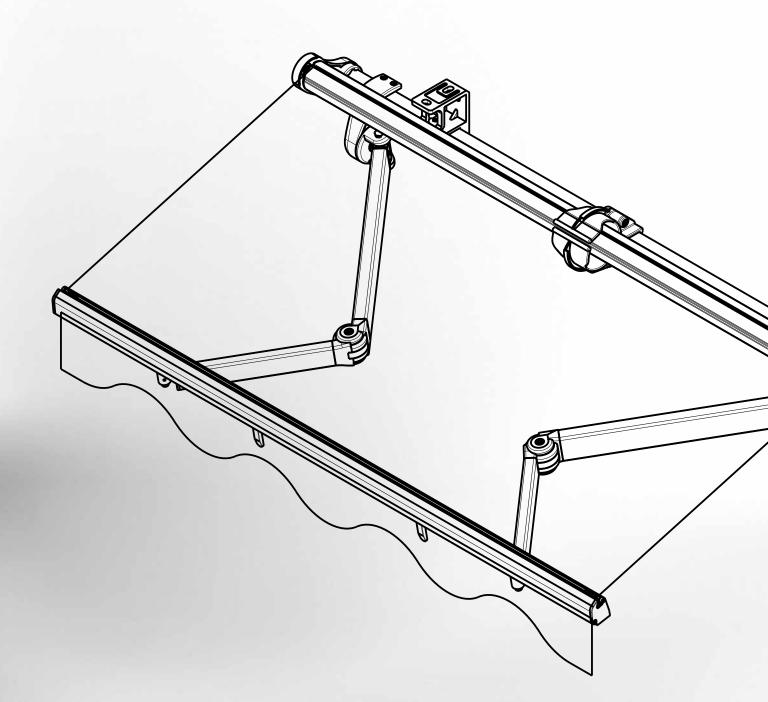
labona®

TECHNICAL MANUAL



STELA, JASMINA, EMMA, OLIVIA, DAKOTA



Contents - Awnings

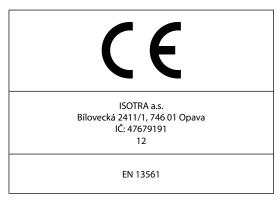
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ISOTRA*Quality*

A brand symbolizing years of tradition, innumerable investments into research and development, use of high-quality materials, technological advancement, reliable work of hundreds of employees and many more parameters, which together form one whole - the final product of the company ISOTRA.

CE Product Marking

All awnings of ISOTRA a.s. comply with the standard ČSN EN 13561:2012. European Marking of CE Compliance – marking on products:



- marking in the accompanying commercial documents:
CE
ISOTRA a.s. Bílovecká 2411/1, 746 01 Opava IČ: 47679191 12
EN 13561:2015 DAKOTA CPR 027/2017
Awning – outsideshading
Windresistance: 2
The total factor of solar energy transmission gtot: 0,08 – 0,2

European Marking of CE Compliance

Sample of CE product marking

Jasmina	Width of the awning L /m/			
Jasiiilia	Arm /m/	2,00 - 4,80	Larger sizes are not realized	
Class of wind resistance	1,50 1,75	2		
Test pressure p (N/m²),	2,00 2,25 2,50	70		
max v (km/h)	2,75 3,00	(38)		

Stela	Width of the awning L /m/			
Stela	Arm /m/	2,00 - 4,80	4,81 - 7,00	Larger sizes are not realized
	1,50			
	1,75			
Class of wind resistance	2,00 2,25	2	1	
	2,25			
Test pressure p (N/m ²),	2,75	70	40	
	3,00			
max (km/hod)	3,25	(38)	(28)	
	3,50	(00)	(=0)	
	3,75			
	4,00			

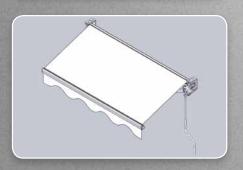
Emma	Width of the awning L /m/			
Ellina	Arm /m/	2,00 - 4,80	4,81 - 5,00	Larger sizes are not realized
Class of wind resistance	<u>1,50</u> 1,75	2	1	
Test pressure p (N/m²),	2,00 2,25 2,50	70	40	
max (km/hod)	<u>2,75</u> 3,00	(38)	(28)	

Dakota			Width of the awning L /m/
Dakota	Arm	2,55 - 7,00	Larger sizes are not realized
Class of wind resistance Test pressure p (N/m ²), max v (km/h)	2,00 2,50 3,00 3,50	2 (38)	

Olivia	Width of the awning L /m/			
Olivia	Arm	2,75 - 7,00	Larger sizes are not realized	
Class of wind resistance Test pressure p (N/m²), max v (km/h)	2,00 2,50 3,00 3,50 4,00	2 (38)		

JASMINA AWNING WITHOUT ANY CARRYING PROFILE

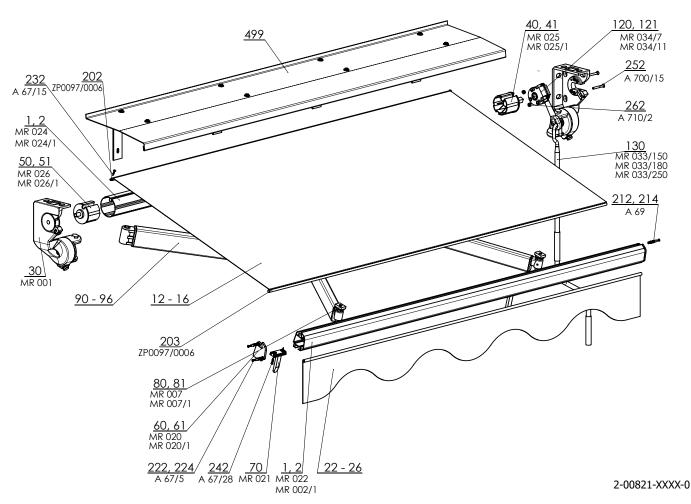




- ▲ Light and aerial awning without load-bearing frame
- ▲ Assembly on side consoles
- ▲ Optimal graded ejection
- High-quality SATTLER and GIOVANARDI awning fabrics

ISOTRA*Quality*

Jasmina Basic product specification



Control

It serves to roll and unroll the awning into the tightened position.

Handle - You can roll (into the tightened position) or unroll the awning by turning the handle to the right / to the left. To achieve the tight fabric at maximum extension, it is necessary to twist the handle about one turn back (the same as the unrolling)

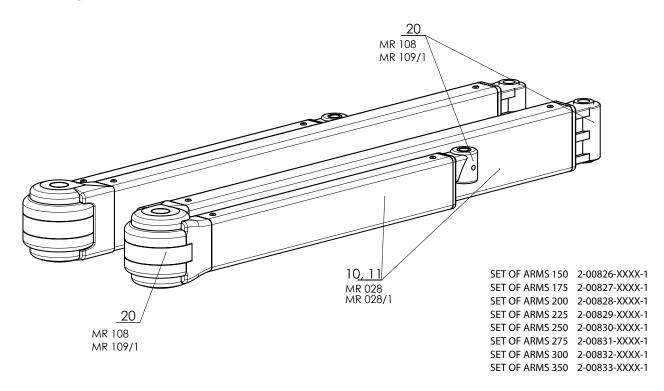
Motor - The unrolling and rolling of the awning can be made by the electric drive either remote control or switch. By the electric drive you can use an automatic transmission according to the weather such as wind and solar sensor. In this case the motor with remote control is necessary. For drives with emergency manual control NHK it has to be ensured that the awning moves only between the two extreme positions when handling the awning handle using (e.g. during a power failure).

Technical data

Extension	1.5 m; 1.75 m; 2 m; 2.25 m; 2.5 m; 2.75 m; 3 m
Max. extension	3 m
Max. width	4,8 m
Min. width	extension + 0.5 m
Informative weight on one standard meter of width	10 kg
Type of arms	folding aluminium with springs and strip
Movement angle	20° -75°
Size of winding shaft	70 mm, 78 mm
Colour of the construction	white RAL 9016
Pelmet	height 21 cm (+/- 0.5 cm)
Manual control	lever 150 cm, 180 cm, 220 cm, 250 cm
Electric control	engine, engine with emergency lever, remote control, automatic wind/sun sensor
Canopy	on request
Assembly	front on the façade or into the ceiling
Printing on awning	on request
Number of consoles:	2 pc

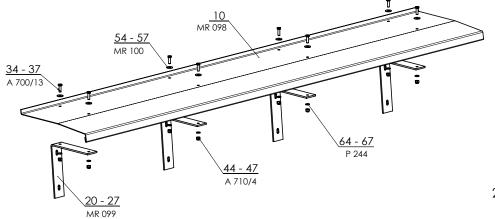
Jasmina (2-00821-0000)

Position	Name of components	Abbreviation	Number of tech. drawing
1	Winding roller for awning Ø70mm - 6m	MR 024	6-011084-0070
1	Low profile with eaves	MR 022	6-011082-0000
2	Winding roller for awning Ø78mm - 6m	MR 024/1	6-011084-0078
2	Great profile with eaves - 6m	MR 022/1	6-011082-0001
12-16	Fabric		see Awnings swatch
22-26	Fabric of ruffle		see Awnings swatch
30	Side Console "Independet" - pair	MR 001	6-011069-0000
40	Roller Cover Ø70mm with four-square	MR 025	6-011085-0070
41	Roller Cover Ø78mm with four-square	MR 025/1	6-011085-0078
50	Roller Cover Ø70mm with pin	MR 026	6-011086-0070
51	Roller Cover Ø78mm with pin	MR 026/1	6-011086-0078
60	Cover for low profile - pair	MR 020	6-011080-0000
61	Cover for big profile - pair	MR 020/1	6-011080-0001
70	Arm stop	MR 021	6-011081-0000
80	Stopper to 2,5m - pair	MR 007	6-011077-0000
81	Stopper over 2,75m - pair	MR 007/1	6-011077-0001
90-99	Set of arms 150 - 300		see page 8
120-130	Control		see page 47
202	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
203	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
212	Dowel 8x40	A 69	6-003149-0000
214	Dowel 8x40	A 69	6-003149-0000
222	Screw 4x40	A 67/42	6-012808-0000
224	Screw 4x40	A 67/42	6-012808-0000
232	Screw 3,9x22	A 67/15	6-009565-3922
242	Screw 3,5x20	A 67/28	6-000869-0002
252	Bolt M6x50	A 700/15	6-009124-0000
262	Nut M6	A 710/2	6-003188-0005
499	Canopy Jasmina		see page 8



Position	Name of components	Abbreviation	Number of tech. drawing
10-11	Small arm profile	MR 028	6-011092-0000
10-11	Big arm profile	MR 028/1	6-011092-0001
20	Set for arms MIDI 1500 - 2500 mm (pair)	MR 108	6-011075-0000
20	Set for arms 2750 - 3000 mm (pair)	MR 109/1	6-011076-0001

Canopy Jasmina – position 499



2-00856-XXXX-0

Position	Name of components	Abbreviation	Number of tech. drawing
10	Canopy Jasmina	MR 098	7-302044-0000
20 - 27	Bracket for canopy Jasmina	MR 099	7-302043-0000
34 - 37	Bolt M6x20	A 700/13	6-003037-0000
44 - 47	Nut M6	A 710/4	6-003037-0000
54 - 57	Pad M6	MR 100	6-005154-0002
64 - 67	Pad M6	P 244	6-003040-0000

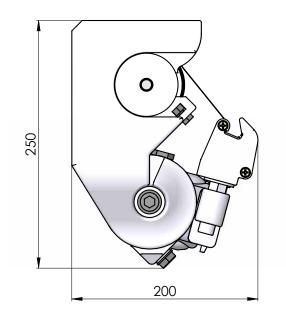
Jasmina Basic Product Specification

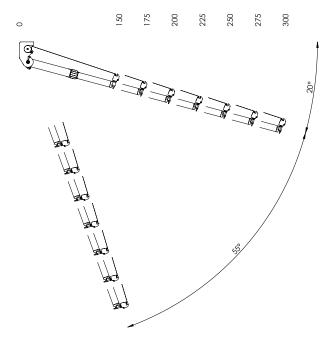




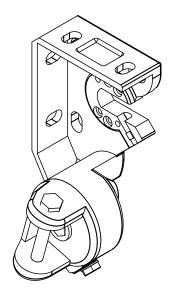
Movement angle

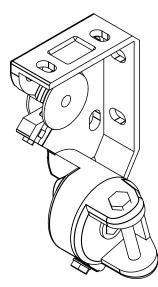
Console wall/ceiling

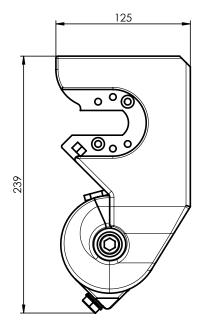


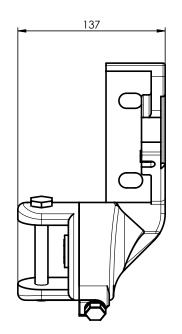


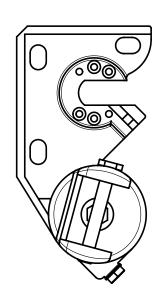
Fixation

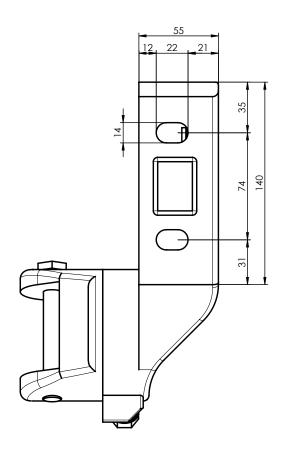


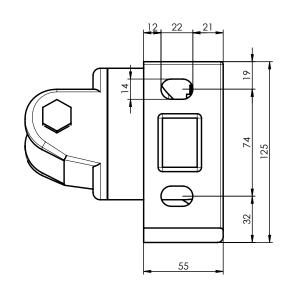








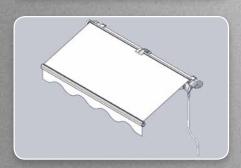




STELA AWNING WITH A CARRYING PROFILE



* TE WENDY



- Awning with carrying profile, joint arms
- ▲ Drip moulding for out-flowing water
- Cross arm option enabling greater extension than the width of the awning
- ▲ Selection of the roof
- ▲ High-quality SATTLER and GIOVANARDI awning fabric
- ▲ As a variation, the semi-cassette variant can be selected

Stela Basic Product Specification



Construction variations of Stela awnings:

- with small check profile (up to max. width of the awning 4.0 m)

- with large check profile (from the width of 4.1 m to the max width 7 m)
- cross arm option enabling greater extension than the width of the awning
- optional removable support

Control

It serves to roll and unroll the awning into the tightened position.

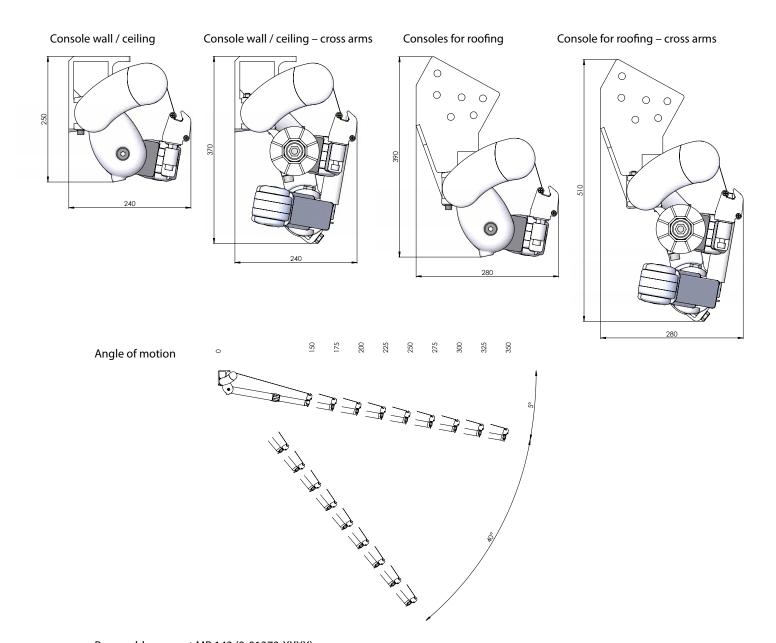
Handle - You can roll (into the tightened position) or unroll the awning by turning the handle to the right / to the left. To achieve the tight fabric at maximum extension, it is necessary to twist the handle about one turn back (the same as the unrolling)

Motor - The unrolling and rolling of the awning can be made by the electric drive either remote control or switch. By the electric drive you can use an automatic transmission according to the weather such as wind and solar sensor. In this case the motor with remote control is necessary. For drives with emergency manual control NHK it has to be ensured that the awning moves only between the two extreme positions when handling the awning handle using (e.g. during a power failure).

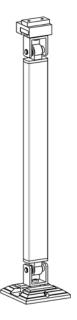
Technical data

Bearing profile	40 x 40 mm
Extension	1,5 m; 1,75 m; 2 m; 2,25 m; 2,5 m; 2,75 m; 3 m; 3,25 m; 3,5 m; 3,75 m; 4 m
Max. extension	4 m (3,5m for crossed arms and half-cassette)
Max. width	7m
Min. width	extension +0,5 m
Informative weight on one standard meter of width	14 kg
Type of arms	folding aluminium with spring and belt
Angle of movement	15° - 45° for max. extension 2,5 m; 5° - 45° for max. extension 3,5 m
Size of winding shaft	78 mm
Colour of the construction	white RAL 9016
Pelmet	height 21 cm (+/- 0,5 m)
Manual control	lever 150 cm, 180 cm, 220 cm, 250 cm
Electric control	engine, engine with emergency lever, remote control, automatic wind/sun sensor
Roof	on request
Assembly	face on the facade, into ceiling, into the roof
Printing on awning	on request

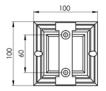
Stela Basic Product Specification



Removable support MR 143 (2-01373-XXXX)

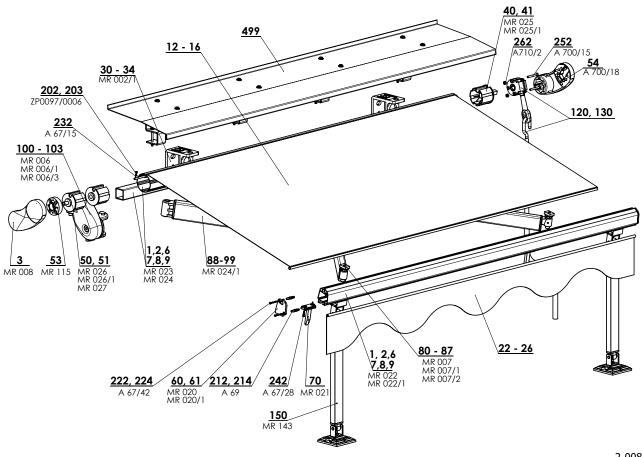




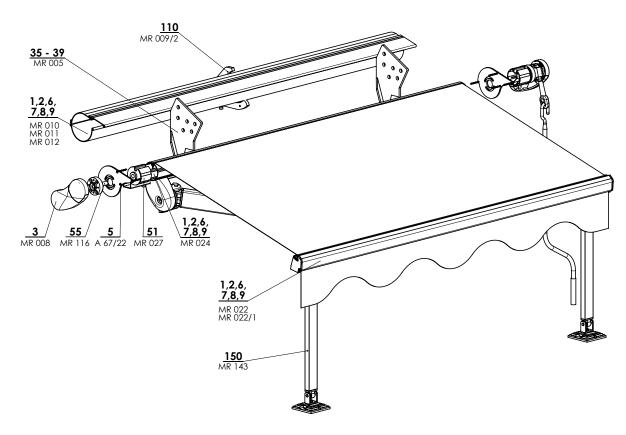


Stela

Basic Product Specification



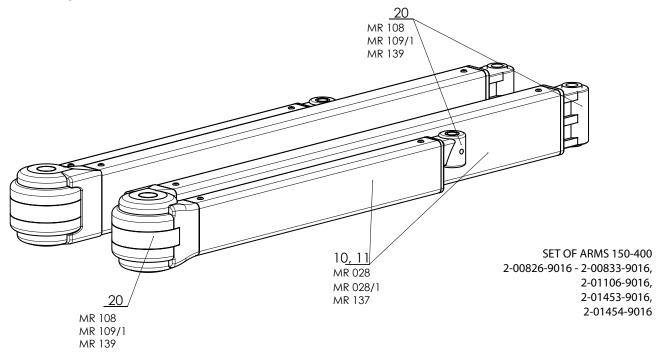
2-00823-XXXX-B



2-00823-XXXX-B

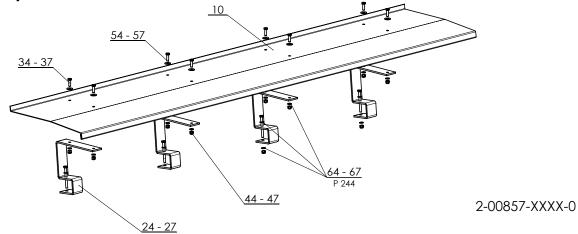
Stela (2-00823-0000)

Position	Name of components	Abbreviation	Number of drawing
1	Winding roller for awning Ø70mm	MR 024	6-011084-0070
1	Low profile with eaves	MR 022	6-011082-0000
1	Support profile for awnings 40x40	MR 023	6-011083-0000
1	Central profile for Semicassette	MR 010	6-011074-xxxx
1	Bottom rail for semicassette awning	MR 011	6-002627-xxxx
1	Front profile for semicassette awning	MR 012	6-002628-xxxx
2	Big profile with eaves - 6m	MR 022/1	6-011082-0001
2	Winding roller for awning Ø70mm	MR 024	6-011084-0070
2	Winding roller for awning Ø78mm	MR 024/1	6-011084-0078
3	Faucet standard for 40x40mm - pair	MR 008	6-011071-0000
4	Side cover for cassette - pair	MR 013	6-002629-9010
5	Screw PZ 4x40 A2	A 67/43	6-012811-0000
12-16	Fabric		see Awning swatch
22-26	Fabric of ruffle		see Awning swatch
30-34	Wall holder standard	MR 002/1	6-011041-0000
35-39	Rafter holder standard	MR 005	6-011069-0004
40	Cover roller Ø70mm with four-square	MR 025	6-011085-0070
41	Cover roller Ø78mm with four-square	MR 025/1	6-011085-0078
50	Cover roller Ø70mm with pin	MR 026	6-011086-0070
51	Cover roller Ø78mm with pin	MR 026/1	6-011086-0078
51	Cover roller Ø70mm with hole	MR 027	6-011087-0070
53	Adapter for semicassette	MR 115	6-011358-0000
54	Bolt M6x40	A 700/18	6-009991-0001
55	Pin roller metal	MR 116	6-011359-0000
60	Cover for low profile - pair	MR 020	6-011080-0000
61	Cover for great profile - pair	MR 020/1	6-011080-0001
70	Stop arm	MR 021	6-011081-0000
80	Stopper to 2,5m - pair	MR 007	6-011077-0000
81	Stopper over 2,75m - pair	MR 007/1	6-011077-0001
85	Stopper for cross arm	MR 007/2	6-011070-6000
88-99	Set of arms 150 - 300		see page 16
100	Bracket arm to 2,75m RAL 9010 - pair	MR 006/1	6-011070-0001
101	Bracket arm 3 and 3,5m RAL 9010 - pair	MR 006	6-011070-0000
102	Bracket arm for cross arm RAL 9010 - pair	MR 006/3	6-011070-5000
103	Screw M 12x90	MR 037	6-011151-0000
110	Support center - half cassette	MR 009/2	6-011072-0002
120-130	Control		see page 47
150	Removable supports STELA	MR 143	2-01373-0000
202-203	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
212, 214	Dowel 8x40	A 69	6-003149-0000
222, 224	Screw 4x40	A 67/42	6-012808-0000
232	Screw 3,9x22	A 67/15	6-009565-3922
242	Screw 3,5x20	A 67/28	6-000869-0002
252	Bolt M6x50	A 700/15	6-009124-0000
262	Nut M6	A 710/2	6-003188-0005
499	Canopy Stela		see page 16



Position	Name of components	Abbreviation	Number of tech. drawing
10-11	Small arm profile (extension 1,5 - 3,5m)	MR 028	6-011092-0000
10-11	Big arm profile (extension 2,75 - 4m)	MR 028/1	6-011092-0001
10	Big arm profile (extension 3,75 - 4m)	MR 137	6-011092-0002
20	Set for arms MIDI 1500 - 2500 mm (pair)	MR 108	6-011075-0000
20	Set for arms 2750 - 3000 mm (pair)	MR 109/1	6-011076-0001
20	Set for arms 3750 - 4000 mm - pair	MR 139	6-015125-0000

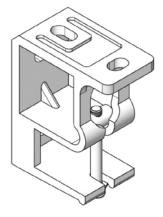
Canopy Stela - position 499

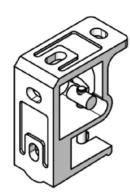


Note: The canopy for Stela awning up to 6 m width is made in one piece, over the 6 m wide is made of two parts (connected by a holder).

Position	Name of components	Abbreviation	Number of tech. drawing
10	Canopy Stela	MR 098/1	7-302042-0000
24 - 27	Bracket for canopy Stela	MR 099/1	7-302043-0000
34 - 37	Bolt M6x20	A 700/13	6-003037-0000
44 - 47	Nut M6	A 710/4	6-003037-0000
54 - 57	Pad M6	MR 100	6-005154-0002
64 - 67	Pad M6	P 244	6-003040-0000

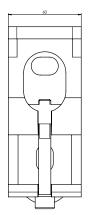
Fixation wall / ceiling

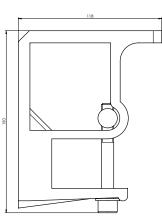


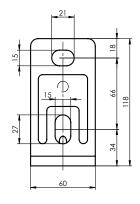


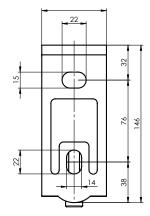
Number of consoles:

Width of the awning	Number of consoles
2000 - 3000 mm	2 pc
3001 - 4000 mm	3 рс
4001 - 5000 mm	4 pc
5001 - 6000 mm	5 pc
6001 - 7000 mm	6 рс





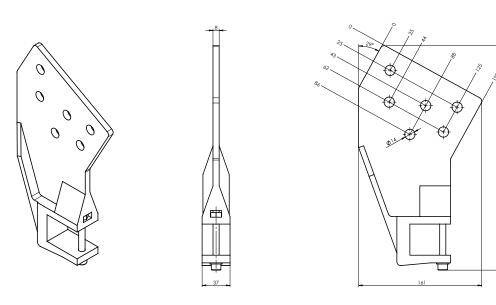




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Fixation

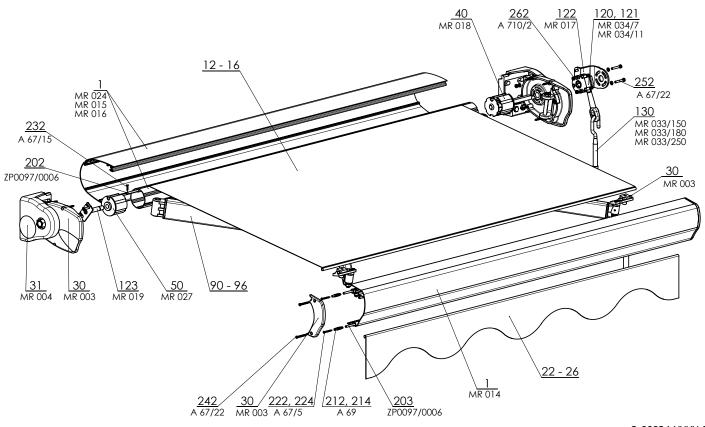




- Awning with round cassette for winding in the fabric
 - Recommended for places interfered with by the open construction
 - ▲ The fabric is fully protected
 - Option of centring the arms into a plain area
 - Setting arms to horizontal or vertical declination
 - ▲ High-quality SATTLER and GIOVANARDI awning fabrics
 - **ISOTRA***Quality*

EMMA CASSETTE AWNING

Emma Basic Product Specification



2-00824-XXXX-0

Control

It serves to roll and unroll the awning into the tightened position.

Handle - You can roll (into the tightened position) or unroll the awning by turning the handle to the right / to the left. To achieve the tight fabric at maximum extension, it is necessary to twist the handle about one turn back (the same as the unrolling)

Motor - The unrolling and rolling of the awning can be made by the electric drive either remote control or switch. By the electric drive you can use an automatic transmission according to the weather such as wind, solar and shock sensor. In this case the motor with remote control is necessary. For drives with emergency manual control NHK it has to be ensured that the awning moves only between the two extreme positions when handling the awning handle using (e.g. during a power failure).

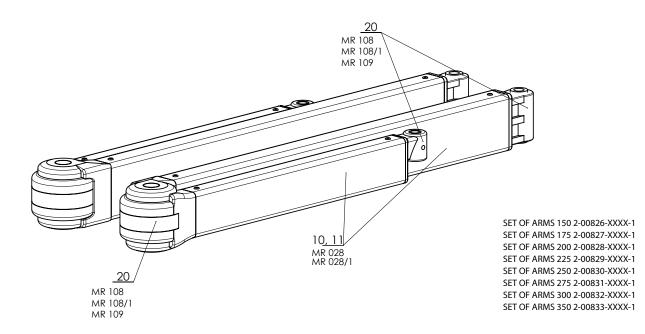
Technical data

Extension	1,5 m; 1,75 m; 2 m; 2,25 m; 2,5 m; 2,75 m; 3 m
Max. extension	3m
Min. extension	0,5 m
Min. width	2,050 m (engine); 2,120 m (handle)
Min. width	2,050 m (engine); 2,120 m (handle)
Informative weight on one standard meter of width	15 kg
Type of arms	folding aluminium with spring and belt
Angle of movement	0° - 50°
Size of winding shaft	70 mm, 78 mm
Colour of construction	white RAL 9016
Pelmet	height 21 cm (+/- 0.5 cm)
Manual control	handle 150 cm, 180 cm, 250 cm
Electric control	engine, engine with emergency lever, remote control, automatic wind /sun sensor
Assembly	face on the façade , into the ceiling
Printing on awning	on request
Number of consoles:	2 pc

Emma (2-00824-0000)

Position	Name of components	Abbreviation	Number of tech. drawing
1	Winding roller for awning Ø70mm	MR 024	6-011084-0070
1	Profile for cassette awning	MR 014	6-002633-xxxx
1	Head rail for cassette awning	MR 015	6-002634-xxxx
1	Bottom rail for cassette awning	MR 016	6-002635-xxxx
12-16	Fabric		see Awning swatch
22-26	Fabric of ruffle		see Awning swatch
30	Side set for cassette awning - pair	MR 003	6-011069-0002
31	Console cover for cassette awning - pair	MR 004	6-011069-0003
40	Cover roller with extension four-square	MR 018	6-011078-0001
50	Cover roller Ø70mm with hole	MR 027	6-011087-0070
90-96	Set of arms 150 - 300		see below
120-130	Control		see page 47
122	Gearbox mount - external	MR 017	6-011078-0000
123	Pin roller metal	MR 019	6-011079-0000
202, 203	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
212,214	Dowel 8x40	A 69	6-003149-0000
222,224	Screw 4x40	A 67/42	6-012808-0000
232	Screw 3,9x22	A 67/15	6-009565-3922
242	Screw 4,5x50	A 67/43	6-012808-0000
252	Bolt M6x50	A 67/29	6-006901-0001
262	Nut M6	A 710/2	6-003188-0005

Set of arms - position 90 – 96



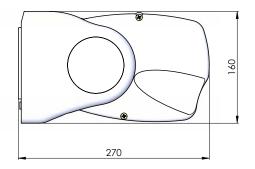
Position	Name of components	Abbreviation	Number of tech. drawing
10-11	Small arm profile	MR 028	6-011092-0000
10-11	Big arm profile	MR 028/1	6-011092-0001
20	Set for arms MIDI 1500 - 2500 mm (pair)	MR 108	6-011075-0000
20	Set for arms 2750 - 3000 mm (pair)	MR 109/1	6-011076-0001

Emma Basic product specification

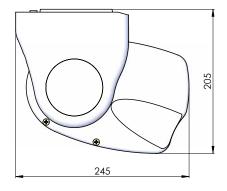


Fixation

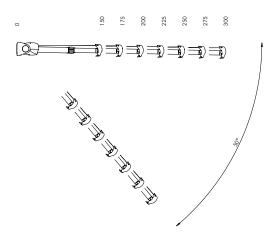
Console wall

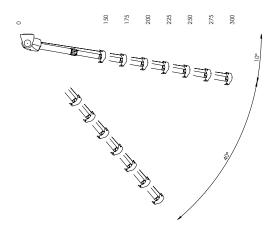


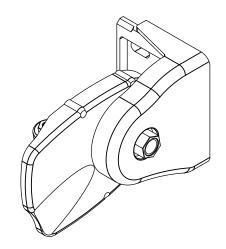
Console ceiling

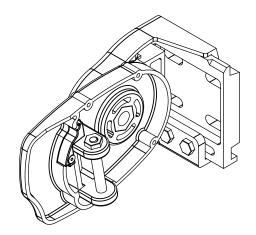


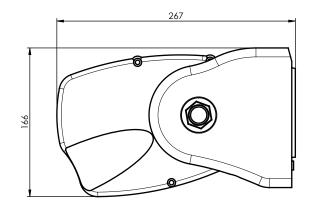
angle of movement

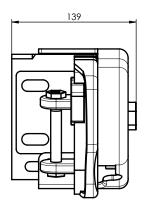


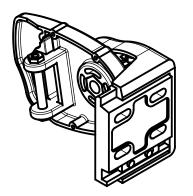


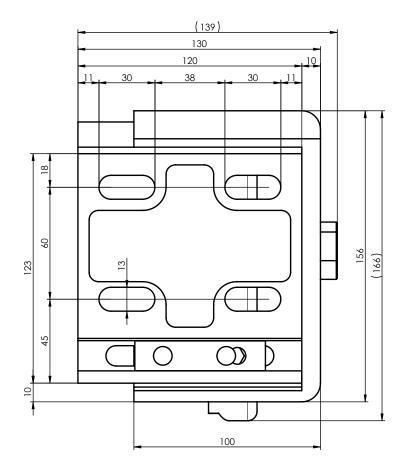












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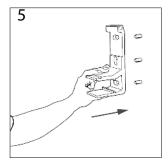
Jasmina, Stela, Emma

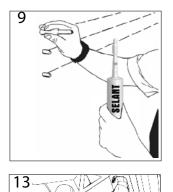
Measuring and assembly

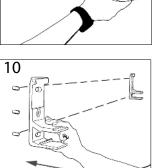
Illustrative assembly of awning with carrying profile



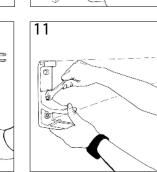


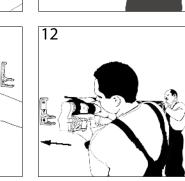


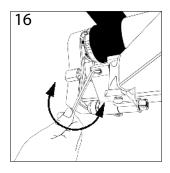


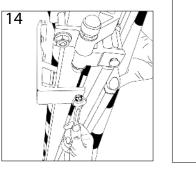


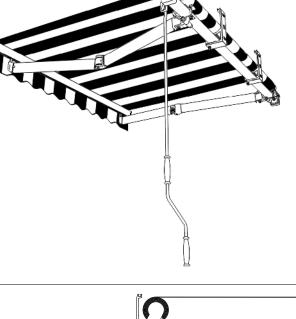
15











Measurement

Before measurement:

At the place of assembly, check the condition of the façade and masonry and its adaptability for installation of the awning. Evaluate the height of the location in relation to the requirements for shading and the proposed dimensions. Evaluate the aesthetical side of the location of the awning.

Measurement

Width (mm) = actual width of the awning (in the case of assembly into the hole, measure the width of the hole) Height (mm) = actual height of the hole of the awning (in the case of assembly into the hole, measure the height of the hole)

Note: It is necessary to keep a minimum passable height of 2,200 mm in the case of maximum extension of the awning.

Assembly

Assembly procedure for JASMINA awning – without load-bearing profile:

- 1. Unpack the awning so it is possible to see the side consoles with the fixation holes
- 2. Level the side consoles and measure the span of holes
- 3. Check the plainness of the assembly place
- 4. Mark the measured values on the assembly place and drill holes
- 5. Blow the holes, seal the anchoring material and leave it to dry
- 6. Mount the awning on the bolts, secure with nuts (in the case of electric control, connect the electricity)
- 7. Unpack the remaining part of the awning, unroll the awning, set the declination, check the plainness of the rolling profile, check and tighten all nuts and bolts
- 8. Check the functionality of the control

Assembly procedure for STELA awning – with load-bearing profile:

- 1. Unpack the awning and check that it contains all necessary components
- 2. Check the plainness of the assembly place
- 3. Measure the consoles, mark the hole spans and drill holes
- 4. Blow the holes, seal the anchoring material and leave it to dry
- 5. Fix the wall consoles, check the plainness and tighten bolts
- 6. Mount the awning on the bolts, secure with nuts (in the case of electric control, connect the electricity)
- 7. Unroll the awning, set the declination, check the plainness of the extension profile or adjust the cradle, check and tighten all nuts and bolts
- 8. Check the functionality of the control

Technical note: the location of the side consoles of the awning is a maximum of 150 mm from the arm holder, or the cradle support.

Assembly procedure for awning EMMA - cassette awning:

- 1. Unpack the awning and check that it contains all necessary components
- 2. Check the plainness of the assembly place
- 3. Fix the wall consoles into the side consoles and measure the hole spans
- 4. Mark the measured values on the assembly place and drill holes
- 5. Blow the holes, seal the anchoring material and leave it to dry
- 6. Fix the wall consoles and check the plainness of the tightening
- 7. Mount the awning on the wall consoles, secure with nuts (in the case of electric control, connect the electricity)
- 8. Unroll the awning, set the declination, check the plainness of the extension profile or adjust the cradle, check and tighten all nuts and bolts
- 9. Check the functionality of the control

General procedure for setting the declination of awnings:

- 1. The declination of the awning is minimally set in production.
- 2. During assembly, unroll the awning into the lower position; loosen the bolts on the arm holders.
- 3. With the lower adjusting bolt /by turning to the left/ set the required declination.
- 4. Tighten all loosened bolts.

General procedure for setting the awning cradle:

- 1. The declination of the awning is minimally set in production.
- 2. During assembly, loosen the side Allen head screw on the cradle so that the plastic part can be moved.
- 3. Unroll the awning into the lower position, set the required declination of the awning (the fabric must be tightened) and turn the plastic part of the cradle so that the fabric exits from the cradle nearer to the upper edge of the plastic part.
- 4. Tighten the Allen head screws and test the functionality of the awning.

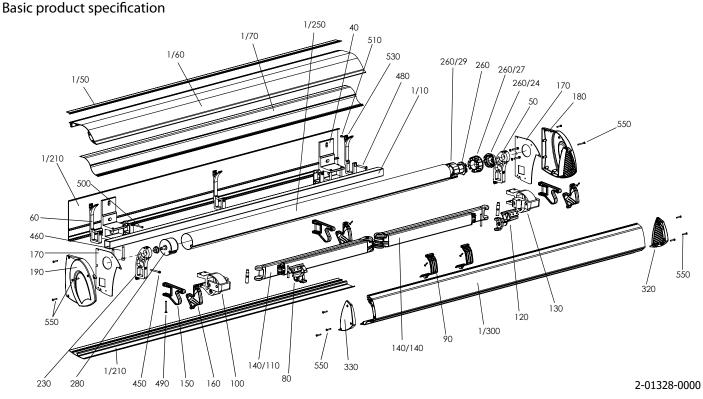
OLIVIA CASSETTE AWNING





- ▲ Ideal for a large terrace area thanks to drop 4 meters,
- ▲ the option of electric vario valance,
- the possibility of lightning integrated into the bottom profile,
- ▲ alternative other optional equipment (heaters),
- awnings can be coupled to a total width of 12 meters (2 pcs of awnings),
- ▲ High-quality SATTLER and GIOVANARDI awning fabrics.

Olivia



Control

It serves to roll and unroll the awning into the tightened position.

Motor - The unrolling and rolling of the awning can be made by the electric drive. There is supplied the motor with automatic post-regulation as standard, the awning will always close completely, 3 metre electric cable, single-pole surface mounted switch and plug. By the electric drive you can use an automatic transmission according to the weather such as wind and solar sensor.

There is optional 5 or 10 metre electric cable, without switch and plug, and these motors:.

- Motor with automatic self-adjustment, awning will always be completely closed (Orea WT)

- Motor with built-in IO receiver (Sunea IO)

Technical data

Extension	2 m; 2,5 m; 3 m; 3,5 m; 4 m
Max. extension	4 m
Min. width*	2,75 m
Max. width**	7 m
Informative weight on one standard meter of width awning without a rear box	20 kg
Informative weight on one standard meter of width awning with a rear box	22 kg
Informative weight on one standard meter of width awning with vario valance	24 kg
Type of arms	folding aluminium with spring and belt
Movement angle	10° - 45°
Colour of the construction	RAL 1015, 7016, 7016 Structure, 7035, 8014, 9006, 9007, 9010
Valance	height 210 mm / 250 mm / 300 mm
Variovalance	max. height 1,4 m
Manual control	-
Electric control	motor
Assembly	front on the façade, into the ceiling
Printing on awning	on request

* Minimum width: depending on the chosen drop:

- awning with 2 arms: W min = extension + 570mm

- awning with 3 arms: W min = (extension x 1,5) + 760mm

- for coupled awnings: see point page 41

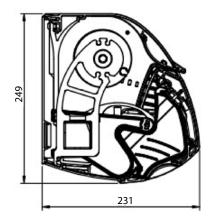
** Maximum width: 6m in 1 part with 2 arms, 7m in 1 part with 3 arms, 12m in 2 parts with 4 arms

When installing the supplied Olivia awning, including the back profile and at the same time the "CEILING" installation variant, the awning box itself does not close to the back profile. The gap created at the top of the box will be a maximum of 4 mm. This condition is caused by the technological solution of the awning, its own weight and the position of the awning's center of gravity. Unfortunately, this defect is not remediable and it is necessary to anticipate it.

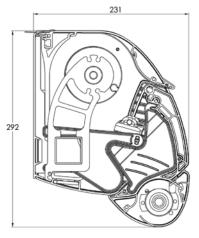
Olivia (2-01328-0000)

Position	Name of component	Abbreviation	Number of tech. drawing
1/10	Mounting profile 40x40x2 - 4,1 m	MRH 019 0004	6-013876-00004
1/50	Rubber profile for cover profile - black	MRH 142	6-013880-9005
1/60	Cover profile - 4 m	MRH 032 0004	6-013881-00004
1/70	Sliding strip for cover profile - PVC	MRH 030	6-013882-0000
1/210	Profil spodní - 7,1 m	MRH021/XXXX7	6-013898-XXXX7
1/220	Back profile - 4,1 m	MRH 027 0004	6-013899-00004
1/250	Roll for fabric section Ø85x1,25 mm - 7 m	MRH 065	6-013900-00007
1/300	Extension pole - 4,1 m	MRH 023 0004	6-013904-00004
40	Wall bracket 100 mm	MRH 234	6-015753-XXXX
50	Bearing support	MRH 085	6-013877-0000
60	Support for cover	MRH 060	6-013878-0000
80	Fastening extension pole left complete		2-01342-PU11
90	Plastic lead-in funnel folding arm - black	MRH 134	6-013885-9005
100	Angular displacement left		2-01344-PU11
120	Fastening extension pole right complete		2-01343-PU11
130	Angular displacement right		2-01345-PU11
140	Set of arms - (LX530) OLIVIA		see page 32
150	Holding support in box ext. pole - black	MRH 124	6-013890-9005
160	Plastic holding support extension pole - black	MRH 125	6-013891-9005
170	Side plate box L/R	MRH 062	6-013894-0000
180	Side guard box right	MRH 035	6-013895-0000
190	Side guard box left	MRH 034	6-013896-0000
230	Bearing bush for fabric roll	MRH 077	6-013870-0000
260	Motors		see page 50
260/24	Motorsupport LT60 HI-PRO	MRH 113	6-013871-0000
260/27	Adapter LT50 - Ø85	MRH 146	6-014680-0001
260/29	Carier ring LT50/60 - Ø 85	MRH 118	6-013903-0000
280	Gudgeon Ø85mm with pin Ø12mm	MRH 075	6-013902-0000
320	Cover variovolant right, LX530	MRH 040	6-013906-0000
320	Cover variovolant right, OLIVIA	MRH 041	6-014216-0000
330	Cover variovolant left, LX530	MRH 037	6-013907-0000
330	Cover variovolant left, OLIVIA	MRH 038	6-014217-0000
450	Screw hexagon M6x60, DIN 912, A2	51050.060.060	6-009991-0060
460	Screw hexagon M10x60, DIN 912, A2	51050.100.060	6-013945-0000
480	Allen countersunk screw M8x60 A2 DIN 7991	51060.080.060	6-012809-0060
490	Allen countersunk screw M6x60 A2 DIN 7991	51060.060.060	6-013677-0060
500	Allen countersunk screw M5x60 A2 DIN 7991	51060.050.060	6-013957-0000
510	Allen screw round head M6x12, ISO 7380	51030.060.012	6-013955-0012
530	Nut M6, low, stainless	51090.060.001	6-010413-0000
550	Screw 4,8x32 DIN 7982 C-H A2	51680.048.032	6-013928-0032

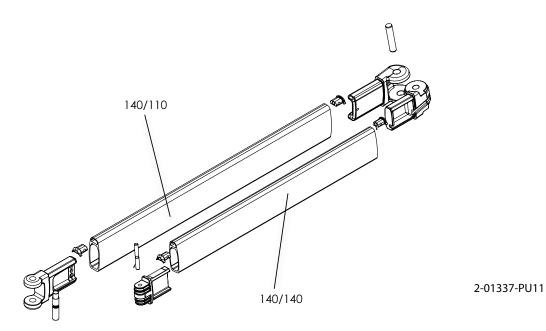
Box



Box with variovalance



Set of arms



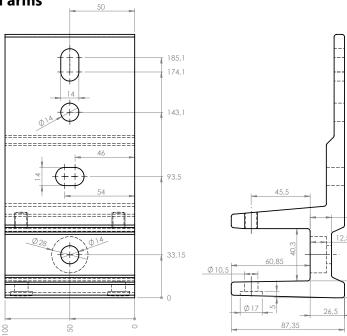
The folding arms are available in these sizes: 2000 - 2500 - 3000 - 3500 and 4000 mm.

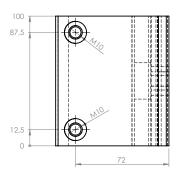
Up to a width of 6000mm two arms are mounted, from 6001mm up to 7000mm 3 arms are mounted.

Position	Name of component	Abbreviation	Number of tech. drawing
140/110	Arm 200 - LEFT, LX530	MRH 002 XXXX	6-014007-XXXX
140/110	Arm 250 - LEFT, LX530	MRH 006 XXXX	6-014008-XXXX
140/110	Arm 300 - LEFT, LX530	MRH 010 XXXX	6-013888-XXXX
140/110	Arm 350 - LEFT, LX530	MRH 014 XXXX	6-014009-XXXX
140/110	Arm 400 - LEFT, LX530	MRH 017 XXXX	6-014010-XXXX
140/140	Arm 200 - RIGHT, LX530	MRH 004 XXXX	6-014011-XXXX
140/140	Arm 250 - RIGHT, LX530	MRH 008 XXXX	6-014012-XXXX
140/140	Arm 300 - RIGHT, LX530	MRH 012 XXXX	6-013889-XXXX
140/140	Arm 350 - RIGHT, LX530	MRH 016 XXXX	6-014013-XXXX
140/140	Arm 400 - RIGHT, LX530	MRH 018 XXXX	6-014014-XXXX

Brackets of arms

Wall bracket



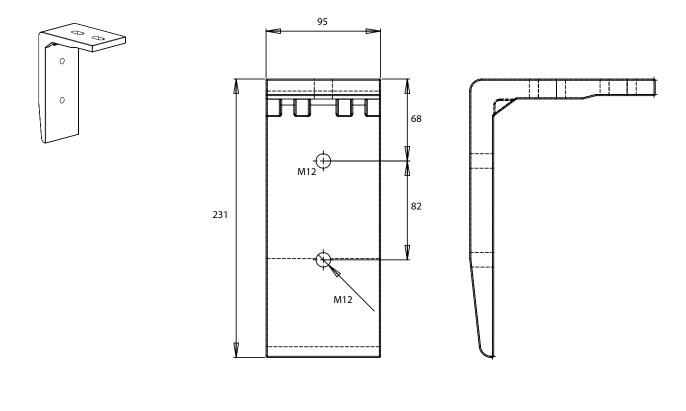


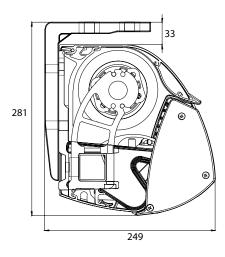
Number of wall brackets:

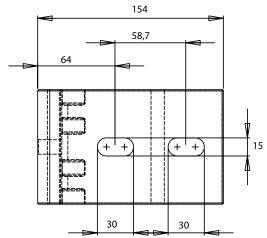
Width of the awning	Number of wall brackets
2750 – 3500 mm	2 pc
3501 – 6000 mm	3 pc
6001 – 7000 mm	4 pc

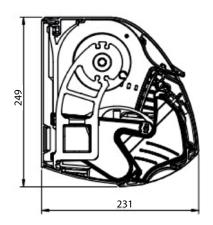
16.5

Ceiling bracket









Fabric roller support

Its function is to prevent the sagging of the fabric roll and the maintenance of the fabric's tension.

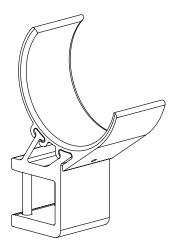
As standard mounted from 5 m width on.

To be placed on the double seam, in the middle of the awning.

Consists out of two components, for an easy assembly and disassembly:

The support, which glides over the support profile, is coated in the chosen colour of the awning.

The shell-formed part is always grey.

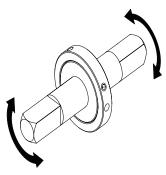


Fabric roller support

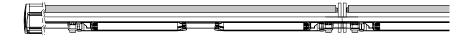
Coupled awnings

Coupling with cardan

- The fabric is provided as two separate fabrics, already fitted to both awnings.
- Wmin (per part) = drop + 630mm.

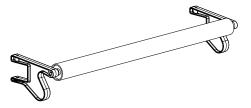


Coupler for coupling (cardan)

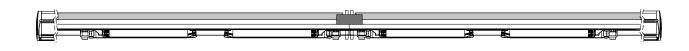


Coupling with cardan and fabric split covering

- The fabric is provided as two separate fabrics, already fitted to both awnings. Fabric split covering subsequently seals the split between the two fabrics.
- Minimum width (per part) = drop + 790 mm.
- The width of the fabric split covering is 600mm (width fabric = 550mm).



Fabric split covering



Accessories

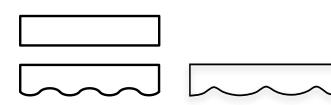
Valance

Optional.

3 different standard types.

Valance not possible with Variovalance.

Valance height: 210 / 250 / 300 mm



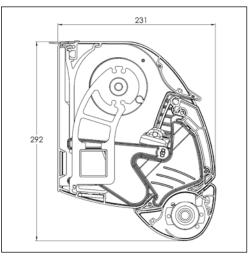
Variovalance

The Variovalance is a vertically rollable flounce.

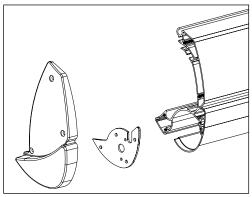
Maximum variovalance height is 1400 mm.

Variovalance with coupled awnings:

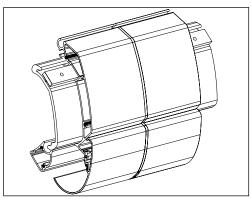
- In this case the Variovalance consists of 2 separate fabric parts with a small interspace.
- Each of these parts has its own operation at the extreme left and the extreme right side.
- Due to the coupling, the pattern of the awnings' fabric is not repeated in the fabric of the Variovalance. For this reason, always use unpatterned or uni fabrics for the Variovalance.



Awning Olivia with variovalance



Extension pole variovalance



Coupling variovalance

LED lightning

The lighting includes a modified bottom plate, LED strip, power supply (240 V AC - 24 V DC) and optional receiver.

The LED strip is glued into the customized bottom plate.

The lighting can be used with the awning in both open and closed position.

The LED strip operates on 24 V, 9.6 W/m.

The lighting is for ambiance lighting purposes only.

If an IO vario valance has been fitted, then the controls for the lighting are always on the opposite side to the IO vario valence controls.

A LED strip with power supply and optional receiver is fitted to each section of the coupled awning.

Cleaning - do not use alcohol, technical gasoline, thinners or other chemical substances to clean the cover diffuser of the LED tape, cleaning is only possible with a cloth moistened with water.

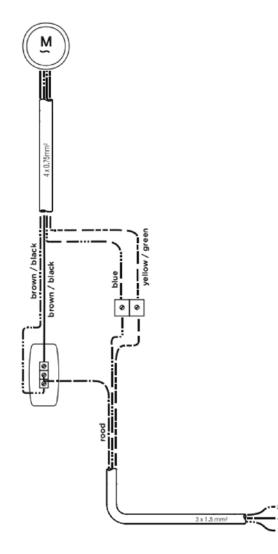
Single-pole switch

Firstly, connect the electric cable of the motor to a test cable.

Four wires exit the motor: yellow-green (earth), blue (neutral), brown and black (up and down direction). Three wires exit the fuse box: yellow-green (earth), blue (neutral) and a phase wire. Connect the wires as shown on the diagram.

The phase wire exiting the fuse box is to be connected to clamp P. If necessary, reverse the brown and black wire of the motor within the switch, so that the arrows on the switch correspond to the raising and lowering direction of the awning.

Connect the two blue wires in the housing of the switch by means of a cableclamp. Do the same for the two earth wires.



Setting of the end switches of the motor

In principle the end switches of the motor are already set at the factory.

But it may be necessary to change the setting.

For this proceed as follows:

First remove the yellow cap from the adjusting buttons.

Press in both adjusting buttons fully, against their stops. The end settings are now fully removed in both directions.

Now allow the awning to roll out until the desired position is reached.

Note : never allow arms to go past their straightened position but stop them a little before.

Then place the switch to its neutral.

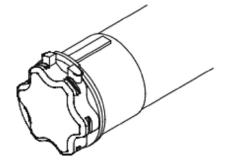
Press the white or yellow button (depending on the building-in-side) so that it rises slightly. Then roll up the awning again and stop at a distance of 10 cm before the closing of the awning. Then press the blue setting button and have it rise slightly.

Let the motor run down for 20 cm.

Then close the awning completely. One can hear the motor hum for a few seconds (to compensate a possible later dilatation of the fabric) and then switch itself off.

Replace the cover cap on the button.

The end switches of the motor are now set.

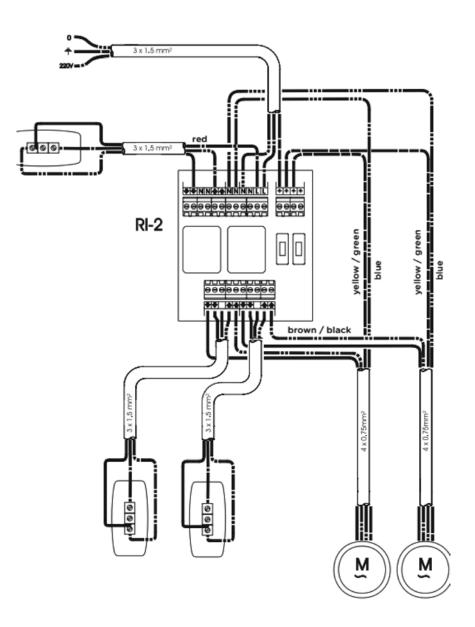


Why use an MRI 2 relay box?

If several motors are operated using the same switch, you must always use a relay box.

If relay boxes are not used under these circumstances, the integral limit switches of the motor will soon burn out, due to the high inductive and capacitive voltages which are mutually generated.

A useful tip: Always use the relay boxes and switches supplied by Isotra.

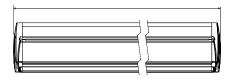


Olivia Measuring and assembly

Measuring

The total width is measured including side guards. The fabric is always less wide than the width of the awning indicated.

The drop is measured from the top of the rear side of the box to the front side of the extension pole. An assembled system always protrudes a little further from the wall than the drop indicated. For optimal sun shading an awning must protrude sufficiently past the window to the left and right.



Assembly

Pay attention to the quality of the surface for assembly.

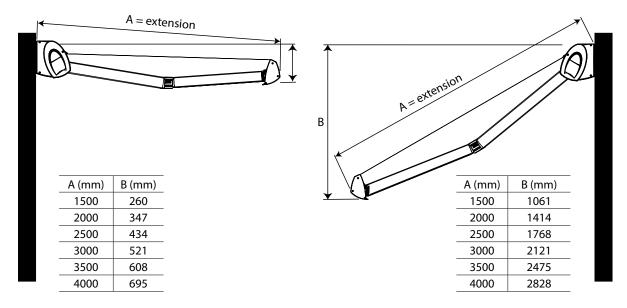
In the case of poor walls, gas concrete, soft or hollow stone walls:

- adapted fastening accessories are required.

- additional wall brackets are to be used.

Take account of the fact that the awning must be mounted at a sufficient height (min. 2500mm).

The slope must be adjusted to an angle between 10° and 45°.



Minimum and maximum angles



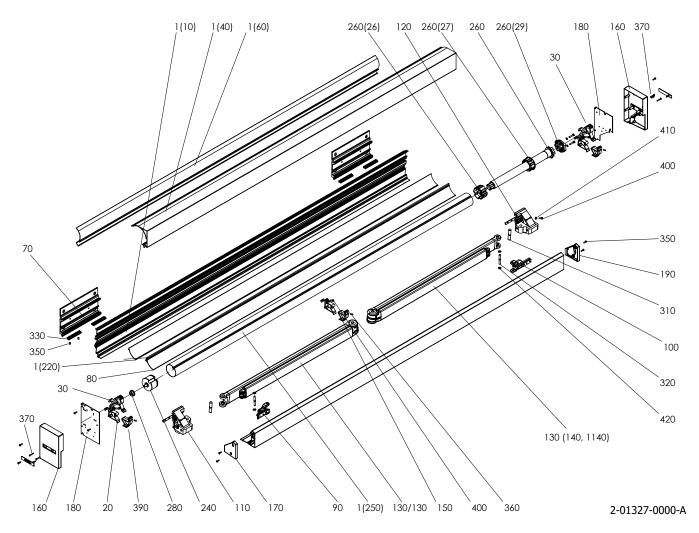




- ▲ Elegant design with compact and fully closed square box,
- ▲ integrated water drainage,
- the possibility of lightning integrated into the bottom profile,
- awnings can be coupled to a total width of 12 meters (2 pcs of awnings),
- ▲ High-quality SATTLER and GIOVANARDI awning fabrics.



DAKOTA Basic Product Specification



Control

It serves to roll and unroll the awning into the tightened position.

Crank handle - self-braking worm-worm gear mechanism, transfer ratio of 7:1, laying hook with toggle: length of 1600 mm, maximum possible awning width for crank handle operation is 6000 mm.

Motor - The unrolling and rolling of the awning can be made by the electric drive. There is supplied the built-in, asynchronous tubular motor with adjustment buttons, automatic readjustment facility, awning will always close completely, 3 metre electric cable, single-pole surface mounted switch and plug. By the electric drive you can use an automatic transmission according to the weather such as wind and solar sensor. There is optional 5 or 10 metre electric cable, without switch and plug.

Technical data

Extension	2 m; 2,5 m; 3 m; 3,5 m
Max. extension	3,5 m
Min. width	2,55 m
Max. width	7 m
Informative weight on one standard meter of width	20 kg
Type of arms	folding aluminium with spring and belt
Movement angle	10° - 35°
Colour of the construction	RAL 1015, 7016, 7016 Structure, 7035, 8014, 9006, 9007, 9010
Valance	210 mm, 250 mm, 300 mm
Manual control	crank handle
Electric control	motor
Assembly	front on the façade
Printing on awning	on request

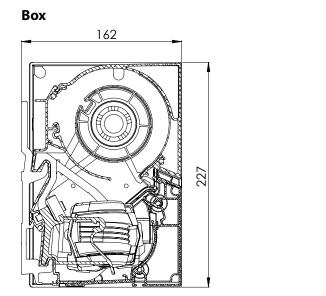
Dakota

Minimum and maximum sizes

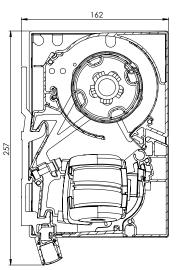
			Minimum	Maximum
Width	1	Motor	Drop + 550 mm	6 m (1 part with 2 arms) 7 m (1 part with 3 arms)
	1 piece	Crank handle, motor NHK	Drop + 570 mm	6 m (1 part with 2 arms) 7 m (1 part with 3 arms)
	2 miana (naumlad)	With cardan	Drop + 525 mm	12 m (2 monto with 4 owner)
	2 piece (coupled)	Fabric split covering	Drop + 775 mm	12 m (2 parts with 4 arms)
Drop			2 m	3,5 m

Dakota (2-01327-0000)

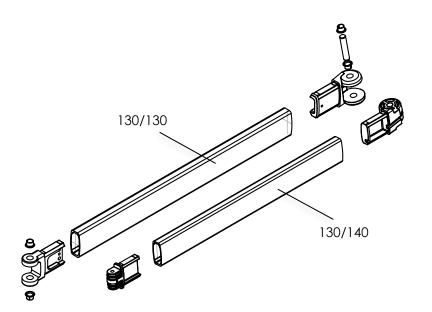
Position	Name of component	Abbreviation	Number of tech. drawing
1/10	Back profile - 4,1 m	MRH 026 0004	6-013841-00004
1/40	Cover profile - 4,1 m	MRH 031 0004	6-014045-00004
1/50	Ext. pole - 4,1 m	MRH 022 0004	6-013845-00004
1/60	Sliding strip for cover profile - pvc	MRH 029	6-013846-0000
1/80	Fabric support profile - 4,1 m	MRH 028 0004	6-013848-00004
1/220	Sliding strip fabric roller support - PVC	MRH 087	6-013864-0000
1/250	Roll for fabric dia 78x1.0mm - 7 m	MRH 064	6-013867-00007
20	Holding support box	MRH 082	6-013842-0000
30	Bearing support	MRH 084	6-013843-0000
70	Wall bracket. L=300 mm	MRH 052	6-013847-0000
90	Fast. extens. pole compl. left		2-01338-PU11
100	Fast. extens. pole compl. right		2-01339-PU11
110	Angular displacement compl. left		2-01340-PU11
120	Angular displacement compl. right		2-01341-PU11
130	Set of arms - (BX270) DACOTA		see page 39
150	Holding support extension pole - black	MRH 123	6-013855-9005
160	Side frame box left/right	MRH 033	6-013856-0000
170	Side guard extension pole - left	MRH 036	6-013857-0000
180	Side plate box left/right	MRH 061	6-013858-0000
190	Side frame box right	MRH 039	6-013860-0000
240	Gudgeon diam.78 mm - pin diam.12 / HR - VK 13 mm	MRH 073	6-013866-0000
260	Motors		see page 47
280	Bearing bush for fabric roll - nylon	MRH 077	6-013870-0000
280	Bearing bush for fabric roll - large - BX270	MRH 133	6-014803-0000
310	Hinge axle large 14x70mm - stainless	MRH 091	6-013872-0000
320	Pin 8x64mm	MRH 095	6-013873-0000
330	Locking pin for mounting	MRH 096	6-013874-0000
350	Screw 4,8x19 DIN 7982 C-H A2	51680.048.019	6-013928-0000
360	Adjusting screw M5x16 A4, DIN 916	55260.050.016	6-013929-0000
370	Adjusting screw M8x10 A4, DIN 916	51300.040.045	6-014505-0000
390	Screw 4,8x19 DIN 7981 C-H, A2 with round head cross	51050.060.030	6-010408-0000
400	Screw hexagon M6x30, DIN 912, A2	51050.060.020	6-013933-0000
410	Screw hexagon M6x20, DIN 912, A2	51420.060.001	6-009997-0001
420	Washer M6, DIN 125-1A, A2	ZP0090	6-009997-0002



Box with LED lightning



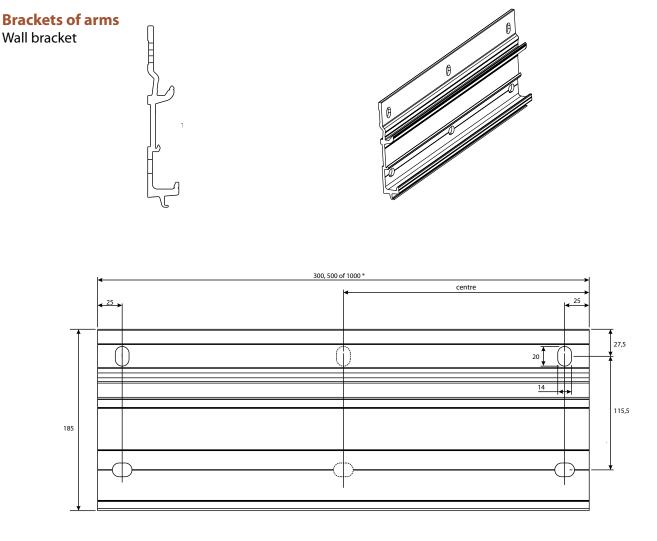
Set of arms



2-01327-0000

The folding arms form the connection between the box and the extension pole and are available in these drop sizes: 2000 - 2500 - 3000 and 3500 mm. For single awnings up to a width of 6000 mm, 2 arms are mounted, from 6001 mm up to 7000 mm, 3 arms are mounted. For coupled awnings 4 arms are always required. The folding arms consist of arm profiles, hinges, springs and steel cables.

Position	Name of component	Abbreviation	Number of tech. drawing
130/130	Arm 200 - LEFT	MRH 001 XXXX	6-014001-XXXX
130/130	Arm 250 - LEFT	MRH 005 XXXX	6-014002-XXXX
130/130	Arm 300 - LEFT	MRH 009 XXXX	6-013853-XXXX
130/130	Arm 350 - LEFT	MRH 013 XXXX	6-014003-XXXX
130/140	Arm 200 - RIGHT	MRH 003 XXXX	6-014004-XXXX
130/140	Arm 250 - RIGHT	MRH 007 XXXX	6-014005-XXXX
130/140	Arm 300 - RIGHT	MRH 011 XXXX	6-013854-XXXX
130/140	Arm 350 - RIGHT	MRH 015 XXXX	6-014006-XXXX



The quantity and width of the wall brackets (300 mm or 500 mm) depend on the width of the awning. For coupled awnings, the middle wall bracket is 1000 mm (see table).

Must always be positioned 50 mm inwards from the sides of the awning, behind the angular displacement of the arm and behind the bearing support. For the exact positions of the wall brackets: see table and picture.

Additional brackets are available as an option, but desirable for unstable surfaces in order to distribute the weight of the awning over a larger surface area.

No ceiling or roof truss brackets available!

Position of the wall brackets on the sides and in the middle

Awning width	2055 – 4000 mm	4051 – 6000 mm	6001 – 7000 mm	7001 - 8000 mm	8001 - 12000 mm
Number and type of bracket	2 x 300 mm	2 x 500 mm 1 x 300 mm	3 x 500 mm	2 x 300 mm 1 x 1000 mm	2 x 300 mm 2 x 500 mm 1 x 1000 mm
Number of drill holes	4	6	6	8	12
Number of folding arms	2	2	3	4	4

Note: 1 pc of wall bracket (with width 1000 mm) more will be delivered with coupled awnings.

Position of the wall brackets on the sides and in the middle

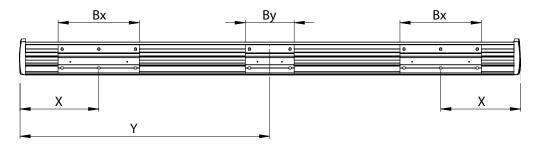
Position of the wall brackets (mm)					
Awning width	Distance X	Width bracket (sides) Bx	Distance Y	Width bracket (middle) By	
2000 – 4000 mm	225	300	-		
4001 – 6000 mm	325	500	Width/2	300	
6001 – 7000 mm	325	500	See table	500	

Position of the wall brackets on the sides and in the middle

Position of middle wall bracket with 3 arms* (mm)				
Width/drop	2928	2901	2401	2087
6001 – 6099	2928	2901	2401	2087
6100 – 6199	2977	2977	2500	2137
6200 – 6299	3027	3027	2600	2187
6300 - 6399	3077	3077	2700	2237
6400 – 6499	3127	3127	2800	2300
6500 – 6599	3177	3177	2900	2400
6600 – 6699	3227	3227	3000	2500
6700 – 6799	3277	3277	3100	2600
6800 – 6899	3327	3327	3200	2700
6900 – 6999	3377	3377	3300	2800
7000	3427	3427	3400	2900

Position of the wall brackets

Total width B = finished width incl. side guards



Example: Where to position the wall brackets with an awning width of 4850 mm for the awning?

In the first column we select the corresponding awning width (4001 - 6000) and take the matching values for the X and Y distances and widths of the side bracket BX and BY.

The centre line of the wall brackets is positioned at 300 mm from the side and the wall brackets are 500 mm wide.

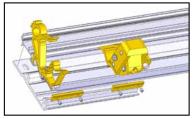
The centre line of the middle wall bracket is positioned at 2425 mm and the width of the bracket is 300 mm.

There is a green mark on the back side of the cassette which indicates position for wall bracket placement.

Locking bolt

Its function is to support the angular displacement of the folding arms and simultaneously the bearing supports of the fabric roll. In this way we obtain a solid unit on the side of the box and stability for the arms. Is laterally retracted at the bottom of the wall bracket and mounted with two set screws. Always 2 locking bolts per wall bracket: one below the angular displacement and one below the bearing support (see picture).





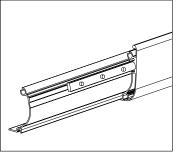
Coupled awnings

Coupled awnings with cardan

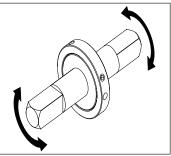
- The fabric is provided as two separate fabrics and already fitted to both awnings.
- Width B (per part) = drop + 550 mm

Coupled awnings with cardan and fabric split covering

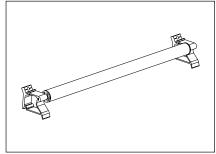
- The fabric is provided as two separate fabrics and already fitted to both awnings. The fabric split covering subsequently seals the split between the two fabrics .
- Width B (per part) = drop + 800 mm
- The width of the fabric split is covering 500 mm.



Extension pole covering for coupling



Fabric split covering



Coupling device for extension pole (cardan)

Valance

Optional.

3 different standard types.

Valance height: 210 mm / 250 mm / 300 mm



Accessories

LED lightning

The lighting includes LED profile, LED strip, power supply (240 V AC - 24 V DC) and optional receiver.

The LED strip is glued into the LED profile.

The power supply for the LED strip and the IO receiver is placed on the side plate.

The LED profile is clicked onto the custom mountings.

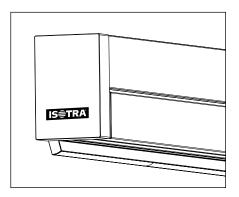
The lighting can be used with the awning in both open and closed position.

The LED strip operates on 24 V, 9.6 W/m.

The lighting is for ambiance lighting purposes only.

A LED strip with power supply and optional receiver is fitted to each section of the awning for coupled awnings.

Cleaning - do not use alcohol, technical gasoline, thinners or other chemical substances to clean the cover diffuser of the LED tape, cleaning is only possible with a cloth moistened with water.



Replacing the power supply and receiver for LED lighting

Use the test LED strip to check that the power supply is working.

Ensure the power to the awning is always completely switched off when working on the electrical connections.

- 1. Removing the existing power supply and receiver:
- a. Remove the side guard by unscrewing the screws behind the ISOTRA logo, so that the power supply, and if present, the receiver are easily accessible.
- b. Disconnect the connector and cables on the 24V and 230V side.
- c. Remove the faulty power supply/receiver.
- 2. Fitting the new power supply/receiver:
- a. Clean pulley plate and tighten power supply screws.
- b. If necessary, glue the receiver or attach with a Colson cable tie.
- c. Connect the 24V output with the LED strip via the connector.
- d. Connect 230V, 3m cable has been provided.
- e. Put back the side guard and ISOTRA logo.

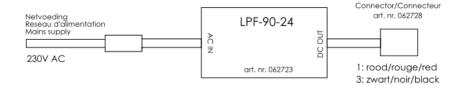
3. Testing

Turn the power back on and test the system.

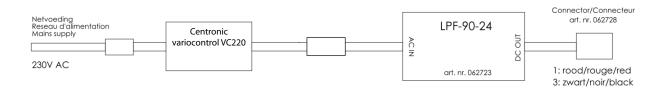
Follow the sender guide to incorporate one or more receiver controls.

Electrical diagrams

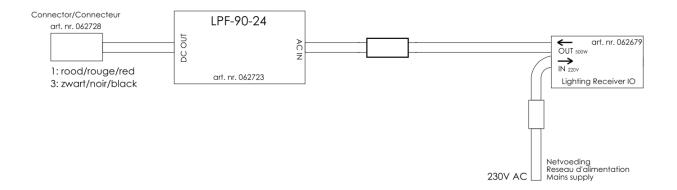
1. LED lighting – Standard

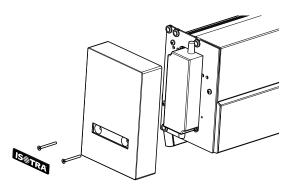


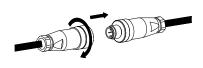
2. LED lighting – RTS controls



3. LED lighting - IO controls







ASSEMBLY OF LED LIGHTNING

External conversionkit for LED lightning

1. INTRODUCTION

To install LED lighting in an existing BX260-BX270, a conversion kit is available: art. no. 063032. The existing locking bolts are replaced by new ones on which the LED profile is fixed. A supply and receiver are delivered in an external connection box. This installation instruction only deals with the conversion kit; for more information about the folding arm awning, please refer to the information included with the awning. There is 1 possible option for operating the LED lighting: Dimmable IO controls

2. GENERAL WARNINGS



For a safe fitting, use and maintenance of this sun protection a number of precautions have to be taken. For the safety of everyone concerned, please do take notice of the following general warnings!

MARKISE

This manual is meant to be used by professionals only! It is not to be used bij DIYenthusiasts or apprentice fitters.

Before you start ,please do read these instructions thoroughly.

Be very careful and make sure of a solid footing while operating.

Provide sufficent light in the fitting area. Dispose of obstacles and dirt. Make sure that, except for the fitters, no other people are in the fitting area. Unauthorized people might be in the way or at risk for themselves.

During operating the system, you must be able to overlook the complete area and the whole of the sun protection. There are a number of places where people might get injured. Especially watch the following parts where people might risk to get jammed : the folding arms, the extension profile and the casing.

The fitter has to make all electrical connections in accordance with the local norms and regulations.

Our products should be installed so that all components should be accessible for maintenance and repairs at all times. If this is not the case, ISOTRA cannot be taken responsible for any additional costs (f.ex. breaking work, repairs to facades and interior walls).

3. LIST OF ACCESSORIES

- ladder(s)
- cutter
- cross-head and flat-head screwdrivers
- · Allen keys
- rubber hammer

4. ASSEMBLY INSTRUCTIONS

4.1. Opening of the packaging

First, check the packaging for any external damage. Next, open the carton packaging. Be careful when cutting lose the tapes with a knife and avoid scratches on the paintwork.

4.2. Control of the contents

The conversion kit is delivered ready for assembly, with the necessary screws. Measure the length of the LED profile and make sure it matches the size you have ordered.

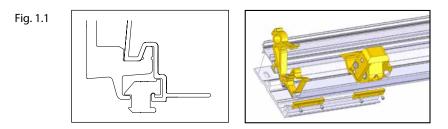
Check the operating side and the accessory bag.

Make sure the power is switched off while assembling/dismantling the components, so that the screen cannot unexpectedly open or close.

43

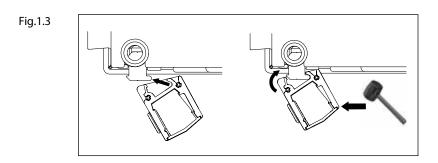
4.3. Replace the locking bolts

- Remove the old locking bolts
- Slide the new locking bolts (fig.1.1) at the bottom between the awning and the consoles. Positioning the locking bolts per box (fig.1.2): place one locking bolt below the bearing support, one locking bolt below the arm support so that the box, the bearing support and the arm support together form a solid and robust unit.



4.4 Mounting the LED profile

Click the LED profile onto the custom mountings. For single awnings, the cable outlet of the LED profile is situated on the operating side. For coupled awnings, the cable outlets are situated on the side guards.



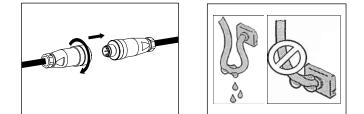
4.5 Mounting the connection box

Place the connection box on a suitable location.

5. ELECTRICAL CONNECTION AND CONTROLS

5.1 Electrical connection

- Connect the feeder cable to the mains supply (230V/50Hz). The LED strip consumes 9,6 W/m.
- Join the connectors between the LED strip and connection box.
 - Fig. 1.4



5.2 Controls

• The LED strip is controlled by an IO receiver. Follow the remote control guide to incorporate one or more controls.

6. Maintenance

• Cleaning - do not use alcohol, technical gasoline, thinners or other chemical substances to clean the cover diffuser of the LED tape, cleaning is only possible with a cloth moistened with water.

Dakota

Measuring and assembly

Measuring

Width B - finished width including the side guards of the box. The sheet is always narrower than the width of the awning. The total width is measured including side guards. The fabric is always less wide than the width of the awning indicated.



Drop D - measured from the back of the box (top) to the front of the extension pole. A mounted awning always protrudes a little further from the wall than the drop indicated. For optimal sun shading, an awning must protrude sufficiently past the window to the left and right.

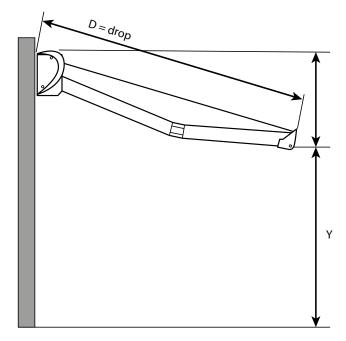
Assembly

Be aware of the mounting surface, especially with poor-quality walls, walls made from cellular concrete or walls with soft or hollow bricks. Custom fastening materials should be used and it is necessary to install additional wall brackets!

Install the awning sufficiently high (minimum of 2500 mm)!

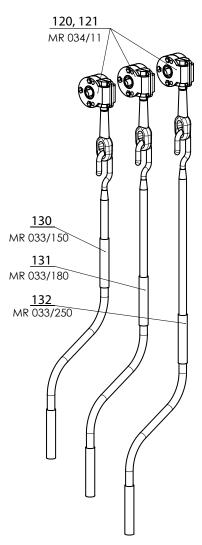
When adjusting the angle of inclination, take care the angle is a minimum of 10° and a maximum of 35°, so there is sufficient run-out height when the awning is open!

Make sure there is sufficient space at the top to hook the awning into the wall brackets when mounting it below an overhang!



Drop U (mm)	Slant 10° X _{min} (mm)	Slant 35° X _{max} (mm)
1500	260	860
2000	347	1147
2500	434	1434
3000	521	1721
3500	608	2008

Control Control - handle



CONTROL- HANDLE 2-00789-0000-0

Position	Name of components	Abbreviation	Number of tech. drawing
120	Gearing awnings 7:1, hole 12cm	MR 034/7	6-011099-0701
121	Gearing awnings 11:1, hole 12cm	MR 034/11	6-011099-1101
130	Crank awnings 1500mm	MR 033/150	6-011095-1500
131	Crank awnings 1800mm	MR 033/180	6-011095-1800
132	Crank awnings 2500mm	MR 033/250	6-011095-2500

Control - motor

Position	Name of components	Abbreviation	Number of drawing
101	Motor ALTUS 50 RTS 30/17	MR 091/30	6-011170-0030
102	Motor ALTUS 50 RTS 40/17	MR 091/40	6-011170-0040
201	Motor OREA 50 RTS 30/17	MR 092/30	6-011171-0030
202	Motor OREA 50 RTS 40/17	MR 092/40	6-011171-0040
203	Motor OREA 60 RTS 70/17	MR 092/70	6-011171-0070
301	Motor LT 50 NHK - Apollo RTS 30/17	MR 090/30	6-002632-0030
302	Motor LT 50 NHK - Mariner RTS 40/12	MR 090/40	6-002632-0040
303	Motor LT 50 NHK - Vectran RTS 50/12	MR 090/50	6-002632-0050
402	Motor Sunea NHK IO 40/12	MR 095/40	6-017641-0040
403	Motor SUNEA NHK IO 50/12	MR 095/50	6-017641-0050
501	Motor LT 50 - Helios 30/17	PR0132	6-002630-0030
502	Motor LT 50 - Mariner 40/17	PR0134	6-002630-0040
503	Motor LT 60 - Sirius 80/12	PR0317	6-002640-0080
601	Motor OREA 50 WT 30/17	MR 096/30	6-001550-0030
602	Motor OREA 50 WT 40/17	MR 096/40	6-001550-0040
603	Motor OREA 60 WT 70/17	MR 096/70	6-001550-0070
701	Motor Sunea 50 io 30/17	MR 134/30	6-012559-3017
702	Motor Sunea 50 io 40/17	MR 134/40	6-012559-4017
703	Motor Sunea 60 io 70/17	MR 134/70	6-012559-7017

Motors Becker

Awnings Stela, Jasmína, Emma

Position	Name of components	Abbreviation	Number of tech. drawing
	Motor BECKER 50 C 30/17	16BC	6-017853-0030
	Motor BECKER 50 C 40/17	16BC	6-017853-0040
	Motor BECKER 60 C 70/17	16BC	6-017853-0070
	Motor BECKER 50 E 30/17	17BE	6-017852-0030
	Motor BECKER 50 E 40/17	17BE	6-017852-0040
	Motor BECKER 60 E 70/17	17BE	6-017852-0070

Awning Dakota

Position	Name of components	Abbreviation	Number of tech. drawing
	Motor BECKER 50 E 40/17	17BE	6-017852-0040
	Motor BECKER 60 E 60/17	17BE	6-017852-0060
	Motor BECKER 60 E 70/17	BE70	6-017852-0070
	Motor BECKER 50 C 40/17	16BC	6-017853-0040
	Motor BECKER 60 C 60/17	16BC	6-017853-0060
	Motor BECKER 60 C 70/17	BC70	6-017853-0070

Awning Olivia

Position	Name of components	Abbreviation	Number of tech. drawing
	Motor BECKER 50 E 30/17	17BE	6-017852-0030
	Motor BECKER 50 E 40/17	17BE	6-017852-0040
	Motor BECKER 60 E 60/17	17BE	6-017852-0060
	Motor BECKER 60 E 70/17	17BE	6-017852-0070
	Motor BECKER 60 E 120/11	BE120	6-017852-0120
	Motor BECKER 50 C 30/17	16BC	6-017853-0030
	Motor BECKER 50 C 40/17	16BC	6-017853-0040
	Motor BECKER 60 C 60/17	16BC	6-017853-0060
	Motor BECKER 60 C 70/17	16BC	6-017853-0070
	Motor BECKER 60 C 120/11	BC120	6-017853-0120
	Motor BECKER 40 C 05/20 for Variovalance		6-017853-0005