

## Common troubles and troubleshooting

See the following table for the common troubles, causes and troubleshooting:

| Trouble            | Analysis of causes                         | Troubleshooting                            |
|--------------------|--|--|
| Suspended platform | 1. Motor electromagnetic                   | 1. Replace electromagnetic brake           |
| slides down in     | brake fails.                               | 2. shorten the spacing, the reasonable     |
| static condition   | 2. The spacing between brake and armature  | spacing should be at 0.5 $\sim$ 0.6mm( see |
|                    | is over too big                            | 5.1.2)                                     |
| Suspended platform | 1. the main contact point of AC contactor  | 1. Push down "emergency stop" to stop      |
| doesn't stop in    | disengages                                 | suspended platform, replace                |
| ascending and      | 2. Control button fails.                   | contactor.                                 |
| descending         |  | 2. First stop suspended platform as per    |
|                    |  | the methods above, and then replace        |
|                    |  | control button.                            |
| Suspended platform | Power supply is abnormal:                  | 1. Check to see if any leakage, and take   |
| can't ascend and   | 1. Leakage breaker disengage               | preventive measures.                       |
| descend            | 2. Phase lacking                           | 2. Check if the 3-phase power is normal    |
|                    |  | and reconnect                              |
|                    | Failure of control line                    | 1. Replace transformer                     |
|                    | 1. Control transformer fails               | 2. Switch or replace thermal relay         |
|                    | 2. Thermal relay breaks or damages         | 3. Replace fuse of contactor               |
|                    | 3. fuse of contactor damages               | 4. Check and tighten plug or place         |
|                    | 4. Poor contact in plug                    |  |
| Suspended platform | 1. Sensitivity difference in motor brake.  | 1. Adjust the spacing of motor brake       |
| tilts              | 2. Spring of centrifugal speed limiter     | 2. Replace centrifugal speed limiter       |
|                    | loose.                                     | spring                                     |
|                    | 3. Difference in motor rotating speed, and | 3. Check the rope pressing device or       |
|                    | hoist rope pulling                         | place motor with incorrect rotating        |
|                    |  | speed                                      |
|                    | Uneven in the load of suspended platform   | Adjust the load of suspended platform      |
| Abnormal noises in | Parts of hoist is damaged                  | Replace                                    |
| suspended platform | <b>3</b> · · ·                             | •  |
| Hoist at one side  | 1. Braking armature stop moving or         | 1. Adjust the spacing between brake        |
| stop motion or     | spacing between armature and friction      | armature and friction disc or replace      |
| motor heats and    | disc is too small                          | armature.                                  |
| gives smoke        | 2. Coil of brake is burnt to damage.       | 2. Replace brake coil                      |
| _                  | Damage of switch.                          | 3. Replace rectifier                       |
|                    | 3. Short circuit and damage of rectifier   | 4. Replace relevant electrical parts       |
|                    | 4. Damage of thermal replay or contactor   | 5. Replace switch                          |



| Trouble condition    | Trouble analysis                    | Troubleshooting                          |
|----------------------|-------------------------------------|--|
| Working wire rope    | Welding problem at end of rope      | 1. Grind welding part                    |
| can't go through     |                                     | 2. Remark end of wire rope               |
| hoist                |                                     |  |
| Hoist can't actuate  | 1. Power voltage is too low         | check and adjust voltage                 |
| suspended platform   | 2. Damage of hoist                  | 2. Examine and adjust hoist              |
|                      | 3. Brake doesn't open or open       | 3. Adjust spacing and check if brake     |
|                      | incompletely                        | work properly                            |
| Motor noise or       | Operation lacking phases            | Check power supply                       |
| abnormal in heat     | 2. Voltage is too low or high       | 2. Check power voltage                   |
| radiation            | 3. Bearing is damaged               | 3. Replace                               |
| Safety lock slip or  | 1. Oil dust on the safety wire rope | Clean or replace wire rope               |
| locking angle is too | 2. Abrasion of rope clip            | 2. Replace rope clip                     |
| big                  | 3. Sluggish motion in safety lock   | 3. Replace torsion spring of safety lock |

The rejection of wire rope is as described before; the wire rope up to the rejection standard should be rejected.