Motorized Roller Shade Systems – ST40 AC

Part 1 – General

1.01 Summary:

Scope of work is to provide roller shades that are operated by BTX / SKYCO motorized lift system along with accessories, attachment hardware, and equipment necessary to complete satisfactory installation.

1.02 Turnkey responsibility for motorized roller shade systems:

A. To ensure control of responsibility for satisfactory performance and installation of the motorized roller shade systems, the design, engineering and installation shall be assigned to a single manufacturer and his authorized dealer/installer.

B. The base building contractor (main contractor) shall provide and coordinate the following items with the window shade contractor/installer for all window shade systems.

1. Shade pockets recessed into ceiling
2. Power wiring
3. Wire conduits as required
4. Duplex outlets and J-boxes

1.03 Submittals

A. Manufacturing literature to describe assembly, materials, installation instructions, and specific data. Include any pertinent wiring diagrams.

B. Shop drawings are to include, but are not limited to, all components, fasteners, and installation methods.

C. Window Systems are custom-built based on measurements taken in the field.

1.04 Warranty

A. Manufacturer shall provide five (5) year warranty from the date of installation on all shade motors. All operating control and electronic accessory components shall carry a one (1) year limited warranty against defects in materials and workmanship.

1.05 Delivery and storage

A. Systems shall be delivered to the site in original manufacturer's containers.

B. Containers shall be uniquely labeled to identify the corresponding window openings and locations.

C. All materials shall be stored in a dry, secure place protected from weather, water and heat, surface contaminants, construction traffic and all other potential damage.

Part 2 – Products

2.01 Manufacturer:

A. BTX Window Automation
2517 Manana Dr
Dallas, TX 75220 USA
(800) 422-8839

B. Skyco Shading Systems
3411 W Fordham Ave
Santa Ana, CA 92704
(800) 777-5926

2.02 Components:

A. ST40 tubular motors shall be asynchronous 120V/60Hz AC rated at 1.2A developing 6 NM torque at 24rpm capable of lifting 50 lbs. Motors shall have a fully encapsulated shock resistant motor coil and be moisture resistant and fire resistant. All motors are UL recognized and equipped with a mechanical brake. Motors shall have a thermal protector for automatic switch-off to prevent overheating. Motor includes internal radio control and electronic limit switches. Limit switches shall be easily adjustable in either direction by means of compatible control device. Motor shall have built-in electronic control board for operation of 433 MHz RF remote control or via dry contact direct input. Alternate motor control configurations can include dry contact closure, RS485, and a non-radio hardwire solution. Consult factory for power and control variations.

B. Tube shall be 38mm extruded aluminum.

C. Drop-in motor bracket shall be zinc-plated steel and allow both the motor end to drop into the bracket for ease of installation.

D. Idler insert shall match the tube shape internally and is provided with a round plastic, spring-loaded shaft for mounting in the bracket. Inserts are made from injection molded plastic.

E. Double-sided tube tape is used and for fabric attachment.

F. Adaptor Set allows the motor to drive the tube and shall be manufactured from injection molded plastic.

G. Bottom Bar shall be extruded aluminum and inserts into pocket in shade fabric to ensure uniform weight distribution and operation.

H. Fascia Panel and Backplate shall be extruded aluminum either 3” or 4” in width to enclose motor and roller and give a finished look to the assembly.

I. Fascia Bracket Set shall be made of stamped steel either 3" or 4" in width and allow for mounting of shade system with fascia panel either inside, outside, or to the ceiling. A self-lubricated bearing will be attached on the idler side bracket.

J. Side Channels and Sill Channels shall be made of extruded aluminum and prevent light from entering along the edges of the shade for blackout situations. Pile Inserts fit into side channels to further enhance light blocking and reduce wear on shade fabric.

K. Shade Pocket and Pocket Enclosure shall be made of extruded aluminum for optional mounting in recessed ceiling pocket.

L. Fabric shall be specified by designer/decorator/end-user. Please refer to BTX / SKYCO sample cards for specifics on color selection, parameters/guidelines and attributes.

2.03 Controls:

A. The switching device to activate the system shall be either an RF remote control or wall-switch. Systems can be controlled individually or as a group. Motors can be integrated into building automation system utilizing wireless RS232 Interface (SmartConnect) or via dry contact input.

B. Alternate motor control configurations can include dry contact closure, RS485, or low-voltage direct wire. Consult factory for power and control variations.

Part 3 – Execution

3.01 Inspection and Preparation:

A. Qualified installer shall be responsible for window measurements prior to installation, installation conditions, and preparation of all mounting surfaces.

B. The charging power supplied shall be manufacturer specified 100V-240V AC/DC power transformer. Wiring between primary switch and selected control units shall be in accordance with manufacturer's wiring schematics and specifications. All on site wiring shall be provided by owner.

3.02 Installation:

A. System installation shall be in accordance with BTX / SKYCO mounting instructions.

3.03 Maintenance:

A. Lift system components should not require routine maintenance under normal operating conditions.

B. For fabric care refer to fabric manufacturer's care and use directions.

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