

Cable reels presentation

All ECODORA cable reels rewind automatically and are equipped with a spring tested for tens of thousands of cycles which ensure a constant force. They are sturdy, compact, easy to position and removable. They allow managing with extreme ease and safety electrical cables of various sizes and cross sections ensuring a tidy and safe work environment.

All models are equipped with:

- ▶ Rewinding spring.
- ▶ Cable stop rack work.
- ▶ Protective shell in shockproof material.
- ▶ Cable guide with rollers.
- ▶ Fixing bracket.
- ▶ System for the manual reset of electrical power (to prevent damage from eventual overloads) with rewinded cable.
- ▶ Inlet cable for connection to the mains.

Accessories

Each model of ECODORA cable reels is customizable with the following accessories: Fixing bracket with "bayonet" coupler, protection cap, rewinding' clutch.

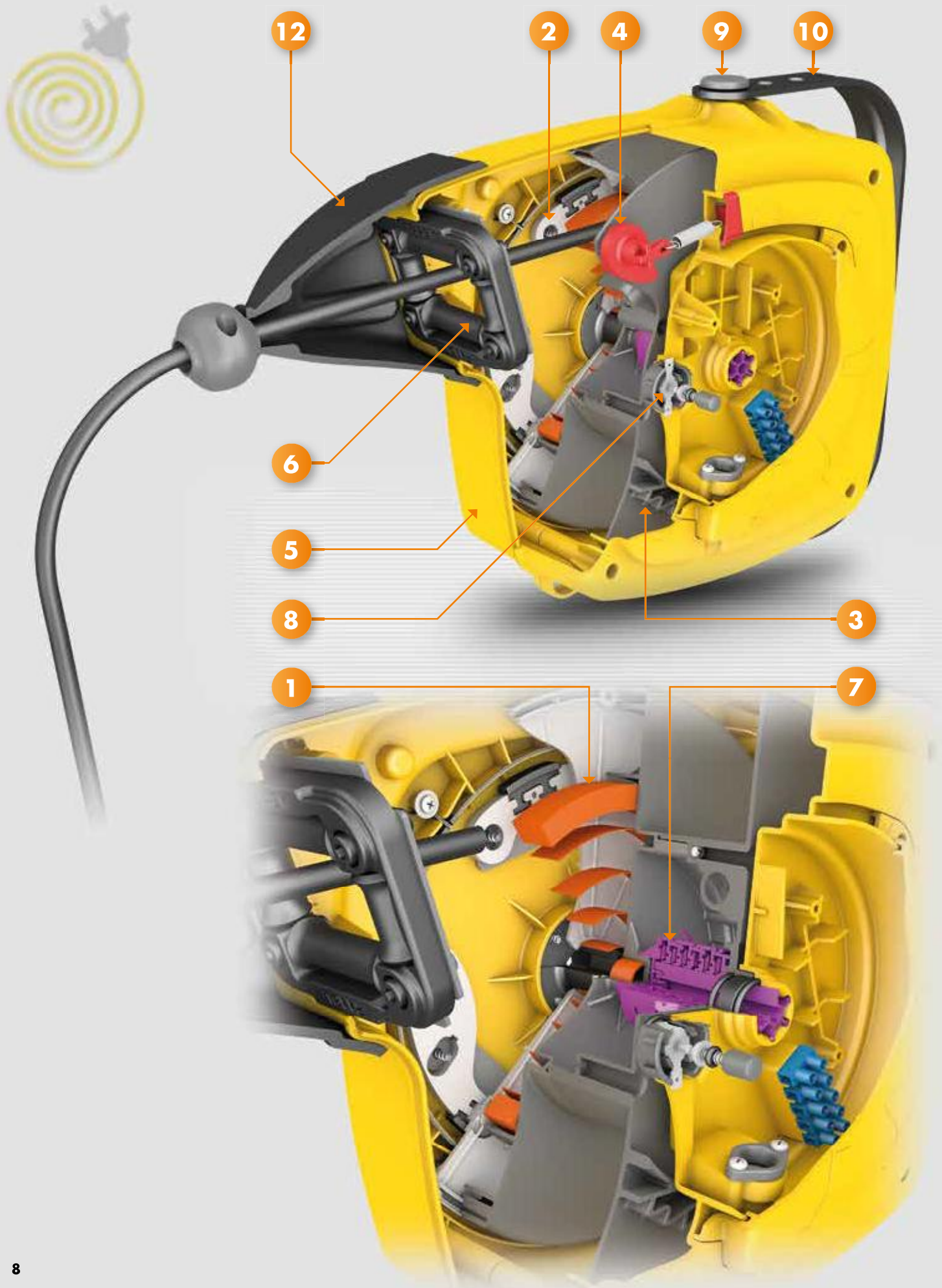


ADVANTAGES

- ▶ Electric collector designed for better performances also with high currents.
- ▶ Thermal protector against overheating of the rewinded cable mounted in all the models.
- ▶ IP44 protection degree provided for all the electrical parts.
- ▶ Spring tested for more than 10 working years with the possibility to easily adjust the rewinding force.
- ▶ Cable guide with rollers equipped with 4 rollers in each model designed to save the work life of the cable.
- ▶ Different options for different needs: rewinding clutch, bayonet bracket and protection cap.



CABLE REELS



Technical characteristics



1 SPRING

Rewinding spring totally protected from the external environment. The spring is subjected to a durability test of 20000 cycles (each cycle corresponds to the complete unwinding and rewinding of the cable) thus simulating an average life of over 10 years. Possibility to intervene to adjust the spring force increasing or decreasing the preload.

2 REWINDING CLUTCH

Optional, devoid of complex and potentially wearing kinematic motions, allows the rewinding of the drum at a safe speed.

3 STOPPING RACK

It has an increased width and reinforcement ribs ensuring greater durability and sturdiness. It offers the possibility to block the cable every 0.5 m. allowing the unwinding of the desired length.

4 PAWL

Easy to remove, of increased thickness with reinforcing ribs ensuring high stress resistance and durability.

5 STRUCTURE

Strong and compact made in shockproof material of high mechanical resistance designed to withstand over time.

6 CABLE GUIDE WITH ROLLERS

Sturdy and resistant with reinforced steel interior. Wide width which allows guiding the cable properly for correct rewind. Equipped with 4 rollers, 2 arranged horizontally (above and below) and 2 arranged vertically (left and right) that reduce cable wear.

7 ELECTRIC COLLECTOR

Replaceable in one single piece, it has sliding contacts each provided with 3 sliding lines to reduce the electrical resistance and the heating during operation. Equipped with double earth contact.

8 THERMAL PROTECTOR

Safety system against overheating of the rewinded cable.

9 SIDE CLUTCH

The bracket is equipped with a special clutch which controls the rotation speed on the right and on the left of the cable reels.

10 ADJUSTABLE BRACKET

Adjustable up to 90 ° per side, constructed with sturdy structure, with fixing slotted holes that facilitate wall mounting.

11 BAYONET BRACKET

A bracket with bayonet type quick coupling is available on request: it allows an easier movement of the cable reeler in the various workstations.

12 PROTECTION CAP

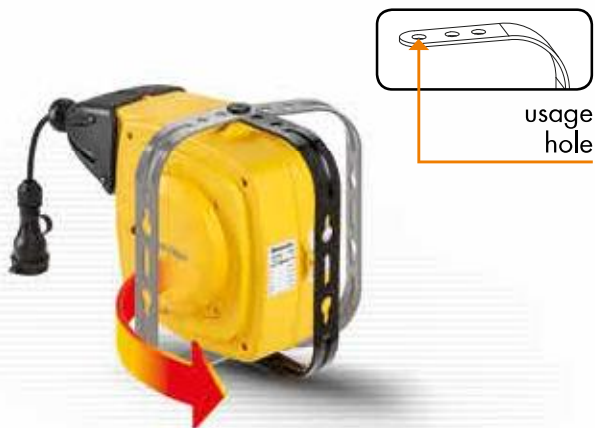
In NBR synthetic rubber, it protects the cable reels from accidental entrance of foreign bodies through the cable guide.

USE OF ADJUSTABLE BRACKET

POSITION 1

The adjustable bracket of the cable reels may assume various positions:

The **position 1** is particularly suitable for "single" installation on the wall or ceiling. This position allows the rotation of the cable reels around the central axis supported by the bracket, allowing maximum flexibility to the operator in the use of the cable in all directions.



POSITION 2

The **position 2** is suitable for installation of the cable reels "in series" (ceiling wall / floor or bench) because the rotation is blocked by the bracket that creates an interlocking with the guards of the cable reels.

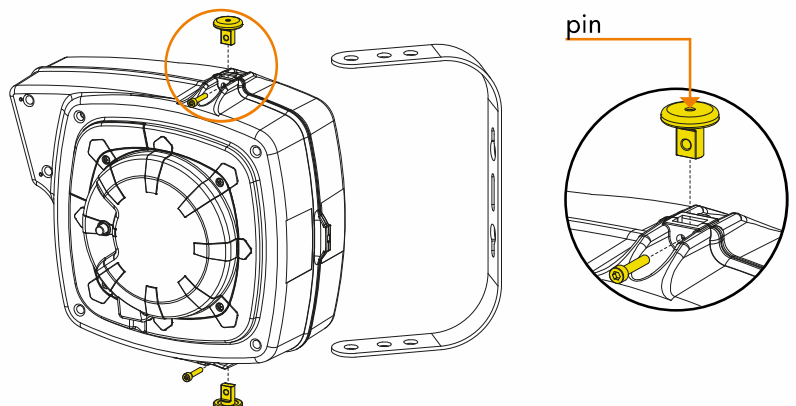


POSITION 3

The **position 3** is suitable for specific installation schemes, that is when the pulling and exit direction of the cable is parallel to the wall where the cable reels is installed.



In order to pass from an installation position to another it is necessary to remove the bracket.



ACCESSORIES

REWINDING CLUTCH

Cable reels series 280 and series 290 can be equipped with a brake acting while rewinding the cable. This accessory limits the maximum rotation speed making secure even accidental and uncontrolled rewinding. The version with the clutch, is distinguished from the

“SPEED CONTROL” plate



PROTECTION CAP

P/N **OE728115**

The **protection cap** of the cable guide, made of flexible black rubber, **prevents accidental entry of foreign bodies** and ensures to the cable reeler the IP45 protection degree.

On request it can be mounted on the cable reel you want to purchase using the appropriate customized code, see the following pages.



For a correct use during the rewinding phase, is important to align the cable with the protection cap's axis.



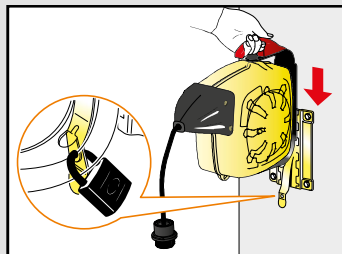
BAYONET BRACKET

P/N **260/03**

A bracket with bayonet type quick coupling is **available on request**: (provided with wall bracket P/N 260/01), it allows an easier movement of the cable reels in the various workstations.

P/N **260/01**

Wall bracket, to be bought **separately** in case you want to create multiple points for fitting the cable reels provided with bayonet bracket.



To prevent removal or theft of the cable reels it is possible to secure it with a bolt or a lock.

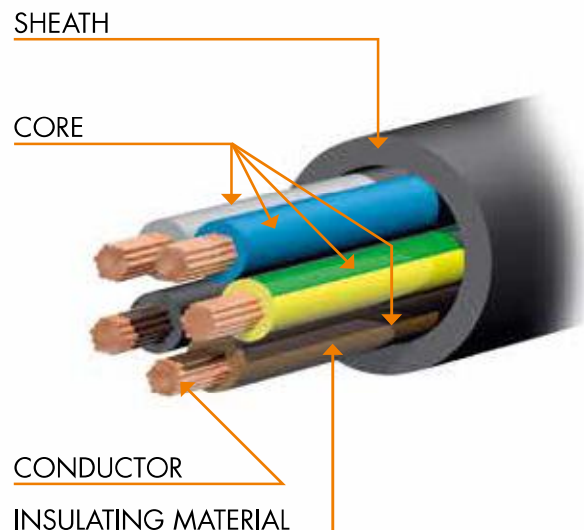


ELECTRICAL CABLES

The denomination “**electrical cable**” indicates a **conductor uniformly insulated or a set of insulated conductors**, each from the others and towards the outside, combined into a single complex complete with protection covering.

THE CABLE IS MADE OF SEVERAL PARTS:

- ▶ The **metallic part** for conducting the current consists of a single wire or several stranded wires and their conductor.
- ▶ A layer of **insulating material** surrounds the conductor.
- ▶ The set of the conductor and its isolation constitutes the cable **core**; each cable may have more cores.
- ▶ The **sheath** has a protective function of the cable cores. The sheath in general is always in insulating material.



TECHNICAL TABLE READING GUIDE

NUMBER OF CONDUCTORS	Number of conductors uniformly insulated that make up the cross section of the electrical cable.
CONDUCTOR'S CROSS SECTION	Area (in mm ²) of the cross section of each conductor.
TYPE OF INSULATING MATERIAL	The type of material (e.g. PVC, natural rubber) acts as a protective covering to the conductor with mechanical or chemical protection function.

The following guidelines have been extracted from the Standard CEI 20-27

EXAMPLE OF POWER CABLE DESIGNATION



Number of conductors and conductor cross section (in mm²)

2 x 1 2 Conductors cable, cross section 1 mm²

3G x 1 3 Conductors, cross section 1 mm² each, one of them with yellow-green insulation

4G x 1 4 Conductors, cross section 1 mm² each, one of them with yellow-green insulation

5G x 1 5 Conductors, cross section 1 mm² each, one of them with yellow-green insulation

Reference Standards

H Cable conforming to Harmonized standards CENELEC (HD 22.4 S2)

A Cable of national type approved and listed in the supplements to the Harmonized standards CENELEC

xx - N Other type of national cable

Voltage rating

03 Rated insulation voltage $U_0/U = 300/300$ V

05 Rated insulation voltage $U_0/U = 300/500$ V

07 Rated insulation voltage $U_0/U = 450/750$ V

1 Rated insulation voltage $U_0/U = 0,6/1$ KV

Insulation material

B Ethylene propylene rubber

B3 Butyl rubber

J Braided fiberglass

M Mineral

N Polychloroprene (or equivalent material)

R Natural rubber or styrene-butadiene rubber

S Silicone rubber

V Polyvinyl chloride (PVC) commonly used

X Cross-linked polyethylene

Non-metallic sheath

B Ethylene propylene rubber

B3 Butyl rubber

J Braided fiberglass

M Mineral

N Polychloroprene (or equivalent material)

R Natural rubber or styrene-butadiene rubber

S Silicon rubber

V Polyvinyl chloride (PVC) commonly used

X Cross-linked polyethylene

Conductor form

F Flexible conductor of a flexible cable for mobile service

H Highly flexible conductor of a flexible cable for mobile service

K Flexible conductor of a cable for fixed installation

R Rigid conductor, round, stringed

S Rigid conductor, sectorial, stringed

U Rigid conductor, round, single-wire



CONSTRUCTION SITE



Examples of application sectors

ECODORA has produced a wide range of industrial cable reels that can meet the most complex and demanding requests for use fields such as industry, agriculture, petrochemical, mining, aeronautics, shipbuilding, fire departments, automotive, construction, etc.

WINERIES AND WINE COMPANIES

