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## **YBR 50DC/70DC**

ROLLER MOTOR 24VDC



This installation manual has been written by the manufacturer and it is considered integrating part of this product.

The information included are intended for the expert technicians who execute the installation and the extraordinary maintenance of the product.

The expert technicians must have specific competences and particular abilities in order to carry out correctly and safely their work.

The constant observance of the information included in this manual guarantees safety of men, energy serving and a longer duration of product operative-life.

In order to avoid wrong handling and the consequent risk of accidents, it is important to read this manual carefully, keeping scrupulously to guidelines according to the supplied information.

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## CONFORMITY DECLARATION

All the devices of the YACHTICA® system are designed in order to comply the directives:

- DIRETTIVA 2014/35/UE (LVD) / • DIRECTIVE 2014/35/EU (LVD):
  - EN 60335-1:2012+A11:2014
  - EN 60335-2-97:2006+A11:2008+A2:2010+A12:2015
  - EN 62233:2008

• DIRETTIVA 2014/30/UE (EMC) / • DIRECTIVE 2014/30/EU (EMC):

- EN 55014-1:2006+A1:2009+A2:2011
- EN 55014-2:2015
- EN 61000-3-2:2014
- EN 61000-3-3:2013

All the devices of the YACHTICA® system are tested and found to comply with the specification of the CE marking.



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## DESCRIPTION

Tubular motor with electronic limit switch equipped with Yachtica® EasyBUS inlet positioned on the motor head.

All the engine functions can be managed through the Yachtica® Cabot programming software with which it is also possible to guarantee perfect alignment between several engines installed in the same environment. The motor is equipped with clean contacts for direct operation even in case of lack of EasyBUS connection.

The main feature of this motor is its extreme silence and the minimum level of vibration during operation, to ensure maximum acoustic comfort. Thanks to its small size, the motor can be installed even in the tightest spaces and allows for a reduction in wiring from the electrical panel.

The Soft Start and Soft Stop functions are electronically managed and allow speed management based on the position with respect to the limit switches. Prolonged operation without the risk of overheating.

## FEATURES

### **24Vdc Motor power supply**

The motor is powered by the 24Vdc mains voltage. Power supply independent and isolated from the EasyBUS supply.

### **2 Dry contact inputs**

On the head of the roller there is a wiring for driving the motor with dry contacts. It is sufficient for the motor to be powered to use these contacts. The EasyBUS part does not need to be connected, which makes these inputs useful as operation backups. These contacts are also used for programming the motor parameters by the installer.

### **Stand-alone mode**

The motor, if powered, can also work through the clean contacts: it is sufficient for the motor to be powered to use these contacts. The EasyBUS part does not need to be connected, which makes these inputs useful as a backup of the module's operation.

### **Electronic limit switches**

The motor is equipped with electronic limit switches.

### **Encoder**

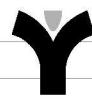
The motor is equipped with an intelligent encoder that allows precise adjustment of the position of the awning.

### **Optoisolation between control electronics and power electronics**

The module electronics and power supply are completely optoisolated, in order to avoid disturbance problems.

### **Detachable terminal block**

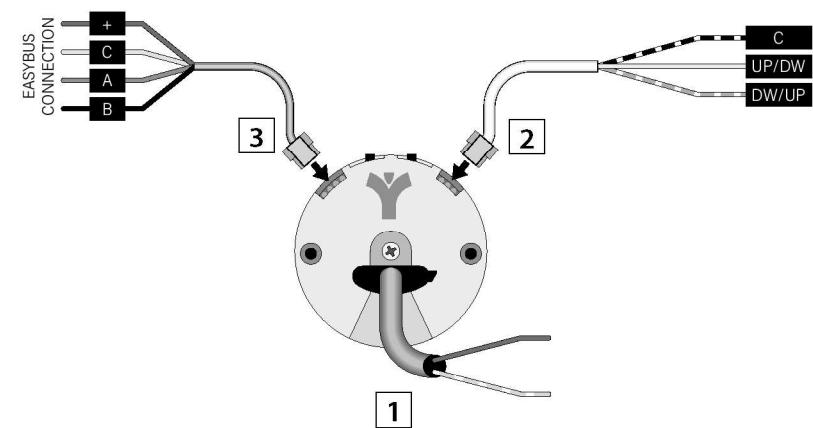
All the terminal block of YACHTICA® modules are detachable, allowing a simple wiring and a quick replacement without the need to disconnect any cable, with a high level of security and stability of the system.



## TECHNICAL SPECIFICATIONS

## MODULE DESCRIPTION

SPECIFICATION	DETAILS
<b>Electronic power supply</b>	20-28V <sub>DC</sub> - Isolated
<b>Electronic requirements</b>	0,36W (15mA@24V <sub>DC</sub> )
<b>Motor power supply</b>	24V <sub>DC</sub> - 50/60Hz
<b>Dry contact inputs</b>	2
<b>Load ratings</b>	2A
<b>Power of motor</b>	50W/70W
<b>Couple</b>	6Nm
<b>Nominal speed</b>	20rpm (50 <sub>DC</sub> ) / 32rpm (70 <sub>DC</sub> )
<b>Noise</b>	35dBA
<b>Weight lifted</b>	22Kg (50 <sub>DC</sub> ) / 18Kg (70 <sub>DC</sub> )
<b>Working temperature</b>	0-60 °C
<b>Dimensions (Length x Diameter)</b>	472x35mm (50 <sub>DC</sub> ) / 486x45mm (70 <sub>DC</sub> )
<b>Weight</b>	1,1 Kg (50 <sub>DC</sub> ) / 1,6 Kg (70 <sub>DC</sub> )
<b>Compliance</b>	CE; N 60335-1:2012+A11:2014; EN60335-2-97:2006+A11:2008+A2:2010+A12:2015; EN62233:2008; EN 55014-1:2006+A1:2009+A2:2011; EN 55014-2:2015; EN 61000-3-2:2014; EN 61000-3-3:2013;





#	CONNECTORS, LED, INDICATORS	DESCRIPTION
1		<p><b>Motor power supply:</b> 2,5mm<sup>2</sup> (12AWG); Power supply connection <b>Red:</b> positive 24V; <b>Black:</b> negative 24V.</p>
2		<p><b>3 poles dry contact connection;</b> - Black/white: common; - White/Orange: clockwise rotation; - White: counterclockwise rotation; (The direction of rotation depends on the motor settings)</p>
3		<p><b>2x2 poles EasyBUS connectors;</b> - Red: positive electronic power supply; - Black: negative electronic power supply; - Blue: BUS A pole; - White: BUS B pole;</p>

## INSTALLATION

### Important notes

The following information are intended for the expert technicians who execute the installation and the extraordinary maintenance of the product. The installation and the maintenance of the module must be executed by qualified technicians, respecting the Norm of the installation country.

The expert technicians must have specific competences and particular abilities in order to carry out correctly and safely their work.

The constant observance of the information included in this manual guarantees safety of men, energy serving and a longer duration of product operative-life. Keep this manual and notes included.

In order to avoid wrong handling and the consequent risk of accidents, it is important to read this manual carefully, keeping scrupulously to guidelines according to the supplied information.

Electrical tension may cause shock and severe burns. Be sure to turn off the electrical supply before carrying out any type of work on the connectors. Omission of observation of these safety measures may cause death or severe lesions to people as well as great material damages.

Before proceeding with the use of the modules, make sure that electric installation, carried out by a qualified technician in conformity with the Technical Norms, corresponding to the class of homologation of the electrical system, is provided with the devices prescribed for the protection against direct and indirect contacts and electrical surcharges.

The modules of the YACHTICA® must be exclusively used in connection with other modules and external components which are conformed to the Norms comparative to the product.

Do not use the module if, upon visual inspection, it shows deterioration of the enclosing box or if the screening wraps of the feeding cables show any wear and tear or damage.

The YACHTICA® system may not be used to carry out safety and accident prevention functions since it does not have the redundancy requirements lawfully requested.

The installer must verify the correct installation and operation of the product.  
It is prohibited to use the product for improper purposes or purposes different from those provided

V.Y.C. Srl shall not be held liable for any damage of any sort or kind in case of module used or installed incorrectly.

It is prohibited to tamper or to modify the product.



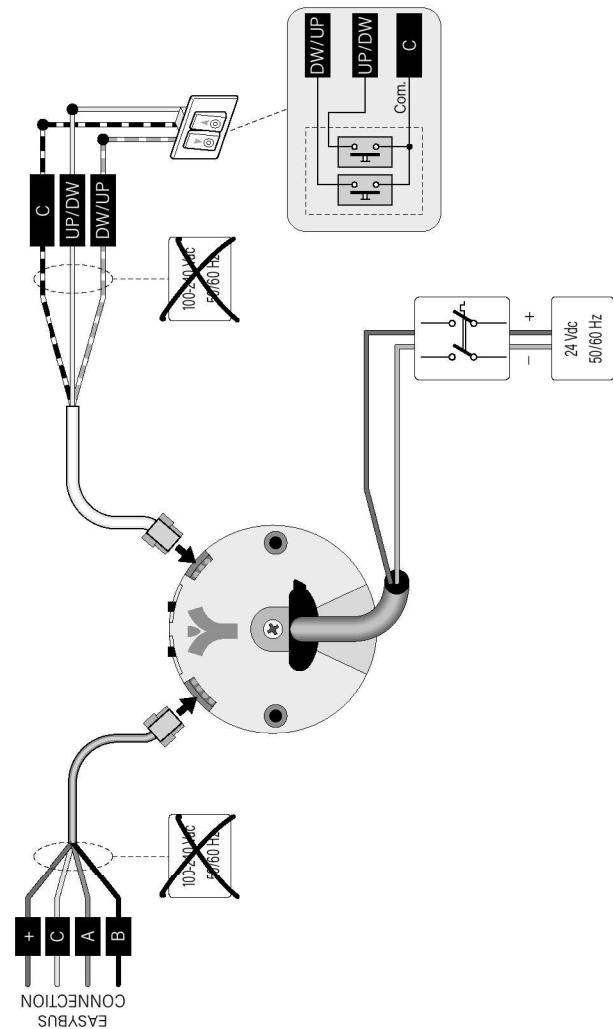
## WIRING DIAGRAM

**Before starting**

Always interrupt the power supply of the electronics and outputs before making any type of electrical connection on the module.

**WARNING:** we suggest the use of a dedicated stabilized power supply for powering the electronics of all the modules inside an electrical panel.

**WARNING:** For the assembly of the motor inside a curtain tube, it is necessary to contact a company specialized in the production of curtain rollers. Yachtica only supplies the roller motor.





## PROGRAMMING

**Programming with Cabot**

The module can be programmed using the YACHTICA® software Cabot. Read the manual of the software for all the information needed about Cabot and the module programming.

For programming examples surf the link [www.yachtica.com](http://www.yachtica.com)

For advanced programming requested contact YACHTICA® technical department if needed.

## TROUBLESHOOTING

PROBLEMA	POSSIBILI CAUSE	POSSIBILI SOLUZIONI
<b>Module does not switch on</b>	The module doesn't receive power supply on the electronic power supply connector	Check that dedicated power supply is working properly, providing right output voltage according to the specifications written in this manual.
	Positive and negative cabling poles inverted	Check that dedicated power supply positive and negative poles are connected in the right way.
<b>The module is powered on but the motor does not move</b>	The motor is not receiving power	Check that the motor is powered.
	The engine electronics are not powered	Check that the motor electronics are powered correctly.
	Dry contact cable interrupted (if installed)	Check that the dry contact cable is correctly wired according to the indicated polarity

**REPAIR AND WARRANTY POLICIES****NOTE****Merchandise returns**

No V.Y.C. Srl merchandise may be returned for credit, exchange or service without prior authorization from V.Y.C. Srl. To obtain warranty service for V.Y.C. Srl products, contact V.Y.C. Srl or an authorized dealer. Request for an RMA (Return Merchandise Authorization) and fill it in properly all the fields, before returning the module. Shipments arriving freight collect or without RMA number shall be subject to refusal.

Return freight charges following repair of items under warranty shall be paid by V.Y.C. Srl, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser. V.Y.C. Srl will provide repairing costs in case the merchandise is not under warranty.

**V.Y.C. Srl limited warranty**

V.Y.C. Srl warrants YACHTICA® products to be free from manufacturing defects in materials and workmanship under normal use for a period of 2 years from the date of purchase.

This warranty extends to products purchased directly from V.Y.C. Srl or an authorized YACHTICA® dealer.

V.Y.C. Srl shall not be liable to honor the terms of warranty if the product has been used in any application other than that for which it was intended or if it has been subject to misuse, accidental damage, modification or improper installation procedures.

Furthermore, this warranty does not cover any products that has had the warranty void label altered, defaced or removed.

V.Y.C. Srl shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, V.Y.C. Srl makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty.

This warranty statement supersedes all previous warranties.



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