



ROLLER-SHUTTER OPERATORS

**The power lifters
of industrial
automation**



RSO5DC



**RSO5R, RSO5R3P
and RSO5RE**



RSO5



RSO9

RSO  TM
Roller-shutter Operator

It truly is an awe-inspiring sight to see the CENTURION **RSO** nonchalantly lift a roller-shutter that would make most men tremble in their boots.

From its hardy aluminium gearbox to its powerful AC motor – everything about the **RSO** screams power.

Main Features

A model to suit your needs

Whether you need basic, cost-effective roller-shutter automation or your site calls for something a little more comprehensive, CENTURION has an **RSO** model to suit your unique needs.

Monstrous lifting force

Heavy lifting is its business...and business is good.

Even the baby of the lot, the **RSO5R**, has enough brawn in its gearbox to automate shutters weighing up to 500kg, and makes for powerful, cost-effective industrial automation.

Then there's the **RSO5** – a mean machine of equal strength and durability that also includes a multi-faceted interface board for connecting ancillary and safety devices.

You'll find the perfect union of simplicity and raw, unadulterated power in the **RSO5R3P**. This three phase model provides the same reliable automation solution as the **RSO5R** – but with the added might of 380V behind it! That means an increased duty cycle and higher starting thrust - the **RSO5R3P** has got the OOMPH-factor down to an art!

Take one part gargantuan lifting force and add a never-say-die attitude, mix in a sturdy cast-iron gearbox and what you've got is the recipe for the **RSO** Endurance model, the **RSO5RE**. With an impressive duty cycle and capable of performing in excess of 400 operations per day thanks to the remarkably durable double-layer planetary gear design, the **RSO5RE** is THE solution for high-volume applications.

The **RSO5DC** is the industrial automation equivalent of the Renaissance Man. It really is the complete package: superior lifting force, reliable battery backup and virtually boundless functionality. Neatly housed within a convenient and secure wall box, two 7Ah batteries provide standby power to this 24V DC titan, while the super-intelligent D-series controller made famous by our **D10** slider takes care of... well... just about everything!

Finally, weighing in with a whopping 550W of power and able to lift roller-shutters weighing up to 900kg, is the **RSO9**.

This beast, which receives an extra dose of power via a three-phase supply, provides all the muscle you need to automate exceptionally heavy shutters such as the entrances to airplane hangars.

Robust construction

Two words: Oblique gear. This proven transmission type, coupled with a motor that packs plenty of clout, makes for an industrial roller-shutter operator that makes quick work of even the heaviest of shutters.

Fail-safe manual operation

What is strength without reliability? In the unlikely event that something goes wrong, the **RSO** is committed to keeping you in business, with not one but two modes of manual operation.

All **RSO** models come standard with a five metre hand chain, ensuring that the shutter can be easily operated even from ground level.

Easy to commission

The strength of a good industrial operator lies not in its complexity, but in its... you guessed it, strength. The **RSO** range of operators is exceptionally easy to set up, and commissioning can be done in mere minutes thanks to a user-friendly cam system.

The exceptionally user-friendly **RSO5DC** takes hassle-free setup to a whole new level by adding a degree of intuitiveness, courtesy of an intelligent controller with LCD interface. Let's face it: we all have an inborn love for pressing buttons and, if you can commission a powerful industrial roller-shutter operator while doing it, all the better!

Reliable position control

Two mechanical limit switches are the heroes that tame the beast, making sure that the shutter stops accurately in the open and closed positions, every time.

Rock-solid mounting system

One can imagine that it takes quite a lot of muscle to keep such a colossus suspended several meters in the air – fortunately, CENTURION custom-made **RSO** mounting plates are more than up to the challenge, and includes vertical slots for easy adjustment of the operator.

Battery backup 1

A 24V battery with rapid charger ensures that come low voltages, power spikes or failures, you can always get in or out!

1. RSO5DC only

Open it the way you like it 1...

Rapid opening but a more tempered closing just in case a loved one or a truckload full of valuable goods is in the way, that's the sort of sophistication in motor control you can expect from the **RSO5DC**. Added to this, you can vary the acceleration and deceleration of your roller-shutter and make it move so smoothly it will do so for many years to come.

1. RSO5DC only

Plug and play 1

The **RSO5DC** comes standard with an LCD-based controller that makes child's play of setting up the roller-shutter. It is literally plug and play – the controller does all the thinking for you.

1. RSO5DC only

It's got it all 1

What a pleasure to click through an almost endless list of really useful features – from multiple Modes of Operation, shutter operating parameters, Alarm functions, Positive Close Mode and Real Time Clock and Calendar to enable time-based features – to help diagnostic feedback.

1. RSO5DC only. RSO5DC only



Alarm features (a world first) ¹

Recent crime stats indicate that robbery at non-residential properties is on the rise. Fortunately, criminals can't outsmart the **RSO5DC**. An ambush alarm will alert your security company if the opening or closing beams are interrupted for a predefined, but adjustable, time. Similarly, a Break-in Alarm will go off if the closing beam outside your factory or warehouse is interrupted.

¹ RSO5DC only. Requires gate safety beams to be installed

Operate wirelessly, thanks to CENTURION ¹

Besides its code-hopping technology offering the highest level remote control security, this multichannel and multi-user CENTURION onboard receiver allows for a multi-button remote to operate any combination of the system inputs, such as trigger, Holiday Lockout, etc.

¹ RSO5DC only

Features and Functions

	RSO5R	RSO5R3P	RSO5	RSO5DC	RSO5RE	RSO9
Max. shutter weight	500kg	500kg	500kg	500kg	500kg	900kg
Battery backup	-	-	-	Yes	-	-
Integrated wall-pendant	Yes	Yes	Yes	¹	Yes	Yes
LCD interface	-	-	-	Yes	-	-
Manual override facility	Yes	Yes	Yes	Yes	Yes	Yes
Hand chain	Yes	Yes	Yes	Yes	Yes	Yes
Safety Beam Input	-	-	Yes	Yes	-	-
Input for ancillary devices, e.g. keypads, pushbuttons, etc.	-	-	Yes	Yes	-	-
Courtesy Light input	-	-	Yes	Yes	-	-
Autoclose	-	-	Yes	Yes	-	-
Local test button	-	-	Yes	Yes	-	-
Multiple Modes of Operation	-	-	-	Yes	-	-
ChronoGuard	-	-	-	Yes	-	-
Onboard receiver	-	-	-	Yes	-	-
Beam Alarm Modes	-	-	-	Yes	-	-
Adjustable speed	-	-	-	Yes	-	-
Dual brake system	-	-	Yes	-	-	-

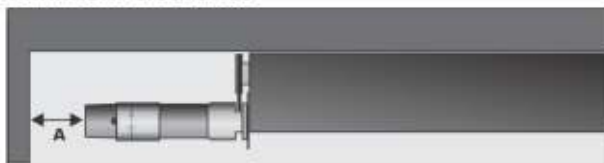
¹ LCD controller

Technical Specifications

	RSO5R	RSO5R3P	RSO5	RSO5DC	RSO5RE	RSO9
Supply voltage	220V-240V AC 50Hz	380V AC 3Ø	220V-240V AC 50Hz	90V-240V AC 50Hz	220V-240V AC 50Hz	380V AC 3Ø
Power	250W	360W	360W	220W	375W	550W
Motor speed	1780rpm ¹	1780rpm ¹	1780rpm ¹	1440rpm ¹	1780rpm ¹	1780rpm
Door travel speed	140mm/sec	100mm/sec	100mm/sec	130mm/sec	74mm/sec	45mm/sec
Current	3.5A 1Ø	1.5 – 2A 3Ø	3.7A 1Ø	4.6A 1Ø	3A	2.2A 3Ø
Time rating	7 min	10 min	10 min	7 – 8min	30 min	8 min
Temperature protector	95°C	70°C	105°C	70°C	125°	115°C
Output shaft rotation	53rpm	35rpm	35rpm	50rpm	28	17rpm
Gear ratio	34:1	55:1	51:1	55:1	64:1	105:1
Gear transmission	Single-row oblique gear	Single-row oblique gear	Single-row oblique gear	Double-row oblique gear	Double-layer planetary gear	Double-layer oblique gear
Gearbox material	Aluminium	Aluminium	Aluminium	Aluminium	Cast-iron	Aluminium
Drive type	Chain-driven	Chain-driven	Chain-driven	Chain-driven	Chain-driven	Chain-driven
Sprocket	9T	9T	9T	9T	9T	10T
Chain	5/8 inch	5/8 inch	5/8 inch	5/8 inch	5/8 inch	1 inch
Length	540mm	500mm	570mm	450mm	530mm	600mm
Net weight	12.7kg	12.8kg	12.8kg	9.64kg	20.2kg	22.1kg
Gross weight	13.5kg	13.5kg	13.5kg	10.4kg	21.0kg	23.0kg
Packing dimensions	Width: 260mm x Depth: 200mm x Height: 540mm	Width: 265mm x Depth: 210mm x Height: 570mm	Width: 265mm x Depth: 210mm x Height: 570mm	Width: 265mm x Depth: 210mm x Height: 570mm	Width: 260mm x Depth: 200mm x Height: 665mm	Width: 345mm x Depth: 285mm x Height: 600mm

± 10%

Minimum Clearance



Operator	Minimum A dimensions
RSO5R	590mm
RSO5R3P	590mm
RSO5	620mm
RSO5DC	460mm
RSO9	650mm

The 'A' dimension refers to the minimum amount of space needed to install each operator, i.e. the distance from the side of the shutter box to the first obstruction (eg. a pillar)



CENTURION infrared beams Always recommended on any automation system



SMARTGUARD or SMARTGUARDair keypad Cost-effective and versatile wired and wireless keypad, allowing access to pedestrians



SupaNOVA receiver Versatile multi-user compatible with the CENTURION code-hopping range of remote controls



Gooseneck
Steel pole for mounting intercom gate station or access control reader



CENTURION transmitters
Available in one, two, three and four button variants. Incorporates code-hopping technology



RSO5DC controller wallbox Durable, weather-resistant wall box housing all RSO5DC electronics.

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