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CONVEYOR BELT

Mini-Maxi 2006
3 M – 115 V

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EC Declaration of Conformance of a machine with the machine directive (98/37/EC, amended by 98/79/EC) and the prescriptions for its transposition into national law

The manufacturer **ETRAMO bvba**
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Belgium

States and declares herein that the following machine :

CONVEYOR BELT

Type	**MINI-MAXI**
Serial number	**3S-**
Construction year	**2006**

satisfies the provisions of the European Machine Directive (Directive 98/37, amended by 98/79/EC) and the prescriptions for its transposition into national law,

and further satisfies the provisions of the following European directives:

- low voltage directive 73/23/EEC, amended by 93/68/EEC
- EMC-directive 89/336, amended by 91/263/EEC, 92/31/EEC, 93/68/EEC,93/97/EEC

In: Antwerp
…./…./ 2006

R. Tropato
Busisness Manager

PURPOSE AND METHOD OF USE

The conveyor belt is designed to carry solid (non-liquid) and non-hazardous materials such as sand, rubble, debris, agricultural vegetation, etc.
The material to be transported must be loaded onto the conveyor belt professionally so that no damage is caused by excess.
A maximum of 3 conveyor belts of 3 M. can be connected behind one another on a mains connection of 115V protected with 16A.

A **large feed hopper** (1) is placed on the first conveyor belt. This keeps the material to be transported on the belt.

Each conveyor belt is supported by a **trestle support** (2) or a tubular construction. Supporting tubes are provided in the frame for the assembly of a tubular construction.

1.Large feed hopper.

2. Trestle support

2. AREA OF APPLICATION

The conveyor belt can be used in covered areas as well as in the open air in damp environmental conditions.

3. ASSEMBLY OPTIONS

The conveyor belts can be set up individually or be placed in series.
They must be set up in such a way that they cannot slip or move, that is the trestle support or tubular construction must stand on a solid basis.
The conveyor belt may not be supported on the small feed hopper.
Lengthways they may be placed at any angle relative to the conveyor belt in front.
The conveyor belt must always be filled using the large feed hopper. Material must never be placed directly onto the belt.
Width ways the conveyor belt must always be horizontal in order to prevent the belt from sloping.
The rubber belt must be able to run along the underside of the conveyor belt unhindered, without touching the surface or any other obstacle. Filling between the rubber conveyor belt should be avoided at all times.

The conveyor belts can be set up as follows:

a) Set-up in a straight line and set-up behind one another on a slope.

The conveyor belts may not be placed on top of one another. The conveyor belt stands on the ground on the filling side. On the discharge side the conveyor belt stands on a trestle support, a tubular construction or a container, for example. The conveyor belt should be placed in such a way that the material is discharged into the small feed hopper.
The gradient depends on the nature of the material to be conveyed and on its weight.

1.Small feed hopper.

b) Set up whereby the conveyor belts do not lay one behind the other.

The conveyor belts can be set up and arranged at any angle.
The conditions for setting up are the same as under point a.

Important !!! : Read all information labels on the machine with the utmost care.

For the coupling of several conveyor belts, we refer to the following chapter
“Putting into operation”.

4. PUTTING INTO OPERATION

Connect the first conveyor to the power supply of 115 V. By means of the connecting cable, the second and third conveyor can be connected to the first one.

Power consumption per conveyor belt is 4,6A full load.

In the event of overload of the conveyor belt, the motor will cut out due to the built-in thermal safety sensors in the motor itself and the switch.

It is advisable to start the conveyor belt unloaded in order to avoid the thermal safety mechanisms in the motor and/or the switch taking effect.
In certain circumstances (belt which is not overloaded and slight slope) the conveyor belt can be started up when loaded.

Warning!!! If the belt does not move along, switch off the motor immediately.

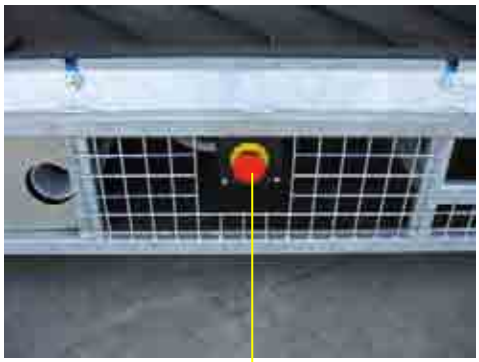
Coupling of several conveyor belts.

When the conveyor belt is set in motion, care should be taken to ensure that the cords cannot be damaged.

A maximum of 3 conveyor belts can be connected behind one another on a mains connection of 115V protected with 16 A (full load). The conveyor belts can be connected by means of a connection cord so that it is not necessary to provide a separate power supply for each conveyor.

If more than 3 belts are to be used, then a separate mains connection must be provided for each group of 3 belts.

Each conveyor belt can be started individually by means of the start button. The start button is green.
Both sides of the conveyor belt is equipped with a (emergency)stop button (red). This stop button doesn't only stop the conveyor belt of which you push the stop button, it also stops all conveyor belts following this conveyor, on condition that they are connected to the same power supply



Emergency-stop

Start

Emergency-Stop

When the first conveyor belt is disconnected from the power supply, all conveyor belts which are connected to this same power supply, will stop.

connection cord

When the conveyor belt is started up again, the various conveyor belts must be started up separately. Start up the last in the series first.

Positioning a large feed hopper

A large feed hopper is placed at the beginning of the first conveyor belt

Positioning of a small feed hopper

A small feed hopper is placed on the winding side on a conveyor belt above the supporting groove

5. PERIODICAL INSPECTION AND CLEANING

See assembly plan TB-3M-ST Series III – 115V

a) Inspection

The drive roller, return roller and trough rollers must be inspected regularly and cleaned if necessary. It is very important that there should not be any residue material on the roller. Material conveyed on the belt which becomes stuck between the roller and the belt can be very damaging and can result in the failure of the structure.

The belt scraper should also be checked regularly to ensure that it is operating correctly.

b) Cleaning

The conveyor belt can be hosed down with a water hose (maximum pressure 5 bar).

Warning!!! Care is required when the work is carried out.
Disconnect the conveyor belt from the power supply!

The water hose should not be aimed directly at the electrical cabinet.
The belt or the drums should never be scrapped down using hands or sharp objects.

6. REPLACEMENT OF WEARING PARTS

See assembly plan TB-3M-ST Series III – 115 V

Replacing the rubber belt.

1. Dismantling the rubber belt.

Procedure and sequence:
- Undo bolts no. 31.
- Remove the connecting piece no. 30 on the front of the conveyor belt.
- Undo the side plates no. 39
- Remove the belt scraper no.13 by pulling it over the hinge points (side by side)
- Undo nuts no. 19 and remove the supporting roller no. 17
- Release nuts no. 12 and measure the depth to which bolts no. 11 are screwed in as a reference.
- Loosen bolts no. 11 (complete).
- Lift the idling roller out of the groove (upwards) and remove it from the frame.
- Hook the belt over the guide grooves.
- Remove the rubber belt starting at the drive roller.
  Important!!! : Make sure that the drive roller does not move out of its slide track!!!!
- Make sure the motor cable is in the safety groove.

2. Fitting the rubber belt.

Procedure and sequence:
- Fit the belt by following the removal procedure in reverse order.

3. Adjusting the tension of the rubber belt.

Procedure and sequence:
- Tighten bolts no.11 alternately until the thread reach is attained!

4. Adjusting the parallelism of the rubber belt.

Procedure and sequence:
- If the belt runs onto the frame on one side, tighten the screws no.11 en 25 one quarter on the side where the belt touches the frame (or loosen the adjusting screws on the opposite site).
- Allow the belt the move on a couple of lengths and check.

Warning !!! : Care is required! This work is carried out while the conveyor belt is in motion. Avoid accidents!

Important !!! **: Never replace parts unless the electrical supply to the conveyor belt has been disconnected.**

: Only use original parts as replacements.

: Replacements or repairs other than those included in these instructions (particularly those involving electrical parts) may only be carried out by technically skilled personnel.

7. TRANSPORTATION AND STORAGE

a) Transportation (mobility)

The conveyor belt can easily be moved by lifting it up on its front and rear. Use the handles when doing this. Also use the set of wheels.
This set of wheels is a handy means of transport even on uneven ground.
Use of wheels: Lift the conveyor belt at its side on which the set of wheels is being installed and place the set of wheels in the open space which is made for this purpose. Now you can lift the conveyor belt on its other side and replace it on its wheels.

b) Storage.

Up to 6 conveyor belts can be stacked on top of each other.
When stacking, the semicircular supporting rings are placed in the grooves of the conveyor belt below .

Warning!!! **: Under no circumstances may anyone "joy-ride" on the Mini-Maxi. Keep children on a safe distance.**

: If the Mini-Maxi is mounted above ground level, all due precautions must be taken to ensure that the material being transported does not fall off (for example onto personnel).

: The Mini-Maxi should never be placed in such a way that the electrical contacts are under water.

: If the set-up blocks during operation, all conveyor belts must be switched off before the cause of the blockage is removed.

: Never work on the conveyor belt unless the electrical supply to the conveyor belt has been disconnected.

: The conveyor belt may be hosed down with a maximum water pressure of 5 bars.

PARTS LIST - MINI-MAXI 3M – STEEL - RUBBER - SERIES III – 115V

Item no.	Part no.	Name	Number
	00444	**Conveyor belt steel 3m complete**	
1	00885	Base frame complete – 3M	1
2	00808	Conveyor belt rubber 6280x400	1
3	00886	Trough roller diam.50 L=185	12
4	00781	Low hexagon nut M12	24
5	00136	Plain washer M12	24
6	00446	Drive roller complete type D 0,37kW – 115V	1
6B	00626	Capacitor 50µF	1
6C	00284	Cable eye flat 0,4/1,5mm² wide 6,6	1
7	00711	Return roller type D	1
8	00543	Sticker instructions for use	1
9	00399	Identification plate	1
11	00663	Hexagon head screw M10x110	2
12	00070	Hexagon nut M10	2
13	00853	Belt scraper complete	1
13A	01395	Scraper belt rubber	1
14	-	PCE built-up socket man 115V	1
15	00782	Cyl. screw with saw groove M4x20	4
16	00317	Hexagon nut M4	4
17	00733	Supporting roller	1
18	00136	Plain washer M12	4
19	00781	Low hexagon nut M12	4
20	00436	Complete industrial switch box 115V	1
20A	00616	Switch box – switch	1
20B	01123	Switch box – push button green	1
20B	00608	Switch box – push button red	1
20C	00618	Switch box – fuse 6A	1
20D	00610	Switch box – fuse cover	1
20E	-	Switch box – built-up socket 115V	1
21	00683	Bridge alu. – switch box	1
22	00598	Hexagon head screw M5x10	4
23	00967	Cross recessed pan head tapping screw ST3,5x9,5	4
24	00421	Sticker 115V	1
25	00597	Hexagon head screw M8x25	2
26	00482	Hexagon nut M8	2
27	00393	Sticker EC	1
28	00544	Sticker sense of rotation	1
29	00801	Frame stop square – black	8
30	00831	Connecting piece	2
31	00556	Hexagon head screw M8x20	8
32	00482	Hexagon nut M8	8
39	01540	Set side plates	4
34	00780	Link cord complete L=2m 115V	1
35	00810	Large feed hopper complete	1
35D	00785	Large feed hopper belt rear L=400	1

35E	00786	Large feed hopper belt side L=850	2
36	00856	Small feed hopper complete	1
36D	00785	Small feed hopper belt rear L=400	1
36E	00844	Small feed hopper belt side L=630	2
37	00860	Trestle support	1
38	00862	Set of wheels	1

Item no.	Part no	Name	Picture
1	00885	Frame	
2	00808	Rubber belt	
3	00886	Trough roller	
6	00446	Drive roller	
6B	00626	Capacitor	
7	00711	Return roller	
13	00853	Belt scraper	
14	01633	Built-in socket	
17	00733	Supporting roller	

20	00436	Industrial switch box	 110 V = yellow
34		Connection cord	 110 V = yellow
35	00810	Large feed hopper	
36	00856	Small feed hopper	
37	00860	Trestle support	
38	00862	Set of wheels	
9	01540	Set side plates	

SAFETY DIRECTIONS & OPERATING INSTRUCTIONS

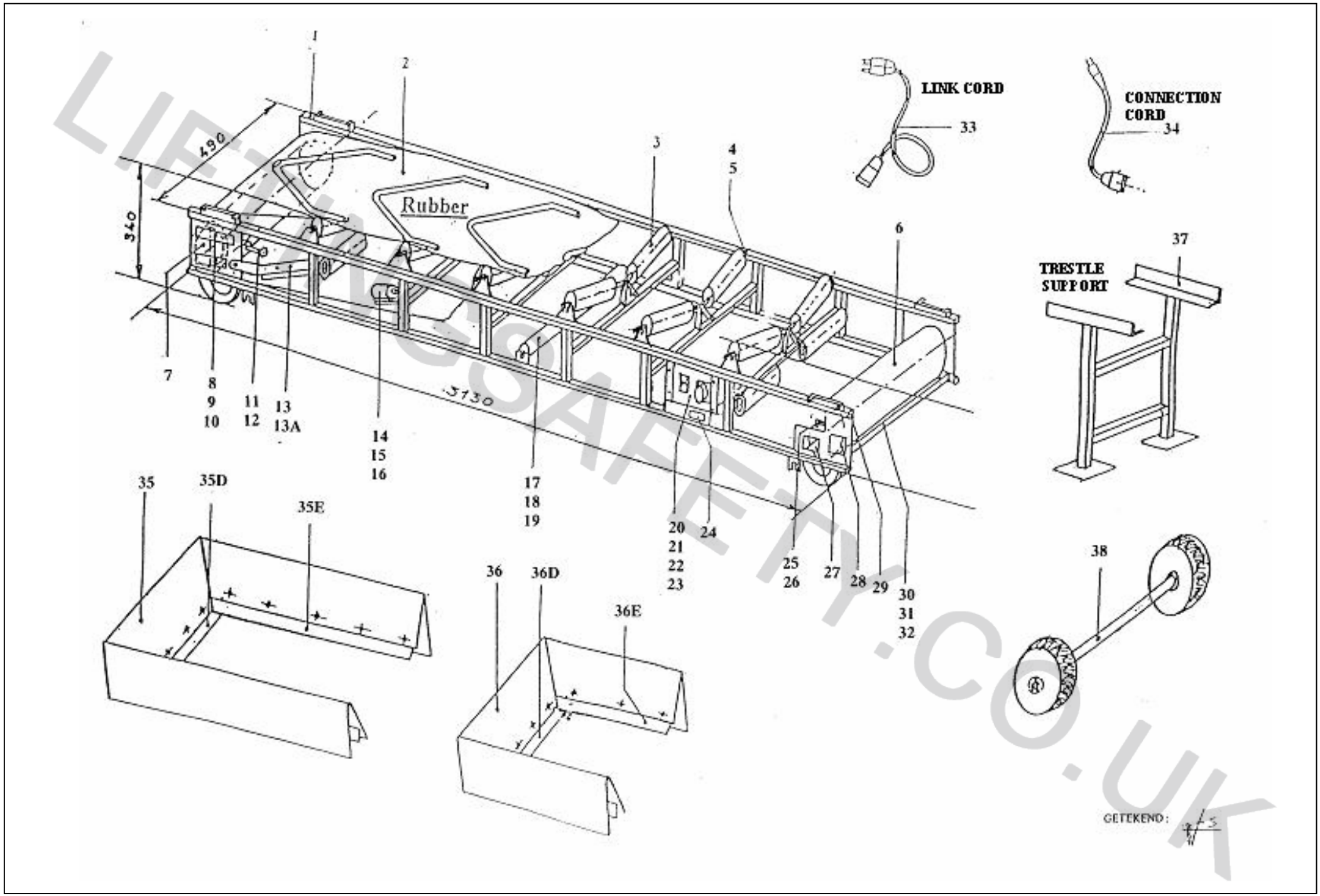
It is recommended that you read these instructions carefully in order to ensure a safe and correct operation of the machine.

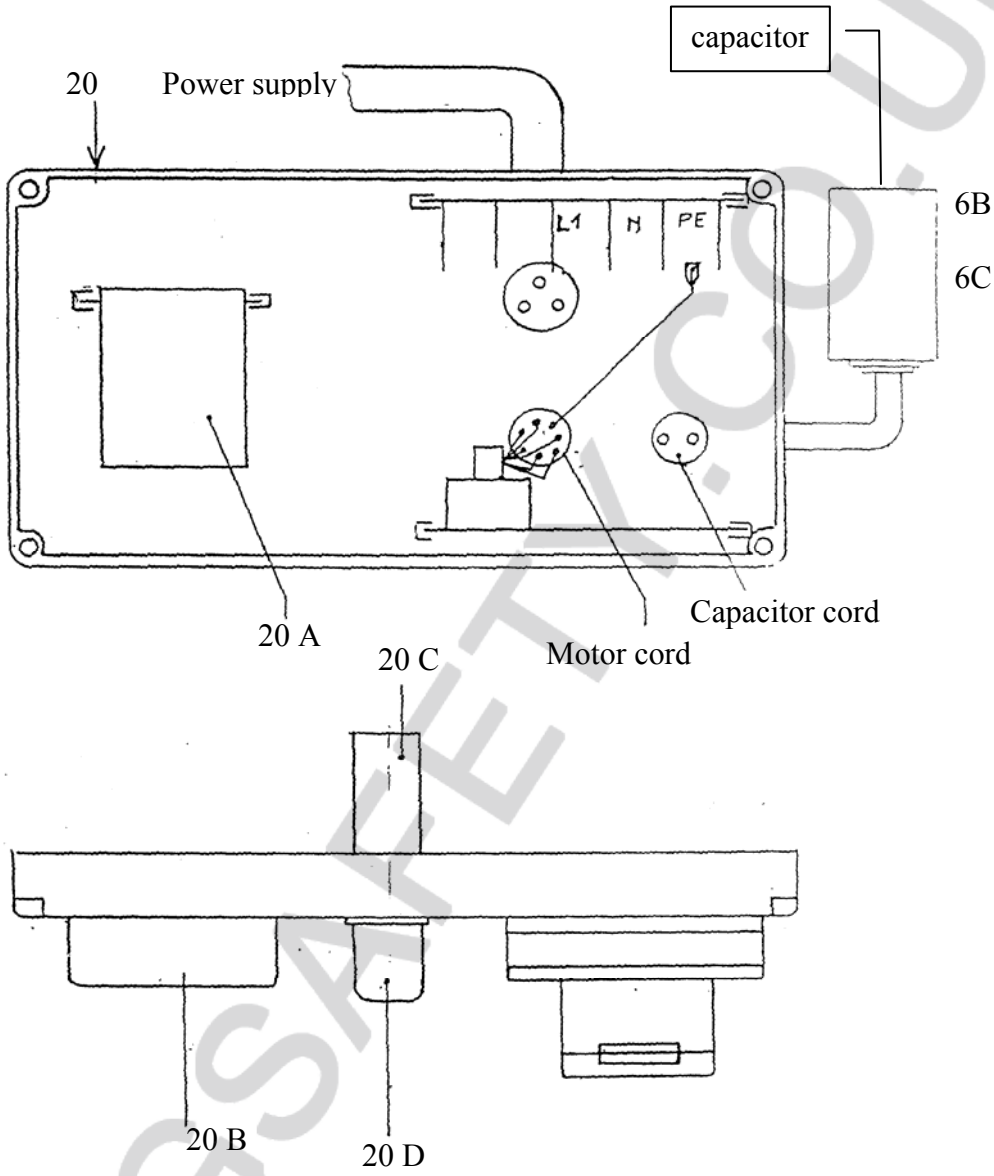
SAFETY DIRECTIONS

Do not allow minors or non-qualified individuals to operate the conveyor belt.
Keep non-essential individuals at a distance and never leave the conveyor belt unattended when in operation.
Under no circumstances allow children or others to ride on the conveyor belt.
Use the belt only for the conveyance of goods that are non-hazardous and can be handled without risk.
Do not transport goods that are liable to adversely affect or damage the belt.
Place the goods on top of the conveyor belt in such a way that they cannot tip off it sideways when moving.
Start the conveyor belt without a load on it in order to avoid that the electrical safeties cut the power.
In case of overload, the thermal safety will cut the engine power. In that case, wait a few minutes. Only after the safety has reset itself will it be possible to restart the conveyor belt by pressing the Start button.
For storing or during transportation, do not stack more than 6 conveyor belts on top of each other.

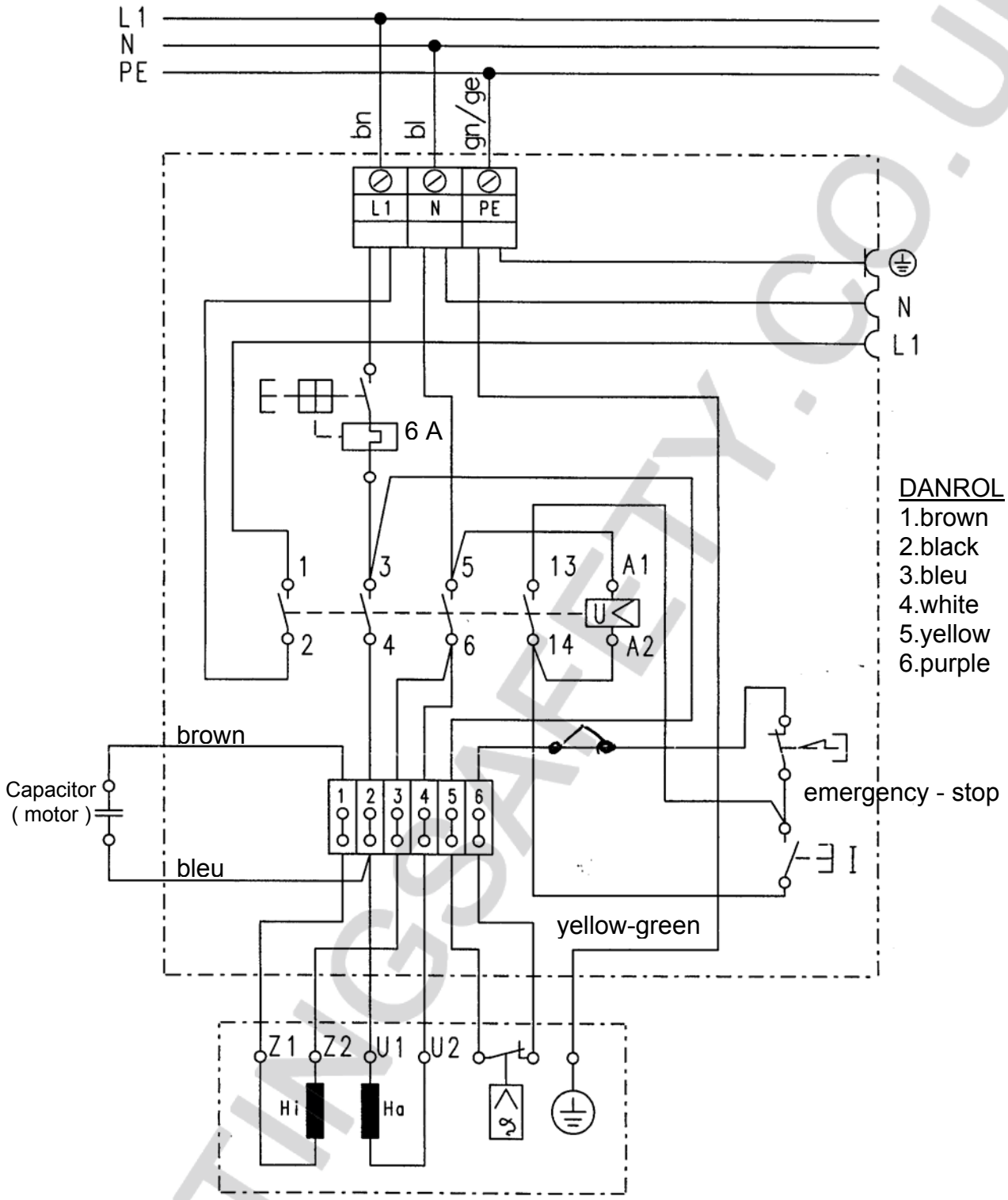
OPERATING INSTRUCTIONS

The conveyor belts can be set up in a line one after the other. Start at the end of the conveyor and place a small filling hopper. Place the end of the next conveyor belt above it with a chair construction that rests on the ground. Ensure that they have been set up in a stable fashion. Also ensure that the conveyor belts cannot shift their ground. Fit the first belt with the large filling hopper especially at a steep incline.
In case of installation at a steep incline, support the conveyor belts separately by means of a solid and rigid pipe construction. Build up the construction starting with the pipe that is provided for in the frame.
Ensure that the conveyor belt can at all time run on unimpeded at the underside of the installation without touching the ground or without some other obstacle to interfere with it.
Only in the longitudinal direction can the conveyor belts be installed at an incline. Widthwise they must always be kept level in order to avoid misalignment in the running of the belt.
The angle of the incline is limited by the nature and the weight of the goods that need conveying.
It is possible to set up the conveyor belts in a descending line.
For the coupling, connecting cords are used. Make sure that these are not liable to become damaged or carried along by the moving belt. The electrical cord of the belt itself must be used only under dry working conditions. When setting up the conveyor belt, ensure that the electrical parts never be submerged in water. Connect only a maximum of 3 conveyor belts to a current of 16 A. Extension cords, minimum
2.5 mm², must be used with a ground and have to be rolled out completely. Ensure that the power feed is fitted with a differential connection and ground leakage connection.
The green start button will activate the conveyor belt. The red button will stop it.
After disconnecting the electrical power, hose off the machine and clean thoroughly.





		INDUSTRIAL SWITCH BOX			SERIES III
PART NR	QTY	NAME	MATERIAL		REMARK
SCALE		CONVEYOR BELT		DATE	
		3 M - ST		SIGNED	
	Etramo bvba	Bisschoppenhoflaan 633 Antwerpen-België Tel: 0032 3 326 02 92 Fax 0032 3 326 5162			TB3MST NR.15



		ELECTRICAL UNIT			SERIES III
PART NR.	QTY.	NAME	MATERIAL		REMARK
SCALE		CONVEYOR BELT 3 M - ST		DATE SIGNED	
		Etramo bvba	Bisschoppenhoflaan 633 Antwerpen -Belgium Tel 0032 3 326 02 92 Fax 0032 3 326 5162		TB3MST NR.15 A