## Alarm Codes

## Alarm Codes for

Set Free Side Flow 2-Pipe,
Modular \& Hi Efficiency Modular 2-Pipe heat pump / 3-Pipe heat recovery

Alarm Codes for
Utopia IVX Comfort, IVX Premium, ES and IVX Centrifuga

If RUN lamp flashes for 2 seconds, there is a failure in transmission between the indoor unit and the remote control switch.
Possible causes are

- The remote cable is broken
- Contact failure in the remote control cable
- IC or microcomputer defective
- In all cases, contact your service provider

If RUN lamp flashes 5 times ( 5 seconds) with unit number and alarm code displayed, note the alarm code (see table Alarm codes) and contact your service provider


Number of indoor units connected

| Model Code |  |
| :---: | :--- |
| Indication | Model |
| H | Heat Pump |
| P | Inverter |
| F | Multi |
| I | Cooling |
| E | Onit |
| L | KPI |


| Code No. | Category | Type of Abnormality | Main cause |
| :---: | :---: | :---: | :---: |
| 01 | Indoor unit | Protection device activation (float switch) | Float switch activation (high water level in drain pan. <br> Blockage in drain pipe, float switch activated or drain pump faulty) |
| 02 | Outdoor unit | Protection device activation | HP switch activation (pipe blocked, excess refrigerant, non condensable present). Phase loss or incorrect rotation (Utopia only), float switch activation or MT open circuit (Centrifugal unit only) |
| 03 | Transmission | Abnormality between indoor and outdoor communication | Incorrect wiring, loose terminals, disconnect cable, blown fuse, outdoor unit switched off. Incorrect address setting |
| 04 | Transmission | Abnormality between inverter PCB and outdoor PCB | Inverter PCB - Outdoor PCB transmission fault (loose connector, broken cable, blown fuse) |
| 04. | Transmission | Abnormality between fan controller and outdoor PCB | Fan controller-Outdoor PCB transmission fault (loose connector, broken cable, blown fuse) |
| 05 | Power phase | Abnormality in the power phases | Incorrect power supply, inverted phase connection, open phase |
| 06 | Voltage | Abnormal inverter voltage Abnormal inverter controller voltage | Outdoor voltage drop, insufficient power. Capacitor or electronic problem on inverter compressor |
| 06. | Voltage | Abnormal inverter voltage Abnormal fan controller voltage | Outdoor voltage drop, insufficient power. Capacitor or electronic problem on fan motor |
| 07 | Refrigerant Cycle | Drop in discharge gas superheat | Excessive refrigerant charge, thermistor fault, incorrect wiring, incorrect pipe connection, expansion valve locked in open position (connector disconnected). |
| 08 | Refrigerant Cycle | Increase in discharge gas temperature | Insufficient refrigerant charge, blocked pipe, thermistor fault, incorrect wiring, incorrect pipe connection, expansion valve locked in closed position (connector disconnected) |
| 09 | Outdoor unit | Tripping of protection device | Fan motor failure |
| 08 | Transmission | Abnormality between outdoor and indoor units | Incorrect wiring, broken cable, loose terminals |
| 06 | Outdoor unit | Incorrect outdoor unit address setting. Main unit of the outdoor unit incorrectly set | Duplicate address setting of outdoor units (secondary units) in the same refrigerant cycle system |
| OC | Outdoor unit | Main unit of the outdoor unit incorrectly set | Two (or more) outdoor units defined as the "main unit" in the same refrigerant cycle system |
| 7 | Indoor unit | Air inlet thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 12 | Indoor unit | Air outlet thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 13 | Indoor unit | Frost protection thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 14 | Indoor unit | Gas pipe thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |

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| Code No. | Category | Type of Abnormality | Main cause |
| :---: | :---: | :---: | :---: |
| 15 | Indoor unit | Outdoor air thermistor (KPI) | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 16 | Indoor unit | Remote thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 17 | Indoor unit | Remote controller thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 19 | Fan motor | Indoor fan protection device activation | Fan motor overheating, locking |
| 20 | Outdoor unit | Discharge gas thermistor at top of compressor (Utopia) | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 21 | Outdoor unit | High pressure sensor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 22 | Outdoor unit | Outdoor air thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 23 | Outdoor unit | Discharge gas thermistor at top of compressor (VRF) | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 24 | Outdoor unit | Heat exchanger liquid pipe thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 25 | Outdoor unit | Heat exchanger gas pipe thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 26 | Outdoor unit | Suction gas thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 29 | Outdoor unit | Low pressure sensor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 37 | Outdoor unit | Incorrect capacity setting on outdoor and indoor units | Combination capacity incorrectly set. Excessive or insufficient total indoor unit capacity. |
| 32 | System | Loss of communication with 1 indoor unit (Multi system) | Loss of power, Incorrect wiring, loose terminals, disconnect cable, blown fuse, outdoor unit switched off. Incorrect address setting |
| 35 | Indoor unit | Indoor unit no. incorrectly set | Indoor unit no. duplicated in same refrigeration cycle |
| 36 | System | Incorrect indoor unit combination | Duplication of indoor unit number in same reftrigerant group |
| 38 | Outdoor unit | Abnormality in the control circuit for outdoor unit protection | Protection detection device fault (incorrect wiring of outdoor PCB) |
| 39 | Compressor | Abnormal operation current in constant speed compressor | Over current, blown fuse, current sensor fault, instant power failure, voltage drop, abnormal power supply or faulty compressor |
| 38 | Outdoor unit | Abnormal outdoor unit capacity | Outdoor unit capacity $>54 \mathrm{HP}$ |
| 36 | Outdoor unit | Voltage or combination of outdoor unit models incorrectly set | Voltage or combination of secondary and main units incorrectly set |
| 30 | Outdoor unit | Abnormal transmission between the main unit and the secondary units | Incorrect wiring, disconnected wiring, broken cable, PCB fault |
| 47 | Refrigerant Cycle | Cooling overload (possible activation of high pressure device) | O.U. pipe thermistor temp. is higher than $55^{\circ} \mathrm{C}$ and the compressor top temp. is higher than $95^{\circ} \mathrm{C}, \mathrm{O} . \mathrm{U}$. protection device is activated |
| 42 | Refrigerant Cycle | Heating overload (high-pressure device may be activated) | If I.U. freeze protection thermistor temp. is higher than 55 and compressor top temp. is higher than 95 |
| 43 | Protection device | Low-pressure decrease protection device activation | Defective compression (compressor or inverter fault, loose power supply connection |
| 44 | Refrigerant Cycle | Low-pressure increase protection device activation | Overload during cooling, high temperature with heating, locked expansion valve (loose connector) |
| 45 | Refrigerant Cycle | High pressure increase protection device activation | Blocked condenser, pipe blocked, excess refrigerant, non condensable present |
| 47 | Refrigerant Cycle | Low-pressure decrease protection device activation (vacuum protection) | "Insufficient refrigerant, refrigerant pipes blocked, expansion valve locked in closed position (VRF). Stoppage due to excessive decrease of evaporating temperature (Temp $<-35^{\circ} \mathrm{C}$ ) is activated 3 times in one hour, motor locked in heating mode." |

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| Code No. | Category | Type of Abnormality | Main cause |
| :---: | :---: | :---: | :---: |
| 48 | Inverter compressor | Inverter over current protection device activation | Overload, compressor fault |
| 51 | Inverter compressor | Abnormal inverter current sensor | Current sensor fault |
| 53 | Inverter compressor | Inverter error signal detection | Controller IC error signal detection (over current, low-voltage and short-circuit protection) |
| 54 | Inverter compressor | Abnormal inverter fin temperature | Abnormal inverter fin thermistor, heat exchanger clogging, fan motor fault |
| 55 | Inverter compressor | Inverter fault | Inverter PCB fault |
| 56 | Fan controller |  |  |
| 57 | Fan controller | Fan controller protection activation | Controller IC error signal detection (over current, low-voltage and short-circuit protection), instant over current. Abnormal rotation speed |
| 58 | Fan controller | Fan controller protection activation | Controller IC error signal detection (over current, low-voltage and short-circuit protection), instant over current |
| 59 | Inverter compressor | Abnormality inverter fin thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 58 | Fan controller | Abnormal fan controller fin temperature | Fin thermistor fault, heat exchanger clogging, fan motor fault |
| 56 | Fan controller | Over current protection activation | Fan motor fault |
| $5 C$ | Fan controller | Abnormal fan controller sensor | Current sensor fault (instant over current, increased fin temperature, low voltage, earthing fault, step-out) |
| 96 | KPI Unit Sensor | Room Temperature thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| 97 | KPI Unit Sensor | Fresh air thermistor | Incorrect wiring, disconnected wiring, broken cable, short circuit |
| $E E$ | System | Compressor protection alarm (cannot be reset from the remote controller) | This alarm code is displayed when the following alarms are triggered three times within six hours: $02,07,08,39,43$ to 45,47 |
| bl | Outdoor unit number setting | Unit number or address number of the outdoor unit incorrectly set | A number greater than 64 has been set for the refrigerant cycle or address |
| b5 | Indoor unit number setting | Connection number of the indoor unit incorrectly set | There are more than 17 units not corresponding to H-LINK II connected to one system |
| $[7$ | CH unit | Incorrect indoor unit connection | There are 2 or more CH units connected between the outdoor and indoor units |
| $[2$ | CH unit | Connection number of the indoor unit incorrectly set | There are 9 or more indoor units connected to the CH unit |
| $[3$ | CH unit | Incorrect indoor unit connection | Indoor units from different refrigerant cycles have been connected to the CH unit |

