



Ecotype[®]

Electrically-operated covering
system for swap bodies



marcolin[®]

ECOTYPE® - Functional features

This is a simplified, electrically-operated folding covering system, specifically designed to cover the widest range of open top containers, skips, **swap bodies**, and rear and three-way **tipper** bodies.

The **mechanical part** includes, at the front, an **electrical drive** unit, usually installed on the left side (also available in a right-side mounted version) and a return unit, installed on the opposite side. The opening and closing movement is effected using a **single cable**, crossed over at the front. The covering is supplied as standard with a **24 V IP66 and IP67 high-performance control unit** operated with 4-channel remote control (with retraction and vibration modules available as options).

Cable return pulleys are mounted on the rear sides of the swap body, complete with an adjustable cable tensioning system. The covering moves while the operator remains safely on the ground, using either the control panel on the lorry, or remotely with the remote control.

The **bows & tarp** section, provided pre-assembled, consists of a series of bows supporting the tarp, and connected by the tarp operating system.

The bows slide along the sides of the body on plastic pads, specifically designed to minimize friction and ensure a smooth and unimpeded movement, to prevent wear on the body and provide a long service life.

To protect the load from the weather and prevent losses during transport, the tarp can be integrated with side flaps to improve the tightness of the covering.

The **Ecotype** cover can be integrated with a wide range of optional accessories for a variety of specific applications.



FIELDS OF APPLICATION



ROLL-UP METHOD



OPERATION



ECOTYPE® - Technical characteristics

Front return unit with tensioning system

It consists of a series of pulleys that guide the return of the cable at the front and side of the body. All the components are made with electrogalvanized steel.



Rear return units with tensioning system

These are located on the rear sides of the body. They consist mainly of a pulley with a diameter of 100 mm, and a support bracket for the correct return of the operation cable. The tension of the cable is adjusted using a screw that controls the position of the pulley, and therefore the tensioning force applied to the cable. All the components are made with electrogalvanized steel.



Single cable

The 6 mm dia. galvanized steel cable runs at a distance of 10 mm above the edge of the load body. As an option, accessories are also available for running the cable at 23 mm below the top edge of the load body. This reduces the possibility of damage to the cable during loading.



Bows & tarp

The tarp is supported by **bows** made with 25 mm dia. hot-dip galvanized steel tube. They are arched at heights of 200, 300, 400, and 500 mm to meet the most various load requirements. The sliding pads at the ends of the bows are made of 30% glass fibre reinforced polyamide PA66. The tarp lifting system, available with 500, 600, 700, 800, and 900 mm modules, is made with electrogalvanized steel rods and 30% glass fibre reinforced polyamide PA66 hinge blocks.

The **tarp** is custom-made and fitted with reinforcements on the edges for the widest range of applications, based on the specific requirements of the vehicle. Available in green or black flame-retardant PVC mesh (350 g/sqm), in 100% waterproof coated PVC in a wide range of colours (650 g/sqm), in flame retardant PVC (weight 680 g/sqm). The select choice of fibres and the quality of the coating ensure a very high resistance to mechanical stresses, light, rain and snow, and all weather conditions in general.

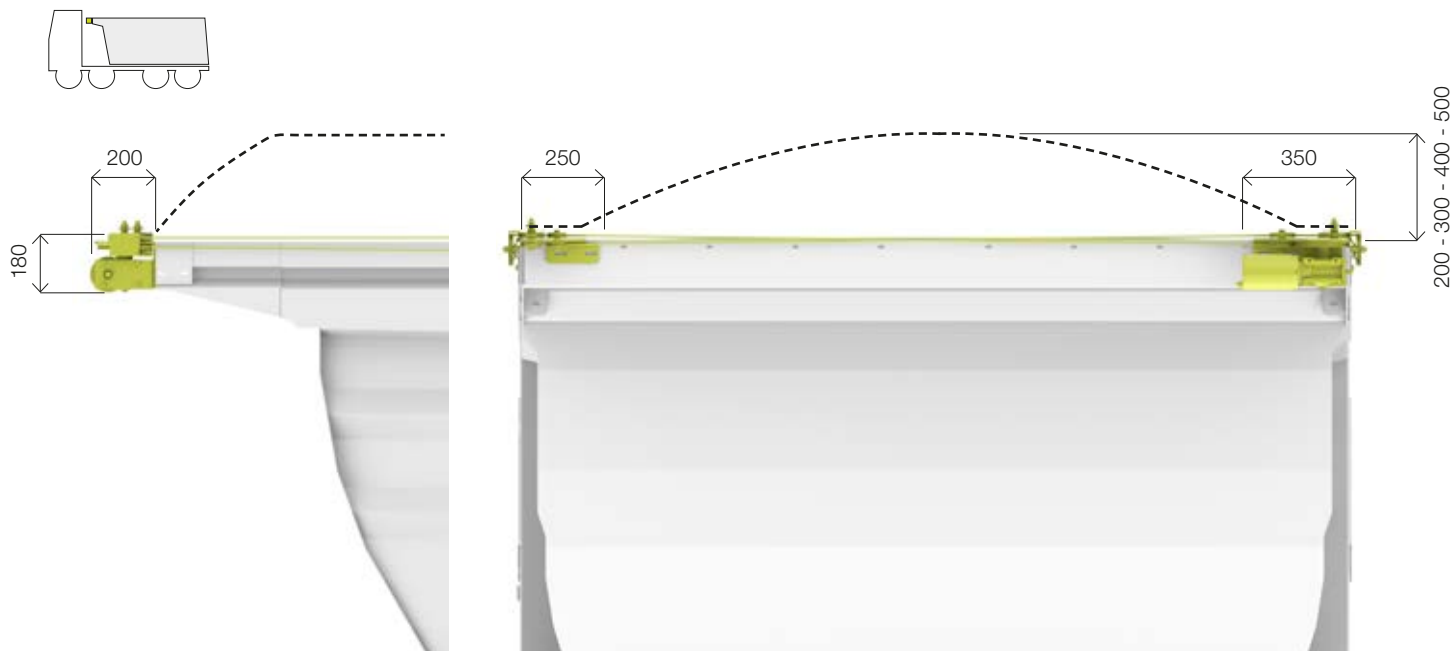
Front drive

This consists of a 24V, 550W, 2400 rpm DC motor connected to a VSF gear reducer (reduction ratio 40:1). The reducer consists of a die-cast aluminium single-piece casing (with a sandblasted external finish) containing the reduction gearing, itself made of precision-ground hardened steel. The cable is pulled by a 150 mm dia. pulley connected to the reducer shaft. Dedicated return pulleys are used to guide and maintain the alignment of the cable. All the components, with the exception of the gearmotor, are made of electrogalvanized steel.

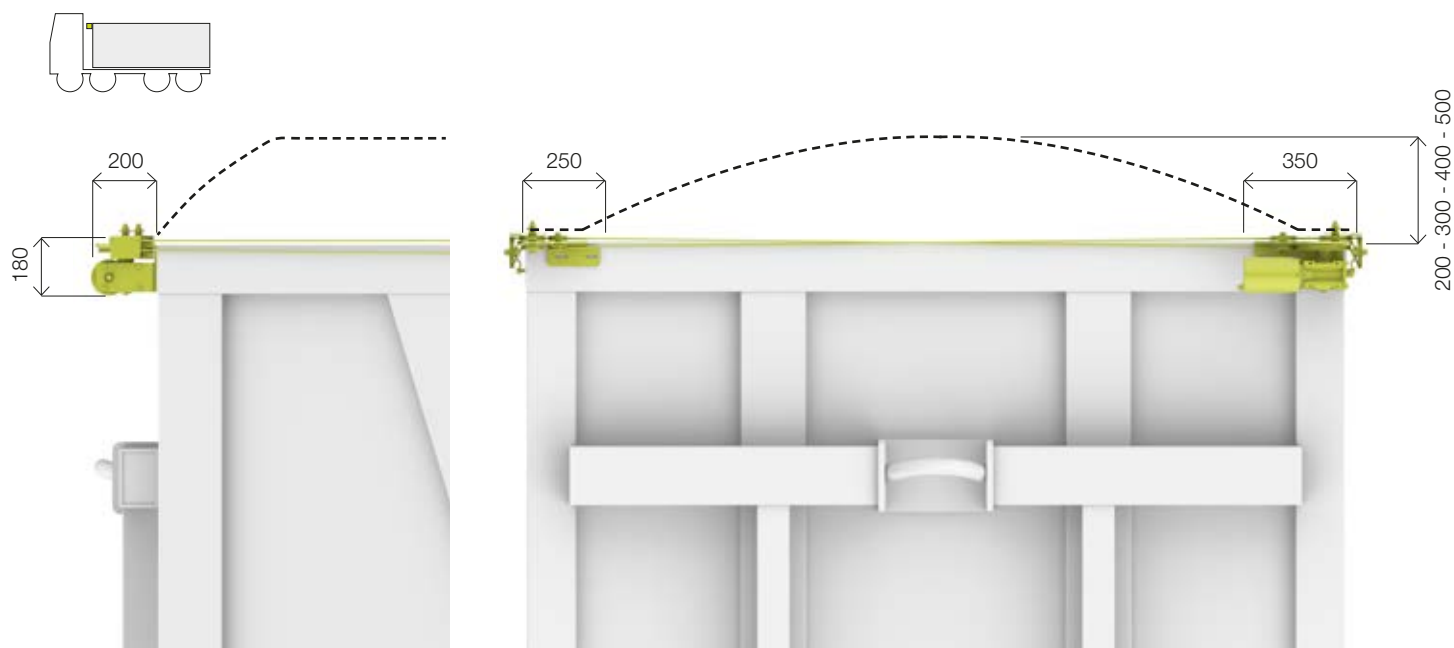


ECOTYPE® - Dimensions

STANDARD ON BODY WITH CAB GUARD



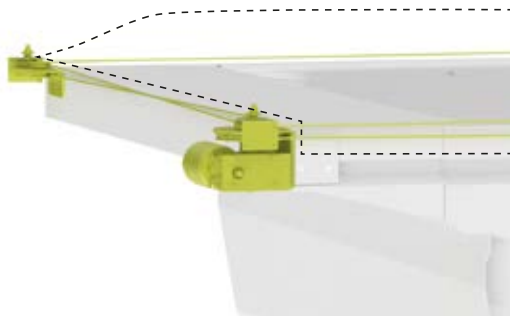
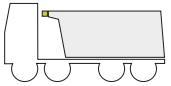
STANDARD ON BODY WITHOUT CAB GUARD



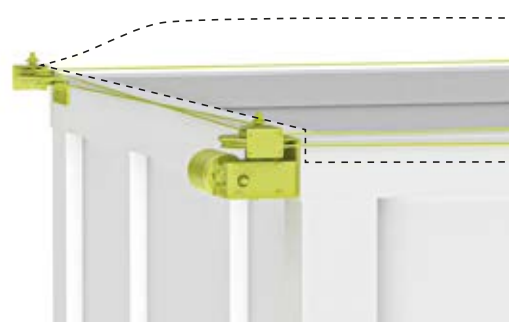
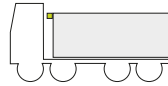
The sizes are indicated in mm

ECOTYPE® - Installation options

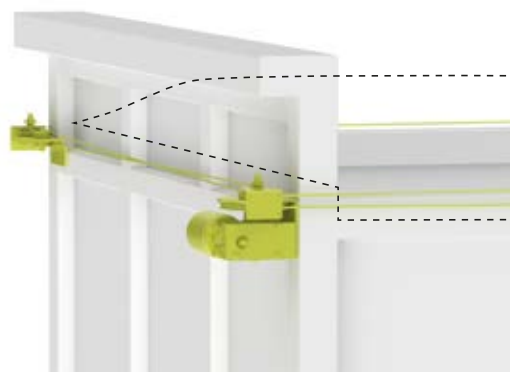
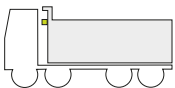
**STANDARD ON BODY
WITH CAB GUARD**



**STANDARD ON BODY
WITHOUT CAB GUARD**



**STANDARD ON BODY
WITH RAISED END WALL**



**STANDARD ON BODY
WITH RAISED CAB GUARD**

