

Title (en)

Automatic tensioning system for roll-type awnings

Title (de)

Automatisches Spannsystem für Rollmarkisen

Title (fr)

Système de mise sous tension automatique pour des stores à rouleaux

Publication

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Application

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Priority

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Abstract (en)

The present invention relates to an automatic tensioning system (100) adapted to cooperate with an awning sheet of a motor-driven roll-type awning comprising a first electric motor (11) comprising a rotating shaft integral with a winding roll-bar (1) and a motor head (11A), a second electric motor (12) associated with a tensioning roll-bar (2), said awning sheet (3) being secured with a first edge portion to said winding roll-bar (1) and operatively associable with the edge portion opposite to said tensioning roll-bar (2), said awning sheet (3) being movable between a retracted position wherein it is completely wound about said winding roll-bar (1) and an extended position, wherein it is at least partially unrolled from said winding roll-bar (1), control means (20) connected to said first and said second electric motor (11, 12) to control the movement of the sheet (3). In particular, said system (100) comprises a support bracket (7) whereon said motor head (11A) of said first electric motor (11) is rotatably mountable, elastic means (9) secured to said support bracket (7) and operatively connectable to said motor head (11 A) for biasing its rotation, position detecting means (25), comprising at least a detecting element, adapted to be integrally associated with said motor head (11A), and reference means (50) arranged integral with said support bracket (7) and operatively connectable to said control means (20). Said reference means (50) are adapted to cooperate with said position detecting means (25) for generating a signal when, due to a change of the tensioning condition of the awning sheet (3) with respect to a pre-set tensioning condition, the couple applied on said motor head (11 A) causes its oscillation, said control means (20) being adapted to receive the generated signal and modify or block the movement of the rotating shaft of said first electric motor (11) or said second electric motor (12) in response to the received signal so that the pre-set tensioning condition of the awning sheet (3) is restored. Moreover, the present invention is related to a method for maintaining or restoring a pre-set tensioning condition of an awning sheet of a roll-type awning.

IPC 8 full level

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Citation (search report)

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