



**ST-68**

**Hot Water Shrink Tank**

# **Operation Manual**

Version 6.9.1

**1915 E. Acacia Street, Ontario, CA91761, U.S.A**

**TEL : 1-909-923-3888**

**FAX : 1-909-923-3588**

**<http://www.promarksvac.com>**

**S/N:**

\_\_\_\_\_

**QC SIGNATURE:**

\_\_\_\_\_

## INDEX

|  |           |
|--|-----------|
| <b>SAFETY RECOMMENDATION .....</b>         | <b>1</b>  |
| <b>1. APPLICATIONS .....</b>               | <b>2</b>  |
| <b>2. TRANSPORTATION INSTRUCTION .....</b> | <b>2</b>  |
| <b>3. ST-68 SPECIFICATION .....</b>        | <b>3</b>  |
| <b>4. INSTALLATION .....</b>               | <b>3</b>  |
| <b>5. MAINTENANCE.....</b>                 | <b>4</b>  |
| <b>6. OPERATION PARAMETERS.....</b>        | <b>5</b>  |
| <b>7. ELECTRICAL DIAGRAM .....</b>         | <b>10</b> |
| <b>8. FABRICATION .....</b>                | <b>15</b> |
| <b>8.1 BODY .....</b>                      | <b>16</b> |
| <b>8.2 HEAT COVER.....</b>                 | <b>22</b> |
| <b>8.3 TRANSPORT SHELF .....</b>           | <b>24</b> |
| <b>8.4 OPERATOR BOX .....</b>              | <b>28</b> |
| <b>8.5 CONVEYOR BRACKET.....</b>           | <b>30</b> |
| <b>8.6 ELECTRICAL BOX.....</b>             | <b>32</b> |

# **SAFETY RECOMMENDATION**

Certain Practices Or Minor Modifications On The Part Of The User May Increase The Risk Of Damage And/Or Accidents.

In The Interest Of Safe Installation, Handling And Maintenance, The Following Recommendations Should Be Strictly Followed:

- 1) Do not attempt to start or handle the machine until all safety topics, installation instructions, operator's guide and maintenance procedures have been fulfilled and understood.
- 2) All adjustments, repairs must only be carries out by qualified maintenance personnel, according to the instructions in this manual.
- 3) The operator must never insert hands, rags, etc, inside the machine while it is functioning.
- 4) Do not place tools, parts or other objects on or inside the machine.
- 5) Always keep the machine clean, oiled and in good working condition.
- 6) To provide continued protection against risk of electrical shock. Connect to properly grounded outlets only.
- 7) Always disconnect machine from power source (main power switch) as show on next page before removing service panel.

# 1. APPLICATIONS

Frozen food, sea food, prepared food, meat, soaked foods, products ... etc.

Recommendation of vacuum pouch – Vacuum shrink film must be applied.

Recommend weight of product : Below 8kg.

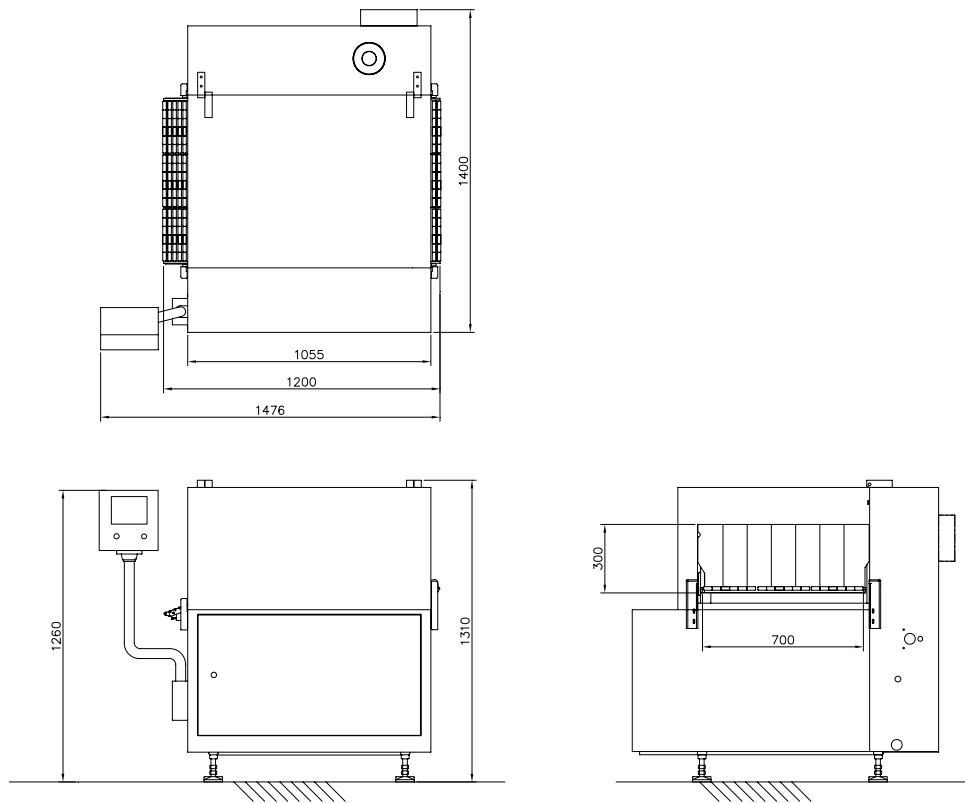
## 2. TRANSPORTATION INSTRUCTION

For the transportation and placing of this machine have a forklift truck available (keep in mind weight of the machine before lifting)

Precautions to take:

- Before lifting balance the machine by adjusting the forks of the fork lift before lifting the machine. Make sure the machine is safe to lift
- Lift the machine with the forklift, from the front of the machine (opposite to the electrical box). Check for components hanging under the machine before lifting because it may cause machine to fall.
- Always lift the machine by placing the forks of the truck between the two free casters of the machine; never lift it by the ends or extensions.
- Always take the utmost care when carrying out lifting and moving operations.
- Approximate Weight of the machine:100kg or 200 lbs.
- Before installation, remove the pallet under the machine then place the machine down for installation.

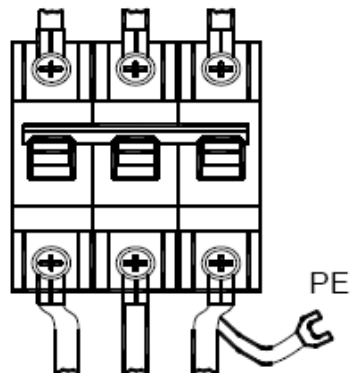
### 3. ST-68 SPECIFICATION



### 4. INSTALLATION

#### PLUG-UP POWER CORD

Before plug-up the power cord make sure you have right power source to hook up the pump. Please look at the back of the machine for the current requirement.

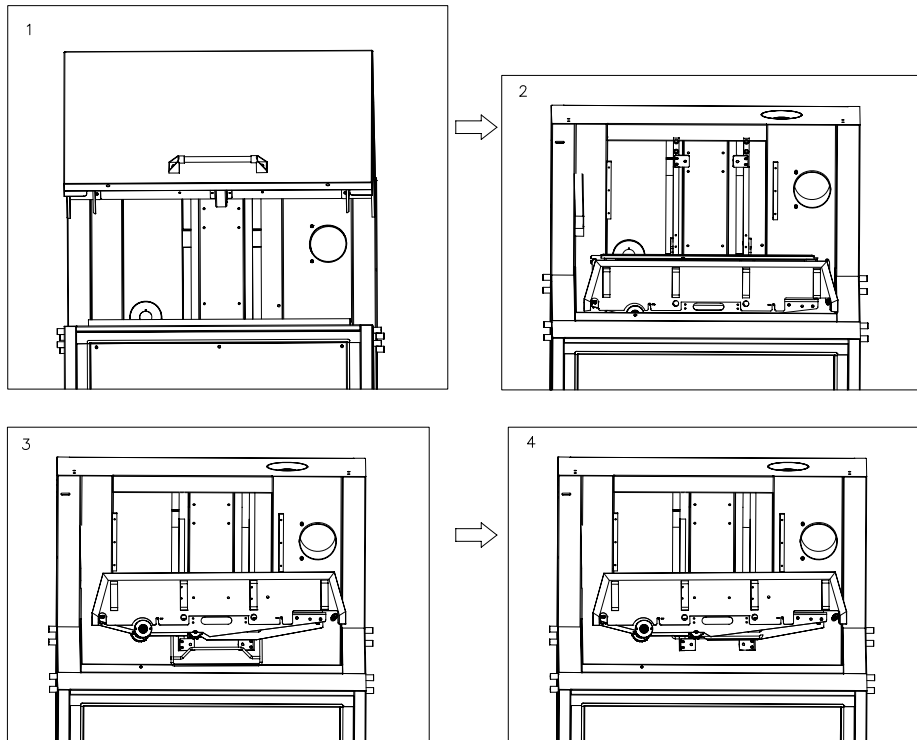


# 5. MAINTENANCE

## DAILY MACHINE CLEANING

The hot water shrink tank should be cleaned every day. We recommend cleaning by hand with a mild detergent. Do not directly hose down machine.

### CLEAN WATER TROUGH



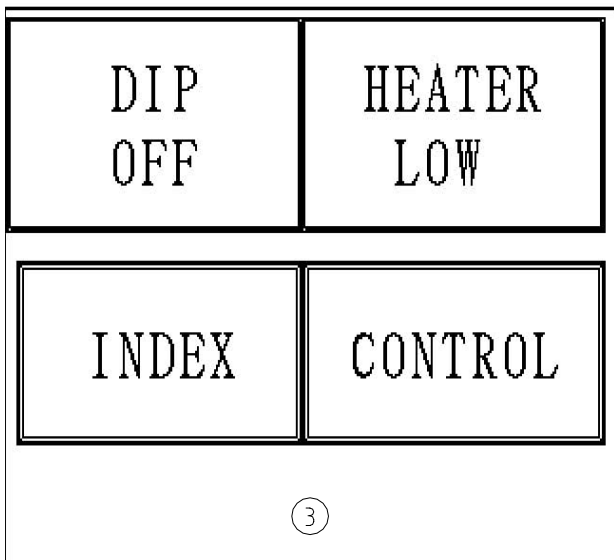
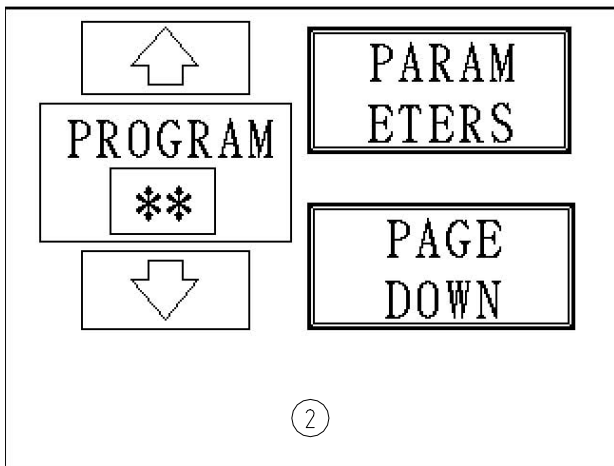
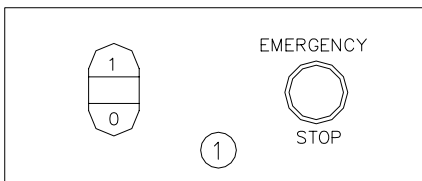
- (1) Push up the machine cover
- (2) The top rod of upper lid will auto-lock hook trough
- (3) To pull-up from protector cover
- (4) Push up the conveyor
- (5) Pull the supporter to hold the conveyor

### ERROR SIGNAL EXPLAIN

You can find all of error signal as below:

- (1) Circuit breaker over - The circuit breaker jump out
- (2) Heater error - Heater circuit breaker jump out. User can choose only 1 or 2 heaters to heat water, you will see the error signal while turn off any one of the heater circuit breaker (go with the function of activate or heater low)
- (3) Motor over
- (4) NFB over
- (5) Conveyor over
- (6) Blower over
- (7) Temperature over - Means the current water is higher than set temperature
- (8) Water lower level - Means the current water is lower than water level switch
- (9) Air pressure error - Means the current air is not enough

## 6、OPERATING PARAMETERS

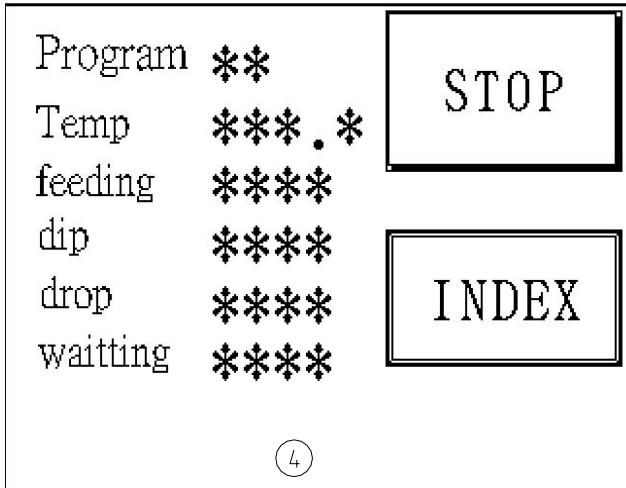


Note: when outer cover is opened, the machine can not to start-up.

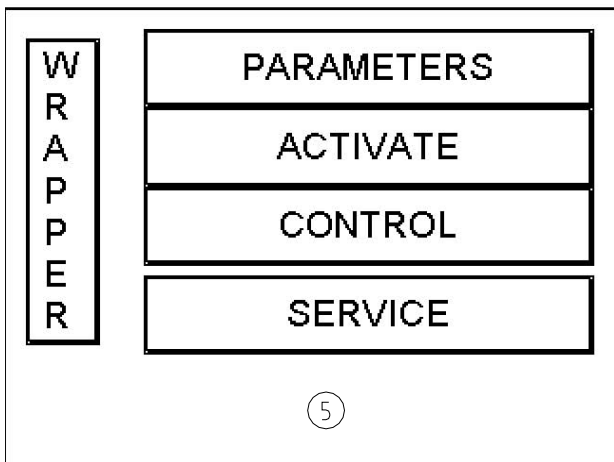
1. Touch screen enter main menu.
2. Press STOP to stop action and turn off screen. Pull STOP return to screen menu.
3. Press double head switch 1 ON to start auto-action.
4. Press double head switch 0 OFF to stop auto-action.
5. Be in AUTO-NO the white lamp is glistening display water is insufficient then it will auto-feeding water, till the water level is more than lower limit level and the white lamp is brighten the user can start-up the machine.

1. Press ↑ ↓ to select setted program
2. Press PARAMETERS enter parameter setting value.
3. Press PAGE DOWN enter menu 3

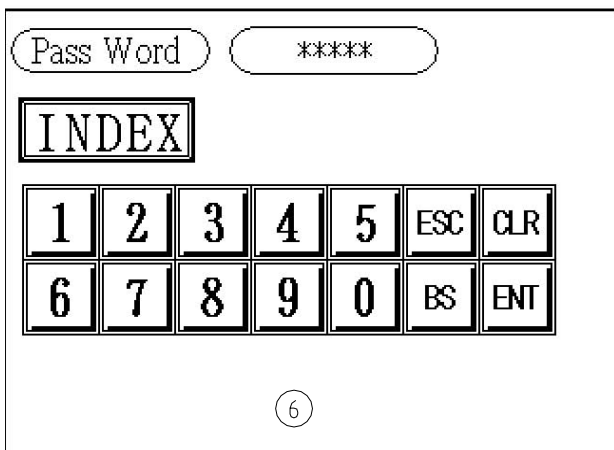
1. Press DIP OFF turn to DIP ON, display conveyor continue rotation, without any action only to carry the material out
2. Press HEATER LOW turn to HEATER HIGH, display auto-heating by 5 sets heating bar in the meantime till to setted temperature then stop heating.  
If select HEATER LOW, display auto-heating by 5 sets heating bar till to setted temperature then stop 2 sets heating bar, remain 3 sets continue heating to setted temperature then stop heating.
3. Press INDEX enter menu 5 to go in main parameter menu.
4. Press CONTROL enter menu 4 to go in operation menu. (included.feeding,dipping,dropping,waitting)



1. Press STOP turn to RUN then electric heating start to auto-warming. If in STOP situation only open system (the electric heating controller without working) .
2. This menu can be observed all programs in use.
3. Press INDEX enter menu 5 to go in parameters menu.

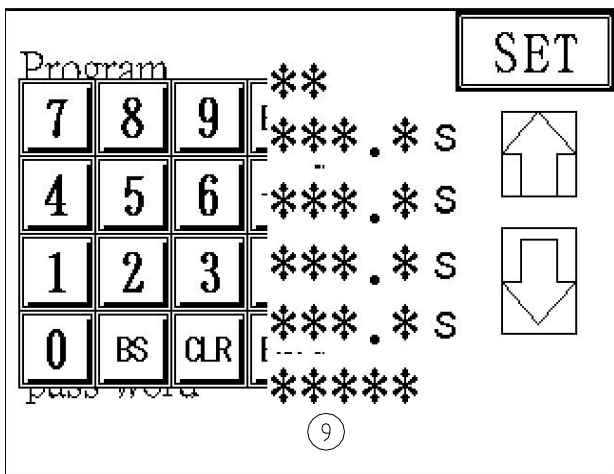


1. Press WRAPPER enter ST-68 operation menu.
2. Press PARAMETERS enter PASS WORD menu.
3. Press ACTIVATE enter manual operation menu.
4. Press CONTROL enter to observe all programs in use.
5. Press SERVICE enter company address .telephone....

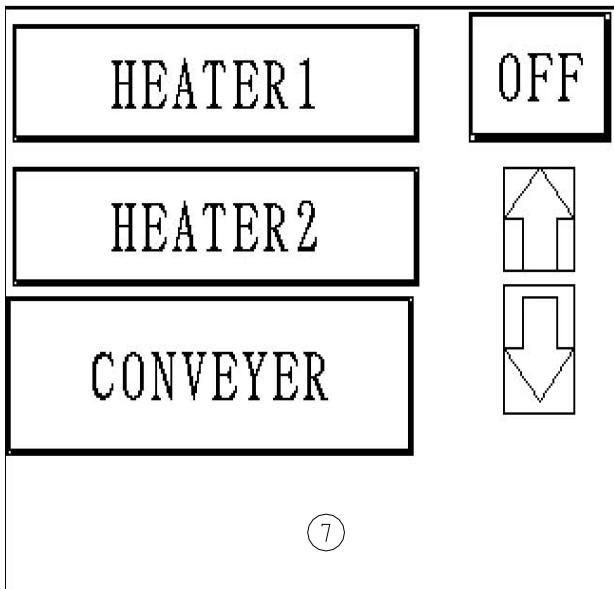


Touch number 0 input 123 press ENT enter setted parameter menu

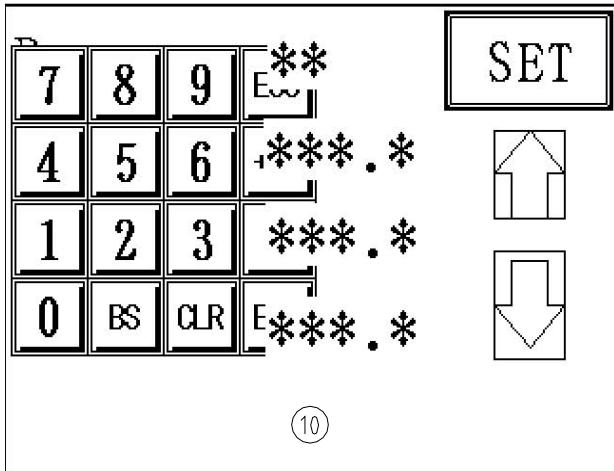




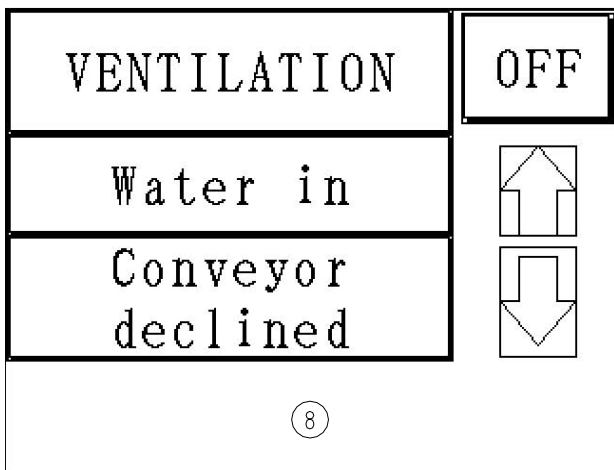
1. Press  $\uparrow$  back to menu 5 main parameter menu
2. Press  $\downarrow$  enter next page to input feeding time, dipping time, dropping time and waiting time.  
then press  $\downarrow$  one more time to input Temperature. Temp-sp-high, after setting press SET to save the value



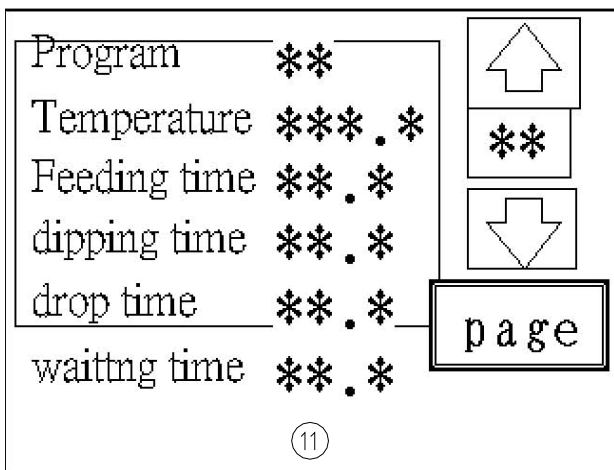
- Note !
- Press OFF to ON then user can operate switch by hand.
1. Press HEATER 1 turn to HEATER 1 ON, press one more time turn to HEATER 1 OFF start heating by 3 sets heating bar till to setted temperature will auto-cut off heater then stop heating.
  2. HEATER 2 as HEATER 1
  3. Press CONVEYER turn to CONVEYER ON start rotating: press one more time turn to CONVEYOR OFF
  4. Press  $\uparrow$  back to menu 5 main parameter menu
  5. Press  $\downarrow$  enter next page
- Note !
- When you finish manual operation, remember to turn ON to OFF then the operation box can be auto-reset.



1. Press Temperature, input working temperature
2. Press Tem SP-high, input the highest temperature(not over than 100°c)
3. Press Temp range ,used by warming to select HEATER LOW and HEATER HIGH



- Note !
- Press OFF to ON then user can operate switch by hand.
1. Press VENTILATION to ON the ventilating machine start working; turn to OFF stop working.
  2. Press Water in to ON start supplying water;turn to OFF stop supplying water
  3. Press Conveyor declined to ON the conveyor down;turn to OFF the conveyor up
- Note !
- When you finish manual operation,remember to turn ON to OFF then the operation box can be auto-reset.



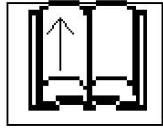
1. Press ↑ upturning to see the setted parameters
2. Press ↓ downturning to see the setted parameters
3. Press PAGE enter to menu 5 main parameter menu.

PROMARKS INC

index

TEL:909-923-3888

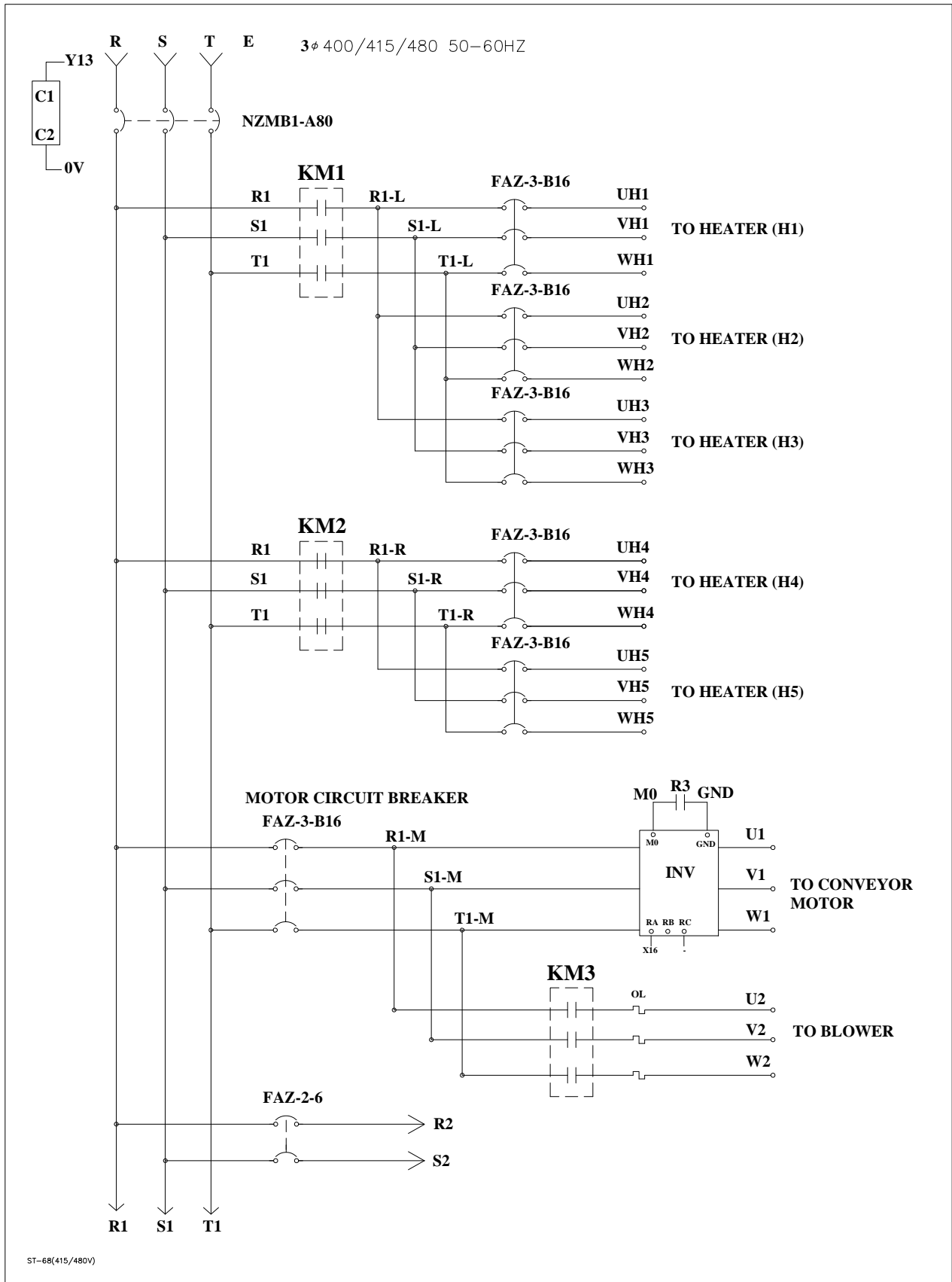
FAX:909-923-3588

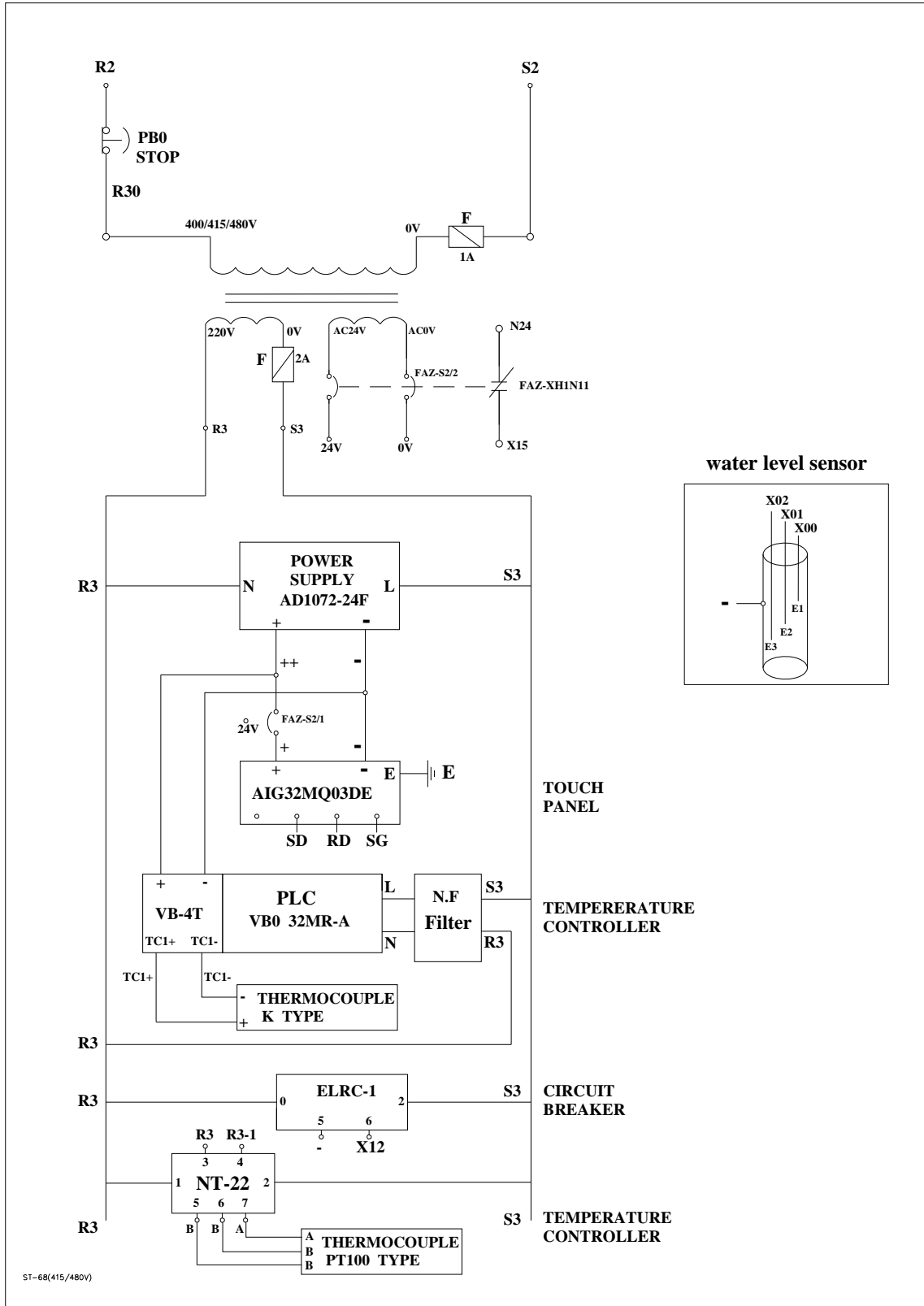


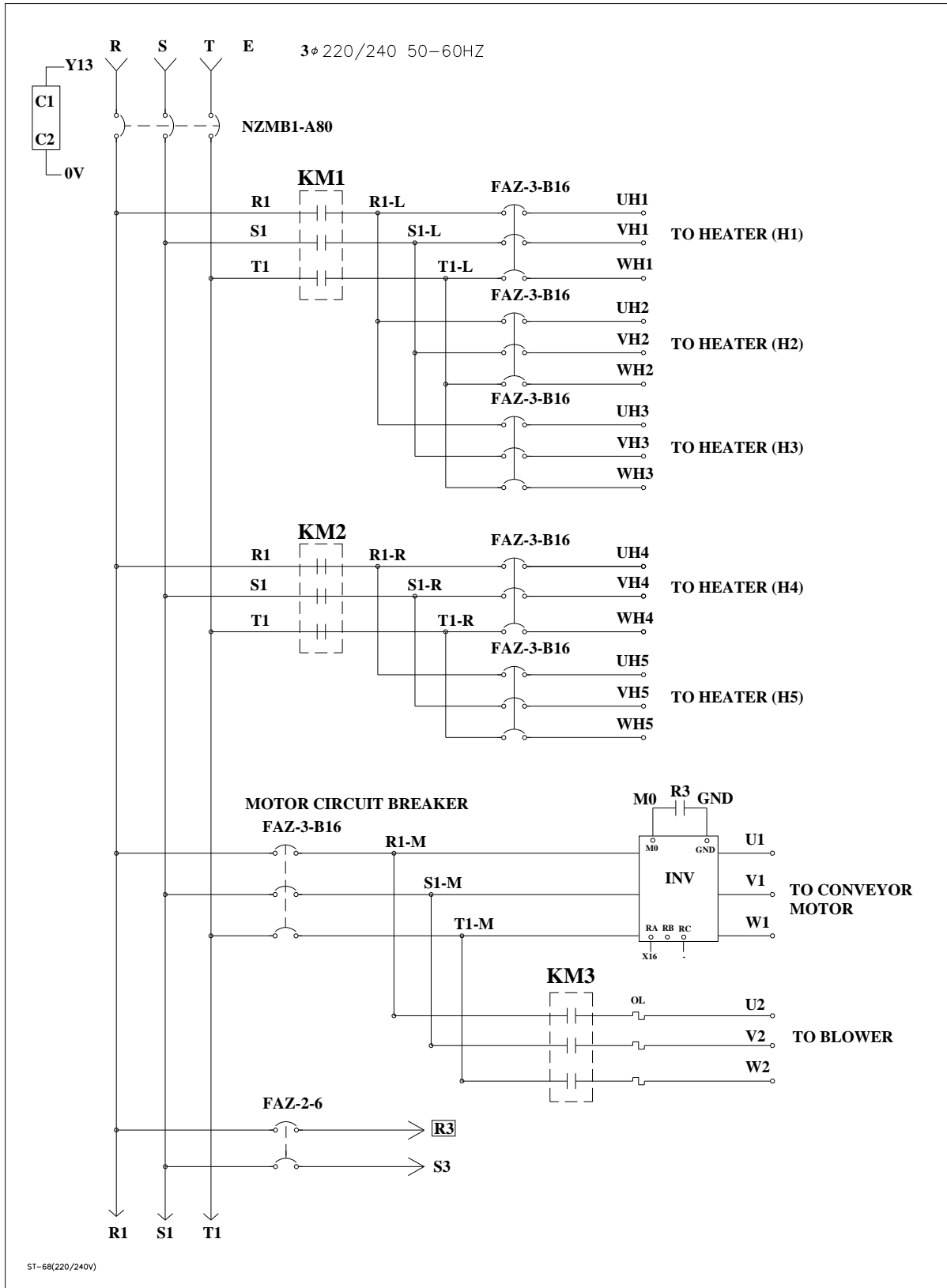
12

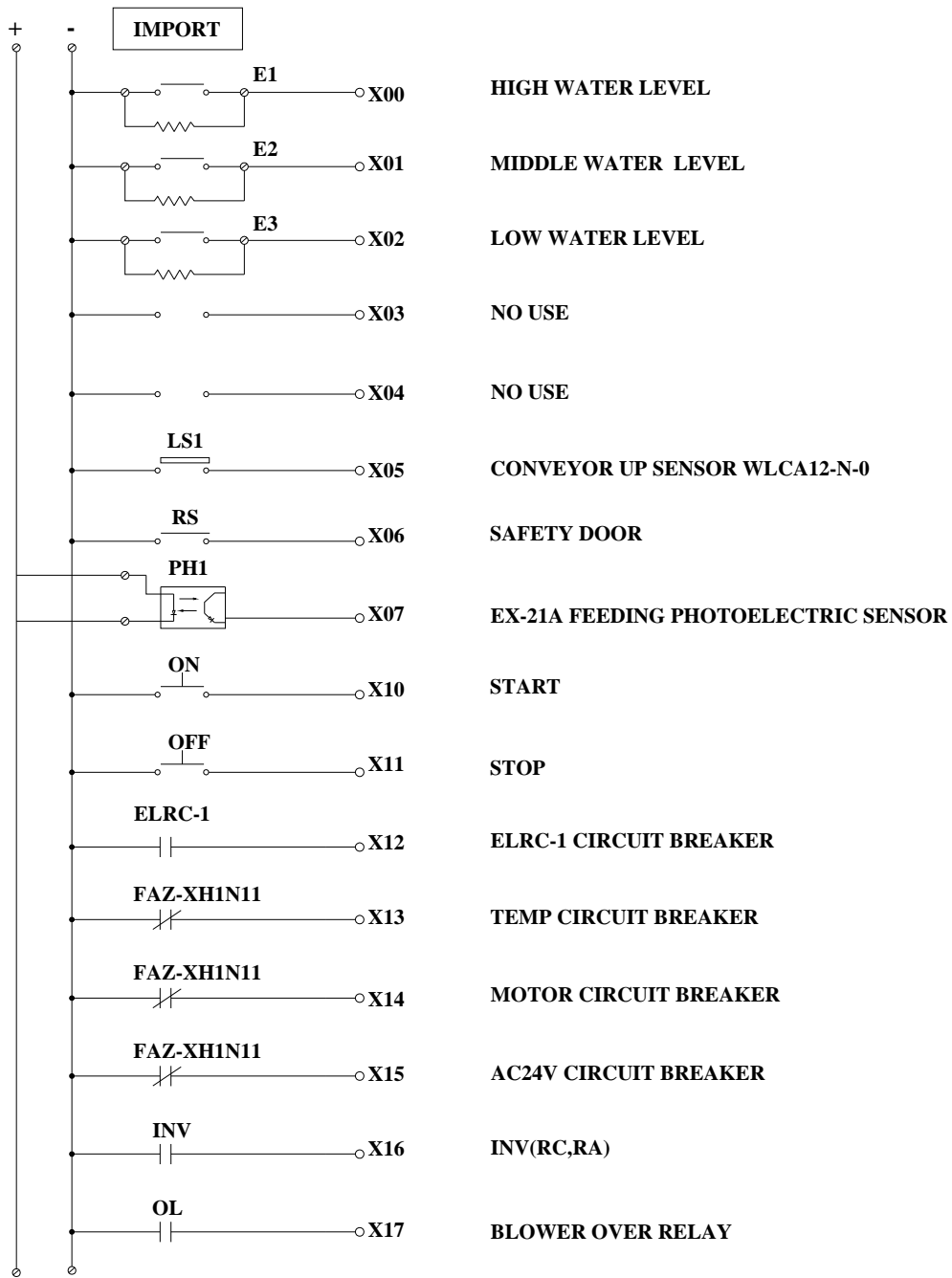
1. Press INDEX back to menu5 main parameter menu
2. Go up next page

# 7. ELECTRICAL DIAGRAM

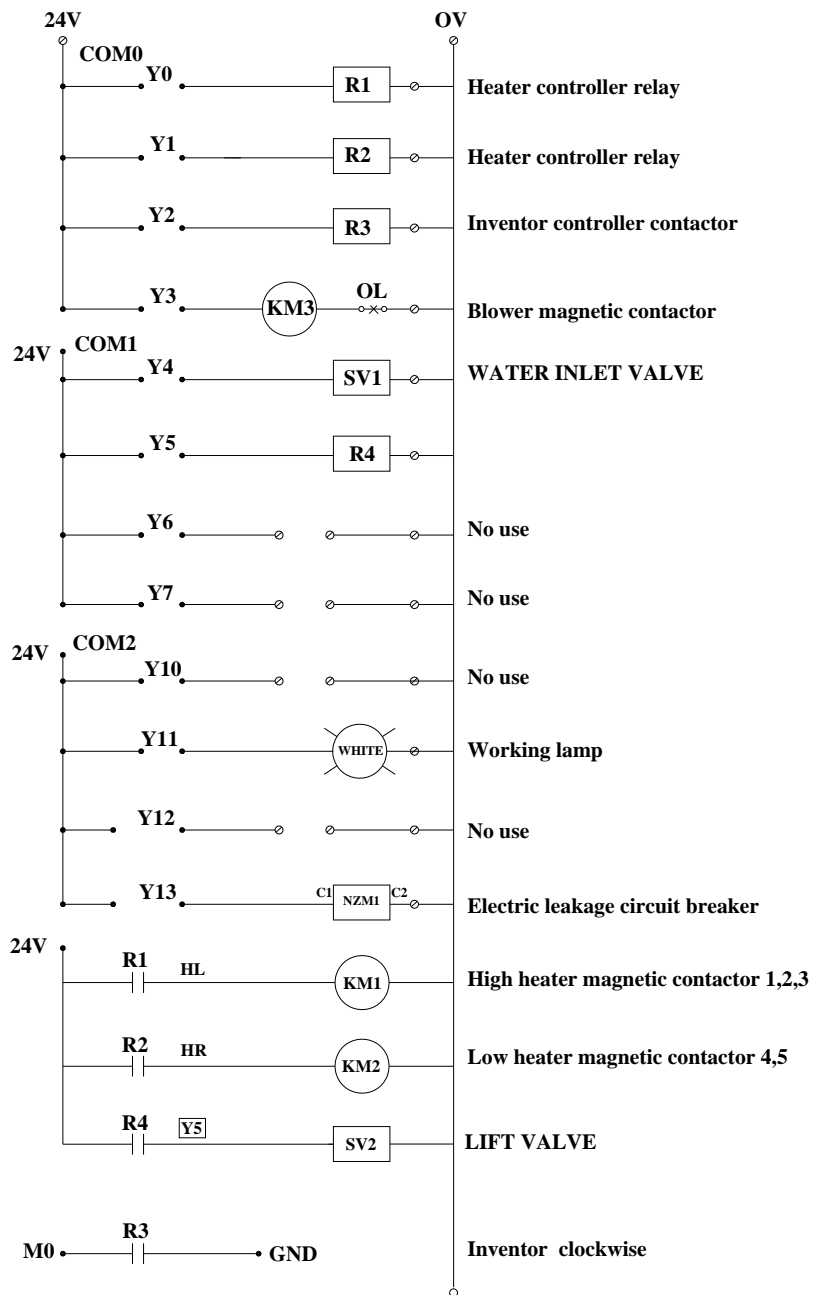








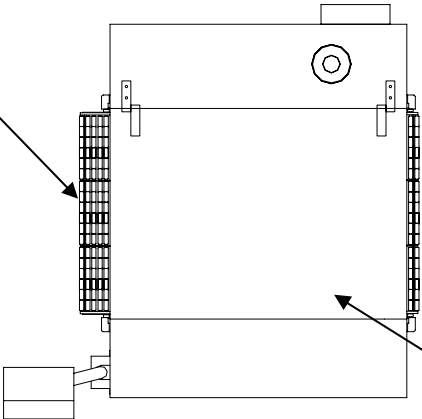
ST-68





# 8. FABRICATION

8.5 CONVEYOR BRACKET



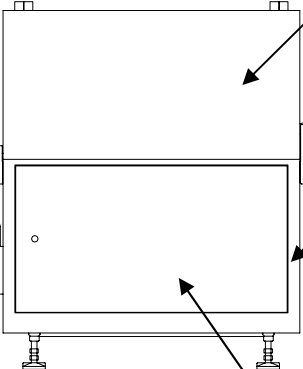
8.3 TRANSPORT SHELF

8.4 OPERATOR BOX



8.2 HEAT COVER

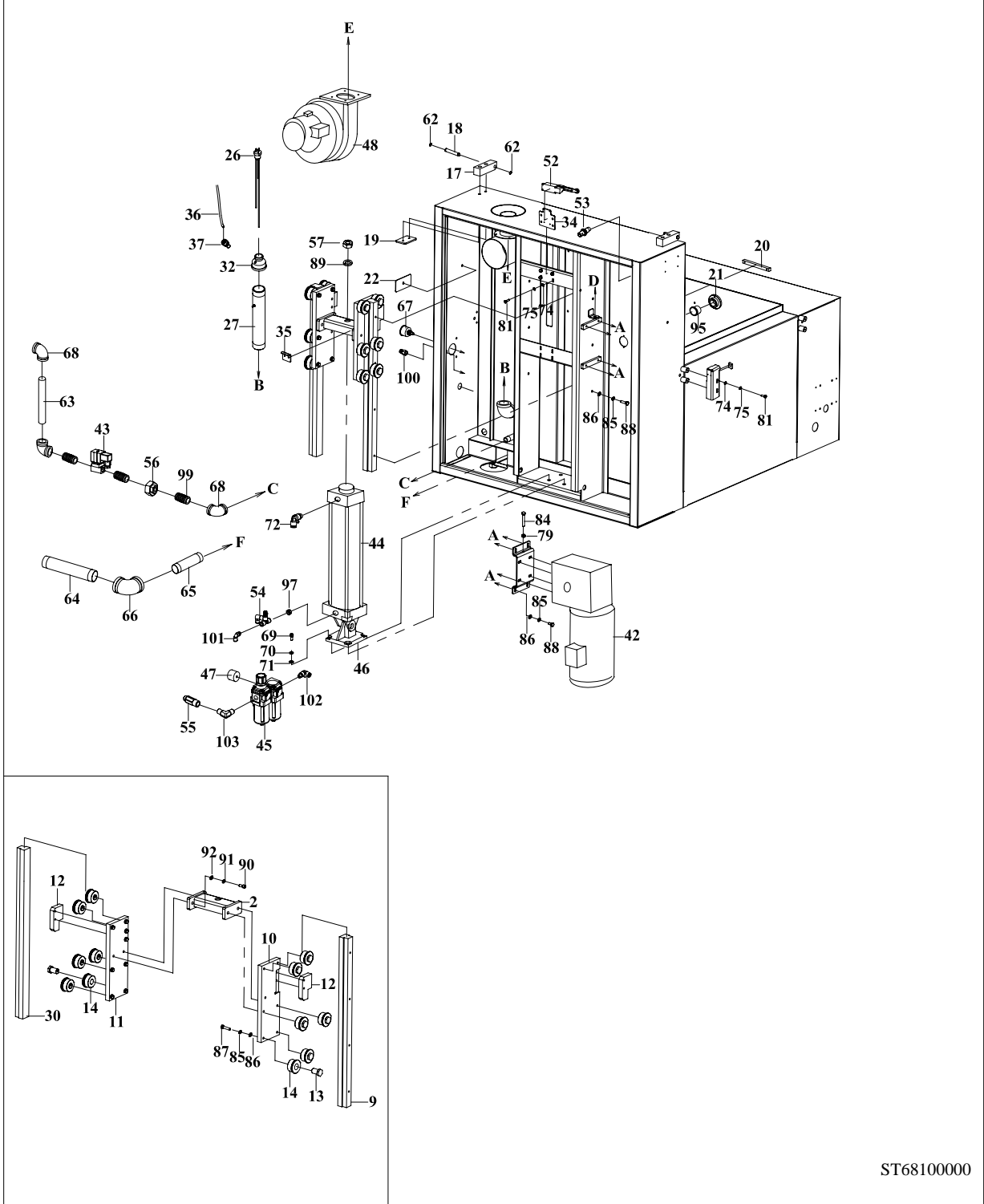
8.1 BODY



8.6 ELECTRICAL BOX

# 8.1 BODY

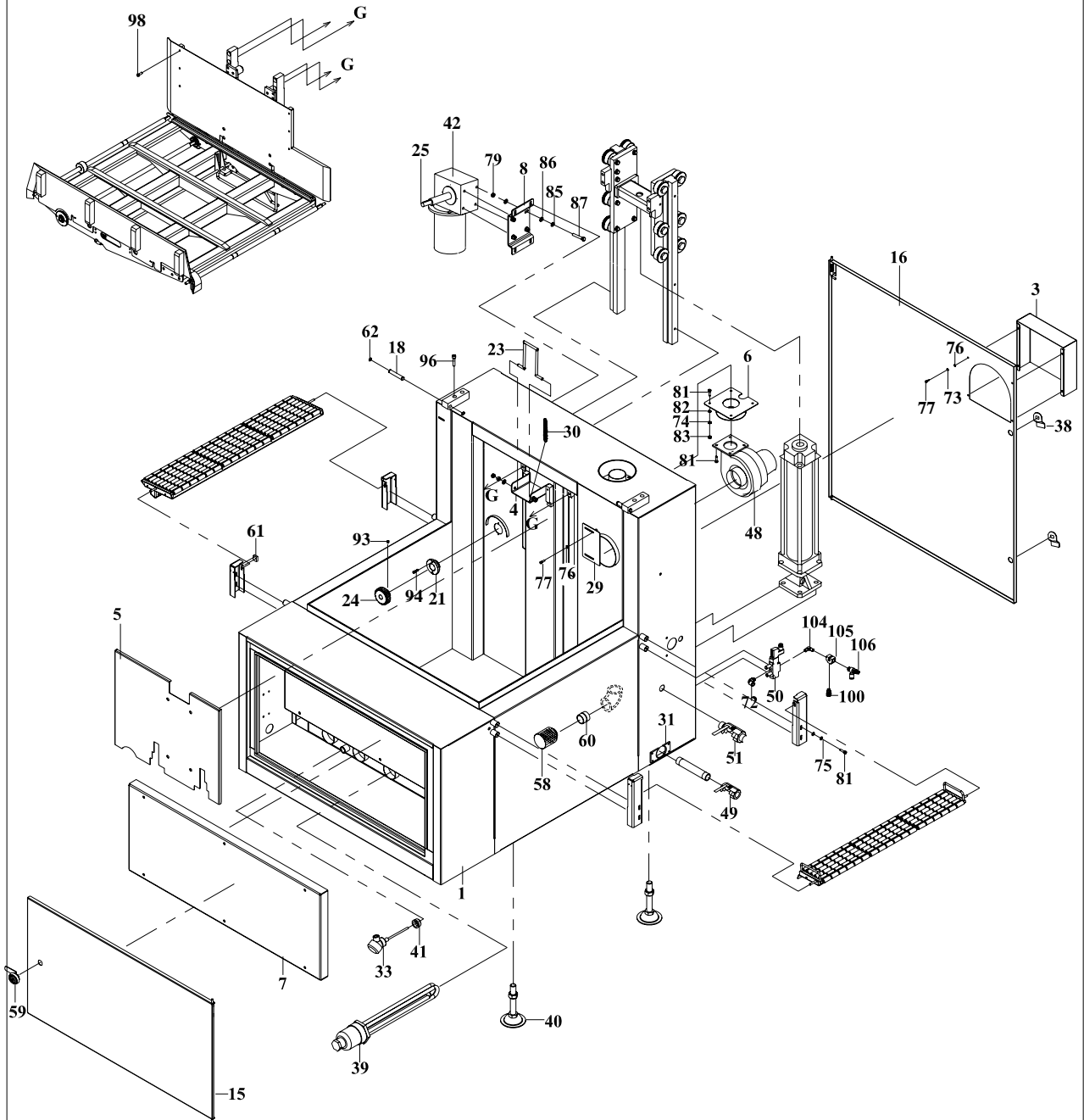
## Body Diagram



ST6810000

# 8.1 BODY

## Body Diagram



ST6810000

| NO. | PART NO.   | DESCRIPTION                       | QTY | NOTE |
|-----|------------|-----------------------------------|-----|------|
| 1   | ST68101000 | Frame                             | 1   |      |
| 2   | ST68102000 | Cylinder,Lift, Top Plate Base     | 1   |      |
| 3   | ST68103000 | Exhaust Fan Cover                 | 1   |      |
| 4   | ST68104000 | Top Rod,Fixed Base                | 1   |      |
| 5   | ST68105000 | Protection Cover                  | 1   |      |
| 6   | ST68106000 | Exhaust Fan Connecting Base       | 1   |      |
| 7   | ST68107000 | Control Box Base Plate            | 1   |      |
| 8   | ST68109000 | Motor Base Plate                  | 1   |      |
| 9   | ST68110000 | Sliding Track                     | 2   |      |
| 10  | ST68111000 | Left,Lift Base,Side Plate         | 1   |      |
| 11  | ST68112000 | Right,Lift Base,Side Plate        | 1   |      |
| 12  | ST68113000 | Lift Base, Connection Plate       | 2   |      |
| 13  | ST68114000 | Lift Base, GuideWheel,Axle Center | 12  |      |
| 14  | ST68115000 | Lift Base, GuideWheel             | 12  |      |
| 15  | ST68116000 | Front Cover Door                  | 1   |      |
| 16  | ST68117000 | Back Cover Door                   | 1   |      |
| 17  | ST68118000 | BackRiveting Base                 | 4   |      |
| 18  | ST68119000 | BackRiveting Base,Axle Center     | 2   |      |
| 19  | ST68120000 | Dental Plate                      | 2   |      |
| 20  | ST68121000 | Dental Plate                      | 1   |      |
| 21  | ST68122000 | Reduction,Axle Center,End Cover   | 1   |      |
| 22  | ST68123000 | Gasket                            | 2   |      |
| 23  | ST68124000 | Upper Lid,Top Rod                 | 1   |      |
| 24  | ST68125000 | Gear                              | 1   |      |
| 25  | ST68126000 | Reduction, Axle Center            | 1   |      |
| 26  | ST68127001 | Water Gage                        | 1   |      |
| 27  | ST68131000 | Water Gage, Outer Pipe            | 1   |      |
| 28  | ST68133000 | Drainage Water,Connecting Pipe    | 1   |      |
| 29  | ST68136000 | Current Adjusting Cover           | 1   |      |
| 30  | ST68138000 | Extension Spring                  | 1   |      |
| 31  | ST68139000 | Nipple,Fixed Plate                | 2   |      |
| 32  | ST10115000 | Fitting 1-1/4"x1/2"               | 1   |      |
| 33  | 2856023    | Thermalψ6.35x100mmLx PT 1/4       | 1   |      |
| 34  | ST68141000 | Limit switch fixed plate          | 1   |      |
| 35  | ST68142000 | Limit switch touch plate          | 1   |      |

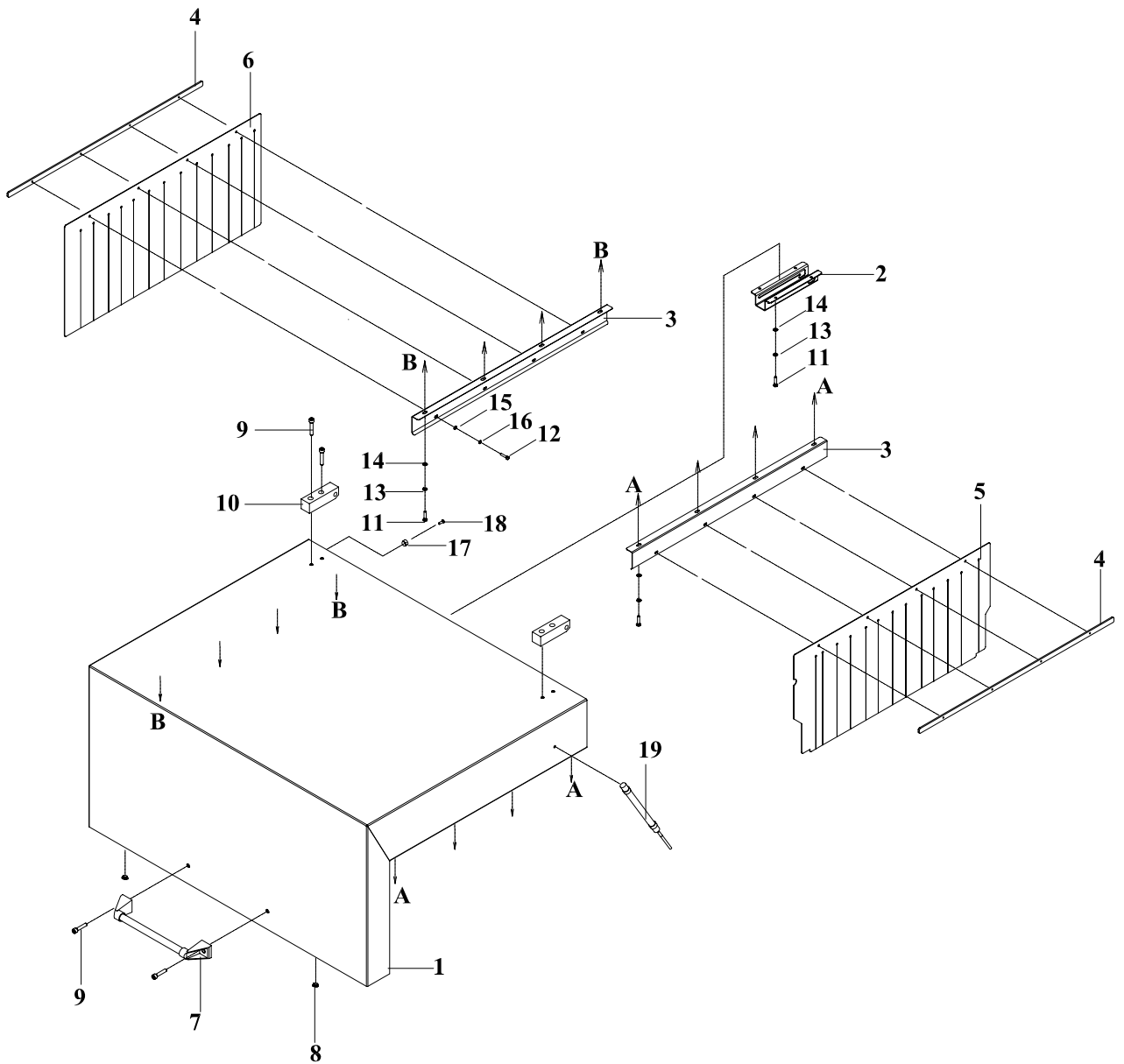
| NO. | PART NO.   | DESCRIPTION                    | QTY | NOTE |
|-----|------------|--------------------------------|-----|------|
| 36  | 2931028    | Pu Air hose                    | 1   |      |
| 37  | 29090311   | C type adapter VSC 8x1/8       | 1   |      |
| 38  | MSK1120000 | Handle                         | 2   |      |
| 39  | 2856028    | Heater nippno Sheatth Wire 5Kw | 5   |      |
| 40  | 27M82536   | Base, leg                      | 4   |      |
| 41  | 2909143    | Fitting 1/4"x1/2"              | 1   |      |
| 42  | 2819464    | Motor                          | 1   |      |
| 43  | 2911049    | Valve BDU08024DW               | 1   |      |
| 44  | 29C80232   | Cylinder CDA2D80-350           | 1   |      |
| 45  | 2910108    | Regulator Air main MACP 300    | 1   |      |
| 46  | 2921221    | Cylinder fixed mount           | 1   |      |
| 47  | ST68901000 | Washer                         | 2   |      |
| 48  | 2812008    | Blower                         | 1   |      |
| 49  | 2909923    | Fitting 1/2"                   | 1   |      |
| 50  | 2911217    | Valve MVSC460-4E1 AC24V        | 1   |      |
| 51  | 2909924    | Fitting 1-1/4"                 | 1   |      |
| 52  | 2853424    | Switch limit WLCA12-2-Q        | 1   |      |
| 53  | 2850968    | Sensor                         | 1   |      |
| 54  | 2920230    | Valve check ASP530F            | 1   |      |
| 55  | 2914052    | Valve check E-002 1/4"         | 1   |      |
| 56  | 2749008    | Fitting 1/2"                   | 1   |      |
| 57  | 2707227    | Nut M22                        | 1   |      |
| 58  | 29300037   | Mesh                           | 1   |      |
| 59  | 2883349    | Door lock                      | 1   |      |
| 60  | 29092187   | Nipple 1-1/4x5cm               | 1   |      |
| 61  | 2850968    | Sensor                         | 2   |      |
| 62  | 27060021   | Ring S12                       | 4   |      |
| 63  | 29092184   | Nipple 1/2x15cm                | 1   |      |
| 64  | 29092186   | Nipple 1-1/4x20cm              | 1   |      |
| 65  | 29092185   | Nipple 1-1/4x12cm              | 1   |      |
| 66  | 2909261    | Fitting 1-1/4"                 | 1   |      |
| 67  | 2910550    | Pressure gauge                 | 1   |      |
| 68  | 274000665  | Fitting 1/2"X271               | 3   |      |
| 69  | 27004575   | Hex socket hd screw M12x35L    | 4   |      |
| 70  | 2705305    | Split lock washer M12          | 4   |      |

| NO. | PART NO.  | DESCRIPTION                | QTY | NOTE |
|-----|-----------|----------------------------|-----|------|
| 71  | 2705137   | Flat washer M12            | 4   |      |
| 72  | 2909346   | JPL10-04                   | 4   |      |
| 73  | 2705303   | Washer, Split Lock M5 (S)  | 4   |      |
| 74  | 27046151  | Washer, Flat M6(S)         | 9   |      |
| 75  | 2705302   | Washer, Split Lock M6 (S)  | 5   |      |
| 76  | 2705150   | Washer, Flat M5(S)         | 4   |      |
| 77  | 2700414   | Screw, Hex Hd M5x12 (S)    | 4   |      |
| 78  | 27013551  | Screw, Oval Hd M4x4 (S)    | 1   |      |
| 79  | 2707224   | Nut, Hex Hd M8 (S)         | 8   |      |
| 80  | 2703327   | Screw, Oval Hd M4x20 (S)   | 1   |      |
| 81  | 27004021  | Screw, Hex Hd M6x15 (S)    | 17  |      |
| 82  | 2705302   | Washer, Split Lock M6 (S)  | 5   |      |
| 83  | 2707204   | Nut, Hex Hd M6 (S)         | 5   |      |
| 84  | 2700406   | Screw, Hex Hd M8x65 (S)    | 1   |      |
| 85  | 270461512 | Washer, Split Lock M8 (S)  | 28  |      |
| 86  | 27046153  | Washer, Flat M8 (S)        | 32  |      |
| 87  | 2700441   | Screw, Hex Hd M8x35 (S)    | 16  |      |
| 88  | 2700408   | Screw, Hex Hd M8x20 (S)    | 12  |      |
| 89  | 2705334   | Washer, Split Lock M22 (S) | 1   |      |
| 90  | 2700463   | Hex socket hd screw M10x35 | 4   |      |
| 91  | 2705304   | Washer, Split Lock M10 (S) | 4   |      |
| 92  | 2705189   | Washer, Flat M10(S)        | 4   |      |
| 93  | 2704621   | Set M4x8                   | 1   |      |
| 94  | 2701172   | Hex socket hd screw M4x16  | 2   |      |
| 95  | 272832522 | Dried bearing BM2520F36    | 1   |      |
| 96  | 2701179   | Hex socket hd screw M8x35  | 8   |      |
| 97  | 2909007   | Fitting 1/2"x3/8"          | 1   |      |
| 98  | 2701502   | Round head screw M5x10     | 6   |      |
| 99  | 29093278  | Fitting 1/2"x3cm           | 4   |      |
| 100 | 29093331  | Fitting SPC10-2            | 1   |      |
| 101 | 2909352   | Fitting SPL8-1             | 1   |      |
| 102 | 29093390  | Fitting SPL10-2            | 1   |      |
| 103 | 29091036  | Fitting S-38 3/8"x1/4"     | 1   |      |
| 104 | 2909111   | Fitting S-38 1/2"x3/8"     | 1   |      |
| 105 | 2909008   | Fitting AP87 3/8"          | 1   |      |



## 8.2 HEAT COVER

### Heat Cover Diagram



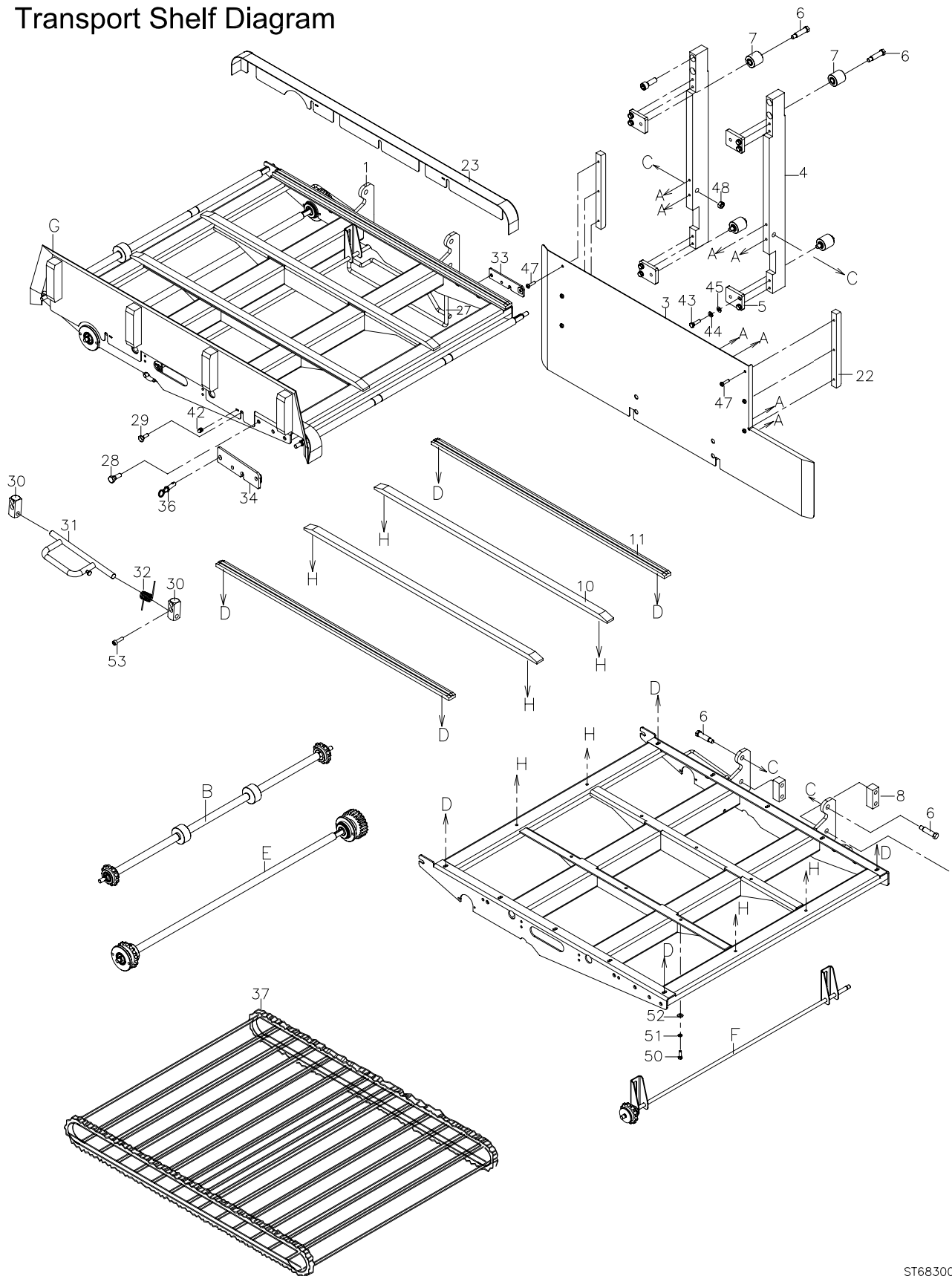
ST68200000





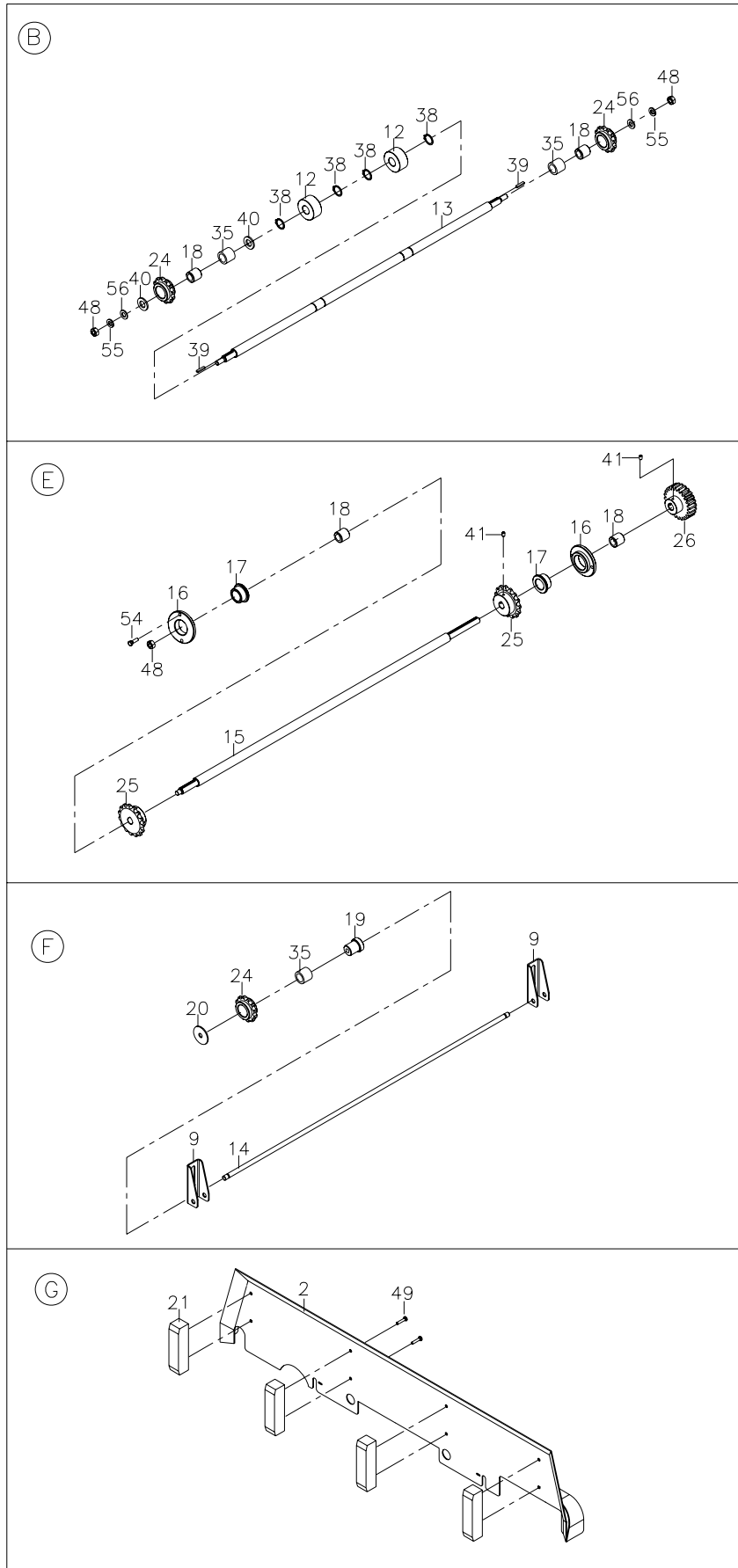
# 8.3 TRANSPORT SHELF DIAGRAM

## Transport Shelf Diagram



ST68300000

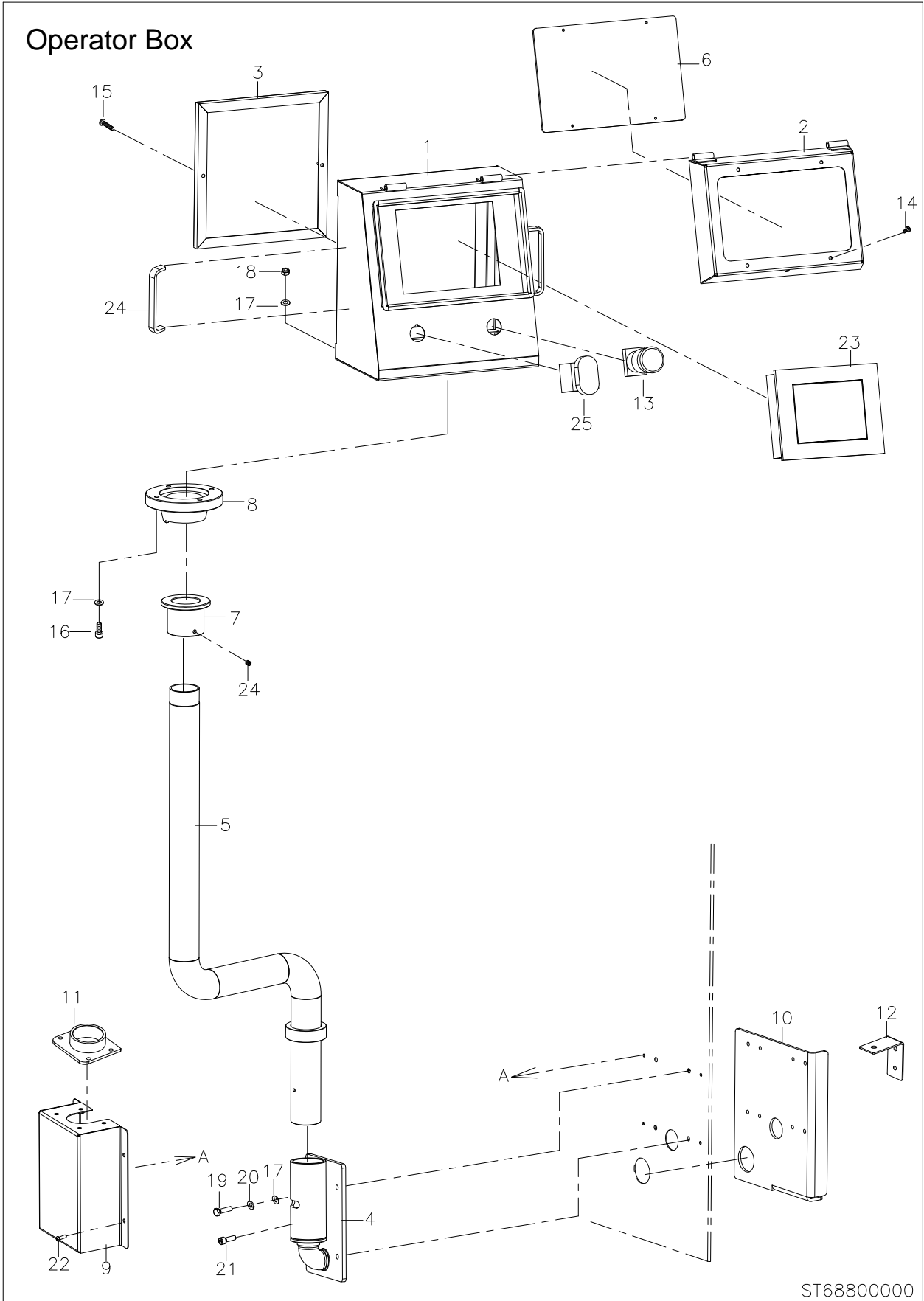
### 8.3 TRANSPORT SHELF DIAGRAM



| <b>NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                 | <b>QTY</b> | <b>NOTE</b> |
|------------|-----------------|------------------------------------|------------|-------------|
| 1          | ST68301000      | Lift conveyor                      | 1          |             |
| 2          | ST68302000      | Conveyor,Side Fender Cover         | 1          |             |
| 3          | ST68303000      | Protection Cover                   | 1          |             |
| 4          | ST68304000      | Conveyor Connecting Link           | 2          |             |
| 5          | ST68305000      | Guide Wheel,Fixed Plate            | 4          |             |
| 6          | ST680306000     | Guide Wheel, Axle Center           | 4          |             |
| 7          | ST68307000      | Lift Base,Guide Wheel              | 4          |             |
| 8          | ST68308000      | Connecting Link-Top                | 2          |             |
| 9          | ST68309000      | Axle,Support Plate                 | 2          |             |
| 10         | ST68310000      | Chain,Guide Plate                  | 2          |             |
| 11         | ST68311000      | Chain,Guide Plate                  | 2          |             |
| 12         | ST68312000      | Guide Wheel                        | 4          |             |
| 13         | ST68313000      | Conveyor,Driven Wheel ,Axle Center | 2          |             |
| 14         | ST68314000      | Tension Wheel, Axle Center         | 1          |             |
| 15         | ST68315000      | Tension Wheel, Axle Center         | 1          |             |
| 16         | ST68316000      | Fixed Shaft Sleeve                 | 2          |             |
| 17         | ST68317000      | Bearing Liner                      | 2          |             |
| 18         | ST68318000      | Driven Wheel Bearing Liner         | 6          |             |
| 19         | ST68319000      | Tension Wheel, Bearing Liner       | 2          |             |
| 20         | ST68320000      | Tension Wheel, Fender              | 2          |             |
| 21         | ST68321000      | Conveyor Side Fender Gasket        | 4          |             |
| 22         | ST68322000      | Gasket                             | 2          |             |
| 23         | ST68323000      | Conveyor Side-Cover                | 1          |             |
| 24         | ST68324000      | Chain Wheel                        | 6          |             |
| 25         | ST68325000      | Driving Chain Wheel                | 2          |             |
| 26         | ST68326000      | Driving Gear                       | 1          |             |
| 27         | ST68328000      | Conveyor Side-Support Bracket      | 1          |             |
| 28         | ST68330000      | Arm Fixed Screw                    | 4          |             |
| 29         | ST68331000      | Chain Cover Fixed Screw            | 4          |             |
| 30         | ST68332000      | Turning Shaft                      | 4          |             |
| 31         | ST68333000      | Handle                             | 1          |             |
| 32         | ST68334000      | Torsion Spring                     | 1          |             |
| 33         | ST68335000      | Chain,Left Swing Arm               | 1          |             |
| 34         | ST68336000      | Chain,Right Swing Arm              | 1          |             |
| 35         | 2728309         | Dried bearing BM2020               | 6          |             |

| NO. | PART NO.   | DESCRIPTION                        | QTY | NOTE |
|-----|------------|------------------------------------|-----|------|
| 36  | ST68337000 | Pull rod assembly                  | 2   |      |
| 37  | 2713400    | Chain RS40 2.7                     | 1   |      |
| 38  | 27060051   | Ring S16                           | 8   |      |
| 39  | 2709010    | Key 4xL20                          | 2   |      |
| 40  | 2705137    | Washer                             | 8   |      |
| 41  | 2704608    | Cap M4x12                          | 2   |      |
| 42  | 2701809    | Set M8                             | 4   |      |
| 43  | 27004011   | Screw, Hex Hd M6x20 (S)            | 4   |      |
| 44  | 2705302    | Washer, Split Lock M6 (S)          | 4   |      |
| 45  | 27046151   | Washer, Flat M6(S)                 | 4   |      |
| 46  | 2700464    | Hex socket hd screw M10x40         | 4   |      |
| 47  | 2701500    | Round head screw M5x6              | 6   |      |
| 48  | 2707224    | Nut, Hex Hd M8 (S)                 | 8   |      |
| 49  | 2701503    | Round head screw M5x12             | 8   |      |
| 50  | 2700414    | Screw, Hex Hd M5x12 (S)            | 20  |      |
| 51  | 2705303    | Washer, Split Lock M5 (S)          | 20  |      |
| 52  | 2705150    | Washer, Flat M5(S)                 | 20  |      |
| 53  | 2701153    | Hex socket hd screw M6x20          | 8   |      |
| 54  | 27000361   | Screw, Hex Hd M5x20 (S)            | 8   |      |
| 55  | 270461512  | Washer, Split Lock M8 (S)          | 4   |      |
| 56  | 27046153   | Washer, Flat M8(S)                 | 4   |      |
| B   | ST68313B00 | Driven wheel axle center assembly  | 1   |      |
| E   | ST68315B00 | Tension Wheel axle center assembly | 1   |      |
| F   | ST68314B00 | Tension Wheel axle center assembly | 1   |      |
| G   | ST68302B00 | Conveyor link plate assembly       | 1   |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |
|     |            |                                    |     |      |

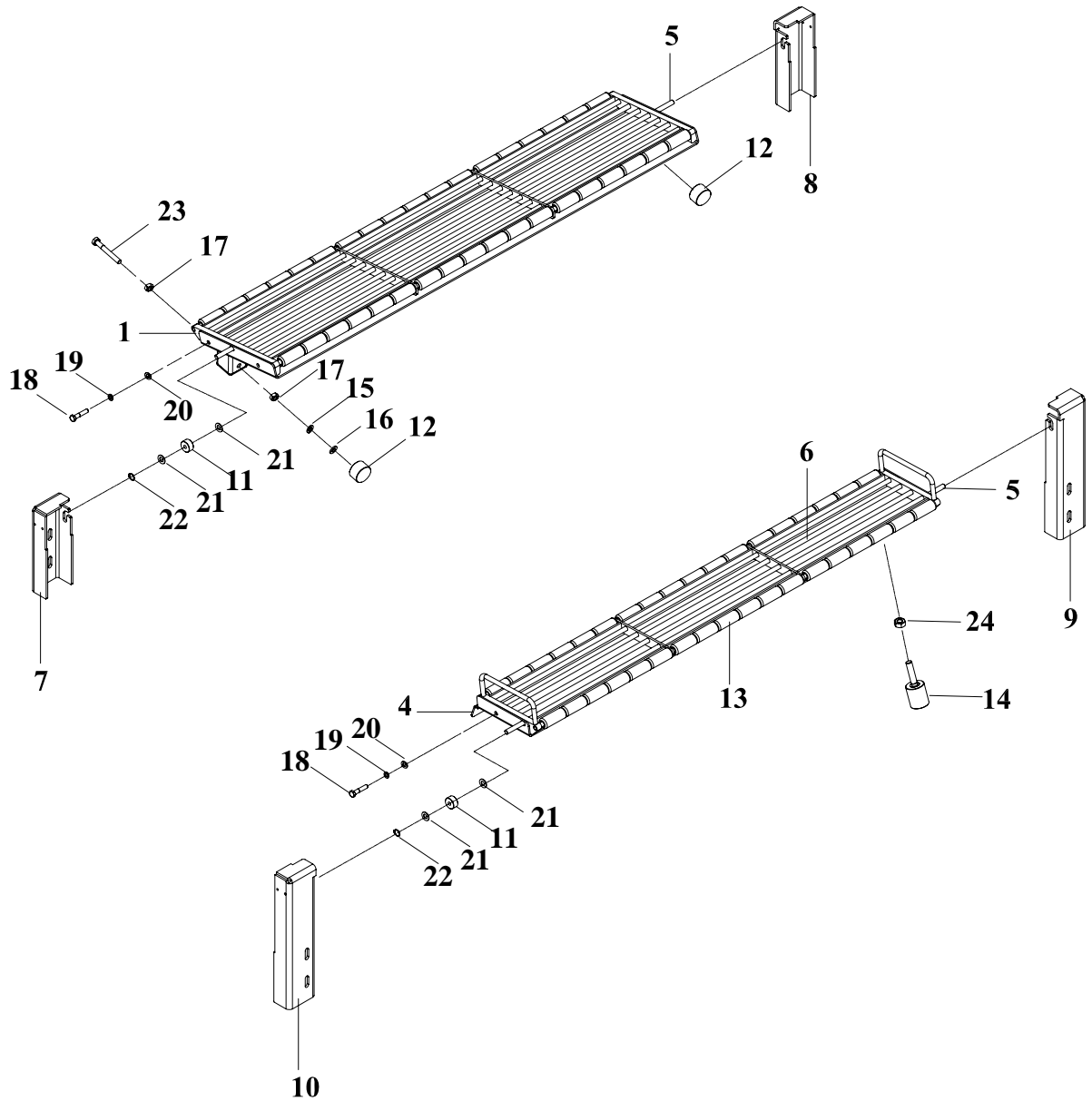
# 8.4 OPERATOR BOX



| NO. | PART NO.   | DESCRIPTION                   | QTY | NOTE |
|-----|------------|-------------------------------|-----|------|
| 1   | ST68801000 | Operator Box                  | 1   |      |
| 2   | ST68802000 | Electric-controll Box Cover   | 1   |      |
| 3   | ST68803000 | Operation Tray Cover Plate    | 1   |      |
| 4   | ST68805001 | Support-Arm Fixed Seat        | 1   |      |
| 5   | ST68806001 | Operation Box Support Pipe    | 1   |      |
| 6   | ST68807000 | Screen Plate                  | 1   |      |
| 7   | ST68808000 | Operation Box Fixed Sleeve    | 1   |      |
| 8   | ST68809000 | Operation Box Fixed Seat      | 1   |      |
| 9   | ST68810001 | Support Pipe Cover Plate      | 1   |      |
| 10  | ST68811000 | Support Pipe,Reinforced Plate | 1   |      |
| 11  | ST68812000 | Splash guard                  | 1   |      |
| 12  | ST68813000 | Heater fixed plate            | 1   |      |
| 13  | 2839127    | Switch emergency              | 1   |      |
| 14  | 27013551   | Screw, Oval Hd M4x4 (S)       | 4   |      |
| 15  | 2703327    | Screw, Oval Hd M4x20 (S)      | 2   |      |
| 16  | 2701153    | Socket set screw M6x20        | 4   |      |
| 17  | 2705151    | Washer, Flat M6 (S)           | 12  |      |
| 18  | 2707204    | Nut, Hex Hd M6 (S)            | 4   |      |
| 19  | 27004011   | Hex head screw M6x20 (S)      | 4   |      |
| 20  | 2705302    | Washer, Split Lock M6 (S)     | 4   |      |
| 21  | 2701165    | Socket set screw M5x12        | 1   |      |
| 22  | 2701503    | Screw, Oval Hd M5x12 (S)      | 4   |      |
| 23  | 2827061    | Human-Machine Interface       | 1   |      |
| 24  | 2704603    | Set M6x10                     | 2   |      |
| 25  | 2870187    | Button                        | 1   |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |
|     |            |                               |     |      |

## 8.5 CONVEYOR BRACKET DIAGRAM

### Conveyor Bracket Diagram



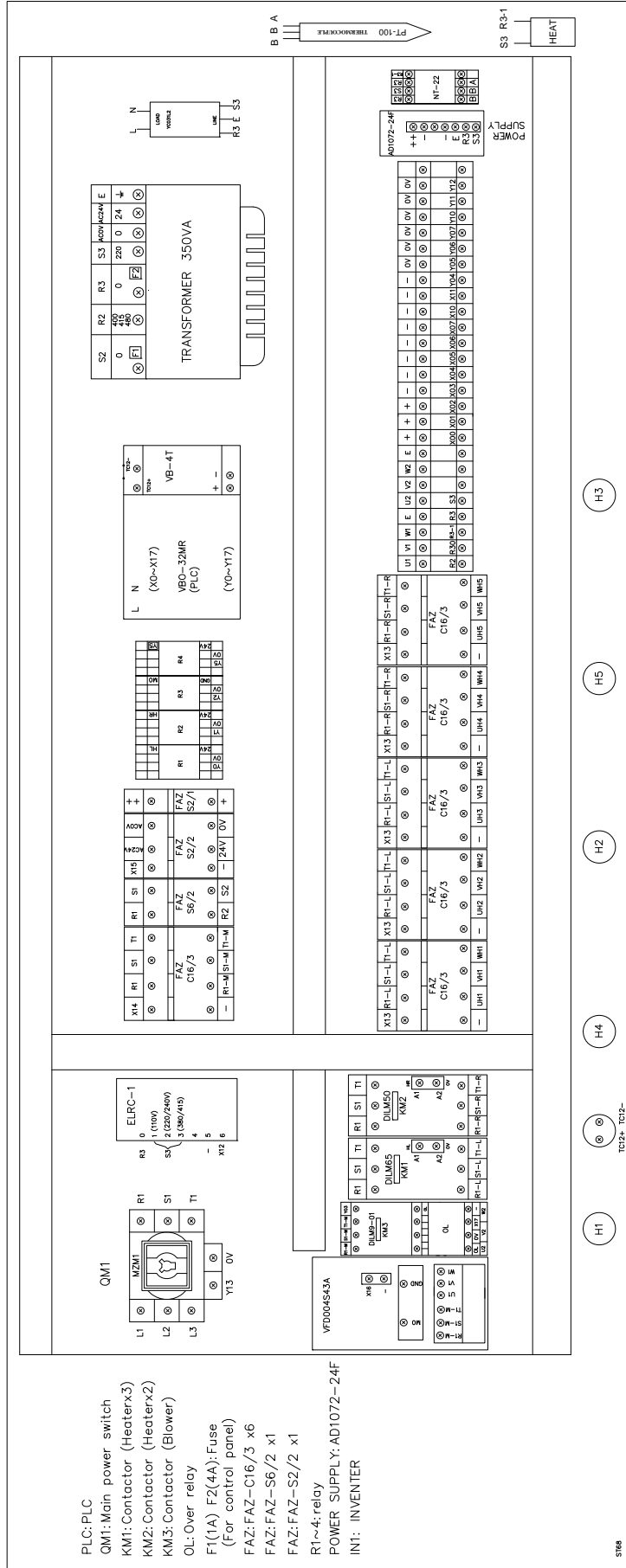
ST68400000





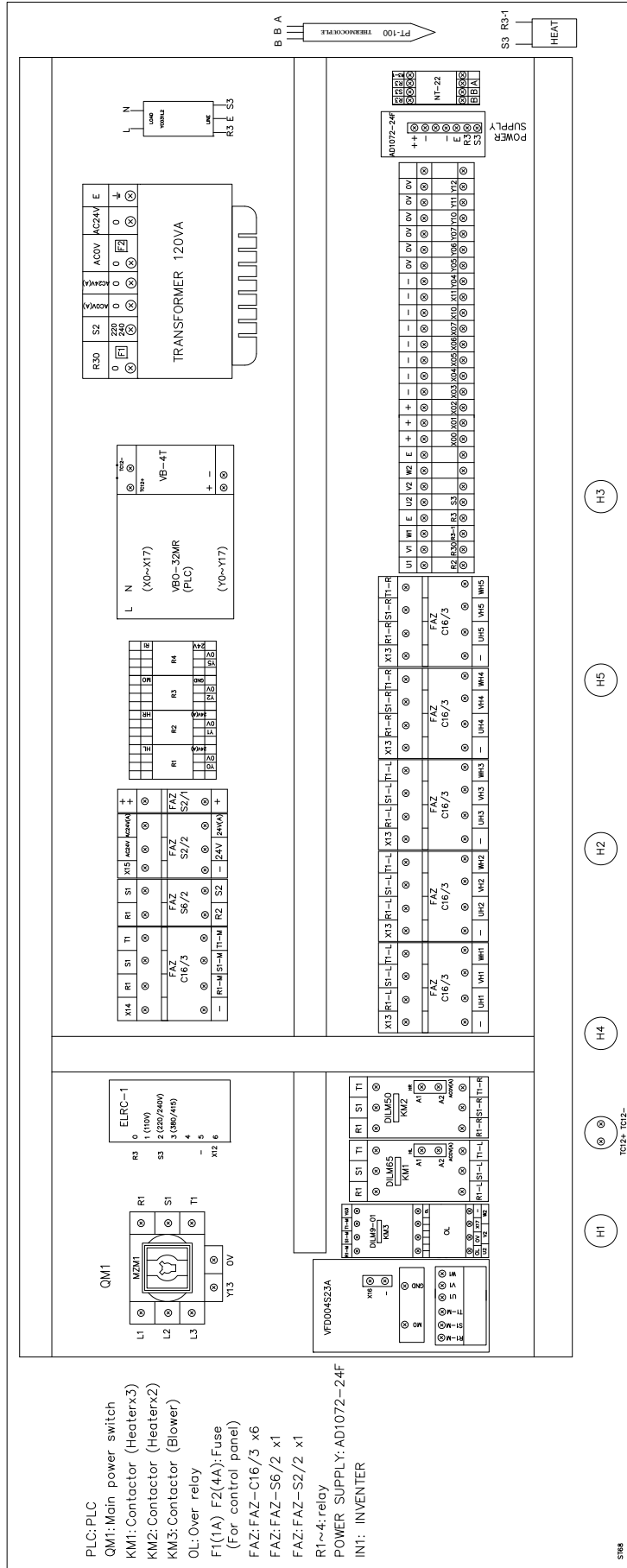
# 8.6 ELECTRICAL BOX

3φ 400V 50/60Hz



# 8.6 ELECTRICAL BOX

3 φ 220-240V 50/60Hz



## 8.6 ELECTRICAL BOX

| ITEM   | PART NO.   | DESCRIPTION                  | SPECIFICATION       | Q'TY | NOTE |
|--------|------------|------------------------------|---------------------|------|------|
| KM1    | 2810783    | Contactor                    | DILM9 AC24          | 1    |      |
| OL     | 2811752    |                              | MDEL ZOO 0.4-0.6A   | 1    |      |
| KM2    | 2810781    | Contactor                    | DILM50 (AC24V)      | 1    |      |
| KM3    | 2810782    |                              | DILM32 (AC24V)      |      |      |
| R1-R3  | 2830132    | Relay                        | RU4S-C-A24          | 3    |      |
|        | 2831106    | Socket, Relay                | SY4S-05D            | 3    |      |
|        | 2850635    | Hook                         | FM-4                | 6    |      |
| PLC    | ST68850000 | PLC                          | VBO-32MR-A          | 1    |      |
|        | 28246682   |                              | VB-4T               | 1    |      |
| KM     | 2801812    | Circuit breaker              | FAZ-2-S2            | 1    |      |
| KM     | 2801815    | Circuit breaker              | FAZ-2-S6            | 1    |      |
| KM     | 2801829    | Circuit breaker              | FAZ-C16/3           | 5    |      |
| KM     | 2801830    | Circuit breaker              | FAZ-XH1NH           | 5    |      |
| KM     | 2801822    | Circuit breaker              | FAZ-S2              | 1    |      |
| PFIM   | 2802022    | Breaker                      | ELRC-1 230-400V     | 1    |      |
| INV1   | 2805144    | Inverter                     | VFD004S43A AC380V   | 1    |      |
| Filter | 2896571    | Filter                       | YC03T1L2            | 1    |      |
| T2     | 28960041   | Transformer<br>TBSW-1I-350VA | 0F-400-440/0-220 UL | 1    |      |
| POWER  | 2896530-3  | POWER SUPPLY                 | LP1100D-24M         | 1    |      |
| QM1    | 2883140    | Switch, Selector             | NZM1-XTVD           | 1    |      |
|        | 2801639    |                              | NZM1/2-XV4          |      |      |
|        | 2801638    |                              | NZMB1-A80           |      |      |
| T.B    | 2840123    | Terminal Block               | T-20                | 1    |      |
|        | 2843212    | Plate, Terminal Block        | PTU-10              | 35   |      |