

| component | KKS | Component | Fault | Possible Cause | Remedy | Benutzerhandbuch |
|--------------------|------------|--------------------|---|--|--|------------------|
| KONDENSATOR | | | | | | |
| K | | Process | Condenser doesn't start | A-Alarm queued | Remedy the fault, acknowledge the alarm | |
| K | | Process | Condenser doesn't start | No release | Check releases | |
| K | | Process | Condenser doesn't start | Temperature at flue gas inlet too low | Adjust limit temperature of the flue gas inlet, inform IS SaveEnergy AG | |
| K | | Process | Condenser doesn't start | Temperature at flue gas inlet too high | Check the firing setting, inform IS SaveEnergy AG | |
| K | | Process | Condenser doesn't start | Water level too low | Feed and check the feed | |
| K | | Process | Condenser doesn't start | No start command at the control panel | Switch on the plant | |
| K | | Process | Condenser start is cancelled, timeout fault | | | |
| K | | Process | No condensing operation | Return temperature too high Excess air too high Not enough water content in the fuel | Check and improve boundary conditions | |
| K | | Process | Low level | No condensation Return temperature too high Excess air too high | Check and improve boundary conditions | |
| K | | Process | Low level | Not enough water content in the fuel | See emergency cooler and/or feeding valve | |
| K | | Process | High fresh-water consumption | Emergency cooler and/or feeding valve is open | Switch to automatic mode, remedy the fault | |
| K | | Process | High fresh-water consumption | High conductance value in process water no condensation, bad fuel | Check and improve boundary conditions, check the fuel | |
| K | | Process | High fresh-water consumption | High pH-value in process water, no condensation, bad fuel | Check and improve boundary conditions, check the fuel | |
| K | | Process | High control value | No condensation, bad fuel | Check and improve boundary conditions, check the fuel | |
| K | | Process | High pH value | No condensation, bad fuel | Check and improve boundary conditions, check the fuel | |
| K | | Process | Formation of foam | Bad burning | Adjust firing | |
| K | | Process | Formation of foam | Bad burning, stop-go operation | Adjust firing | |
| K | | Process | Process water tank 1 overflow | No signal from level sensor | See HTD01CL101 | |
| K | | Process | Process water tank 1 overflow | Water treatment line closed or blocked | Open valve, automatic mode, check and clean line | |
| K | | Process | Process water tank 1 overflow | Nozzle arrangement | Inform IS SaveEnergy | |
| K | | Process | Process water tank 1 overflow | Emergency overflow blocked | Check and clean the line | |
| K | | Process | Process water tank 1 overflow | Emergency cooler and/or feeding valve is open | Switch to automatic mode, remedy the fault | |
| K | | Process | Process water tank 2 overflow | No signal from level sensor | See HTD01CL101 | |
| K | | Process | Process water tank 2 overflow | water treatment line closed or blocked | Open valve, automatic mode, check and clean line | |
| K | | Process | Process water tank 2 overflow | Nozzle arrangement | Inform IS SaveEnergy | |
| K | | Process | Process water tank 2 overflow | Flue gas flow too high | Inform IS SaveEnergy | |
| K | | Process | Process water tank 2 overflow | Emergency overflow blocked | Check and clean the line | |
| K | | Process | Process water tank 2 overflow | Emergency cooler and/or feeding valve is open | Switch to automatic mode, remedy the fault | |
| K | | Process | Leak in the service lid | Defective or worn seal | Replace the seal | |
| K | | Process | Leak in compensators | | See General: Compensator | |
| K | | Process | Leak in pump | | See Pump: inform IS SaveEnergy | |
| K | | Process | Feed and emergency cooling not functioning or flow rate is too low | Valve defective | Check and replace valve if necessary | |
| K | | Process | Feed and emergency cooling not functioning or flow rate is too low | Mains system pressure too low | Increase mains system pressure, completely open the shut-off valves | |
| K | | Process | Feed and emergency cooling not functioning or flow rate is too low | Valve in manual mode | Switch to automatic mode | |
| K | | Process | Boiler fan at power limit | Fan from condenser running incorrectly, underpressure sensor | See Underpressure Sensor HTD01CP001 | |
| K | | Process | Boiler fan at power limit | Pressure loss in flue gas line too high from the condenser inlet to the chimney: check for obstacles and dirt deposits | Remove obstacles and dirt | |
| K | | Process | Underpressure cannot be maintained | Volume flow from boiler too high | Check firing power, firing setting | |
| K | | Process | Underpressure cannot be maintained | Pressure loss in flue gas line too high from the condenser inlet to the chimney: check for obstacles and dirt deposits | Remove obstacles and dirt | |
| K | | Process | Underpressure cannot be maintained | Line to pressure measurement is dirty | Blow out and clean the line | |
| K | | Process | Underpressure cannot be maintained | Defective pressure sensor | See Underpressure Sensor HTD01CP001 | |
| K | | Process | Nozzle pressure cannot be reached | Nozzles close or have fallen off | Replace nozzles | |
| K | | Process | Fan control fluctuates | PID controller | Re-adjust the PID controller | |
| K | | Process | Fan control fluctuates | Obstacle in flue gas line | Check flue gas line and clean if necessary | |
| K | | Process | Nozzle pressure cannot be reached | Dirt in heat exchanger | Back flush or clean, add citric acid, see Heat Exchanger HTD01AC002 | |
| K | | Process | Nozzle pressure cannot be reached | Rate/level of delivery too low | See Process Water Pump HTD01AP0xx | |
| K | | Process | Nozzle pressure cannot be reached | Switch pump to manual mode at a low speed | Switch to automatic mode | |
| K | | Process | Pressure loss over the HE increases | Chalk or dirt deposits in the heat exchanger | Back flush or clean, add citric acid, see Heat Exchanger HTD01AC002 | |
| K | HTA0xC10xx | Temperature sensor | | | See "General" Temperature Sensor | |
| K | HTC01AN001 | Flue gas fan | Fan is turbulent | Caking on the impeller blades | Carefully clean the impeller | |
| K | HTC01AN001 | Flue gas fan | Fan is turbulent | Worn impeller | Replace the impeller | |
| K | HTC01AN001 | Flue gas fan | Fan is turbulent | Impeller deformed by heat | Replace the impeller | |
| K | HTC01AN001 | Flue gas fan | Fan is turbulent | Irregular blockages in fan due to uneven foundation | Release the anchoring and level the foundation. Then fix the fan back on. | |
| K | HTC01AN001 | Flue gas fan | Fan is turbulent | Improper setting of the anti-vibration buffer or the isolation springs. | Correct the setting. | |
| K | HTC01AN001 | Flue gas fan | Fan is turbulent | Pipe connections screwed on too tight. | Insert flexible pipe connections (compensators) | |
| K | HTC01AN001 | Flue gas fan | Medium being pumped exits at the shaft seal | Defective or worn seal. | Replace the seal | |
| K | HTC01AN001 | Flue gas fan | Grinding noises at the fan | Impeller scrapes on intake pipe. | Release the top section of the housing and realign: check and correct pipeline if necessary. | |
| K | HTC01AN001 | Flue gas fan | Grinding noises at the fan | Noises at the motor. | Check motor for bearing damage and replace bearing if necessary | |
| K | HTC01AN001 | Flue gas fan | The flow volume specified on the motor plate is constantly exceeded | Air volume too high. | Reduce the air volume with a flue damper until the permitted flow rate is reached | |
| K | HTC01AN001 | Flue gas fan | The flow volume specified on the motor plate is constantly exceeded | Other speed at 60 Hz network | 60 Hz network | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Drive motor incorrectly connected. | Check the connection | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | The motor stops at star in a star-delta circuit. | Shorten the switching time from star to delta. | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Runs against too little plant resistance | Close the flue dampers or install additional sheet covers | |

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| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Motor protection equipment is too weak | The cable cross-section and the protective equipment must provide the start-up current during startup | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Startup time too long | Close the flue dampers: check torque at motor MA/MN | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Defective drive motor | Check and replace the motor if necessary | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Motor too hot due to high frequency of operation | Operate the fan in continuous operation and control with the flue damper or frequency converter | |
| K | HTC01AN001 | Flue gas fan | Fan doesn't start | Startup current too high | Incorrect voltage. Provide star-delta startup, local network too weak | |
| K | HTC01BRxxx | Compensator | | | See "General" Compensator | |
| K | HTD01AA00x | Solenoid valve | | | See "General" Solenoid Valve | |
| K | HTD01AA00x | Shutting flap | Flap cannot move to end position | Dirt / contamination | Clean the flap | |
| K | HTD01AAxxx | Ball tap | | | See "General" Ball Tap | |
| K | HTD01AA90x | Switchover valve(optional) | Flap cannot move to end position | Dirt / contamination | Clean the flap | |
| K | HTD01AC002 | Plate HE | Pressure loss increasing over the heat exchanger | Chalk or dirt deposits in the heat exchanger | Flushback or clean, add citric acid | |
| K | HTD01AC003 | Plate HE | Delta T increasing over heat exchanger | Chalk or dirt deposits in the heat exchanger | Flushback or clean, add citric acid | |
| K | HTD01AC004 | Plate HE | Leak | Loose screw connection | Check screw connection | |
| K | HTD01AC005 | Plate HE | Leak | Brittle seals | Open HE and replace seal | |
| K | HTD01AP00x | Process water pump | | | See "General" | |
| K | HTD01AP00x | Process water pump | Overheating / Overload | Rate of delivery too low | Increase minimum rate of delivery | |
| K | HTD01AP00x | Process water pump | Shaft seal leakage too high | Scoring or roughness in the shaft bushing | Replace shaft bushing, replace shaft seal | |
| K | HTD01AP00x | Process water pump | Shaft seal leakage too high | Shaft seal worn | Replace the shaft seal | |
| K | HTD01AP00x | Process water pump | Shaft seal leakage too high | Pump is turbulent | Correct suction/intake conditions, increase pressure at pump inlet side | |
| K | HTD01AP00x | Process water pump | Shaft seal leakage too high | Pump overtight or resonance vibrations in the pipeline | Check pipeline connections and pump fixture: decrease the distance between the pipe clips if necessary: fix the pipelines using vibration-damping material | |
| K | HTD01AP00x | Process water pump | Rate of delivery too low | Scoring or roughness in the shaft bushing | Replace shaft bushing, replace shaft seal | |
| K | HTD01BB050 | Replace control value probe | Leak | | Reassemble the container | |
| K | HTD01BB052 | Replace pH electrodes | Leak | | Reassemble the container | |
| K | HTD01BNxxx | Nozzles | Uneven spraying pattern | Nozzles worn | Replace | |
| K | HTD01BNxxx | Nozzles | Uneven spraying pattern | Nozzles deformed due to excessive temperatures | Check the settings of the inlet and outlet temperatures | |
| K | HTD01BNxxx | Nozzles | Uneven spraying pattern | Mains system pressure too low | Increase mains system pressure, completely open the shut-off valves | |
| K | HTD01BR80x | Compensator | | | See "General" Compensator | |
| K | HTD01BR80x | Expansion joint | Leak | Loose screw connection | Tighten the screws | |
| K | HTD01BR80x | Expansion joint | Leak | Wear | Replace | |
| K | HTD01BR80x | Expansion joint | Leak | Brittleness due to excessive temperature | Callback required, replace | |
| K | HTD01BR80x | Expansion joint | Leak | Brittleness due to composition of process water | Callback required, replace | |
| K | HTD01CF00x | Flow rate measurement (pump meter) | Incorrect indication of rate of flow | Opening to the diaphragm dirty | Clean the line | |
| K | HTD01CF00x | Flow rate measurement (pump meter) | Incorrect indication of rate of flow | Defective sensor | Replace the sensor | |
| K | HTD01CF00x | Flow rate measurement (pump meter) | Incorrect indication of rate of flow | Incorrect flow rate range setting in the controller | Adjust to the correct range | |
| K | HTD01CF00x | Flow rate measurement (pump meter) | No indication of the flow rate | Defective electrical wiring | Check electrical wiring | |
| K | HTD01CF00x | Flow rate measurement (pump meter) | No indication of the flow rate | Defective sensor | Replace the sensor | |
| K | HTD01CG00xH/L | Drive limit switch | No response | Defective electrical wiring | Check electrical wiring | |
| K | HTD01CG00xH/L | Drive limit switch | No response | Defective limit switch | Replace the sensor | |
| K | HTD01CG00xH/L | Drive limit switch | No response | Flap cannot move to end position | Clean the flap | |
| K | HTD01CL1xx | Floating switches | | | See "General" Floating Switches | |
| K | HTD01CP001 | Underpressure measurement (differential press) | Incorrect pressure indication | Condensate or dirt in the line to the sensor | Clean the line | |
| K | HTD01CP001 | Underpressure measurement (differential press) | Incorrect pressure indication | Defective sensor | Replace the sensor | |
| K | HTD01CP001 | Underpressure measurement (differential press) | Incorrect pressure indication | Pressure range setting in the controller is incorrect | Set the correct range | |
| K | HTD01CP001 | Underpressure measurement (differential press) | No pressure indication | Defective electrical wiring | Check electrical wiring | |
| K | HTD01CP001 | Underpressure measurement (differential press) | No pressure indication | Defective sensor | Replace the sensor | |
| K | HTD01CP00x | Pressure measurement | Incorrect pressure indication | Opening to the diaphragm dirty | Clean the sensor | |
| K | HTD01CP00x | Pressure measurement | Incorrect pressure indication | Defective sensor | Replace the sensor | |
| K | HTD01CP00x | Pressure measurement | Incorrect pressure indication | Pressure range setting in the controller is incorrect | Set the correct range | |
| K | HTD01CP00x | Pressure measurement | No pressure indication | Defective electrical wiring | Check electrical wiring | |
| K | HTD01CP00x | Pressure measurement | No pressure indication | Defective sensor | Replace the sensor | |
| K | HTD01CQ011 | Control value measurement | "PWR FAIL" (power output 22mA) | <ul style="list-style-type: none"> Power supply is unstable or less than 12 V DC. Power supply is defective. | <ul style="list-style-type: none"> Use power supply between 12 and 30 V DC. Use a filtered and controlled power supply Replace the device | |
| K | HTD01CQ011 | Control value measurement | "ERROR" (power output 22mA) | Error in internal memory (EEPROM) | <ul style="list-style-type: none"> Switch the device off then back on. Replace the device | |
| K | HTD01CQ011 | Control value measurement | "-- °C" (power output 22mA) | The temperature of the fluid is outside the range (-40 °C > T° or T° > +120 °C). | <ul style="list-style-type: none"> Check the temperature of the process. Replace the device | |
| K | HTD01CQ011 | Control value measurement | "-- mS" (power output 22mA) | The black connector of the conductivity sensor is not longer connected to the electronic board. | <ul style="list-style-type: none"> Reconnect the black connector of the conductivity sensor to the electronic board. Replace the device | |
| K | HTD01CQ011 | Control value measurement | "0000" power output 4...20mA | The measured conductivity is zero. | <ul style="list-style-type: none"> Check the sensor coefficient (must be identical to 6 or 7). Reconnect the gold connector of the conductivity sensor to the electronic board. Replace the device | |
| K | HTD01CQ011 | Control value measurement | "9999" power output 4...20mA | The measured value cannot be displayed because it is too large. | <ul style="list-style-type: none"> Change the measuring unit (e.g.: from mS to S) Change the decimal point | |
| K | HTD01CQ011 | Control value measurement | Conductivity value flashes (power output 22mA) | Conductivity is outside of the range (>2 S) | <ul style="list-style-type: none"> → Make sure conductivity <2 S Check the sensor coefficient (must be identical to 6 or 7). Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "Sensor not found" | Connection to the test card interrupted | <ul style="list-style-type: none"> Switch the device off then back on. Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "S EE Fact Read" | <ul style="list-style-type: none"> Factory settings lost Accuracy of the device is impaired | <ul style="list-style-type: none"> Switch the device off then back on. Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "S EE User Read" | Sensor user data lost | <ul style="list-style-type: none"> Switch the device off then back on Check the sensor data in all "Sensor" menus, then re-save the data Replace the device | |

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| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "S PT Missing" | Connection to Pt1000 lost | • Check tight seating of the connecting nut between the sensor unit and the electronic module. • Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "S PT Regulation" | • The temperature of the fluid is measured incorrectly. • The process is stopped. | • Switch the device off then back on • Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "S RCT Clock" | The clock is defective. The process is continued | Replace the device when clock is required | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "TR EE Fact/User Read" | Data read error | • Switch the device off then back on • If the fault continues, reset the device to its basic settings • Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "TR COM Measure" | • The module that detects and converts the measured variables is defective. • The process is interrupted. | • Switch the device off then back on • Replace the device | |
| K | HTD01CQ011 | Control value measurement | ON (power output 22mA) "TR EE UserWrite" | Data storage error | • Switch the device off then back on • Re-save the data • If the fault continues, reset the device to its basic settings • Replace the device | |
| K | HTD01CQ011 | Control value measurement | OFF (power output 4...20mA) "S RTC Reinit" | The data and time have been lost because the device has not been supplied with power for at least 5 days | Reset the date and time of the device - connect the transmitter to power for at least four hours to ensure that time can be detected for the next five days. | |
| K | HTD01CQ011 | Control value measurement | ON power output 22mA) "E: Conductivity" | Conductivity is outside of the range | • Read-off the conductivity in the "Sensor" menu • If necessary, clean then recalibrate the sensor | |
| K | HTD01CQ011 | Control value measurement | ON power output 22mA) "E: Polarization" | The increase in the polarization curve is too high | • Call the "Sensor" function from the diagnostics menu to read-off the polarization curve increase value • If necessary, clean then recalibrate the sensor | |
| K | HTD01CQ011 | Control value measurement | ON power output 22mA) "E: Temperature" | The fluid temperature is outside of the range | • If necessary check the correct function of the integrated Pt1000 by measuring a fluid with a known temperature • Replace the device | |
| K | HTD01CQ011 | Control value measurement | OFF (power output 4...20mA) "W: Conductivity" | Conductivity is outside of the range | • Call the "Sensor" function from the diagnostics menu to read-off the conductivity value • If necessary, clean then recalibrate the sensor | |
| K | HTD01CQ011 | Control value measurement | OFF (power output 4...20mA) "W: Polarization" | The increase in the polarization curve is too high | • Call the "Sensor" function from the diagnostics menu to read-off the polarization curve increase value • If necessary, clean then recalibrate the sensor | |
| K | HTD01CQ011 | Control value measurement | OFF power output 4...20mA) "W: Temperature" | The fluid temperature is outside of the range | • If necessary check the correct function of the integrated Pt1000 by measuring a fluid with a known temperature • Replace the device | |
| K | HTD01CQ011 | Control value measurement | OFF power output 4...20mA) "M: Calib. Dat" | Due date for sensor calibration | Calibrate the conductivity sensor | |
| K | HTD01CQ011 | Control value measurement | Incorrect display of the control value | Control value range in the controller is incorrect | Set the correct range | |
| K | HTD0xC10xx | Temperature sensor | | | See "General" Temperature Sensor | |
| K | HTS01AP051 | pH pump | Pump does not dispense | "Set point" (limit value) is incorrect | Adjust the "set point" | |
| K | HTS01AP051 | pH pump | Pump does not dispense | Alkali / acid selector switch set incorrectly | Adjust the dispensing unit | |
| K | HTS01AP051 | pH pump | Pump does not dispense | Air in the inlet line | Vent the suction hose | |
| K | HTS01AP051 | pH pump | Pump does not dispense | Filter blockage | Thoroughly flush the filter | |
| K | HTS01AP051 | pH pump | Pump does not dispense | Problem with suction and pressure valves | Clean valves; replace if necessary | |
| K | HTS01AP051 | pH pump | Wire break | Defective electrical wiring, no grounding | Check electrical wiring, check the grounding | |
| K | HTS01AP051 | pH pump | Measures incorrect pH values | Sensor aged | Recalibrate the sensor | |
| K | HTS01AP051 | pH electrode | Measures incorrect pH values | Sensor worn | Replace the sensor | |
| K | HTS01AP051 | pH electrode | Wire break | Ground not connected to the sensor receptacle, or defective | Check the grounding | |
| K | HTS01AP051 | pH electrode | Measured value is incorrect (dropping) | Probe is in the sediment and measures sediment pH | Remove sediment, clean the probe | |
| K | HTS01AP051 | pH electrode | Measured value is incorrect (dropping) | Probe is dirty, shows signs of deposits | Clean the probe. | |
| K | HTS01AP051 | pH electrode | Measured value is incorrect (dropping) | Incorrect measurement due to voltage in water, line, housing, etc. | Place the probe in a glass of water then add acid to free the dirt (citric acid or "salt acid"). Swivel the probe in the fluid and then dry it. | |
| K | HTS01AP052 | pH electrode | Measured value is incorrect (dropping) | Soldering point of the wiring in the pump is bad or loose | Check the soldering | |
| K | HTS01AP053 | pH electrode | Measured value is incorrect (dropping) | Influence (electromagnetic) from the surroundings If the pH value drops, then fill a glass with process water, remove the probe and place it in the glass; when the pH value once more rises then electricity is affecting the measurement | Check the soldering point of the wiring in the pump and repair | |
| K | HTS01AP051 | pH electrode | Measured value is incorrect (dropping) | Defective probe | Ground the probe holder, ground the lines Simulation mV feed instead of the probe (50-60mV/ppm: 7ppm = 400mV) | |
| WASSERBEHANDLUNG | | | | | | |
| W | | Process | Lamella separator overflows | No signal from level sensor HTM01CL111 | See HTM01CL111 | |
| W | | Process | Lamella separator overflows | Flow rate in the lamella separator is too high | Check and slow down the flow rate | |
| W | | Process | Lamella separator overflows | Valve HTM01AA001 defective | See HTM01AA001 | |
| W | | Process | Lamella separator overflows | Incorrect stroke limitation, valve HTM01AA001 | Check stroke limitation | |
| W | | Process | Lamella separator overflows | Return line to condenser is blocked | Check and clean the line | |
| W | | Process | Lamella separator overflows | Plant heavily soiled | Clean the entire plant | |
| W | | Process | No water to the lamella separator | | See Lamella Separator (HTM01AT011) | |
| W | | Process | Sand filter overflows | No signal from level sensor | See HTM01CL131 | |
| W | | Process | Sand filter overflows | Diaphragm valve (HTM01AA031) closed manually | Switch valve to automatic mode | |
| W | | Process | Sand filter overflows | Line from the collection cone in the sewage tank blocked | Check and clean the line | |
| W | | Process | Sand filter overflows | Filter sand blocked | Replace sand | Beschreibung / Description |
| W | | Process | Sand filter overflows | Filter nozzles defective | Remove the sand and replace the filter nozzles | Beschreibung / Description |
| W | | Process | Water is not cleaned properly | | See Lamella Separator (HTM01AT011) | |
| W | | Process | Sewage tank overflows --> sewage pump HTM01AP051 does not function | No signal from level sensor | See HTM01CL151 | |
| W | | Process | Sewage tank overflows --> sewage pump HTM01AP051 does not function | Pump does not function | See HTM01AP051 | |

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| W | | Process | Sewage tank overflows -> sewage pump HTM01AP051 does not function | Pump HTM01AP051 manual off | Switch the pump to automatic mode | |
| W | | Process | Sewage tank overflows -> sewage pump in operation | Line to lamella separator blocked | Check and clean the line | |
| W | | Process | Cleanwater tank overflows | Drain pipe blocked | Check and clean the line | |
| W | | Process | Purging does not function | No compressed air | Check the compressed air supply, shut-off valves ... | |
| W | | Process | Purging does not function | No compressed air | Check the pilot valve (see HTM01AA011/21) | |
| W | | Process | Purging does not function | Pilot valve (HTM01AA011/21) closed manually | Switch valve to automatic mode | |
| W | | Process | Purging does not function | Inlet line, pressure line or sludge pump blocked | Clean lines and the pump | |
| W | | Process | Purging does not function | Defective sludge pump | See HTM01AP011 | |
| W | | Process | Backflush not working | No signal from level sensor HTM01CL131 | See HTM01CL131 | |
| W | | Process | Backflush not working | Backflush cut-off time still active | Wait until the cut-off time has expired | |
| W | | Process | Backflush not working | Backflush pump not working | See HTM01AP041 | |
| W | | Process | Backflush not working | Switch off backflush pump HTM01AP041 manually | Switch the pump to automatic mode | |
| W | | Process | Backflush not working | Backflush compressor not working | See HTM01AP031 | |
| W | | Process | Backflush not working | Switch off backflush compressor HTM01AN031 manually | Switch the pump to automatic mode | |
| W | | Process | Backflush not working | Filter sand blocked | Replace sand | |
| W | | Process | Backflush not working | Filter nozzles defective | Remove the sand and replace the filter nozzles | |
| W | | Process | Backflush interval, sand filter HTM01AT031 <30min | Sand HTM01KT002 very dirty/clotted | Check sand: replace! | |
| W | | Process | Backflush interval, sand filter HTM01AT031 <30min | Dust content of flue gas >150mg/nm3 | Check dust removal before condenser (cyclone, filter, etc.) | |
| W | HTM01AA0xx | Diaphragm valve | Outward leak at the flange connection | Connection incorrectly mounted Seal worn | Tighten the connection and replace the seal if necessary | |
| W | HTM01AA0xx | Diaphragm valve | Outward leak at the connecting nut | Connection incorrectly mounted Worn o-ring | Tighten connection hand-tight or replace o-rings if necessary | |
| W | HTM01AA0xx | Diaphragm valve | Leak of medium at the connection between the valve body and the housing nut | | <ul style="list-style-type: none"> Tighten the housing nut until there is a clearance of 0.5 to 1 mm between the valve body and the housing nut The semi-circular indicator on the housing nut with raster element must be flush to the valve body, or replace the diaphragm as per chapter "Replacing the diaphragm". | |
| W | HTM01AA0xx | Diaphragm valve | Leak in the seating / leak in opening | Worn diaphragm | Replace the diaphragm as per chapter "Procedure – replacing the diaphragm" | |
| W | HTM01AA0xx | Diaphragm valve | Unit is sluggish | | <ul style="list-style-type: none"> Check the spindle for wear and lubricate if necessary replace seals and/or functional parts if necessary | |
| W | HTM01AA0xx | Diaphragm valve | Control medium leak | | Check connections and piping system | |
| W | HTM01AA0xx | Diaphragm valve | Unit does not perform the specified stroke, or closes and opens | | <ul style="list-style-type: none"> Check the control pressure Check function (FC, FO, DA) and corresponding connections Check function of venting and breather line | |
| W | HTM01AA0xx | Diaphragm valve | Medium leak at the position indicator | | Replace the spindle and piston seal as well as the diaphragm | |
| W | HTM01AA0xx | Diaphragm valve | Leak of control medium at the venting | | Replace the spindle and piston seal | |
| W | HTM01AA0xx | Diaphragm valve | Diaphragm closes early | | <ul style="list-style-type: none"> Check the control pressure Check function (FC, FO, DA) and corresponding connections Check the size of the drive If necessary, replace the number of spring packs for function FC Check the vent hole at the intermediate element and clean if necessary Check the chemical and mechanical reliability of the diaphragm | |
| W | HTM01AA0xx | Diaphragm valve | Drive no longer actuates – signs of solid freezing | | <ul style="list-style-type: none"> Condensate has frozen Dry control air Seal the indicator cap with a foam rubber seal | |
| W | HTM01AA0xx | Solenoid valve | | | See "General" Solenoid Valve | |
| W | HTM0xA00xxZ | Pilot valve | | | See "General" Solenoid Valve | |
| W | HTM01AA3xx | Ball tap | | | See "General" Ball Tap | |
| W | HTM01AA7x1 | Nonreturn valve | Leak in the passage | Gasket damaged | Replace the seal | |
| W | HTM01AA7x1 | Nonreturn valve | Leak in the passage | Nonreturn valve dirty | Remove and clean the nonreturn valve | |
| W | HTM01AA7x1 | Nonreturn valve | Leak in the passage | Nonreturn valve incorrectly installed | Observe the direction of flow on the nonreturn valve | |
| W | HTM01AA7x1 | Nonreturn valve | Outwards leak | Compression from gasket too low | Tighten the screw-in part in the nonreturn valve | |
| W | HTM01AA7x1 | Nonreturn valve | Outwards leak | O-ring compression too low | Tighten the connecting nuts | |
| W | HTM01AA7x1 | Nonreturn valve | Outwards leak | O-ring missing or is damaged | Replace the o-rings | |
| W | HTM01AA7x1 | Nonreturn valve | Valve cone is jammed | Unsuitable medium | Only use permitted median. See «Georg Fischer Planning Criteria» | |
| W | HTM01AA7x1 | Nonreturn valve | Spring malfunctions | Corroded spring | Ensure correct chemical reliability. See «Georg Fischer Planning Criteria» | |
| W | HTM01AN031 | Backflushing compressor | Compressor not running | Motor protection switch triggered | Switch on the motor protection switch | |
| W | HTM01AN031 | Backflushing compressor | Final pressure (max. overpressure) not reached | Leaks at the machine or in the system | Check piping and screw connections for leaks and tight seating | Kap / Chap 7.2 |
| W | HTM01AN031 | Backflushing compressor | Final pressure (max. overpressure) not reached | Lamellas are worn or damaged | Replace the lamellas | Kapitel / Chapter 7.2.2, Kapitel / Chapter 7.4 |
| W | HTM01AN031 | Backflushing compressor | Final pressure (max. overpressure) not reached | Selected drive power is too low | Use the next-higher motor power | |
| W | HTM01AN031 | Backflushing compressor | Machine gets too hot | Surrounding temperature or inlet temperature is too high | Make sure that correct usage is observed | Kapitel / Chapter 2.3 |
| W | HTM01AN031 | Backflushing compressor | Machine gets too hot | Cooling air current is impeded | <ul style="list-style-type: none"> Check surrounding conditions Clean the ventilation slots | Kapitel / Chapter 5.1: Kapitel / Chapter 7.2 |
| W | HTM01AN031 | Backflushing compressor | Machine gets too hot | The filter cartridge from the blow-out filter is dirty | Clean / replace filter cartridge | Kapitel / Chapter 7.2.1: Kapitel / Chapter 7.4 |
| W | HTM01AN031 | Backflushing compressor | Machine gets too hot | The control valve is dirty; the permissible pressure is therefore exceeded | Clean / replace the control valve | Kapitel / Chapter 7.2: Kapitel / Chapter 7.4 |
| W | HTM01AN031 | Backflushing compressor | Machine generates unusual noise | The compressor housing is worn (chatter marks) | Repairs by the manufacturer or authorized repair shop | |
| W | HTM01AN031 | Backflushing compressor | Machine generates unusual noise | The control valve vibrates | Replace the valve | Kapitel / Chapter 7.4 |
| W | HTM01AN031 | Backflushing compressor | Machine generates unusual noise | The lamellas are damaged | Replace the lamellas | Kapitel / Chapter 7.2.2, Kapitel / Chapter 7.4 |
| W | HTM01AT131 | Compressor intake filter | | Filter is dirty | Clean the filter | |
| W | HTM01AP011 | Sludge pump | Delivery rate is reduced, pulsation increased | Ball valve on the inlet side is blocked | Free up the ball valve | |
| W | HTM01AP011 | Sludge pump | Piston rod is sluggish | Compressed air too dry (instrument air) | Slightly oil the air | |
| W | HTM01AP011 | Sludge pump | Piston rod is sluggish | Temperature too high | Cool | |
| W | HTM01AP011 | Sludge pump | Piston rod is sluggish | Compressed air dirty | Place on a filter | |
| W | HTM01AP011 | Sludge pump | Piston rod is sluggish | Piston rod worn | Replace | |

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| component | KKS | Component | Fault | Possible Cause | Remedy | Benutzerhandbuch |
|-----------|-----|-----------|---|---|--|------------------|
| K / N / W | | Pump | Delivery height too low | Impermissible air or gas content in the fluid being conveyed | Callback required | |
| K / N / W | | Pump | Delivery height too low | Wear to inside parts | Replace worn parts | |
| K / N / W | | Pump | Delivery height too low | Incorrect direction of rotation | If direction of rotation is incorrect, check the connection of the pump / pump unit and when necessary of the switchgear | |
| K / N / W | | Pump | Damaged rising pipeline (pipe and seal) | | Replace defective rising pipe and replace seals | |
| K / N / W | | Pump | Delivery height too low | Running on 2 phases | Replace defective fuse, check line connections | |
| K / N / W | | Pump | Pump does not convey | Pump or pipeline not completely vented | Clean vent hole 5.8 in pump housing 101 | |
| K / N / W | | Pump | Pump does not convey | Intake line or impeller blocked | Remove deposits in the pump and/or the pipelines | |
| K / N / W | | Pump | Pump does not convey | Motor does not run because no power supply | Check electrical installation, contact the electric works | |
| K / N / W | | Pump | Pump does not convey | Motor winding or electrical line is defective | Switch on Service SaveEnergy | |
| K / N / W | | Pump | Pump does not convey | The temperature monitor for winding monitoring has cut-off because the winding temperature is too high | The motor switches back on automatically after cooling down | |
| K / N / W | | Pump | Pump does not convey | Damaged rising pipeline (pipe and seal) | Replace defective rising pipe and replace seals | |
| K / N / W | | Pump | Pump does not convey | Running on 2 phases | Replace defective fuse, check line connections | |
| K / N / W | | Pump | Rate of delivery too low | Pump conveys against excessive pressure | Open the shut-off valve more until the operating point is correctly adjusted | |
| K / N / W | | Pump | Rate of delivery too low | Intake line or impeller blocked | Remove deposits in the pump and/or the pipelines | |
| K / N / W | | Pump | Rate of delivery too low | Impermissible air or gas content in the fluid being conveyed | Callback required | |
| K / N / W | | Pump | Rate of delivery too low | Wear to inside parts | Replace worn parts | |
| K / N / W | | Pump | Rate of delivery too low | Incorrect direction of rotation | Check the electrical connection of the pump / pump unit and when necessary of the switchgear | |
| K / N / W | | Pump | Rate of delivery too low | Damaged rising pipeline (pipe and seal) | Replace defective rising pipe and replace seals | |
| K / N / W | | Pump | Rate of delivery too low | Running on 2 phases | Replace defective fuse, check line connections | |
| K / N / W | | Pump | Rate of delivery too low | Pump sanding up, trench is dirty, feed is too low | Clean the infeed, sand trap, pump parts and nonreturn valve, empty the pit and clean | |
| K / N / W | | Pump | Rate of delivery too low | Pipelines blocked | Clean | |
| K / N / W | | Pump | Rate of delivery too low | Pump sucks in air | Seal the inlet line | |
| K / N / W | | Pump | Rate of delivery too low | Pump conveys against excessive pressure | Readjust the operating point, check the plant for contamination, install a larger impeller 16) increase the speed (turbine, combustion engine) | |
| K / N / W | | Pump | Rate of delivery too low | Airbag formation in the pipeline | Change the pipeline, attach an air bleed valve | |
| K / N / W | | Pump | Rate of delivery too low | Pump or pipeline not completely vented or not filled | Vent or fill in | |
| K / N / W | | Pump | Rate of delivery too low | Suction lift too high/NPSH plant (feed) too low | Correct the fluid level, completely open the shut-off valve in the intake line, change the intake line when required, if resistances in the intake line are too large, check the installed sifters/suction (inlet) opening | |
| K / N / W | | Pump | Rate of delivery too low | Return valve is blocked | Clean | |
| K / N / W | | Pump | Rate of delivery too low | Unsuitable conveying medium (density or specific weight) | Callback required | |
| K / N / W | | Pump | Rate of delivery too low | The plant is untight / leaks | Check plant for leakage and repair | |
| K / N / W | | Pump | Pump does not start | Condensate in the motor | Replace the pump | |
| K / N / W | | Pump | Pump does not start | Insulator is defective | Replace the pump | |
| K / N / W | | Pump | Pump does not start | Manually switched off | Set to automatic mode | |
| K / N / W | | Pump | Pump does not start | Contaminants present (bolts, screws, chips, etc.) | Clean | |
| K / N / W | | Pump | Pump does not start | Problems with the power supply: • no power • cable not connected or damaged • voltage is too low | Check electrical installation | |
| K / N / W | | Pump | Pump does not start | Impeller is blocked | Remove mechanical blockage | |
| K / N / W | | Pump | Pump does not start | Fuse triggered | Reset the fuse | |
| K / N / W | | Pump | Pump does not start | Circuit breaker triggered / not calibrated | Check the switching level | |
| K / N / W | | Pump | Pump does not start | Condenser too small or damaged (AC motor) | Replace the pump | |
| K / N / W | | Pump | Pump does not start | Only 2 phases receive current (3-phase motor) | Check wiring and winding | |
| K / N / W | | Pump | Pump does not start | Overheat or overload (unsuitable conveying medium) | Callback required | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Wear to inside parts | Replace worn parts | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Pump or pipeline not completely vented or not filled | Vent or fill in | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Suction lift too high/NPSH plant (feed) too low | Correct the fluid level, completely open the shut-off valve in the intake line, change the intake line when required, if resistances in the intake line are too large, check the installed sifters/suction (inlet) opening | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Pump counterpressure is lower than specified in the order | Exactly adjust the operating point | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Not enough, too much or unsuitable lubricant | Add, reduce or replace lubricant | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Pump overtight or resonance vibrations in the pipeline | Check pipeline connections and pump fixture: decrease the distance between the pipe clips if necessary; fix the pipelines using vibration-damping material | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Impeller imbalance | Clean the impeller, rebalance the impeller | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Rate of delivery too low | Increase minimum rate of delivery | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Pump runs in impermissible operating range (partial load/overload) | Check operating data of the pump | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Dirt / fibres in the side spaces of the impeller, rotor is sluggish | Make sure the impeller can be rotated easily, perform hydraulic cleaning if necessary | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Radial bearing in motor defective | Callback required | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Intake line or impeller blocked | Remove deposits in the pump and/or the pipelines | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Impermissible air or gas content in the fluid being conveyed | Callback required | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Incorrect direction of rotation | If direction of rotation is incorrect, check the connection of the pump / pump unit and when necessary of the switchgear | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Pump cavitates | Check incoming flow for soiling | |
| K / N / W | | Pump | Pump is turbulent or makes noises | Pump overtight during assembly | • Callback required • Realign the pump | |
| K / N / W | | Pump | Current / power consumption too high | Pump runs in impermissible operating range (partial load/overload) | Check operating data of the pump | |
| K / N / W | | Pump | Current / power consumption too high | Dirt / fibres in the side spaces of the impeller, rotor is sluggish | Make sure the impeller can be rotated easily, perform hydraulic cleaning if necessary | |
| K / N / W | | Pump | Current / power consumption too high | Radial bearing in motor defective | Callback required | |
| K / N / W | | Pump | Current / power consumption too high | Wear to inside parts | Replace worn parts | |
| K / N / W | | Pump | Current / power consumption too high | Incorrect direction of rotation | If direction of rotation is incorrect, check the connection of the pump / pump unit and when necessary of the switchgear | |

| component | KKS | Component | Fault | Possible Cause | Remedy | Benutzerhandbuch |
|---------------|-----|--------------------------|--|---|---|------------------|
| K / N / W | | Pump | Current / power consumption too high | Operating voltage too low | • Check the mains voltage | |
| K / N / W | | Pump | Current / power consumption too high | Incorrect voltage | • Check the line connections | |
| K / N / W | | Pump | Current / power consumption too high | Windings are defective | Check electrical installation | |
| K / N / W | | Pump | Current / power consumption too high | Motor only runs on 2 phases instead of 3 (3-phase motor) | Replace | |
| K / N / W | | Pump | Current / power consumption too high | Unsuitable conveying medium | Check the wiring | |
| K / N / W | | Pump | Current / power consumption too high | Incorrect impeller diameter | Callback required | |
| K / N / W | | Pump | Current / power consumption too high | Pump is defective | Callback required | |
| K / N / W | | Pump | Current / power consumption too high | Pump starts too often | Replace | |
| K / N / W | | Pump | Overheating / Overload | Conveying medium temperature is too high | Callback required | |
| K / N / W | | Pump | Overheating / Overload | Pump starts too often | Callback required | |
| K / N / W | | Pump | Overheating / Overload | Incorrect voltage connected | Check electrical installation | |
| K / N / W | | Pump | Overheating / Overload | Pump is defective | Replace | |
| K / N / W | | Pump | Overheating / Overload | Axial bearing damaged / seized | Callback required | |
| K / N / W | | Pump | Overheating / Overload | Insufficient protection in the control cabinet (applies to motors without internal protection, see 2.3) | Check fuse and adjust if necessary, callback required | |
| K / N / W | | Pump | Overheating / Overload | Insufficient aeration of the motor | Increase speed, | |
| K / N / W | | Pump | Overheating / Overload | Insufficient aeration of the motor | Clean the cooling fins, check the fan impeller | |
| K / N / W | | Pump | Overheating / Overload | Environmental temperature too high | Allow the motor to cool down | |
| K / N / W | | Pump | Overheating / Overload | Environmental temperature too high | Check and lower the room temperature | |
| K / N / W | | Pump | Overheating / Overload | Pump or pipeline not completely vented or not filled | Vent or fill in | |
| K / N / W | | Pump | Overheating / Overload | Suction lift too high/NPSH plant (feed) too low | Correct the fluid level, completely open the shut-off valve in the intake line, change the intake line when required, if resistances in the intake line are too large, check the installed sifflers/suction (inlet) opening | |
| K / N / W | | Pump | Motor overload | Running on 2 phases | • Replace defective fuse • Check electrical line connections | |
| K / N / W | | Pump | Motor overload | Higher density or higher viscosity of conveying medium than specified in the order | Callback required | |
| K / N / W | | Pump | Motor overload | Transport lock not pulled out from the keyseat | Pull out | |
| K / N / W | | Pump | Motor overload | Pump counterpressure is lower than specified in the order | Exactly adjust the operating point | |
| K / N / W | | Solenoids | Valve does not open/close, or not completely | Electrical supply NOK | Check power supply and connection | |
| K / N / W | | Solenoids | Valve does not open/close, or not completely | Water pressure too high | Reduce the pressure in the line < 10 bar | |
| K / N / W | | Solenoids | Valve does not open/close, or not completely | Mechanically blocked | Clean line and valve | |
| K / N / W | | Solenoids | Valve does not close, or not completely | Return spring is defective | Replace the pilot valve | |
| K / N / W | | Solenoids | Valve does not close, or not completely | Soiling in the valve body | Clean or replace valve body | |
| K / N / W | | Solenoids | Valve does not close, or not completely | Manual emergency actuation released | Release manual emergency actuation | Kap / Chap 11.3 |
| K / N / W | | Solenoids | Valve controls incorrectly | Medium pressure too high / too low | Check medium pressure | Kap / Chap 6 |
| K / N / W | | Solenoids | Valve controls incorrectly | Connections untight | Check connections | Kap / Chap 11.1 |
| K / N / W | | Ball tap | Medium flows out | Untight | Replace | |
| K / N / W | | Ball tap | Medium flows out | Faulty installation | Install correctly | |
| K / N / W / E | | Temperature sensor | No temperature transmitted | Electrical wiring is faulty | Connect correctly | |
| K / N / W / E | | Temperature sensor | No temperature transmitted | Sensor defective | Replace | |
| K / N / W / E | | Temperature sensor | Temperature -50+C | Wire break | Check wiring, replace sensors if necessary | |
| K / N / W / E | | Temperature sensor | Incorrect temperature is displayed | Temperature range setting in the controller is incorrect | Set the correct range | |
| K / N / W | | Floating switches | Does not switch | Electrical wiring is faulty | Connect correctly | |
| K / N / W | | Floating switches | Does not switch | Solled | Clean | |
| K / N / W | | Floating switches | Does not switch | Switch is defective | Replace | |
| K / N / W / S | | Suspended float switches | Does not switch | Electrical wiring is faulty | Connect correctly | |
| K / N / W / S | | Suspended float switches | Does not switch | Switch is defective | Replace | |
| K / N / W / S | | Suspended float switches | Does not switch | Floater has got caught | Uncover the floater | |
| K / N / W / E | | Compensator | Leak | Loose screw connection | Tighten the screws | |
| K / N / W / E | | Compensator | Leak | Wear | Replace | |
| K / N / W / E | | Compensator | Leak | Brittleness due to excessive temperature | Callback required, replace | |
| K / N / W / E | | Compensator | Leak | Brittleness due to composition of process water | Callback required, replace | |
| B | | Bypass flap | Flap does not move | No compressed air, or insufficient | Check compressed air supply, check solenoid valve | |
| B | | Bypass flap | Flap does not move | Controller to manual operation | Switch to automatic mode | |
| B | | Bypass flap | Flap does not move | Deposits in the flap | Clean the flap | |
| B | | Bypass flap | Flap does not move | Damper blade grazes | Realign the damper blade | |
| B | | Bypass flap | Flap does not move | Underpressure of flue gas fan too high | Check the settings | |
| B | | Bypass flap | Limit switch cannot be reached | Dirt / contamination | Clean the flap | |
| B | | Bypass flap | Limit switch cannot be reached | End position incorrect | Check the end position | |