

TECHNICAL FILE :

For:

*“E EDGE xI yzz AC BD” Tubular motor with touchless
Transmitter*

of:

*NICE SPA
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31046 Oderzo (ITALY)*

Overview

This product series are tubular motors for automating indoors roll-up awnings, or indoors sunscreens, or similar roll-up equipment.

The tubular motor can move the awning up or down; stop it at the upper limit switch, the lower limit switch or various intermediate positions. It has a built-in radio transceiver/receiver and control unit with encoder technology that electronically controls the movement and precision of the limit switches. The radio interface allows the management and transmission of automations.

Description of the series

The series is described by the code

E EDGE xI yzz DC AC

where

- the **x** character identifies the diameter of the motor
x = M or S;
 M = medium
 S = small
- the **y** character identifies the torque of the motor
y = 3, 6, 10
 3 = 3Nm
 6 = 6Nm
 10 = 10Nm
- the **zz** characters identifies the rotation speed of the motor
zz= 12,20,32
 12 = 12rpm
 20 = 20 rpm
 32 = 32 rpm

Description of the product

The tubular motor is composed by 3 boards:

- Main Board: power supply and motor control
- Expansion card 1: radio
- Expansion card 2: connectors and mechanical interface. It changes only between medium and small version due to the difference of diameter of the motor's tube.

Expansion card 1:

- The U4 transceiver which works like a transmitter; the signal taken from the TX-PIN (pin-4 of U4) passes through the filter, composed of passive components and reaches the external aerial for silent radio providing a guaranteed stability with regards its characteristics and, consequently, the complete lack of calibrations. The X1 is a 30MHz oscillator that guarantees the exact oscillation base frequency for the PLL-circuit build inside the transceiver.
- The code is generated by the integrated circuit U2 and consists of a train of pulses; as the code is the "Rolling Code" type, it changes each time it has to transmit.