

CABLE REEL

L03K

LF3K

INSTRUCTION MANUAL

INSTALLATION

OPERATION

MAINTENANCE

SPARE PARTS

"EC " DECLARATION OF CONFORMITY
(Only for reels with ratchet)

INSTALLATION

DELIVERY

The extension open spring reel type 3 (LO3K) is delivered with a standard support bracket for wall or ceiling mounting.

The ratchet mechanism operates in these 2 positions.

An optional swivelling bracket may also be fitted, allowing the wall mounting operation only.

The extension enclosed spring reel type 3 (LF3K) is delivered with a standard swivelling bracket for wall mounting only.

INSTALLATION INSTRUCTIONS

- The extension spring reel shall be installed at max. 2,5 m from the ground for wall operation.
- For ceiling mounting, the length of cable to be wound shall be taken into consideration.
- Mounting by means of bolts on the support bracket or swivel of the open type LO3K and by means of bolts on the swivelling bracket of the enclosed type LF3K.
- Check that the axis of the spool is perfectly horizontal.
- Check that the axis of cable when unwinding is perpendicular to the axis of the spool.
- Connect the cable end to your main supply ; flexible cable shall be used.

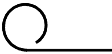

BEFORE THE FIRST OPERATION

- Check that the extension spring reel is compatible with your APPLICATION, with a particular emphasis on the cable core section ; the cable shall be able to withstand your current requirement.
- Check that your electrical installation is fitted with a proper safety device.
- Every operator of the extension spring reel shall be instructed accordingly beforehand.

OPERATION

This equipment is not to be used in EXplosive ATmospheres (ATEX) in accordance with the definition in directive 1999/92/CE dated 16 december 1999.

USE WITH MAXIMUM VOLTAGE 400 V ~ / IP 55

Type of cable	Section		
HO7 RNF	2x1,5 - 3G1,5	22 A	16 A (3130 Watts with 230V)
HO7 RNF	4G1,5 - 5G1,5	22 A	16 A (9400 Watts with 400V Tri)
HO7 RNF	2x2,5 - 3G2,5	30 A	24 A (4692 Watts with 230V)
HO7 RNF	4G2,5 - 5G2,5	30 A	24 A (14000 Watts with 400V Tri)

OPERATION OF THE RATCHET MECHANISM

When unwinding the cable, the ratchet hook is in contact with the ratchet toothed wheel, thus generating a specific noise.

In this position, you may release the cable and the ratchet is on, the cable is unwound at the required length.

To release the ratchet and allow the winding of the cable, pull on the cable to free the hook from the toothed wheel ; you may then rewind the cable smoothly.

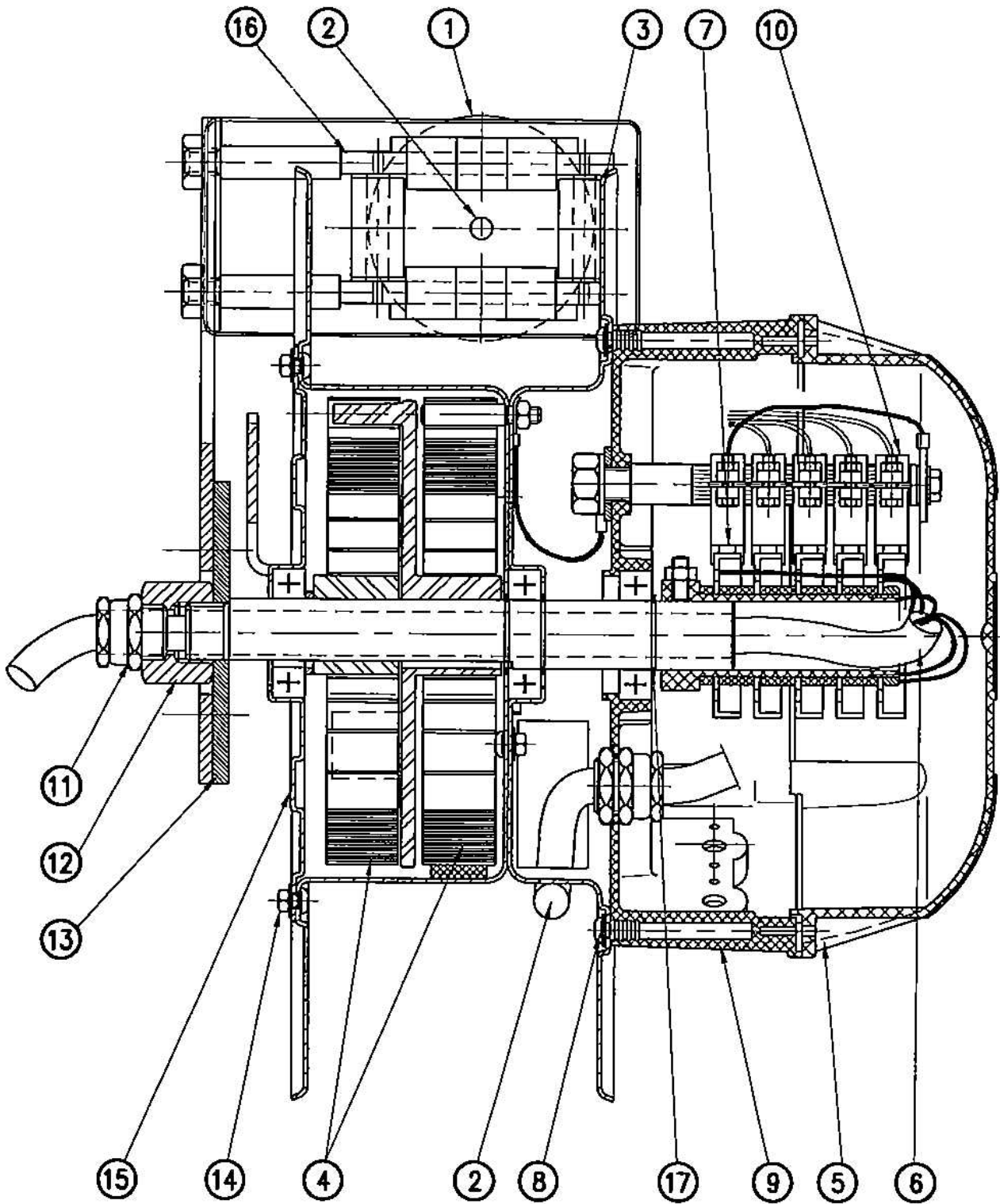
THE CABLE SHALL BE HELD BY HAND AT ANY TIME OF REWINDING TO PREVENT INCIDENTS AND / OR DAMAGE TO THE SPRING REEL . DO NOT RELEASE THE CABLE WHEN THE RATCHET HOOK IS NOT IN CONTACT WITH THE RATCHET WHEEL.

If your extension spring reel is fitted with a thermal overload protection : after dripping, wait for 10 minutes before re-switching on the red button located on the black plastic cover.

MAINTENANCE

BEFORE ANY MAINTENANCE :

1. SWITCH OFF THE POWER ON THE SPRING REEL



- SPRING REEL LO 3K -

View with 2 springs

LO3K

2. Remove the cable stopper pos. 1 on the cable pos. 2 while holding the drum pos.3; let the drum wind freely while holding it until unbending of the springs pos. 4.
3. Remove the slip ring cover pos. 5.

SLIPRINGS : Every 2000 hours operation :

4. If the rings are marked, slightly worn or dirty, polish them with a grade 230 sand paper.
5. Clean the insulation rings.
6. Remove the dust if necessary.
7. Check the surface of the rings, the wear of the carbon brushes, the tension of the springs and the position of the brush holders on the rings.

REPLACING THE CABLE

4. Disconnect the cables pos. 2 and pos. 6
5. Remove the slip ring assembly pos. 7.
6. Remove the screws pos. 8 and the circlips pos. 17
7. Remove the connection box pos. 9.
8. Remove the old cable pos. 2 while noting the winding direction.
9. Remove 10 cm of cable outer sheathing and core sheathing on 5 mm on the new cable.
10. Wind the new cable manually on the spool while holding the spool on a fixed position. The new cable shall be wound in the same winding direction as the old cable ; the cable end without sheathing is for the connection to the brush holders.
11. Re-assemble the connection box pos. 9 with the screws pos. 8.
12. Re-assemble the slip ring assembly pos. 7 on the brush holders pos. 10 and tighten the assembly.
13. Re-connect the cable pos. 6.

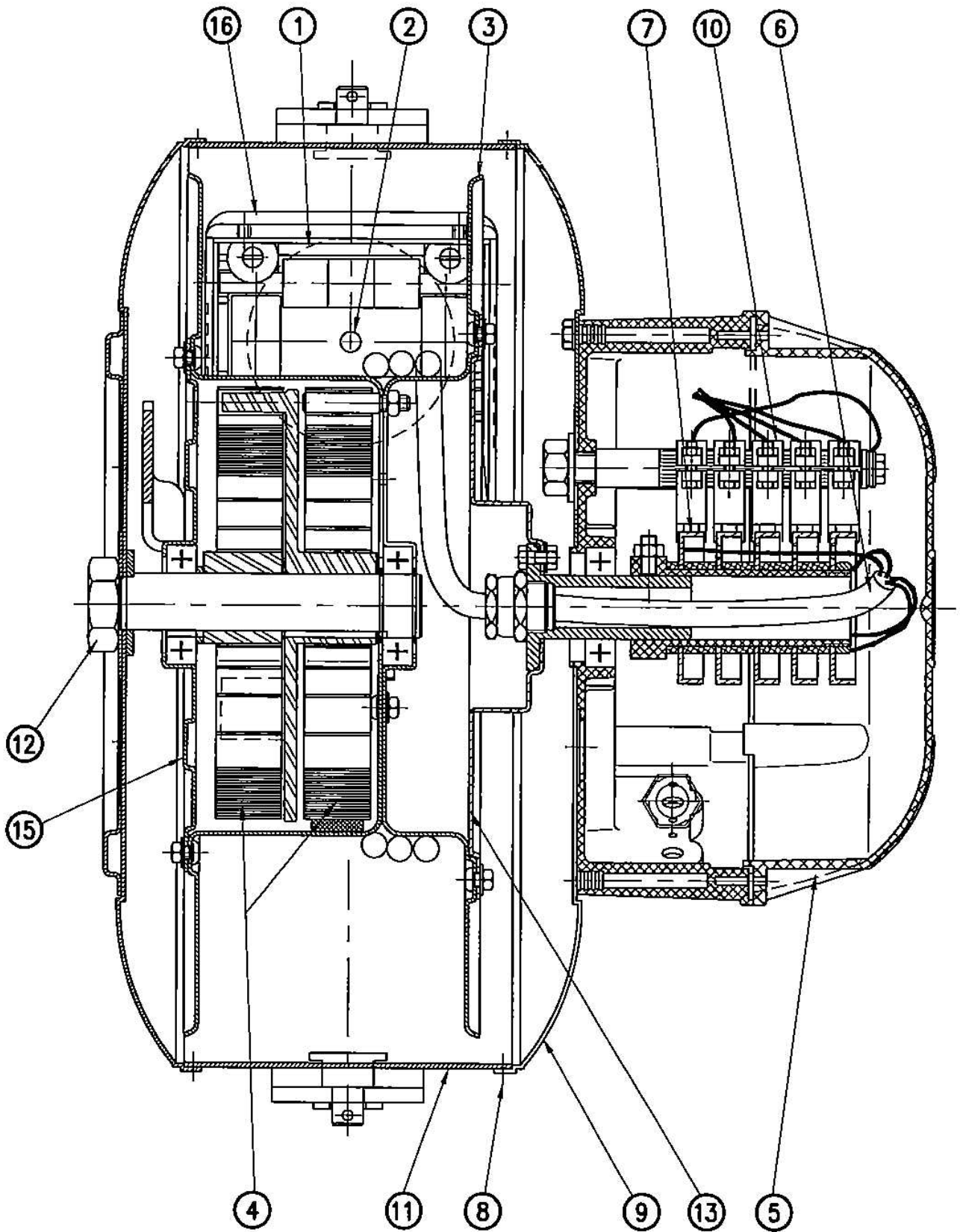
Follow then instructions 15 to 19.

REPLACING THE SPRINGS

4. Disconnect the cable pos. 6 from the slip ring assembly and remove it from the shaft.
5. Remove the cable gland pos. 11 and bolt pos. 12.
6. Remove the drum pos. 3 from its support pos. 13.
7. Remove screws pos. 14 from flange pos. 15.
8. Remove flange pos. 15.
9. Carefully remove the 1 or 2 springs pos. 4 while noting the hooking direction of the springs.
10. Install the 1 or 2 new springs in the same direction as the old springs.
11. Re-assemble the flange pos. 15 and the screws pos. 14.
12. Re-install the drum pos. 3 on its support pos. 13.
13. Screw the bolt pos. 12 and the cable gland pos. 11.
14. Fit the cable pos. 6 into the shaft and re-connect it to the slip ring assembly pos.7.

Follow then instructions 15 to 19.

15. Re-install the slip ring cover pos. 5.
16. Bend the spring(s) pos. 4 by turning the drum pos. 3 at least 2 times in the unwinding direction, while holding the cable tight on the drum.
17. Insert the cable pos. 2 through the roller guide pos. 16.
18. Tighten the cable stopper pos. 1 on cable pos. 2.
19. Switch on power before operation.



- SPRING REEL LF 3K -

View with 2 springs

LF 3 K

2. Remove the slip ring cover pos. 5.
3. Disconnect the cables pos. 2 and pos. 6.
4. Remove the slip ring assembly pos. 7
5. Remove the self threading screws pos. 8 that hold the cover pos. 9 on the housing pos. 11
6. Remove the flange pos. 13
7. Remove the cable stopper pos. 1 on the cable pos. 2 while holding the drum pos. 3; let the drum wind freely while holding it until complete unbending of the springs pos.4.
8. Remove the central bolt pos. 12
9. Remove the drum pos. 3.

REPLACING THE CABLE

10. Remove the old cable pos. 2 while noting the winding direction.
11. Remove 10 cm of cable outer sheathing and core sheathing on 5 mm on the new cable.
12. Wind the new cable manually on the spool while holding the spool on a fixed position. The new cable shall be wound in the same winding direction as the old cable ; the cable end without sheathing is for the connection to the brush holders.

Follow then instructions 14 to 24.

REPLACING THE SPRINGS

10. Remove flange pos. 15. from drum pos. 3.
11. Carefully remove the 1 or 2 springs pos. 4 while noting the hooking direction of the springs.
12. Install the 1 or 2 new springs in the same direction as the old springs.
13. Re-assemble the flange pos. 15 on the drum pos. 3.

Follow then instructions 14 to 24.

14. Insert the drum pos. 3 in the housing pos. 11.
15. Tighten the central bolt pos. 12.
16. Bend the spring(s) pos. 4 by turning the drum pos. 3 at least 2 times in the unwinding direction, while holding the cable tight on the drum.
17. Insert the cable pos. 2 through the roller box pos. 16. on the housing pos. 11.
18. Tighten the cable stopper pos. 1 on cable pos. 2.
19. Re-assemble the cover pos. 9 on the housing pos. 11.
20. Tighten the self threading screws pos. 8.
21. Re-assemble the slip ring assembly pos. 7 on the brush holders pos. 10 and tighten the assembly.
22. Re-connect the cables pos. 2 and pos. 6.
23. Re-assemble the slip ring cover pos. 5.
24. Switch on power before operation.

PIECES DE RECHANGE

(The other components are available on request, please notify the serial n° in any enquiry).

For types LO3K and LF3K

- Spring(s)

TYPE	NUMBER	REFERENCE
LO3K.1S LF3K.1S	1	43R45015
LO3K.2S / LO3K.2P LF3K.2S / LF3K.2P	2	43R45015
LO3K.1RL LF3K.1RL	1	43R45028

- 1 ratchet spring ref. 43R45009
- 1 ratched wheel ref. 33R60001
- 1 ratched ref. 43C52006
- 1 length of flexible cable
- * phase brush holder 12x8 ref. 43P70002 (without thermal overload protection)
- * phase brush holder 12x8 (for thermal overload protection)
- * earth brush holder ref 43P70003
- 1 slip ring assembly Diam. 60 2 + earth or 3 + earth (according to type)
- * thermal overload protection (according to type)

* Quantity depends on type of extension reel

"EC" DECLARATION OF CONFORMITY (*)

The undersigned manufacturer :

Sté DELACHAUX - 30 Avenue Brillat Savarin - 01300 Belley - FRANCE

declares that the original equipment referred to below :

LO3K / LF3K

is in conformity with the regulations defined in the European directive 98/37/CE.

Place : Belley

Date : 28/04/03

Name and position of Signatory :

B. FONTENEAU
Industrialization and research department manager
ENERGY Division

Signature :

(*) Only for reels with ratchet.