

Motors and Control Systems

Interior Window Covering Motors 2023

DELIVERING SILENCE

Pioneering Window Shading Technology Since 1969 Ultra Quiet Motorization 100% Made in Italy

> US Distribution: 300 Shell Lane Phoenixville, PA 19460 salesus@gaposa.com tel: 484-927-4385



noise reduction technology

What makes the XS range so unique is the patented planetary worm drive gearing, called Gearing Revolution. It provides an ultra quiet motor operation without any constraint in using dampening components inside the motor or silent blocks to absorb the shade's vibrations. This exclusive gearing technology is available in all DC and AC motors having the XS part number.

Worm-planetary gearing



XSDC main features:

- Quiet operation
- Constant and controlled speed
- Start and stop speed-ramps
- Power saving

- Easy limits setting
- Easy and safe wiring connection
- Dry contact inputs

Sound level	DC MODELS	Torque (Nm)	Speed (rpm)	Db (A)*
	XSDC3EZ030B/BI/BC/BE	1.1	30	36
	XSDC3EZ226B/BI/BC/BE	2	26	38
	XSDC3EZ128 / XSDC3DZ128	1.5	28	38
	XSDC3EZ228 / XSDC3DZ228	2	28	38
	XSDC4EZ326B	3	18-28	/
	XQDC4EZ615B	6	15	39
	XSDC5EZ326B	3	26	34
	XSDC5EZ615B	6	15	39
	XSDC5DZ428 / XSDC5ED428	4	28	34
	XSDC5DZ815 / XSDC5ED815	8	15	39

AC MODELS

Torque (Nm)	Speed (rpm)	Db (A)*

XS4EZ334 / XS4E334 / XS4P334	3	34	39
XS4EZ624 / XS4E624 / XS4P624	6	24	39
XQ5EZ634 / XQ5E634 / XQ5P634	6	34	42
XQ5EZ934 / XQ5E934 / XQ5P934	9	34	/

* Average value of sound pressure recorded in an acoustic room at a distance of 1 m.

Note

Transducer and acquisition hardware:

- 1/2-inch prepolarized free-field condenser microphone,

50mVPa

- 24 bits 102.4 kS/S ±10 V









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JGAPOSA

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DIMENSIONS mm/in

WIRING

DC motor External power Supply

XSDC3 EZ

Electronic encoded type with built-in radio receiver

XSDC3 DZ

Electronic encoded type with built-in radio receiver and dry contacts

XSDC3 ED

Electronic encoded with dry contacts

Model

1.7716

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Models	XSDC3EZ128 XSDC3DZ128 XSDC3ED128	XSDC3EZ228 XSDC3DZ228 XSDC3ED228
Torque	1.5 Nm	2 Nm
Speed	28 rpm	28 rpm
Power	22 W	25 W
Current	0.90 A	1.10 A
Limit switch	Electronic	Electronic
Max turns	35	35

Voltage	24 VDC
Duty rating	6 min
Radio frequency (type EZ/DZ)	434.15 MHz
Protection	IP30
Working temperature	14°F / 104°F
Insulation class	

S L	Model			A	00	
	XSDC3EZ128	XSDC3DZ128	XSDC3ED128	349 / 13.7402	25/0.9842	
DIMENSI	XSDC3EZ228	XSDC3DZ228	XSDC3ED228	368 / 14.4882	28 / 1.1023	
	*	←9/0.354				35 < <u>1.377</u>
		-	-	— A —	₿	
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Power/Dry contact cables (ED / DZ)

Maximum power cable lenght

(to guarantee characteristics)

AWG 14	200 ft	
AWG 16	115 ft	
AWG 18	82 ft	

XSDC4 EZ B

Electronic encoded type with built-in radio receiver and Li-Ion battery

Embedded rechargeable Li-Ion battery motor

MAIN	Models	XSDC4EZ326B	XQDC4EZ615B		
Е/	Torque	3 Nm	6 Nm		
	Speed	26 rpm	15 rpm		
	Power	32 W	32 W		
	Current	2.9 A	2.9 A		
	Limit switch	Electronic	Electronic		
	Max turns	55	34		
_					
	Voltage	12 VDC			
AT,	Duty rating	6 min			
zΩ	Radio frequency	434.15 MHz			
Т	Protection	IP30			
Ц Ц	Working temperature	14°F/104°F			
•	Insulation class				

DIMENSIONS mm/in

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XSDC5 EZ B

Model

XSDC5DZ326B

XSDC5DZ615B

Α

573/22.56

576/22.68

Electronic encoded type with built-in radio receiver and Li-lon battery

Embedded rechargeable Li-lon battery motor

MAIN ATURES	Models	XSDC5EZ326B	XSDC5EZ615B
FE/	Torque	3 Nm	6 Nm
	Speed	26 rpm	15 rpm
	Power	32 W	32 W
	Current	2.9 A	2.9 A
	Limit switch	Electronic	Electronic
	Max turns	55	34

Voltage	12 VDC
Duty rating	6 min
Radio frequency	434.15 MHz
Protection	IP30
Working temperature	14°F/104°F
Insulation class	

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OPTIONAL

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Line voltage X-quiet tubular motors

Mechanical limit switch

MAIN FEATURES	Models	XS4EZ334 XS4EZ624	Power Supply Working temperature	120 VAC / 60 Hz 14°F / 104°F		
	XS4E334		Duty rating	45secON / 1minOFF		
	-			TECH	Radio frequency (type EZ)	434.15 MHz
	Iorque	3 Nm	6 Nm		Protection	IP44
	Speed	34 rpm	24 rpm			
	Current	0.40 A	0.60 A			
	Max turns (EZ/E - P)	160 - 40	160 - 40			

DIMENSIONS mm/in

Model	Α	Model	Α
XS4EZ334	601 / 23.66	XS4EZ624	603 / 23.74
XS4E334	601 / 23.66	XS4E624	603 / 23.74
XS4P334	511/20.11	XS4P624	543/21.37

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Line voltage quiet tubular motors

Electronic encoded

Mechanical limit switch

MAIN FEATURES

	SILEO	S HSM	SILEO	HSM	
Models	XQ5EZ634 XQ5E634 XQ5P634	XQ5EZ790 XQ5E790 XQ5P790	XQ5EZ934 XQ5E934 XQ5P934	XQ5EZ1234 XQ5E1234 XQ5P1234	
Torque	6 Nm	7 Nm	9 Nm	12 Nm	
Speed	34 rpm	90 rpm	34 rpm	34 rpm	
Amps	0.60 A	1.20 A	1.10 A	1.10 A	
Max turns (EZ/E - P)	80 - 28	80 - 28	80 - 28	80 - 28	

TECHNICAL DATA

Power Supply	120 VAC / 60 Hz
Working temperature	14°F/104°F
Duty rating	45secON / 1minOFF
Radio frequency (type EZ)	434.15 MHz
Protection	IP44

Model	Α	Model	Α	Model	Α	Model	Α
XQ5EZ634	543 / 21.37	XQ5EZ790	598/23.54	XQ5EZ934	574 / 22.59	XQ5EZ1234	602 / 23.70
XQ5E634	543 / 21.37	XQ5E790	598 / 23.54	XQ5E934	574 / 22.59	XQ5E1234	602 / 23.70
XQ5P634	505 / 19.88	XQ5P790	560 / 22.04	XQ5P934	534 / 21.02	XQ5P1234	580 / 22.83

Motor chart selection

		XSDC30 030B	XSDC30 226B	XSDC30 128	XSDC30 228
ø Tube (in)	type		Max blind weight (lt) (fabric + bottom bar) ⁽¹⁾	
1.1417	Benthin	12.3	23	16.7	/
1.2598	Benthin	11.2	20.5	14.4	20.5
1.4960	Rollease	9.2	16.7	12.8	16.7

		XSDC40 326B	XSDC40 615
ø Tube (in)	type	Max blind weight (lt	(fabric + bottom bar) ⁽¹⁾
1.574	Round	23.8	33
1.7322	Round	21.6	30
1.968	Round	19.2	26.5

		XSDC50 326B	XSDC50 615B	XSDC50 428	XSDC50 815
ø Tube (in)	type		Max blind weight (lt	(fabric + bottom bar) ⁽¹⁾	
1.968	Round	19	38.3	26.5	53
2.362	Round	15.8	38	22.5	45
2.7559	Round	13.6	27.3	19	38.5

(1) Weight of the blind has great influence in the max number of cycles the Li-Ion battery operated motor performs every recharge.

An operating friction factor is taken into account. The data are theoretical and do not consider extra friction due to fabricator/installer mistakes. Tube selection should take into consideration the max allowed deflection which varies with weight and width of the blind.

ADAPTERS

DC30 range motors

40 range motors

50 range motors

Drive wheel	Crown adapter		Drive wheel	Crown adapter	
		Code: AXR50 Tube: Round 2"/50 mm			Code: AXO6.EC Tube: Round 2"-1⁄2/73 mm
\mathbf{O}		Code: AX5.01P079 Tube: Round 2"/50 mm with grooves	0		Code: AX5.01P205 Tube: Round 3"-¼/83 mm
		Code: AXGS78 Tube: 2.75" with grow	M oves		

Accessories

BC312.USA

Li-lon battery charger Input: 100-240 VAC - 50/60 Hz - 0.5 A Max Output: 12.6 VDC - 1000 mA Dimensions: 1.5748 x 2.2834 x 1.2598 in Cable length: 11.8110 in

Motors XSDC3EZ228B XSDC3EZ030B ► TRASDC3.120

Switching power supply 2 Amps Input: 100-240 VAC - 50/60 Hz - 1.5 A Max Output: 24 VDC - 2.0 A Dimensions: 1.8110 x 3.4645 x 1.4960 in Cable length: 11.8110 in

Motors

XSDC3EZ128 XSDC3EZ228

 TRAS.120 Switching power supply 2.5 Amps

Motors XSDC5EZ815 XSDC5EZ428

FLAX14W007.L1 (15.5 cm)
FLAX14W007.L2 (122 cm)
FLAX14W007.L3 (244 cm)

Power cord extension with plugs (for Li-Ion battery motors)

FLAX13W070
Plug-in power cable for XSC50

Plug-in power cable for XSC50 motor without dry contacts FLAX13W065
Power cable for XSC50 motor with dry contacts

► SPM10

Photovoltaic monocristalin panel Max power current: 100 mA Max power Voltage: 18 V Maximum power: 1.8 W Dimensions: 11.4960 x 1.8897 x 0.3937 in Cable length: 2.3622 in

Power distribution panels 24V DC

ARM4

Power supply for 4 XSDC30 motors

Technical details

Input voltage	100-240Vac 50/60Hz - 3.6 A
Output	4x 24 VDC - 10 A
Motor connections	4
Working temperature	-22°F /+158°F
Dimensions	5.24 x 8.19 x 3.15 in

ARM5

Power supply for 5 motors with dry contact input for each motor and for group control

Technical details

	100-120Vac 50/60Hz - 6.0 A
Input voltage - Amps	200-240Vac 50/60Hz - 4.8 A
Output Voltage	5 x 24 VDC - 10 A
Motor connections	5 DC power + 5 Dry contacts
Working temperature	-22°F /+158°F
Protection fuse	4.0 A
Dimensions	12.01 x 8.27 x 4.72 in

EMITTO MART16 Transmitters

Inspired by the elegant and modern design of the *Smart Line* range, the new transmitter *SMART16* is the latest addition of this product line. It can control up to 16 channels in a simple and user-friendly way, through its comfortable LCD display

A collection of remote controls for interior window coverings and exterior solar protections. They are either single channel or 5 channels and each channel allows users to operate their motorized products. Each channel can control one individual motor or one group of motors.

Hand-held remotes

1 Channel

QCTZ01Y

Hand-held remotes 5 Channels with Preset/ All pushbuttons

· 1 · 2	
· 3 · 4	PRESET
• 5	ALL

2 ∐ 3 ▽
3
4 PRESET
5 ALL

QCTZ02Y

Wireless Wall Switches 1 Channel

1 Channel

QCTZ01D

Wireless Wall Switches

5 Channels with Preset/ All pushbuttons

QCTZ02D

Dimensions (in)

Technical details

Channels	1 to 5
Frequency	434.15 MHz
Power supply	3V mod. CR2032
Battery life	2 years
Radiated power	<10 mW
Protection rate	IP40
Coverage (int/ext)	65 / 600 ft
Encoding	RC Gaposa
Working temperature	14°F / 104°F

Features

- Control up to 32 different Gaposa motorized products from the app from anywhere you are.
- Create as many rooms as you want
- Create up to 6 favorite rooms that can be easily accessed from the home screen.
- Easily control your shades from the room page with control for UP, STOP, DOWN, and PRESET position.
- Set limits from the app
- Synchronize motors with the app easily with no need for an existing remote.
- Set up to 10 schedules Each schedule can automate Up, Down, and Preset commands, and have them repeat every day of the week or none of them.
- Schedules can utilize your location to set your shades to go up or down with the sun.
- Schedules can be enabled or disabled so you can make a schedule for when you are away and disable it when you are home.
- Light and Dark Mode options to change the app background.

JGAPOSA

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Gaposa 3rd party integration via dry contacts with: Lutron, Savant, Control4, Crestron

1 channel

6 channels

Panels with integrated transmitter enables to interface a radio motors with a home automation system. In this way, the home automation system will control the radio motor(s) through the UP/STOP/DOWN signals.

Power supply	120V~ - 60 Hz (±10%)
Frequency	434.15 MHz
Fuse	315 mA
Protection rate	IP44
Working temp.	14°F / 104°F

RS232 integration

Models

linkIT-US16 16 channels (434.15 MHz) ■ linkIT-US24 24 channels (434.15 MHz)

Control

- 16-24 blinds or groups per device
- Up Down Stop
- Intermediate position
- Tilting

Hardware

- Very small dimensions
- Visible feedback
- Exterior antenna for increased range
- LED for power

RS232 via RJ9

- Interconnectable
- 5V power input

PROGRAMMING QUICK GUIDE

The buttons shown on the left are used to program the transmitters and specific channels. The programing button's (buttons 4 and 5) locations can be placed differently depending on the transmitter model. Shown in this guide is the Emitto Slim line transmitter.

UP (1)the motor lifts the rolling shade/awning upSYNC (4)STOP (2)the rolling shade/awning stopsLIMIT (5)DOWN (3)the rolling shade/awning goes down

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SYNC (4) program LIMIT (5) set limit

program the transmitter set limits

CONNECT POWER TO THE MOTOR

PROGRAMMING A TRANSMITTER (Sec. 1)

- 1 Press and hold **SYNC** button on the back of transmitter or the white button on the head of the motor until the motor starts moving
- 2 Check the motor rotation (UP or DOWN) then release the SYNC button or the white button (the motor now stops)
- 3 Within 5 seconds, press the corresponding button (**UP** if the motor turns upwards or **DOWN** if the motor turns downwards.) This will set the direction of the motor. If the incorrect button is pressed, the controls will be reversed. To fix, see Sec. 3.

Transmitter is now programmed

ADDING A NEW TRANSMITTER (Sec. 2)

- 1 Press and hold the **SYNC** button on the back of a transmitter **ALREADY** paired until the motor starts moving in one direction
- 2 Check the motor rotation (UP or DOWN) then release the SYNC button (the motor now stops)
- 3 Within 5 seconds, press the corresponding button (UP if the motor turns upwards or DOWN if the motor turns downwards) on the NEW transmitter being added. This will set the direction of the motor. If the incorrect button is pressed, the controls will be reversed. To fix, see Sec. 3.

Additional transmitter is now added

CHECKING / CHANGING DIRECTION (Sec. 3)

To check the direction, press the UP or DOWN button. The motor will go UP or DOWN accordingly, if the direction needs to be changed:

- 1 Press and hold the SYNC button on the back of transmitter until the motor starts moving
- **2** Press the STOP button; the motor makes a brief jog. The direction of the motor has been reversed

IMPORTANT: the change of direction of procedure must be performed before initiating the limit setting procedure, otherwise limits must be reset

3

1

SETTING THE LIMITS (Sec. 4) IT IS MANDATORY TO SET THE "UP" LIMIT FIRST EVERY TIME

Run the motor to an intermediate position inbetween the two desired limits. The motor needs to move in the direction of the limit in order for the limit to be properly set.

1 Press and hold the LIMIT button on the back of transmitter until the motor makes a brief jog

Note: during "limit setting mode" the operations are in "deadman control" (The UP and DOWN buttons must be held down inorder to move the motor.)

- **2** Press and hold the UP button and run the motor to the desired UP limit position.
- **3** Press the STOP button to set the UP limit position. The motor makes a brief jog to confirm.
- 4 Press and hold the DOWN button and run the motor to the desired DOWN limit position
- **5** Press the STOP button to set the DOWN limit position. The motor makes a brief jog to confirm.

Note: Accurate limit setting can be performed by pressing the LIMIT button a second time: the motor will then will reduce its output speed, moving slowly in steps towards the desired limit. Always press the STOP button to set the limit position.

1

2

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1

SETTING THE LIMITS INDIVIDUALLY (Sec. 5)

If the limits need to be changed after the initial limit setting procedure, it is possible to change the limit positions individually. One limit can be set without the other limit needing to be set. The motor can be in any postion to initiate the procedure.

TO CHANGE THE UP LIMIT:

1 From any point between the existing limits, press and hold both the LIMIT button and the UP button until the motor makes a brief jog.

Note:during "limit setting mode" the operations are in "deadman control" (The UP and DOWN buttons must be held down inorder to move the motor.)

- **2** Press and hold the UP button until the desired new UP limit is reached.
- **3** Press the STOP button to set the limit. The motor makes a brief jog to confirm. The new UP limit is set.

TO CHANGE THE DOWN LIMIT:

1 From any point between the existing limits, press and hold both the LIMIT button and the DOWN button until the motor makes a brief jog.

Note: during "limit setting mode" the operations are in "deadman control" (The UP and DOWN buttons must be held down inorder to move the motor.)

- 2 Press and hold the DOWN button until the desired new DOWN limit is reached
- **3** Press the STOP button to set the limit. The motor makes a brief jog to confirm. The new DOWN limit is set.

1. SETTING AN PREFERRED POSITION

PREFERRED POSITION (Sec. 7)

Operate the motor to and stop it at the desired intermediate position, then press both the UP and DOWN buttons together until the motor makes a brief jog to confirm.

AUTOMATIC SETTING OF THE LIMITS (Sec. 6)

The intermediate position is now set.

2. RECALLING THE PREFERRED POSITION

Press and hold the STOP button for 3 seconds: the motor will move to and stop at the intermediate position.

3. ERASING THE PREFERRED POSITION

Press both the UP and DOWN buttons until the motor makes a brief jog to confirm.

The intermediate position is now erased.

DELETING A TRANSMITTER OR A CHANNEL (Sec. 8)

Using the transmitter to be deleted press and hold both the SYNC and STOP buttons untill the motor makes a brief jog to confirm.

Only the transmitter used for this procedure has been deleted from motor memory

2

RESET TRANSMITTER MEMORY (Sec. 9) (DELETING ALL THE TRANSMITTERS OR CHANNELS OR SENSORS)

Option 1 - Using a programmed transmitter

Press and hold both the SYNC and STOP buttons for at least 15 seconds: to confim that the operation has completed, the motor first makes a brief jog and after 5 seconds it makes an additional jog. This operation will not be successful unless it makes both jogs.

Memory is now empty

Option 2 - Using a new transmitter without ID (not paired).

1 Switch the power to the motor OFF, then switch it back ON.

2 Within 8 seconds, using any Gaposa transmitter, press and hold both the SYNC and STOP buttons until the motor makes a jog.

Memory is now empty

Option 3 - White button on the head of the motor

Press and hold the white button on the head of the motor until it makes a jog.

All transmitters have been erased.

For limits set with torque sensor (mechanical stop of shutters or cassette awnings/ shades), press and hold the UP button until the bottom bar hits the cassette or shutter box. A short jog will indicate that the UP position has been memorized. The same procedure can be followed for the DOWN limit but only for roller shutters.