



SIREM

MOTORIZATIONS DESIGNER SINCE 1928



3

Warranty

Designed
and Made in
FRANCE



COVEO® : Motorizations for automatic pool cover



www.sirem.fr

* According to SIREM generals and particulars conditions of sale



COVEO® : Motorizations for automatic pool cover

The motorization and the control box are the key elements of ease of use of a pool cover with automatics opening and closing controlled fingertips. So, effortless, secure your pool becomes a simple and natural gesture. It will be the same to protect water from external hazards and ensure maintaining the temperature of the pool.

SIREM, french industrial company of 150 people founded in 1928 near Lyon is specialized in electric motorizations.

Since 2004, SIREM designs and manufactures a complete range of motorizations fitted to all types of installations :

- Immersed
- Above-ground

In 2014, SIREM launches **COVEO®**, and reaffirms its position as a market leader in motorization for automatic pool covers. **COVEO®** is the result of two years of development benefiting experience acquired by SIREM on nearly 100,000 pools in the world, equipped with the first generation of motorizations.

COVEO® meets the specific needs of end users, installers and automatic pool covers manufacturers to comply with the french standards NF P 90-308.

Robustness of the design, qualification of technical solutions and traceability have guided the realisation of 100% innovative **COVEO®** confirming : reliability and performance.

COVEO® motorizations for automatic pool covers are simple and quick to install. Connection and different settings (limit switches, ...) are in minutes and no technical knowledge is required.

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REASONS TO INTEGRATE THEM :

Compatible with all the cover models

Easier replacement

Reinforced waterproofness

Opening and closing faster until 40%

Easy limit switch adjustment (double electronic sensors)

Reinforced overvoltage protection (twice as much than threshold standard EN 61000-4-4 et EN 61000-4-5)

Above ground until 150M²

Immersed until 120M²

Immersed **COVEO**® Range

WATERPROOF TUBULAR MOTORIZATIONS

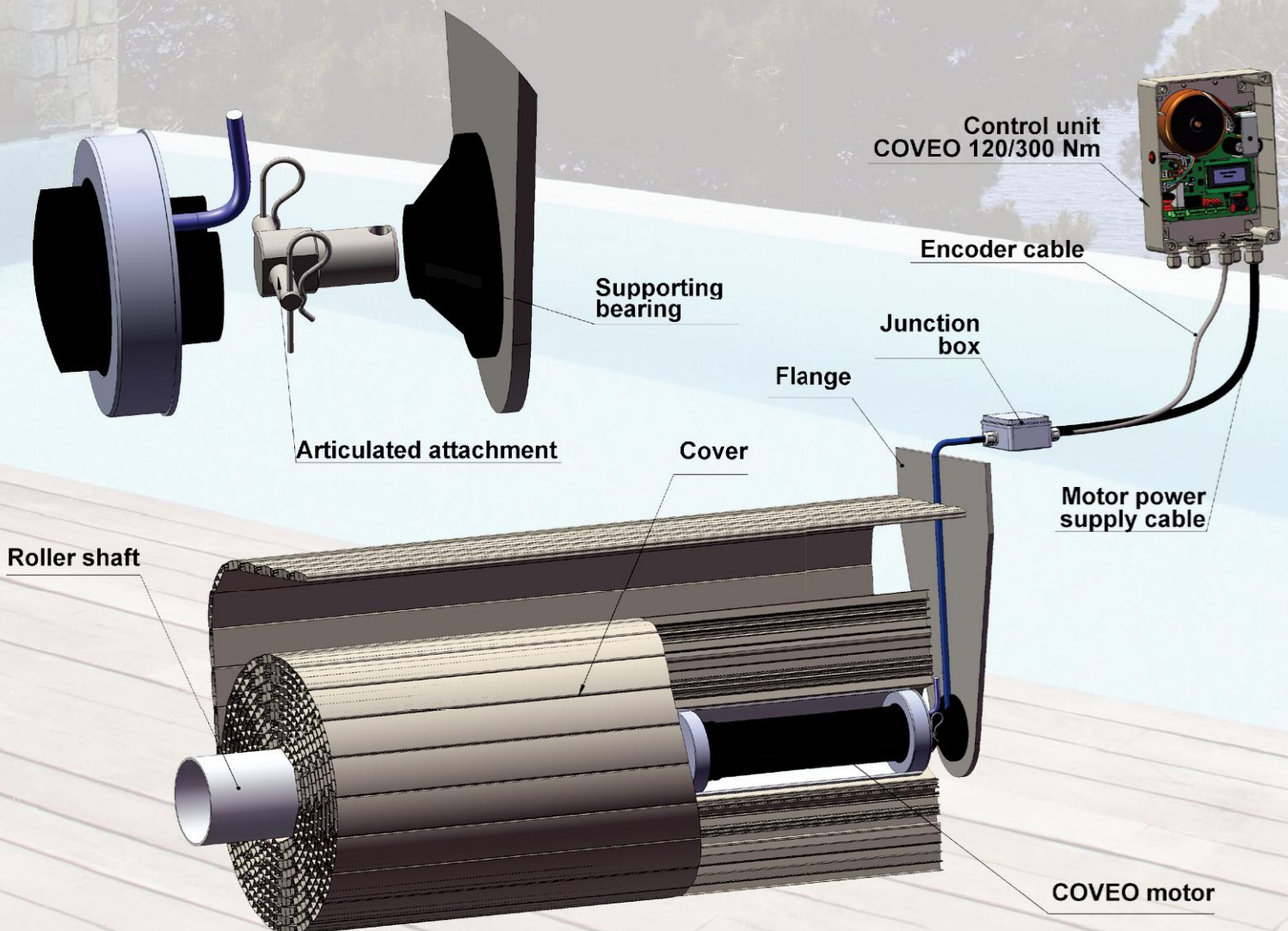
This motor is designed to drive pool safety covers with immersed drive shafts. It is mounted in the roller shaft and fulfils the following functions :

- Rotating the shaft
- Maintaining the shaft in position when it stopped
- supporting the load buoyancy of the entire cover

Motorizations range and control box :

- 120N.m immersed axis motor with or without limit switches
- 300 N.m immersed axis motor with limit switches
- Control box with or without information screen

HOW IT WORKS



CHOOSE YOUR IMMERGED MOTORIZATION

Immersion depth of the shaft = 0,5m		WIDTH OF THE POOL								
		3m*	4 m*	4,5 m*	5 m*	5,5 m*	6 m**	6,5 m**	7 m**	7,5 m**
	5 m									
	7 m	Motorization 120 N.m								
	9 m									
	10 m									
	11 m	Motorization 300 N.m								
	12 m									
	14 m									
	15 m									
	17 m									
	20 m									

LENGTH OF THE POOL		WIDTH OF THE POOL								
		3m*	4 m*	4,5 m*	5 m*	5,5 m*	6 m**	6,5 m**	7 m**	7,5 m**
	0,5 m	14m 120N.m	14m 120N.m	11m 120N.m	9m 120N.m	7m 120N.m	20m 300N.m	17m 300N.m	15m 300N.m	12m 300N.m
	1 m	20m 300N.m	20m 300N.m	20m 300N.m	15m 300N.m	12m 300N.m	14m 300N.m	12m 300N.m	10m 300N.m	8,5m 300N.m
	1,5 m	18m 300N.m	18m 300N.m	13m 300N.m	10m 300N.m	8m 300N.m	8,5m 300N.m			
	2 m			12m 300N.m	8m 300N.m	7m 300N.m	5,5m 300N.m			

Data used to compile the table :

- Lift : 100N/m²
- Weight of the slats : 40N/m²

Cross-section of the roller shaft :

- * : Equivalent to that of an aluminium tube with an $\phi_{int} 150 \times e = 4$
- ** : Equivalent to that of an aluminium $\phi_{int} 150 \times e = 10$

This data is not guaranteed and can only be used for initial approximations. It cannot replace the user's experience. To be validated according to the type of slats, the type of shaft, the type of fastening...

IMMERSED MOTORIZATION

For immersed automatic pool covers



MOTORIZATION FOR IMMERSED POOL COVER
AUTOMATIC LIMIT SWITCH MANAGING
FLANGE DIMENSIONS TAILOR-MADE
IP68 WATERPROOF CLASS

TECHNICAL FEATURES :

- 24 Vdc motor
- Stainless steel 316 L shaft
- Flexible cable multi-wire
- IP68 waterproofness class
- Limit switch electronic manage
- Installation until 2 meters (see the determination table)
- Possibility to adjust the speed

- 2 motorizations :
- 120 Nm = 3,0 tr/min
 - 300 Nm = 5,0 tr/min

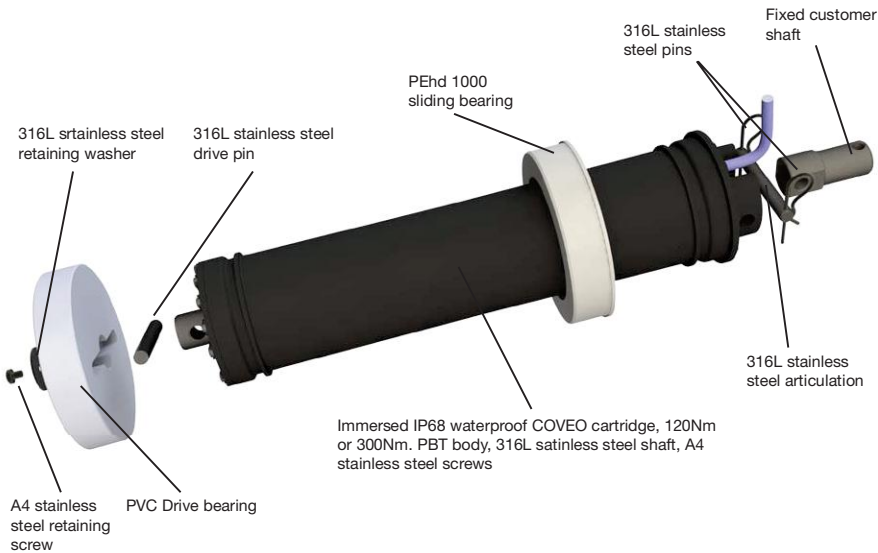
COMPLY WITH STANDARDS :

Attempt	Standard rules
Discharge Immunity to ESD	EN 61000-4-2
Immunity to radiated electrostatic	
Immunity to fast transients (burst	EN 61000-4-4
	EN 61000-4-5
Radio frequency in common mode	EN 61000-4-6
Conducted emissions	EN 55014-1
Electrical safety	

These standards comply with the French rules of the NPF 90308 standards



MODULAR PRODUCT :

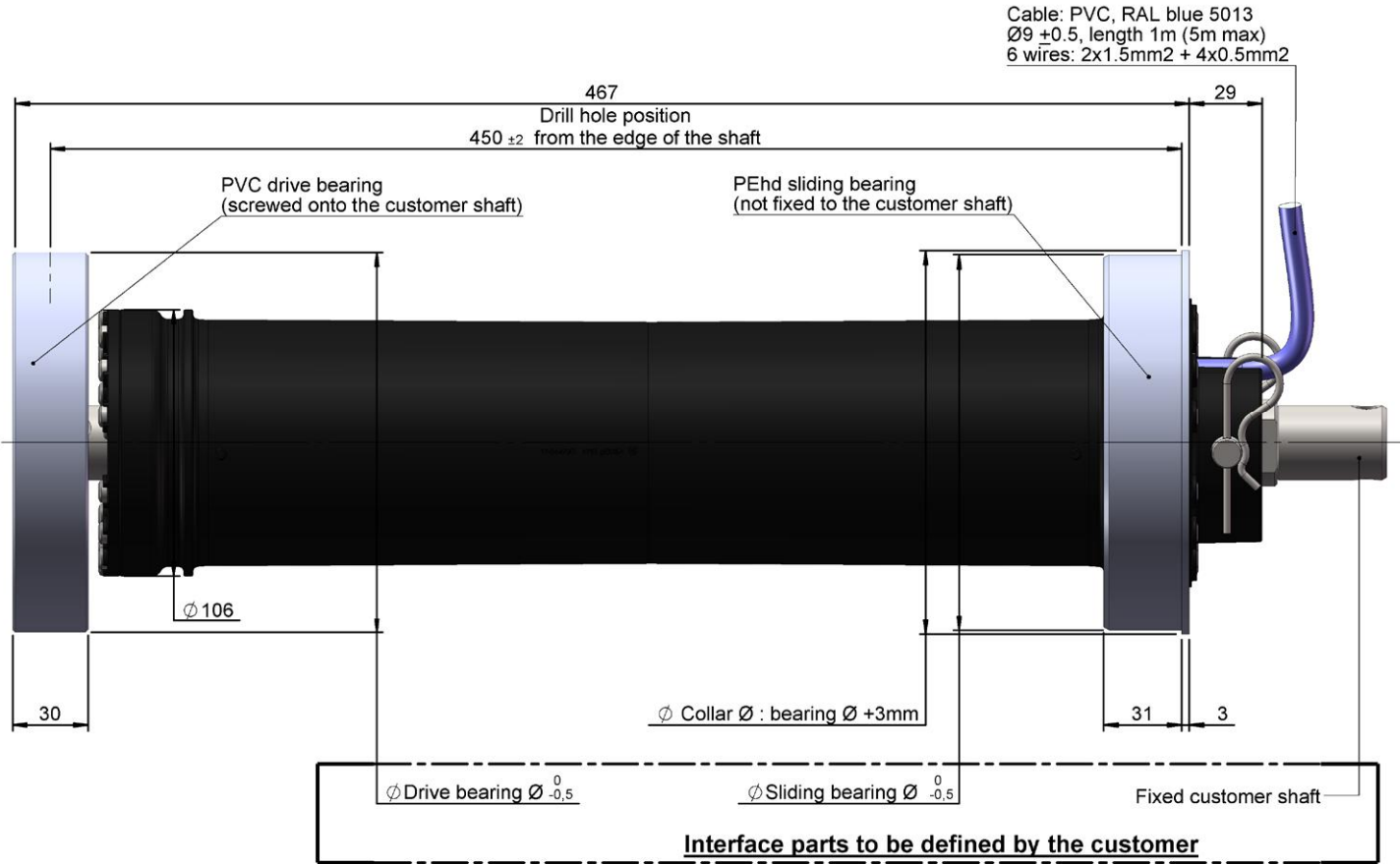


TECHNICAL FEATURES

Features		120 N.m motor	300 N.m motor
Reduction ratio		1/886	1/516
Input power of the power supply SIREM box		24 Vdc	24 Vdc
Consumption at max. torque (±20%)		5 A	16 A
Protection class IP		IP68*	IP68*
Service : for the automatic cover roller, max three successive cycles			
Max torque		120 N.m	300 N.m
Speed (±20%)	Off load	5,5 rpm	9,0 rpm
	at maximal torque	3,0 rpm	5,0 rpm
Motor shaft		316 L stainless steel	316 L stainless steel
Materials		PBT	PBT
End run sensors		2 square signals, offset by 90° One point per rev	
Magnetic brake (auto unlocking)		120N.m mini	300N.m mini
Flexible cable	Diameter	Ø9 ±0,5 mm	Ø9 ±0,5 mm
	Composition	2x2,5mm² + 4x0,5mm²	2x2,5mm² + 4x0,5mm²
	Waterproofing (NFC15-100)	AD8	AD8
Max. permissible load on the motorization		6.000 N (1)	
Conditions of use	Period of use	≈ 6 months / year	
	Number of cycles/day	2	
	Max pool length in shaft revs	12 shaft revs (2)	15 shaft revs (3)
	Operating water T°	0°C to +40°C	

* until 2 meters
(1) : Max covered surface : 120m²
(2) : for a cover length of 14m
(3) : for a cover length of 20m

DIMENSIONS



Above-ground **COVEO**[®] Range

TUBULAR MOTORIZATIONS

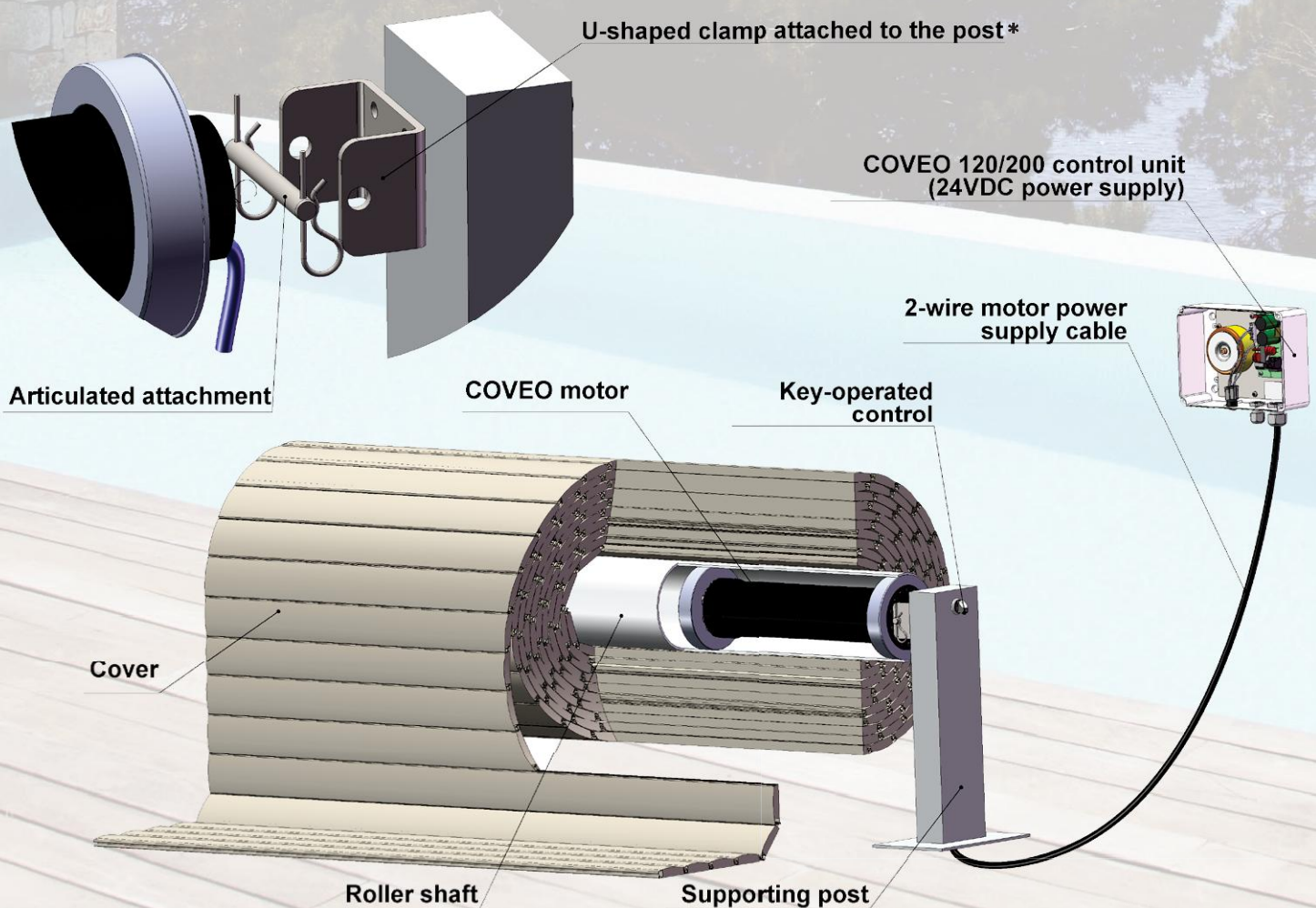
This motorization is designed to drive pool safety covers with ground-level drive shaft. It is mounted in the roller shaft and fulfils the followings functions :

- Rotating the shaft
- Maintaining the shaft in position when it is stopped
- Supporting the weight of the entire cover
- The close and open positions are controlled by the electronic card built into the motor (depending on the equipment)

Motorizations range and control box :

- 120 N.m above-ground axis motor with or without limit switches
- 200 N.m above-ground axis motor with or without limit switches
- Control box with overvoltage protection

HOW IT WORKS



* other fastening system on demand

CHOOSE YOUR ABOVE-GROUND MOTORIZATION

		WIDTH OF THE POOL								
		4 m*	4,5 m*	5 m*	5,5 m*	6 m**	6,5 m**	7 m**	7,5 m**	8 m**
	5 m									
	10 m	Motorization 120 N.m								
	12 m									
	15 m							Motorization 200 N.m		
	18 m									
	20 m									

Note : 120N.m motors can be used for 6x12m pools with a more rigid tube (see cross-section**)

Data used to compile the table :

- Weight of the slats : 40N/m²
- Very rigid lugs
- Lugs height : 0,5 m above the water level

Cross-section of the roller shaft :

- * : Equivalent to that of an aluminium tube with an øint150xe=4
- ** : Equivalent to that of an aluminium tube with an øint150xe=10

This data is not guaranteed and can only be used for initial approximations. It cannot replace the user's experience. To be validated according to the type of slats, the type of shaft, the type of fastening...

ABOVE-GROUND MOTORIZATION

For above-ground automatic pool covers



ABOVE-GROUND POOL COVER MOTORIZATION

LIMIT SWITCH AUTOMATIC MANAGE

TECHNICAL FEATURES :

- 24 Vdc motor
- U-shaped clamp
- Flexible cable multi-wire
- IPX5 Waterproofness class
- Limit switch electronic manage
- initialization button (to connect)

2 motorizations :

- 120 Nm = 3,0 tr/min
- 200 Nm = 4,0 tr/min

HOW TO INITIALIZE THE LIMIT SWITCH :

1. Closed cover position : Press on the init button during 3 seconds minimum.
2. Put the cover in open position.
3. Release the key : The initialization is done.

COMPLY WITH STANDARDS :

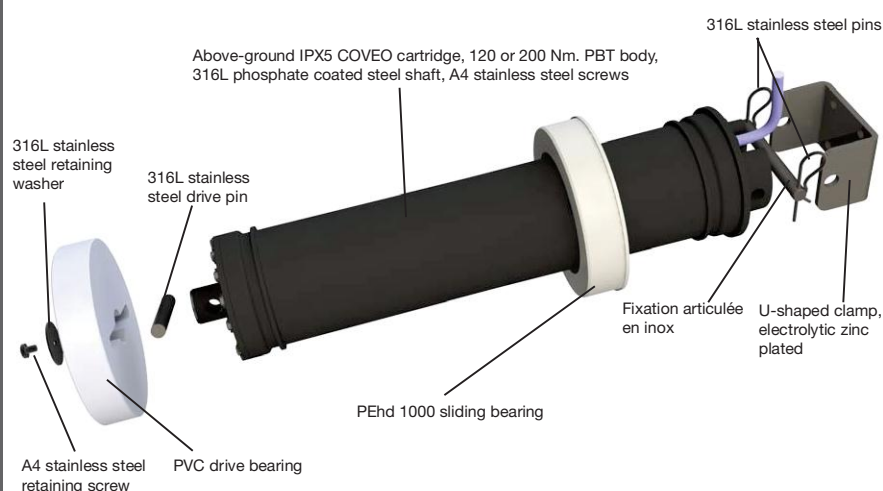
Attempt	Standard rules
Discharge Immunity to ESD	EN 61000-4-2
Immunity to radiated electrostatic	
Immunity to fast transients (burst	EN 61000-4-4
	EN 61000-4-5
Radio frequency in common mode	EN 61000-4-6
Conducted emissions	EN 55014-1
Electrical safety	

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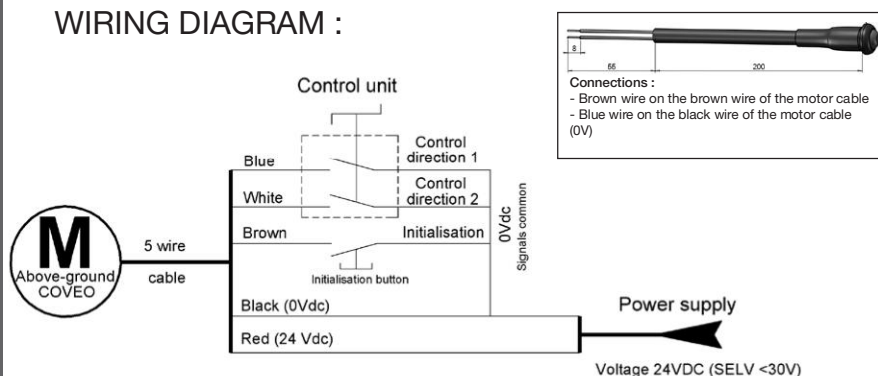
Photos and data are non contractual



MODULAR PRODUCT :



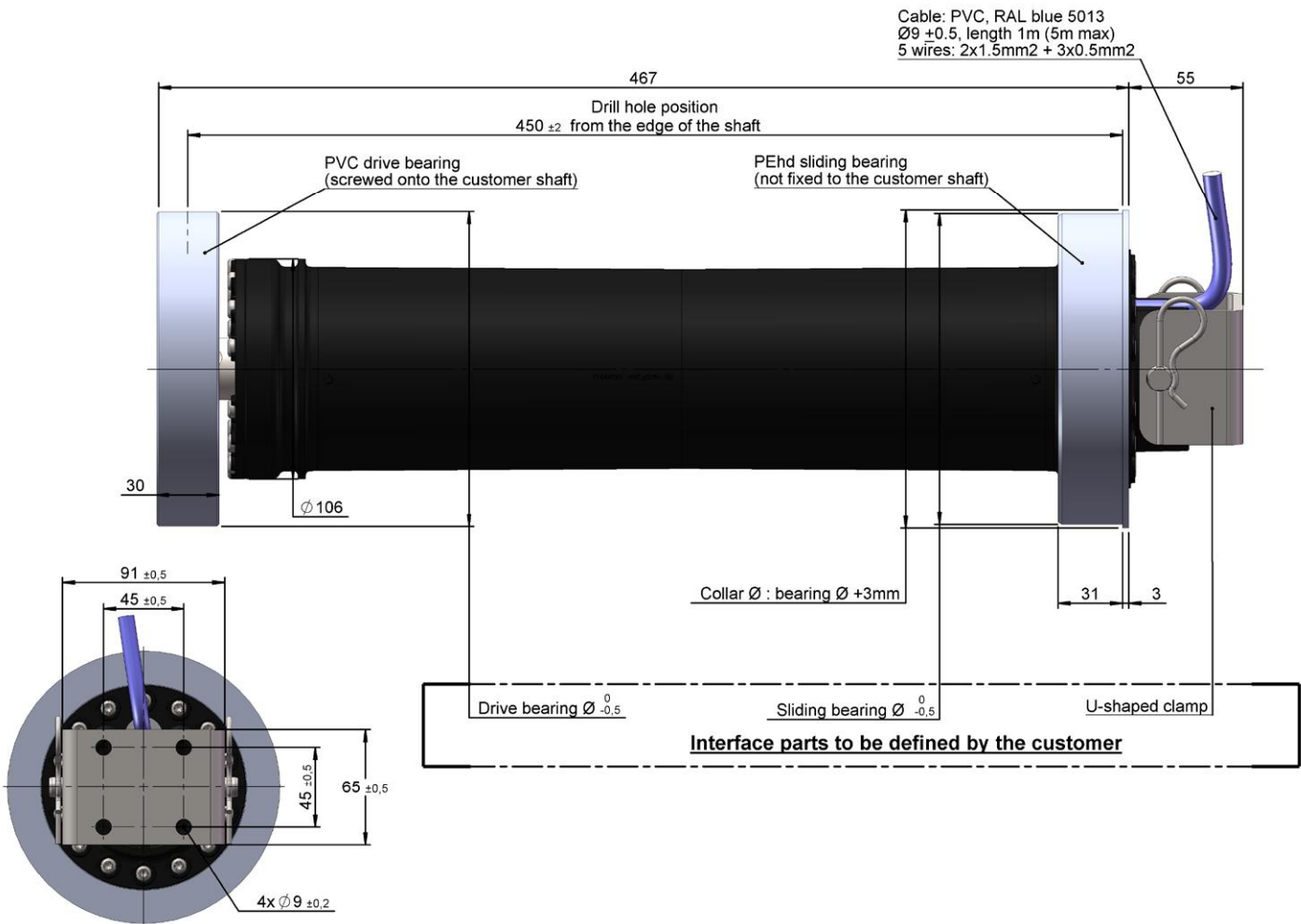
WIRING DIAGRAM :



TECHNICAL FEATURES

Features		120 N.m motor	200 N.m motor
Reduction ratio		1/886	1/630
Input power of the power supply SIREM box		24 Vdc	24 Vdc
Consumption at max. torque (±20%)		5 A	9 A
Service : for the automatic cover roller, max three successive cycles			
Max torque		120 N.m	200 N.m
Speed (±20%)	off load	5,5 rpm	6,5 rpm
	at maximal torque	3,0 rpm	4,0 rpm
End shaft		Phosphate coated steel and oiled (hold 96h in neutral salt fog)	
Material	Cartridge	PBT	
Control		Rev counter board, activated by the signals on the blue or white wires	
Magnetic brake (auto unlocking)		120N.m mini	200N.m mini
Flexible cable	Diameter	Ø9 ±0,5 mm	Ø9 ±0,5 mm
	Composition	2x1,5mm² + 3x0,5mm²	2x1,5mm² + 3x0,5mm²
	Waterproofing (NFC15-100)	AD8	AD8
Max. permissible load on the motorization		6.000 N	
Conditions of use	Period of use	≈ 6 months / year	≈ 6 months / year
	Number of cycles/day	2	2
	Max pool length in shaft revs	12 shaft revs	15 shaft revs
	Operating water T°	0°C to +50°C	0°C to +50°C

DIMENSIONS



POWER SUPPLY BOX

For above-ground SIREM automatic cover motorizations



POWER SUPPLY

OVERVOLTAGE PROTECTION

THERMAL PROTECTION

BOX :

- IP55
- IK07 shocks holding
- Easy wiring
- Mounted PG
- Fixation screws including
- Installation manual included

TECHNICAL FEATURES :

- 230 VAC - 50/60 Hz power supply
- 24Vdc transformer (<30Vdc comply with the legislation)
- On/off button
- LED indicator motor On
- Overintensity protection use
- Overvoltage protection
- Automatical reloadable thermal cut-out
- Working temperature : 0° to + 50°C
- Storage temperature : -20°C to +60°C
- Relative hygrometry up to 95%

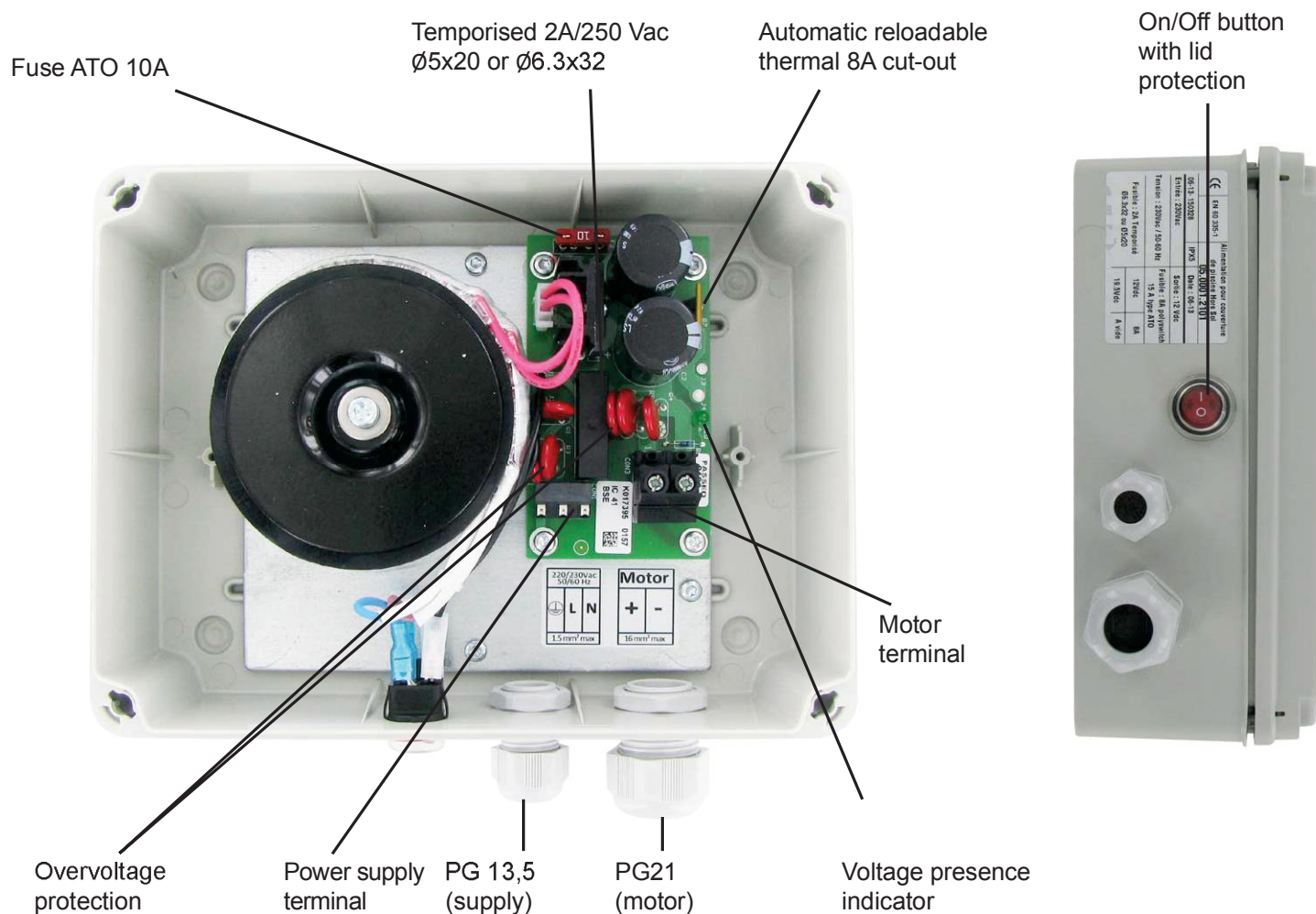
COMPLY WITH STANDARDS :

Attempt	Standard rules
Discharge Immunity to ESD	EN 61000-4-2
Immunity to radiated electrostatic	
Immunity to fast transients (burst)	EN 61000-4-4
	EN 61000-4-5
Radio frequency in common mode	EN 61000-4-6
Conducted emissions	EN 55014-1
Electrical safety	

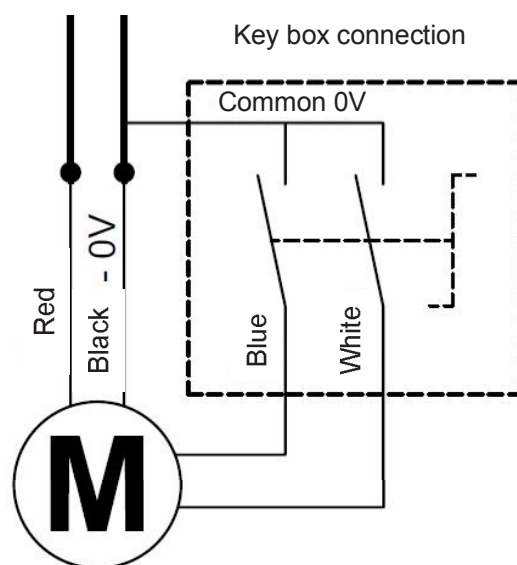
These standards comply with the French rules of the NPF 90308 standards



CARD DETAILS



ELECTRIC WIRING



The box must be connected to

- a RCD : residual current devices (30mA)
- a built-in installation has a multipolar connection with a 3mm contact breaker

Before maintenance, be sure the box is power off.



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