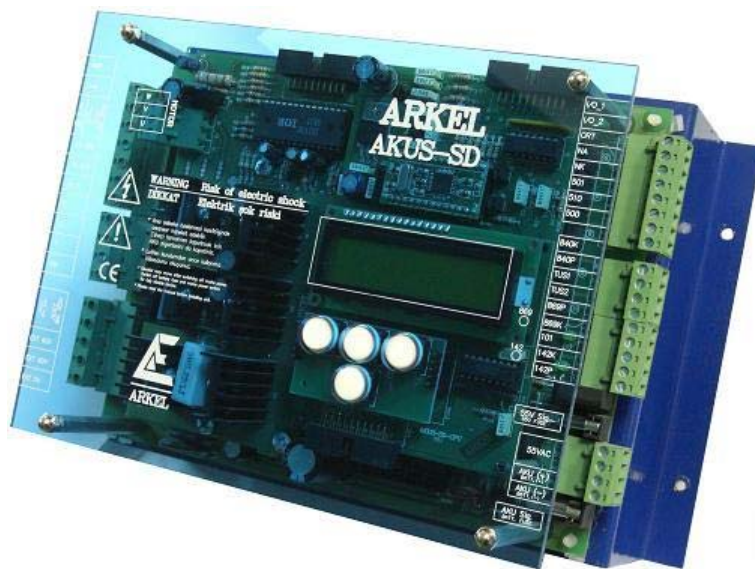




AKUS-SD



Troubleshooting Manual

Document Ver. : V1.0

INFORMATIVE MESSAGES

S. DELAY: 3 SEC

The time remaining before rescue starts, according to the parameter set in menu.

**BATTERY SUPPLY TO
PANEL POWER**

Control panel transformer is being powered by AKUS-SD transformer.

**PREPARING TO
RESCUE**

System is preparing to start the rescue operation.

**RESCUE STARTED
BAT: 65V IM: 10.0A**

Rescue operation has started and showing battery voltage and motor current values during rescue operation.

**OPENING THE DOOR
BAT: 65V IM: 10.0A**

A message informing the opening of the doors, battery voltage and door motor current values during rescue operation.

**DOOR OPENED
RESCUE FINISHED**

A message informing that the doors have been opened and rescue operation has ended.

ERROR CODES & EXPLANATIONS

INSPECTION MODE RESCUE CANCELLED

Rescue operation cannot be done because the elevator is in inspection mode.

- Verify that the elevator is not in inspection mode during the rescue operation.
- In ARL type control panels make sure that the inspection bridge is not connected in KBK input card and check the inspection connections according to the schemes
- Be aware that before rescue operation the 869 LED on AKUS-SD board is ON. It is expected to go OFF when KAK (rescue active) contactor is activated.

CAR IS AT THE FLOOR LEVEL

Car is at floor the level message is received by AKUS-SD during rescue operation.

- If “car is at the floor level” message is received but the car is not at floor level, make sure that the 142 LED on AKUS-SD board is ON/OFF according to the “at floor” parameter.
- Make sure that AKUS-SD 142 LED works in accordance with the “at floor” signal of the control card. If “at floor” signal does not work in accordance with the system, check the related magnetic shelter, magnets and connections according to the schemes.
- If “at floor” signal is displayed even though the AKUS-SD 142 LED works in accordance with the system, check whether the 1000 connector in the panel is bridged to the battery connector.
- Make sure that “at floor” signal output setting is adjusted for the appropriate contact in your system

220V INVERTER IS OVERLOADED

AKUS-SD transformer is overloaded during the rescue operation.

- AKUS-SD transformer power is exceeded during rescue. The sum of the powers of the main transformer in the panel and of the brake/cam coil should not be higher than AKUS-SD transformer (400VA).
- Most probably the brake coil causes this warning; it may be drawing excess current. Check the current that the brake draws.
- Check your connections with respect to the schemes.

**WAITING FOR
DOOR LOCK**

Safety circuit is complete and contactors are waited to activate.

- If “waiting for door lock” is displayed during rescue, make sure that safety circuits (120, 130, 140) are in active stages.
- Display of this message until rescue starts is normal. When door lock wait time is exceeded, “motor connection err. Zero current” error is given the rescue operation is canceled. Extending the door lock wait time may solve the problem.
- If rescue operation cannot be executed even though safety circuits and motor contactors are active, check the connection from motor output connectors to motor with respect to the schemes.

**MOTOR CONNECTION
ERR. ZERO CURRENT**

There is a connection problem between AKUS-SD card and motor or “waiting for door lock” time is exceeded.

- This error message is generated when motor cannot be powered within door lock wait time. It may have been set to a low value.
- Check whether the safety circuit is active.
- Door may not be fully locked when rescue starts.
- Make sure that KAK (rescue active) contactor is activated during rescue operation.
- In ARL type panels, make sure that the 869 LED on control card is OFF.
- In ARL type panels, check whether one of the inspection direction signals (500, 501) is ON.
- In ARL type panels, make sure that related motor contactors are activated according to the system (KPA & KPB contactors in VVVF systems / KU1 or KU2 with KH contactors in two speed systems / KU1 or KU2 with KP contactors in one speed systems should be active).
- Check motor connection line with respect to the schemes.

**UNABLE TO
TURN MOTOR**

Generated when motor does not work even though it is powered during rescue operation.

- This error message is generated when motor does not work even though all the functions are fulfilled during rescue operation.
- If the motor is double coiled, make sure that AKUS-SD motor outputs are connected to high speed coil.
- In two speed systems, slow contactor instead of high one is being activated during rescue operation.
- Applied torque on motor is inadequate. Try increasing motor torque or decreasing motor running frequency by setting the related parameter.
- Two phases are supplied to motor. Check connections.
- Motor is stuck; battery cannot run the motor. Check if it is stuck.
- Make sure that brakes are also activated after the contactors do during rescue. Brake may not be fully open

**MAX. TRAVEL
TIME IS ELAPSED**

Maximum travel time is exceeded during rescue.

- Increase the maximum travel time with respect to the high floor by trial.
- If the elevator bypasses the floor and generate the error, check the 142 input on AKUS-SD and related magnets.
- Check the 142 connection line on the scheme
- Make sure that 142 LED on AKUS-SD works in compliance with the contact output that is set when the elevator is at floor level.

**WHILE RUNNING
LOW TORQUE ERR.**

Connection between AKUS-SD and motor has been interrupted before the rescue has finished.

- Make sure that contactors are not deactivated during rescue operation.
- If this error is generated at lowest and highest limiter zones, set the related control card parameter to “go to limiter floor during inspection”.
- During rescue operation, at least one of the motor ends cannot be powered when motor is working. Check the motor line connection.

**BATTERY FAILURE
RESCUE CANCELLED**

Inadequate battery for rescue operation.

- Can be generated just before the sleep mode is activated.
- Check the batteries if this error is generated when rescue is about to start or has already started
- Check the batteries one by one with a 12V halogen lamp. Measuring one by one or as a group with a measuring device may lead to incorrect results.

DRIVER ERROR

Malfunction in motor driving transistors.

- Malfunction due to connections may have damaged the product. Send back to factory for inspection.