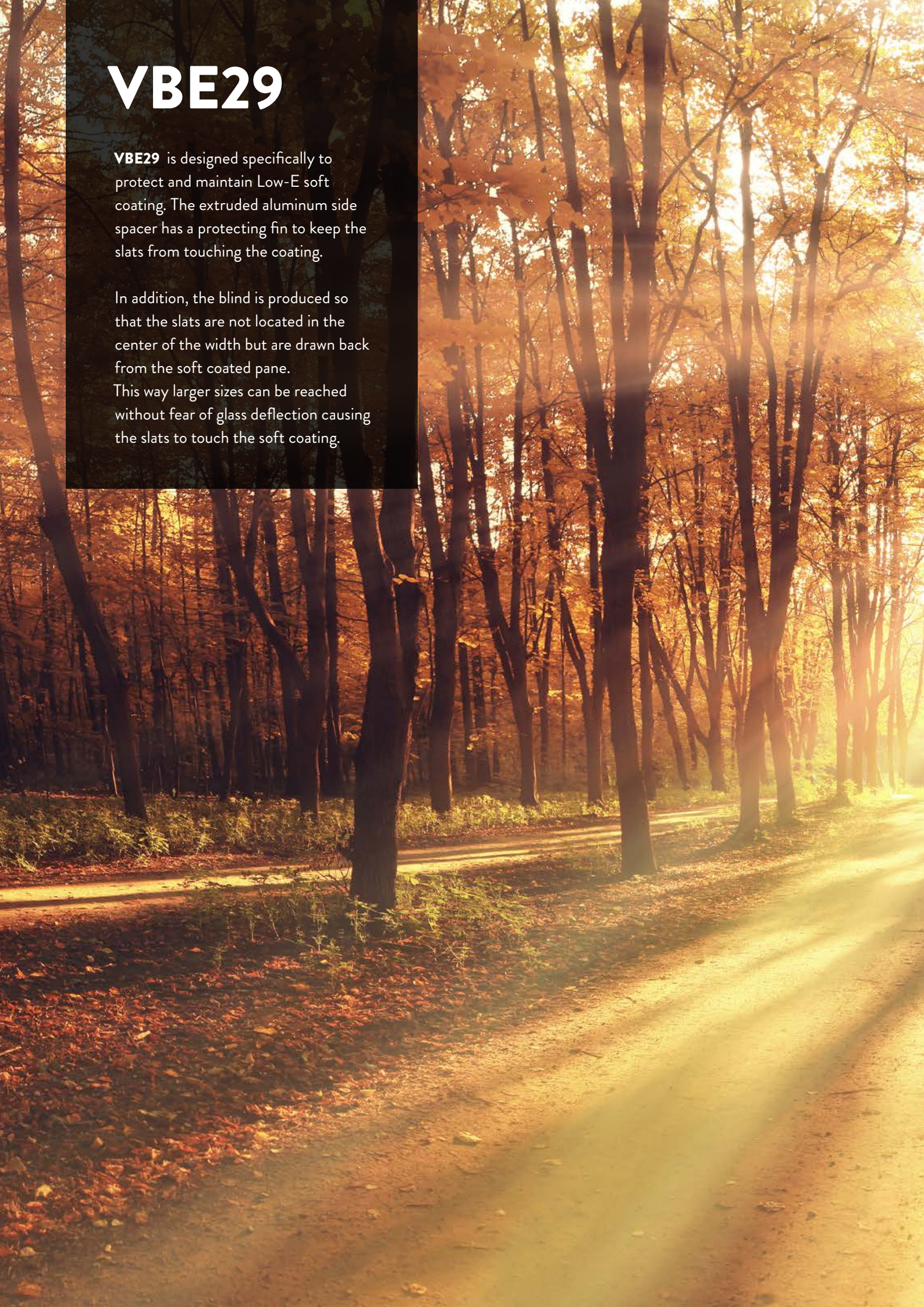


# VBE29

**VBE29** is designed specifically to protect and maintain Low-E soft coating. The extruded aluminum side spacer has a protecting fin to keep the slats from touching the coating.

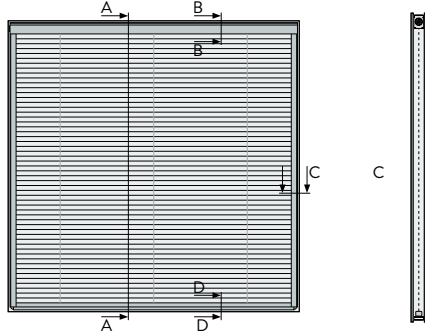
In addition, the blind is produced so that the slats are not located in the center of the width but are drawn back from the soft coated pane. This way larger sizes can be reached without fear of glass deflection causing the slats to touch the soft coating.



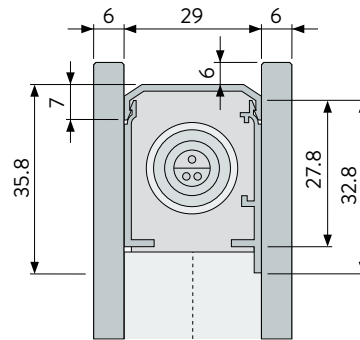
# DETAILED DIMENSIONS in mm

VBE29

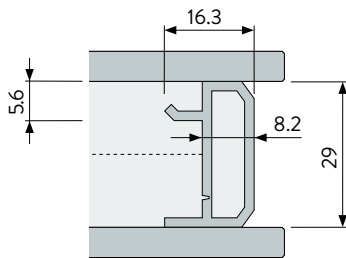
SECTION A-A



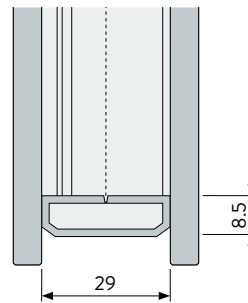
SECTION B-B



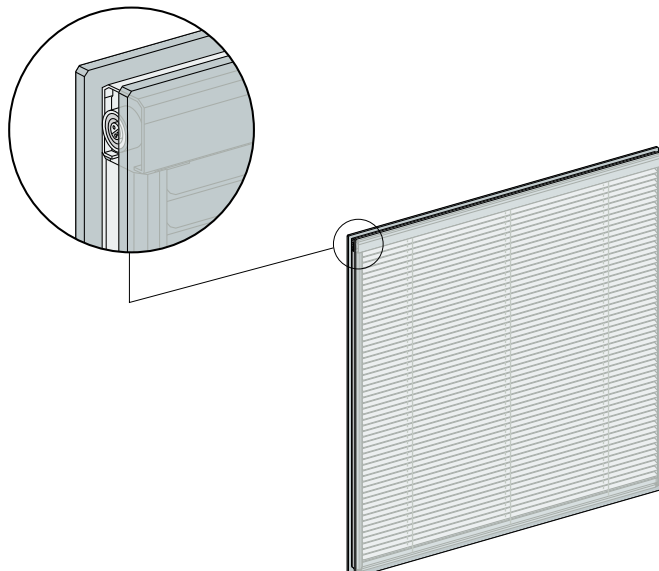
SECTION C-C



SECTION D-D



## POWER AND COMMAND SOCKET







Motors

## DESCRIPTION

The **DM9035** is a small, yet powerful 24 V DC, synchronized encoded motor. It is designed specifically for the operation of shading systems, encapsulated in insulating glass units. The motor is fitted with two gearboxes, spreading the load on two output shafts to ensure a long trouble-free lifetime of the complete system, and high lifting capacity.

A single **DM9035** operates blind units in sizes of up to 4 M2.

Bigger units are operated by a unique dual motor system.

## FEATURES

- Noise reduced
- Suitable for air or gaz filled units
- High accuracy positioning
- Tested for minimum 80,000 cycles
- Fully Synchronized operation of multiple blinds of varying sizes.
- Operation via pushbuttons, KNX interfaces and Remote-control systems.

## CAUTION

- **DM9035** is to be controlled by electronic controllers approved by Orshade only.
- For use in IGU or indoor use only.

## TECHNICAL SPECIFICATIONS

Motor	Bühler motor
Voltage nom.	24VDC
Voltage min.	16VDC
Voltage max.	25VDC
Nominal sync spd	40 rpm
Torque, stall	1,8 Nm
Current nominal	40-580mA
Current Max	coded current loop
Encoder	-20~105°C
Operating temp	EN60730-1
Standards	IP 40
Protection index	23X25X210MM
Size	230g



## DESCRIPTION

The **DM9040** Smart-motor is a small, yet powerful, 24VDC encoded motor, with an integrated electronic control unit. It is designed specifically for the operation of shading systems, encapsulated in insulating glass units.

The **DM9040** allows synchronized Tilt and lift functionality of multiple blinds, as well as fully electronic end positioning of the blind, ensuring superior blind lifetime. The motor is fitted with two gearboxes, spreading the load on two output shafts, ensuring a long lifetime of the complete system, and high lifting capacity.

A single **DM9040** operates blind units in sizes of up to 4 M2.

## FEATURES

- Noise reduced
- Suitable for air or gas filled insulating glass units.
- High accuracy positioning
- Tested for minimum 80,000 cycles

## CAUTION

- Follow instructions carefully.
- For use inside and IGU or indoors only.

## TECHNICAL SPECIFICATIONS

Motor	Bühler motor
Voltage nom.	24VDC +/- 5%
Nominal sync spd	40 rpm
Torque, stall	1,8 Nm
Current nominald	40-580mA
Current Max peak	800mA
Encoder	Magnetic
Operating temp	-20~105°C
Standards	EN60730-1
Protection index	IP 40
Size	23X25X210MM
Weight	230 g





# Controllers

## DESCRIPTION

The **MCU9201** blind controller is designed to meet the specific needs of blind systems encapsulated inside insulating glass units. The **MCU9201** is perfectly compatible with all types of Orshade motors. the new active encoder systems allow a perfect synchronization between blinds, whether they are the same or of different sizes.

The **9201** is programmed to ensure blind performance over time and protect it from mechanical and electrical damage. Maximum protection is achieved with features such as Soft-stop with reverse, down-on-boot and individual power and positioning for each blind. The controller also measures the temperature inside the IGU, and allows operation cut off in extremely cold climate, where vacuum is more likely to occur. The controllers are also set up to protect the motor from short circuit.

## CAUTION

- Only for use with compatible motor/encoders
- Only for indoor use.



## TECHNICAL SPECIFICATIONS

Type number	MCU-9201P
Voltage nom.	24VDC
Load nominal	16VDC
No of channels	1
No of Groups pr. ch.	4

## CONNECTIONS

### J1:

7	RS48 data A/+
6	RS485 data B/-
5	Input grp. DOWN
4	Input grp. UP
3	GND/Scrn
2	GND
1	+24 VDC

### J2:

1	Motor +
2	Encoder
3	Motor -



## DESCRIPTION

The **MCU9206** blind controller is designed to meet the specific needs of blind systems encapsulated inside insulating glass units. The controller contains 6 channel for the operation of 6 individual blinds. The **MCU9206** is perfectly compatible with all types of Orshade motors. the new active encoder systems allow a perfect synchronization between blinds, whether they are the same or of different sizes.

The **9206** is programmed to ensure blind performance over time and protect it from mechanical and electrical damage. Maximum protection is achieved with features such as Soft-stop with reverse, down-on-boot and individual power and positioning for each blind. The controller also measures the temperature inside the IGU, and allows operation cut off in extremely cold climate, where vacuum is more likely to occur. The controllers are also set up to protect the motor from short circuit.

## FEATURES

- Pushbuttons for height programming directly from the controller.
- DIN rail compatible
- Short circuit protection
- Mechanical wear protection
- Temperature limit - optional
- Perfect synchronization of hundreds of blinds



## TECHNICAL SPECIFICATIONS

Type number	MCU-9206H
Voltage nom.	24VDC
Consumption	<10 A
No of channels	1
No of Groups pr. ch.	4
Config Tool	BC9305

## CONNECTIONS

### J1:

7	RS48 data A/+
6	RS485 data B/-
5	Input grp. DOWN
4	Input grp. UP
3	GND/Scrn
2	GND
1	+24 VDC

### J2:

1	Motor -
2	Motor +
3	Encoder
4-18	Sequence is repeated for each of the 6 ch.

## DESCRIPTION

The Orshade remote control type **RFR9170** operates up to 30 individual or groups of blinds/pleated curtains. The number of units in each group is unlimited.

The names of the different groups can be customized and shown in clear text on the handheld unit's OLED display, along with the group's number. Each group or individual blinds can be lifted, lowered or tilted separately.

One receiver can have up to 16 remote controls paired to it. An unlimited number of receivers can be in a system.

The handheld remote control is powered by a rechargeable battery, which is easily charged by a simple USB charger. When fully charged, the remote will typically operate for more than a year, with normal use.

## FEATURES

- 30 channel remote
- Name of groups in Clear text
- High visibility OLED display
- Rechargeable battery - up to 1 year normal use on a fully charged battery

## TECHNICAL SPECIFICATIONS

Battery	3,7V LiPo 350mAh
Operates on	ISM 868,5MHz/ FCC915MHz high band, 5m
Sensitivity	-104dbm
Range	~30m inside building, depending on wall material and buildup
Standards	FCC/ETSI TR 102 649-2 v1.2.1 (2010- 06), Part 2 SRD, Short Range Device

