

fig. 341: Conservatory awning W20

- 1 Cover panel
- 2 Shaft
- 3 Fabric
- 4 Lateral guidance
- 5 Reinforcement profile
- 6 Front rail

Application

External sun shading systems for shading glazed conservatories, patio roofs and pergolas.

The secudrive® guide guides the curtain along the complete length in the guide rail which completely prevents light gaps. The curtain is optimally tensioned and especially wind-stable.

Operation

Motor

Basic motor, 230 V, 50 Hz

WM REA with electronic limit switch-off (optionally with EWFS/WMS Plug receiver)

EWFS radio motor, 230 V, 50 Hz (optionally)

W-WM with electronic limit switch-off

WMS radio motor, 230 V, 50 Hz (optionally)

WMS-WM with electronic limit switch-off More information about drives from page 275.

Cover panel (1)

two-piece, sides closed

Material: aluminium, extruded
Dimensions (WxH): 199x159 mm
Surface: powder-coated

Shaft (2) Fabric shaft

Material: aluminium
Material thickness: 1.6 mm
Dimensions (Ø): 86.2 mm
Profile: round profile
Surface: plain

Motor shaft

Material: aluminium
Material thickness: 1.6 mm
Dimensions (Ø): 70 mm
Profile: round profile
Surface: plain

Fabric (3)

Fabric qualities: Standard/Lumera acrylic fabric

Perfora/All Weather acrylic fabric

Soltis 92 fabric Twilight Pearl/Metal

Designs: according to current WAREMA awning

collection

Special fabrics not included in our current awning collection are only available upon request and at a surcharge.

Lateral guidance (4) with secudrive® in rail

with mounting groove

Material: aluminium, extruded

Dimensions (WxH): 45x60 mm Surface: powder-coated

Fixing: brackets see page 197

A spring steel strip guides the fabric directly in the guide rail.

Reinforcement profile (5)

Description

for ordering lengths from 2500 mm

Material: aluminium, extruded

Dimensions (Ø): 40 mm

Profile: round profile

Surface: powder-coated

For order widths from 3501 mm a profile Ø60 mm is used.

Front rail (6)

with beading channel for fabric fixing Material: aluminium, extruded

Dimensions (WxH): 94 x 54 mm Surface: powder-coated

Fixing and connecting parts

within the awnings:

Material: A2 steel or aluminium

Colours

Powder coating of aluminium parts with chrome-free pretreatment according to valid RAL CLASSIC colour chart (except camouflage and luminous colours) or in six DB colours as well as eight textured colours, four anodised-look colours (WC31 – WC34) and further colours according to WAREMA Colour World (in WAREMA colour specification). Other colour specifications and special colours are available on request and are subject to surcharge.

SDO switch - mutual interlock (optionally)

When using a conservatory awning W20 above a ventilation wing (no smoke and heat venting system) it is necessary to use a SDO switch which is integrated in the awning. It is used for mutual interlock between the conservatory awning and the wing.

The minimum width is increased to 900 mm. More information on request.

WMS sensor system

Fully automatic control according to wind, photo and rain, see page 218.

Protection of the unit against damage due to rain

The conservatory awning W20 is intended to be used as a sun shading system, not as rain protection.

In order to avoid destruction of/damage to the unit in the case of sudden rain, the following points must be taken into consideration:

- Control incl. rain sensor
- Drainage cutouts in the fabric (see page 179)

If none of these points are complied with, the operator is responsible for the retraction of the awning in the case of rain.

Small amounts of residual water can cause smudges at the edges of awnings.

Checklist

- Provide drawings of the conservatory, or draft a sketch and, in addition, send a photo (if possible)
- Fabric colour and quality
- Frame colour
- Type of guide rail brackets
- Specify the drive position. (operation side of cover panel in direction of movement)
- Arrange for supply line on-site
- Arrange for housing of plug-in connector
- Lock ventilation flaps and awning against each other or elevate the awning

Information on operation and electrical connection:

The following connection conditions must be taken into consideration when operating electronic motors:

- It must be ensured that the drives are to be operated via locked switching elements. However, the drives switch to programming mode, if synchronous voltage is applied to the up and down running direction. In this case, the integrated electronics lose their stored limit positions and await new programming.
- 2. Switching devices with the so-called 3-wire conductor technology (e.g. Rademacher timer clip) cannot be used because these devices draw their operating voltage from the drive and the electronics in the motors do not build up enough voltage.

If both conditions have been met, the electronic motors can be operated with any roller shutter controller or bus system (via actuators).

2020023en_031.fm/04.2018 177

Diagram for determining run time of a conservatory awning W20

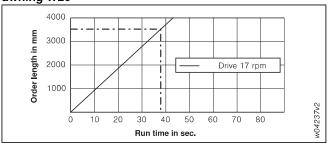


fig. 342: Diagram for determining run time

How to read the diagram:

Awning with order length of 3500 mm and drive speed of 17 rpm has a run time of approx. 38 sec.

Guide rails

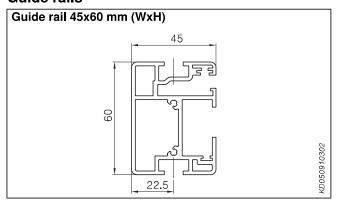


fig. 343: Guide rail

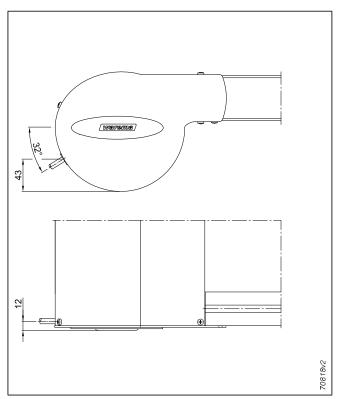
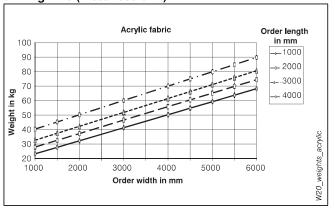


fig. 344: Cable exit

Diagram for determining the weight of a conservatory awning W20 (motorised unit)



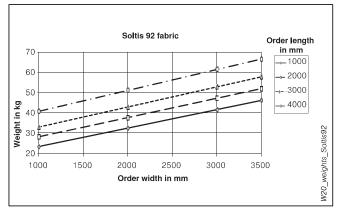


fig. 345: Diagrams for determining weights for W20

How to read the diagram:

Awning with order length of 3000 mm, order width of 2000 mm and Soltis 92 fabric has a weight of approx. 43 kg.

178 2020023en_032,fm/04,2018

Construction limit values/definitions Conservatory awning Climara W20

Conservatory awining Chinara W20

Application example

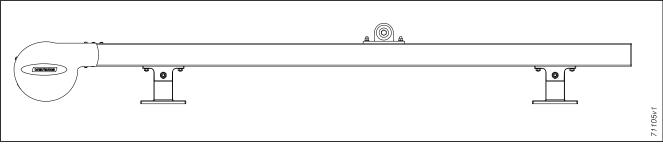


fig. 346: Application example

Construction limit values in mm W20

Ourstraction mint values in min wzu			
External sun shading systems	Type of fabric	Individual units	
Max. width	Acrylic - all qualities -	6000	
	Soltis 92 fabric	3500	
	Twilight Pearl/Metal	4500	
Min. width	Acrylic - all qualities -	650	
	Soltis 92 fabric	650	
	Twilight Pearl/Metal	650	
Max. length	Acrylic - all qualities -	60001)	
	Soltis 92 fabric	4000	
	Twilight Pearl/Metal	6000	
Min. length	Acrylic - all qualities -	950	
	Soltis 92 fabric	950	
	Twilight Pearl/Metal	950	
Max. area (m²)	Acrylic - all qualities -	24	
	Soltis 92 fabric	14	
	Twilight Pearl/Metal	24	
Inclination with rain sensor		0°-45°	
Inclination with drainage cutouts		3°–16°	
Inclination when direction of movement "from bottom to top"		0°-45°	

¹⁾ Note max. area.

Note:

A conservatory awning type W20 is only available as individual unit, i.e. no coupled curtains are possible! Each awning requires 2 single guide rails.

When using Twilight Pearl, the fabric is fastened with a fabric strip visible at the side.

Definitions

The drive end or operation side is always seen from the cover panel in extension direction.

Order width = from one guide rail fixing axis to the next fixing axis = axial dimension

Guide rail brackets

Order length (mm)	Guide rail brackets per rail
up to 2000	2
2001 to 3500	3
3501 to 5000	4
5001 to 6000	5

Drainage cutouts

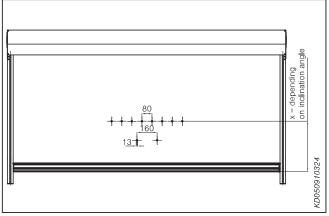


fig. 347: Drainage cutouts

Dimension x depending on inclination angle of the unit between 200 mm (16°) and 1115 mm (3°).

Number of drainage cutouts

Number of cutouts	up to an area of (Order depth x order width)
6	15.0 m ²
8	20.0 m ²
10	24.0 m ²

Attention: The drainage cutouts protect the awning from destruction/damage, however they do not guarantee complete drainage.

179

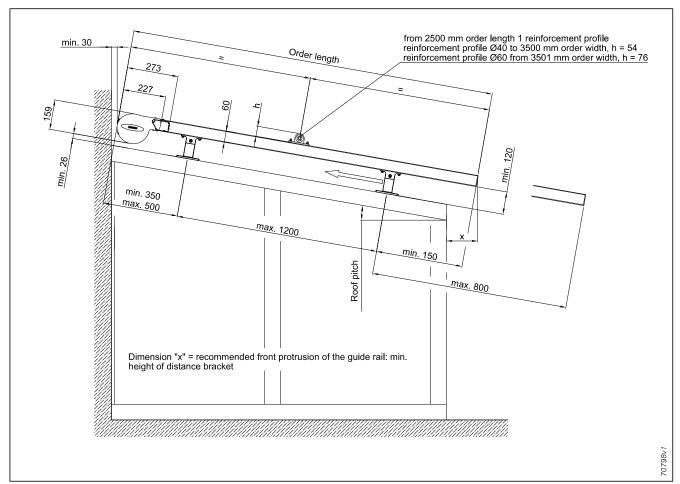


fig. 348: Conservatory awning W20

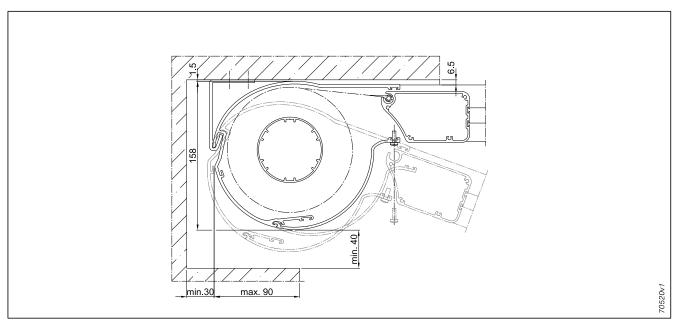


fig. 349: Installation space cover panel

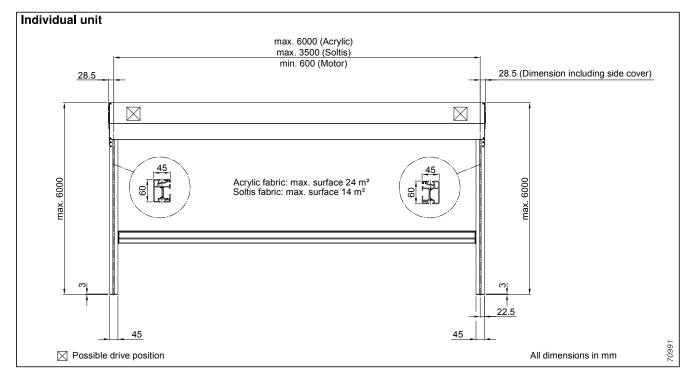
Attention: Mounting and inspection of the cover panel only possible outside the shaft!

180 2020023en_034,fm/04,2018

Attention!

Measuring instructions

Order width = centre of guide rail – centre of guide rail. The complete awning (incl. side covers) is 57 mm wider. Please note when ordering!



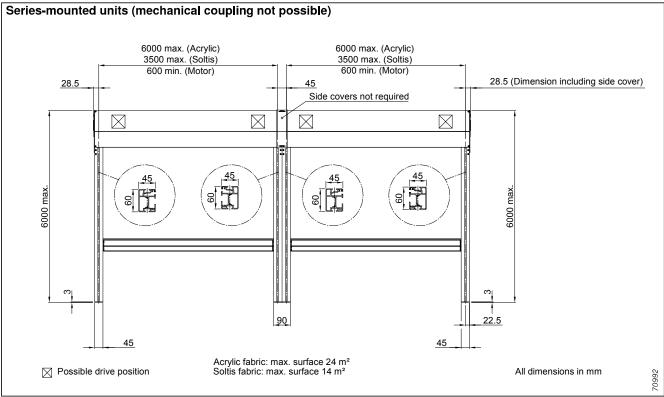


fig. 350: Measuring instructions for drives

With series-mounted units it is possible to attach 2 guide rails with one bracket; after 12000 m an expansion joint of 20 mm is necessary!

2020023en_035.fm/04.2018 181