

序号	常见故障	Problem	故障分析	Probable Causes
1	保护开关 QF 跳闸。	Switch QF trips out.	电缆内部损伤、短路或相线接地。	Damaged cable, short circuit, phase terminals grounded.
2	保护开关 QF1、QF2、QF3 跳闸。	Switch QF1、QF2、QF3 trip out.	1. 变压器绕组或控制绕组与地短路。 2. 安全保护开关压线松动、掉落、接地等。	1. Coil of transformer grounded. 2. Safety switch wire loosen, fallen and grounded.
3	电源正常，电源接触器不吸合。	The main electric power is normal but the contractor.	1. 热继电器 1KCE、2KCE 的控制接点打开。 2. 活板门安全开关 3SL 和限速保护开关 1SL 断绳保护开关 2SL，损坏。	1. Joint of thermal relays 1KCE, 2KCE opened. 2. Damaged safety switches for trap door 3SL, safety device 1SL, slack rope 2SL.
4	操作开关手柄置于上下行位置，接触器不吸合。	The contact has not been actuated when operating lever is in “up” or “down” position.	1. 吊笼门安全开关 4SL、5SL，上、下限位开关 6SL、7SL，损坏。 2. 操作开关内部接点松动或损坏。 3. 操作开关电源损伤、断路等。	1. Damaged safety switches 4SL, 5SL, of the cage, and limit switches 6SL, 7SL. 2. Contact of operating lever damaged or loosens. 3. Damaged operation wire, open circuit.
5	吊笼上下运行有自停现象。	The cage stops suddenly	1. 超载运行，热继电器 1KCE 或 2KCE 动作。 2. 安全保护开关接点接触不良。 3. 门开关动作。	1. Thermal relays 1KCE or 2KCE actuated due to overload. 2. No circuit on contacts of safety switch. 3. Gate open.

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6	电动机启动困难并有异常噪音。	Electric motor start difficultly and with unusual noise.	1. 制动器无动作。 2. 超载。 3. 电源功率不足，压降过大。	1. Brake can not work.. 2. Over load. 3. Power is not enough, Voltage decline too much.
7	制动器无动作	The brake can not work.	1. 制动继电器 KC 不吸合。 2. 制动继电器 KC 接点损坏。 3. 控制制动继电器 KC 的 KMU 和 KMD 接点损坏。 4. 整流器 U 损坏。	1. Brake contactor KC has not been actuated. 2. Contact of brake contactor KC damaged. 3. Contacts KMU, KMD damaged. 4. Rectifier U damaged.
8	吊笼上行或下行运行，限位碰铁碰到限位开关不停止。	The hoist can not stop when the limit switch touches the other limit cam.	1. 上限位开关 6SL 或下限位开关 7SL 损坏。 2. 限位碰铁上移。	1. Damaged limit switch 6SL, or 7SL. 2. Moved limit cam.
9	接触器 KMU、KMD 释放有延时现象。	Contacts KMU, KMD restart	接触器 KMU、KMD 的触点上 有油污。	The surfaces of contact KMU, KMD are not clean.
10	接触器易烧损。	Contacts fire easily.	电源功率不足，或工地电源距升降机过远，供电电缆截面过小，致使启动压降过大，启动电流过大。	Power is not enough, or the power is too far, the cable is too small, result in the voltage decline too much, the start current is too large.
11	操作升降机上下运行时有时动作不正常。	The hoist travels abnormally sometimes.	接触器 KMU、KMD 的接点接触不良。	Loosen contact of KMU and KMD.

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12	升降机则启动就跳闸	The switch trips off while cage starts.	<ol style="list-style-type: none"> <li>吊笼超载，变频器电流太大；</li> <li>电源的空气保护开关选型不正确；</li> <li>制动器线圈短路或接地。</li> </ol>	<ol style="list-style-type: none"> <li>The cage is overload, the current of frequency is too large.</li> <li>The switch isn't chosen right;</li> <li>Coil of brake short circuit or grounded.</li> </ol>
13	总接触器吸合，变频器无电，吊笼不能运行。	The total contactor work, the frequency isn't normal, the cage can't run.	<ol style="list-style-type: none"> <li>吊笼门限位断开；</li> <li>上、下限位断开；</li> <li>内、外转换开关未正常工作；</li> <li>用操作板检查变频器模块等是否需更换。</li> <li>变频器接线端子松脱或断开；</li> <li>变频器坏；</li> <li>外笼门限位断开；</li> <li>断绳保护开关断开；</li> <li>急停开关断开；</li> <li>钥匙开关断开；</li> <li>极限开关断开。</li> </ol>	<ol style="list-style-type: none"> <li>Cage door limit is open.</li> <li>Up and down limit is open.</li> <li>In or out converter switch is not normal.</li> <li>Check the frequency conversion system.</li> <li>The end-point of frequency is free.</li> <li>The frequency is damaged.</li> <li>Enclosure door limit is open.</li> <li>Rope switch is open.</li> <li>Stop switch is open.</li> <li>Key switch is open.</li> <li>3-phase switch is open.</li> </ol>
14	变频调速升降机运行中突然自动停止，不能继续运行。	The frequency hoist stops suddenly when works, and can't start.	变频器自动过载保护，立即通知专业维修人员，在查明原因前，不得启动升降机。	The frequency protect of overload. Call technical severs at once. Don't start the hoist before check the account.
15	主接触器不吸合	The main contactor does not word.	<ol style="list-style-type: none"> <li>检查三相电源是否正常；</li> <li>三相电相序是否正确同，相序继电器工作指示灯是否亮。</li> <li>断绳限位开关是否正常。</li> <li>变频器故障保护继电器是否动作。</li> <li>内外急停按钮开关，电锁开关是否开启。</li> <li>元件损坏或线路短路，断路等。</li> </ol>	<ol style="list-style-type: none"> <li>Check 3-phase power.</li> <li>Check the order of 3-phase, the lamp of relay should be work.</li> <li>Check rope switch.</li> <li>Check the trouble relay of the frequency.</li> <li>Check in or out emergency button, EL. Lock is on.</li> <li>Damaged electric parts, short or open circuit.</li> </ol>

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16	操作没上行或下行	The cage can not work	<ol style="list-style-type: none"> <li>1. 检查主接触器是否吸合。</li> <li>2. 检查限速器微动开关，上下限位开关，减速限位开关，极限开关，各门限位是否动作。</li> <li>3. 按上行是否上行继电器吸合，按下行是否下行继电器吸合。</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the main contactor.</li> <li>2. Check safety device switch, top and bottom limit switch, delay switch, 3-phase switch, all door switches.</li> <li>3. Check up relay and down relay.</li> </ol>
17	启动时突然下滑约200mm	The cage sleeves down while start.	检查刹车延时限位开关是否回位。	Check the break relay.
18	运行没高速	The cage can not run high speed.	<ol style="list-style-type: none"> <li>1. 检查减速限位开关是否回位。</li> <li>2. 检查加速继电器是否吸合。</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the delay switch.</li> <li>2. Check the accelerate relay.</li> </ol>
19	启动时，制动器没打开	The break does not release	<ol style="list-style-type: none"> <li>1. 制动延时器是否正常，制动继电器是否动作，制动接触器是否动作。</li> <li>2. 整流桥块是否正常，输入有没有电压，输入有没有直流输出。</li> <li>3. 制动器的控制电压不正确。</li> <li>4. 制动器的间隙调整不正确。</li> <li>5. 线路短路，断路等。</li> </ol>	<ol style="list-style-type: none"> <li>1. Check time delay, break relay, break contactor.</li> <li>2. Check the rectifier.</li> <li>3. Wrong voltage at brake control unit.</li> <li>4. Check the brake interval.</li> <li>5. Short or open circuit.</li> </ol>
20	吊笼运行时震动较大	The cage is bigger shock when the hoist is running	<ol style="list-style-type: none"> <li>1. 滚轮螺栓松动。</li> <li>2. 齿轮、齿条的啮合间隙过大。</li> <li>3. 导轮与齿条背的间隙过大。</li> <li>4. 齿轮、齿条啮合缺少润滑油。</li> </ol>	<ol style="list-style-type: none"> <li>1. Screws of roller are loose.</li> <li>2. Engagement play is big between pinion and rack.</li> <li>3. The play of roller and rack is big.</li> <li>4. Engagement of pinion and rack is short of lubrications oil.</li> </ol>

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21	吊笼启动或停止时有跳动现象	The cage shock suddenly when it is starting and shopping	<ol style="list-style-type: none"> <li>1. 制动器制动力矩过大。</li> <li>2. 电机与减速机间联轴器内橡胶损坏。</li> </ol>	<ol style="list-style-type: none"> <li>1. The brake torque of brake is too big.</li> <li>2. Rubber between shaft coupling of motor and reducing device is broken down.</li> </ol>
22	吊笼运行时电机跳动	The motor is shock when hoist is running	<ol style="list-style-type: none"> <li>1. 电机的固定装置松动。</li> <li>2. 电机的橡胶垫掉落。</li> <li>3. 减速机与传动大板的联接螺栓松动。</li> </ol>	<ol style="list-style-type: none"> <li>1. Tie of motor is loose.</li> <li>2. Rubber washer has fallen off.</li> <li>3. Connection of reducing device and machinery plate is loose.</li> </ol>
23	吊笼运行时有跳动现象	The cage is shock when hoist is running.	<ol style="list-style-type: none"> <li>1. 标准节管对接阶差大。</li> <li>2. 标准节齿条螺栓松动，齿条对接阶差大。</li> <li>3. 小齿轮磨损，更换全部小齿轮。</li> </ol>	<ol style="list-style-type: none"> <li>1. Interface step of vertical pipe of the mast section is big.</li> <li>2. Screw of the mast section rack is big.</li> <li>3. The pinions are worn, replace all pinions.</li> </ol>
24	吊笼运行时有摆动现象	The cage is swing when hoist is running	<ol style="list-style-type: none"> <li>1. 滚轮螺栓松动。</li> <li>2. 支撑板螺栓松动</li> </ol>	<ol style="list-style-type: none"> <li>1. Screw of roller is loose.</li> <li>2. Screw of support plate is loose.</li> </ol>
25	制动器噪声大	Noise of brake is big too	<ol style="list-style-type: none"> <li>1. 制动器止退轴承损坏。</li> <li>2. 转动盘摆动</li> </ol>	<ol style="list-style-type: none"> <li>1. Lock bear of brake is broken down.</li> <li>2. Rotary disc is swing.</li> </ol>
26	制动器磨损很快	Wear of brake pad is quickly	<ol style="list-style-type: none"> <li>1. 制动盘磨损。</li> <li>2. 制动器止退轴承内积灰尘，致使不能同步打开。</li> <li>3. 工地电源功率不足，启动压降大，制动器打不开。</li> </ol>	<ol style="list-style-type: none"> <li>1. Brake disc is worn.</li> <li>2. Brakes are not synchronism because of dirty.</li> <li>3. Brakes can't work because that power is not enough.</li> </ol>
27	减速机漏油	Reducing device leak oil	<ol style="list-style-type: none"> <li>1. 减速机骨架油封损坏。</li> <li>2. 减速机观察孔盖螺丝未拧紧。</li> <li>3. 减速机“O”型密封圈损坏。</li> </ol>	<ol style="list-style-type: none"> <li>1. Frame of reducing device is broken down.</li> <li>2. Screw of observe hole of work gear was not tighten.</li> <li>3. O-ring of the worm box is broken down.</li> </ol>



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28	电机发烫	Motor is too hot	<ol style="list-style-type: none"> <li>1. 制动器动作不同步。</li> <li>2. 升降机长时间超载运行。</li> <li>3. 起、制动过于频繁。</li> <li>4. 供电电压过低。</li> </ol>	<ol style="list-style-type: none"> <li>1. Brake is not synchronism.</li> <li>2. Hoist run overload too long time.</li> <li>3. It is frequency for starting and brake.</li> <li>4. Power voltage is very low.</li> </ol>
29	减速机蜗轮磨损快	Wear of worm is quick	<ol style="list-style-type: none"> <li>1. 润滑清型号不正确。</li> <li>2. 减速机蜗轮油未及时更换。</li> <li>3. 减速机蜗轮、蜗杆中心距偏移。</li> </ol>	<ol style="list-style-type: none"> <li>1. The oil is not correct.</li> <li>2. Oil of reducing device does not change in time.</li> <li>3. Center distance of worm and worm gear is deviat.</li> </ol>
30	吊笼启、制动时振动大	Bigger shock when stop and start	<ol style="list-style-type: none"> <li>1. 电机制动力矩太大,适当放松电机尾端调节套6。</li> <li>2. 齿轮齿条间隙、滚轮与立管间隙不正确。</li> </ol>	<ol style="list-style-type: none"> <li>1. Release 6 at the back of motor.</li> <li>2. The interval between pinions and rack or between rollers and vertical pipe is not correct.</li> </ol>
31	吊笼制动时下滑距离过长	The sleeve distance is too long when stop	电机制动力矩太小,适当拧紧电机尾端调节套6,或更换制动块(制动盘)。	Replace brake pads(or brake piece),tighten 6 at the back of motor.
32	减速机通气塞漏油	Breathing cram leaks oil.	<ol style="list-style-type: none"> <li>1. 油量太多。</li> <li>2. 通气塞安装不正确。</li> </ol>	<ol style="list-style-type: none"> <li>1. Too much oil.</li> <li>2. Breathing cram installs incorrect.</li> </ol>
33	减速机有异常的不稳定的噪声	Unsteadily running noise	<ol style="list-style-type: none"> <li>1. 油已污染。</li> <li>2. 油量不足。</li> </ol>	<ol style="list-style-type: none"> <li>1. The oil is dirty.</li> <li>2. The oil is short.</li> </ol>
34	减速机有异常的稳定的运转噪声	Steadily running noise	<ol style="list-style-type: none"> <li>1. 轴承损坏。</li> <li>2. 传动零件损坏。</li> </ol>	<ol style="list-style-type: none"> <li>1. The bearing is broken.</li> <li>2. The driving part is broken.</li> </ol>
35	减速机输出轴不转,但电机转动	The output shaft does not rotate, but motor rotate.	减速机轴键联接被破坏。	The shaft key is broken.