Fault tracing tripped alarms GOLD-C and D			Dokument nr I-11472	Revision 009	Sida 1 (117)
			Frisläppt datum 2012-03-06	Ersätter	
Dokumenttyp Instruktion	Upprättad av Bertil Sjunnesson	Reviderad av Bertil Sjunnesson	Frisläppt och utgiven av Björn Flodén		

Instructions for Fault Tracing Tripped Alarms in the GOLD C-D.

Contents

1 General

The layout of the fault tracing instructions is based on the alarm list in the GOLD, Version C.

Find the relevant tripped alarm in the list and follow the instructions in the rectangles.
The instruction is followed by a yes/no question.

Follow the arrow for the correct reply to the next instruction. Disregard all the instructions that come after incorrect reply options.

1.1 Authority

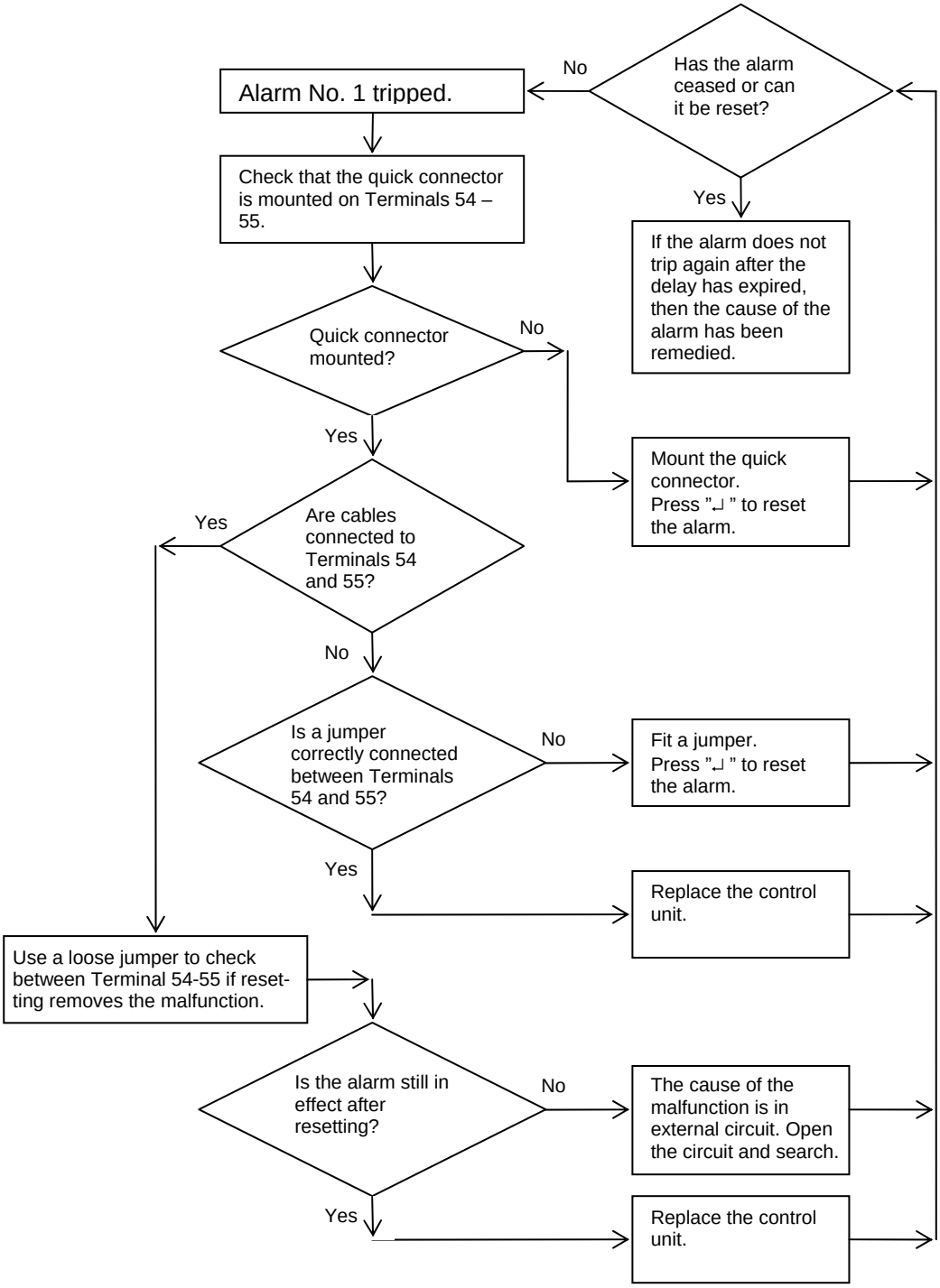
Only specially trained personnel informed of risks involved and correct wiring shall be allowed to test components and trace faults while components in the air handling unit are energized.

Personnel taking readings in energized equipment must have electrical engineering skills, information about the air handling unit functions and sufficient experience to avoid hazards that can arise due to the presence of electricity and moving parts.

2 Alarm tripped

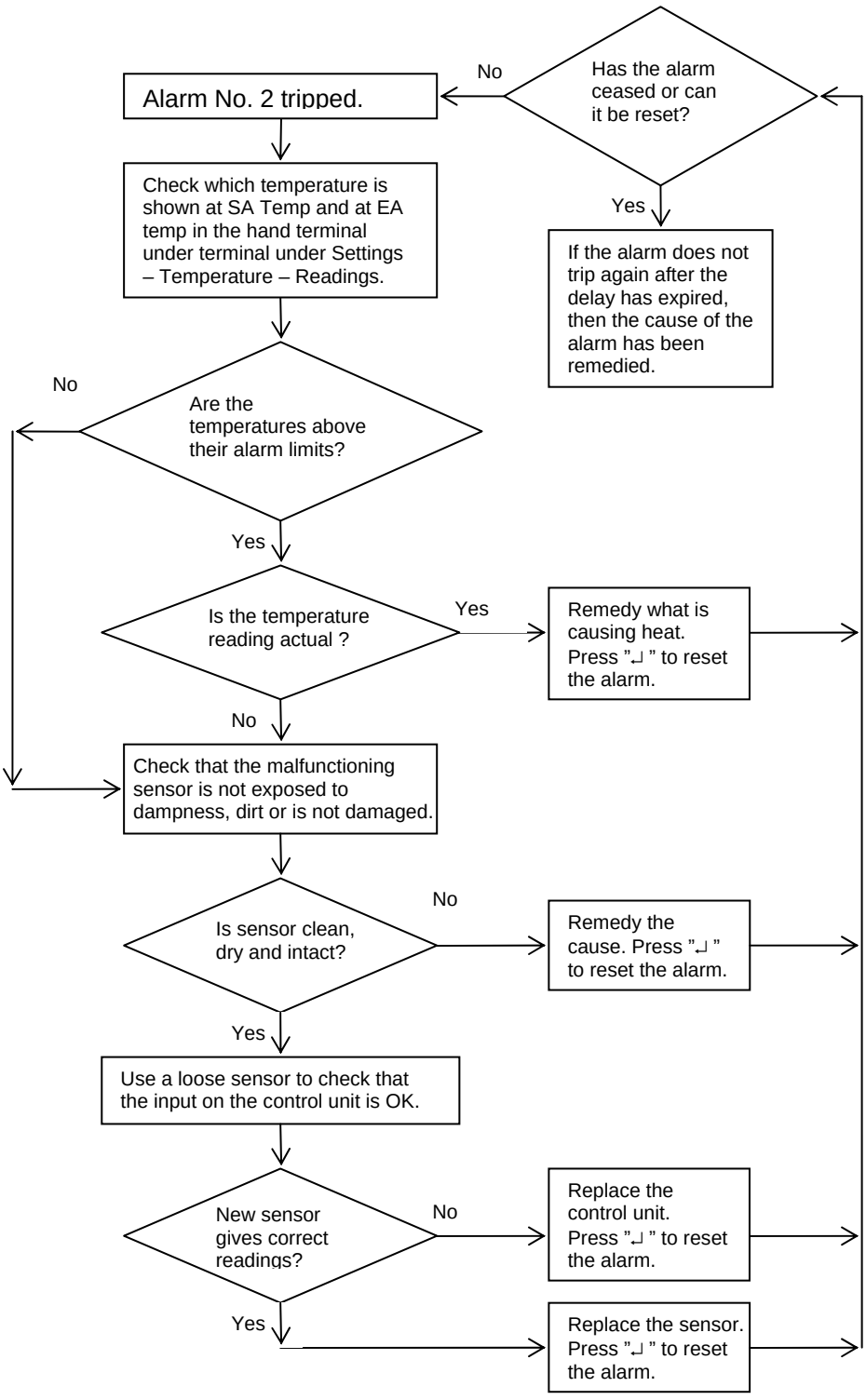
2.1 Alarm No. 1: External fire *alarm tripped*

The alarm trips if the external connection between terminals 54 and 55 is broken.



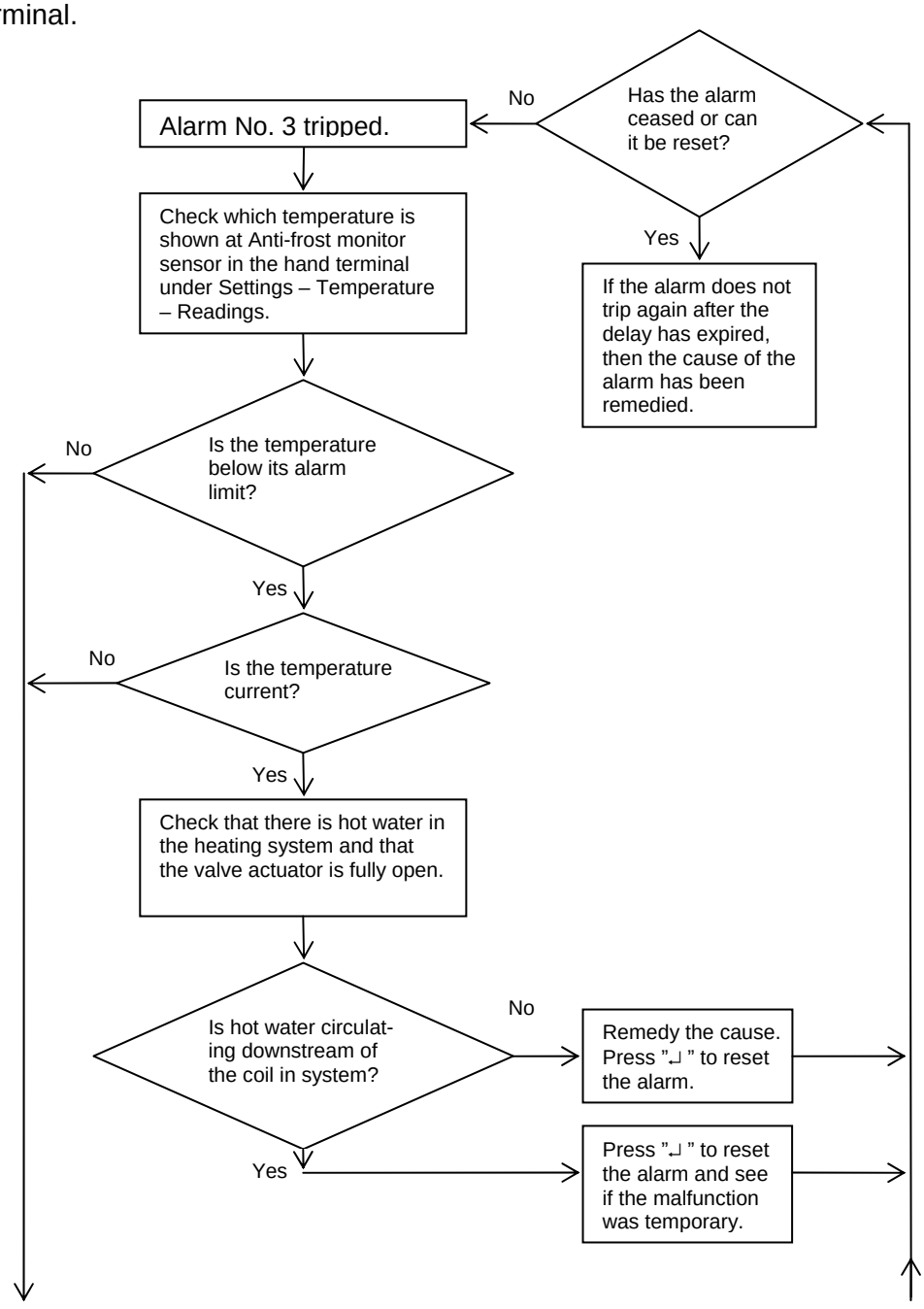
2.2 Alarm No. 2: Internal fire alarm tripped

The alarm is active only when the ”Internal fire alarm” function is activated in the hand terminal under Settings – Installation – Alarm setting. The alarm trips when the SA temp sensor measures a temperature above 70°C or the EA temp sensor measures a temperature above 50°C.



2.3 Alarm No. 3: Frost protection measures a temp. below alarm limit

The alarm is active only when a water coil (coil type 10) is connected to the control unit.
The alarm trips when the anti-frost monitor temp sensor measures a temperature below preset alarm limit. The alarm limit is factory preset to 7°C , but the limit can be adjusted under Service in the hand-held micro terminal.



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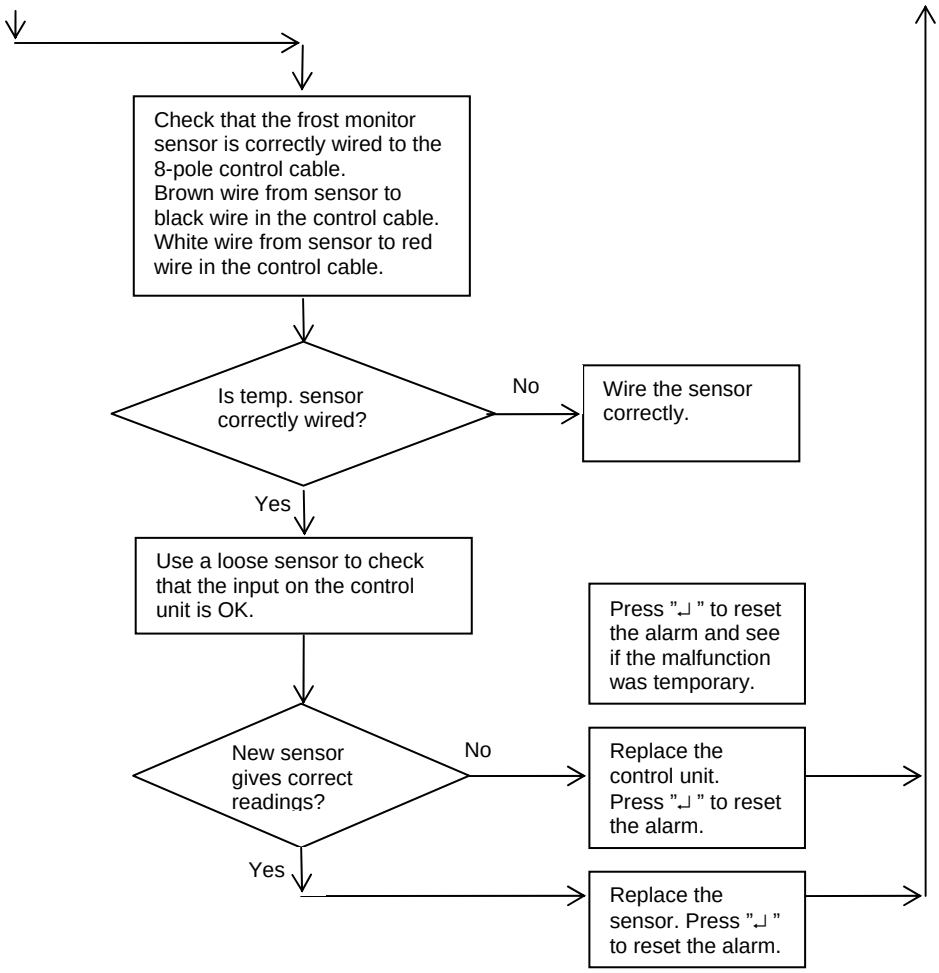
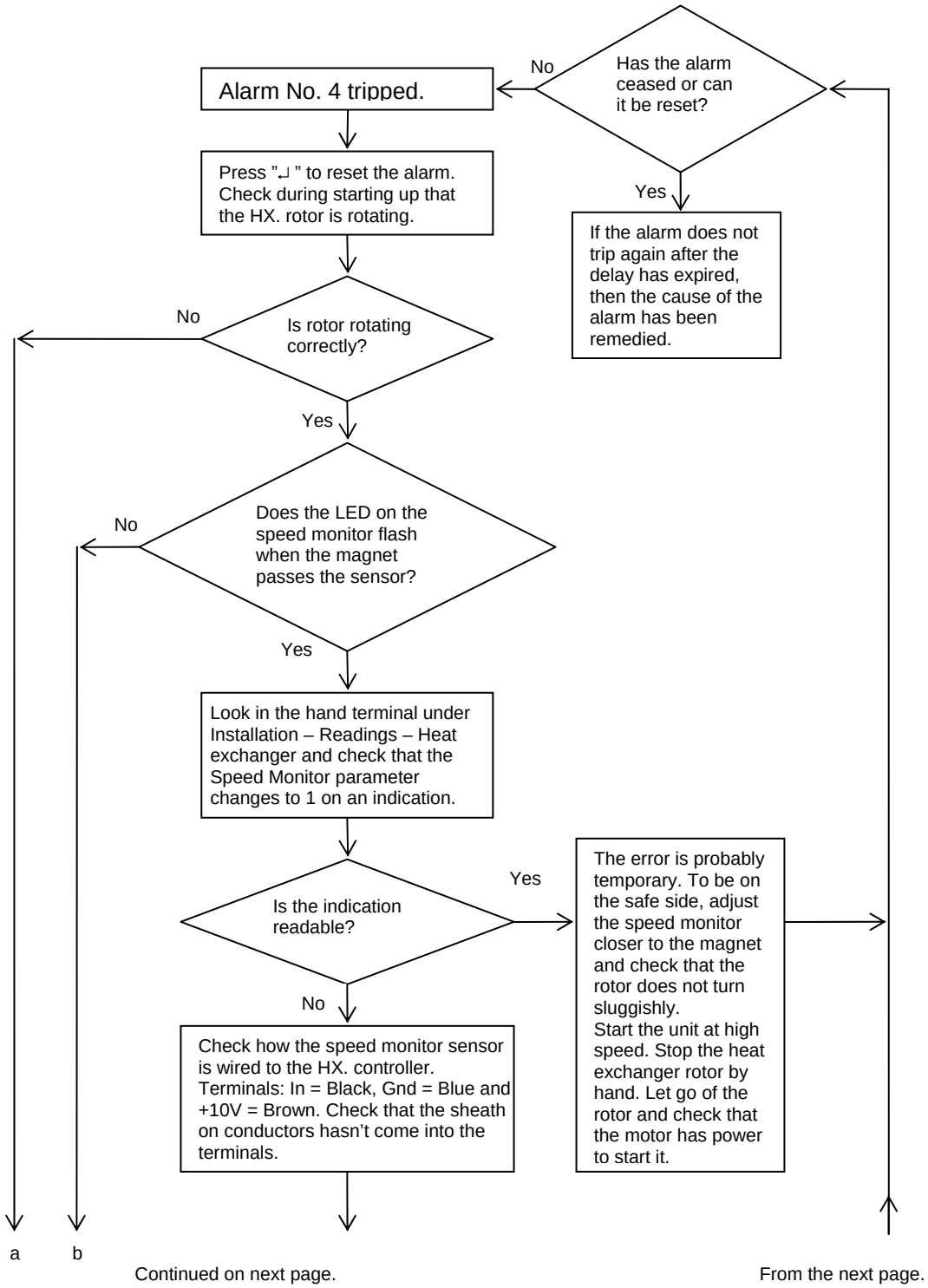


2.4 Alarm No. 4: R. HX. speed monitor tripped

The alarm is active only in GOLD RX units.
The alarm trips when the heat exchanger controller does not sense pulses from the speed monitor sensor within the time equivalent to 1.5 rotor revolutions with current control signal.



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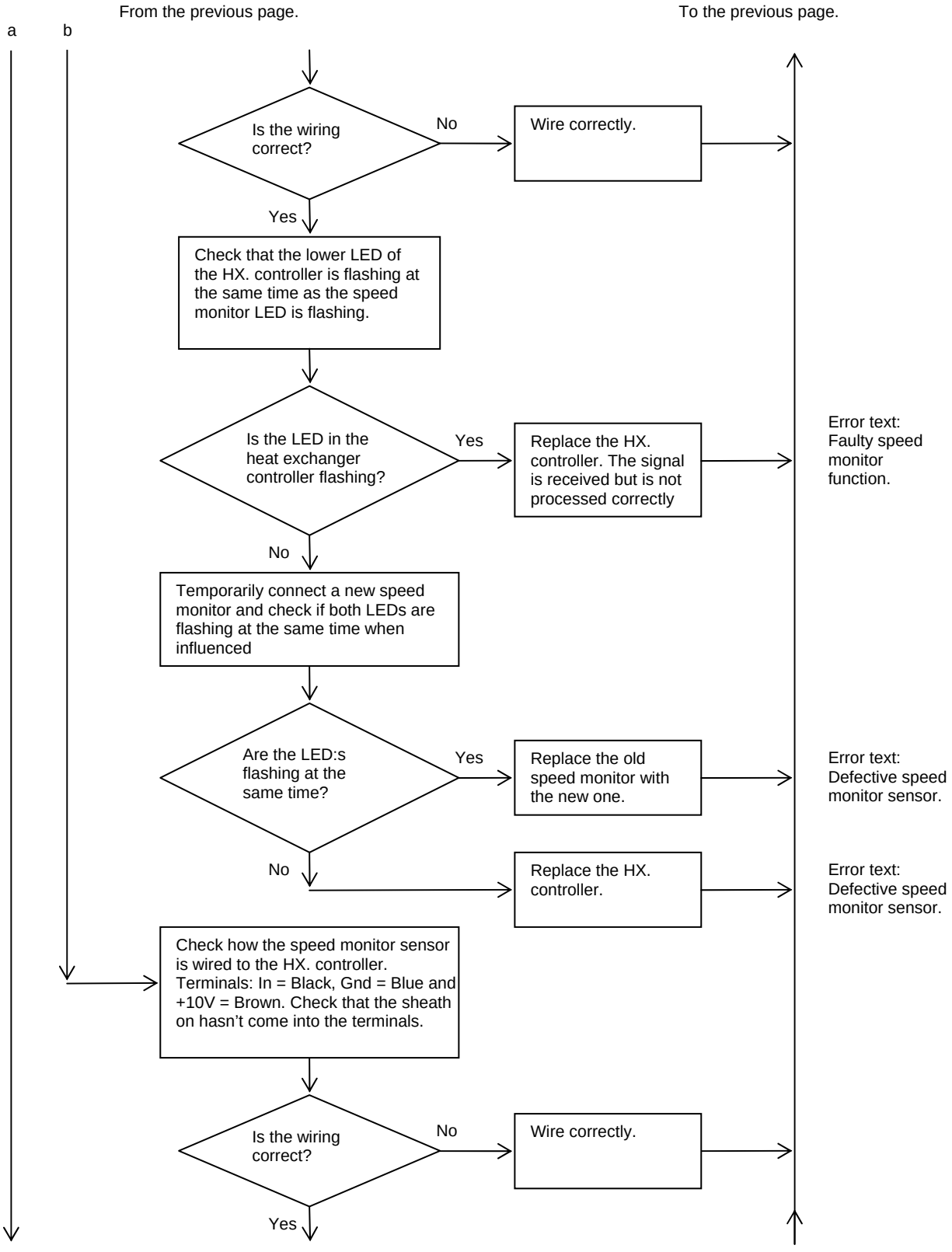
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a
b
Is the wiring correct?
No
Wire correctly.
Yes
Check that the lower LED of the HX. controller is flashing at the same time as the speed monitor LED is flashing.
Is the LED in the heat exchanger controller flashing?
Yes
Replace the HX. controller. The signal is received but is not processed correctly
Error text: Faulty speed monitor function.
No
Temporarily connect a new speed monitor and check if both LEDs are flashing at the same time when influenced
Are the LED:s flashing at the same time?
Yes
Replace the old speed monitor with the new one.
Error text: Defective speed monitor sensor.
No
Replace the HX. controller.
Error text: Defective speed monitor sensor.
Check how the speed monitor sensor is wired to the HX. controller. Terminals: In = Black, Gnd = Blue and +10V = Brown. Check that the sheath on hasn't come into the terminals.
Is the wiring correct?
No
Wire correctly.
Yes
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a

Adjust the speed monitor sensor – its head should be 2-4 mm from the rotor magnet when it passes. Check that the magnet is seated opposite the sensor. Run the rotor.

Is the LED on the speed monitor flashing?

Yes → The malfunction has been corrected.

No → Replace the speed monitor sensor.

Error text: Defective speed monitor sensor.

Slip the drive belt off the HX. motor drive pulley and check whether the heat exchanger motor is rotating – AHU. ON.

Is the HX. motor rotating?

Yes

No

Connect a loose HX. motor to the HX. controller's quick connector and test run.

Is the HX. motor rotating?

No → Replace the HX. controller.

Error text: Faulty speed monitor function.

Yes → Replace the HX. motor.

Error text: Defective HX. motor.

Rotate the HX. rotorn by hand and check whether it turns abnormally slow.

Does the rotor turn sluggishly?

Yes → Remedy the rotor's sluggishness. May be mechanical or perhaps the vinyl-coated fabric bands on sides are excessively tensioned. Start the unit at high speed. Stop HX. rotor by hand. Let go of the rotor and check that the motor has power to start it.

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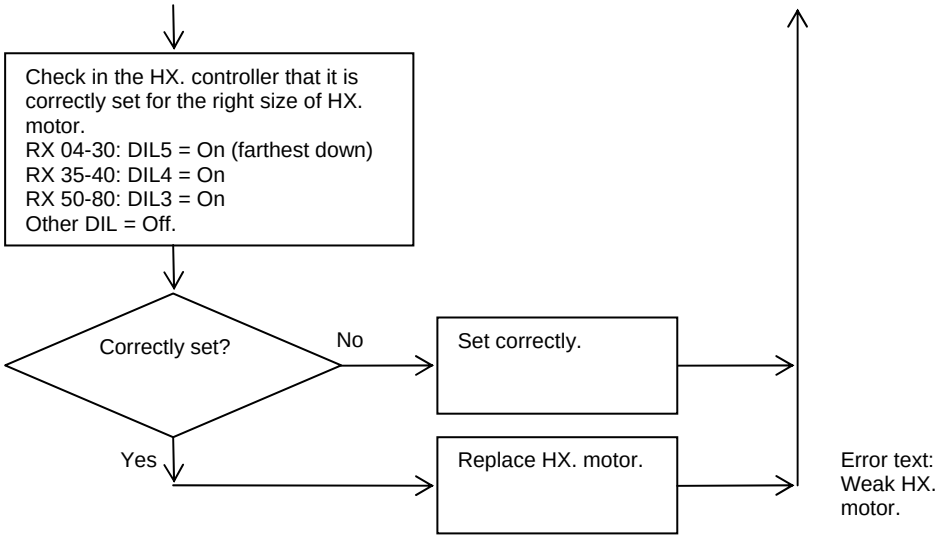
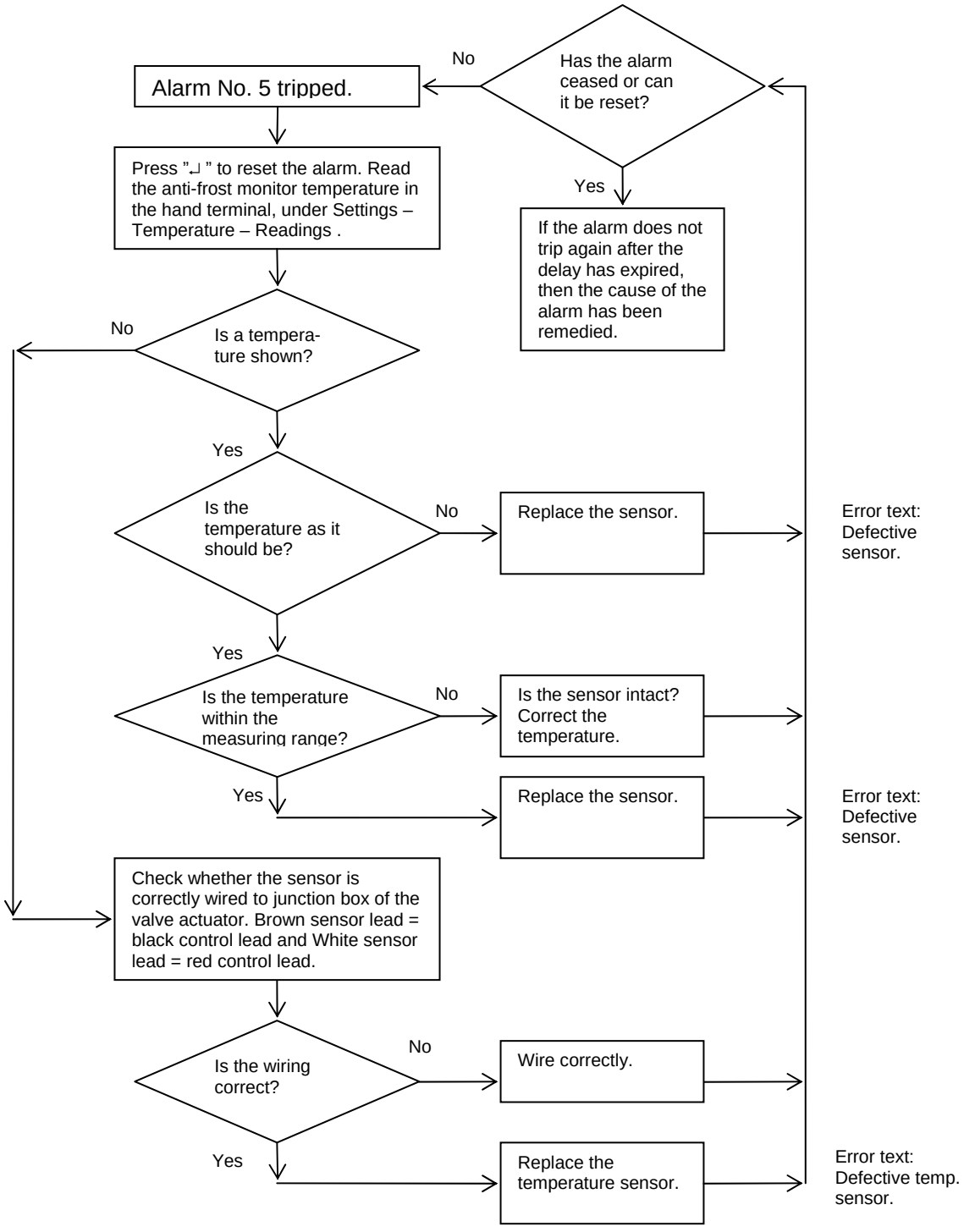


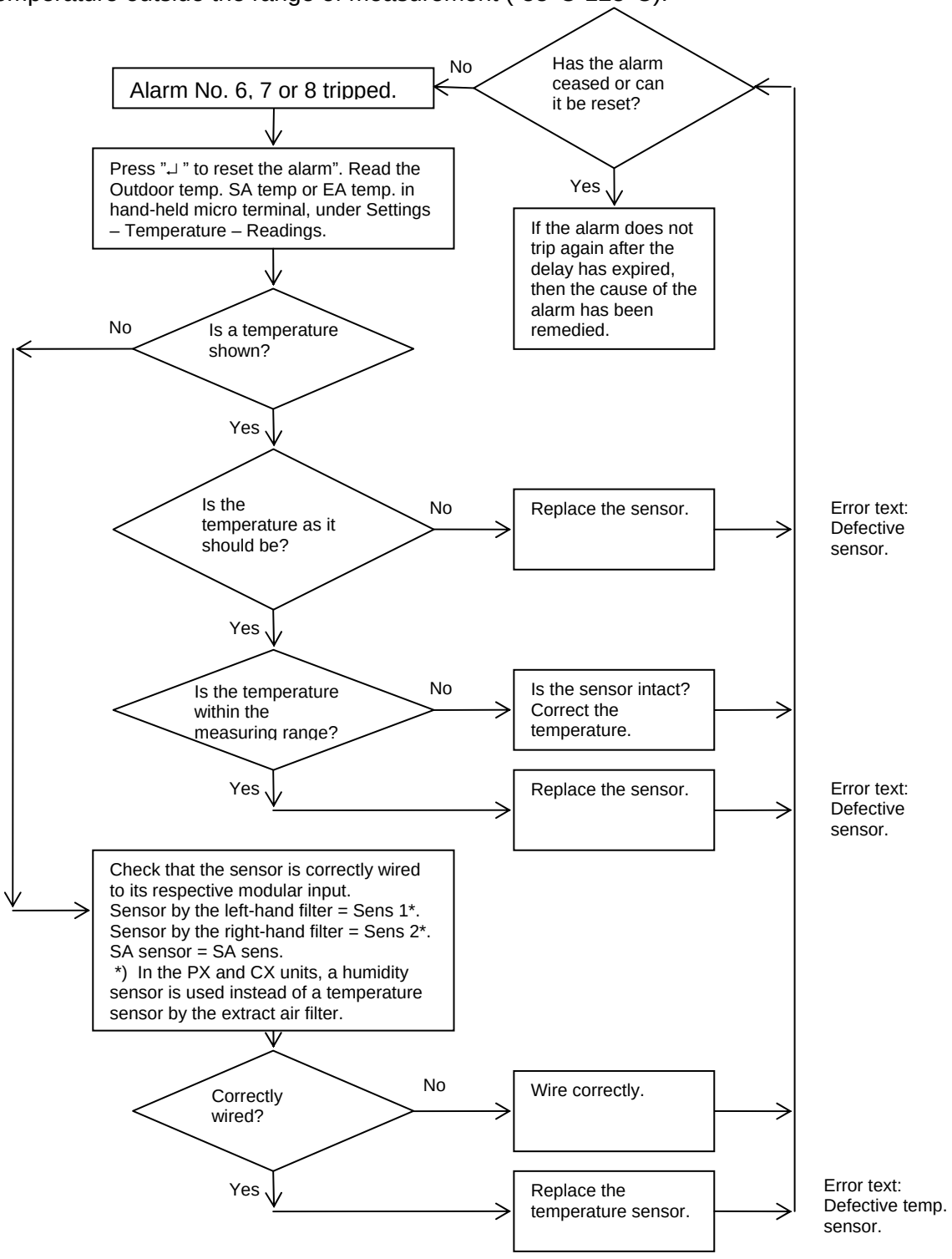
2.5 Alarm No. 5: Frost protection sensor defective

The alarm is active only when a water coil (coil type 10) is connected to the control unit.
The alarm trips when the control unit lacks communication with the anti-frost monitor sensor or if the sensor measures temperature outside the range of measurement (-55°C-125°C).



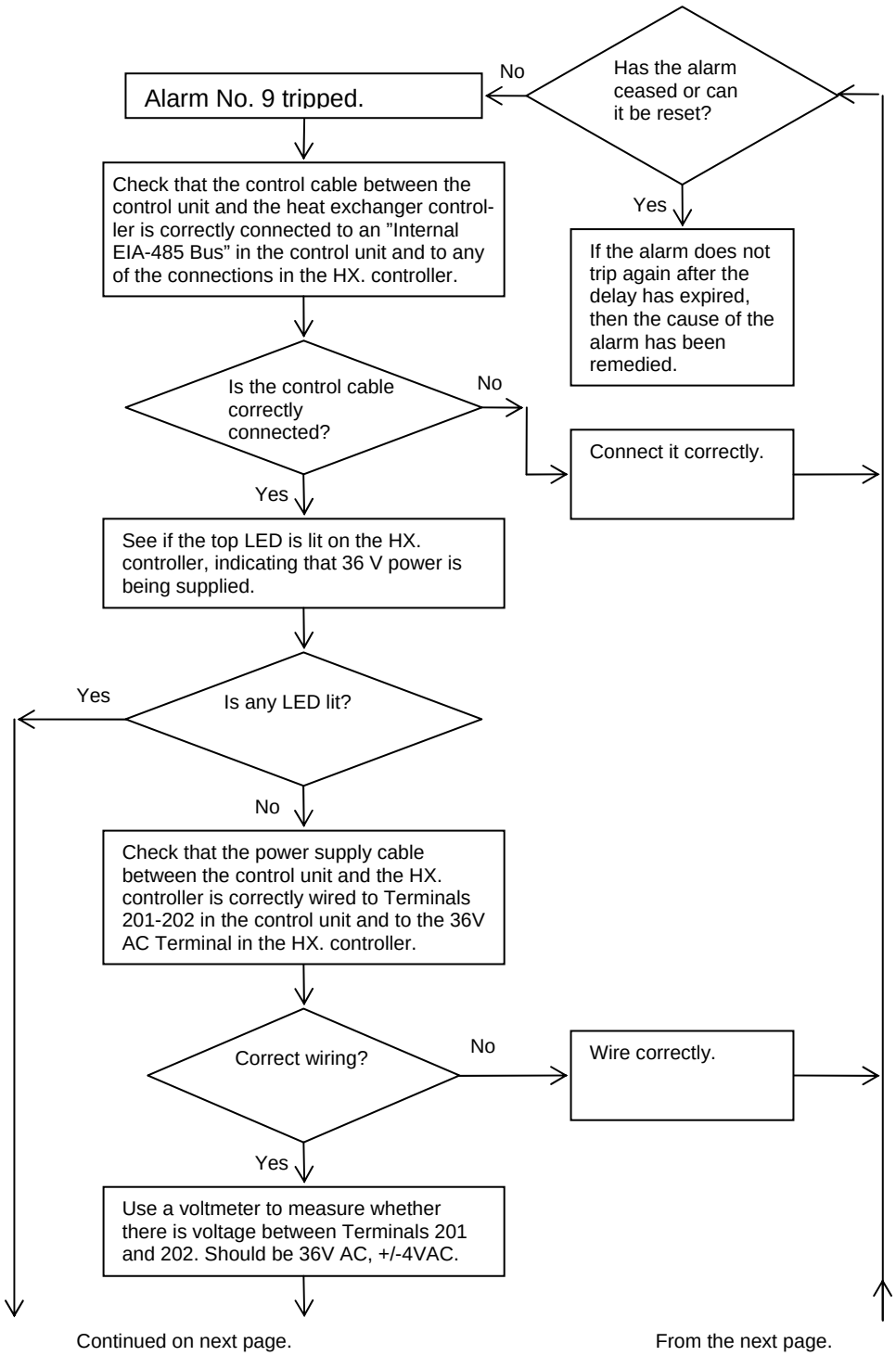
2.6 Alarm Nos. 6, 7 and 8: Supply air, Extract air and Outdoor air temp. sensor defective

The alarms are always active. The sensors are presumed to always be connected.
The alarms trip when the control unit lacks communication with each temperature sensor or if the sensor measures temperature outside the range of measurement (-55°C-125°C).



2.7 Alarm No. 9: No communication with R. HX. controller

The alarm is active when the control unit is set as GOLD RX. DIL-switches 4 and 5 = Off.
The alarms trip when the control unit lacks communication with the HX. controller.



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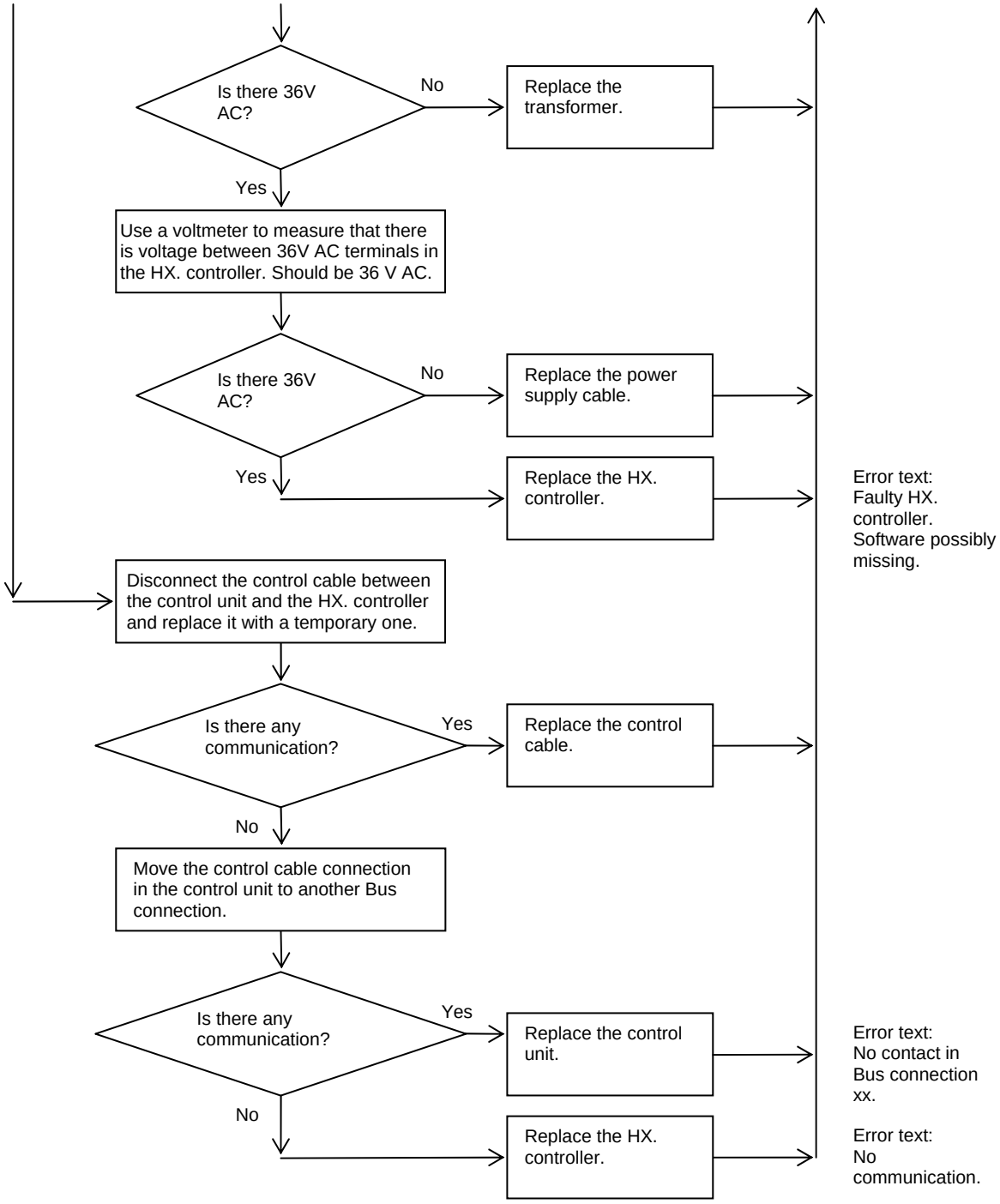
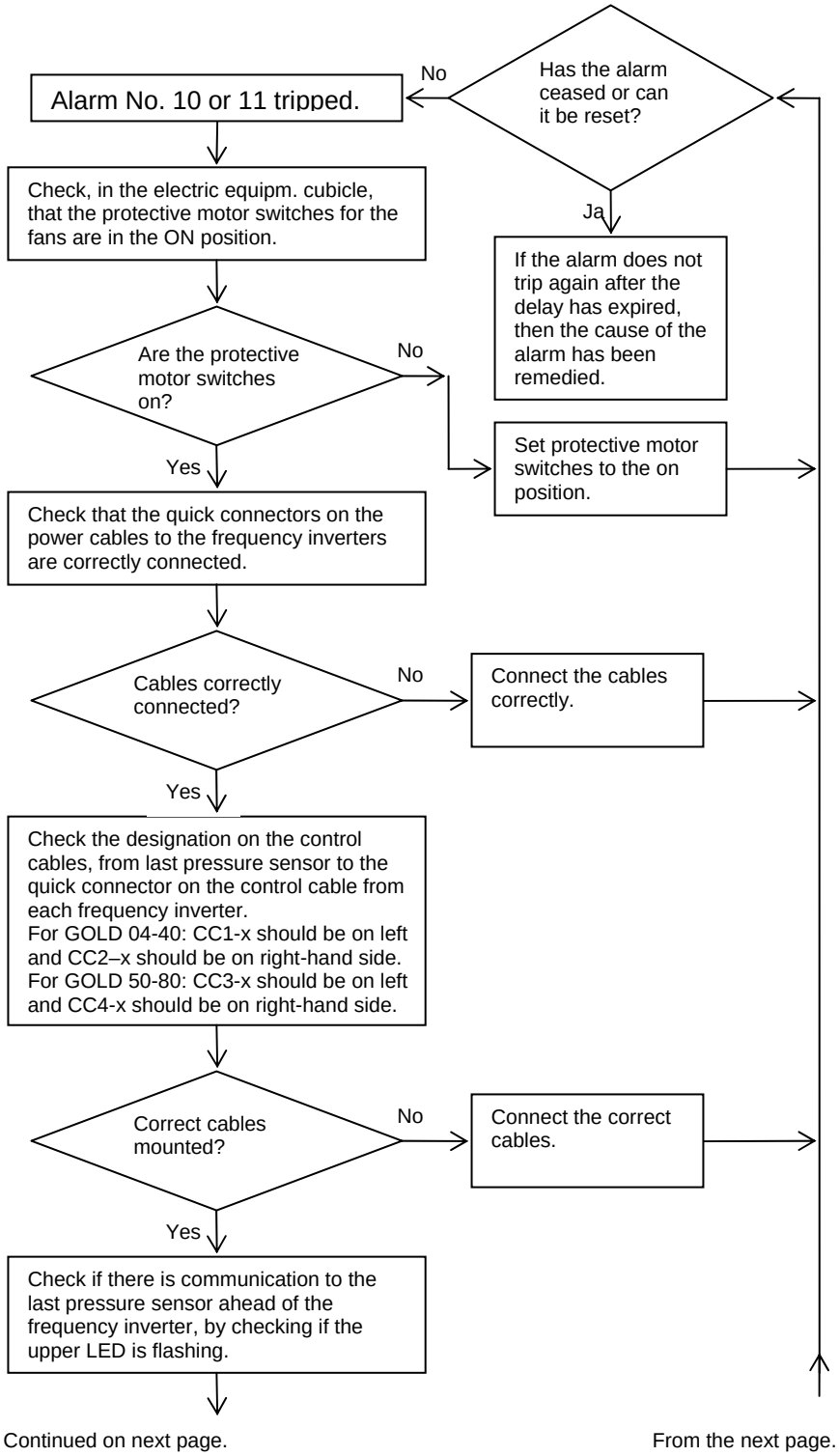


2.8 Alarms No. 10 and 11: No communication with SA or EA frequency inverter

The alarms are always active.
The alarms trip when the control unit lacks communication with relevant frequency inverter.



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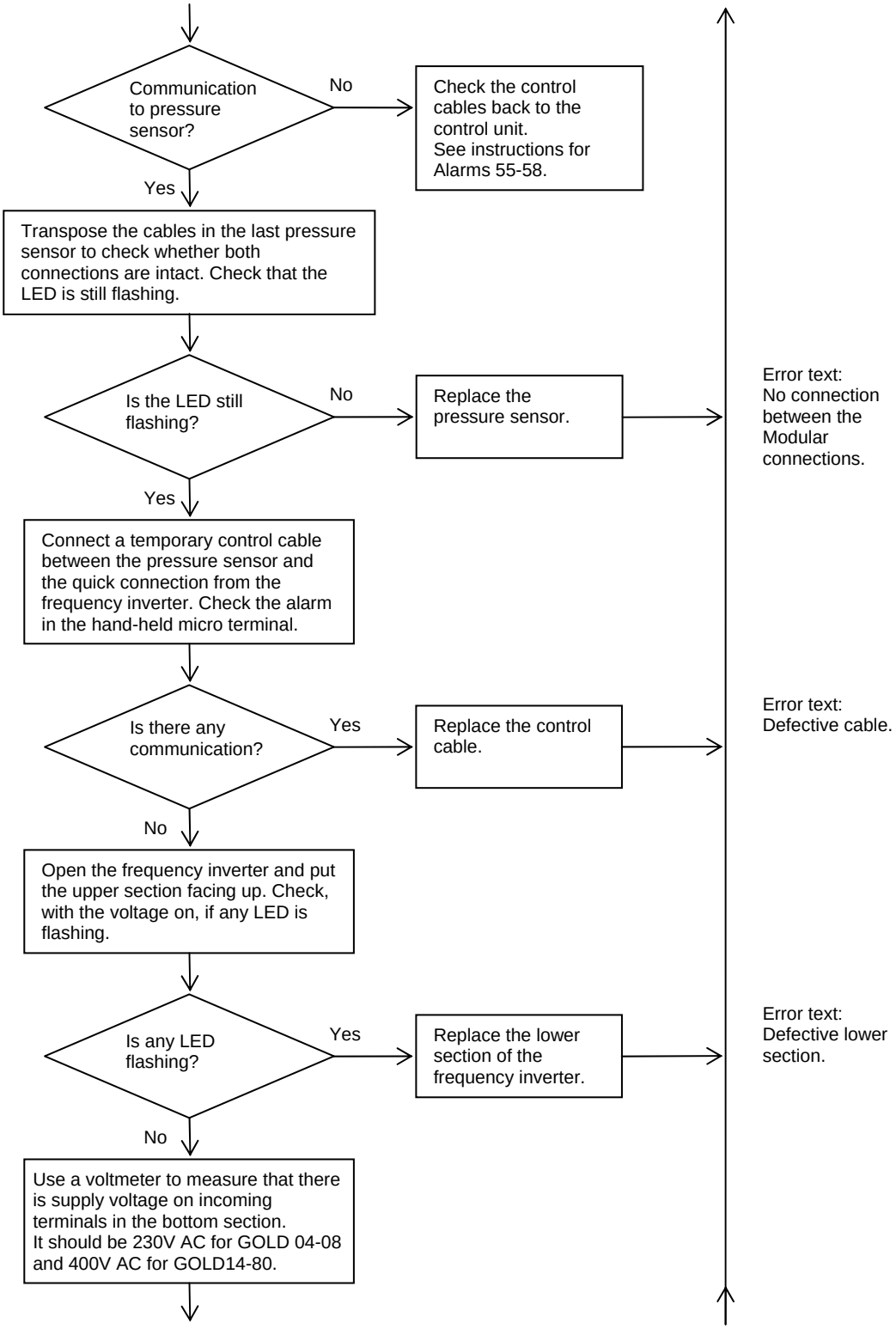

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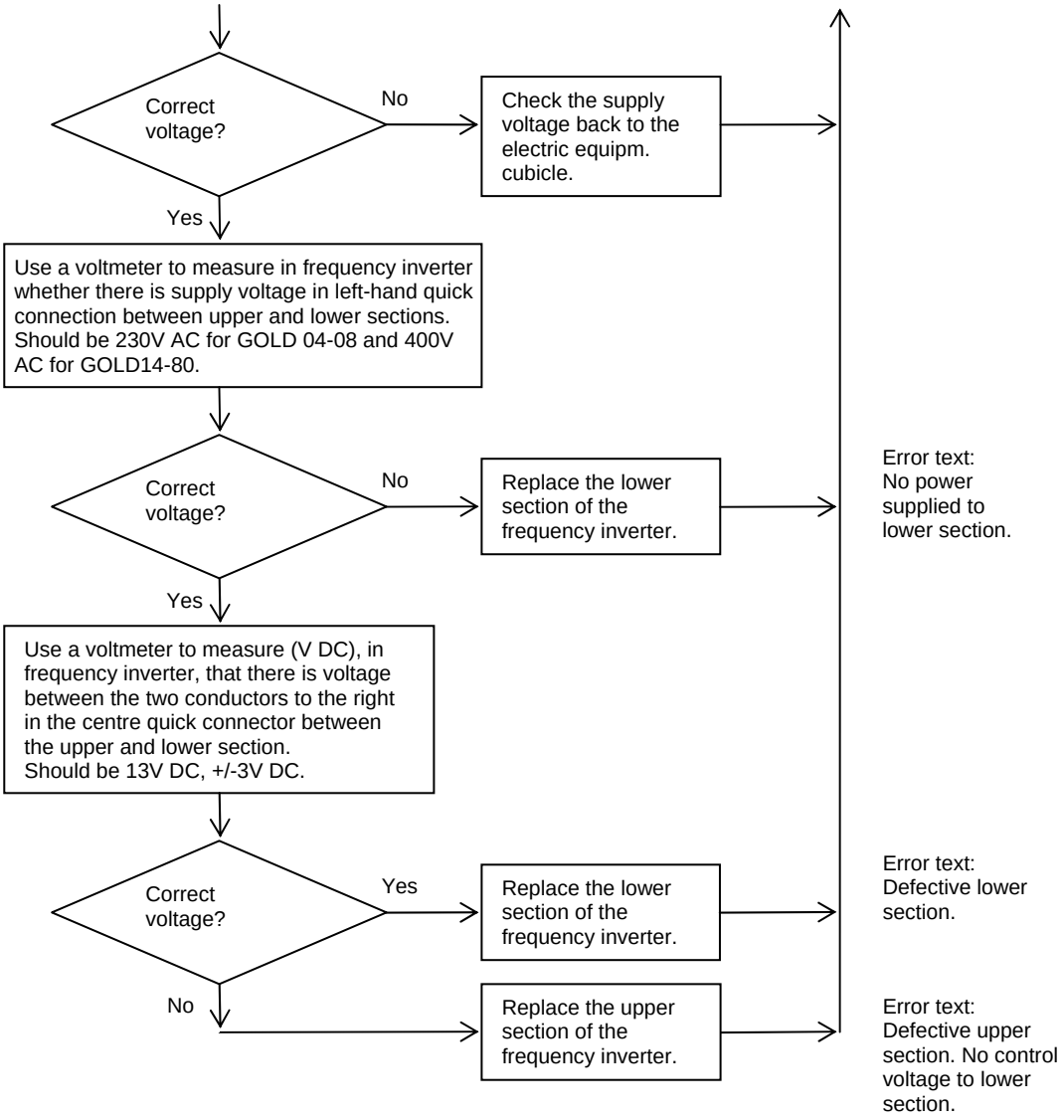
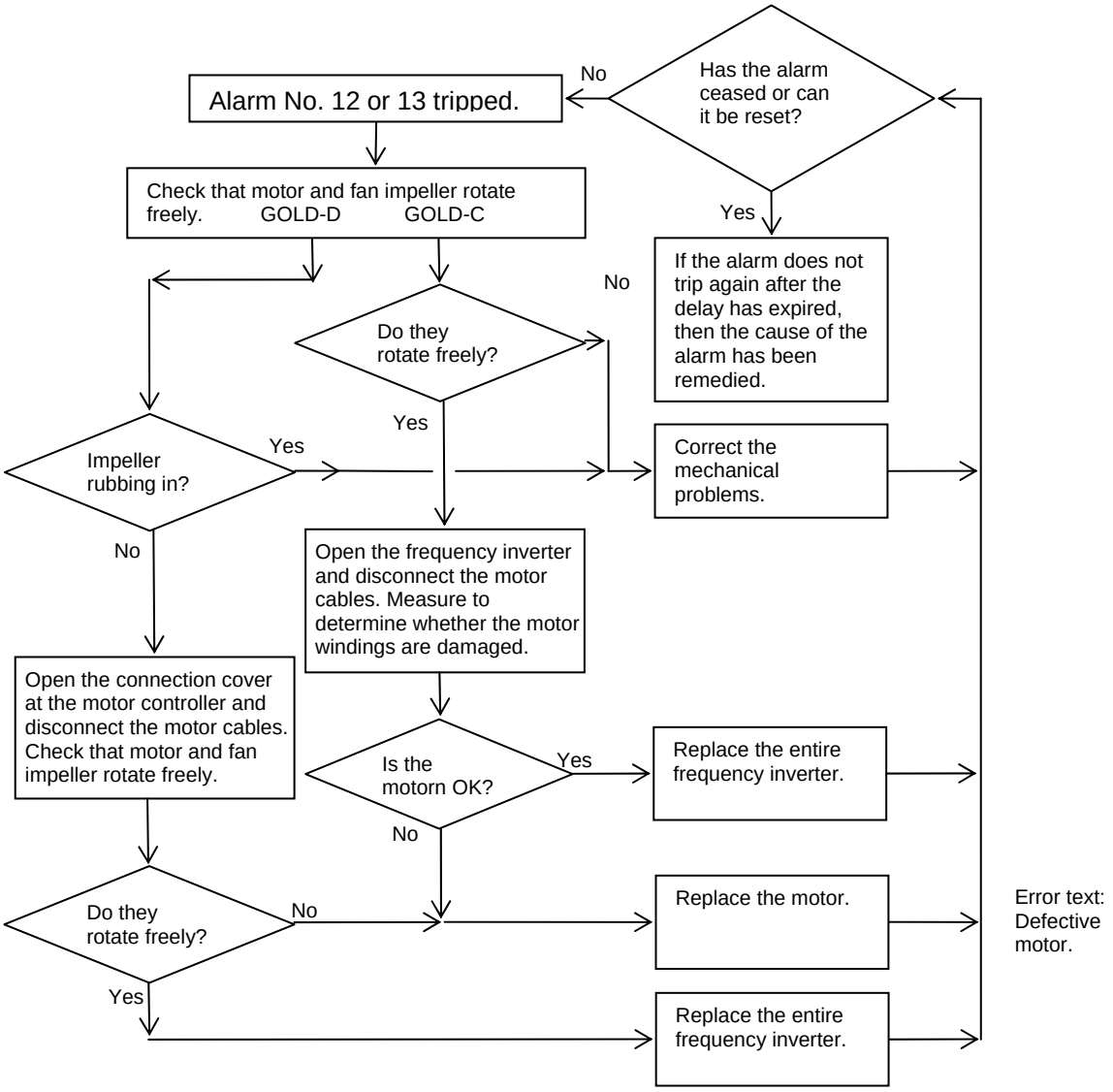


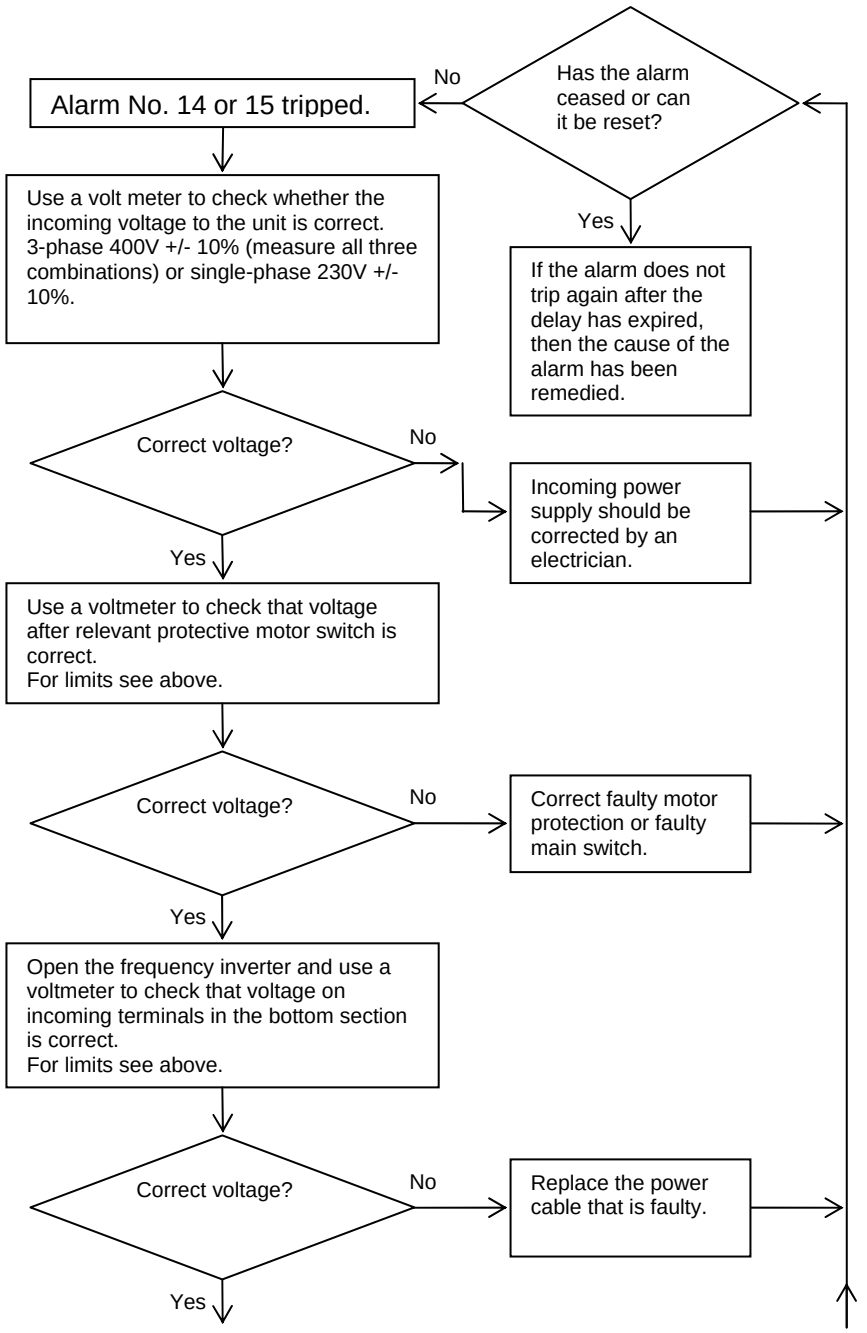
2.9 Alarms No. 12 and 13: Overcurrent in SA or EA frequency inverter

The alarms are always active.
The alarms trip when the internal monitoring function in the relevant frequency inverter, senses that the current supplied to the motor is above the alarm limit.



2.10 Alarms No. 14 and 15: Undervoltage in SA or EA frequency inverter

The alarms are always active.
The alarms trip when the internal monitoring function in the relevant frequency inverter, senses that voltage supplied to the motor is below the alarm limit.



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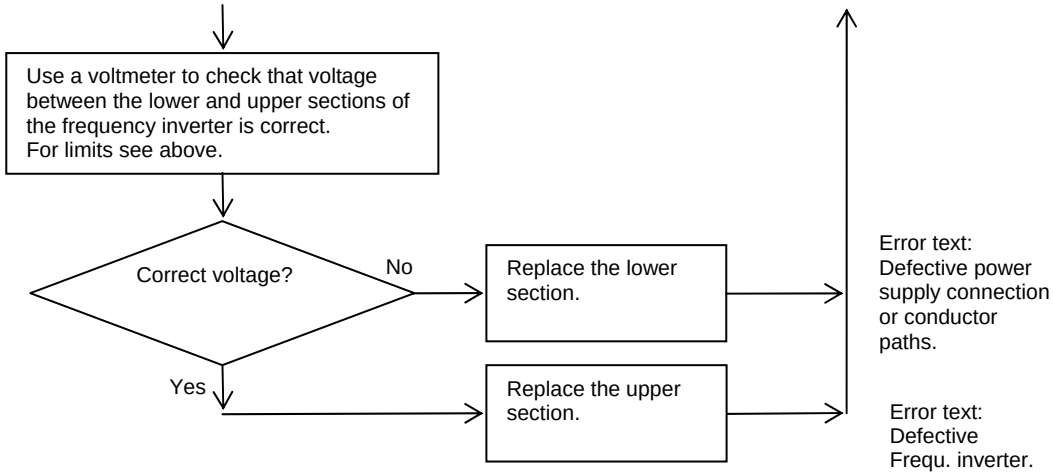


2.11 Alarms No. 16 and 17: Overvoltage in SA or EA frequency inverter

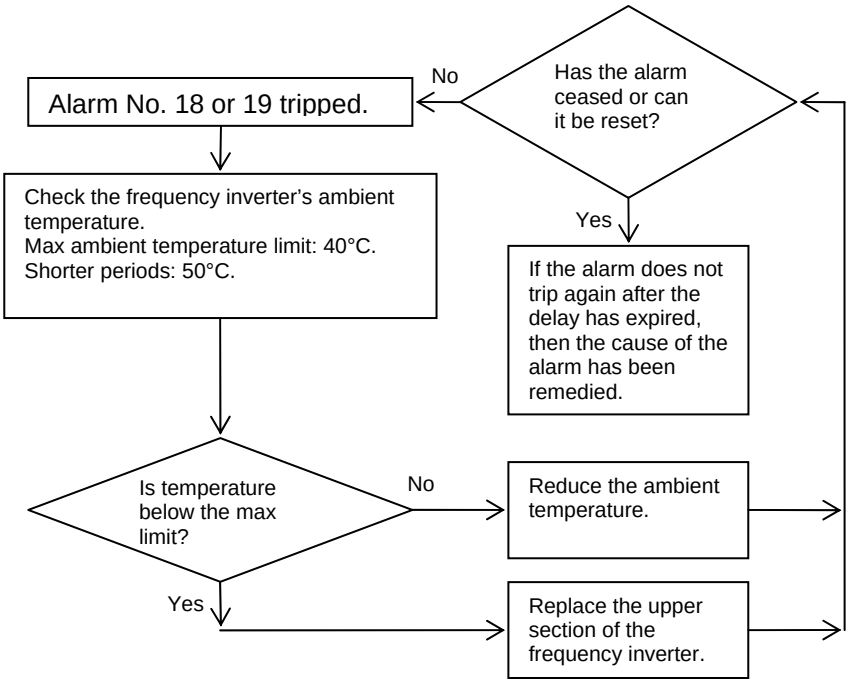
The alarms are always active.
The alarms trip when the internal monitoring function in the relevant frequency inverter, senses voltage above the alarm limit.

The alarm may occur when incoming supply voltage is above the permissible limit values for the unit. 3-phase 400V +10% or single-phase 230 +10%.

The alarm may occur on older motors equipped with braking action that is slightly too quick.
In GOLD units set value, for retardations, is communicated from the GOLD controller. The retardation time is corrected from soft ware version Pv 2.02.
In frequency converter without communication, the retardation time is corrected, in the base unit, from soft ware version Pv 1.14.

2.12 Alarms No. 18 and 19: Excess temperature in, SA or EA frequency inverter

The alarms are always active.
The alarms trip when the internal monitoring function in the relevant frequency inverter, senses that the temperature in the inverter's upper section exceeds 90°C.



2.13 Alarms No. 20 and 21: No communication with SA-2 or EA-2 frequency inverter

The alarms are always active for the GOLD 50-80.
The alarms trip when the control unit lacks communication with the relevant frequency inverter.

See instructions for Alarms 10 and 11.

2.14 Alarms No. 22 and 23: Overcurrent in SA-2 or EA-2 frequency inverter

The alarms are always active for the GOLD 50-80.
The alarms trip when the internal monitoring function in the relevant frequency inverter senses that the current supplied to the motor is above the alarm limit.

See instructions for Alarms 12 and 13.

2.15 Alarms No. 24 and 25: Undervoltage in SA-2 or EA-2 frequency inverter

The alarms are always active for the GOLD 50-80.
The alarms trip when the internal monitoring function in the relevant frequency inverter senses voltage below the alarm limit.

See instructions for Alarms 14 and 15.

2.16 Alarms No. 26 and 27: Overvoltage in SA-2 or EA-2 frequency inverter

The alarms are always active for the GOLD 50-80.
The alarms trip when the internal monitoring function in the relevant frequency inverter senses voltage above alarm limit.

See instructions for Alarms 16 and 17.

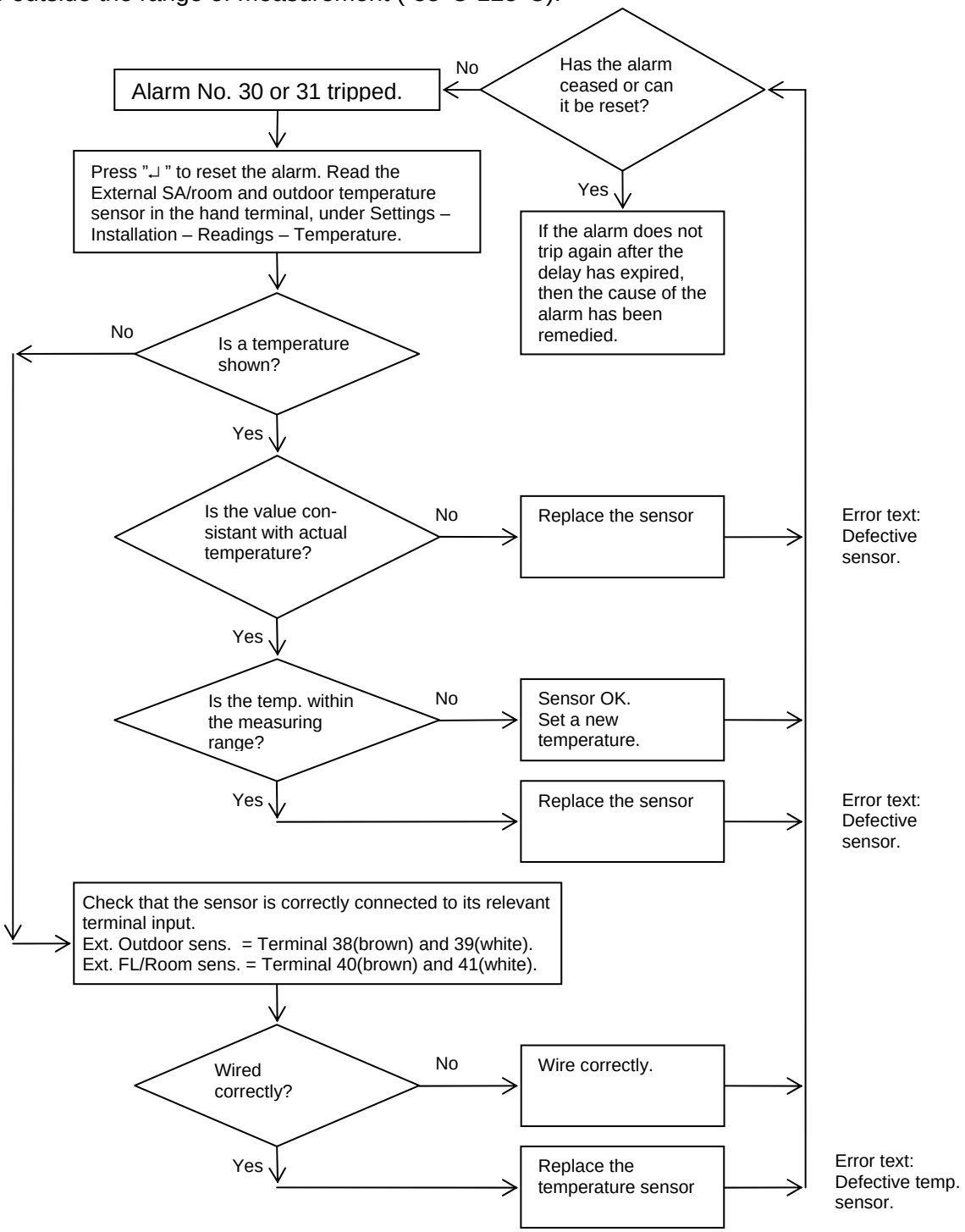
2.17 Alarms No. 28 and 29: Excess temperature in SA-2 or EA-2 frequency inverter

The alarms are always active for the GOLD 50-80.
The alarms trip when the internal monitoring function in the relevant frequency inverter senses that the temperature inside the inverter exceeds 90°C.

See instructions for Alarms 18 and 19.

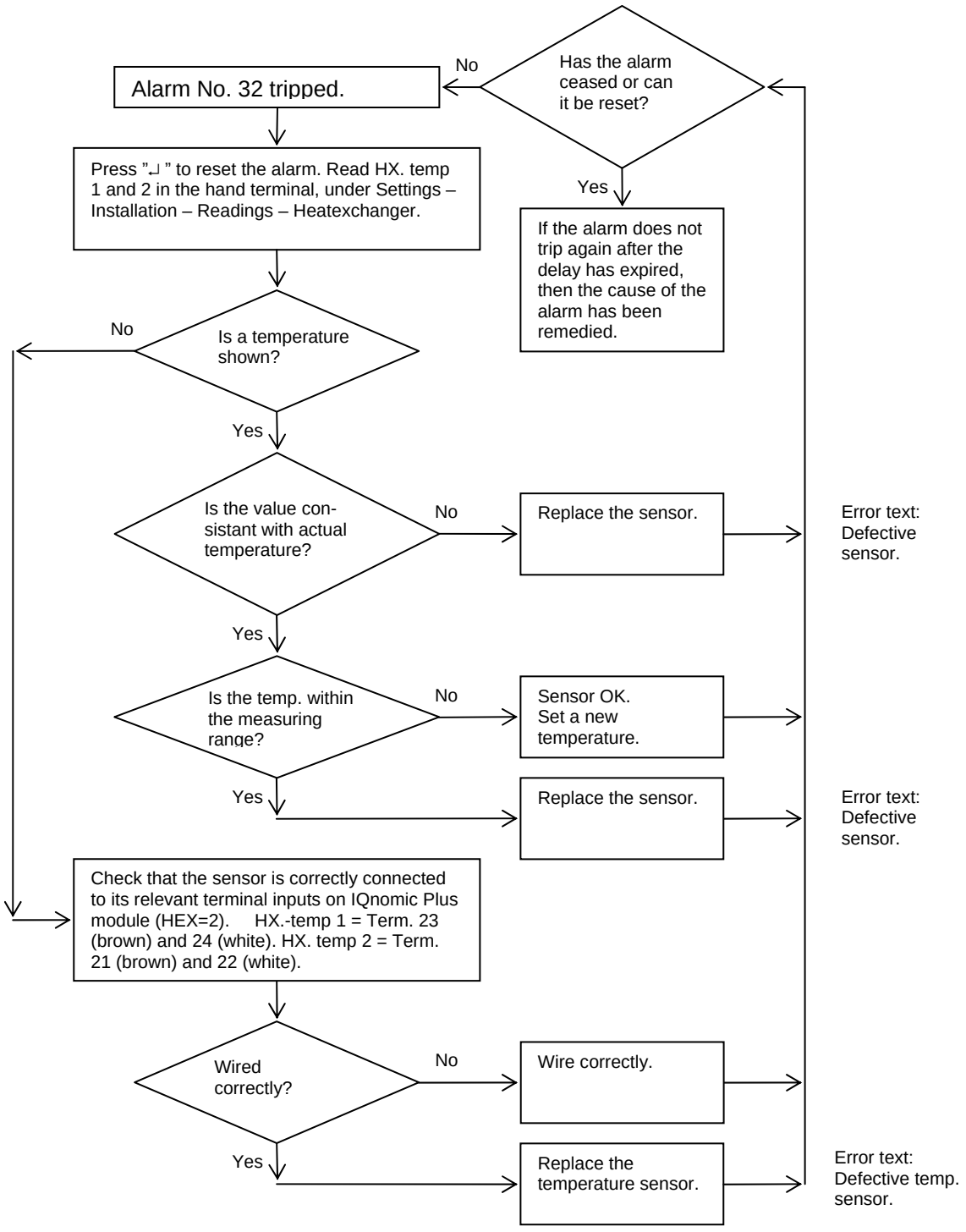
2.18 Alarms No. 30 and 31: External Extract air/Room air sensor or External outdoor temp sensor faulty

The alarms are active when External SA/room sensor and External outdoor sensor respectively are selected to be active. Alarm No. 30 is also active when Intermittent night-time heat function is activated. The alarm trips when the control unit lacks communication with each sensor or if the sensor measures a temperature outside the range of measurement (-55°C-125°C).



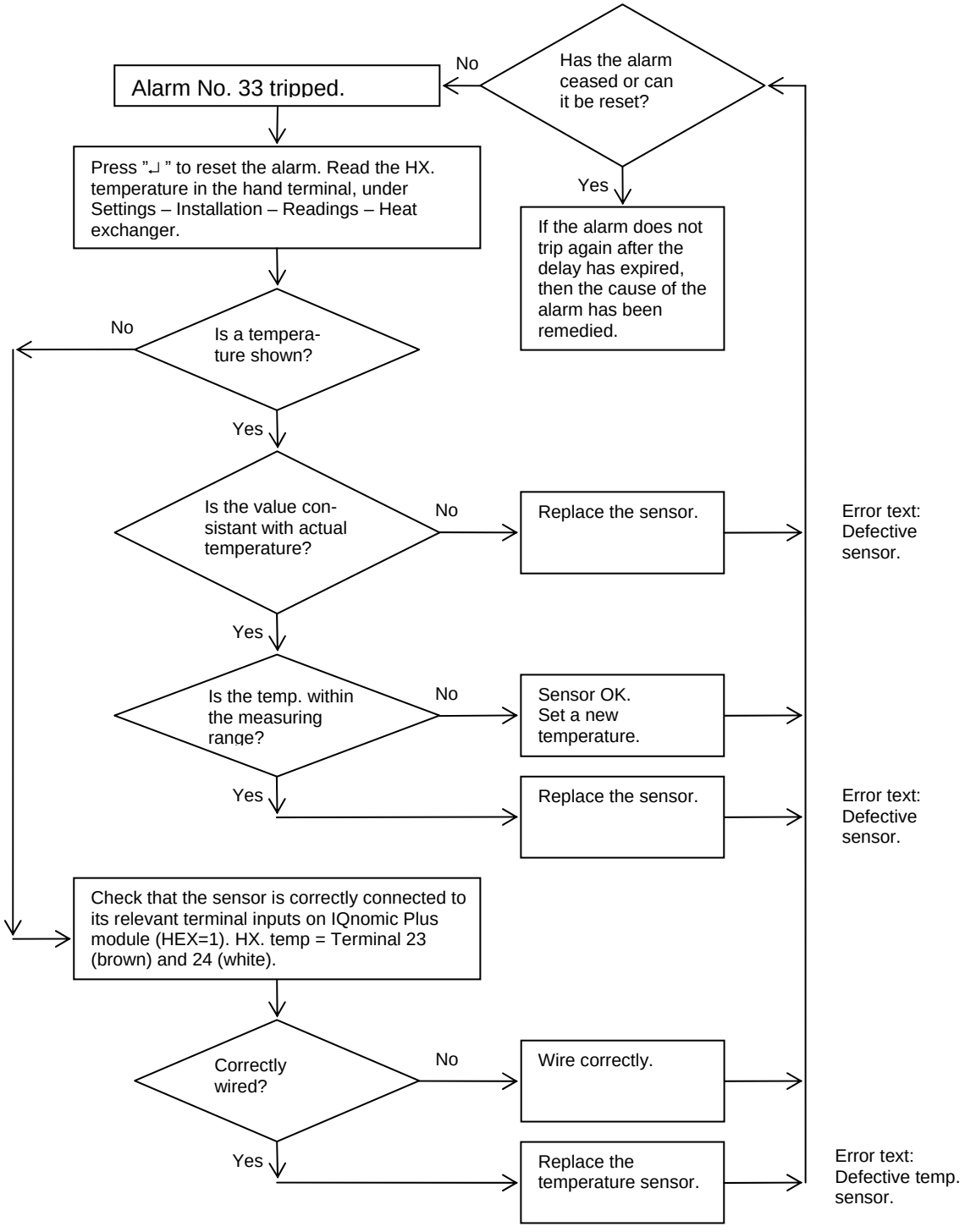
2.19 Alarm No. 32: Plate heat exchanger sensor faulty

The alarm is active when DIL switch 4, on control unit, is set to the On position
The alarm trips when the control unit lacks communication with one of the two sensors or if any sensor measures a temperature outside the range of measurement (-55°C-125°C).



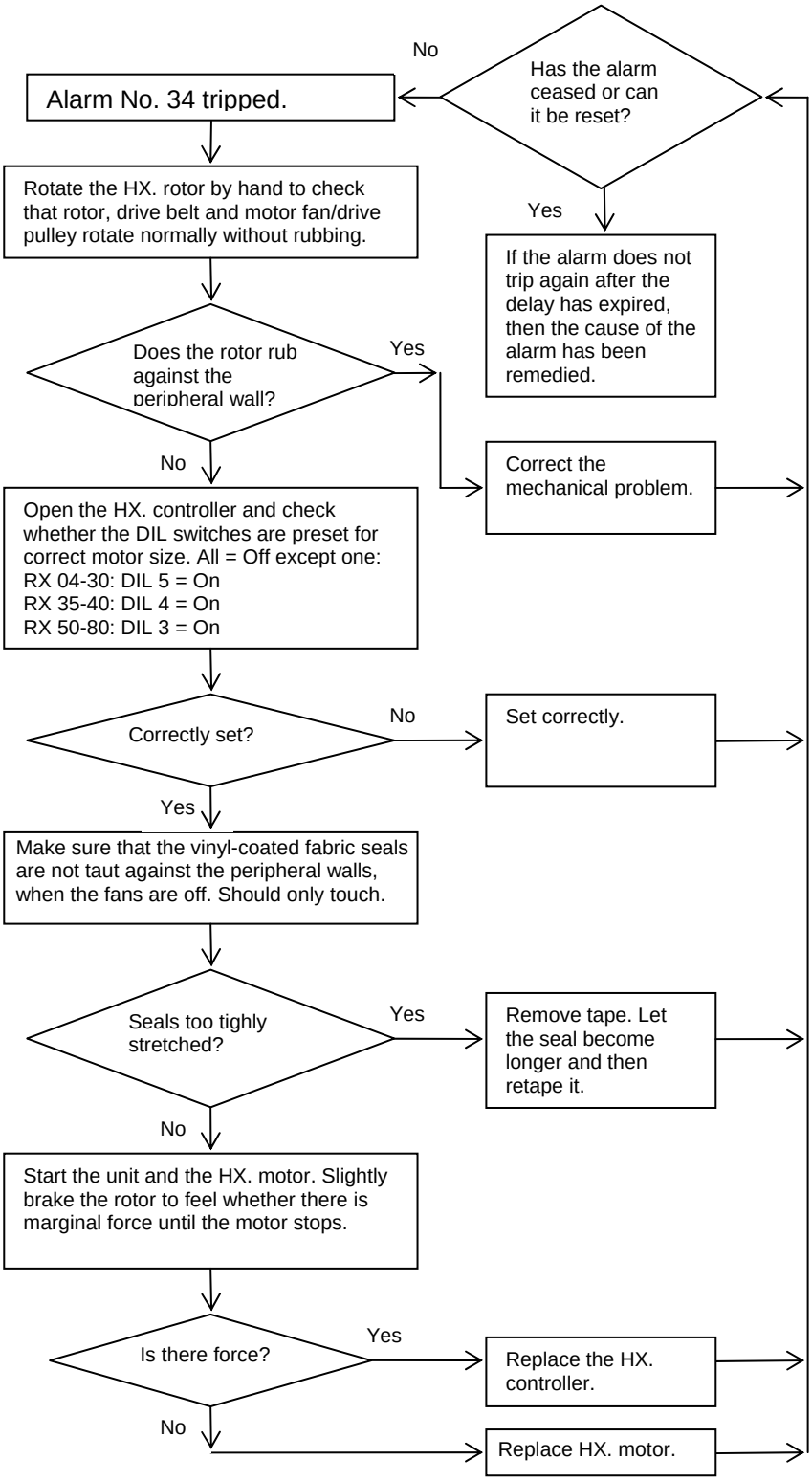
2.20 Alarm No. 33: Coil heat exchanger sensor faulty

The alarm is active when DIL switch 5, on control unit, is set to the On position.
The alarm trips when the control unit lacks communication with the sensor or if the sensor measures a temperature outside the range of measurement (-55°C-125°C).



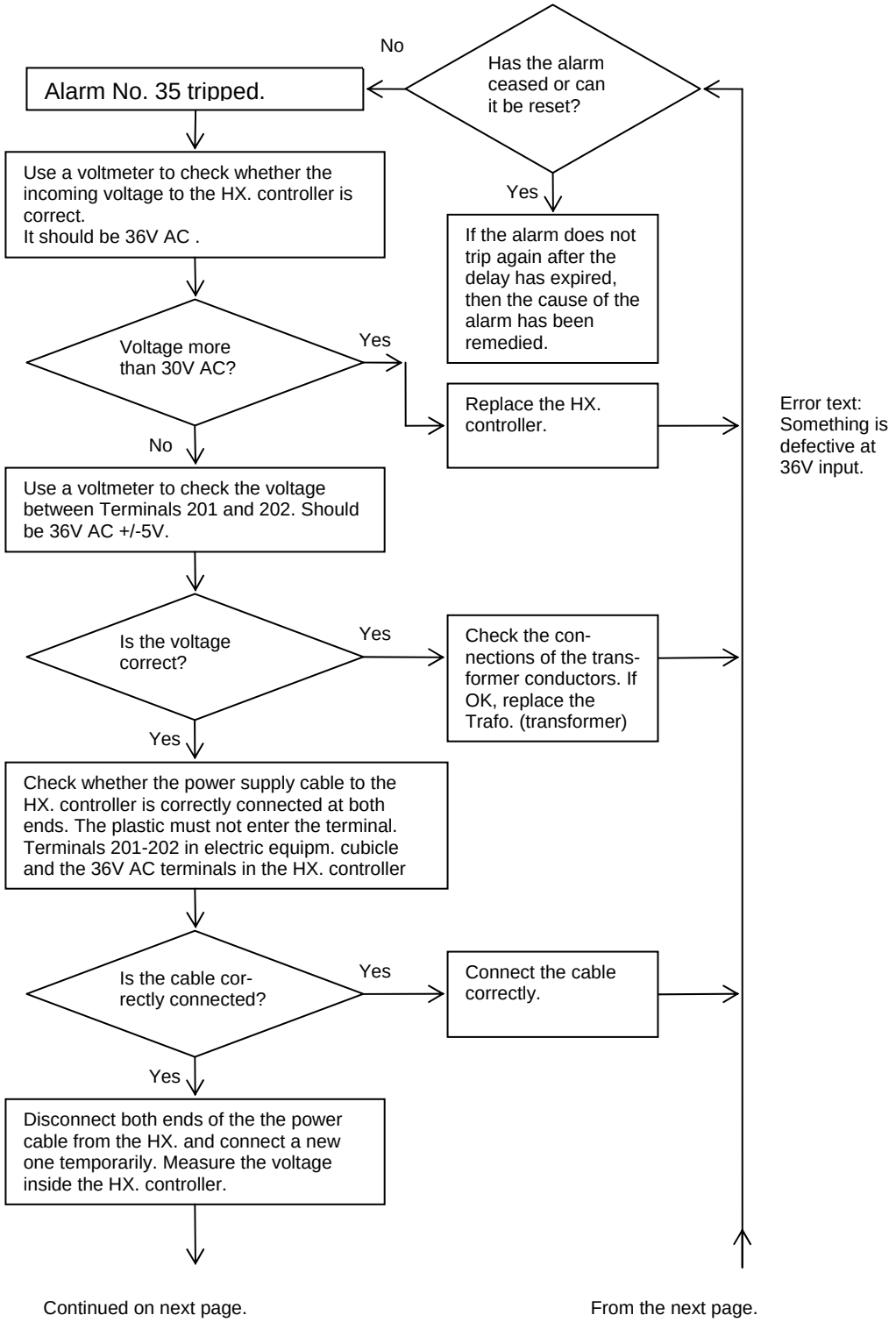
2.21 Alarm No. 34: Overcurrent in R. HX. controller

The alarm is active in GOLD RX units only.The alarm trips when internal monitoring function in the HX. controller senses current to the HX. motor above the alarm limit.



2.22 Alarm No. 35: Undervoltage in R. HX. controller

The alarm is active in GOLD RX units only.
The alarm trips when the internal monitoring function in the HX. controller senses voltage below the alarm limit (25 V AC).



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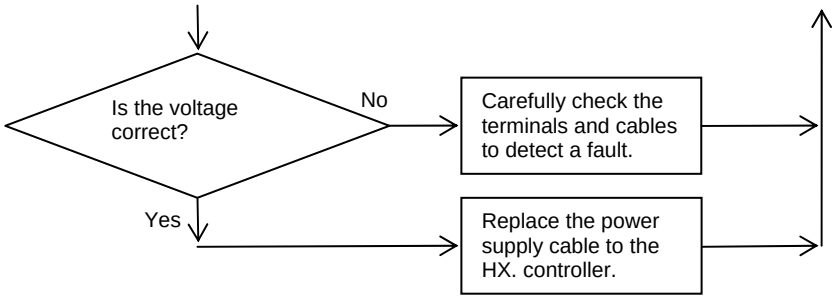
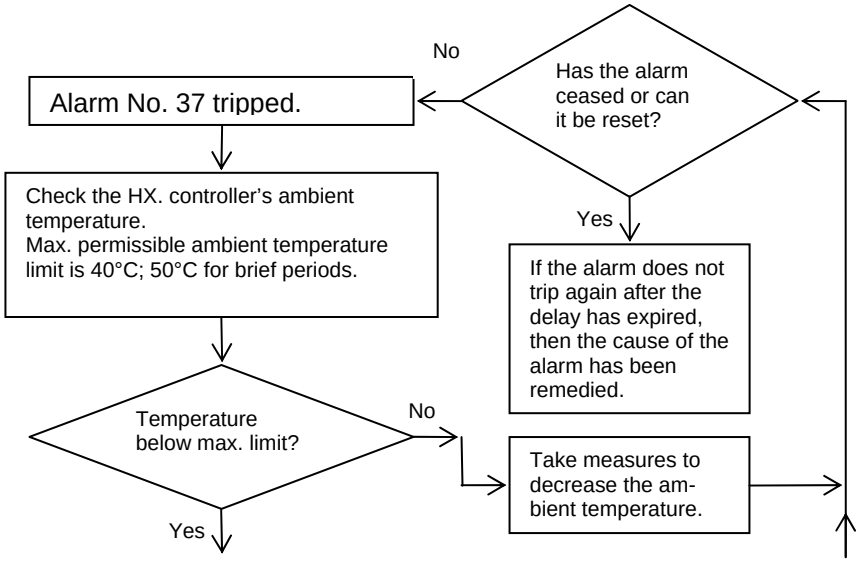


2.23 Alarm No. 36: Overvoltage in R. HX. controller

The alarm is active in GOLD RX units only.
The alarm trips when the internal monitoring function in the HX. controller senses voltage that exceeds the alarm limit (42 V AC).

2.24 Alarm No. 37: Excess temperature in R. HX. controller

The alarm is active in GOLD RX units only.
The alarm trips when den internal monitoring function in the HX. controller senses that the temperature inside the controller exceeds 90°C.



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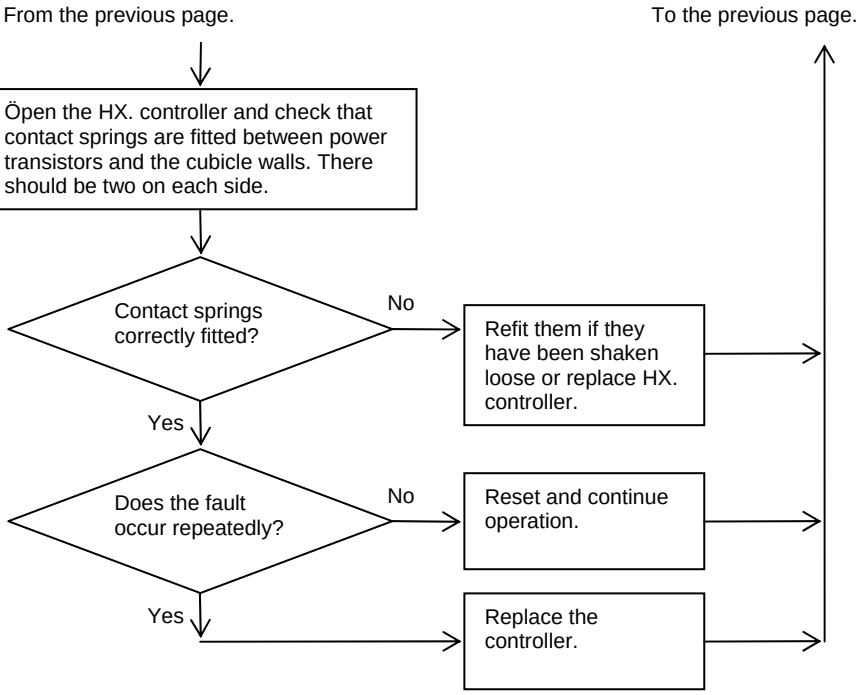
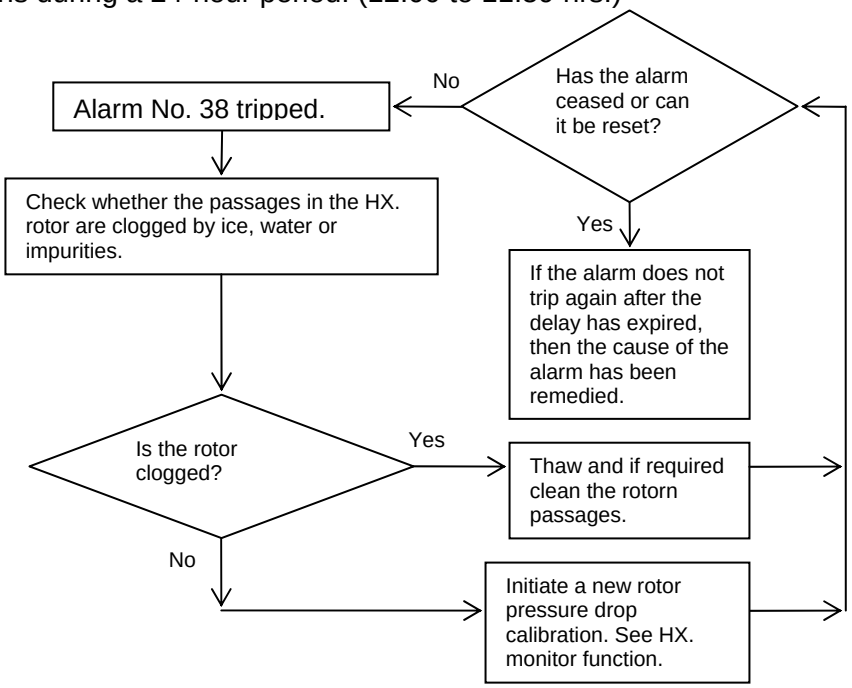


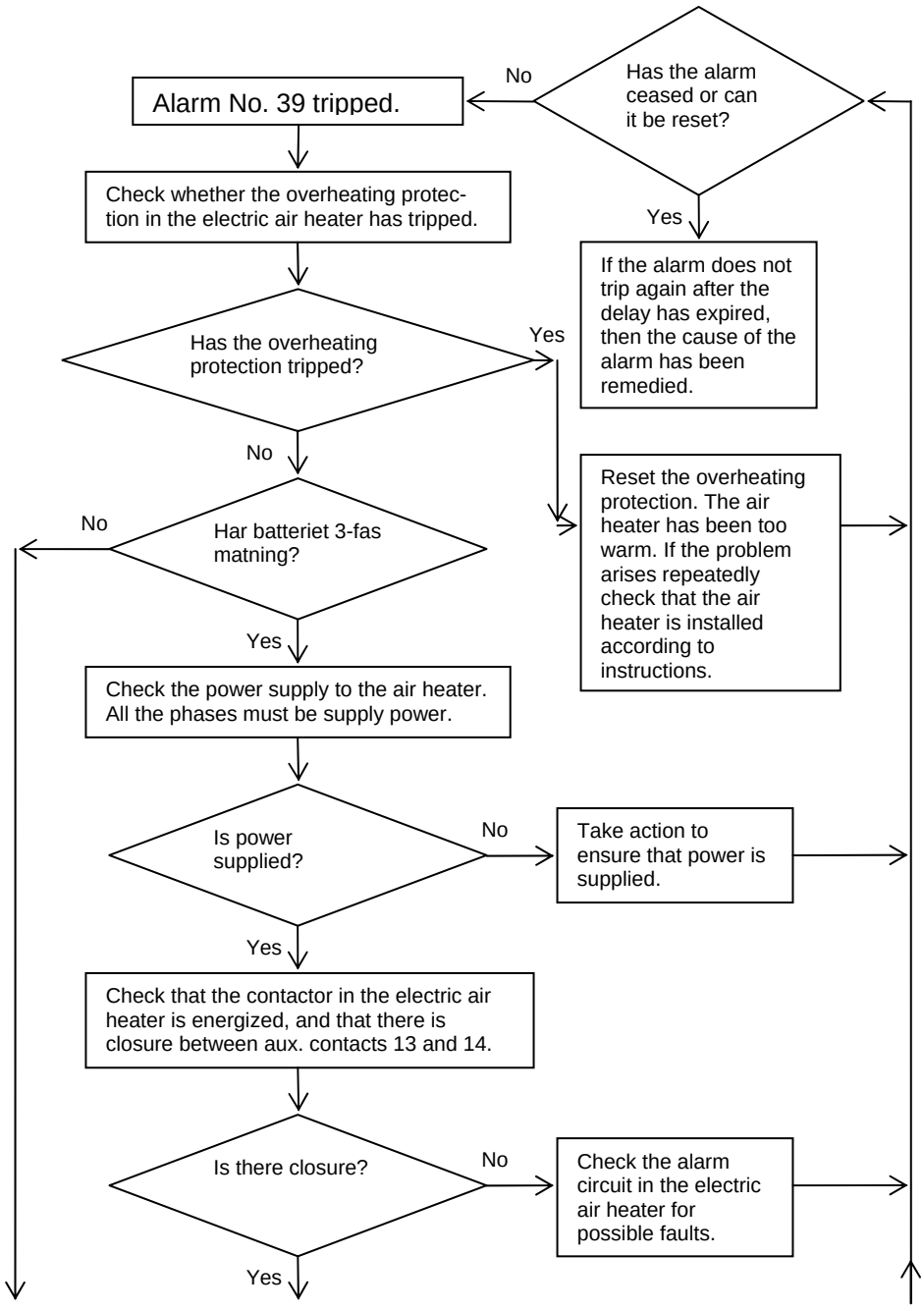
2.25 Alarm No. 38: R. HX. pressure drop above alarm limit

The alarm is active in GOLD RX units only and if the HX. monitor function is activated.
The alarm trips when the defrosting function's max. permissible period has expired (30 minutes) on more than 6 occasions during a 24-hour period. (12.00 to 11.59 hrs.)



2.26 Alarm No. 39: Electric heating coil tripped

The alarm is active only when an electric air heater is connected. (Coil type 1-6 or 11-15)
The alarm trips when there is connection between pins 3 and 4 in the quick connector of the connection cable for the electric air heater.



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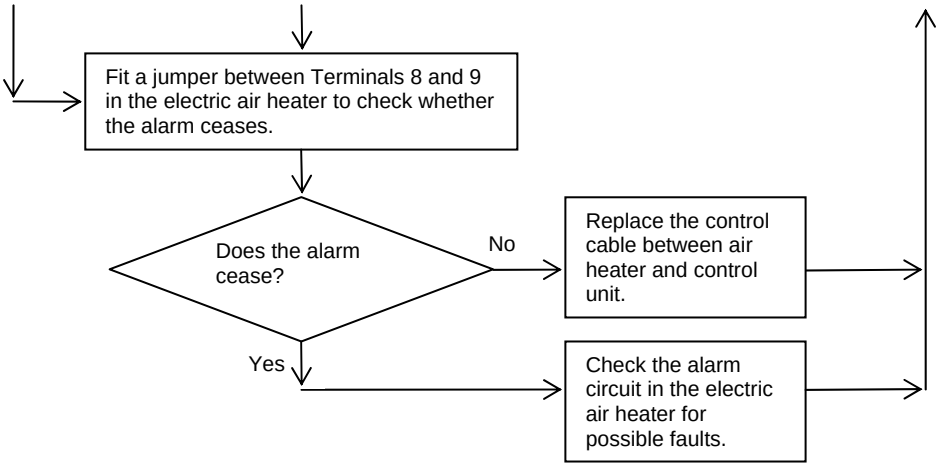


2.27 Alarm No. 40: Extract air temp. below alarm limit

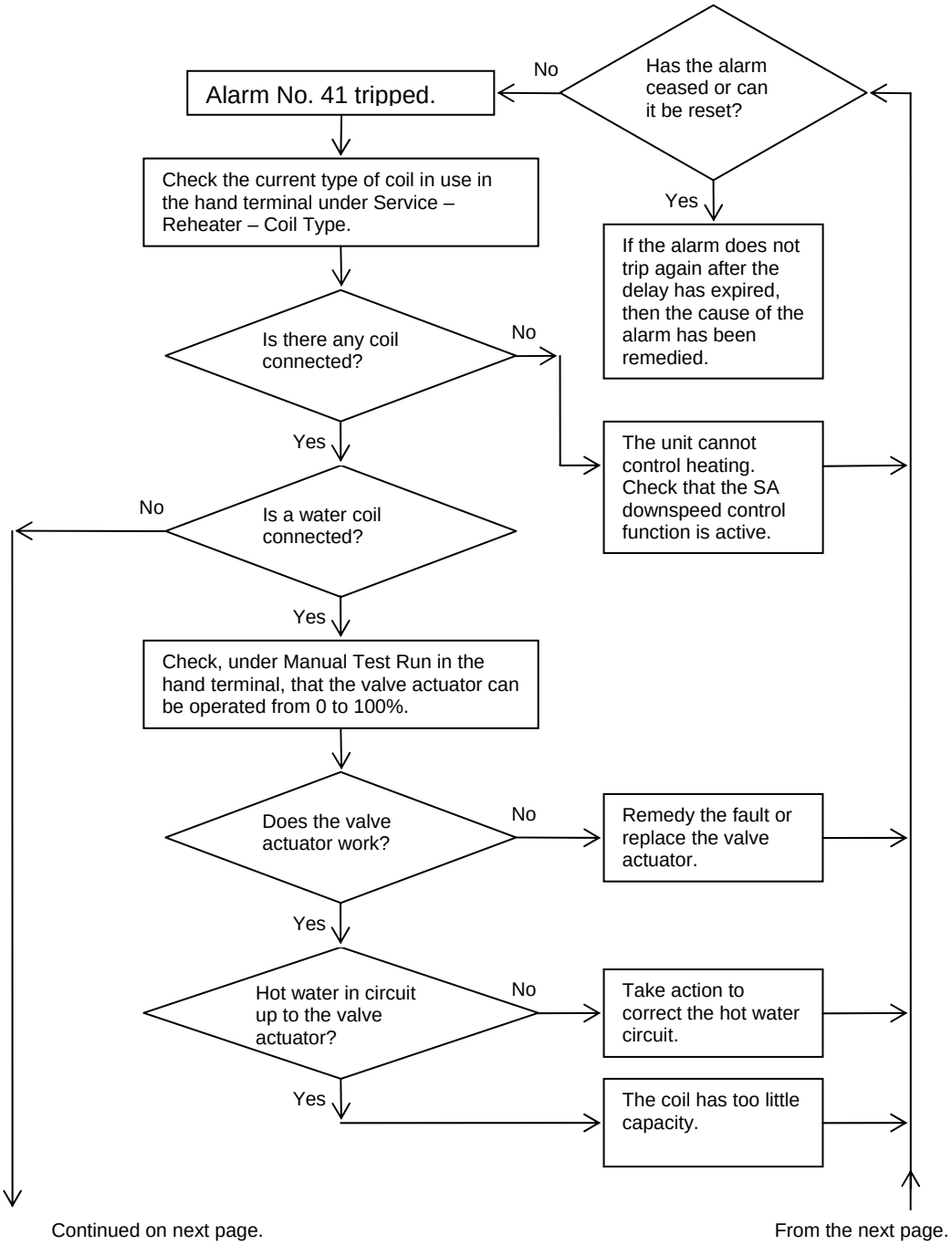
The alarm is always active.
The alarm trips when the extract air temperature is below the preset alarm limit for more than 20 minutes.

Check that the preset alarm limit is correct.

Find out why the extract air temperature is too low.

2.28 Alarm No. 41: Supply air temp. below set point

The alarm is always active.
The alarm trips when the supply air temperature is below the current set point for more than 20 minutes. Check that the preset alarm limit is the one required.



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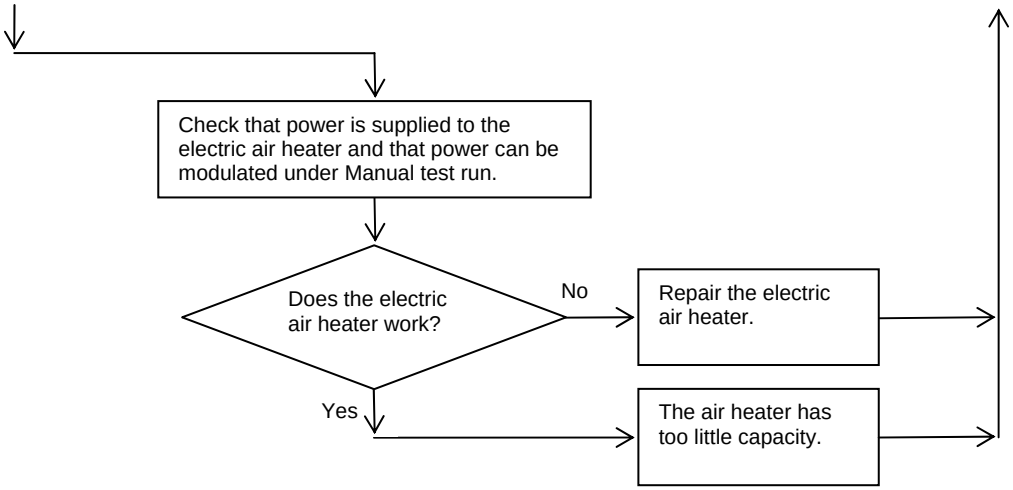


2.29 Alarms No. 42 and 43: External Alarm 1 or 2 tripped

The alarms are always active.
The alarms trip when the relevant terminal input has the preset function for alarms.

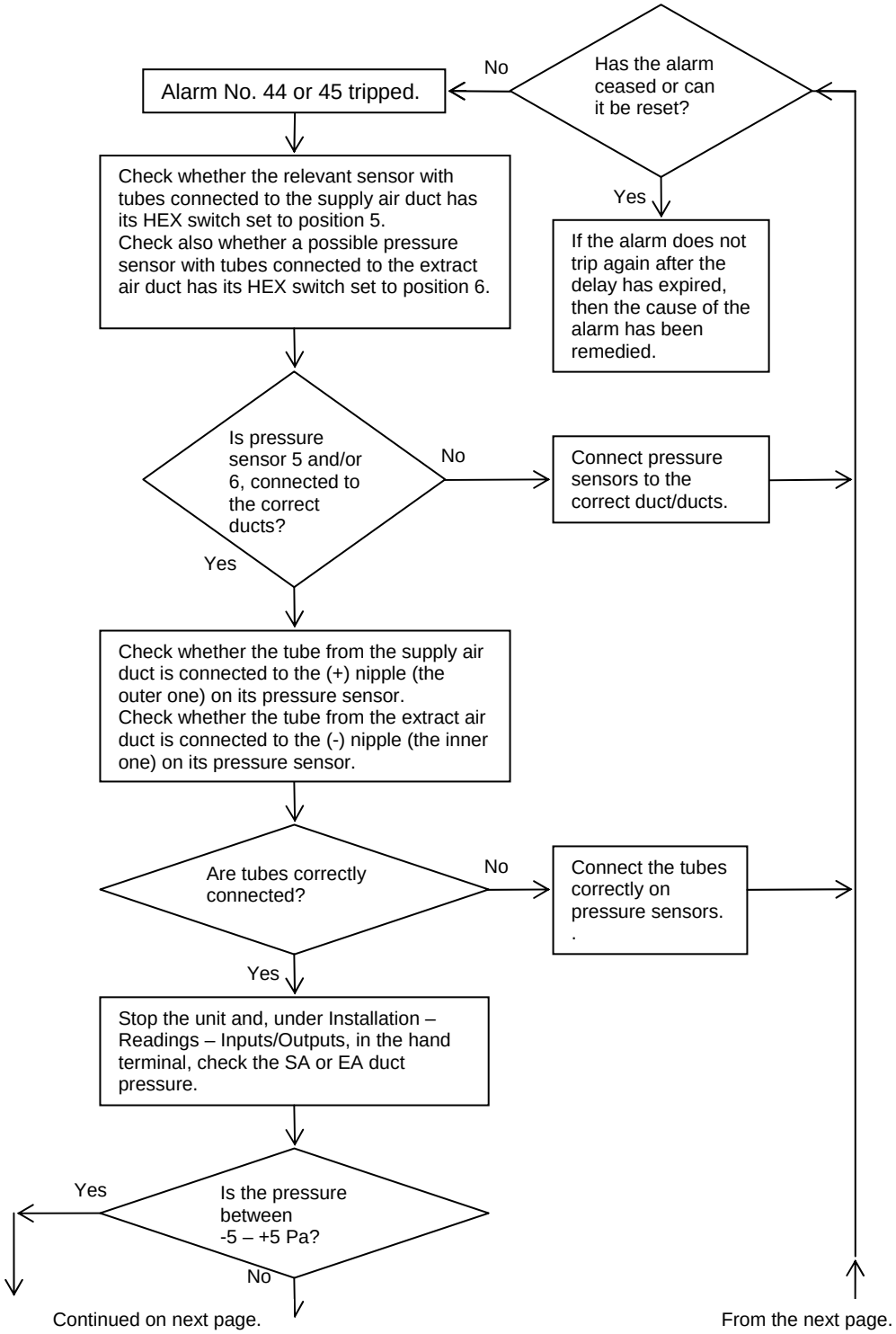
Each input can, under Alarm settings, in the hand terminal, be set to trip alarms on closure or interruption between the input terminals.

Connect External alarm 1, to Terminals 50 and 51.
Connect External alarm 2, to Terminals 52 and 53.

Check the external alarm circuits.

2.30 Alarms No. 44 and 45: Supply air or Extract air duct pressure below set point

The alarms are active only when the Pressure Control function is activated for each fan.
The alarms trip when the duct pressure has been more than 10% below the relevant pressure set point for more than 20 minutes on end.



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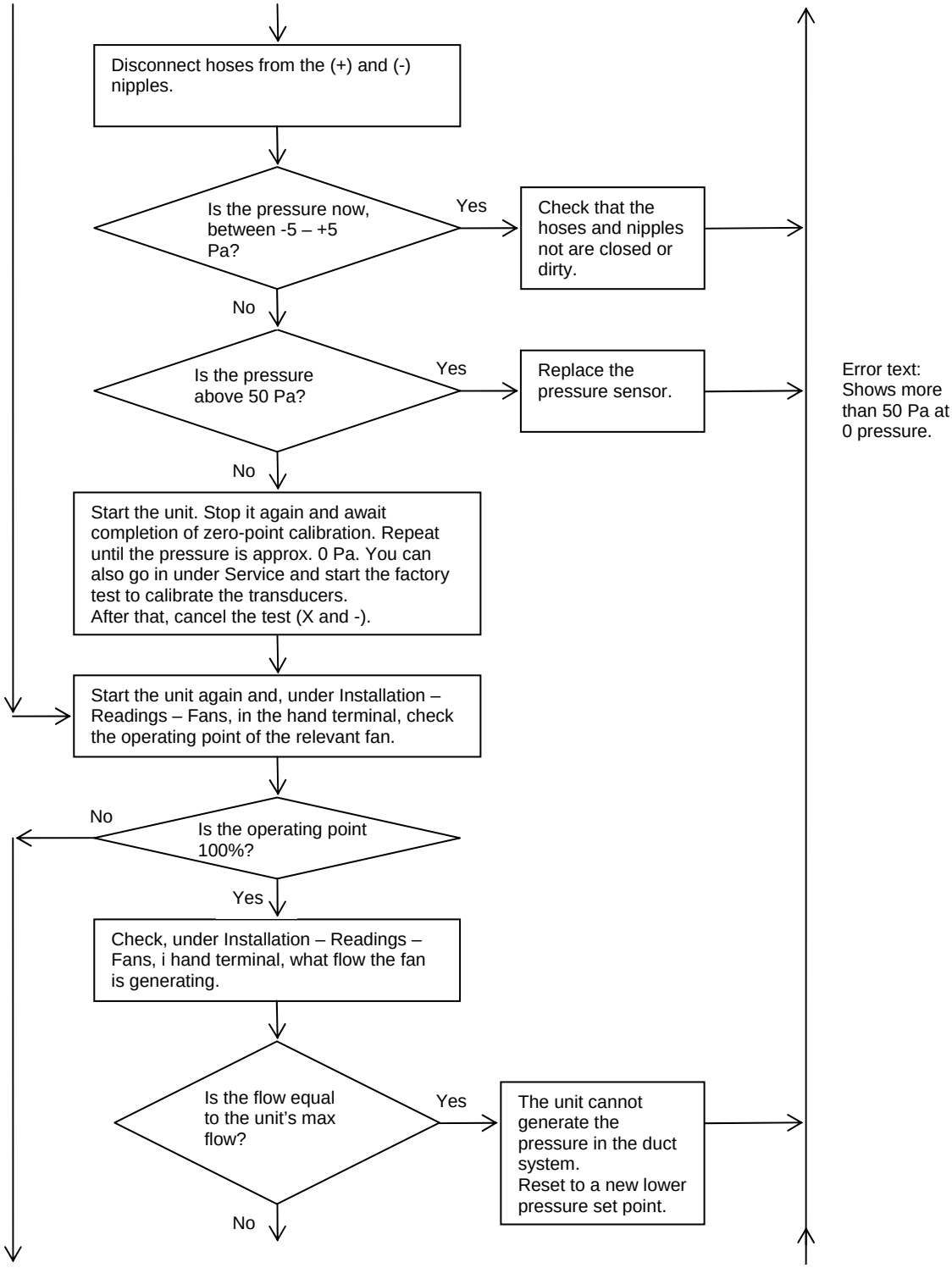

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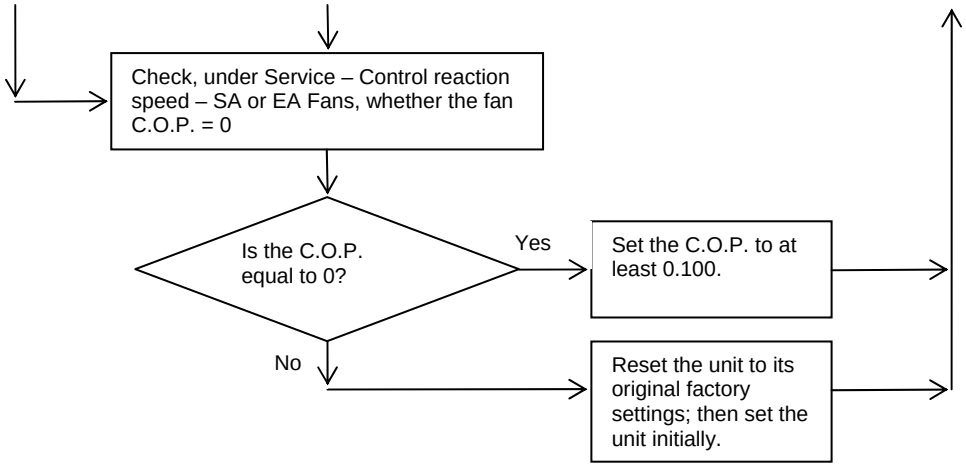
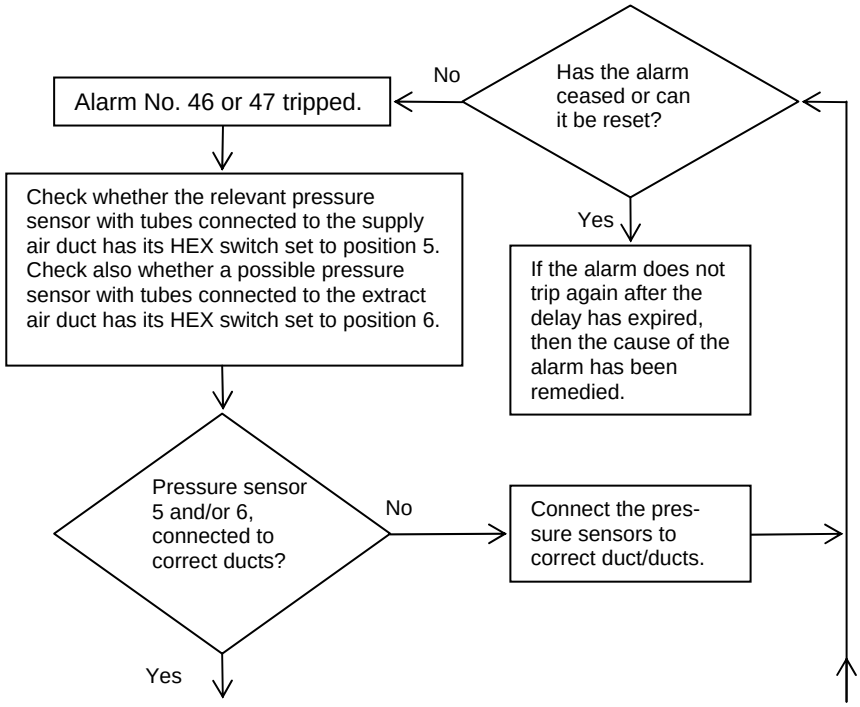


2.31 Alarms No. 46 and 47: Supply air or Extract air duct pressure above set point

The alarms are active only when the Pressure Control function is activated for each fan.
The alarms trip when the duct pressure has been more than 10% above the relevant pressure set point for more than 20 minutes on end.



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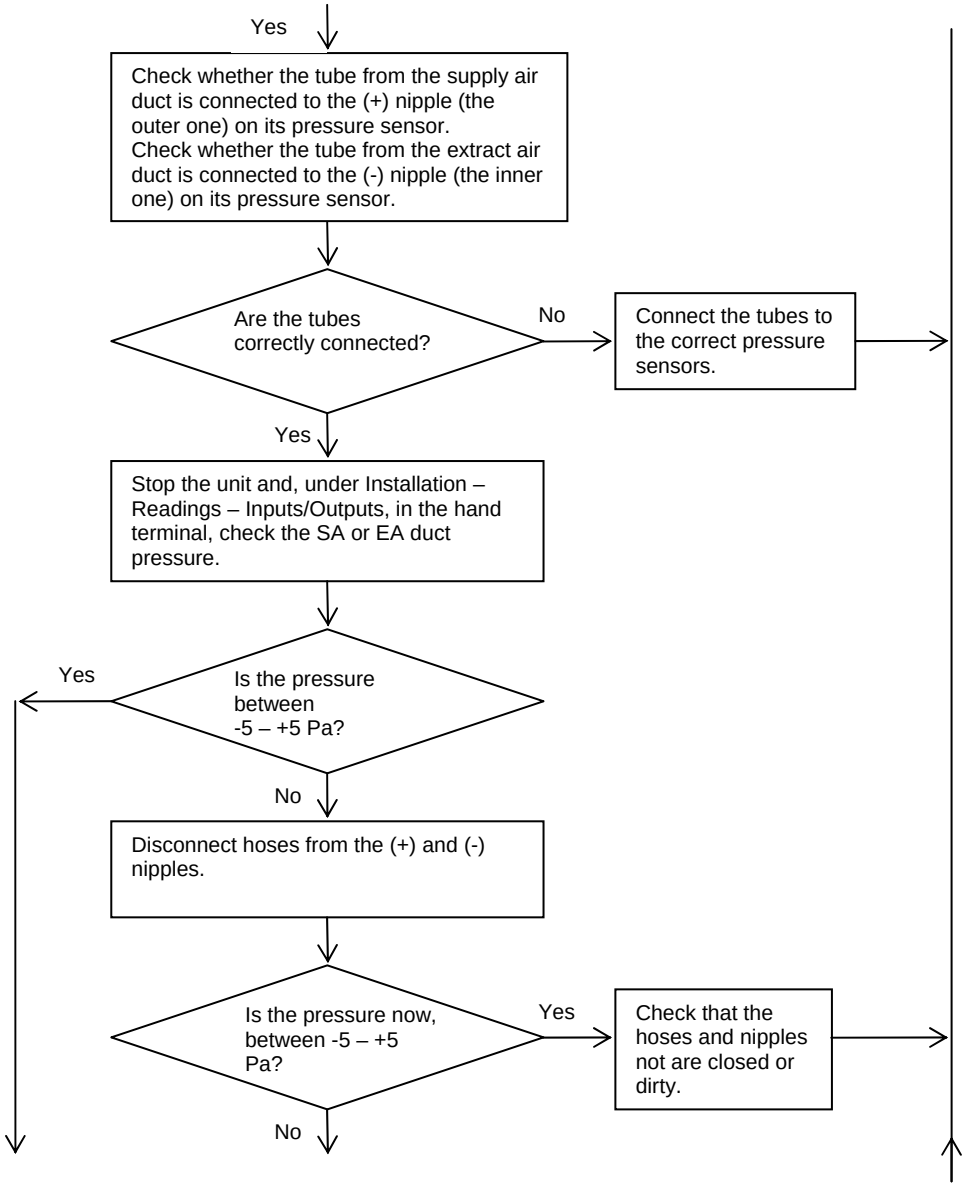

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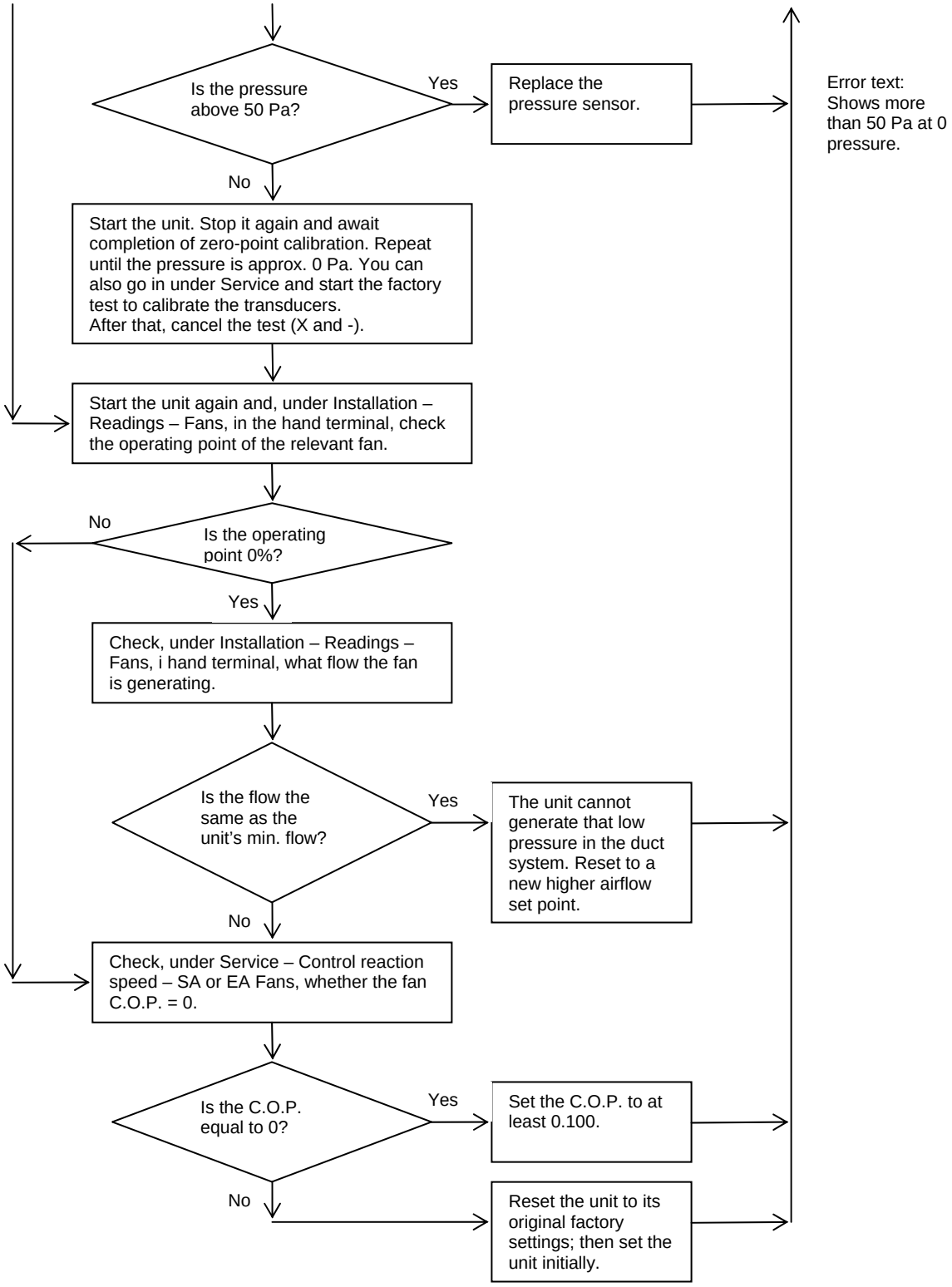
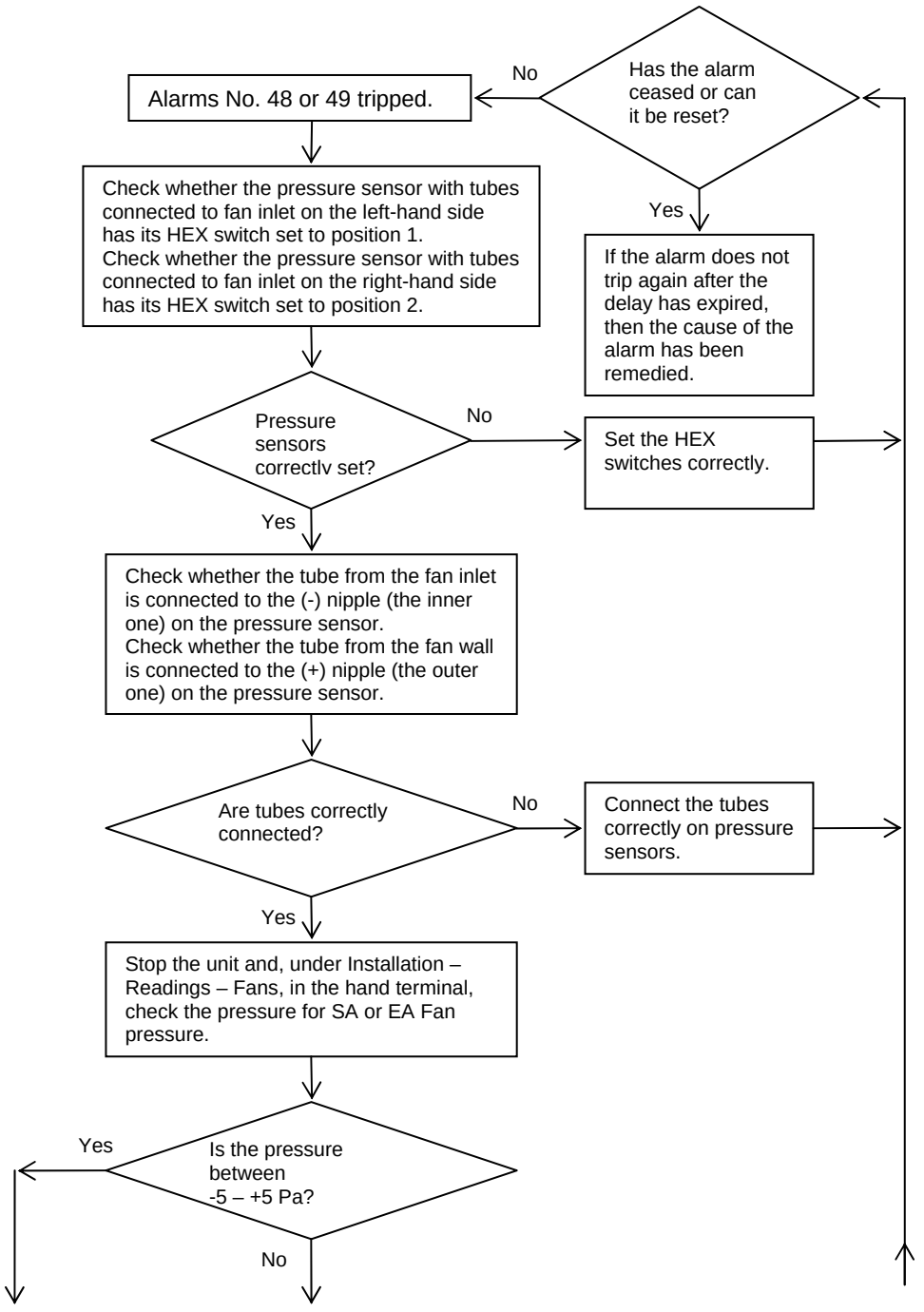


2.32 Alarms No. 48 and 49: Supply air or Extract air flow below set point

The alarms are active when the Flow control, Demand control and slave operation are activated for each fan.
The alarms trip when the flow has been more than 10% below the current flow set point, for more than 20 minutes on end.



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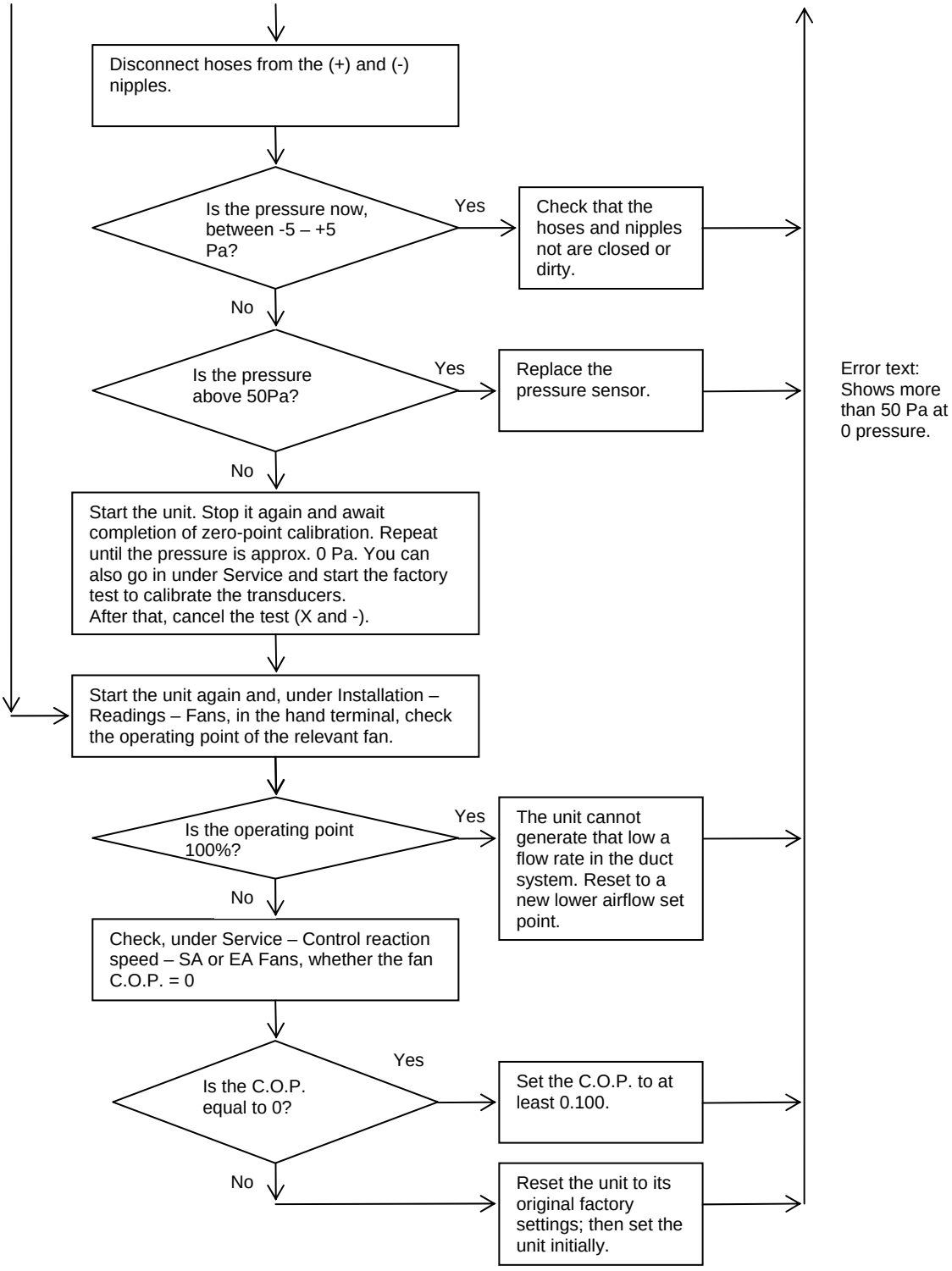
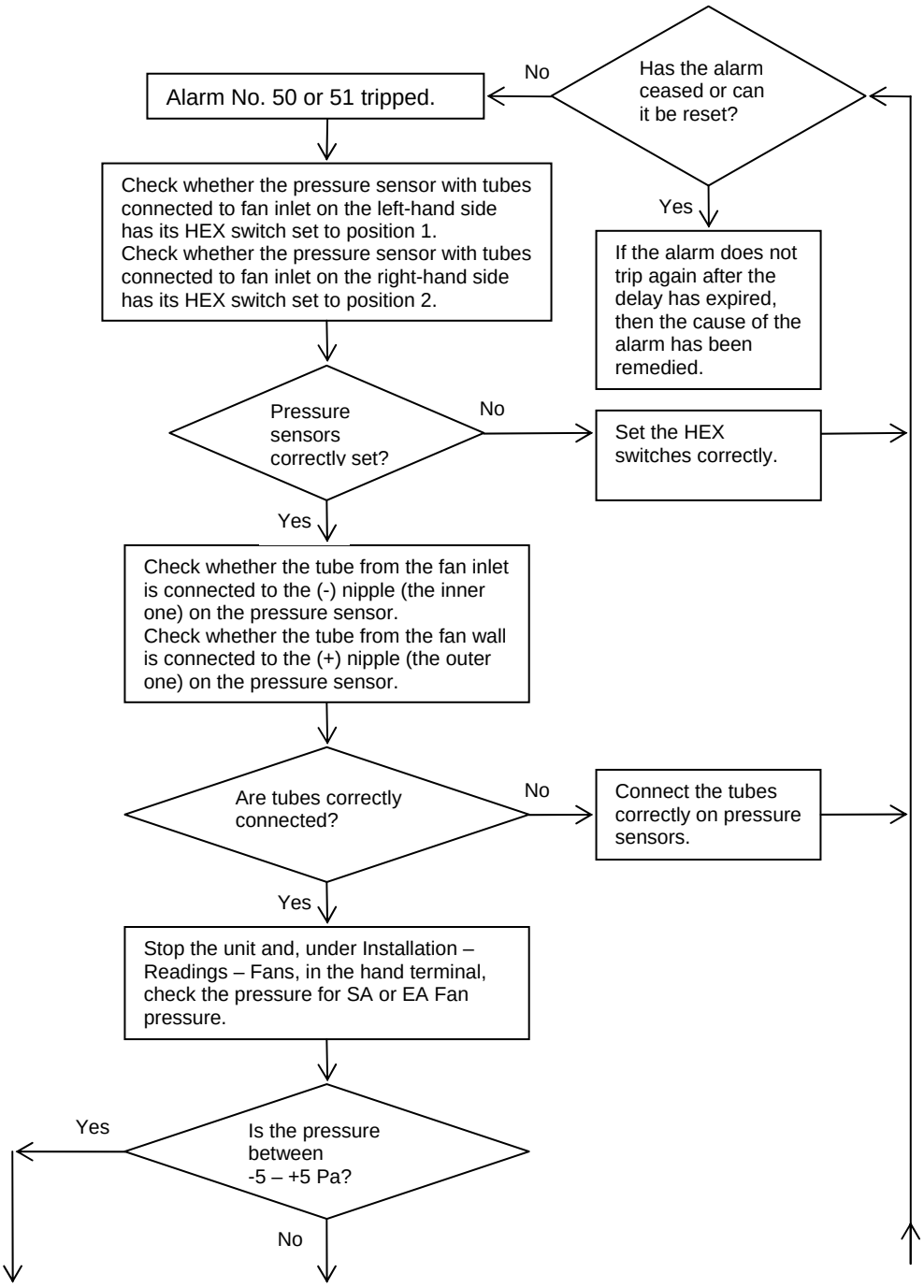


2.33 Alarms No. 50 and 51: Supply air or Extract air flow above set point

The alarms are active when the Flow Control, Demand Control and slave operation are activated for the relevant fan.
The alarms trip when the flow has been more than 10% above the current flow set point, for more than 20 minutes on end.



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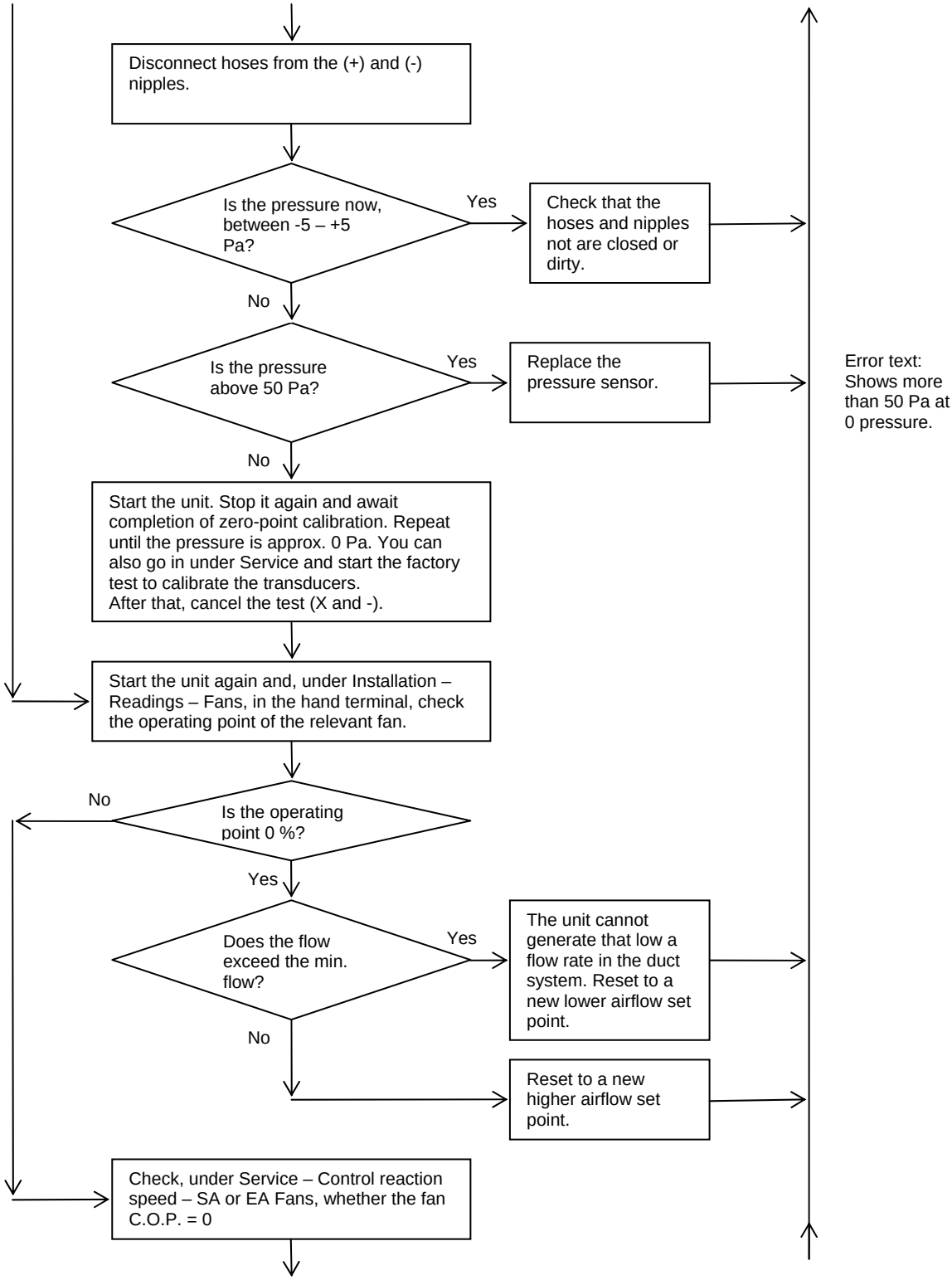

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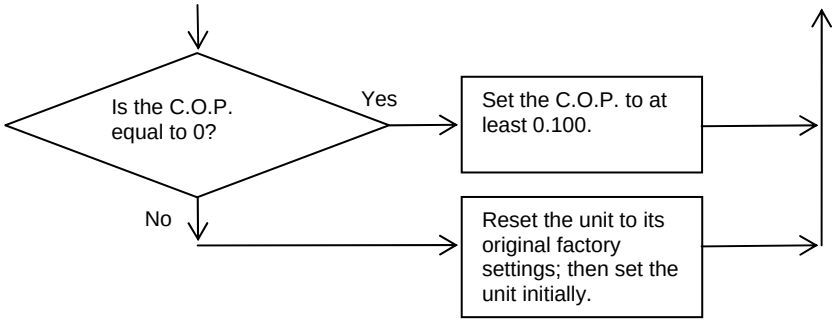
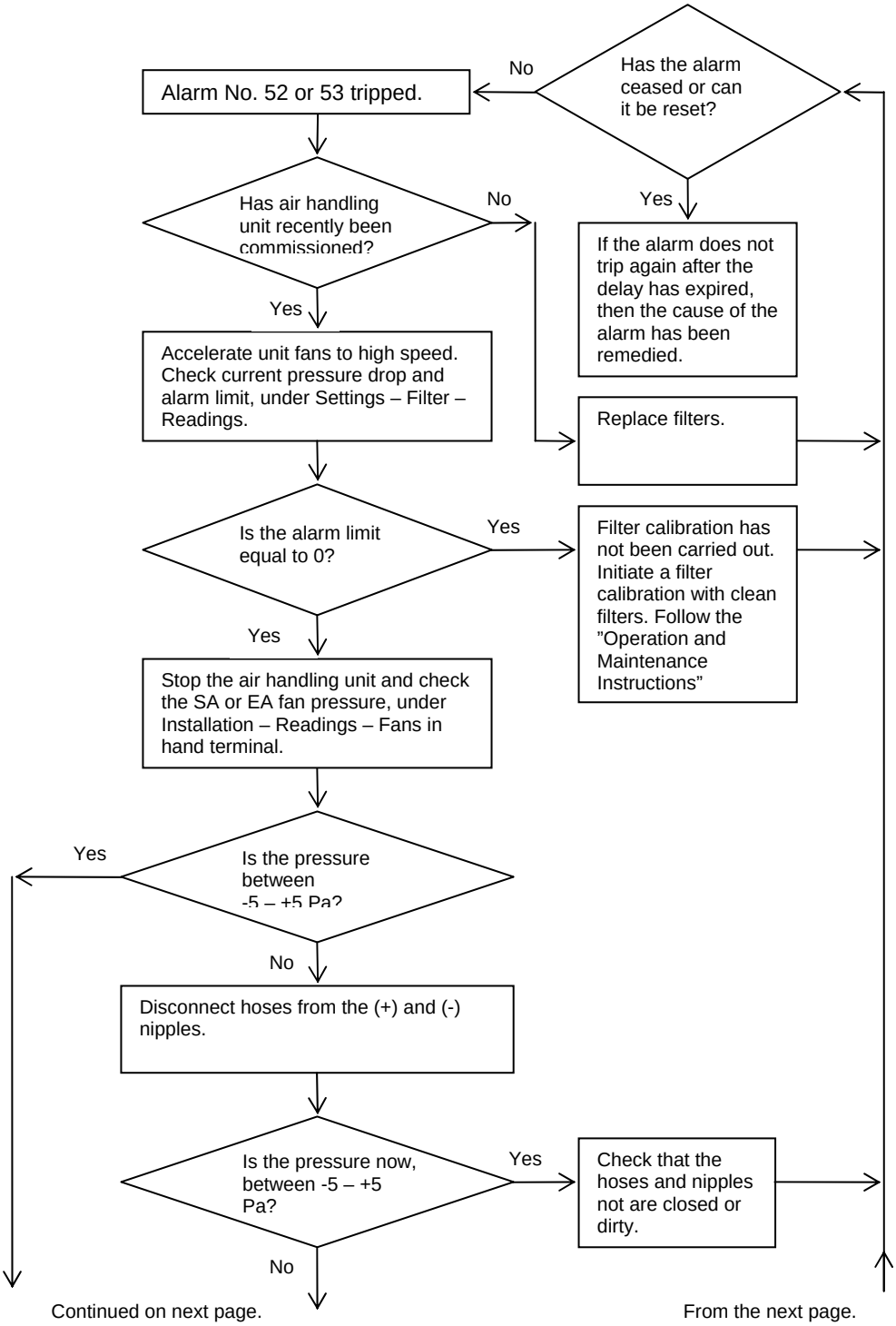


2.34 Alarms No. 52 and 53: Supply air or Extract air filter dirty

The alarms are active when the flow through each filter is more than half of the flow that was used when the filters were calibrated. The alarms trip when the pressure drop across the filter has exceeded the alarm limit longer than 10 minutes on end.



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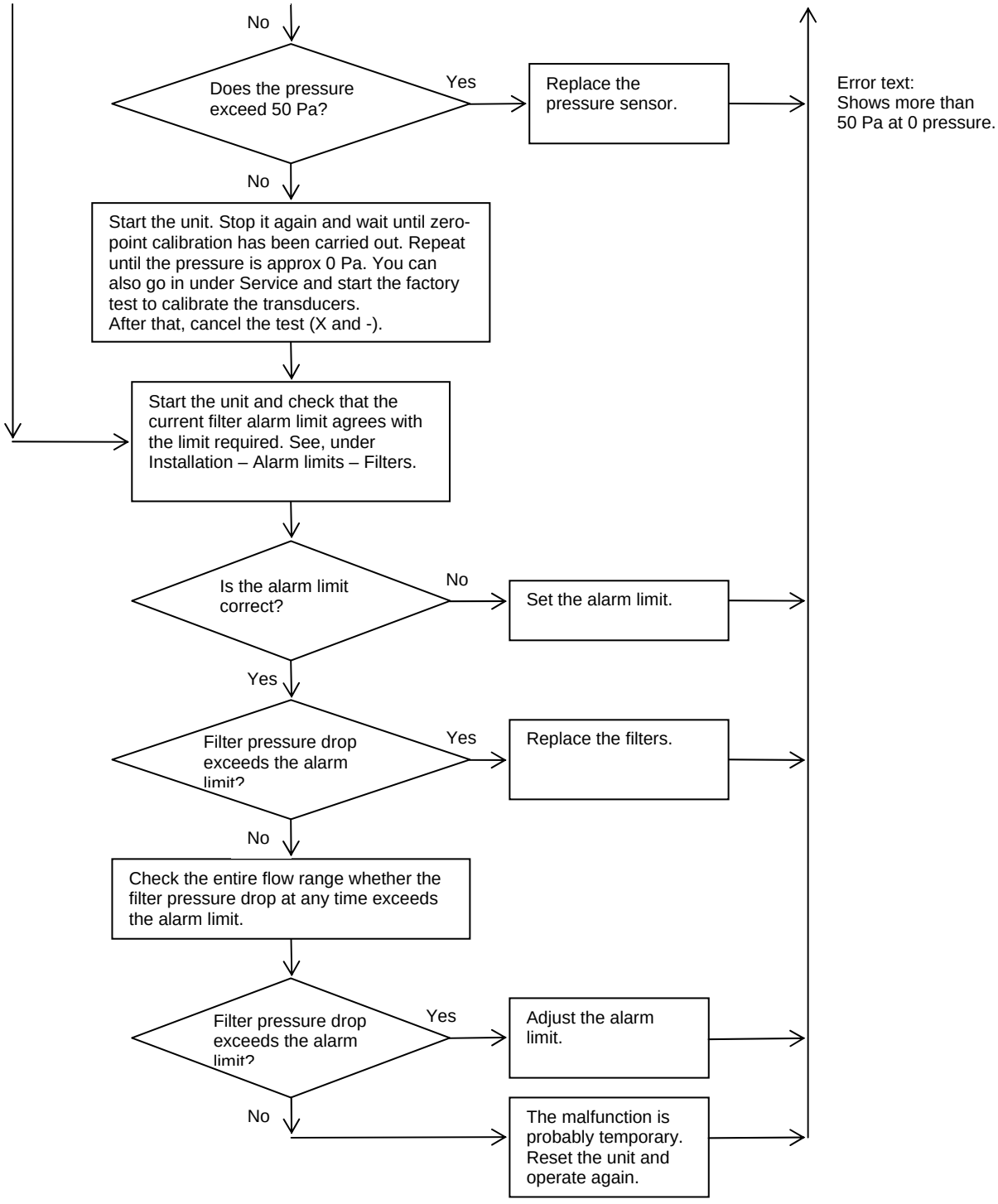

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2.35 Alarm Nos. 54: Service period past alarm limit

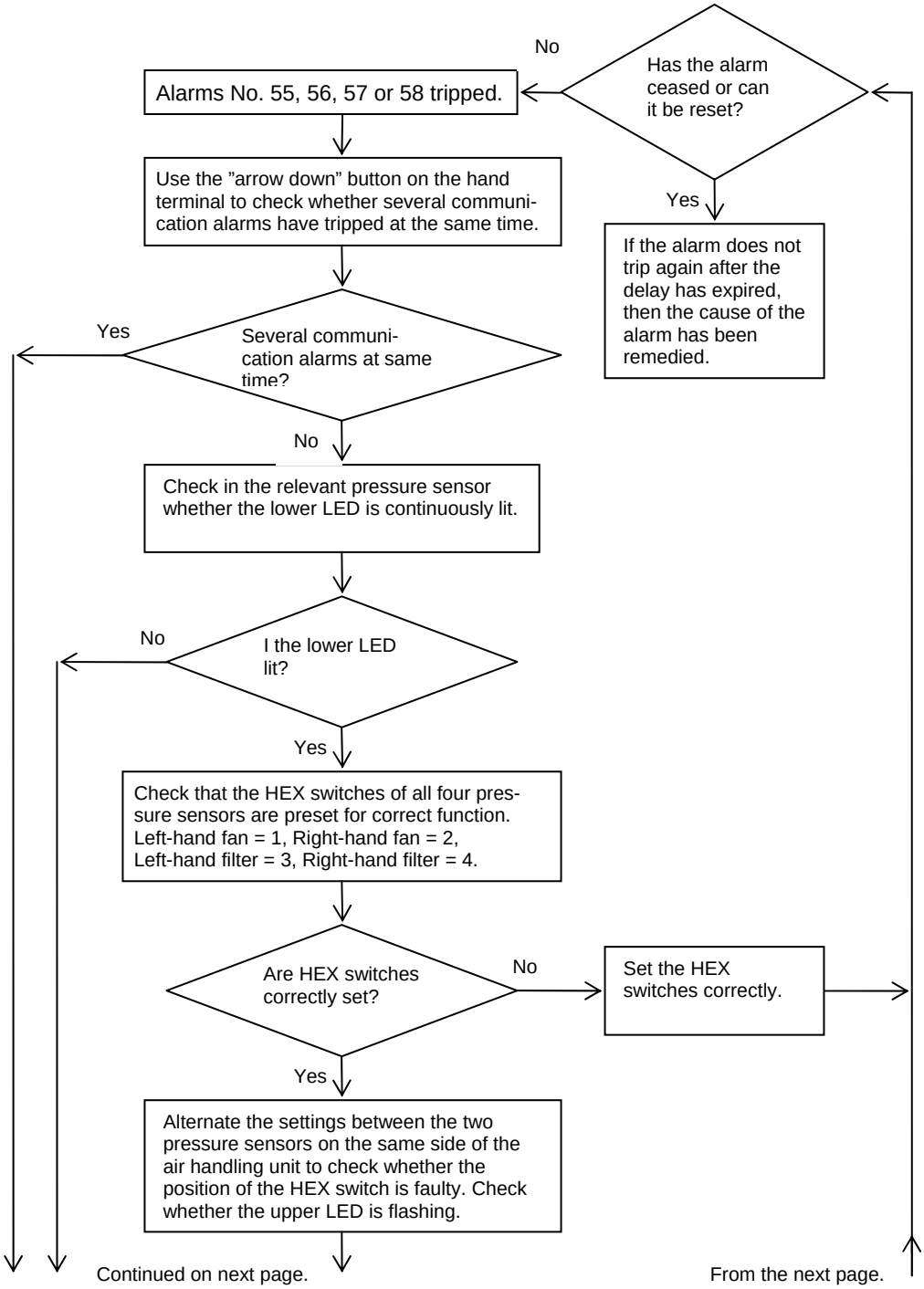
The alarm is always active.
The alarm trips when the unit has been in operation for a longer period than the preset alarm limit.

When the reset button is pressed to reset the alarm, this initiates a 7-day alarm delay period.

To recreate the period required for a new service alarm, a new period (months) must be set under Installation – Setting alarms – Alarm limits.

2.36 Alarms No. 55, 56, 57 and 58: No communication with SA and EA flow pressure sensor and filter

The alarms are always active. The alarms trip when the control unit lacks communication with the relevant pressure sensors.



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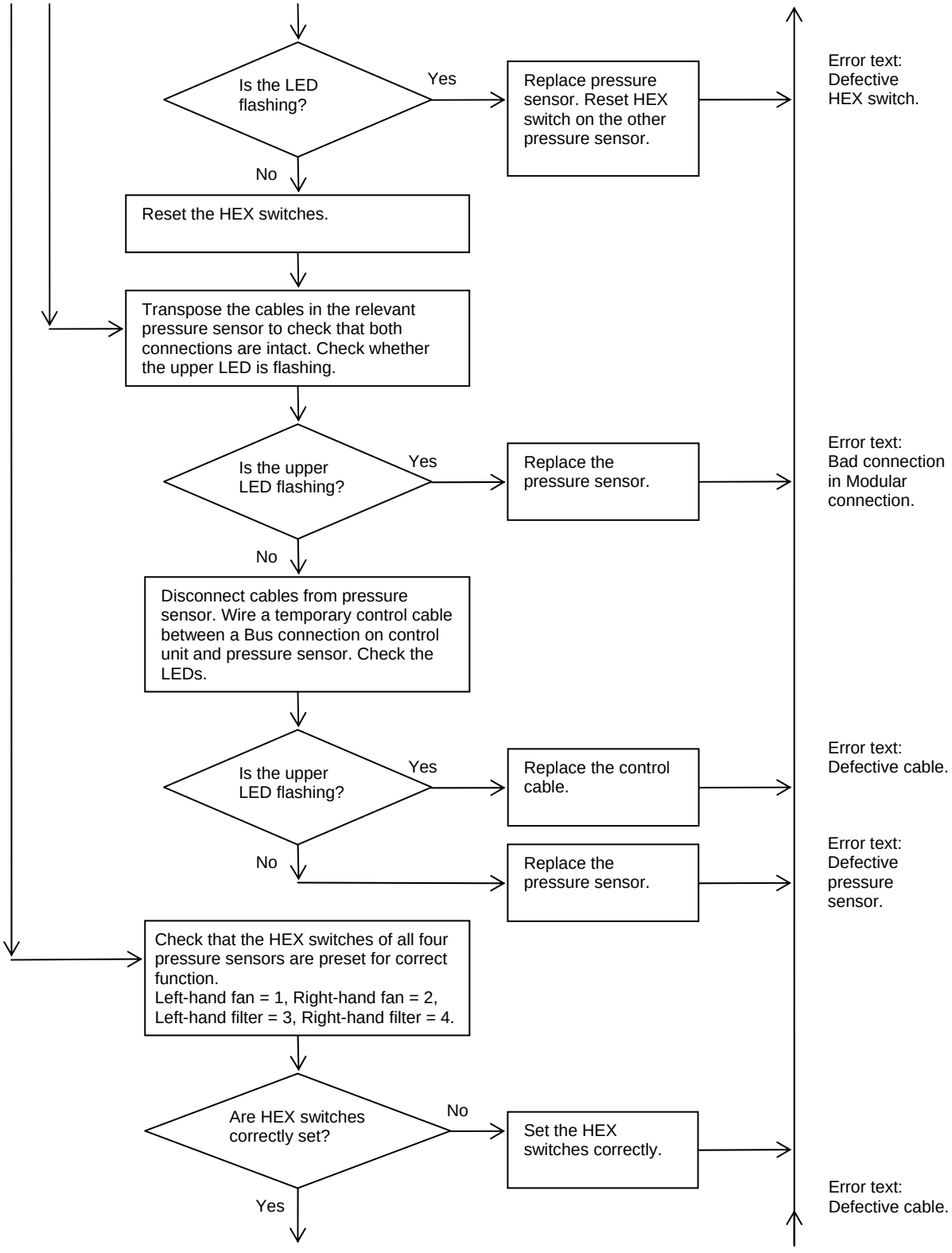

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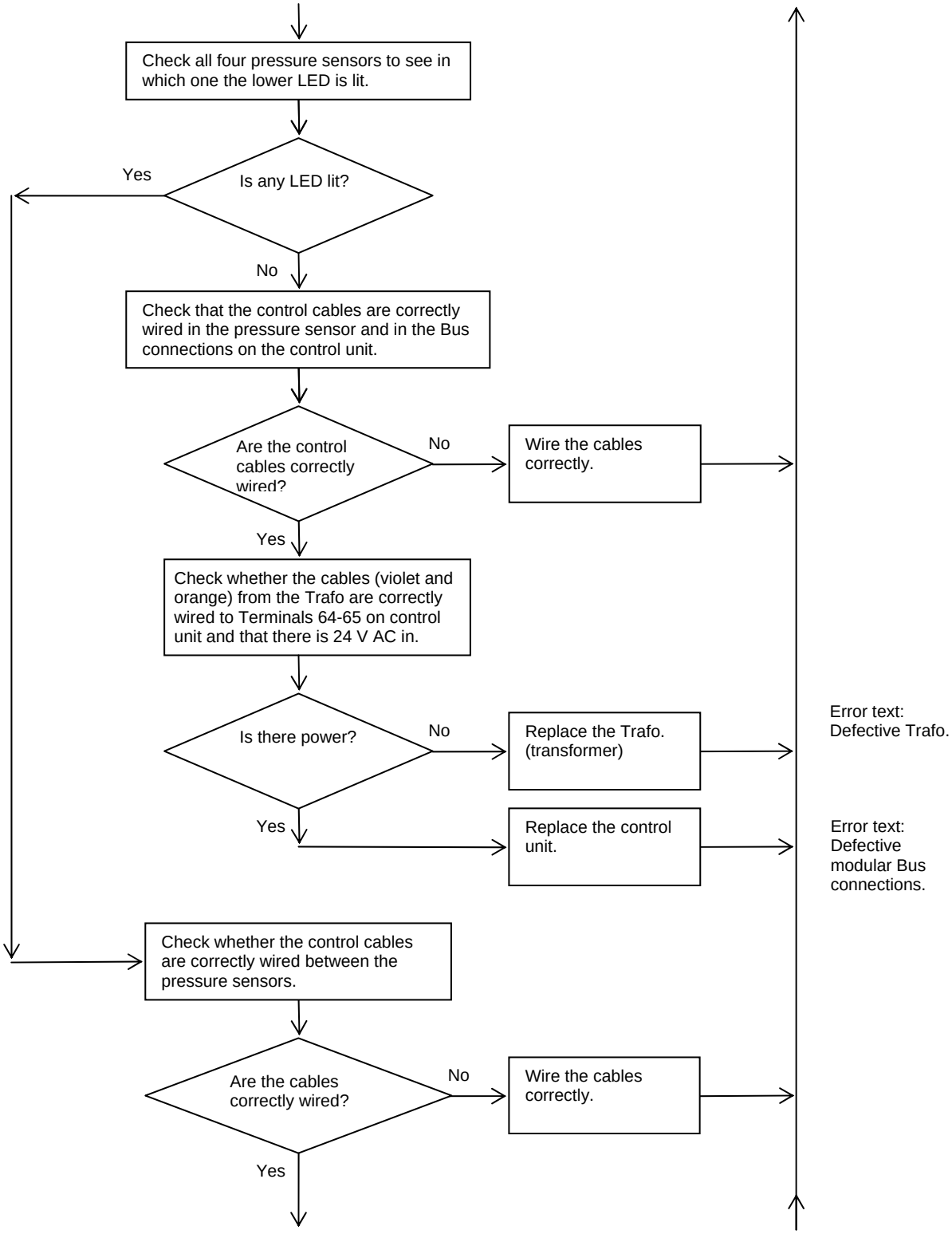

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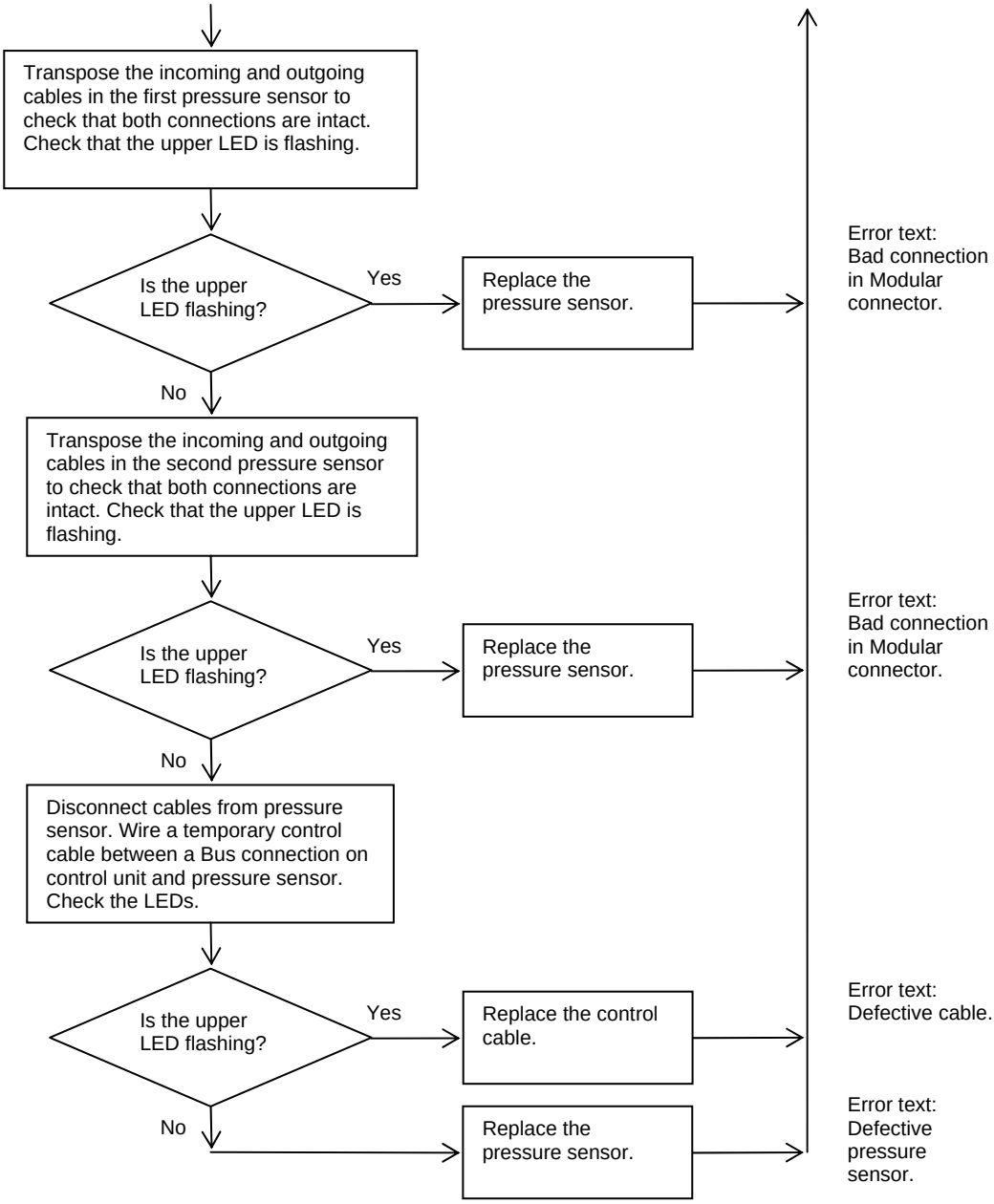
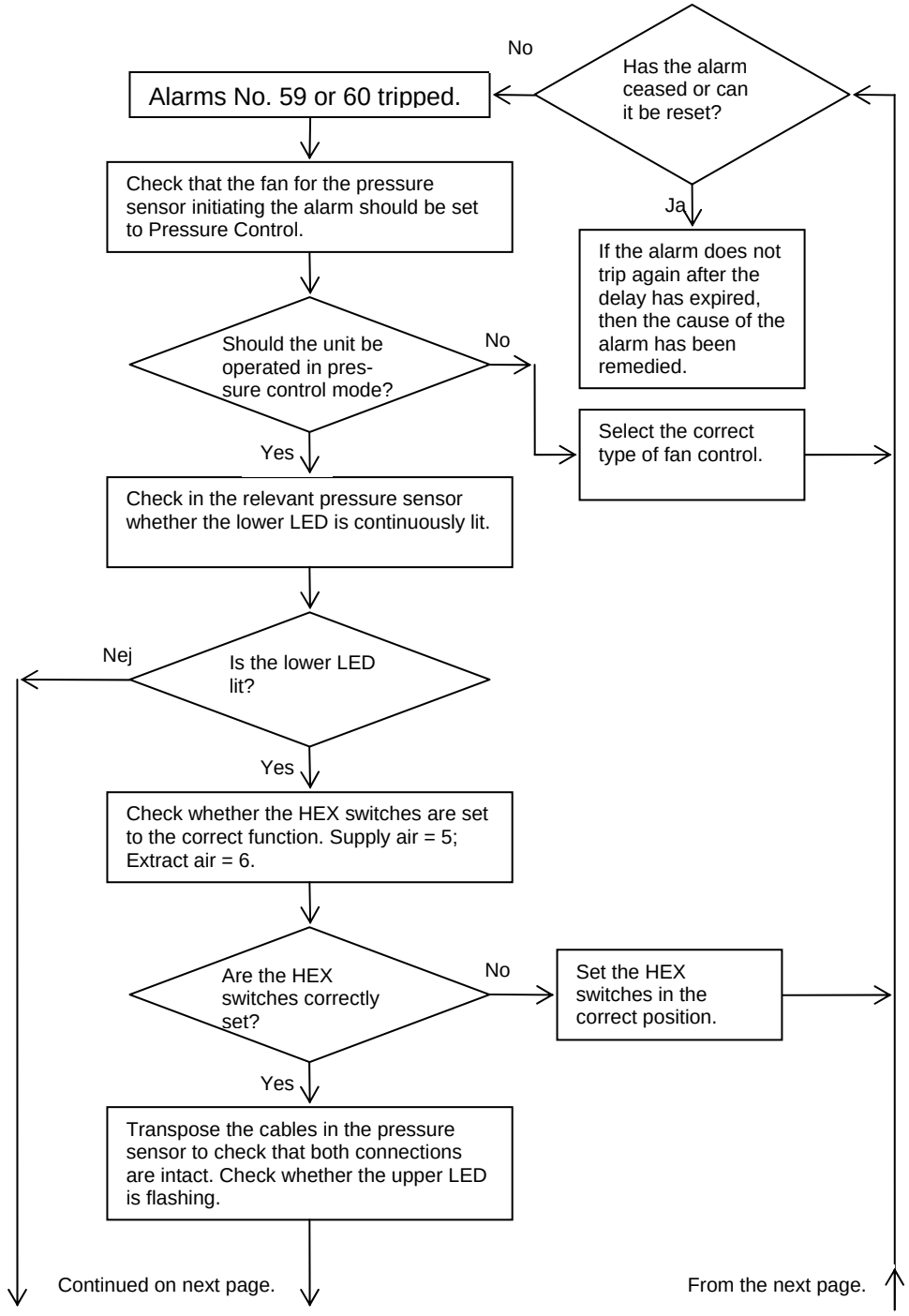
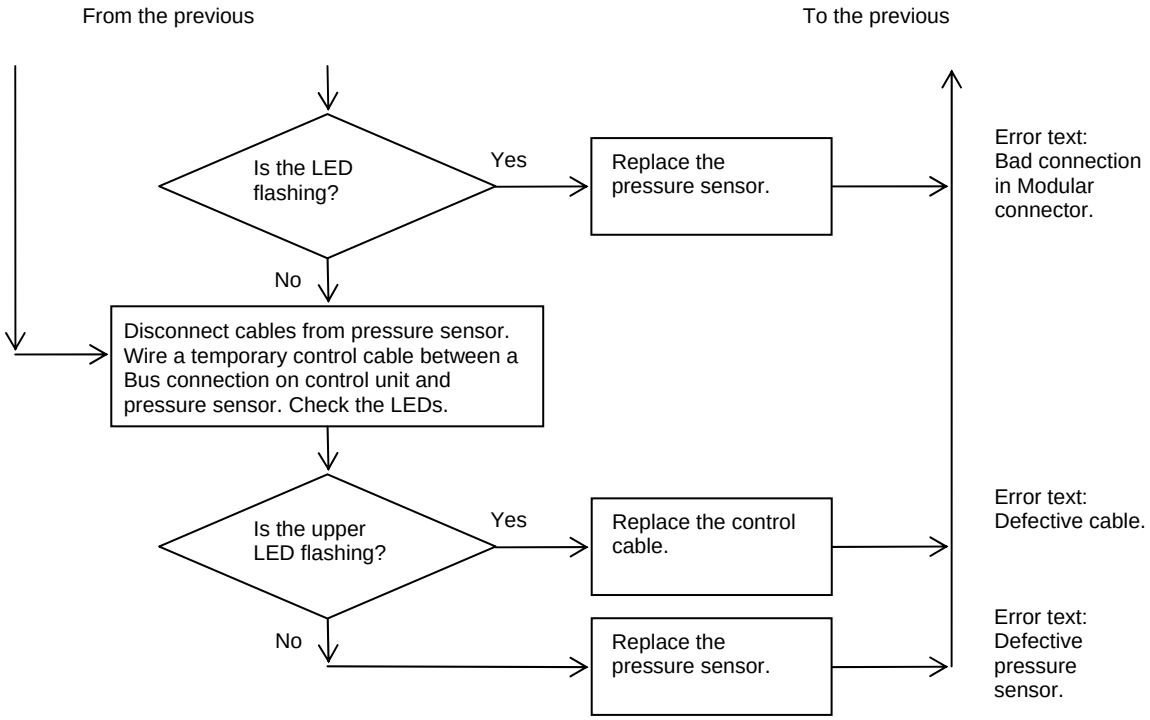


2.37 Alarms No. 59 and 60: No communication with SA and EA duct pressure sensor

The alarms are active when each fan is set for pressure control. The alarms trip when the control unit lacks communication with the relevant pressure sensors.

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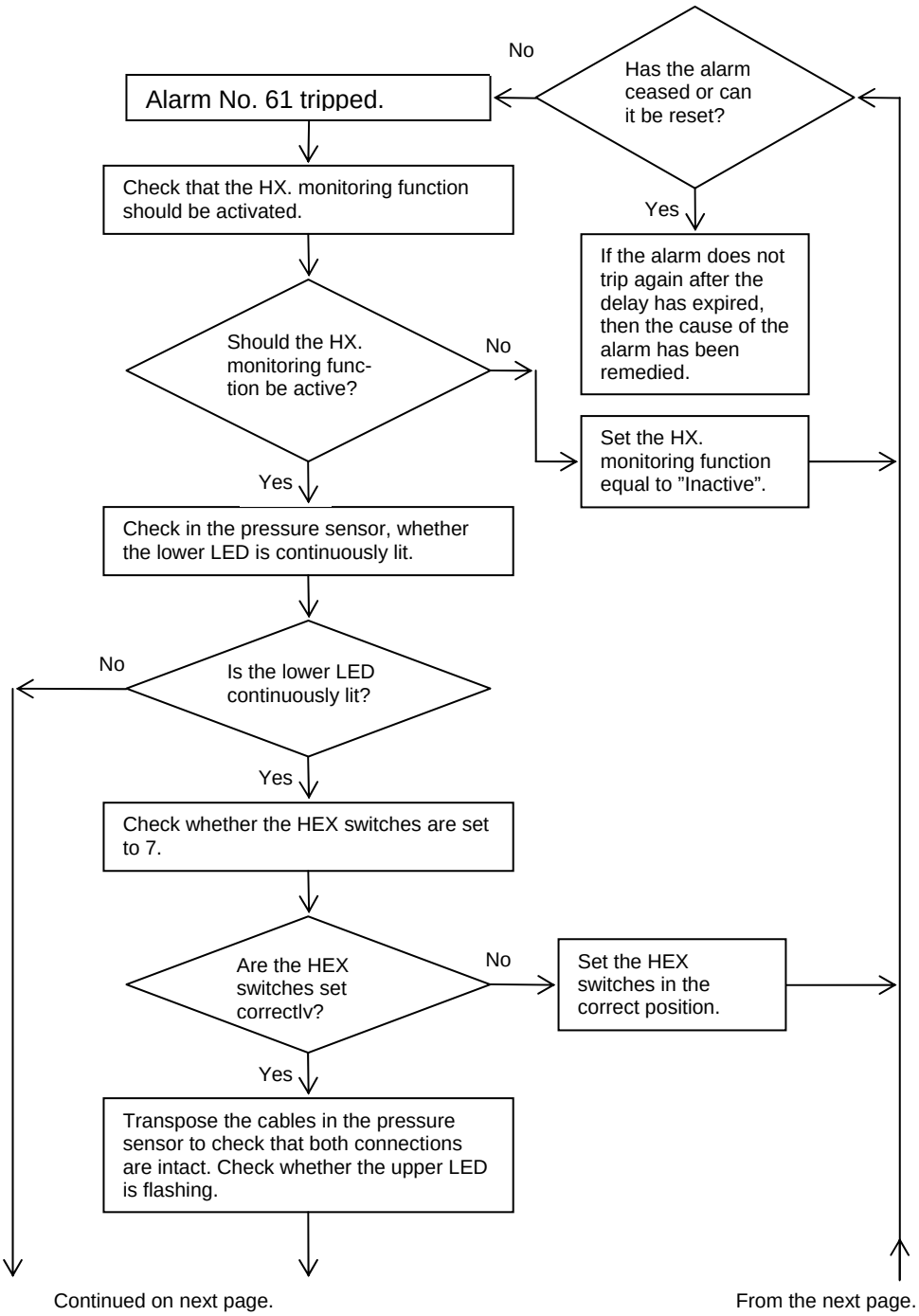
Is the LED flashing?
Yes
Replace the pressure sensor.
Error text: Bad connection in Modular connector.
No
Disconnect cables from pressure sensor. Wire a temporary control cable between a Bus connection on control unit and pressure sensor. Check the LEDs.
Is the upper LED flashing?
Yes
Replace the control cable.
Error text: Defective cable.
No
Replace the pressure sensor.
Error text: Defective pressure sensor.

2.38 Alarm No. 61: No communication with R. HX. pressure sensor

The alarm is active when the HX. monitoring function is activated. The alarm trips when the control unit lacks communication with the relevant pressure sensor.



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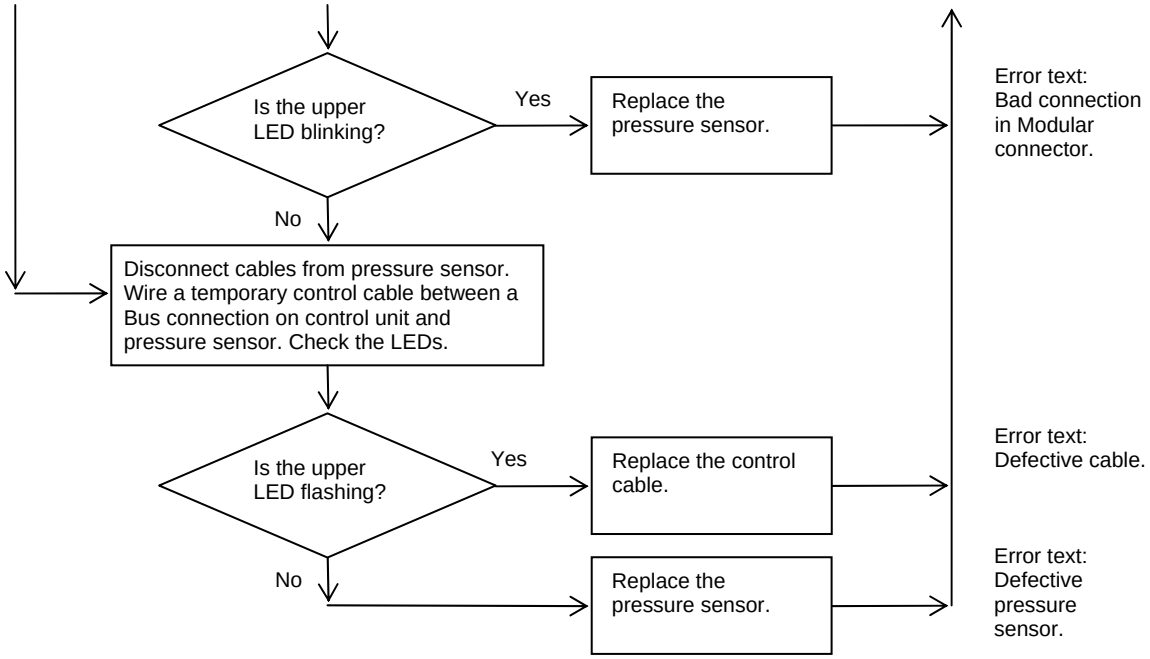
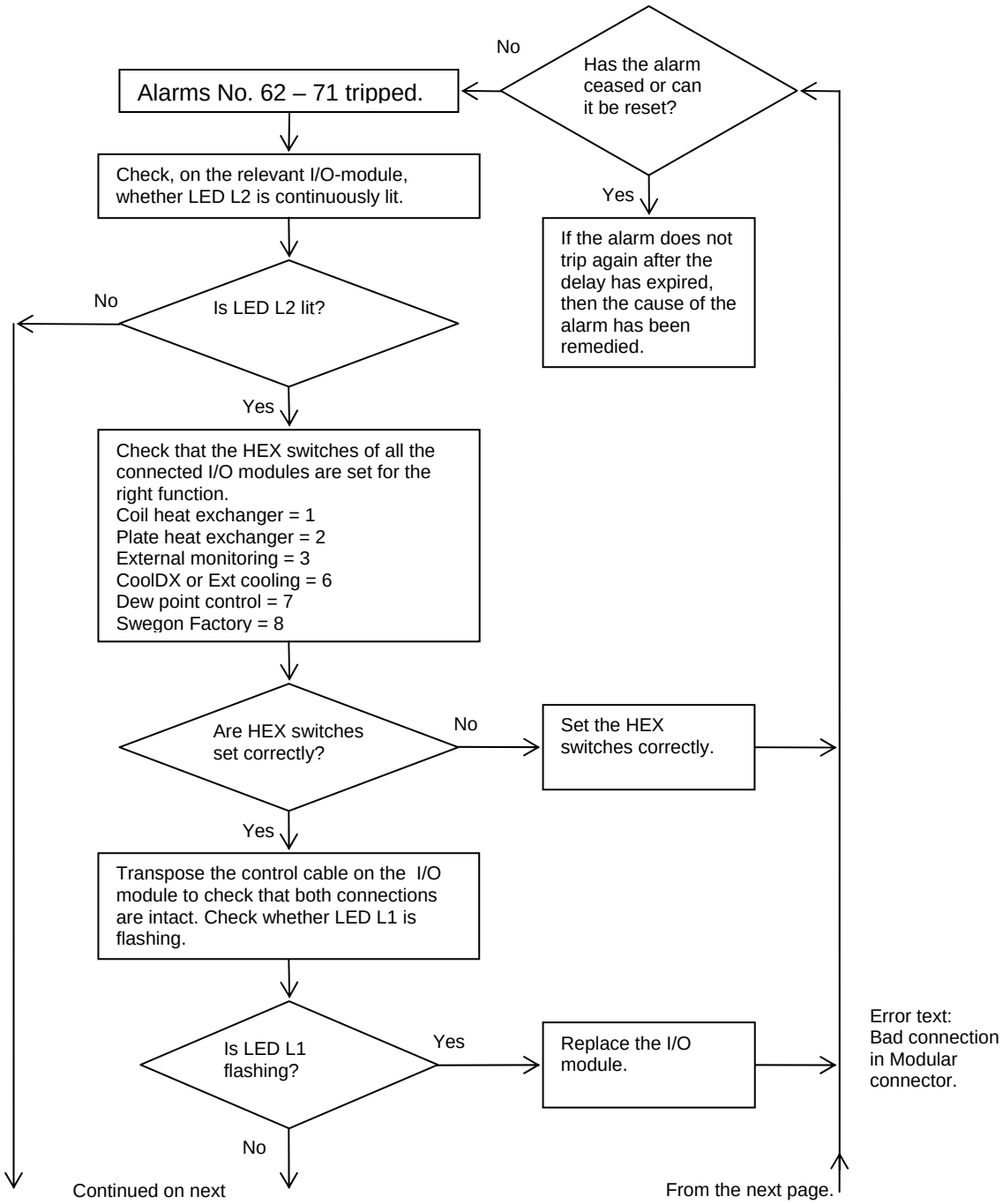
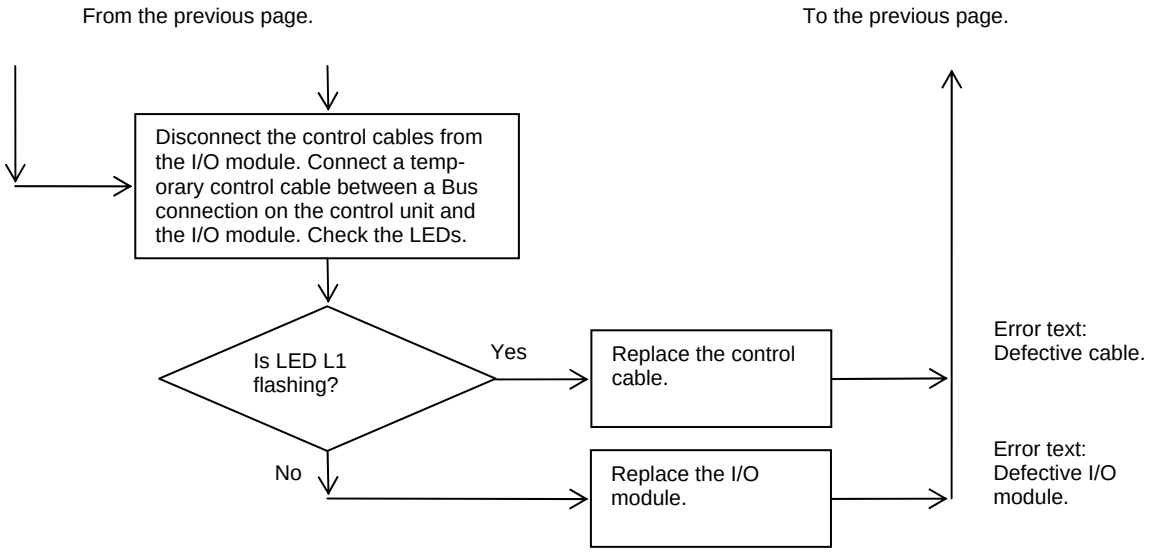


2.39 Alarms No. 62 - 71: No communication with I/O module 0 - 9

The alarm for each I/O module is active when some function that requires I/O-module (IQnomic Plus) is activated or if a module is manually activated.
The alarm is tripped if the control unit lacks communication with the relevant I/O-modules.





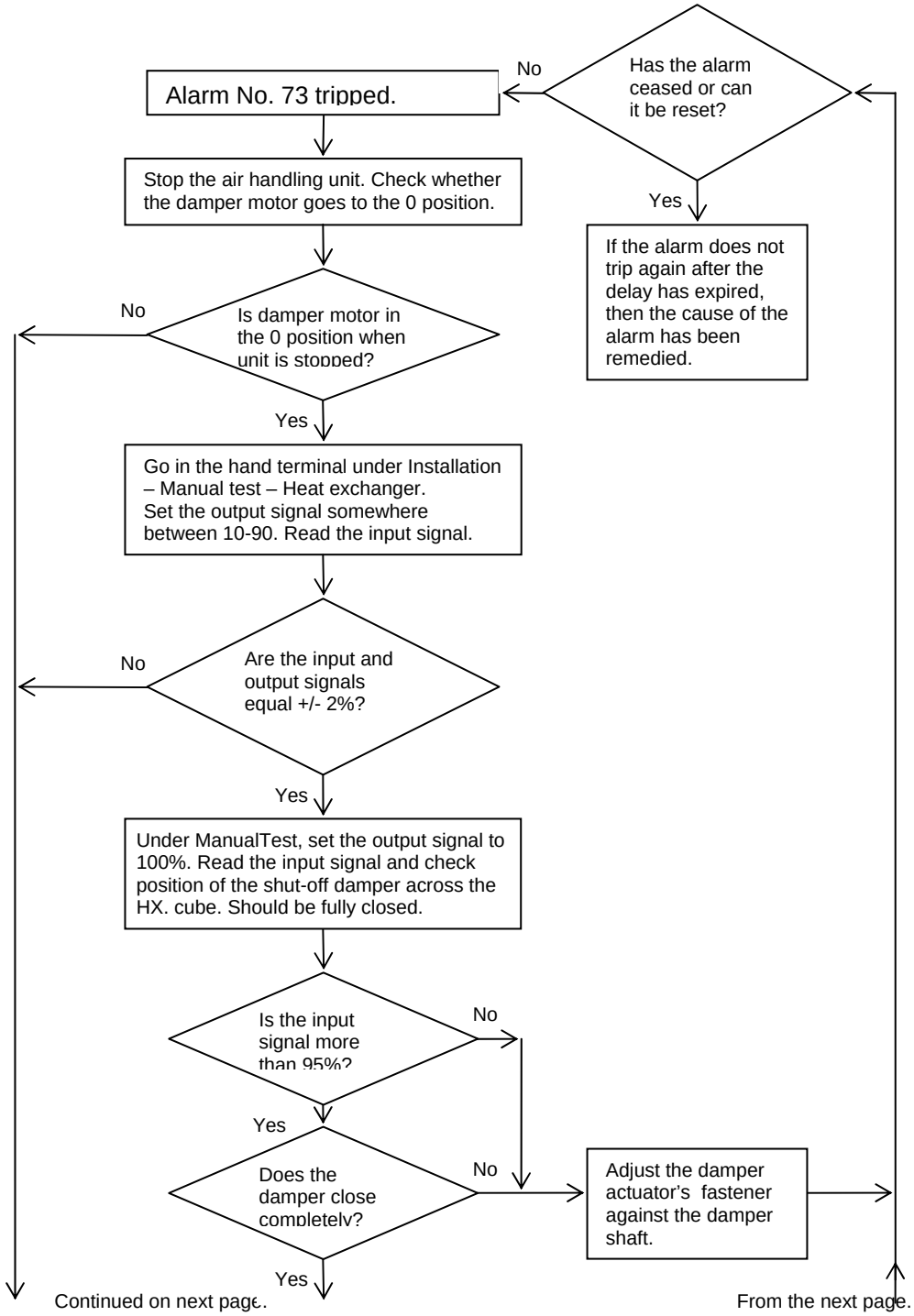
2.40 Alarm No. 72: No communication with I/O control unit

The alarm is continuously active.
The alarm trips when the CPU card in the control unit lacks communication with the I/O-processor of the control unit.

A malfunction within the control unit is tripping the alarm. Replace the control unit.

2.41 Alarm No. 73: Plate heat exchanger damper motor faulty

The alarm is active when DIL switch 4 is in the ON position.
The alarm trips if the response signal (input signal) from the by-pass damper motor does not agree with the control signal to the damper motor.



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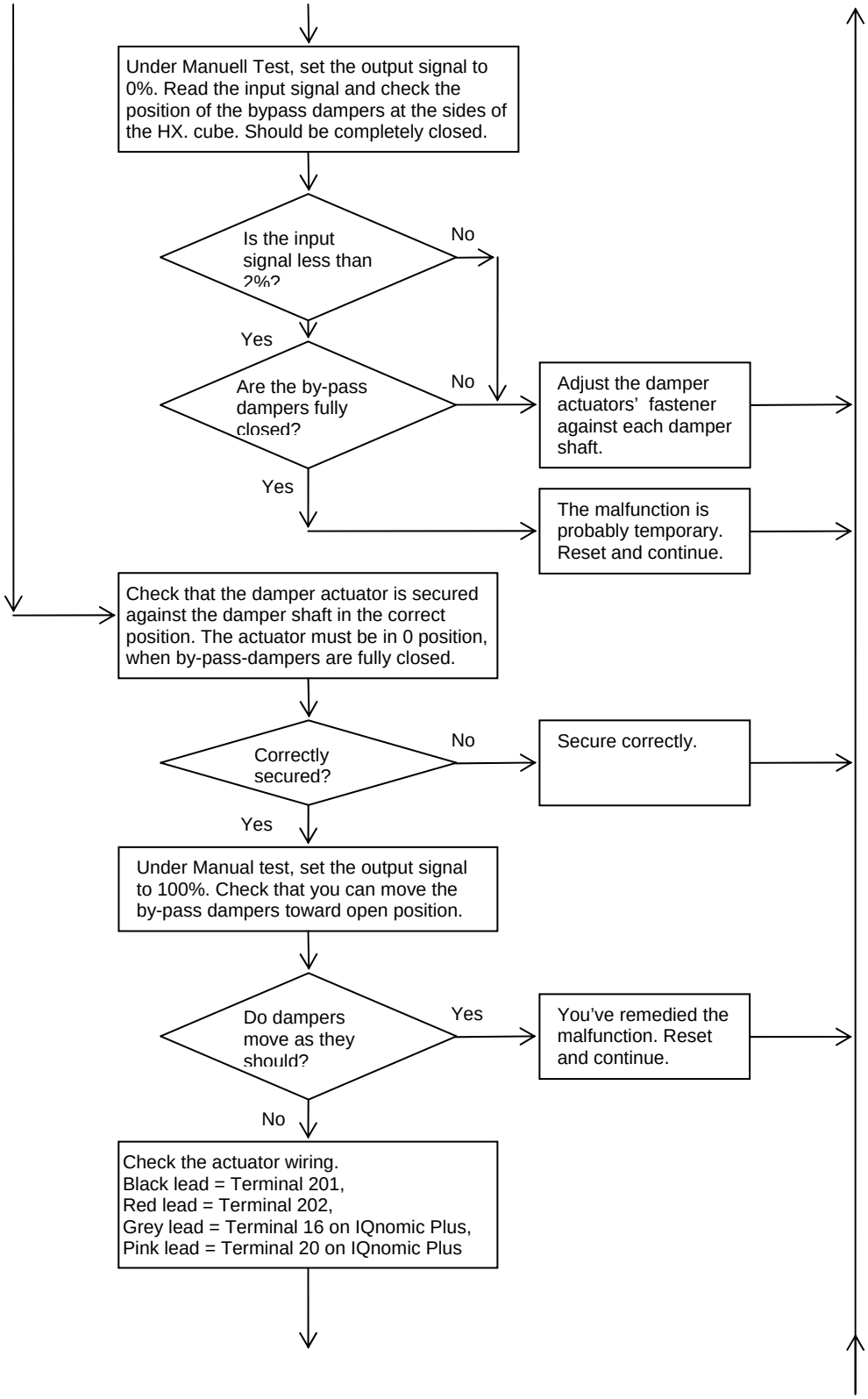

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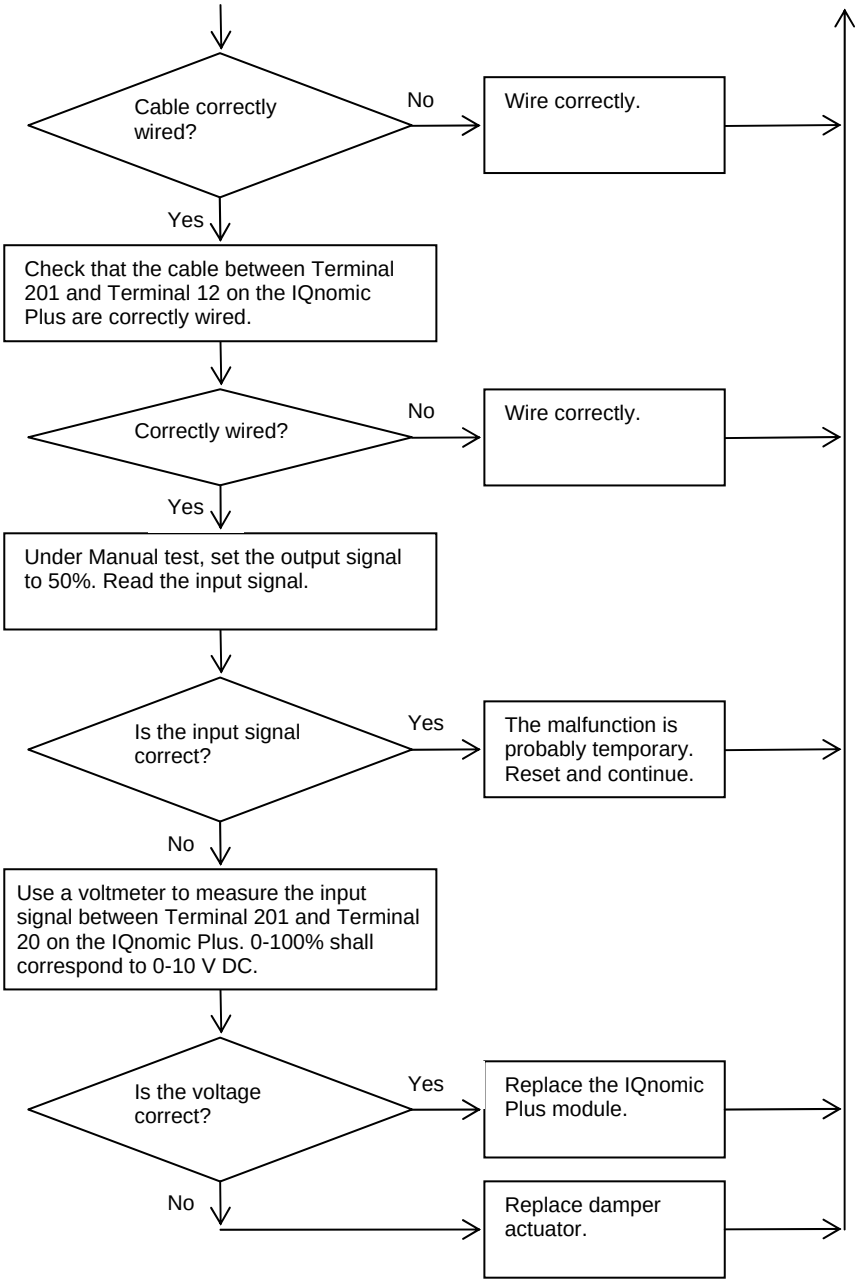
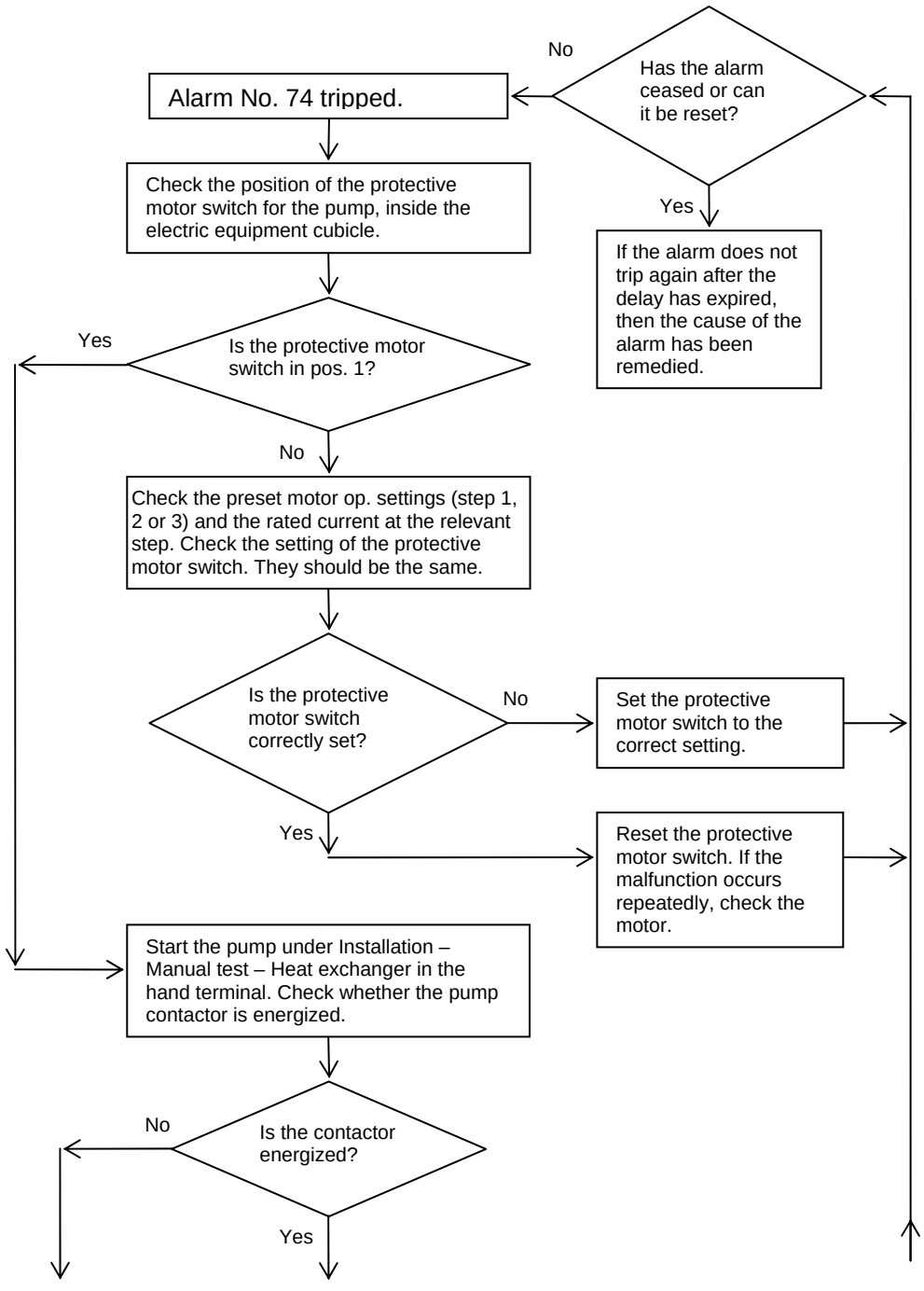


2.42 Alarm No. 74: Coil HX. pump tripped

The alarm is active when DIL switch 5 is in the ON position.
The alarm trips if no response signal is received from the circulation pump when the pump has received a start order.



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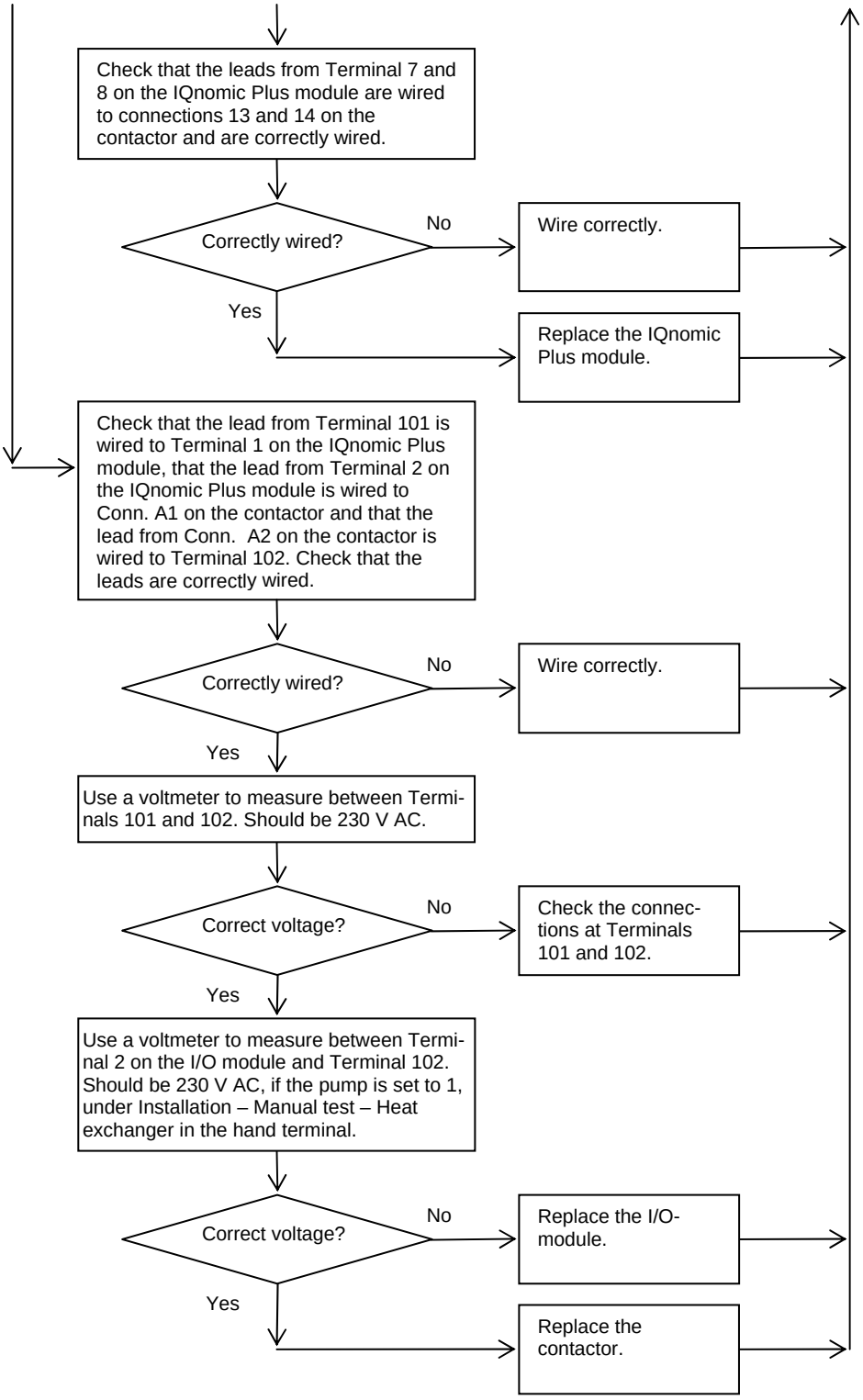
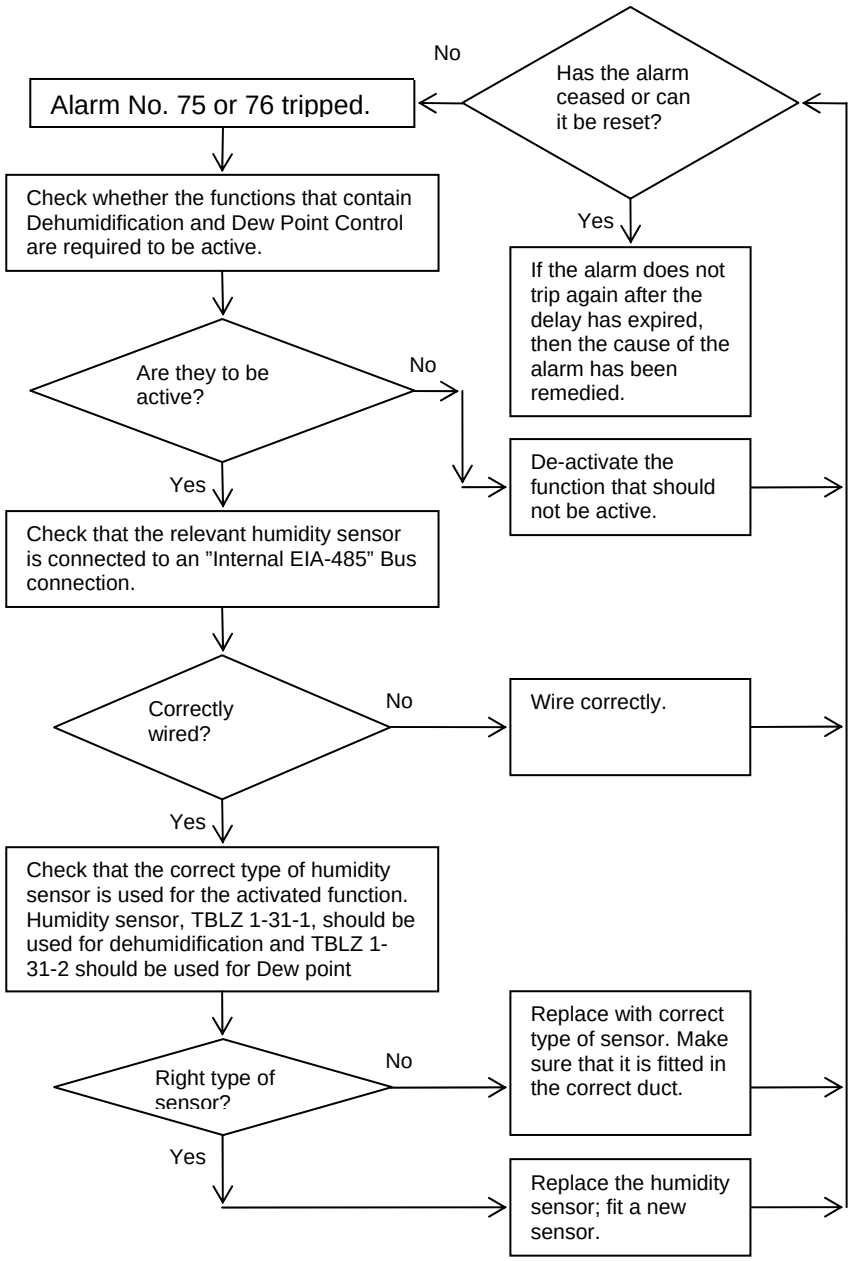


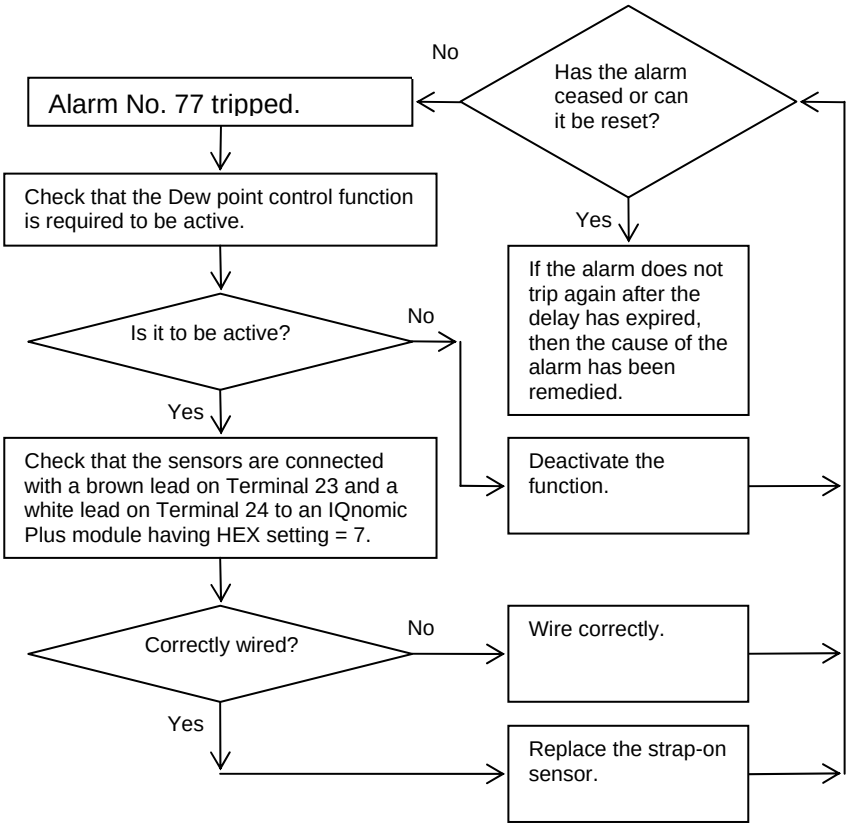
2.43 Alarms No. 75 and 76: Supply air or Extract air humidity sensor faulty

The alarms are active when the Dehumidification and Dew Point Control functions resp. are activated. The alarms trip if the control unit lacks communication with each humidity sensor.



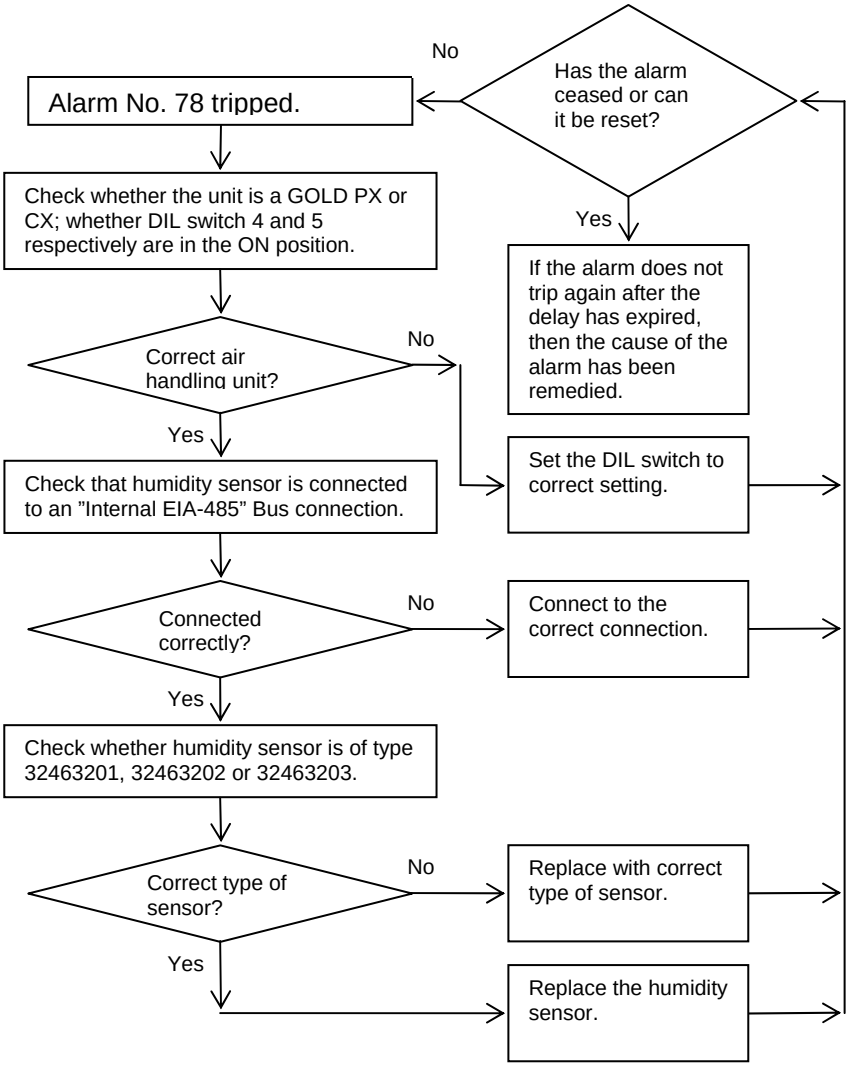
2.44 Alarm No. 77: Supply flow temp. sensor I/O-7 faulty

The alarm is active when the Dew Point Control function is activated. The sensor must be connected to Terminals 23-24 in the IQnomic Plus module (HEX=7).
The alarm trips if the control unit lacks communication with the temperature sensor.



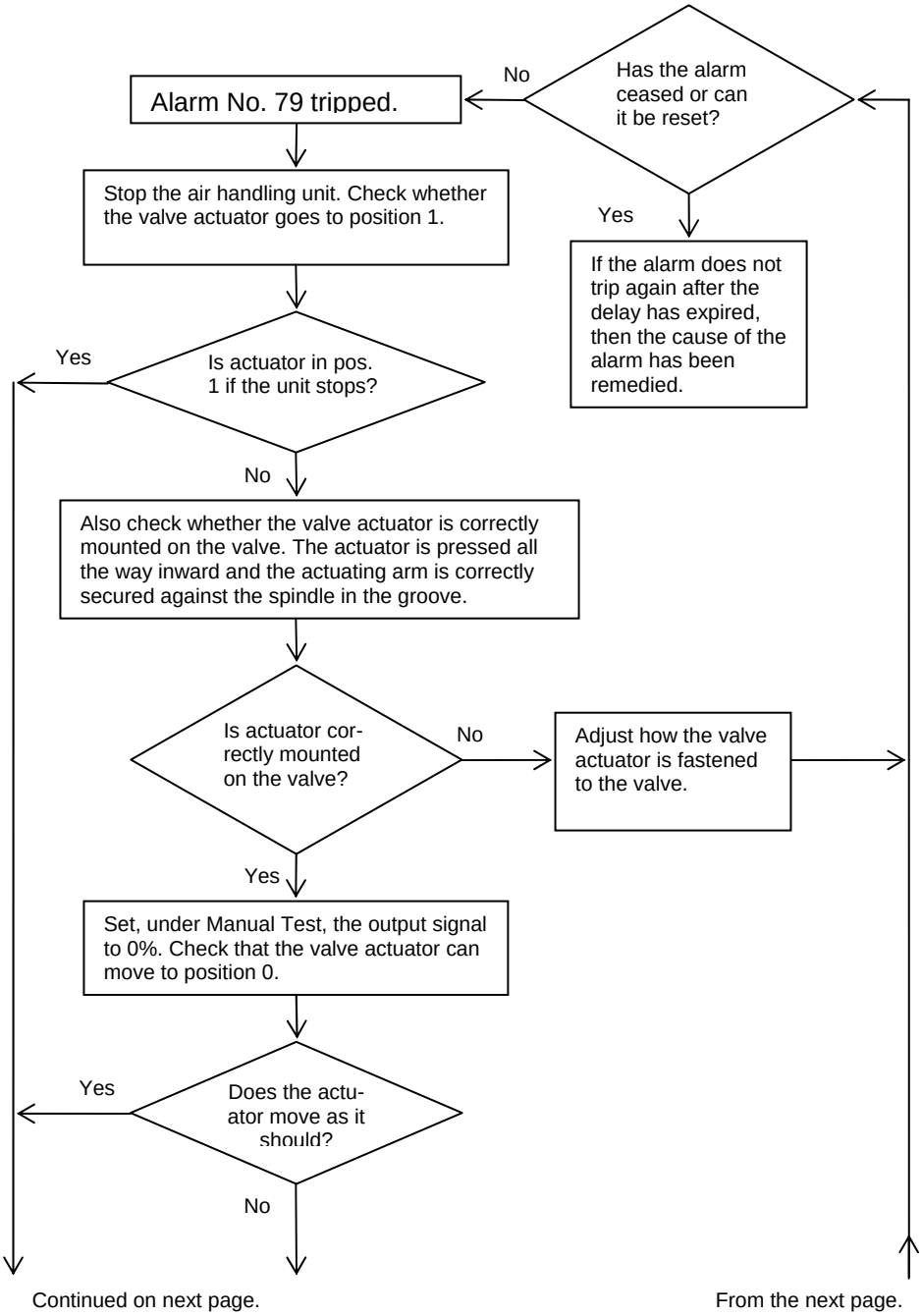
2.45 Alarm No. 78: Humidity sensor in R. HX. faulty

The alarm is active in the GOLD PX and CX.
The alarm trips if the control unit lacks communication with HX. humidity sensor.



2.46 Alarm No. 79: Coil HX. valve actuator faulty

The alarm is active when DIL switch No. 5 is in the ON position and the IQnomic Plus module is set to HEX=1.
The alarm trips if the response signal (input signal) from the valve actuator does not agree with the control signal.



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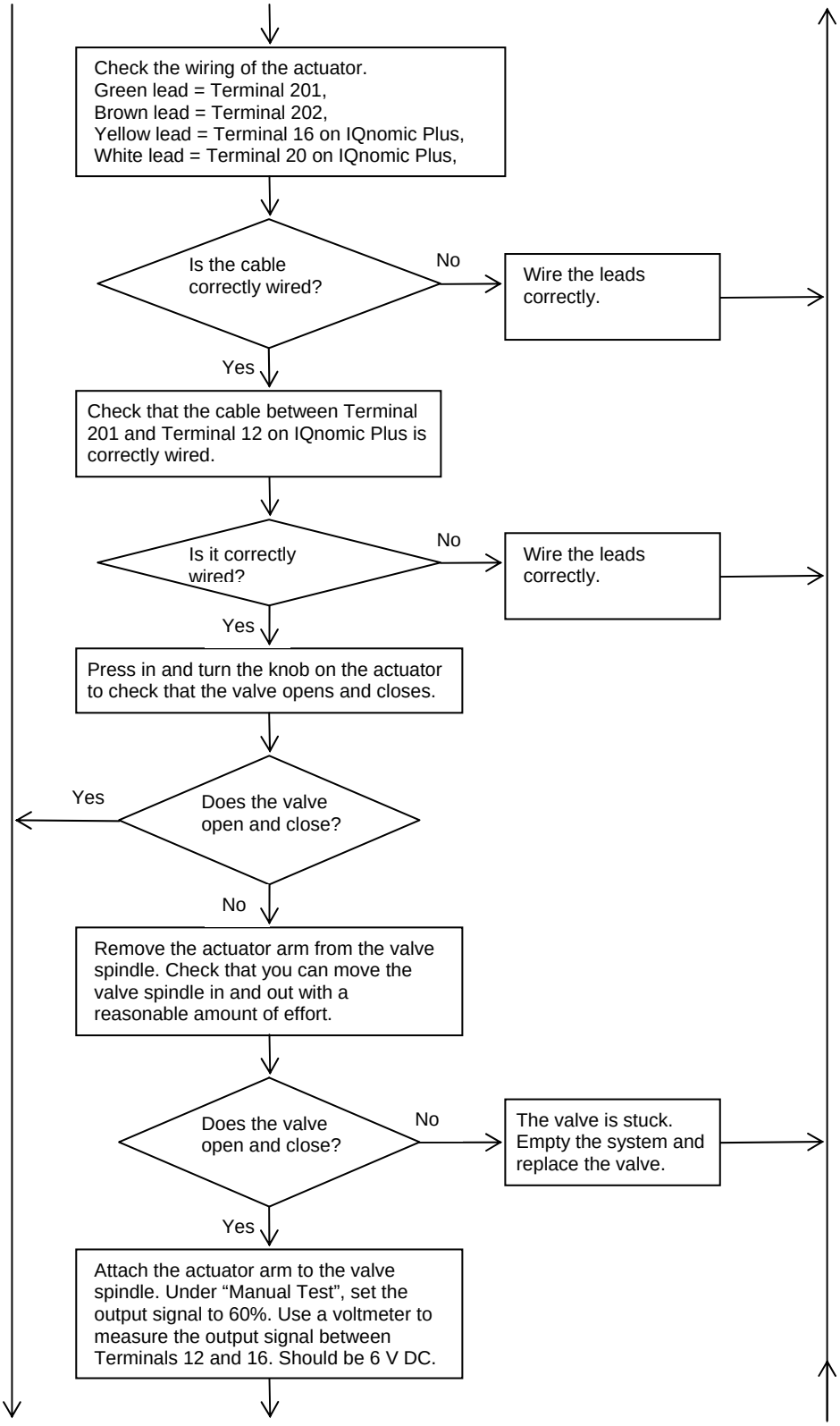

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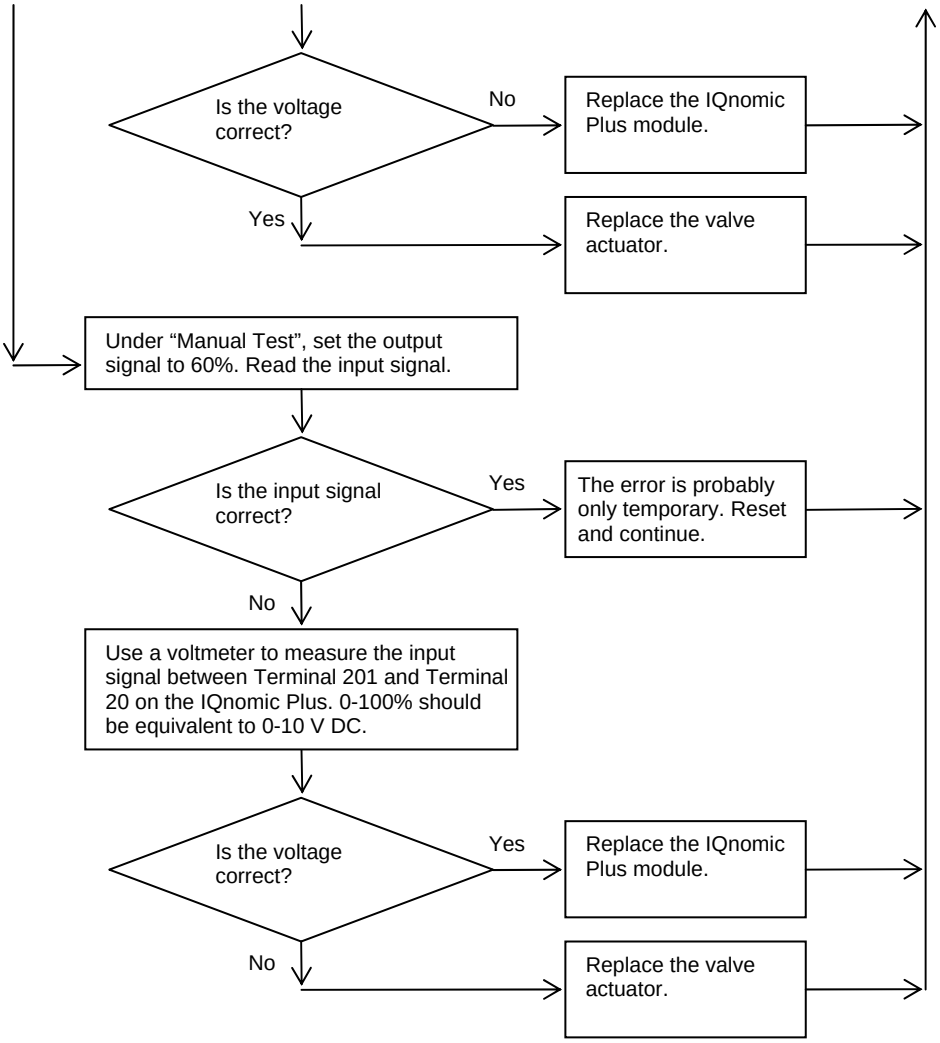


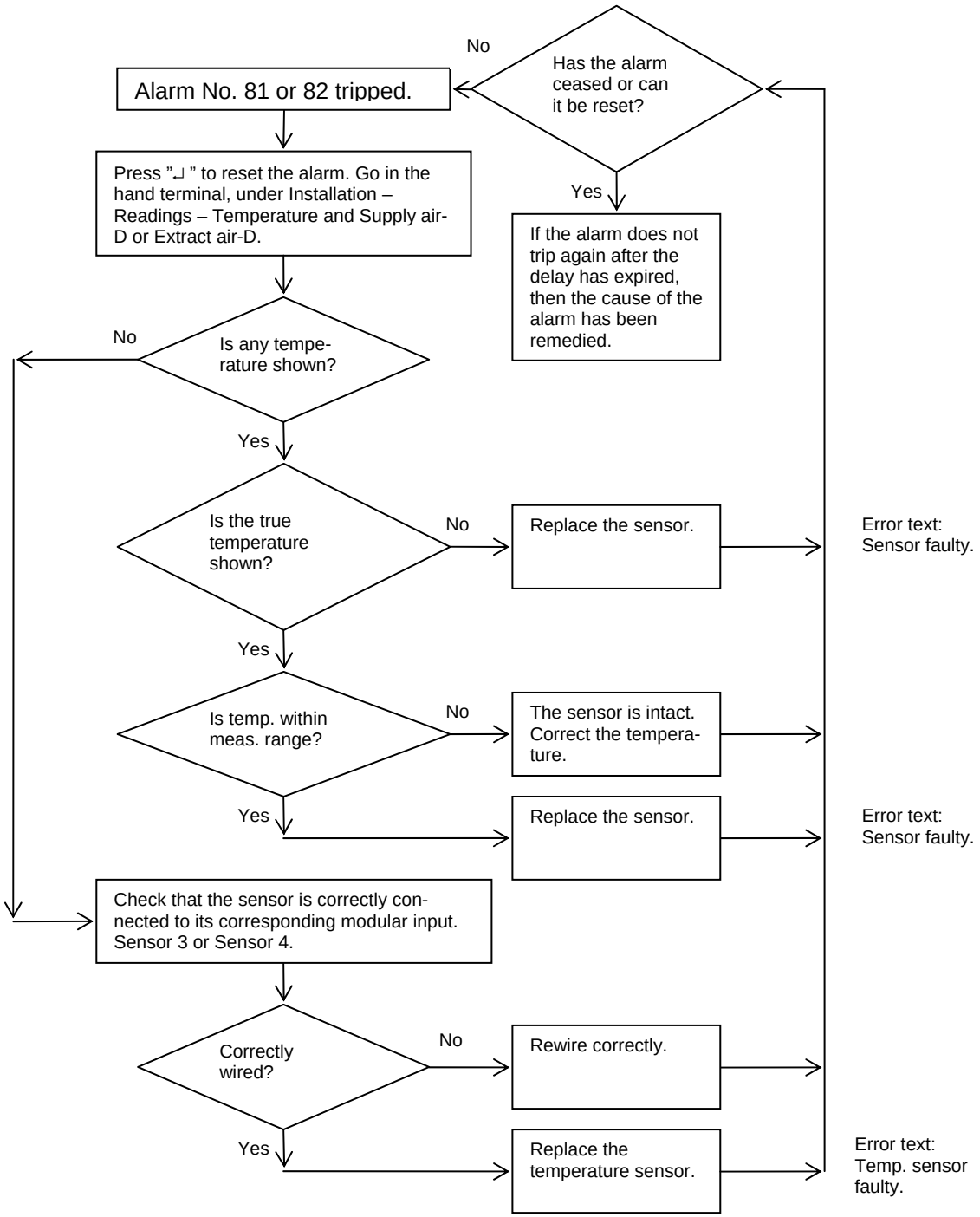
2.47 Alarm No. 80: Temperature monitor below alarm limit

The alarm is active when the dehumidification function is activated.
The alarm trips if the temperature on SA-D sensor has been below the preset limit during the preset delay.

Find out why the temperature by the SA-D sensor is below the alarm limit.

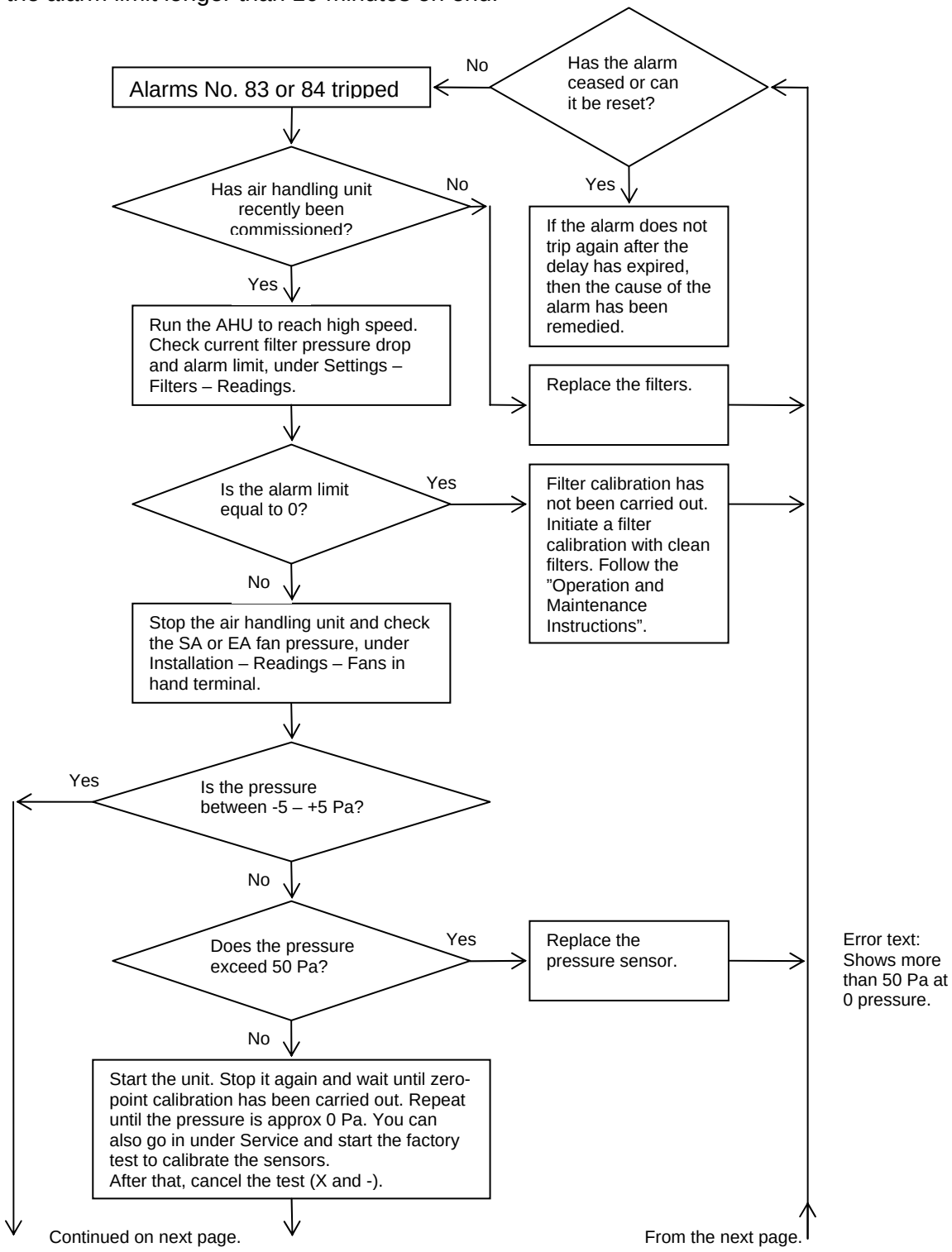
2.48 Alarms No. 81 and 82: Supply air-D. or Extract air-D. temp sensor faulty

The alarms are active in the GOLD PX and CX, assuming that the sensors are connected. Alarm 81 is also active if the temperature monitor function is manually activated.
The alarm trips if the control unit lacks communication with the relevant temperature sensor or if the sensor measures a temperature outside the range of measurement (-55°C-125°C).



2.49 Alarms No. 83 and 84: Supply air or Extract air prefilter dirty

The alarms are active when the flow through each filter is more than half of the flow that was used when the filters were calibrated. The alarms trip when the pressure drop across the filter has exceeded the alarm limit longer than 10 minutes on end.



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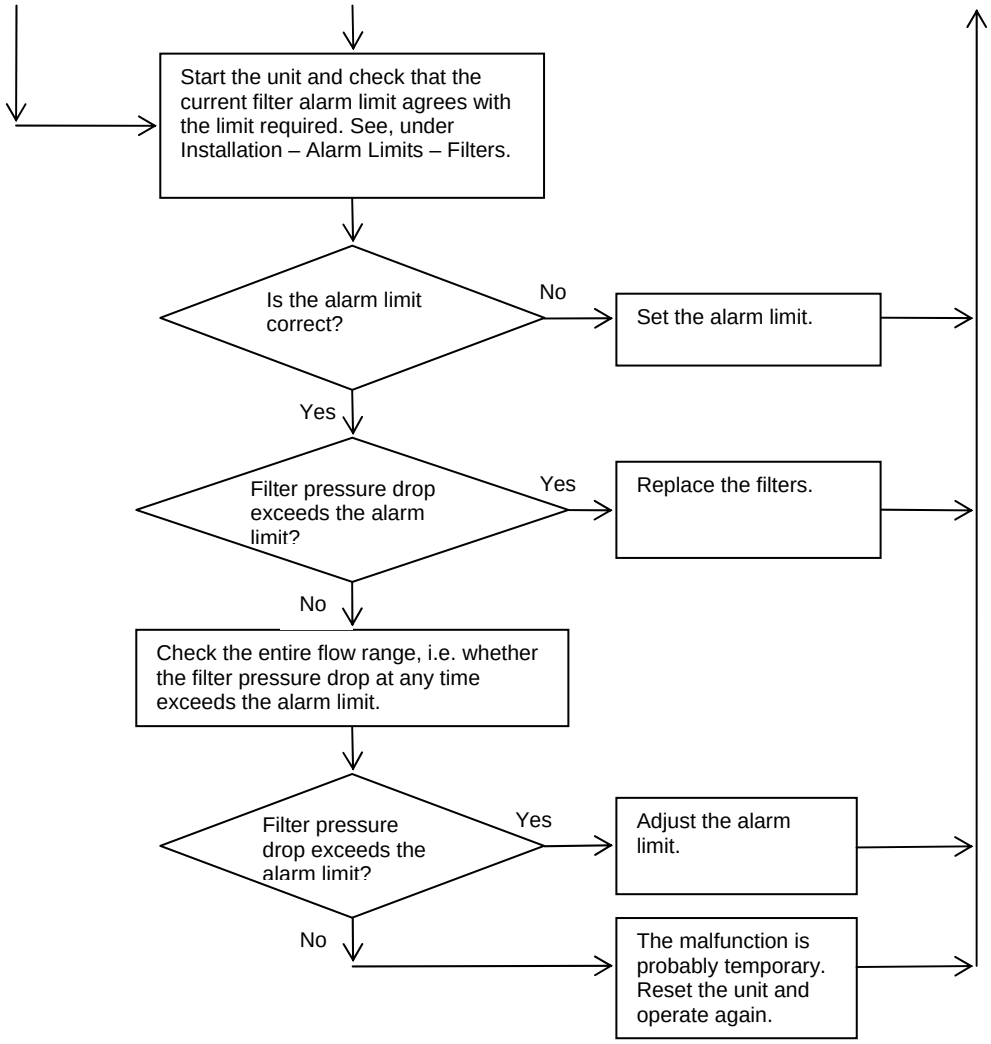
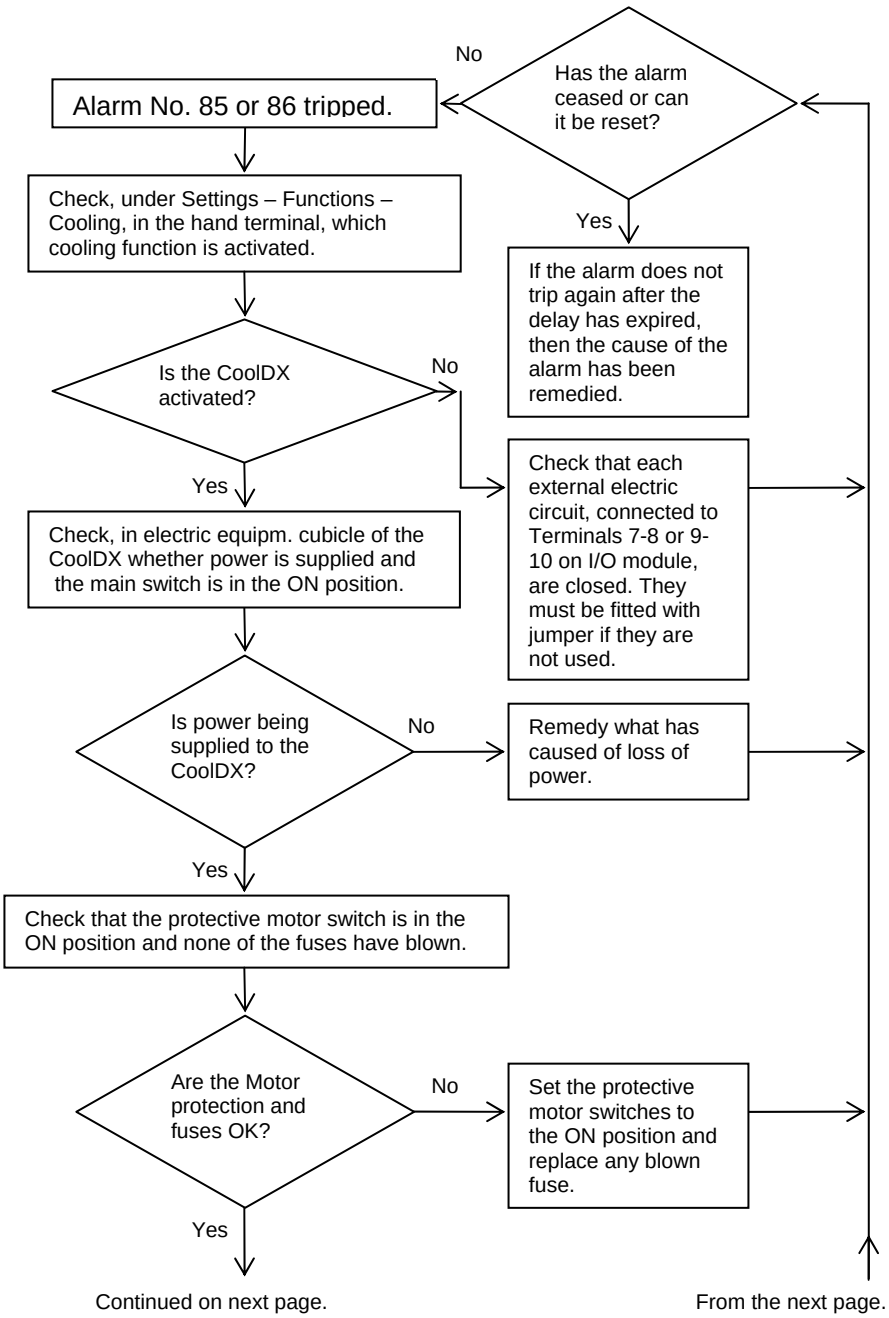


2.50 Alarms No. 85 and 86: CoolDX, C1 or C2 tripped

The alarms are active when the CoolDX has been selected and is operating. The alarms are also active if IQnomic Plus module 6 (External cooling) is manually selected to be active.
The alarms for the CoolDX trip when the control unit does not sense a response on the digital input when the corresponding digital output is energized; for External Cooling: when the control unit does not sense closure on the corresponding digital input.



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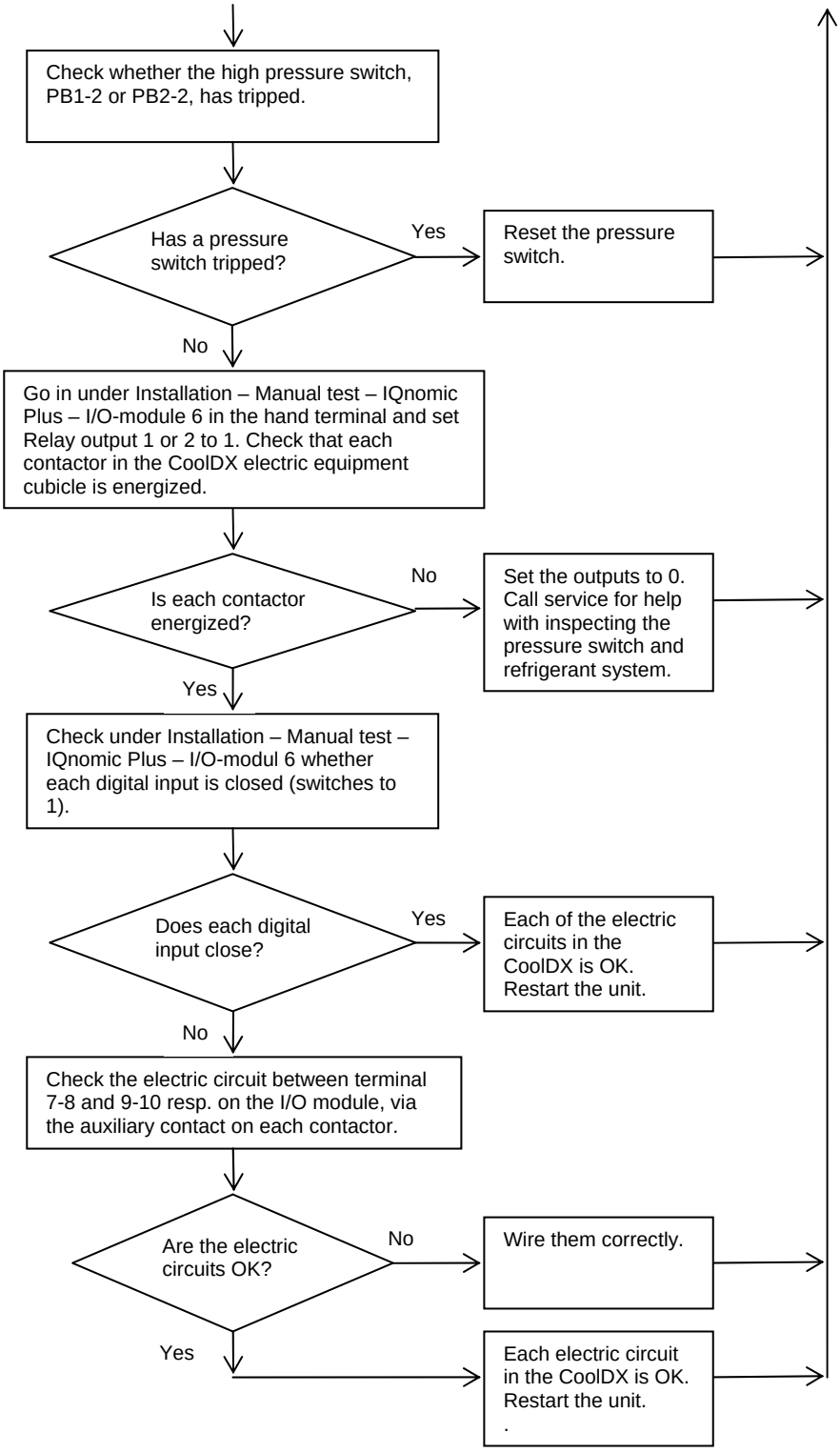
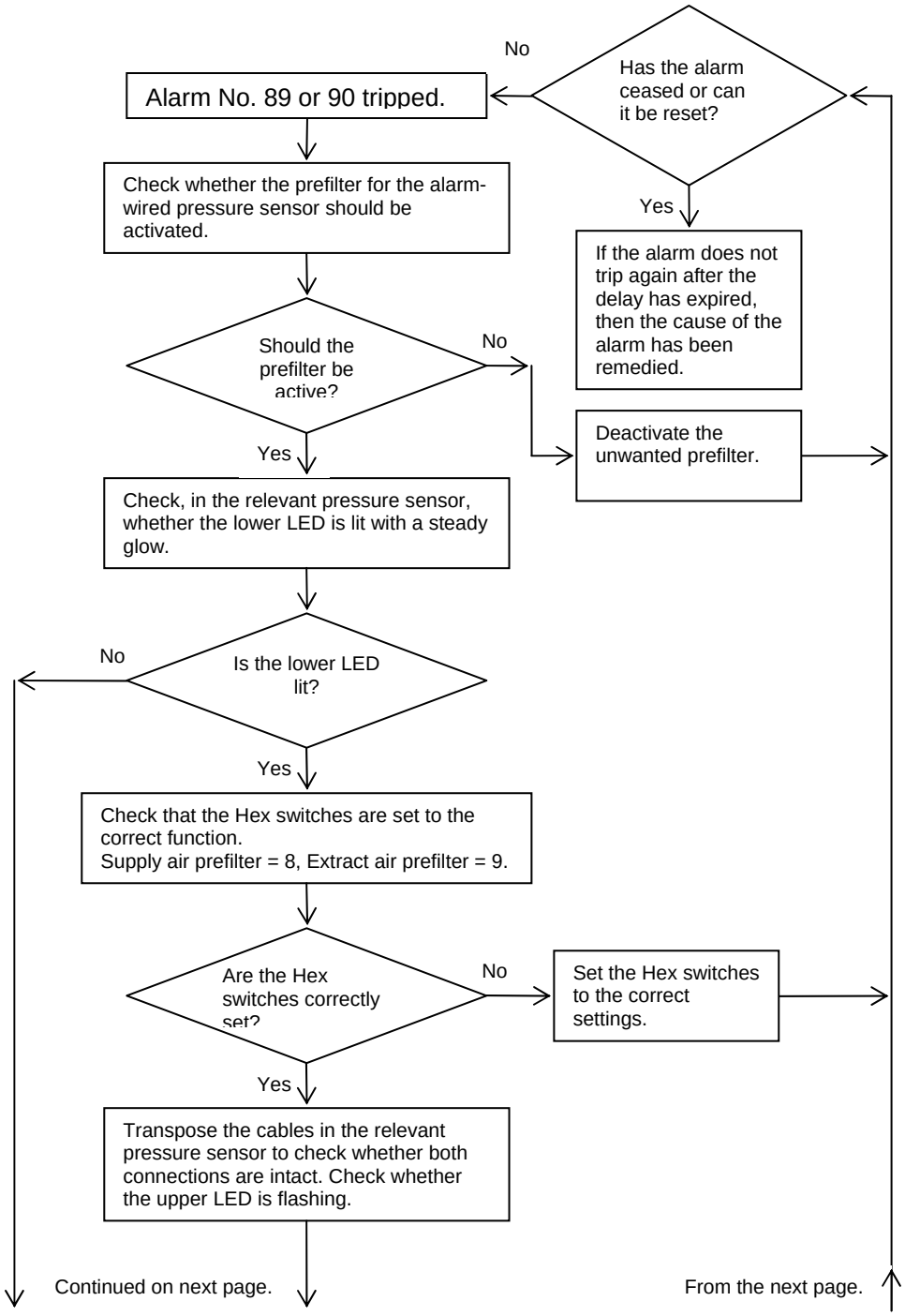


2.51 Alarms No. 87 and 88: CoolDX C1 or C2: too many restarts

The alarms are active when the CoolDX has been selected and is operating.
The alarm trips when the control unit has restarted the relevant cooling compressor more than 20 times during a 2-hour period.
Check the settings and other possible reasons why the compressors have stopped after running only briefly.

2.52 Alarms No. 89 andh 90: No communication with the SA and EA prefilter pressure sensors

The alarm is active when each fan is preset for pressure control.
The alarm trips when the control unit does not obtain communication with the subject pressure sensors.



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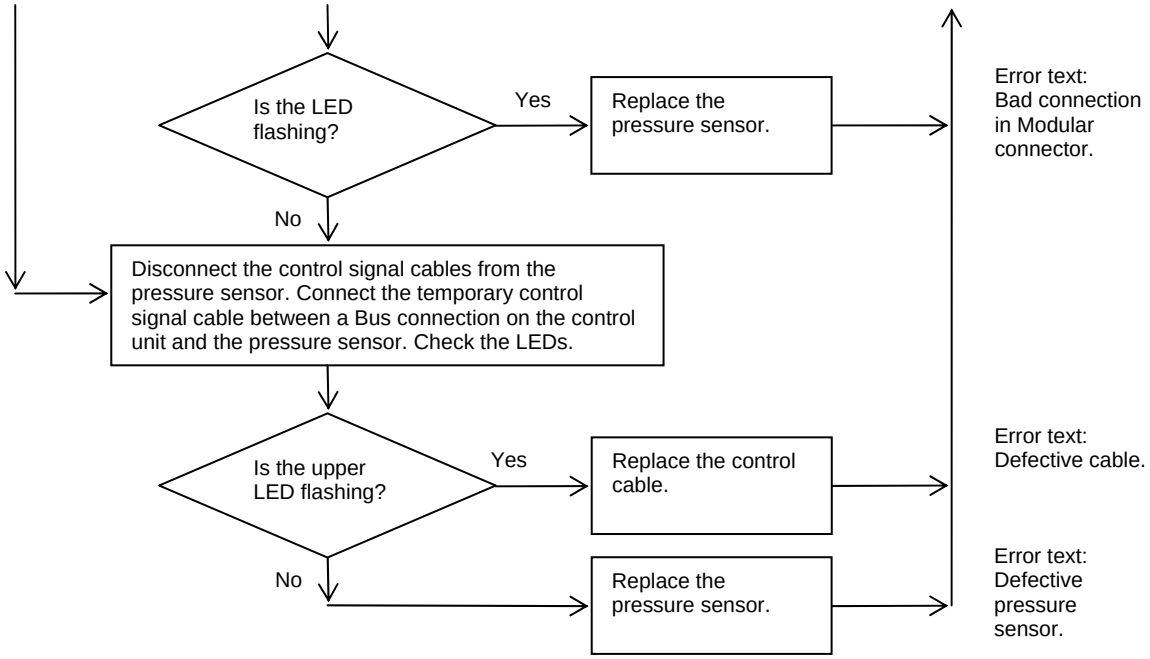
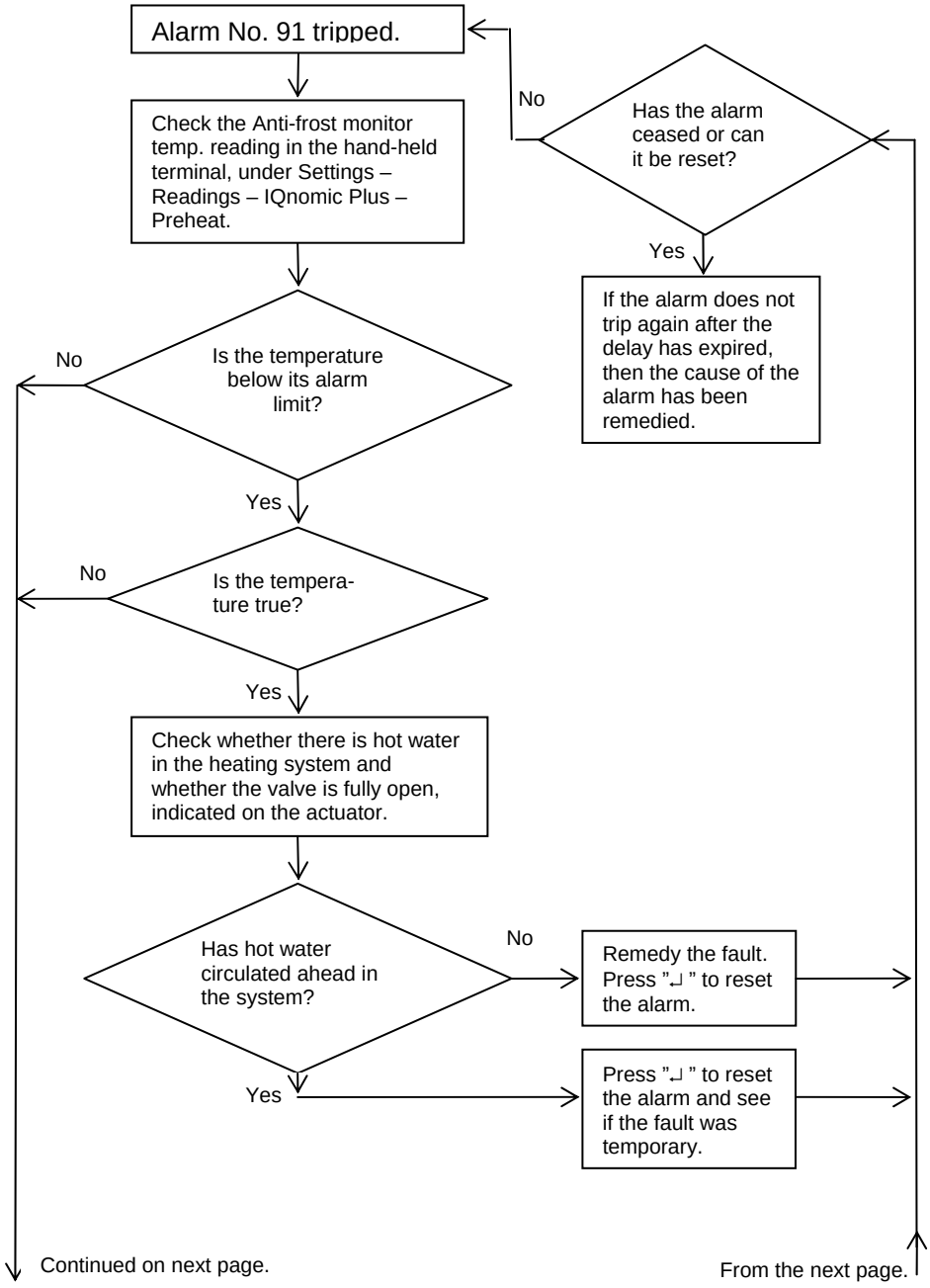
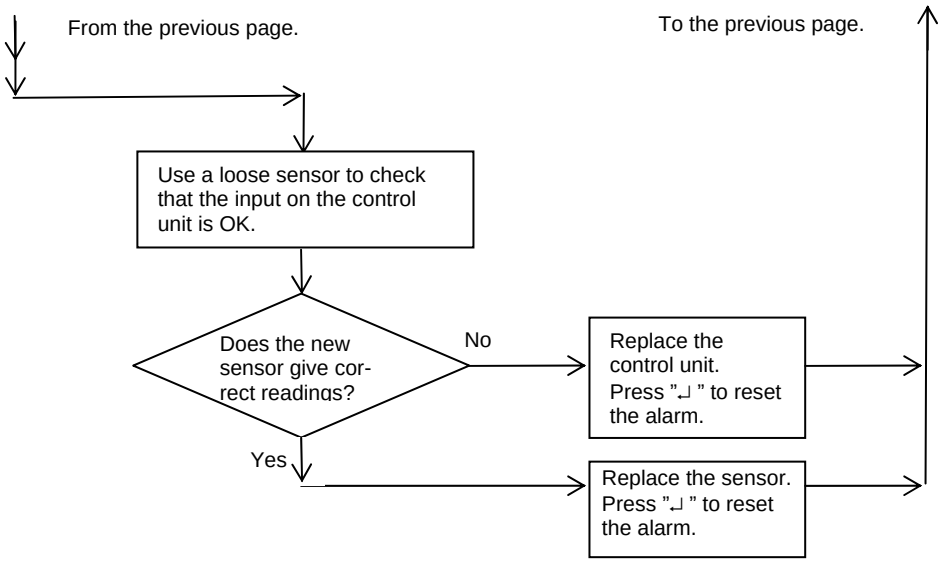


2.53 Alarm No. 91: Preheating anti-frost monitor below alarm limit

The alarm is active only when a water coil with anti-frost monitor has been selected under Installation – Functions – IQnomic Plus – No. 9 Preheat, in the hand-held micro terminal.
The alarm trips when the anti-frost monitor temperature sensor measures a temperature below the preset alarm limit. The alarm limit is factory installed to 7°C, however the limit can be adjusted under Service in the hand-held micro terminal.

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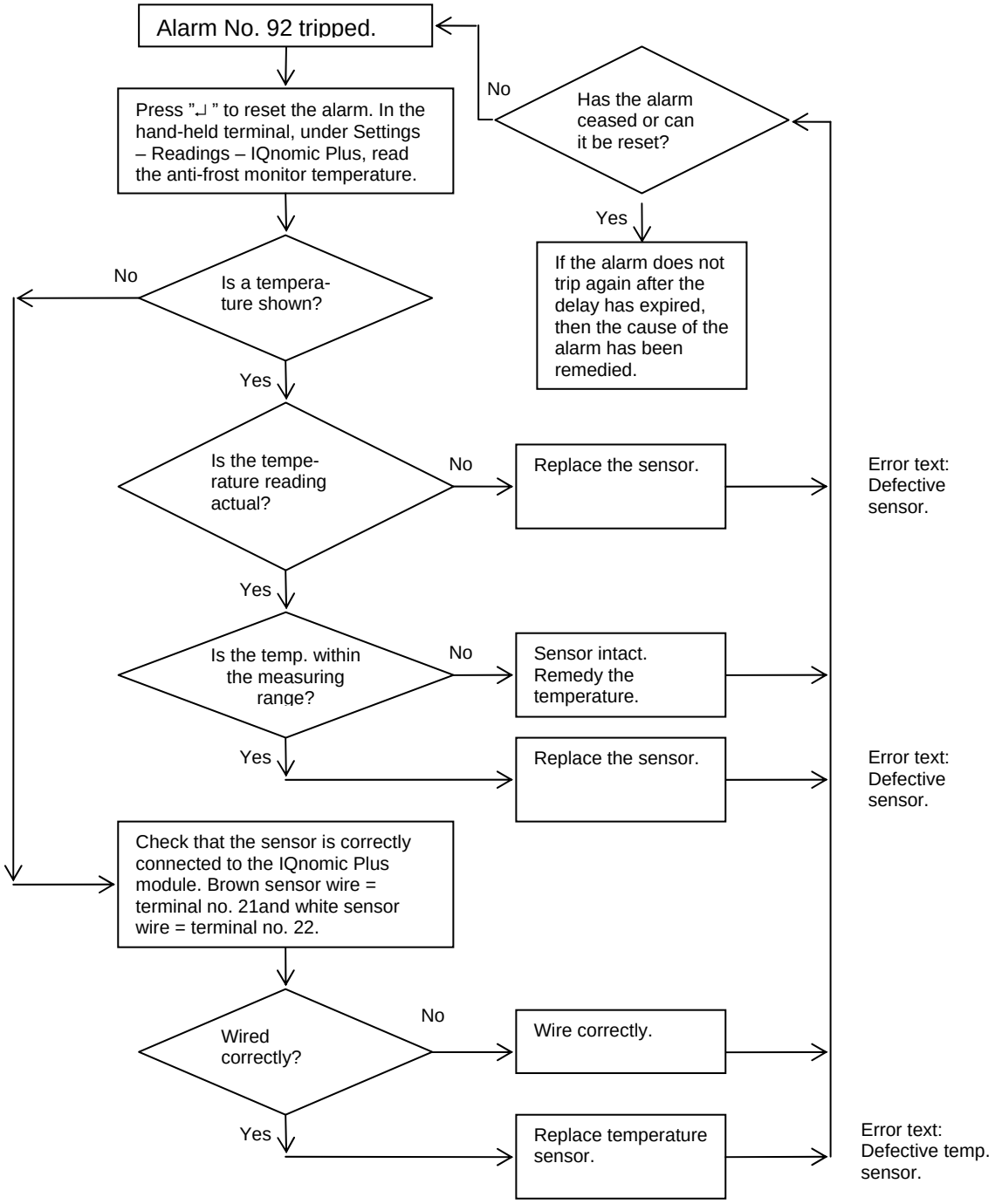
Use a loose sensor to check that the input on the control unit is OK.
Does the new sensor give correct readings?
No
Yes
Replace the control unit. Press "↵ " to reset the alarm.
Replace the sensor. Press "↵ " to reset the alarm.

2.54 Alarm No. 92: Preheating anti-frost monitor sensor faulty

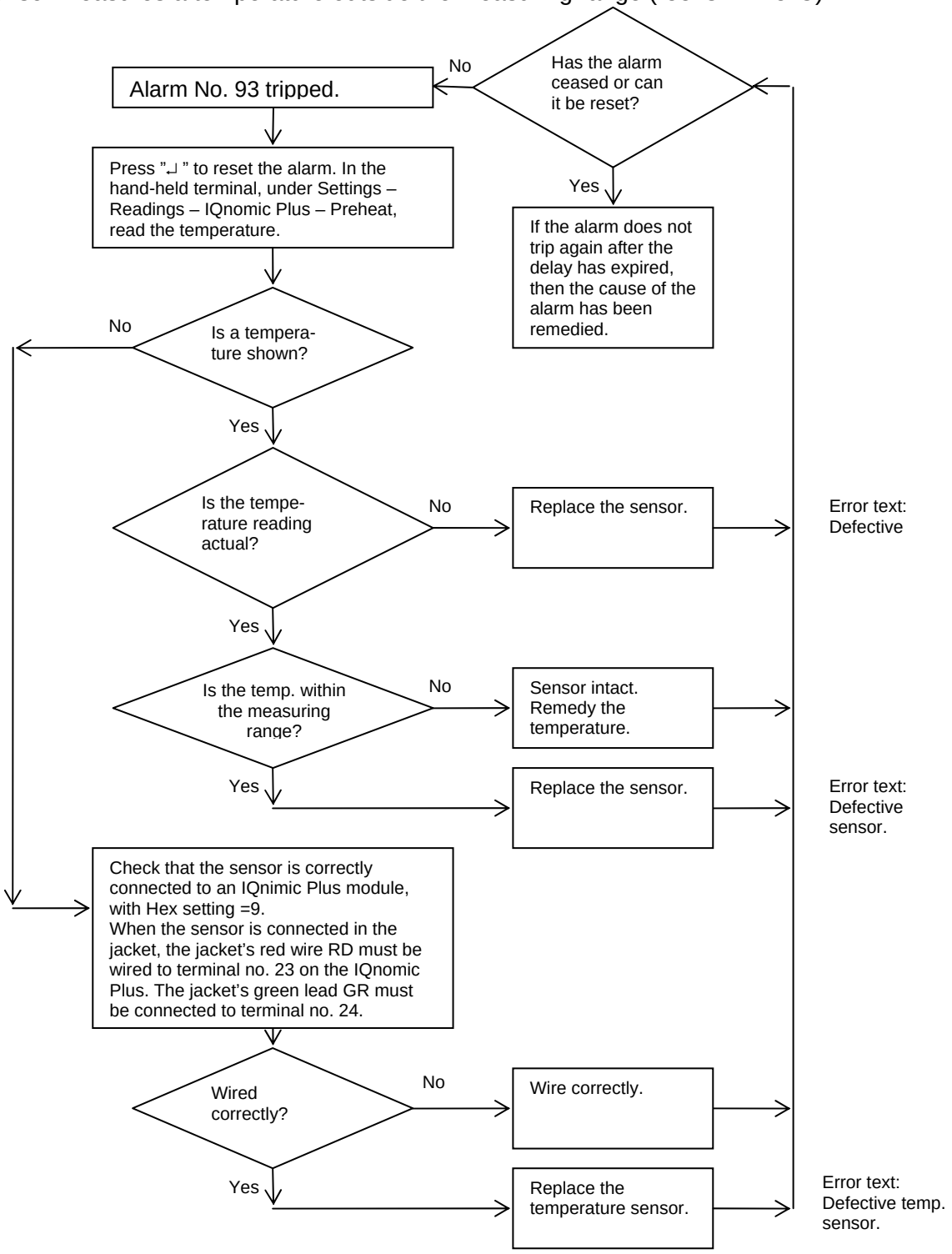
The alarm is active only when a water coil with anti-frost monitor has been selected under Installation – Functions – IQnomic Plus – No. 9 Preheat, in the hand-held micro terminal.
The alarm trips when the control unit does not have communication with the anti-frost monitor temperature sensor or when the sensor measures a temperature outside the measuring range (-55°C – 125°C).



2.55 Alarm No. 93: Preheating sensor faulty

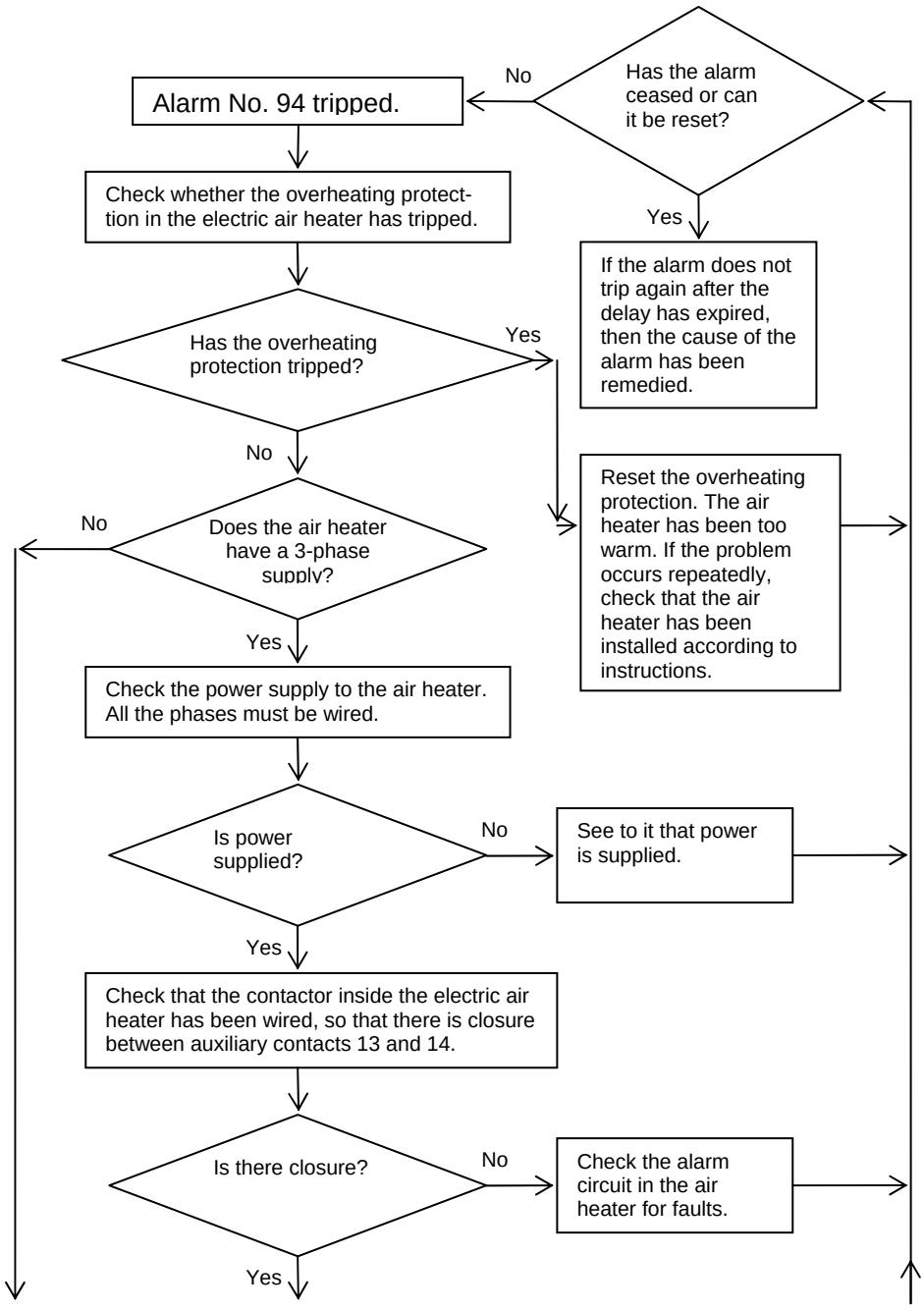
The alarm is active when the Preheating function has been activated. The sensors are assumed to always be connected.

The alarm trips when the control unit does not have any communication with each temperature sensor or when the sensor measures a temperature outside the measuring range (-55°C – 125°C).



2.56 Alarm No. 94: Electric air heater for preheating tripped

The alarm is active only when the electric air heater is activated for preheating.
The alarm trips when there is no connection between terminal 19 and terminal 20 on the IQnomic Plus module, set to Hex = 9.



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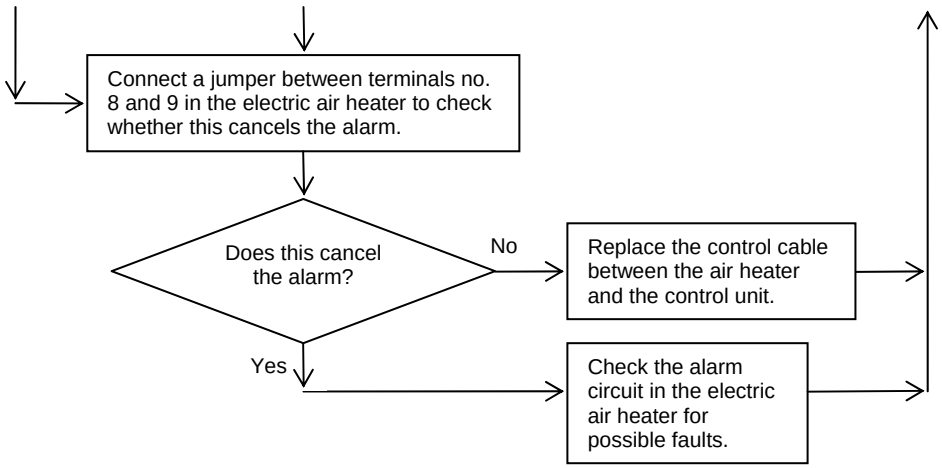
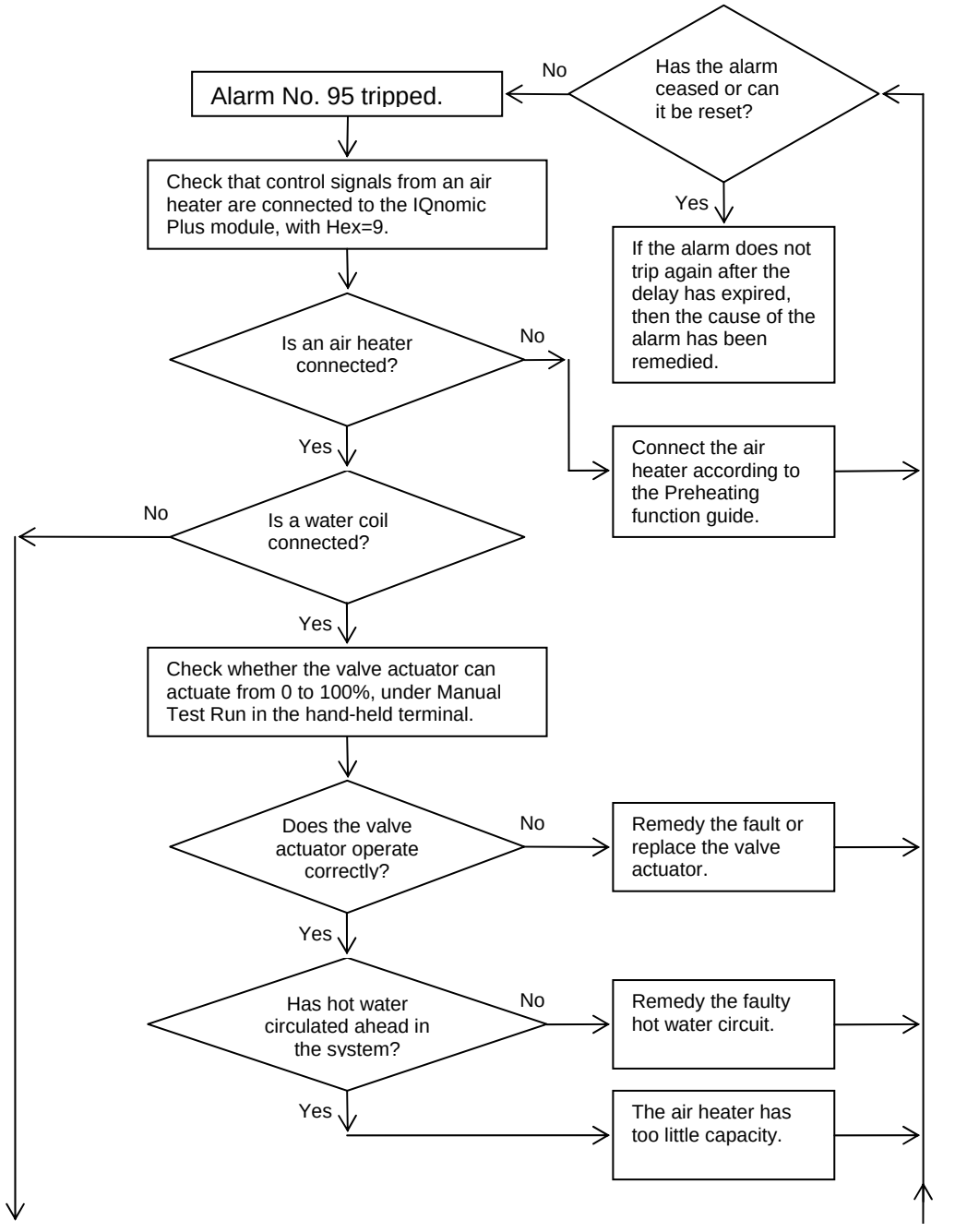


2.57 Alarm No. 95: Preheating below setpoint

The alarm is active when the Preheat function is activated.
The alarm trips when the temperature downstream of the preheating coil is below the current setpoint for more than 20 minutes. Check that the preset alarm limit is the one of your choice.



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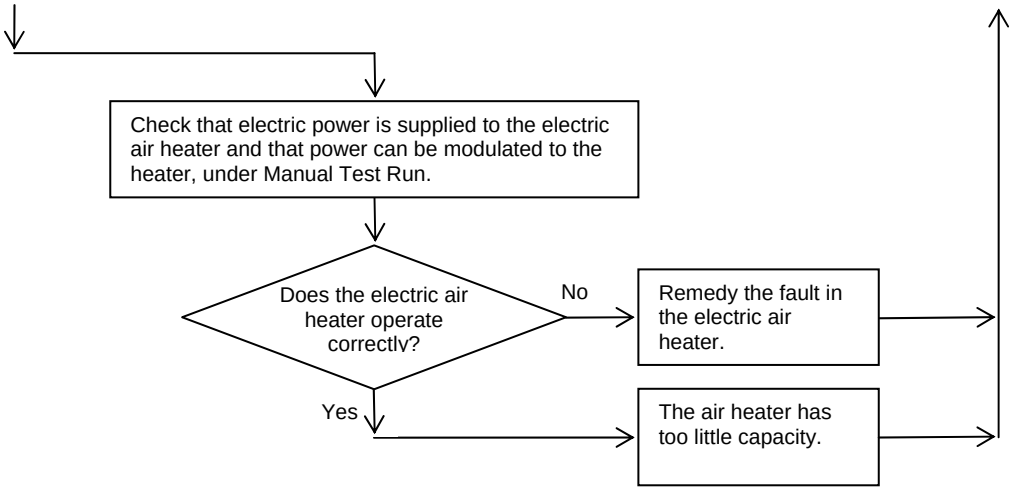
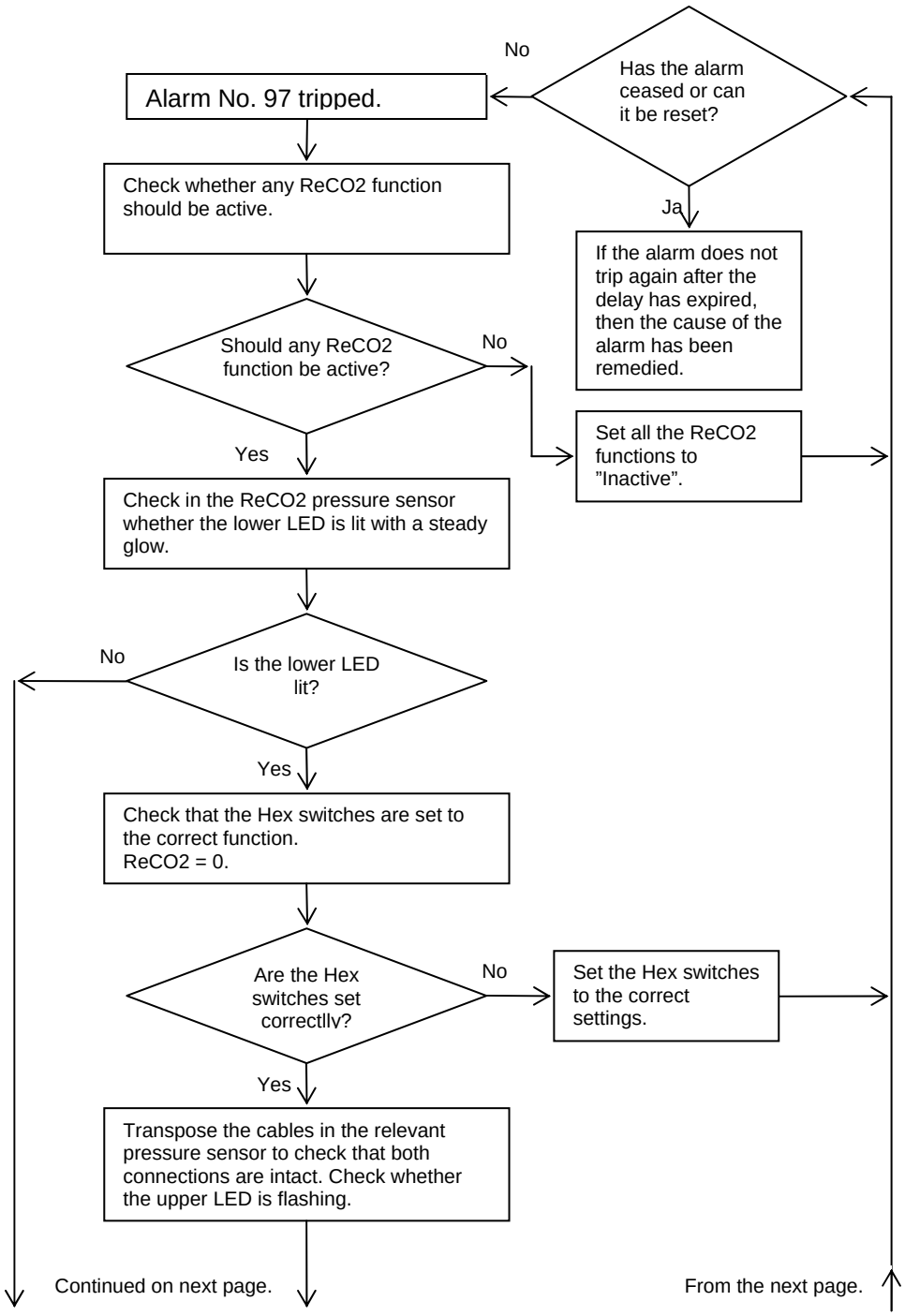


2.58 Alarm No. 96: Spare

2.59 Alarm No. 97: No communication with the ReCO2 pressure sensor

The alarm is active when the ReCO2 function is activated.
The alarm trips when the control unit does not obtain communication with the ReCO2 pressure sensor.



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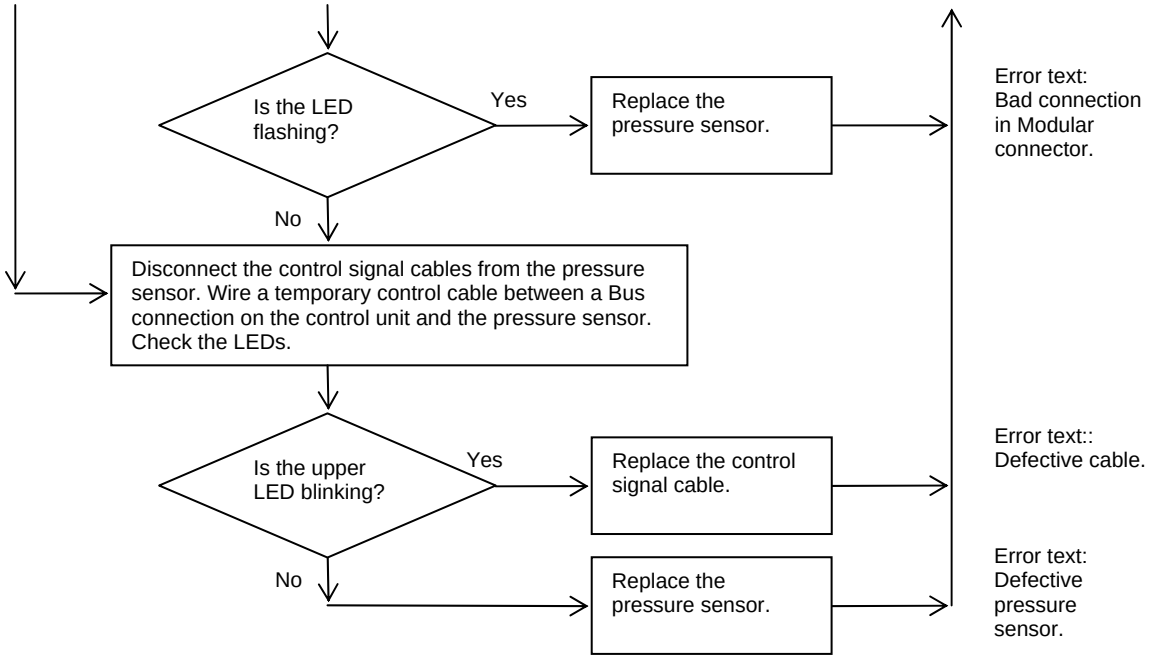
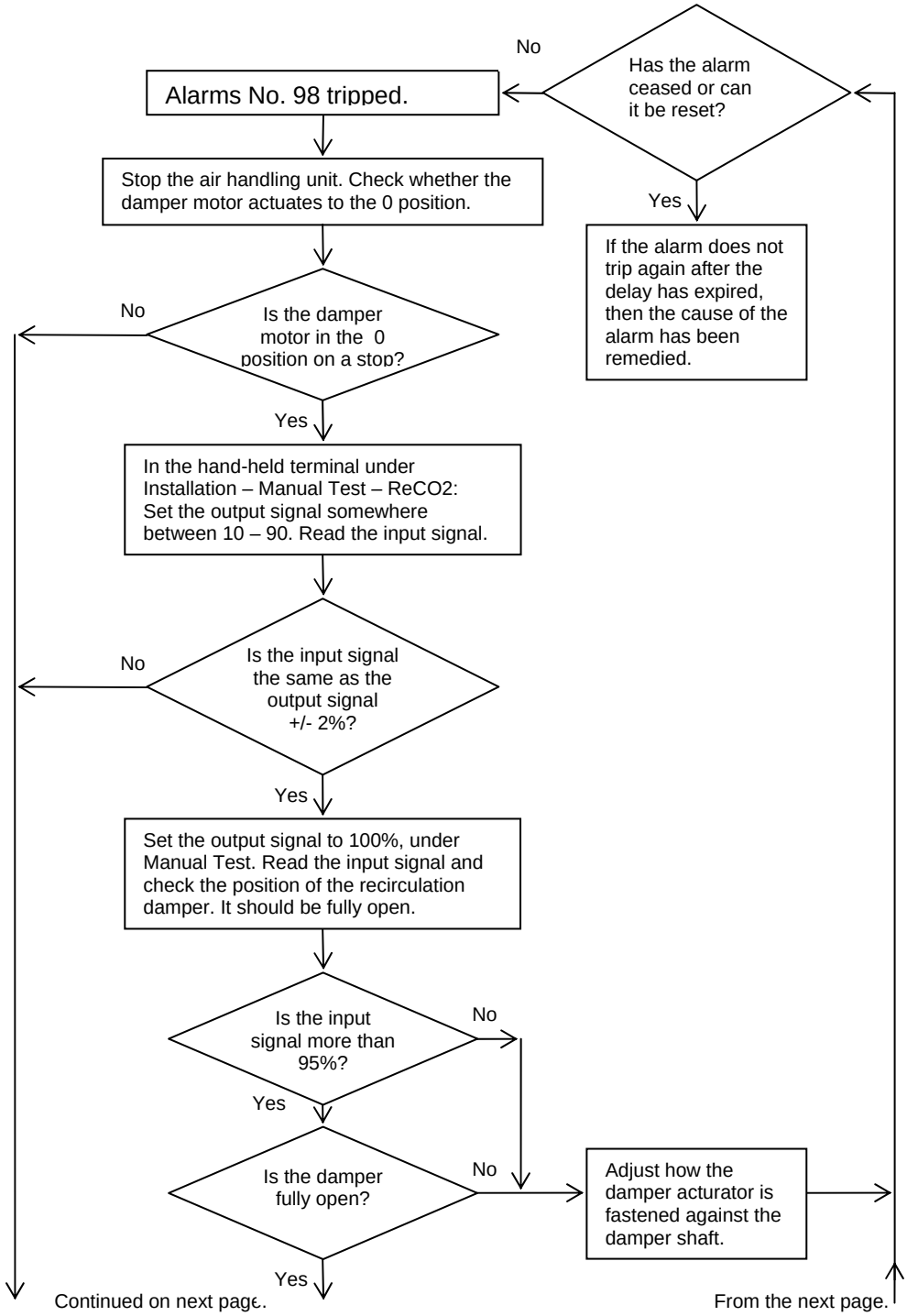


2.60 Alarm No. 98: ReCO2 damper motor faulty

The alarm is active when the ReCO2 function is activated.
The alarm trips when the feedback signal (the input signal) fom the air recirculation damper motor is not consistent with the control signal to the damper motor.



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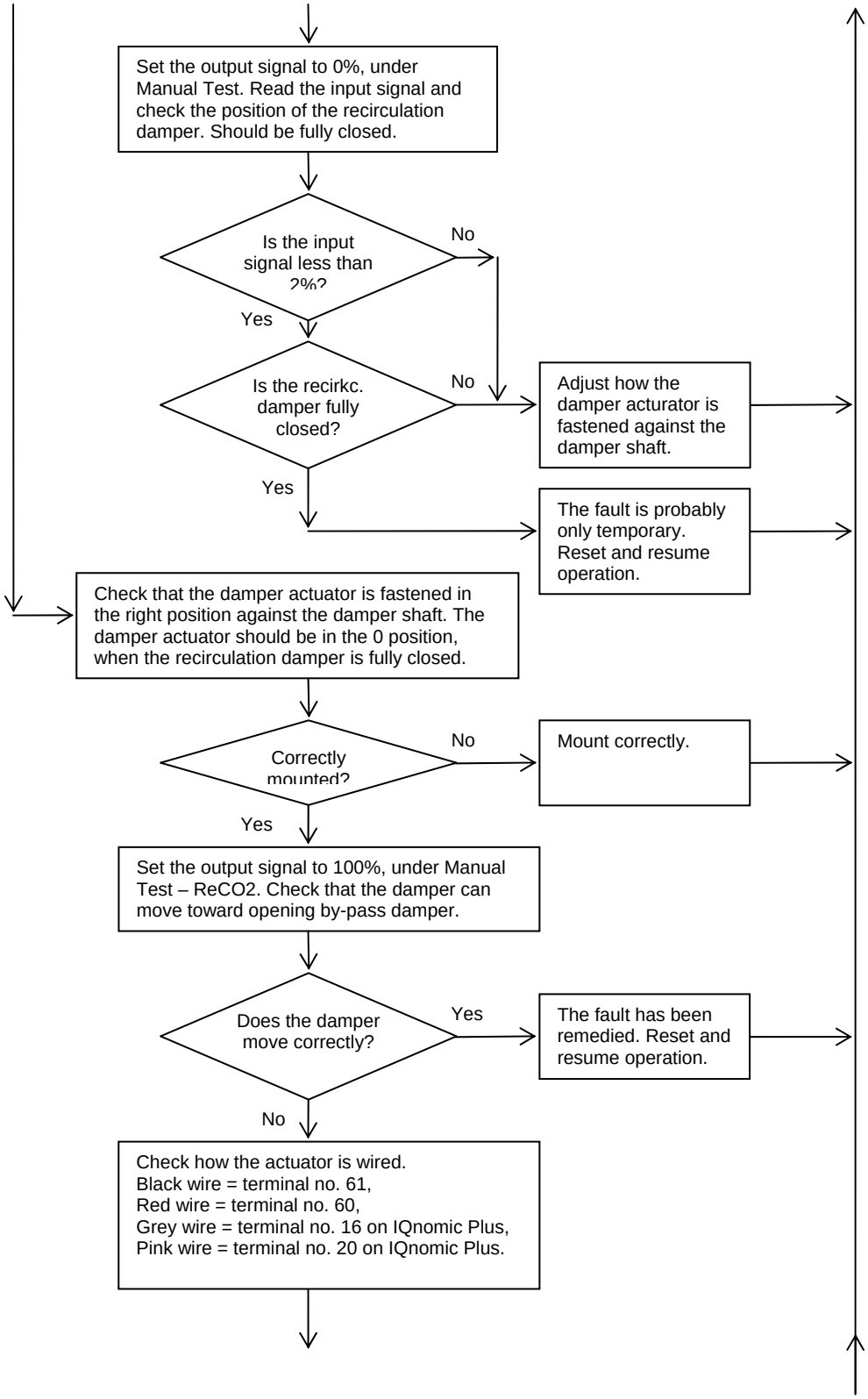

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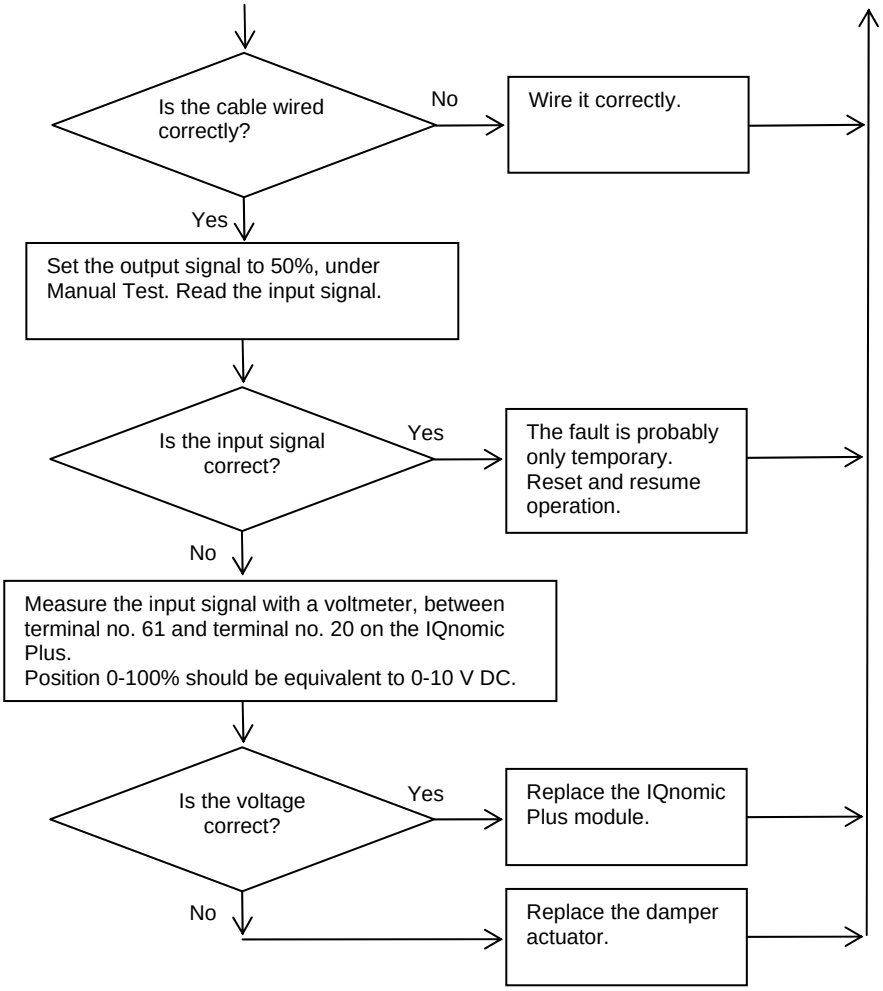


2.61 Alarm No. 99: Time lock tripped

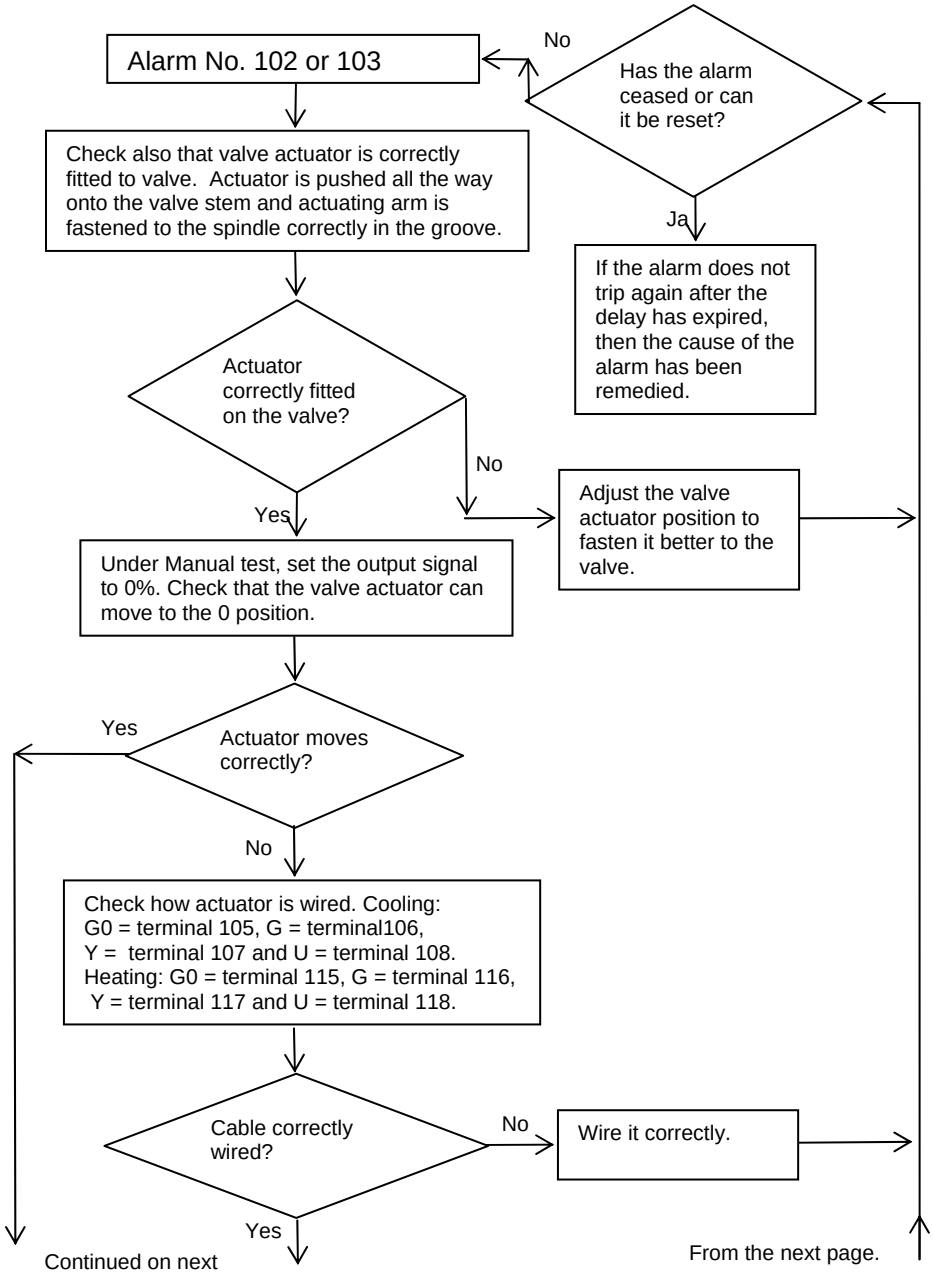
The alarm is active when the time lock function has been activated.
The alarm trips when the preset time lock date and time have expired.

The air handling unit and the control system are now completely locked and cannot be restarted unless a special code is keyed.
Contact the seller of the equipment.

2.62 Alarms No. 100 – 101: Spares

2.63 Alarms No. 102 and 103: Cooling valve I/O-7 or Heating valve I/O-7 defective

The alarm is active when the AYC function for cooling and heating respectively are selected and the IQnomic Plus module is set to Hex=7.
The alarms trip when the feedback signal (input signal) from the valve actuator does not agree with the control signal.



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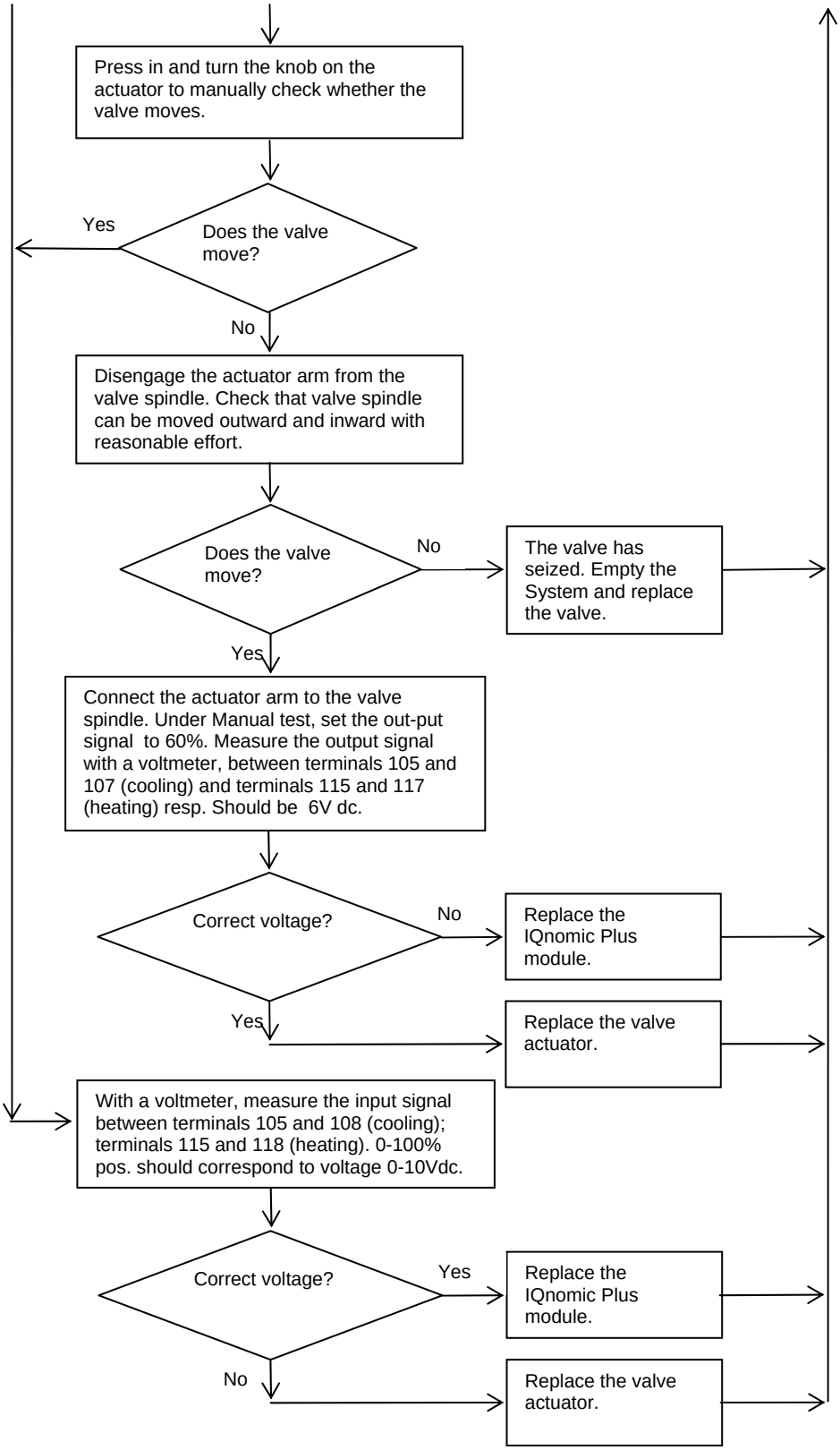
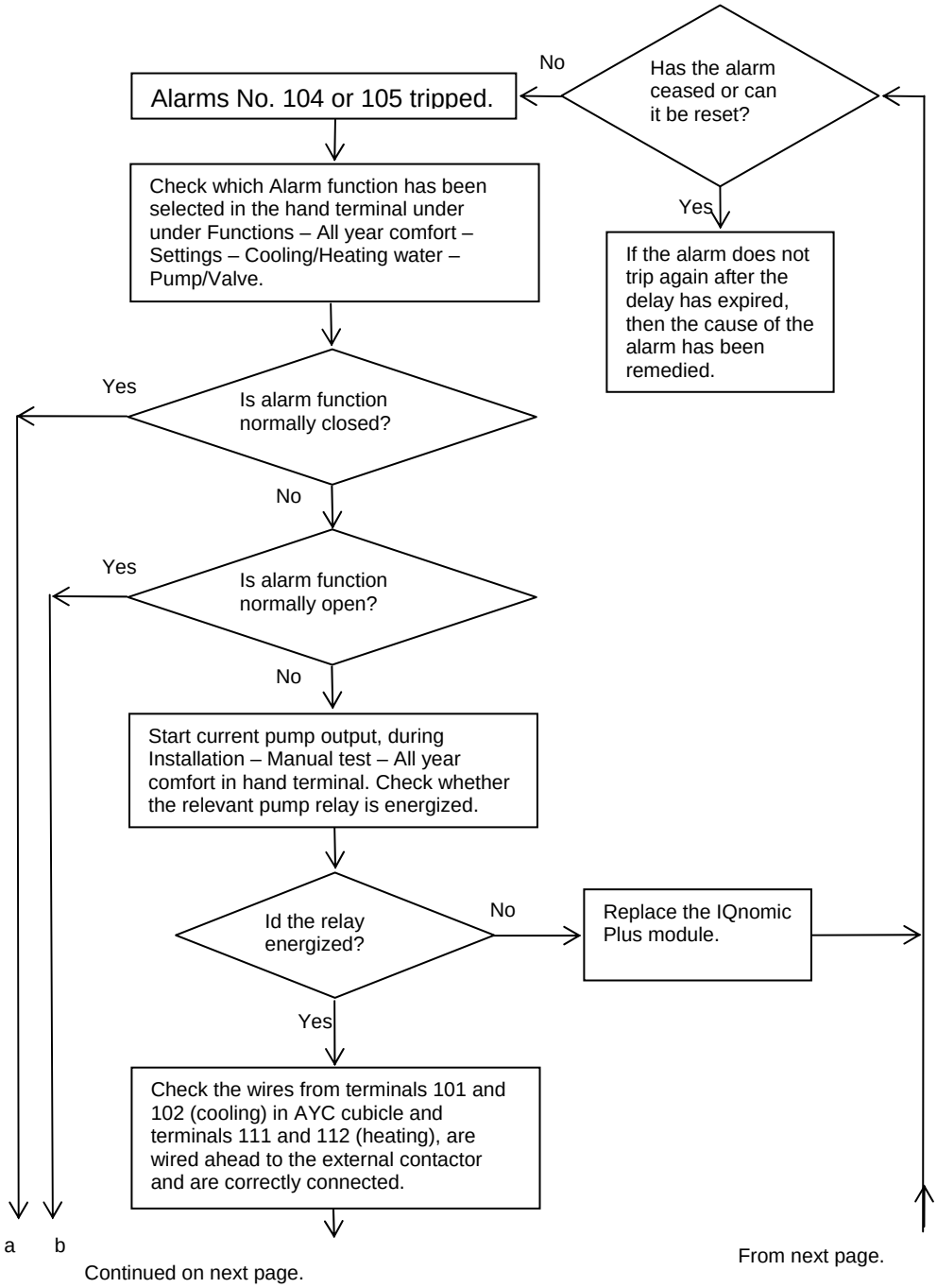
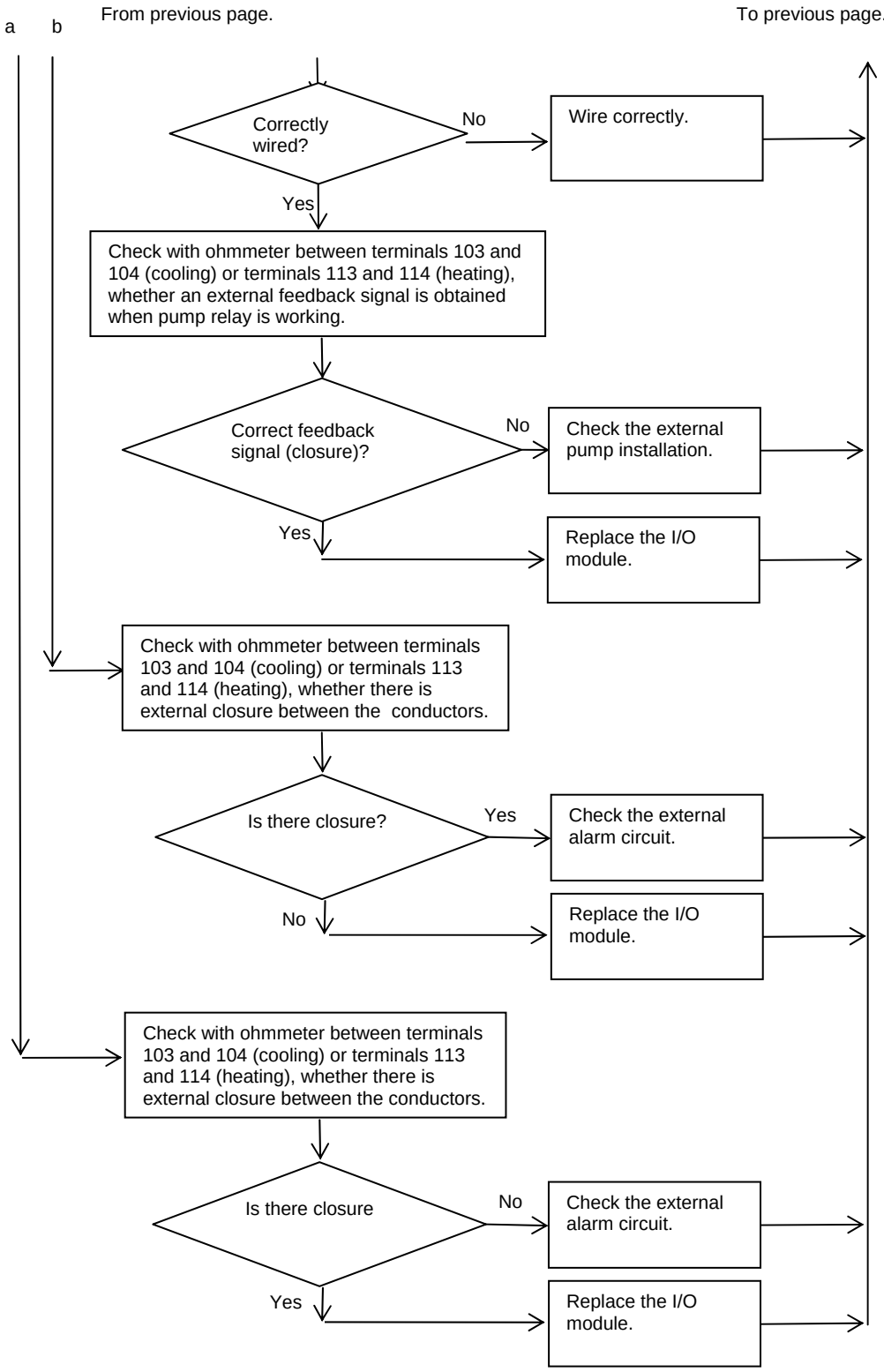


2.64 Alarm No. 104 and 105: Cooling circuit pump I/O-7 or Heating circuit pump I/O-7 tripped

The alarm is active when the AYC function for cooling and heating respectively are selected as active and the IQnomic Plus module is set to Hex=7.
The alarms trip when depending on which monitoring function is selected for each pump.
Alarm for interrupted or closed signal or if there is no feedback from the contactor.

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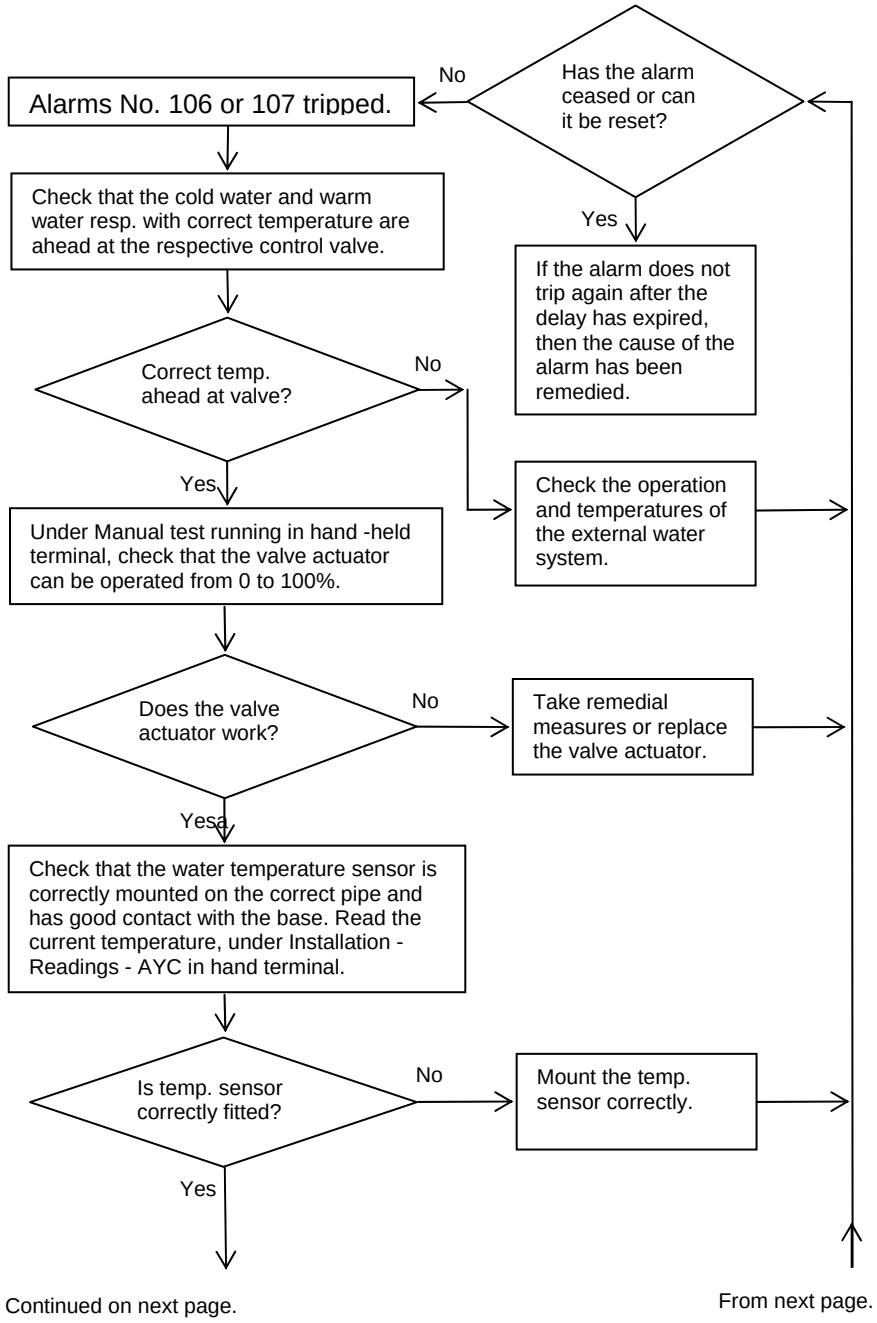
Correctly wired?
No
Wire correctly.
Yes
Check with ohmmeter between terminals 103 and 104 (cooling) or terminals 113 and 114 (heating), whether an external feedback signal is obtained when pump relay is working.
Correct feedback signal (closure)?
No
Check the external pump installation.
Yes
Replace the I/O module.
Check with ohmmeter between terminals 103 and 104 (cooling) or terminals 113 and 114 (heating), whether there is external closure between the conductors.
Is there closure?
Yes
Check the external alarm circuit.
No
Replace the I/O module.
Check with ohmmeter between terminals 103 and 104 (cooling) or terminals 113 and 114 (heating), whether there is external closure between the conductors.
Is there closure
No
Check the external alarm circuit.
Yes
Replace the I/O module.

2.65 Alarms No. 106 and 107: Cooling water temp. or Heating water temp. I/O-7 are below the set point

The alarm is active when the AYC function for cooling and heating respectively are selected as active and the IQnomic Plus module is set to Hex=7.
The alarms trip when the water temperature is below the current set point for more than 20 minutes.
Check that the preset alarm limit is the one of your choice.



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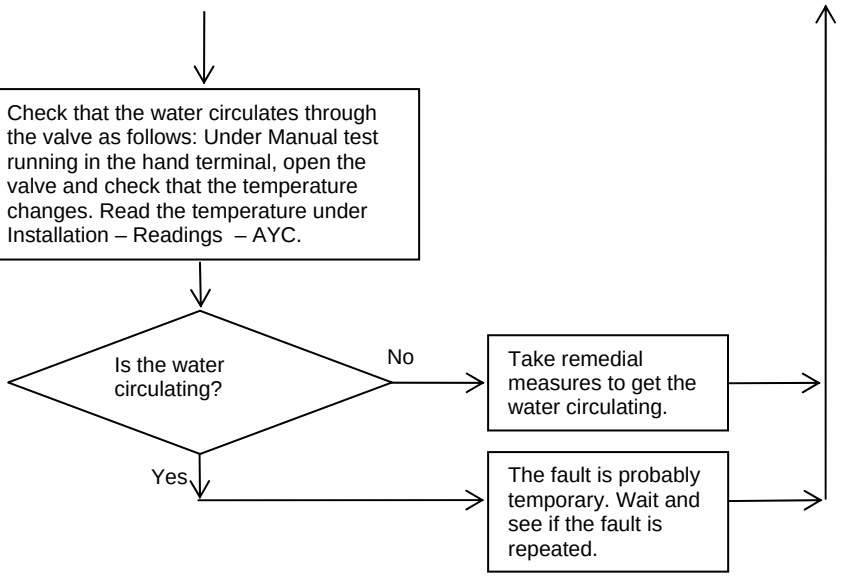
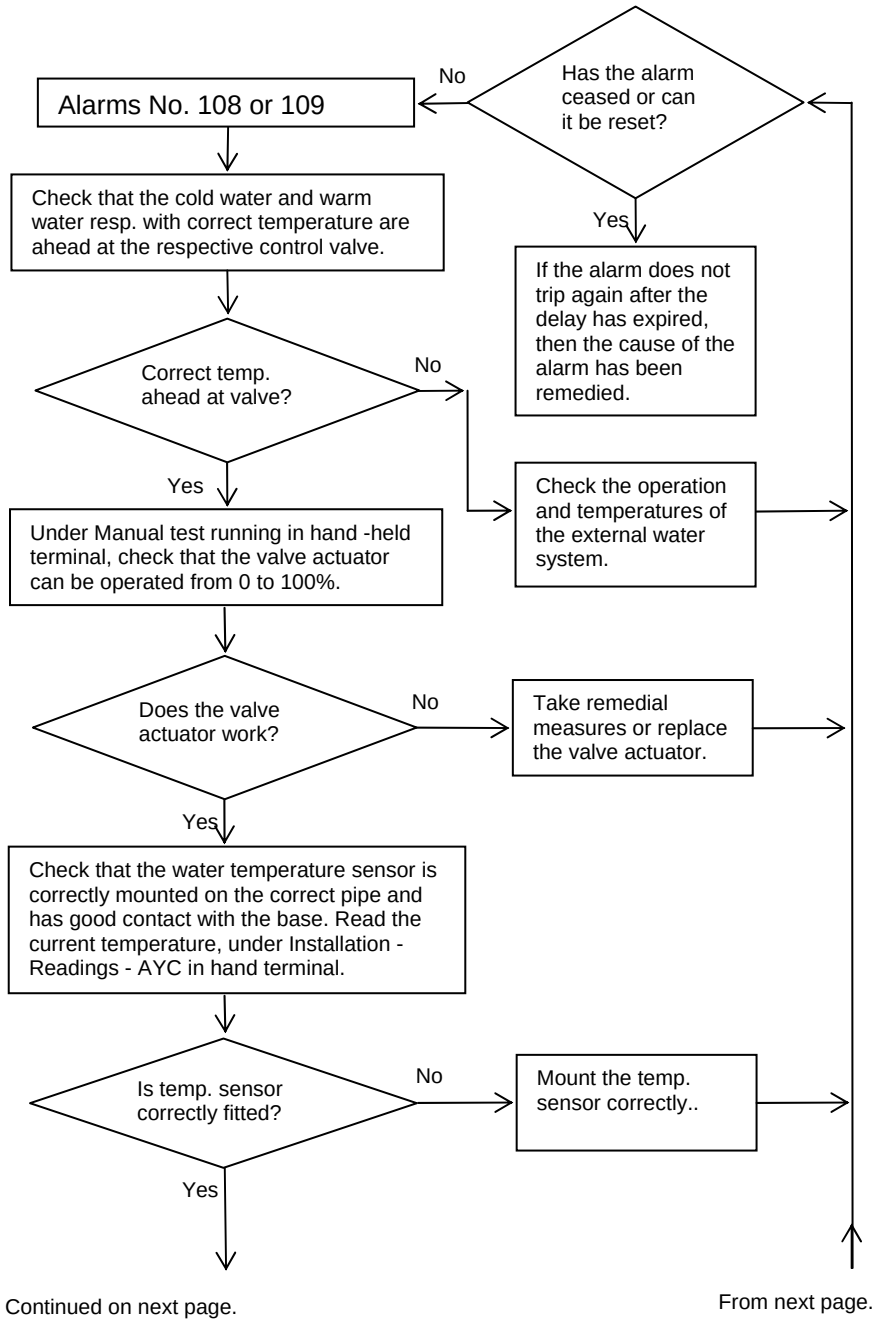


2.66 Alarms No. 108 and 109: Cooling water temp. or Heating water temp. I/O-7 is above the set point.

The alarm is active when the AYC function for cooling and heating respectively are selected as active and the IQnomic Plus module is set to Hex=7.
The alarms trip when the water temperature is above the current set point for more than 20 minutes.
Check that the preset alarm limit is the one of your choice.



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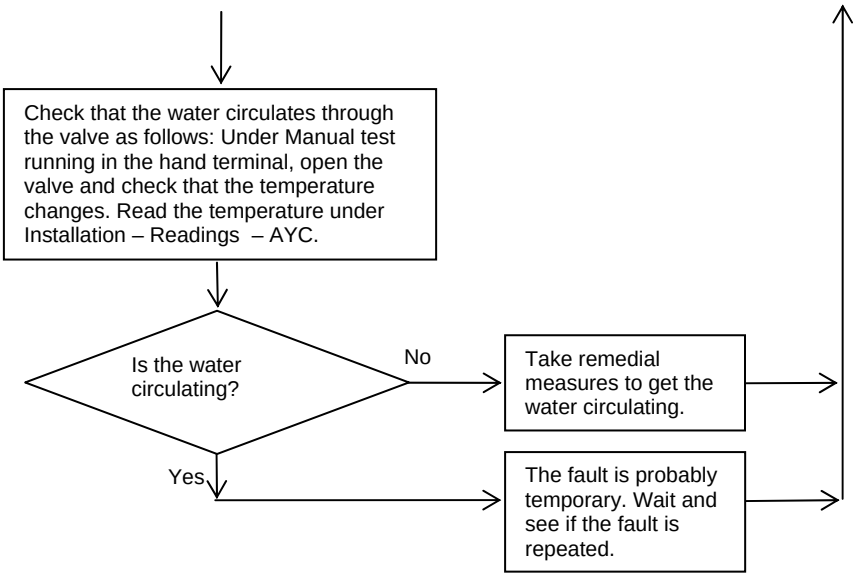
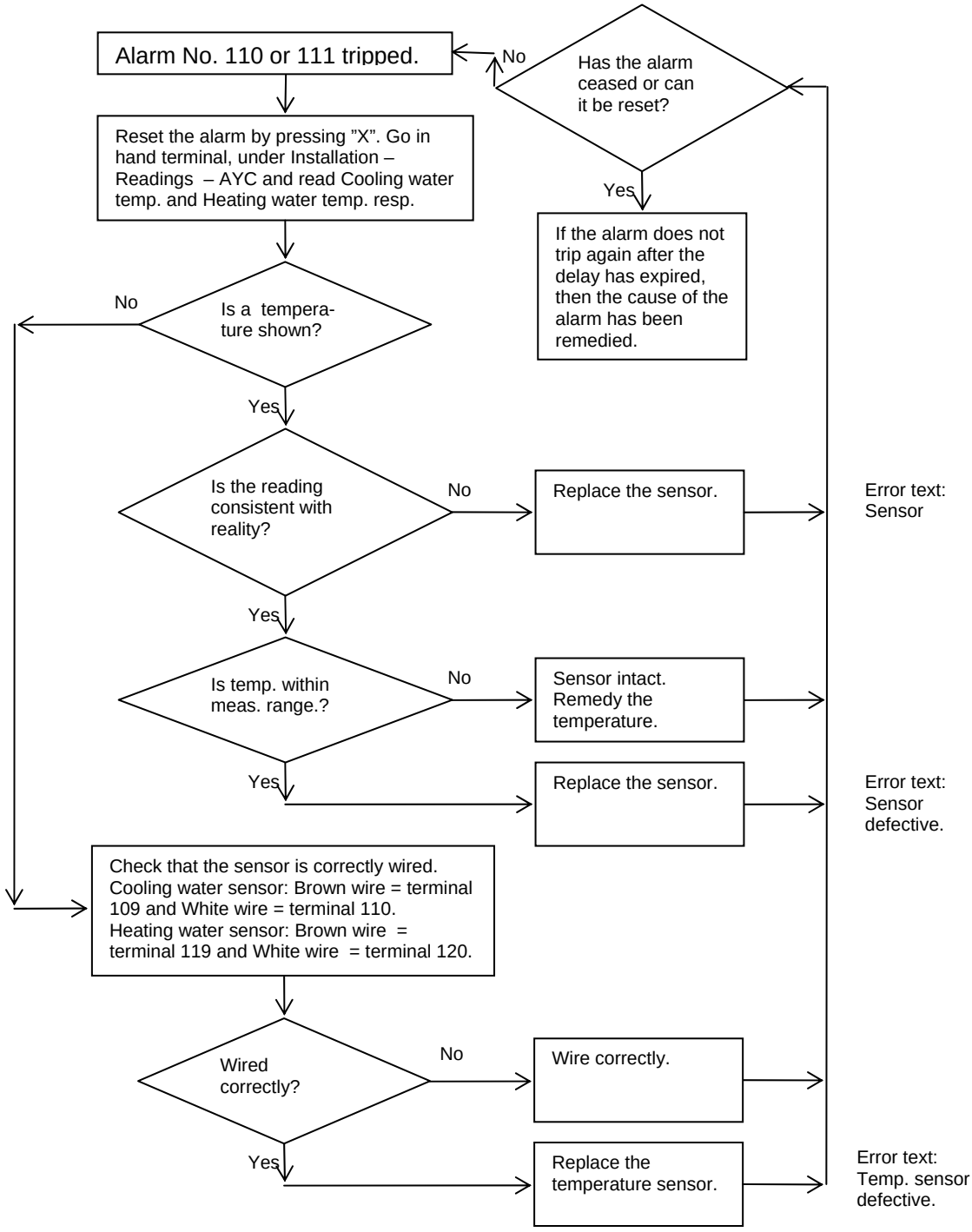


2.67 Alarms No. 110 and 111: Cooling water temp. or Heating water temp. sensor I/O-7 defective

The alarm is active when the AYC function for cooling and heating respectively are selected as active and the IQnomic Plus module is set to Hex=7. The alarms trip when the control unit does not have communication with the respective temperature sensors or if the sensor measures a temperature outside of the measurement range (-55°C-125°C).



2.68 Alarms No. 112 – 134: Spares

2.69 Alarms No. 135 and 136: SA alt. EA Fan motor blocked

The alarms are active in GOLD-D air handling units.
The alarms trip when the fan motor is blocked or operates too sluggishly when it is to start up. Check by rotating the fan by hand that the motor is not mechanically blocked or whether the motor bearings are beginning to become worn.

2.70 Alarms No. 137 and 138: SA-2 alt. EA-2 Fan motor blocked

The alarms are active in GOLD-D 50-80 air handling units.
The alarms trip when the fan motor (the inner one) is blocked or operates too sluggishly when it is to start up. Check by rotating the fan by hand that the motor is not mechanically blocked or whether the motor bearings are beginning to become worn.

2.71 Alarms No. 139 and 140: Irregular voltage between phases SA alt. EA

The alarms are active in GOLD-D air handling units.
The alarms trip when incoming voltage to the fan motor controller is irregular.
Check, with a voltmeter, that the voltage between the incoming phases does not differ more than 2%.

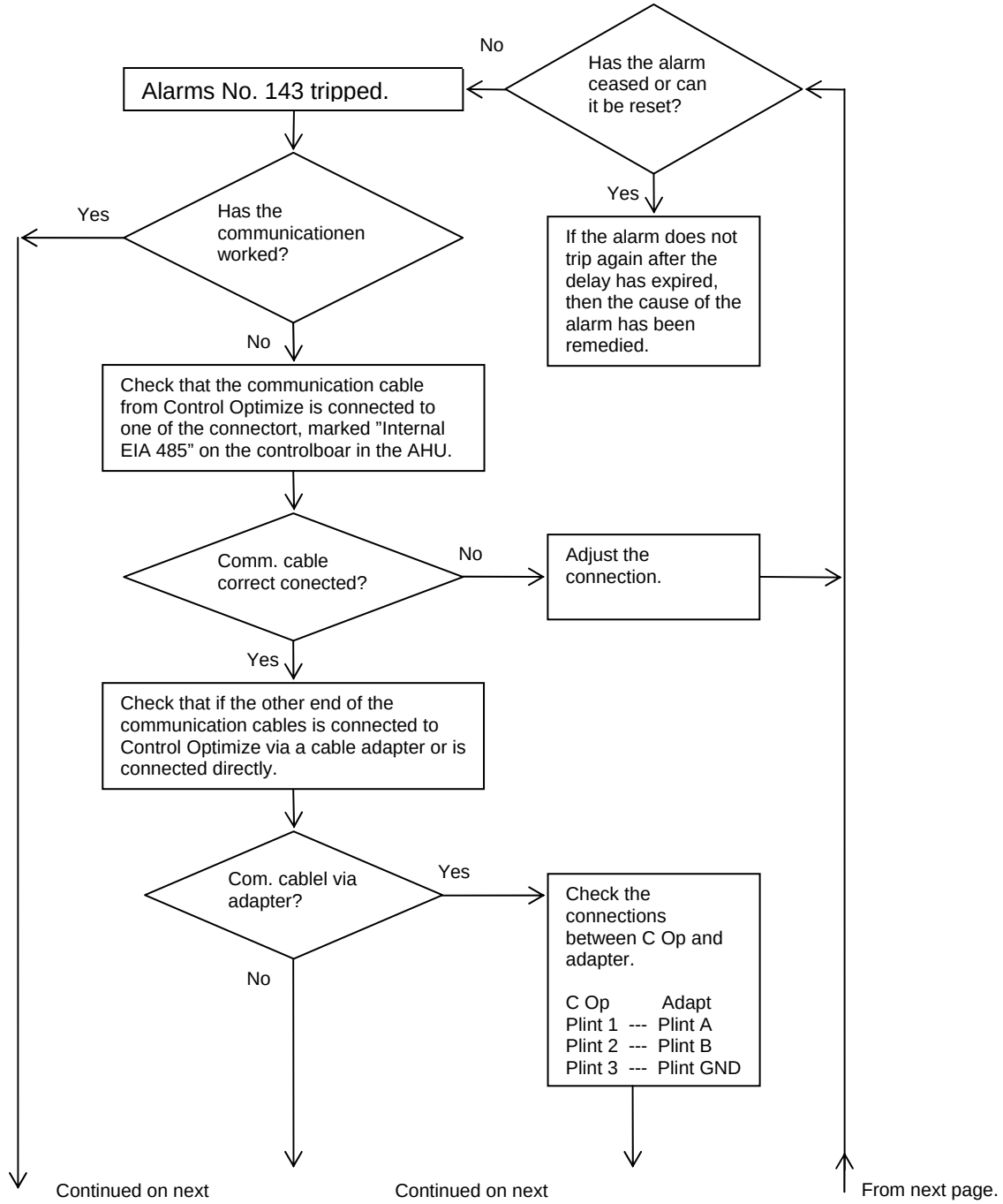
2.72 Alarms No. 141 and 142: Irregular voltage between phases SA-2 alt. EA-2

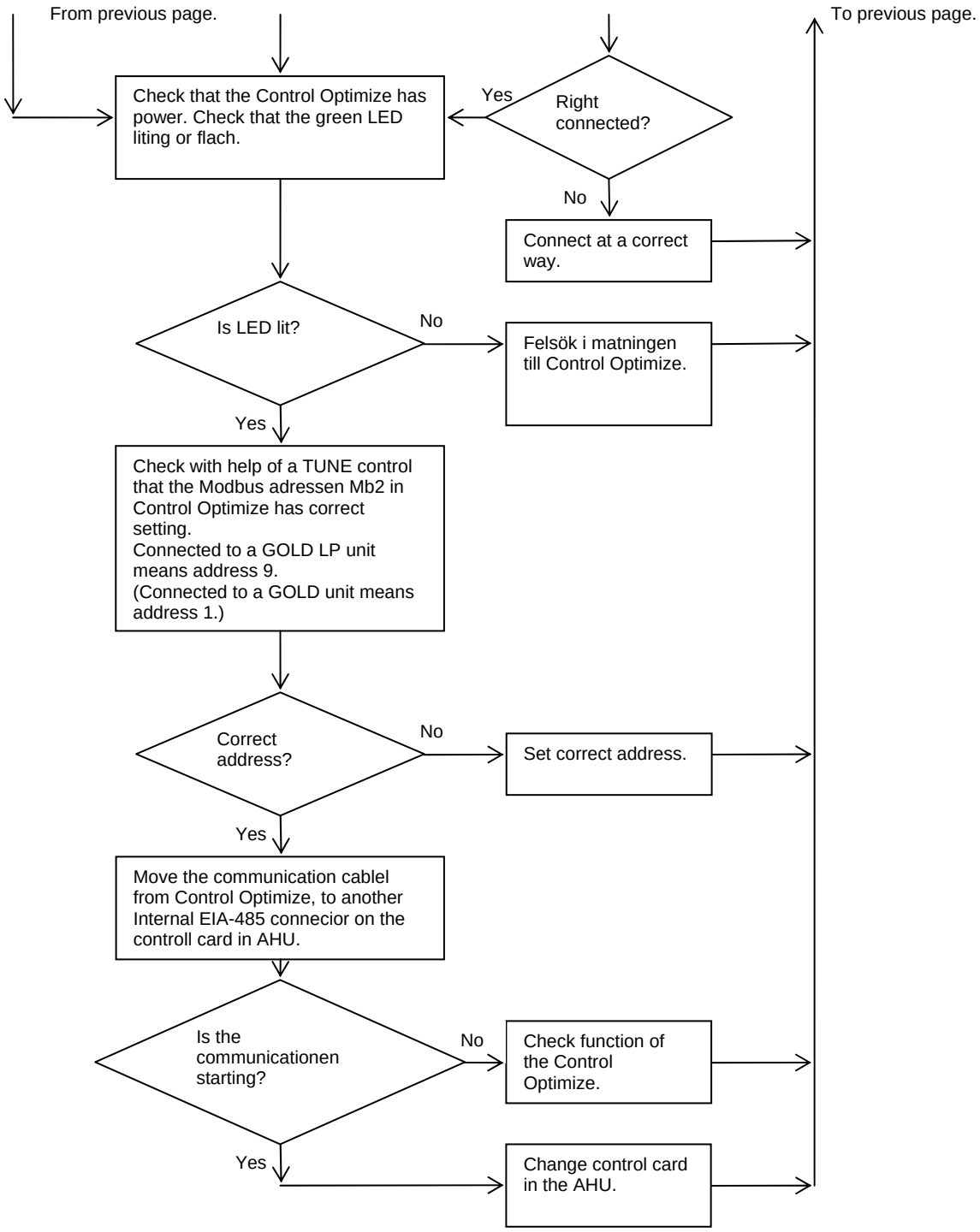
The alarms are active in GOLD-D 50-80 air handling units.
The alarms trip when incoming voltage to the fan motor controller (the inner one) is irregular.
Check, with a voltmeter, that the voltage between the incoming phases does not differ more than 2%.

2.73 Alarms No. 143: No communication CONTROL Optimize

The alarm is active when the function CONTROL Optimize has been manually activated.

The alarm trips when the control system does not obtain communication with the CONTROL Optimize module.

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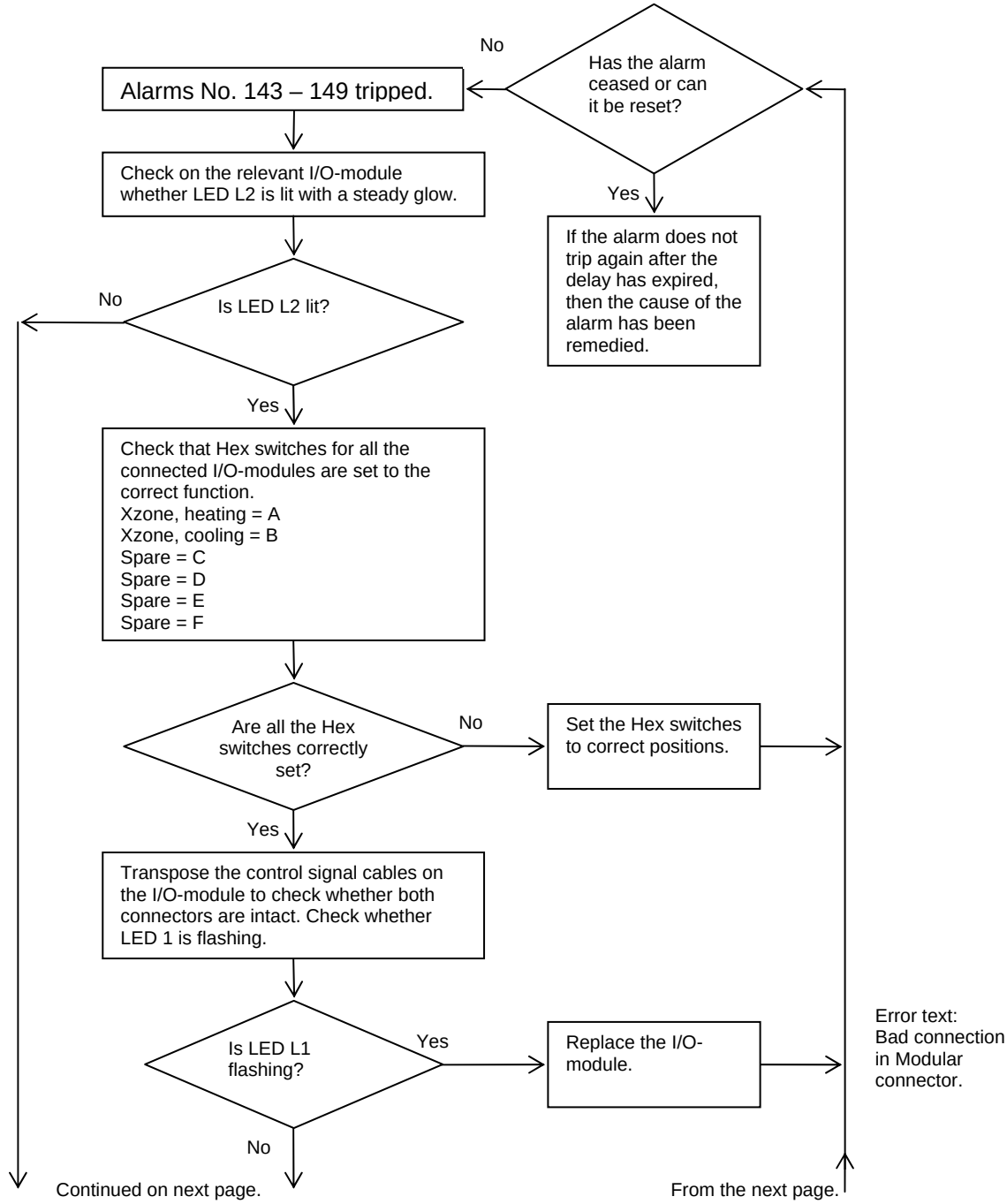
Check that the Control Optimize has power. Check that the green LED liting or flach.
Right connected?
Yes
No
Connect at a correct way.
Is LED lit?
No
Felsök i matningen till Control Optimize.
Yes
Check with help of a TUNE control that the Modbus adressen Mb2 in Control Optimize has correct setting.
Connected to a GOLD LP unit means address 9.
(Connected to a GOLD unit means address 1.)
Correct address?
No
Set correct address.
Yes
Move the communication cablel from Control Optimize, to another Internal EIA-485 connecior on the controll card in AHU.
Is the communicationen starting?
No
Check function of the Control Optimize.
Yes
Change control card in the AHU.

2.74 Alarms No. 144 – 149: No communication with I/O modules A – F

The alarm for each I/O module, is active when some function that requres I/O module (IQnomic Plus) or if a module has been manually activated.
The alarm trips when the control system does not obtain communication with the relevant I/O modules.



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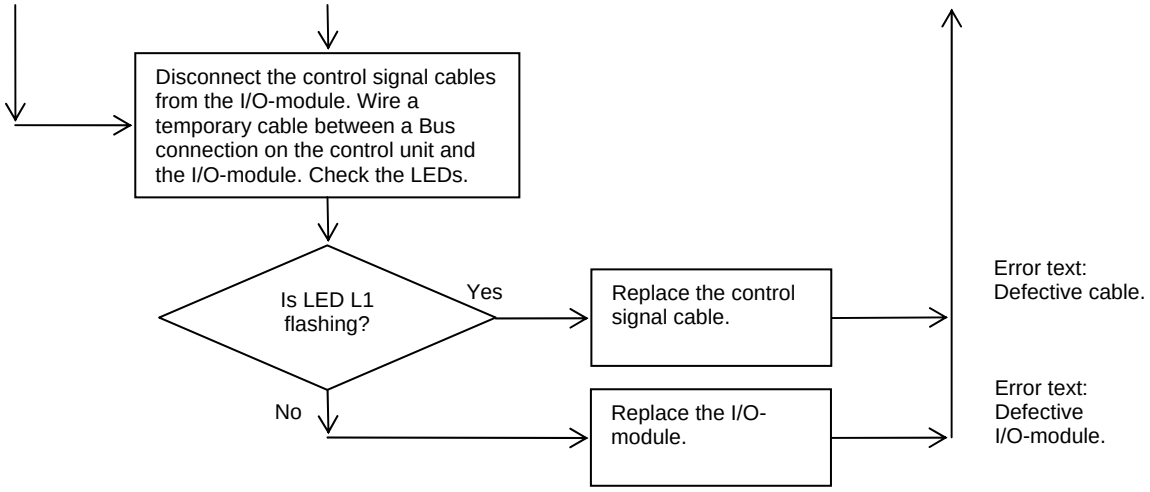
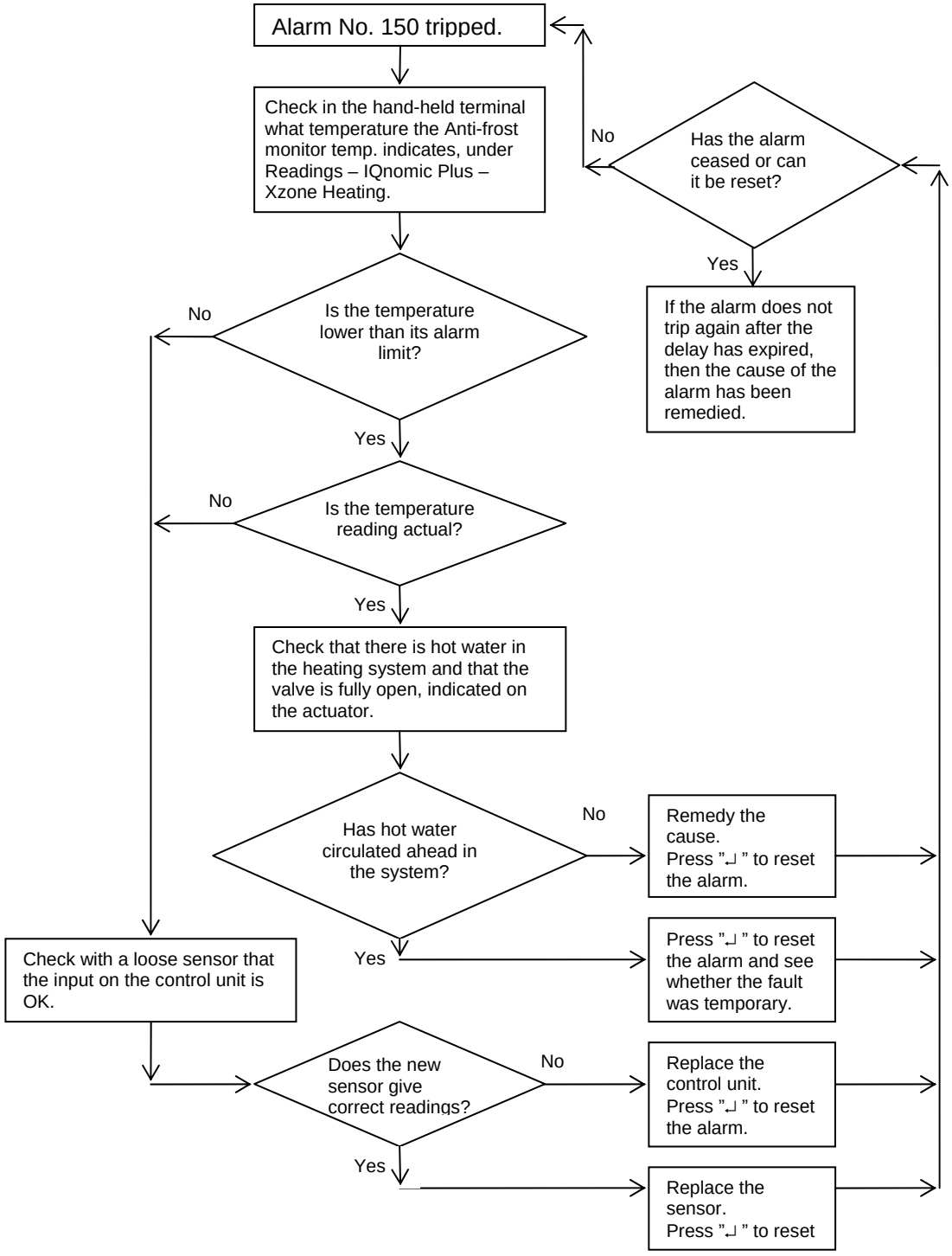


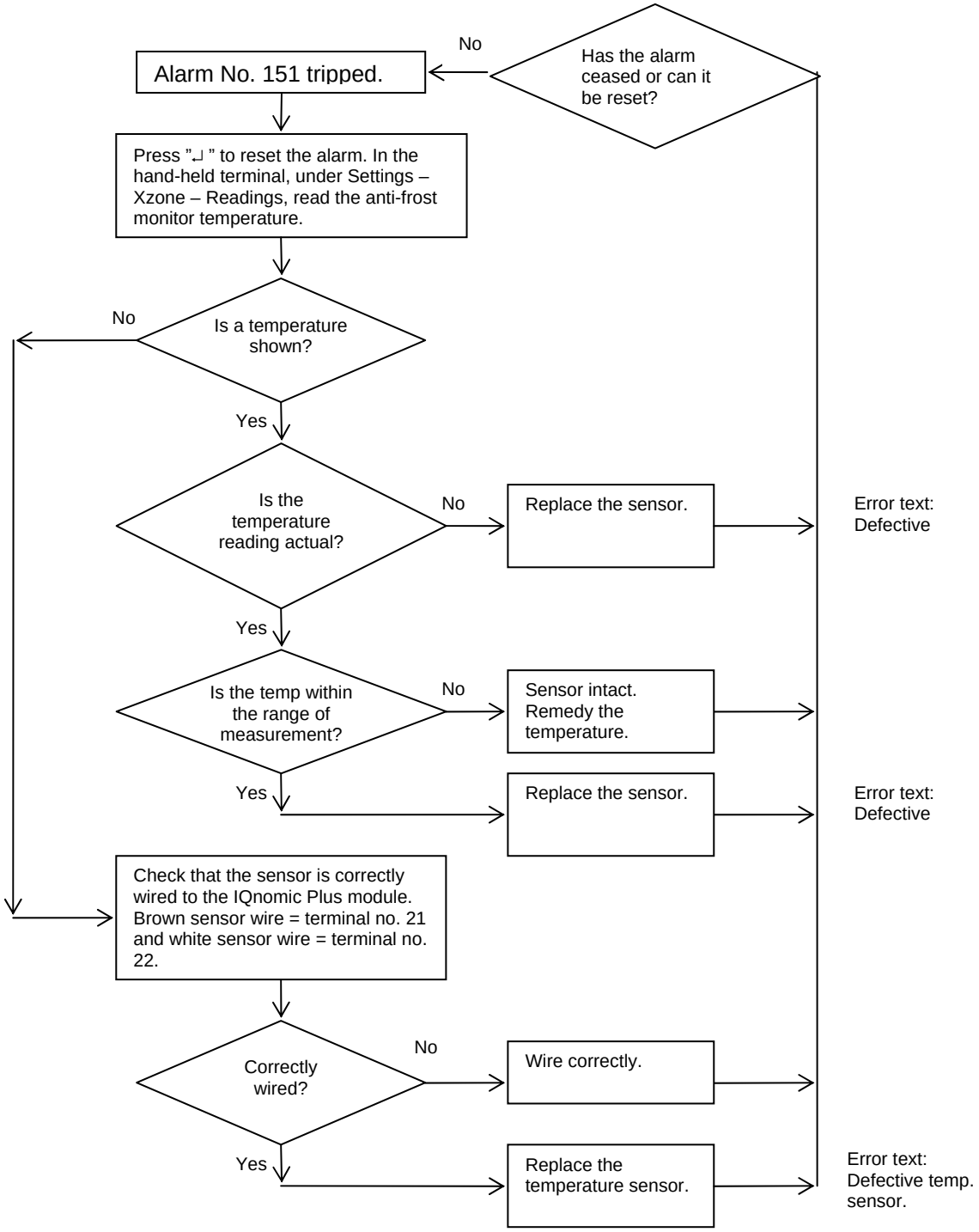
2.75 Alarm No. 150: Extra zone anti-frost monitor below alarm limit

The alarm is active only when Extra zone with anti-frost monitor has been activated.
The alarm trips when the anti-frost temperature sensor measures a temperature below the preset alarm limit. The alarm limit is factory preset to 7°C , however the limit is can be adjusted, under Service in the hand-held micro terminal.



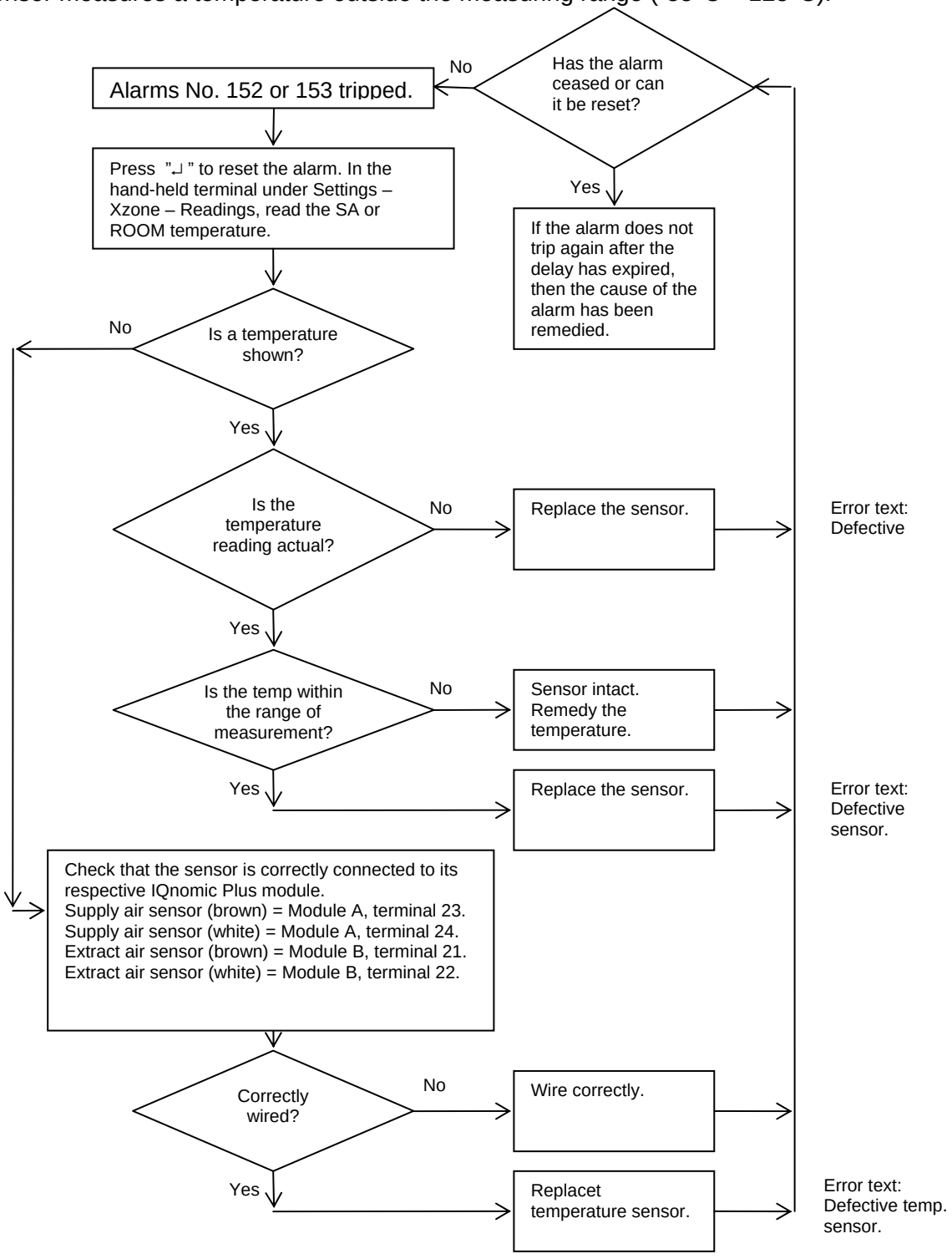
2.76 Alarm No. 151: Extra zone anti-frost sensor faulty

The alarm is active only when Xzone heating with water coil with anti-frost monitor has been selected. The alarm trips when the control unit does not have communication with the anti-frost monitor temperature sensor or when the sensor measures a temperature outside the measuring range (-55°C – 125°C).



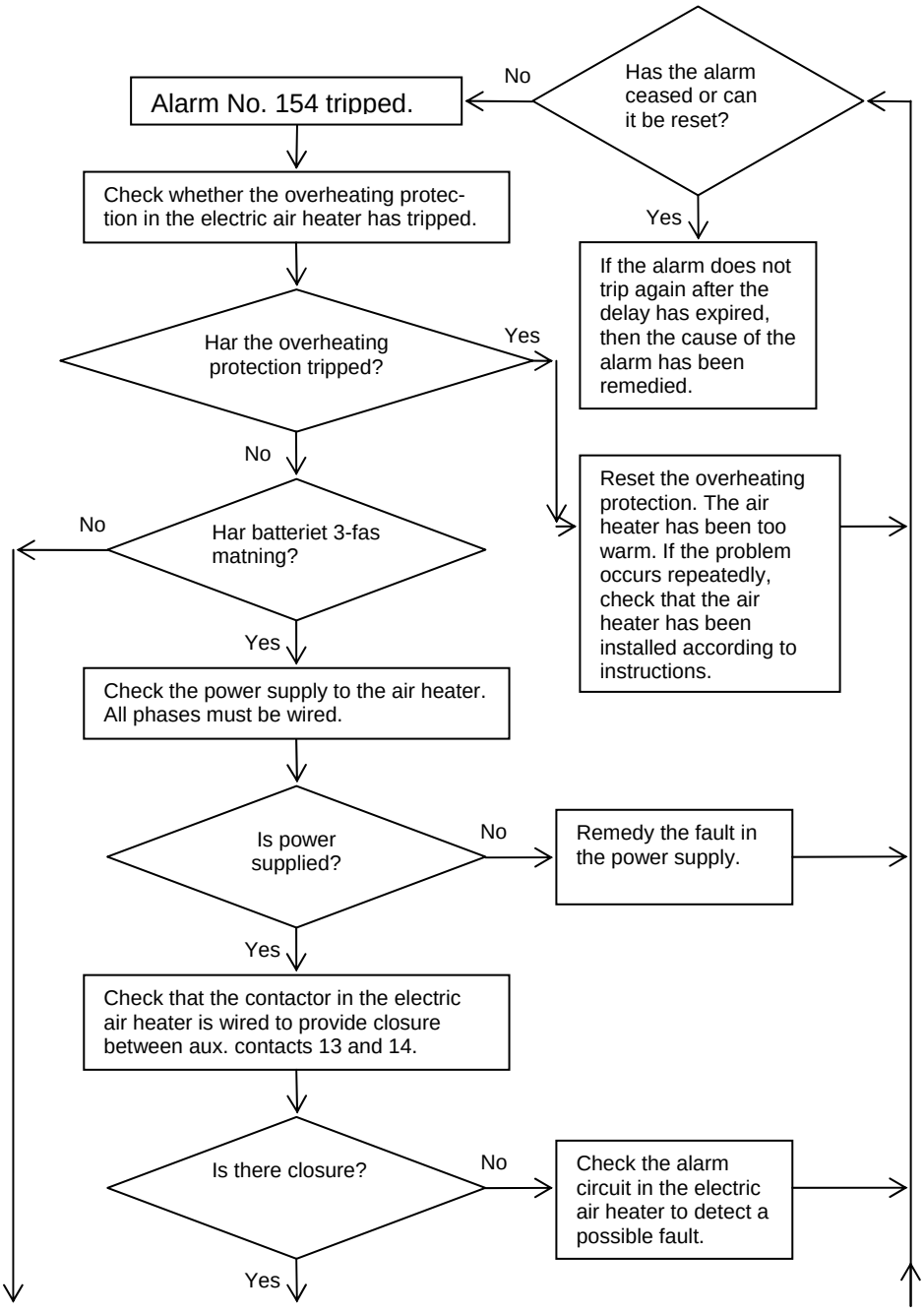
2.77 Alarms No. 152 and 153: Extra zone supply air and extract air sensors faulty

The alarms are active when Xzone is activated. The sensors are assumed to always be connected. The alarms trip when the control unit does not have communication with each temperature sensor or when the sensor measures a temperature outside the measuring range (-55°C – 125°C).



2.78 Alarm No. 154: Extra zone electric air heater tripped

The alarm is active only when the Xzone function is activated and the electric air heater has been selected.
The alarm trips when there is no connection between terminal nos 21 and 22 on the IQnomic Plus module, Hex = A.



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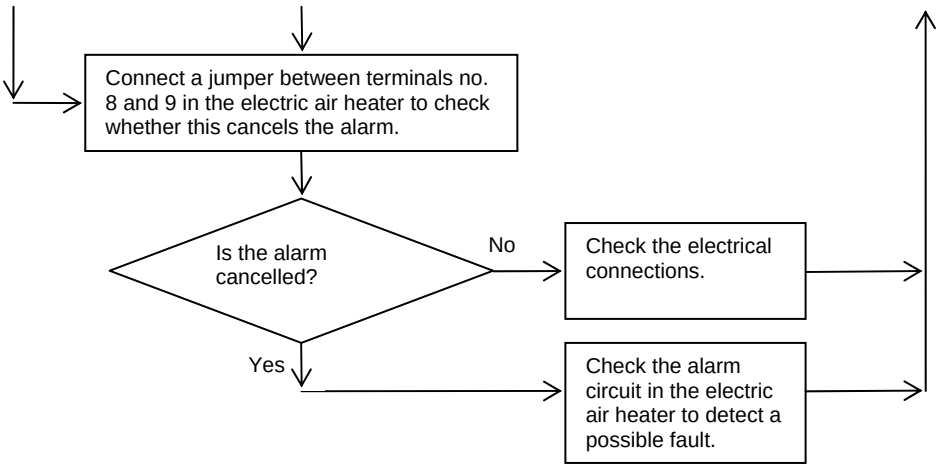


2.79 Alarm No. 155: Extra zone extract air temp below alarm limit

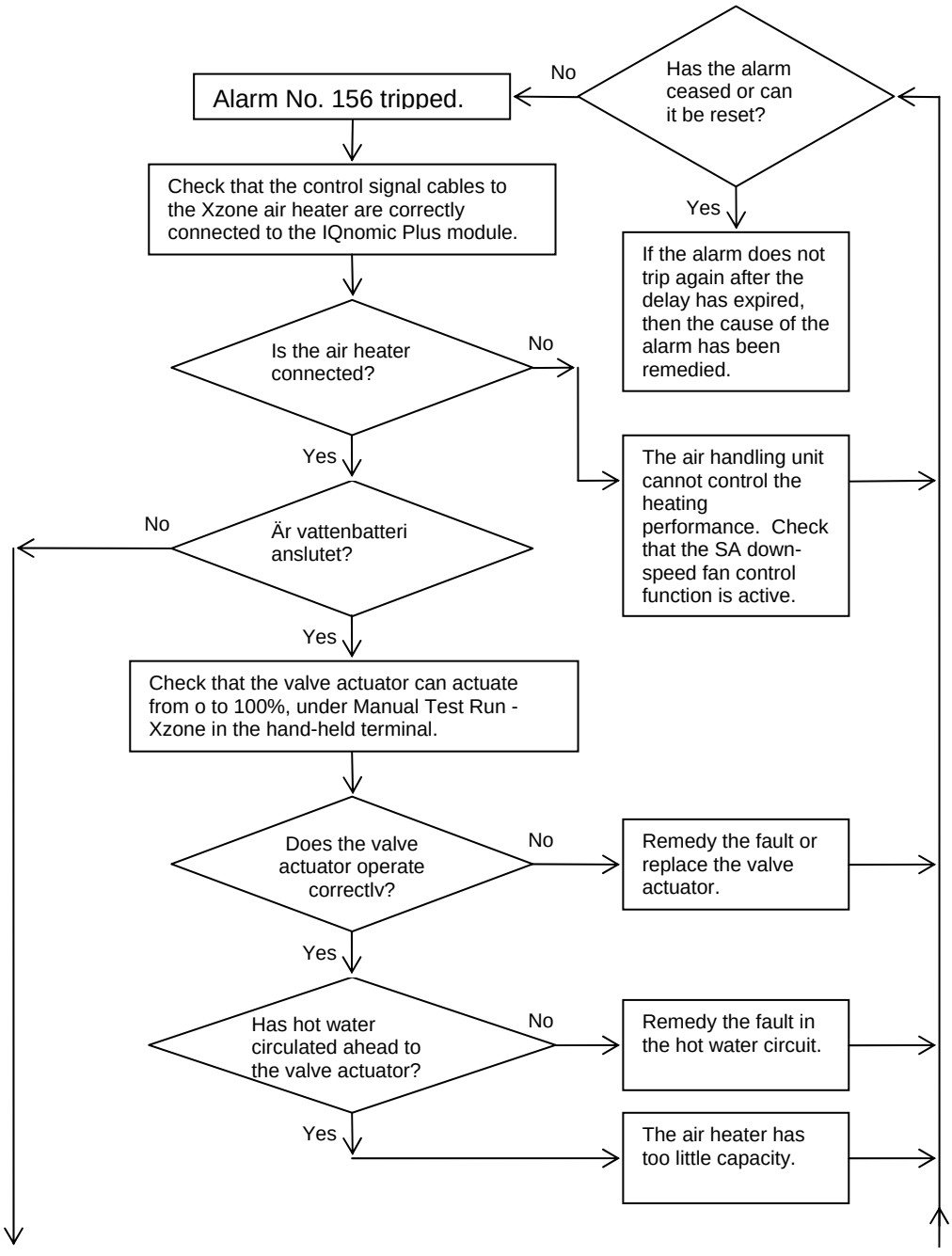
The alarm is active when the Xzone function is activated.
The alarm trips when the extract air temperature is below the preset alarm limit for more than 20 minutes.

Check that the preset alarm limit is correct.

Find out why the extract air temperature is too low.

2.80 Alarm No. 156: Extra zone supply air temp. below setpoint

The alarm is active when the Xzone function is activated.
The alarm trips when the supply air temperature is below the current setpoint for more than 20 minutes.
Check that the preset alarm limit is the one of your choice.



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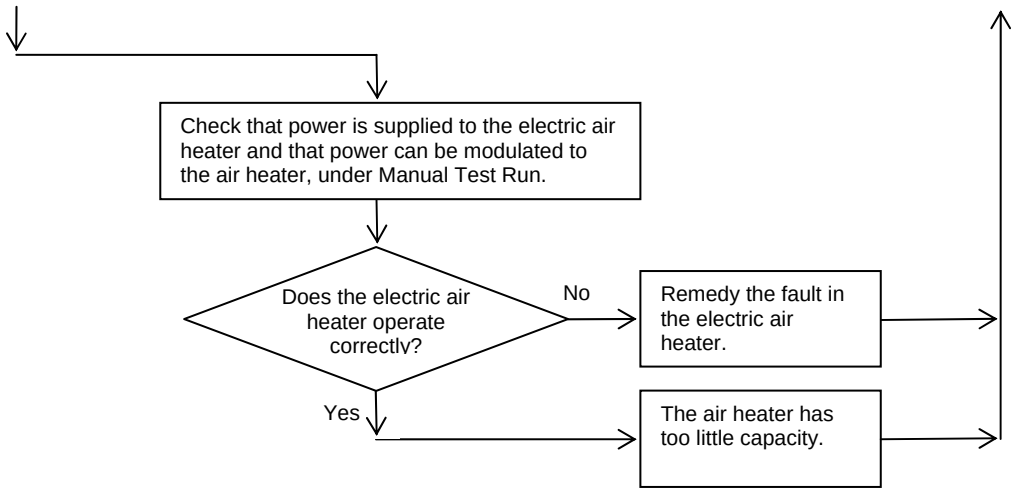
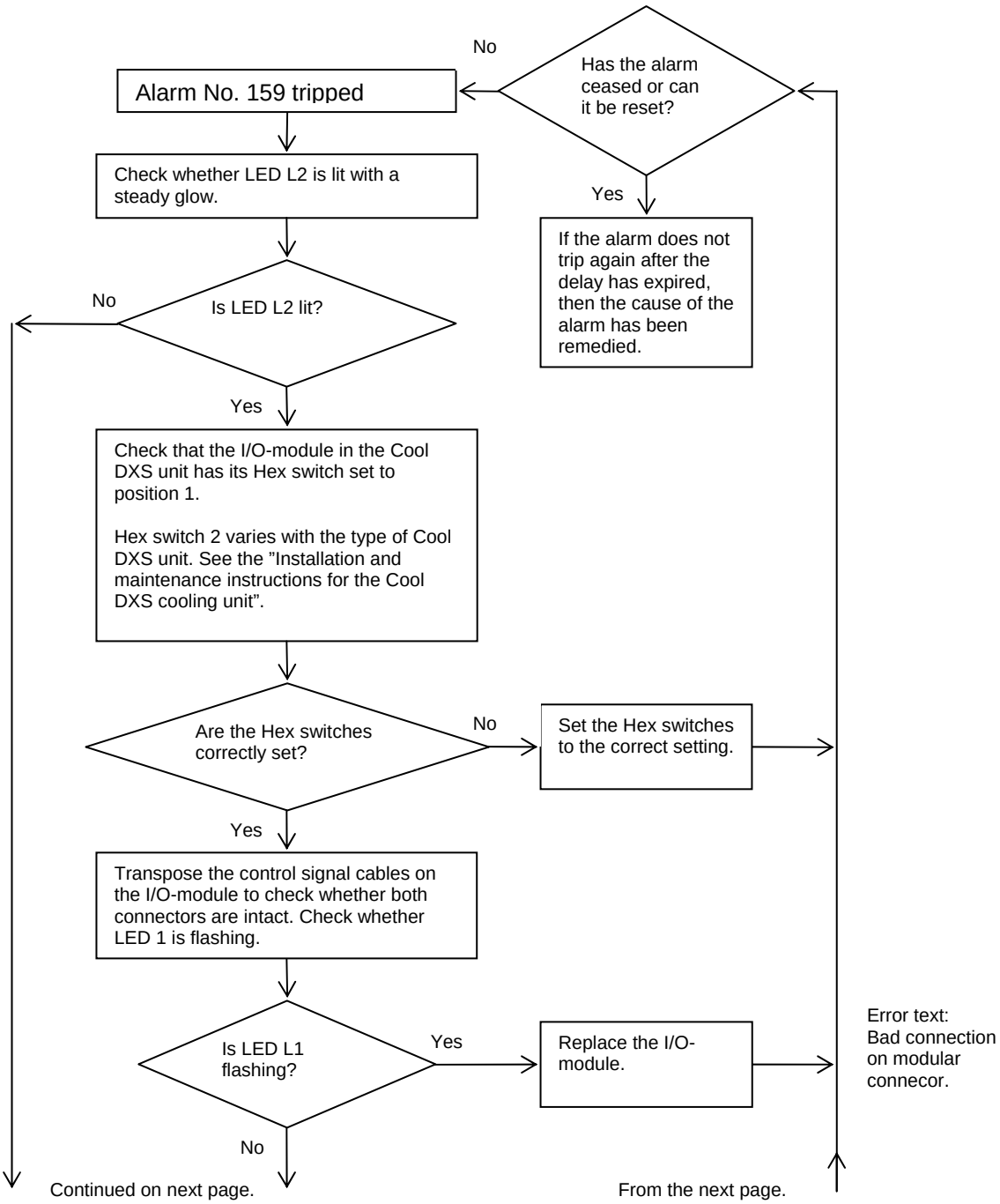


2.81 Alarms No. 157 – 158: Spares

2.82 Alarm No. 159: No communication COOL DXS module

The alarm is active when the COOL DXS cooling function is selected to be active.
The alarm trips when the control unit cannot establish communication with the I/O module mounted in the CoolDXS unit.


Alarm No. 159 tripped
Check whether LED L2 is lit with a steady glow.
Is LED L2 lit?
No
Yes
Check that the I/O-module in the Cool DXS unit has its Hex switch set to position 1.
Hex switch 2 varies with the type of Cool DXS unit. See the ”Installation and maintenance instructions for the Cool DXS cooling unit”.
Are the Hex switches correctly set?
No
Set the Hex switches to the correct setting.
Yes
Transpose the control signal cables on the I/O-module to check whether both connectors are intact. Check whether LED 1 is flashing.
Is LED L1 flashing?
Yes
Replace the I/O-module.
No
Error text:
Bad connection on modular connecor.
Has the alarm ceased or can it be reset?
No
Yes
If the alarm does not trip again after the delay has expired, then the cause of the alarm has been remedied.
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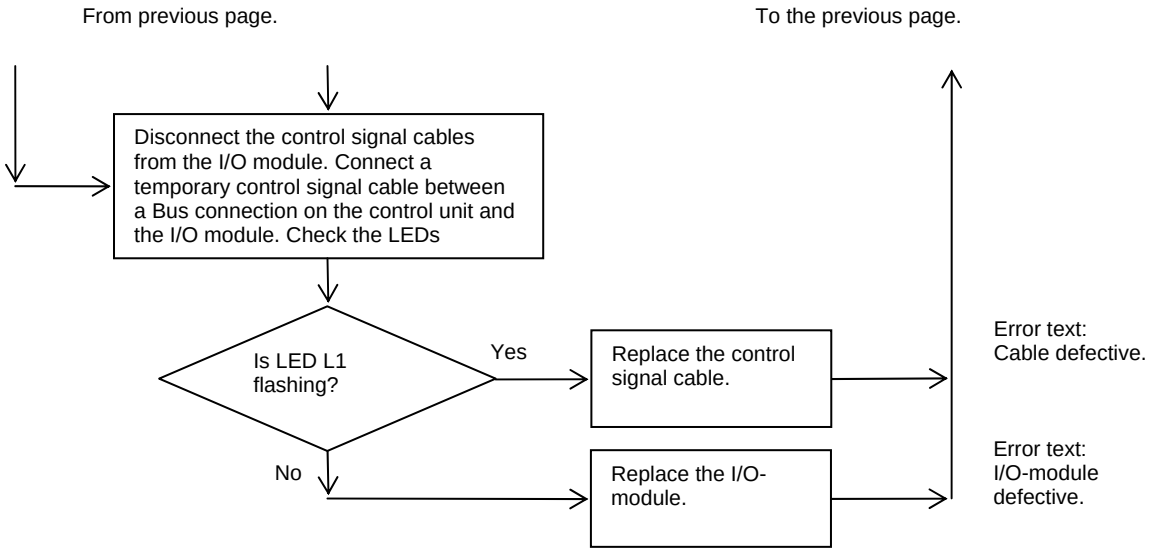


2.83 Alarm No. 160: Cool DXS Low pressure below alarm limit

The alarm is active when the COOL DXS cooling function has been selected to be active.
The alarm trips when pressure sensor B2 on the low pressure side of the compressors shows a pressure reading below the current alarm limit (3.5 Bar).

2.84 Alarm No. 161: Cool DXS High pressure above alarm limit

The alarm is active when the COOL DXS cooling function has been selected to be active.
The alarm trips when pressure sensor B1 on the high pressure side of the compressors shows a pressure reading above the current alarm limit (40.0 Bar).

2.85 Alarm No. 162: Cool DX-2/DXS Low pressure sensor defective

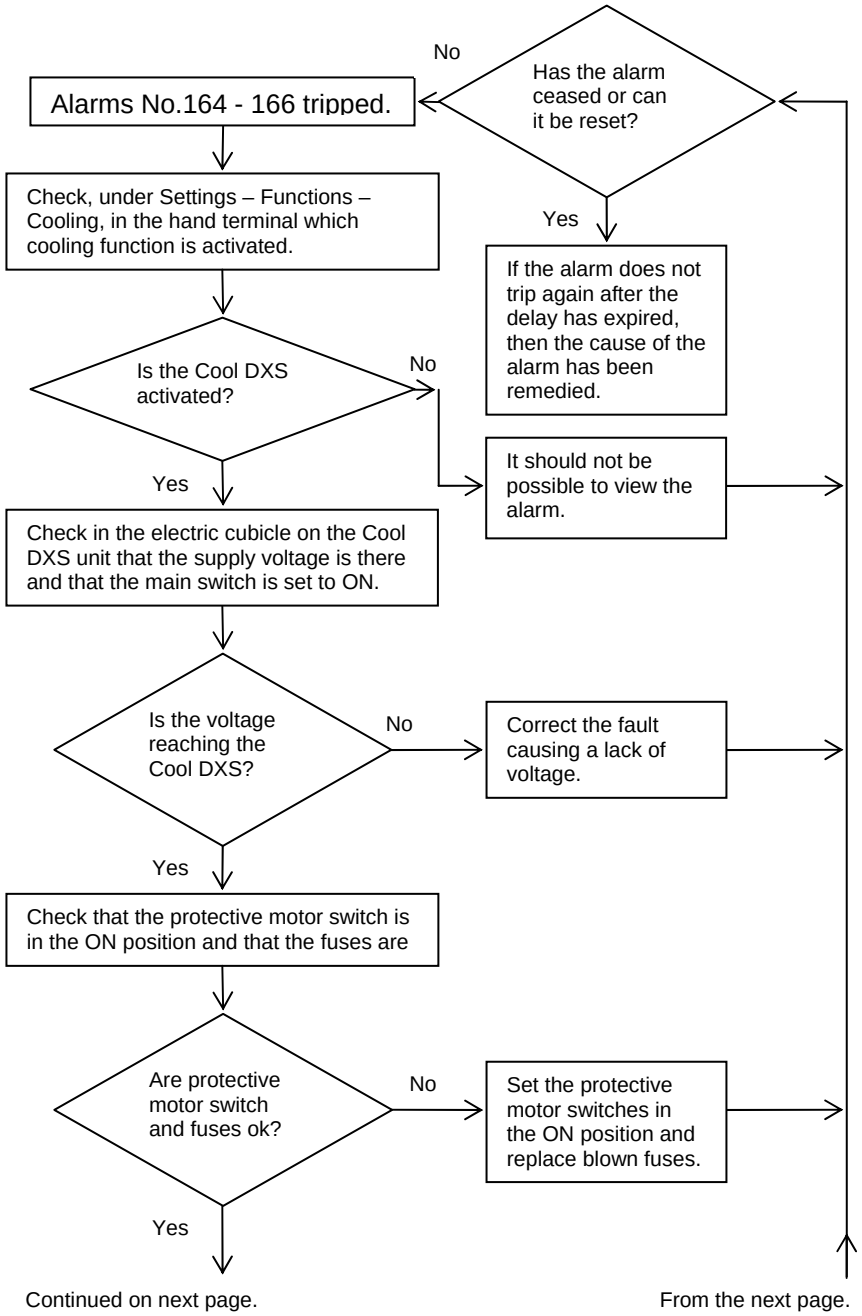
The alarm is active when the COOL CoolDX-2 or Cool DXS cooling function has been selected to be active.
The alarm trips when the signal from low pressure sensor B2 is < 0.2V dc.

2.86 Alarm No. 163: Cool DX-2/DXS High pressure sensor defective

The alarm is active when the COOL CoolDX-2/Cool DXS cooling function has been selected to be active.
The alarm trips when the signal from high pressure sensor B1 is < 0.2V dc.

2.87 Alarms No. 164 - 166: Cool DXS K1alt. K2 alt. K3 tripped

The alarms are active when COOL DXS cooling function has been selected as active.
The alarms trip for the Cool DXS, when the control unit does not sense a replay on the digital input when the corresponding digital output is energized.



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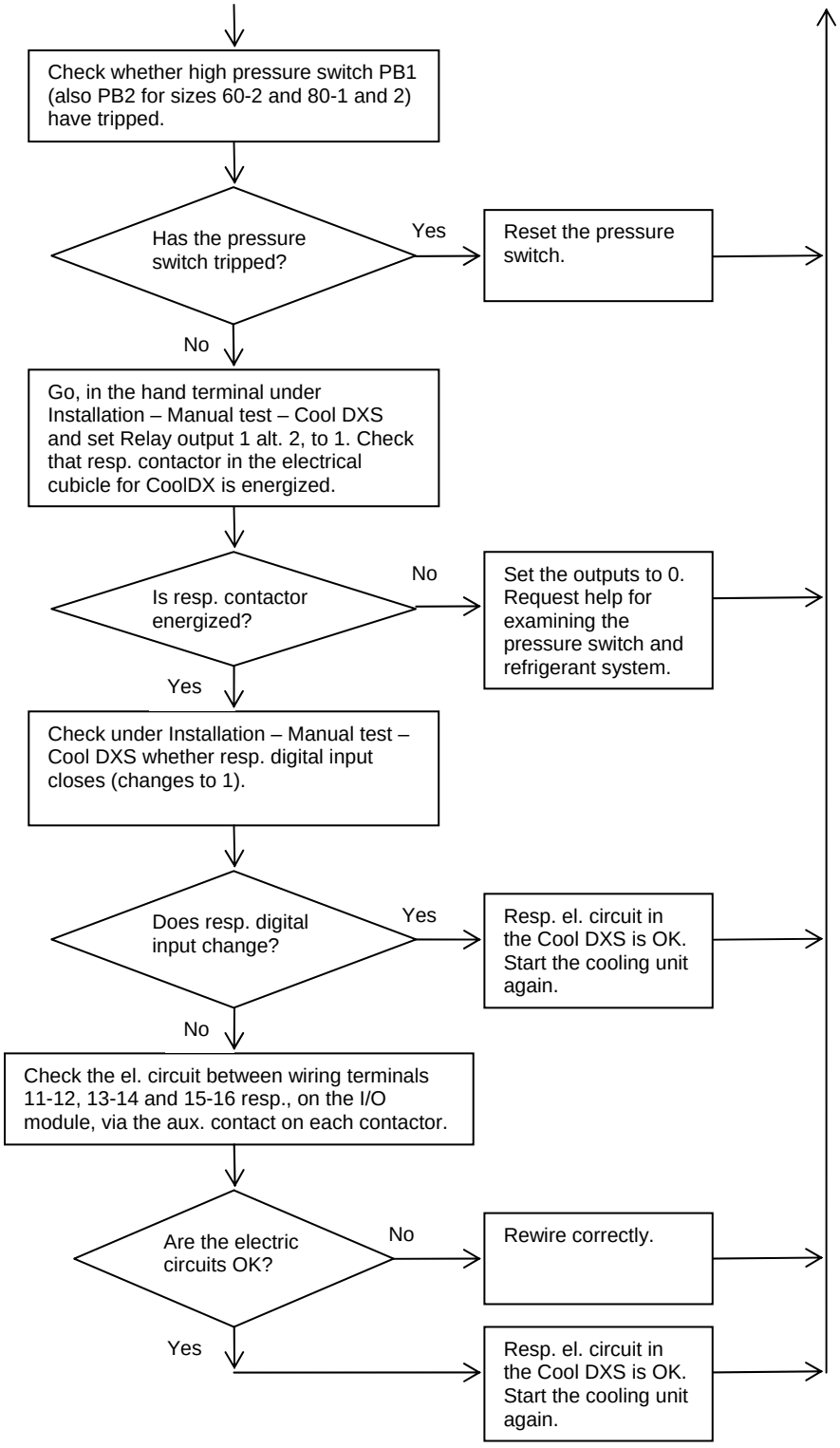

2.88 Alarms No. 167 - 169: Cool DXS K1, K2 alt. K3 too many restarts

The alarm is active when the Cool DXS cooling function is selected to be active.
The alarm trips when the control unit has restarted each cooling compressor more than 20 times during a 2 hour period.
Check the settings and other causes why the compressors stop after so short a time.

2.89 Alarm No. 170: Cool DXS Fan tripped

The alarm is active when the Cool DXS cooling function is selected to be active.
The alarm trips when the thermostatic contact in one of the fan motors has tripped.
The thermostatic contacts are coupled in a series to connections 17-18 on the IQnomic Plus module.
Measure ahead to determine which fan motor has become.

2.90 Alarm No. 171: Cool DX-2/DXS Incorrect phase sequence

The alarm is active when the CoolDX-2 or Cool DXS cooling function is selected to be active.
The alarm trips when the PSC2 relay, which monitors the phase sequence on the incoming power supply, initiates an alarm indicating the presence of an incorrect phase sequence.

2.91 Alarms No. 172 – 199: Spares.