



Fixing instructions and directions

for use of

ELECTRIC POWERED CONCERTINA

electric motor OMEGADRIVE



Important documents! Please keep them casefully!

F885-91451 // 02.02.2018 / RS

1





2



Fixing from electric parts and laying of cables for concertina ladder

Fixing of hatchbox – see details in separate instruction (F885-91375)

On format – DD see installation instructions concertina ladder DD (F885-91647)

Fixing of telescopic handrail (F885-91051)

Please read this guide carefully before fixing and follow the instructions given

<u>Caution</u>: Please make sure that only authorized persons work on electric controller and cable connections. Make sure that is no voltage on electric controller and electric motor. Before you install the switches or the smoke warner please remove the power plug. It must be sure that is no voltage on every electric part.

- ♦ The use of the stairway is only allowed with Totmann wiring! That means, that you can only move the stairway if you press the switch.
- Make sure that is no strange voltage on plugs and electric contoller.
- Do not use the stairway if persons or things are in the operating space or on the stairway.
- It is only allowed to use the stairway if the trapdoor is completely open and the linkage stands in end position. Make sure that the stairway is standing savely on the ground.
- ♦ Each changing of the product or using improperly makes you loose any guaranty of the producer

Cables are not included in the delivery.

- 1. All operation parts must be installed outside from operating space but in sight of the stairway.
- 2. If you need it, install necessary cables in your building.
- 3. Please see details for fixing from concertina ladder in fixing instructions for concertina ladders, loft ladders and guard rail
- 4. **Install steering case and distributor box**. Remove test cable "2 –pole" between the distributor box on the back board (like drawing) and the steering case. Replace the test cable trough the cable in your building NYM 3 x 1,5 mm² plug "2 pole" (like "wiring diagram").
- 5. **Install switch above 1** (switch over or under plasterwork) **and steering case** with the shielded cable in your building J-Y St Y2x2x0,6 mm² with plug "6- pole". Fix each switch with 3 electric conductors. **Install switch below 2**. Same procedure like switch 1
- 6. Press switch and open the trapdoor till the stairway is standing savely on the ground. The linkage must being in it's end position. Support with screw (pos. 12) the operating arm (pos. 8) and secure the operating arm with a nut (pos. 13). Please take a look at adjustment of stop screw in "fixing instructions for concertina ladders, loft ladders and guard rail".

Special parts (please take a look at the included instuctions for using)

7. Infrared remote control

"IR hand transmitter ViF/CM6 with reduced range; IR-booster PA38333."

8. **Install IR- booster 1** (receiver under plasterwork) **and steering case** with shielded cable J-Y (St) Y 2x2x0,6 mm² plug "3-pole", (like "wiring diagram").

Install IR- booster 2. Fit cables IR- booster 1 and IR- booster 2 together (like "wiring diagram").

If you refit a infrared remote control you can use the cables from the installed switches. Install the cables on plug for booster at the steering case with plug "3-pole".

9. Smoke warner

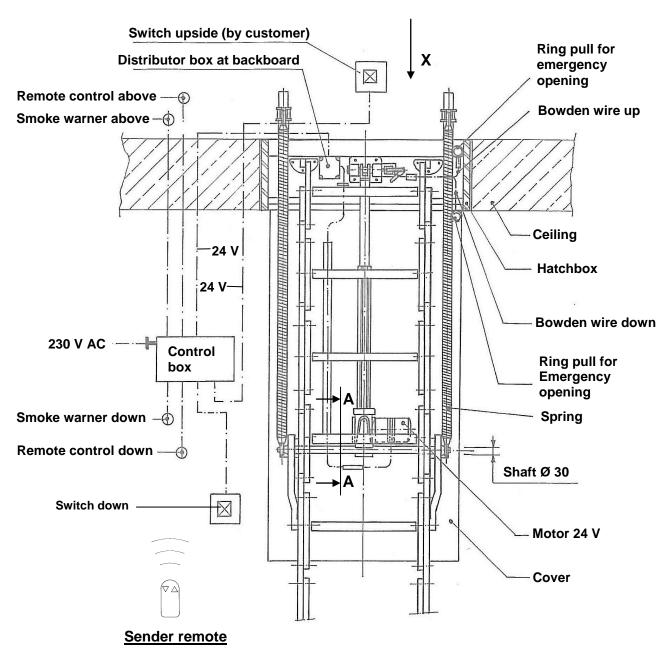
Install type 1 smoke warner and steering case with the necessary cable in your building YR 2x0,8 mm² with "4- pole" plug. Fix each smoke warner with 2 electric conductors (*like "wiring diagram*").

Install type 2 smoke warner. Same procedure like type 1.





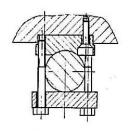
Scheme for electrically operated stair



Detail X

Emergency opening

Slice A - A



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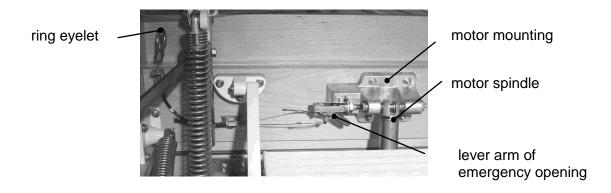


Owners manual for electricly operated concertina ladders



<u>Caution</u>: Please make sure that only authorized persons work on electric steering, laying of cables and cable connections.

- 1. The steering equipment from the stairway is a micro processing unit. The voltage is 24 V. The micro processing unit make a automatic break if you have a higher voltage. You can handle the stairway with the fixed switch (Totmann wiring), the infrared remote control or a external smoke warner.
- 2. If you have a power failure the steering stwitchs over to Akku. You can use the stairway with the Akku ca. fifteen times. The life time from the Akku is ca. 4 5 years. Please proof the Akku in regular interval. You can see the condition from the Akku on the LED lights from the steering case. Caution! If you change the Akku please look for the correct pole a wrong installation destroy the Akku and the board. You loose the guaranty of the producer. You can open the stairway by hand if you have no voltage.
 - a) From below: if you pull the ring eyelet you open the motor shaft in the motor mounting. Pull down the trapdoor with the operating stick and move the stairway by hand.
 - b) From above: re-lay the lever arm of the emergency opening or pull the ring eyelet above. The motor shaft is open. Press down the trapdoor (stairway) safely with a operating stick.



Emergency opening by power failure – handling from above and from below.

If you have open the stairway by hand you must fix the motor shaft in the motor mounting. Drive up the motor spindle electrically, till you can fix the motor spindle in the motor mounting. Put round the lever arm of emergency opening till stop point. Please make sure that the lever arm of emergency opening is in end position. Caution! The spindle from the motor can slide outside from the motor mounting. The motor can be damaged.

The emergency opening is ready for use again.





3. You can handle electricly operated stairways by hand if the motor is not fixed in the motor mounting. Please drive the motor spindle down and fix the motor on the trapdoor. Please make sure that the motor can not swing out or remove the motor complete. Please make sure that the motor get no damage.

Remove electric motor:

- Remove cables from the motor
- Trigger emergency opening
- Remove motor bearing on shaft of stairway. Please remove two cylinder screws M 6 x 30 DIN 912 with a wrange
- Remove motor complete

Install electric motor:

- Fix the motor bearing slack (you can move it with the hand)
- Drive the motor spindle up and and fix it in the motor mounting
- Please make sure that the motor bearing is rectangular and tighten the screws (max. Ma = 6 Nm)
- Fix the cables
- 3. If you have fire in your building you can close the stairway automaticly with a smoke warner. If persons must use the stairway after the trapdoor is closed by a signal from the smoke warner, it is possible with a infrared control or a switch. If you open the trapdoor by hand and the smoke warner is active, the trapdoor will be closed automaticly after one minute. This process repeats five times. If there is no signal from the smoke warner you must press the reset button at the steering case. (The red LED light for smoke warner goes out).

 The steering from the stairway over a smoke warner is accompanied by a acustic signal, the

The steering from the stairway over a smoke warner is accompanied by a acustic signal, the acustic signal goes out if the smoke warner is not active. Please notice that the smoke warner have a 9 V battery inside. You must proof this battery all 3 - 4 years. You can fix the steering case at different places – please make sure that the steering case and the cables are protected against fire, too.

4. Maintenance:

- The motor and the steering is maintenance free. (not the Akku in the steering and the battery from the smoke warner)
- Oil all mechanical and turning parts from the scissor stair. Proof this parts every year (worn out parts).
- Proof the tight from screws and nuts at the latest every two years





Diodes of the control box and their function

Reset button press if control unit was activated by signal (e.g. battery empty

or smoke warner) to go back to original status

shows that control box is connected to 230V AC working

Green LED

Charging Battreies are being charged

Yellow LED

Battery full Green LED Battery is charged

Battery empty Red LED on for 1 minute for empty battery

blinks for defect battery

Smoke warner shows activation.

Red LED Press reset button to reset into original status

Smoke warner	Battery empty	Battery full	Charging	230 V AC connect	Original status
0		۵	•	۵	Connected to 230 V AC Battery full
0			ם	ם	Connected to 230 V AC Battery full Batteries being charged
0		ם			No connection to 230 V AC Batteries full
0	ם				No connection to 230 V AC, Batteries almost empty
0	•	•			No connection to 230 V AC, Batteries empty
0	•			0	Batteries or fuse defect
ם	0	0	0	0	Activation

Legend: **LED off**

> LED on ם

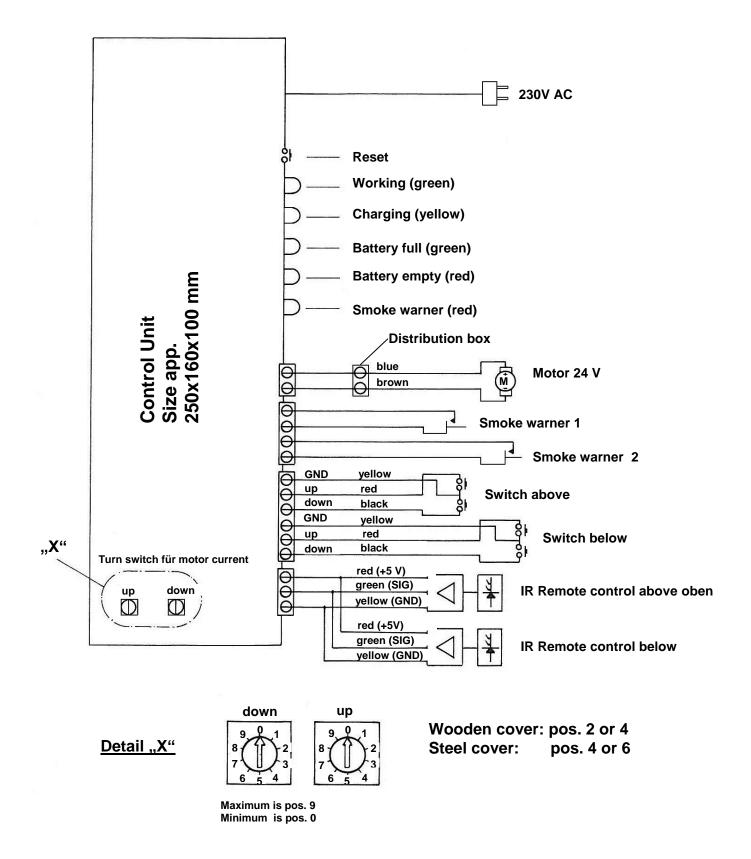
LED blinks

LED off or on





Wiring plan for elektrically operated stair







EC - Concurring Declaration according to EC Machinery Directive 98/37/EC

We herewith declare 1), Columbus Treppen Gutenbergstr. 21

86356 Neusäss

the following described machine in the version we deliver complies with the appropriate basic safety and health requirement of the EC Machinery Directive 89/392/EC based on its design and type, as brought into circulation by us. In case of alteration of the machine, not agreed upon by us, this declaration will lose validity.

Description: Concertina ladder with electric motor

Machine type: Concertina ladder

Serial number: as per order

Applicable EC directives: EC Machinery Directive (98/37/EC)

EC Low Voltage Directive (73/23/EC)
EC Directive of Electromagnetic Compability (89/336/EC)

Applicable harmonized standards 2)

EN ISO 12100-1:2004 EN ISO 12100-2:2004 DIN EN 60204-1:1998

Place / date:

b Signature:

Columbus

BESSER DURCHDACHT, PERFEKT GEMACHT. Stamp:

Columbus Treppen GmbH

Gutenbergstraße 21 // 86356 Neusäß Tel. +49 821 48051-0 // Fax 45051-61

Archives

Order number

Please write in printed letters or with a typewriter Please write in official language of customers country Signature from suppliers representative

- 1) Name and address of manufacturer or his representative in the community
- 2) Complete list of all used standards and specifications

COLUMBUS Treppen GmbH Gutenbergstr. 21 D-86344 Neusäß

Sitz der Gesellschaft:

Geschäftsführer

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Registergericht: Augsburg HRB 6653 USI-IdNr DE127476066 Steuernr.: 102 / 123 / 60002

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