

error codes





	RUN light	Description of trouble	Cause
	1 Time flash	Heat exchanger sensor 1 error	Broken heat exchanger sensor 1 wire, poor connector connection
	2 Time flash	Room temperature sensor error	Broken room temperature sensor wire, poor connector connection
TIMER light ON	3 Time flash	Heat exchanger sensor 3 error	Broken heat exchanger sensor 3 wire, poor connector connection
ON	5 Time flash	Active filter voltage error	Defective power supply
	6 Time flash	Indoor fan motor error	Defective fan motor, poor connector connection
	7 Time flash	Refrigerant insufficient Closed service valve Heat exchanger sensor 1 error	 Refrigerant is insufficient, leaking Closed service valve Heat exchanger sensor 1 wire, poor connector connection
	TIMER light		
	1 Time flash	Outdoor temperature sensor error	Broken outdoor sensor wire, poor connector connection
RUN light Keeps flashing	2 Time flash	Outdoor heat exchanger fluid pipe Sensor error	Broken heat exchanger fluid pipe sensor wire, poor connector connection
	3 Time flash	Discharge pipe sensor error	Broken discharge pipe sensor wire, poor connector connection
	5 Time flash	Suction pipe sensor error	Broken suction pipe sensor wire, poor connector connection





	TIMER light	Description of trouble	Cause
	1 Time flash	Current cut	Compressor locking.Open phase on compressor output.Short circuit of on power transistor.Closed service valve.
	2 Time flash	Trouble of outdoor unit	 Broken power transistor. broken compressor wire. Broken discharge pipe sensor wire, poor connector connection. Compressor blockage.
	3 Time flash	Over current	Overload operation, overcharge.
RUN light ON	4 Time flash	Power transistor error	Broken power transistor.
ON	5 Time flash	Over heat of compressor	Gas shortage.Defective discharge pipe sensor.Closed service valve.
	6 Time flash	Error of signal transmission	Defective power supply.Broken signal wire.Defective indoor/outdoor PCB.
	7 Time flash	Outdoor fan motor error	Defective fan motor, poor connector connection.
	Keep flashing	Cooling high pressure protection	Gas over chargeShort circuit of outdoor unit air flow.
RUN light 2 time flash	2 Time flash	Rotor lock	Defective compressor.Open phase on compressor.Defective outdoor unit PCB





Indoc indic	or unit cator	Outdoor unit	Wired remote Controller	Description of	
RUN light	TIMER light	Indicator LED	display (optional part)	Trouble	
1 time flash	Comes ON	Stays OFF	E6	Indoor heat exchanger sensor 1 error	Broken heat exchanger sensor 1 wire,Poor connector connection
2 time flash	Comes ON	Stays OFF	E7	Room temperature sensor error	Broken room temperature sensor wire,Poor connector connection
4 time flash	Comes ON	Stays OFF	E9	Drain abnormal (STM. SRRM only)	Float switch defective,Reverse gradient on drain
5 time flash	Comes ON	Stays OFF	E6	Indoor heat exchanger Sensor 2 error	Broken heat exchanger sensor 2 wire,Poor connector connection
6 time flash	Comes ON	Stays OFF	E16	Indoor fan motor error	Defective fan motor,poor connector connection
7 time flash	Comes ON	Stays OFF	E6	Refrigerant insufficient Closed service valve Heat exchanger sensor 1 error	 Refrigerant is insufficient, leaking Closed service valve Heat exchanger sensor 1 wire, poor connector connection
Keeps flashing	1 time flash	Keeps flashing	E38	Outdoor air temperature sensor error	Broken outdoor sensor wire,poor connector connection
Keeps flashing	2 time flash	Keeps flashing	E37	Outdoor heat exchanger sensor error	Broken heat exchanger fluid pipe sensor wire,poor connector connection
Keeps flashing	4 time flash	ON 4 sec OFF 4 sec	E39	Discharge pipe sensor error	Broken discharge pipe sensor wire,poor connector connection
Keeps flashing	5 time flash	Keeps flashing	E53	Suction pipe sensor error	Broken suction pipe sensor wire,poor connector connection
Keeps flashing	6 time flash	Keeps flashing	E41	Power transistor sensor error	Broken power transistor sensor wire,poor connector connection





	or unit cator	Outdoor unit	Wired remote Controller	Description of	
RUN light	TIMER light	Indicator LED	display (optional part)	trouble	
Come s ON	1 time flash	1 time flash	E42	Current cut	Compressor lockingOpen phase on compressor outputShort circuit on power transistor
Come s ON	2 time flash	2 time flash	E59	Trouble of outdoor unit	Defective power transistorBroken compressor wireCompressor blockage
Come s ON	3 time flash	3 time flash	E58	Current safe stop	Overload operationOvercharged
Come s ON	4 time flash	4 time flash	E41	Power transistor error	Broken power transistor
Come s ON	5 time flash	5 time flash	E36	Over heat of compressor	Gas shortageDefective discharge pipe sensor
Come s ON	6 time flash	6 time flash	E5	Error of signal transmission	Defective power supplyBroken signal wireDefective indoor/outdoor PCB
Come s ON	7 time flash	Comes ON	E48	Outdoor fan motor error	Defective fan motorPoor connector connection
2 time flash	2 time flash	7 time flash	El	Error of wired remote controller wiring	 Broken remote control wire Defective indoor unit PCB



ERROR CODES - R22 & R407C Units

Black = All Units

Red = 4, 5, 6 & 7 Series

Blue = 8 Series

Green = KX/KX2/KXR



Technical Support Spares & Warranty 01359 272211



		Checl	k Indicatio	ns			
Receive			Circuit		or Circuit	Fault at:	Details of fault
[if appl	icable	Вс	pard	В	oard		
Error Code	Red LED	Red LED	Green LED	Red LED	Green LED		
	-	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	No Fault	Normal operation.
	-	Stays Off	Lights Continuously	Stays Off	Lights Continuously	Indoor circuit board	 There is a unit, on the same network, where the indoor circuit board or the CPU has a fault.
No	-	Stays Off	Stays Off	Stays Off	Stays Off	Mains power	No mains power detected [power off or power failure]. T phase wire is open circuit.
indication	-	Flashes 3 times	Keeps Flashing	Stays Off	Keeps Flashing	Remote controller wiring	 Remote controller wires - X & Y connections are reversed. Remote controller wires - Y & Z connections are reversed. Remote controller wiring is open circuit. (X wire broken - a beep is produced and no indication is made. Z wire broken no beep and no indication).
	Stays Off	Flashes 3 times	Keeps Flashing	Stays Off	Keeps Flashing	Infra red receiver wiring	Open circuit or poor connection in receiver unit wiring. (Power - red. Ground - black)
	Keeps Flashing	(1) Lights or Stays Off	Undefined	Stays Off	Keeps Flashing	Indoor circuit board	Indoor circuit board or CPU failure.
	Keeps Flashing	Flashes 3 Times	Keeps Flashing	Stays Off	Keeps Flashing	Infra-red receiver	 Open circuit or poor connection in the signal cable (white) of the infra red receiver unit. Electrical noise interference of the infra red receiver unit.
	-	-	-	-	-	Remote controller wiring	Open circuit or poor connection of remote controller wiring. Electrical noise interference of the remote controller wiring. (Other electrical sources are too close to the controller cable causing interference)
E1	-	-	-	-	-	Indoor circuit board	Defective communication circuit on indoor circuit board
	-					Indoor circuit board	Indoor circuit board fault.
	-	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Interconnecting wiring	The remote controller wires XY&Z are connected to A & B terminals on the indoor unit terminal block. The indoor/outdoor signal wires A & B are connected in a loop. Indoor circuit board or CPU fault.
	-	(3) Flashes 3 times	Keeps Flashing	Stays Off	Keeps Flashing	Remote controller wiring	 A PAC remote controller is connected to the KX indoor unit. Remote controller wire Y is open circuit. Remote controller wires - X & Y connections are reversed.
E2	-	Flashes once	Keeps Flashing	Stays Off	Keeps Flashing	Indoor unit address	Duplication of indoor unit address. More than 49 indoor units are connected on a network.
E2	-	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Indoor unit address	Duplication of indoor unit number when addressing with the remote controller.

	Keeps Flashing	Flashes Twice	Keeps Flashing	Stays Off	Stays Off	Power supply	 No mains power at indoor or outdoor unit [power off or power failure]. Outdoor unit circuit board fault.
	Keeps Flashing	Flashes Twice	Keeps Flashing	Stays Off	Keeps Flashing	Interconnecting cable	 Open circuit or poor connection of the outdoor unit control cable. Incorrect address of the outdoor unit
	Keeps Flashing	Flashes Twice	Keeps Flashing	(1) Lights or Stays Off	Undefined	Outdoor unit power	No mains power at outdoor unit [power off or power failure].Outdoor unit circuit board fault.
E 3	Keeps Flashing	Flashes Twice	Keeps Flashing	Flashes 3 Times	Keeps Flashing	Outdoor unit address	Incorrect address of the outdoor unit.
	-	Flashes twice	Keeps Flashing	Lights or Stays Off	Undefined	Outdoor circuit board	Outdoor unit circuit board fault.
	-	Flashes twice	Keeps Flashing	Stays Off	Keeps Flashing	Incorrect address	 Incorrect address of the indoor unit. Incorrect address of the indoor unit and/or outdoor unit while trying to auto address [KX2 only].
	-	Flashes twice	Keeps Flashing	Stays Off	Keeps Flashing	Interconnecting cable	Open circuit or poor connection of outdoor unit control cable [Outdoor unit address not detected].
	-	Flashes twice	Keeps Flashing	Stays Off	Stays Off	Outdoor unit power	No mains power at outdoor unit.
E4	Keeps Flashing	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	Incorrect address	Incorrect address of the indoor / outdoor unit.
	Keeps Flashing	Flashes Twice	Keeps Flashing	Flashes Twice	Keeps Flashing	Interconnecting cable	 Open circuit or poor connection of the outdoor unit control cable. Electrical noise interference of the interconnecting control wiring. (Other electrical sources are too close to the controller cable causing interference)
	Keeps Flashing	Flashes Twice	Keeps Flashing	Stays Off	Stays Off	Outdoor unit power	No mains power at outdoor unit [power off or power failure]. The power cable is not connected to the outdoor circuit board.
E 5	Keeps Flashing	Flashes Twice	Keeps Flashing	(1) Lights or Stays Off	Undefined	Electrical noise	The outdoor unit circuit board or CPU is out of control while current is flowing.
	-	Flashes twice	Keeps Flashing	32 sec Time flash	Stays Off or Lights Continuously	Outdoor circuit board	Outdoor unit circuit board or CPU failure.
	-	Flashes twice	Keeps Flashing	Stays Off	Keeps Flashing	Interconnecting cable	 Indoor/outdoor unit transmission error. Wires A & B have been swapped after mains power was turned on.
	-	Flashes twice	Keeps Flashing	Stays Off	Stays Off	Outdoor unit power	No mains power at outdoor unit [power off or power failure].
E6	-	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	Indoor coil sensor	Indoor unit heat exchanger sensor [ThIR] defective (resistance is open circuit or closed circuit). Poor connection of sensor connector on the indoor PCB.
E 7	-	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	Indoor return air sensor	 Indoor unit return sensor [ThIA] defective (resistance is open circuit or closed circuit). Poor connection of sensor connector on the indoor PCB.



E8	Keeps	Flashes	Keeps	Stays Off	Keeps Flashing	Heating overload	Overload in heating (extraordinarily high indoor heat exchanger temperature). Indoor unit heat exchanger sensor [ThIR] failure (resistance)
	Flashing	Once	Flashing	July 5		Indoor circuit board	of sensor is closed circuit). • Abnormality of the heat exchanger sensor input.
<u> </u>							
						Condensate drain motor	Drain motor [DM] failure (drain motor open circuit or the drain motor is disconnected from the indoor PCB).
E 9	-	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	Condensate float switch	High limit of condensate still detected in drain tray (the drain motor can not remove the condensate – blockage in discharge pipe or condensate returning to drain tray). Float switch stuck in high position.
						Wiring of accessory	Incorrect wiring of condensate drain kit (typically on wall mounted indoor units).
						Indoor circuit board	Defective float switch input circuit on indoor PCB. Defective drain motor output circuit on indoor PCB.
E10	-	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Number of indoor units connected	17 or more indoor units are connected to one remote controller (maximum permitted: 16 indoor units)
E11	-	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Indoor unit address	More than one indoor unit is connected to a remote controller while trying to address the unit from the remote controller.
E12	-	Flashes once	Keeps Flashing	Stays Off	Keeps Flashing	Incorrect address	 One or more units (indoor or outdoor) are still addressed at 48 or 49 [factory setting] While trying to auto address, one or more of the units (either indoor or outdoor) is not set at 49. Auto address is not possible on the system you are commissioning (Auto address is only possible on a single KX2 system).
E14	-	-	-	-	-	Master / slave set up	Incorrect setting of SW2 on indoor unit PCB when setting up a master / slave system. Incorrect control wiring between master and slave(s) [XYZ]. Open circuit of control wiring between master and slave(s).
E28	-	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Remote controller sensor	Failure of the sensor within the remote controller.
	•			•			
E30	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	-	Indoor/outdoor unit connected error.



	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Twice	Keeps Flashing	Indoor unit address	Duplication of an indoor unit address number (U00 – U47).	
E31	-	Stays Off	Keeps Flashing	8 Time Flash	Keeps Flashing	Outdoor unit address	 Duplication of outdoor unit address. Incorrect outdoor unit address. Outdoor unit address number has been changed since the power was turned on. 	
E32	-	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Outdoor unit power	 The anti phase device has detected that two phases of the mains power need to be swapped. The [L2] phase of the mains power (primary side of contactor) has been detected as open phase. 	
E33	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Compressor current	 Abnormally high current drawn by compressor (CM). Open phase detected at L1 or L3 (secondary side of contactor). Faulty outdoor unit PCB. 	
	-	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Compressor current	Abnormal current drawn by inverter compressor (CM1). Abnormally high current drawn by fixed speed compressor (CM2).	
E34	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Twice	Keeps Flashing	Compressor current	Abnormally low current (or no current) detected by [CT] on L3. Open phase detected at L3 (secondary side of contactor).	
E34	-	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Compressor current	 Abnormally low current (or no current) detected by [CT] on L3. Open phase detected at L3 (secondary side of contactor). Error on inverter board. 	
						Compressor discharge temperature	 The discharge gas temperature is abnormally high (>70°C). Insufficient refrigerant. 	
E35	-	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Outdoor heat exchanger sensor	Outdoor unit heat exchanger sensor [ThOR] defective (resistance is open circuit or closed circuit). Poor connection of sensor connector on the outdoor unit PCB.	
	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing		The discharge temperature is abnormally high.	
E36	-	Stays Off	Keeps Flashing	Flashes 5 Times	Keeps Flashing	Compressor discharge temperature	Insufficient refrigerant. Poor airflow through condenser coil.	
	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing		Compressor discharge temperature sensor [ThOD] defective.	
	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Outdoor heat exchanger	Outdoor unit heat exchanger sensor [ThOR] defective	
E37	-	Stays Off	Keeps Flashing	Keeps Flashing	Keeps Flashing	sensor	(resistance is open circuit).Poor connection of sensor connection on outdoor unit PCB.	
•	1 -	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	1		



	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing		Outside air temperature sensor [ThoA] defective (resistance)
E38	-	Stays Off	Keeps Flashing	Keeps Flashing	Keeps Flashing	Outdoor air sensor	is open circuit). Poor connection of sensor connection on outdoor unit PCB.
	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing		
	Keeps Flashing	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing		
E39	-	Stays Off	Keeps Flashing	Keeps Flashing	Keeps Flashing	Compressor discharge	Compressor discharge temperature sensor [ThOD] defective (resistance is open circuit).
	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	temperature sensor	Poor connection of sensor connection on outdoor unit PCB.
	_	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing		The high-pressure switch [63H or 63H1] has tripped.
E40	-	Stays Off	Keeps Flashing	Flashes 3 Times	Keeps Flashing	High pressure switch	System overcharged with refrigerant. One (or more) of the service valves is shut.
	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing		 Insufficient airflow (or no airflow) over the condensercoil.
	1	1	1	1	1	1 -	
E41	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Inverter power transistor	The power transistor for the inverter has overheated.
	1	Г	W	Г	1	<u> </u>	
E42	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Compressor current	Abnormally high current detected in inverter compressor.
E43	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Number of indoor units	The maximum number of indoor units connected to one outdoor unit has been exceeded.
	1		Waana.	Г	1	T	Township in a mark to the state of the state
E45	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Inverter wiring	Transmission error between inverter and outdoor unit PCB. Loose connection of [CnI]
	1	T		T	1	T	
E46	-	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Address setting	 There is a conflict of address settings. A combination of: automatic / manual / remote control addresses coexist on one network.
		T	T	T	ı	T	
						Refrigerant circuit	Refrigerant leak or shortage of refrigerant.
E57	_	_	_	_	_	Indoor heat exchanger sensor	 Indoor unit heat exchanger sensor [ThiR] is defective (short circuit).
						Indoor unit circuit board	Indoor unit PCB defective (defective sensor input circuit).
						Address setting	Incorrect addressing of SW1 when commissioning a Multi System.



ERROR CODES - R410A

Black = All R410A

Red = FD Split 1, 2 Series R410A Blue = KX4 & KXR4 Series R410A

(does not cover SRK & SCM MODELS)

Technical Support Spares & Warranty 01359 272211



Error	Indoor Cir	rcuit Board	Outdoor C	ircuit Board	Details of Fault
Code	Red LED	Green LED	Red LED	Green LED	
	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Normal operation.
	Stays Off	Stays Off	Stays Off	Stays Off	No mains power detected [power off or power failure]. L phase wire is open circuit.
No indication	Flashes 3 times	Keeps Flashing	Stays Off	Keeps Flashing	 Remote controller wires - X & Y connections are reversed. Remote controller wires - Y & Z connections are reversed. Remote controller wiring is open circuit. (X wire broken - a beep is produced and no indication is made. Z wire broken -no beep and no indication).
LCD Flashes continuou sly or Off	Stays Off	Keeps Flashing	Flashes Twice	Keeps Flashing	Open Circuit or poor indoor/outdoor interconnecting wiring
		0" 0			
	Stays Off	Off or On continuousl y	Stays Off	Keeps Flashing	Indoor circuit board or CPU failure.
	Off or On continuou sly	Off or On continuousl	Stays Off	Keeps Flashing	Indoor circuit board or CPU failure.
E1	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	 In group control, power supply to at least one indoor unit off Remote controller wire Y is open circuit Remote controller wires X and Y are reversed Faulty Indoor or Remote controller PCB Electrical noise interference
	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	 Remote controller wiring connected to A and B A and B wiring connected in closed loop Indoor unit PCB processor runs away
	Flashes 3 times	Keeps Flashing	Stays Off	Keeps Flashing	Remote controller wiring open circuit



	Flashes	Keeps		Keeps	Duplication of indoor unit address.
E2	once	Flashing	Stays Off	Flashing	 More than 49 indoor units are connected on a network
					•
	Flashes Twice	Keeps Flashing	Stays Off	Stays Off	No mains power at outdoor unit [power off or power failure].
E3	Flashes Twice	Keeps Flashing	Stays Off	Keeps Flashing	Incorrect address setting of the outdoor unit
	Flashes Twice	Keeps Flashing	On or Stays Off	Undefined	 No mains power at outdoor unit [power off or power failure].
	Flashes Twice	Keeps Flashing	Flashes Twice	Keeps Flashing	Outdoor/Indoor communication error
	Flashes Twice	Keeps Flashing	Stays Off	Stays Off	Outdoor unit control PCB failure Inverter parts faulty
E5	Flashes Twice	Keeps Flashing	Stays Off	Stays Off	 The outdoor power unit failure (where indoor/outdoor power supplies are separated) Indoor/outdoor communication error A and B wiring reversed after power on
	Flashes twice	Keeps Flashing	Stays Off	Keeps Flashing or irregular	Outdoor unit microcomputer failure
E 6	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	 Indoor unit heat exchanger sensor [ThIR] defective (resistance is open circuit or closed circuit). Poor connection of sensor connector on the indopce.
E 7	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	 Indoor unit return sensor [ThIA] defective (resistance is open circuit or closed circuit). Poor connection of sensor connector on the indo PCB.
					Overload in heating (extraordinarily high indoor heat
E8	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	exchanger temperature).
	Office	riasiling		i lasiling	Indoor unit heat exchanger sensor [ThIR] failure (resistance of sensor is closed circuit).
	<u> </u>	<u> </u>	I		Drain motor [DM] failure (drain motor open circui
					or the drain motor is disconnected from the indo PCB).
E9	Flashes Once	Keeps Flashing	Stays Off	Keeps Flashing	Condensate still detected in drain tray (the drain motor can not remove the condensate – blockage in discharge pipe or condensate returning to drain
				3	tray). • Float switch stuck in high position.
					Defective float switch input circuit on indoor PCE Defective drain motor output circuit on indoor PCE
	 				T -=
		Keeps	Stays Off	Keeps	 17 or more indoor units are connected to one

E10	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	17 or more indoor units are connected to one remote controller (maximum permitted: 16 indoor units)
E11	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	More than one indoor unit is connected to a remote controller while trying to address the unit from the remote controller.



E12	Flashes once	Keeps Flashing	Stays Off	Keeps Flashing	 One or more units (indoor or outdoor) are still addressed at 48 or 49 [factory setting] While trying to auto address, one or more of the units (either indoor or outdoor) is not set at 49. Auto address is not possible on the system you are commissioning (Auto address is only possible on a single KX2 system).
E14	Flashes 3 times	Keeps Flashing	Stays off	Keeps Flashing	 Incorrect setting of SW5 on indoor unit PCB when setting up a master / slave system. Incorrect control wiring between master and slave(s) [XYZ]. Open circuit of control wiring between master and slave(s).
E16	Stays off Flashes once	Keeps Flashing Keeps Flashing	Stays off Stays off	Keeps Flashing Keeps Flashing	Faulty indoor fan motorFaulty indoor fan motor
E28	Stays Off	Keeps Flashing	Stays Off	Keeps Flashing	Failure of the sensor within the remote controller.
E30	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Indoor/outdoor unit connected error.
E31	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 Duplication of an indoor unit address number (U00 – U47). Outdoor unit address setting error
E32	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 The anti phase device has detected that two phases of the mains power need to be swapped. The [L2] phase of the mains power (primary side of contactor) has been detected as open phase.
E34	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 Abnormally low current (or no current) detected by [CT] on L3. Open phase detected at L3 (secondary side of contactor).
E35	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 Outdoor unit heat exchanger sensor [ThOR] defective (resistance is open circuit or closed circuit). Poor connection of sensor connector on the outdoor unit PCB.
	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	Cooling high pressure
E36	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 The discharge temperature is abnormally high. Insufficient refrigerant. Compressor discharge temperature sensor [ThOD] defective.



	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 Outdoor unit heat exchanger sensor [ThOR] defective (resistance is open circuit). Poor connection of sensor connection on outdoor unit PCB. 		
			One time Flash Two time		E37-1 Outdoor heat exch thermistor failure (Tho-R1) Country C		
E37	Stays Off	Keeps Flashing	Flash Three time Flash	Keeps Flashing	E37-3 Outdoor heat exch thermistor failure (Tho-R3)		
		riasiling	Four time Flash Five time Flash	riasiling	E37-4 Outdoor heat exch thermistor failure (Tho-R4) E37-5 Outdoor heat exch thermistor failure (Tho-SC)		
			Six time Flash		E37-6 Outdoor heat exch thermistor failure (Tho-H)		
	,		,				
E38	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 Outside air temperature sensor [ThoA] defective (resistance is open circuit). Poor connection of sensor connection on outdoor unit PCB. 		
E39	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 Compressor discharge temperature sensor [ThOD] defective (resistance is open circuit). Poor connection of sensor connection on outdoor unit PCB. 		
E40	Stays Off	Keeps Flashing	Flashes Once	Keeps Flashing	 The high-pressure switch [63H or 63H1] has tripped. System overcharged with refrigerant. One (or more) of the service valves is shut. Insufficient airflow (or no airflow) over the condensercoil. 		
_	1						
E41	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	 The power transistor for the inverter has overheated. 		
E42	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Abnormally high current detected in compressor.		
	1						
E43	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	 The maximum number of indoor units connected to one outdoor unit has been exceeded. 		
-	1		ı				
E45	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	 Transmission error between inverter and outdoor unit PCB. Loose connection of [Cnl] 		



E63	Stays Off	Keeps	Flashes once	Keeps	Emergency stop of indoor unit		
	-	riashing	twice	riasililiy			
E60	Stays Off	Keeps Flashing	Flashes once or	Keeps Flashing	Compressor position detection error		
E59	Stays Off	Flashing	flash	Flashing	Compressor start-up error		
		Keeps	1 to 5 times	Keeps			
E57	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Refrigerant leak or shortage of refrigerant (FDCVA151 251)		
E56	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Power transistor thermistor faulty or disconnected (FDCVA151-251)		
			T T				
E55	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Compressor under dome thermistor disconnected		
			twice		2 disconnection/output error		
	Stays Off	Keeps Flashing	Flashes twice	Keeps Flashing	High pressure sensor (PSH) disconnection/output error		
E54		Kaana	Flashes once	<u> </u>	E54- Low pressure sensor (PSL) disconnection/output error		
	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Low pressure sensor (PSL) disconnected/output error		
E53	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Suction pipe thermistor (Tho-S) disconnected		
	Otayo On	Flashing	or twice	Flashing	- 1 one transfer eventedt		
E51	Stays Off Stays Off	Flashing Keeps	Flashes once Flashes once	Flashing Keeps	Inverter PCB fault Power transistor overheat		
	Stays Off	Flashing Keeps	Flashes once	Flashing	Low voltage detected		
E49	Stays Off	Keeps Flashing Keeps	Flashes once	Keeps Flashing Keeps	Low pressure fault		
			Г		Ţ		
E48	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	DC Outdoor Fan motor fault		
E47	Stays Off	Keeps Flashing	Flashes once	Keeps Flashing	Inverter over voltage		
E46	Stays Off	Keeps Flashing	Off	Keeps Flashing	A combination of: automatic / manual / remote control addresses coexist on one network.		





2.3 Contents of troubleshooting

(a) List of inspection displays

1) Indoor and outdoor units

massi una	outdoor units			
Remote controller error code	7-segment display	Name of inspection	Classification	Page
E1	_	Remote controller communication error	Communication error	63
E2	-	Duplicated indoor unit address	Address setting error	64
E3	_	Outdoor unit signal line error	Address pairing setting error	65
E5	_	Communication error during operation	Communication error	66
E6	_	Indoor heat exchanger temperature thermistor anomaly (Thi-R)	Thermistor wire breakage	67
E7	_	Indoor return air temperature thermistor anomaly (Thi-A)	Thermistor wire breakage	68
E9	_	Drain trouble	System error	69
E10	-	Excessive number of indoor units (more than 17 units) by controlling one remote controller	Communication error	70
E11	-	Address setting error of indoor units	Address setting error	70-1
E12	_	Address setting error by mixed setting method	Address setting error	71
E16	_	Indoor fan motor anomaly (FDT series)	DC fan motor error	72
210	_	Indoor fan motor anomaly (FDK series)	DC fan motor error	73
E18		Address setting error of master and slave indoor units	Address setting error	73-1
E19	_	Indoor unit operation check drain motor check mode anomaly	Setting error	74
E28		Remote controller temperature thermistor anomaly (ThC)	Thermistor wire breakage	75
E30	E30	Unmatch connection of indoor and outdoor unit	System error	76
E31	E31	Duplicated outdoor unit address No.	Address setting error	77
E32	E32	Open L3 Phase on power supply at primary side	Site setting error	78
E36	E36-1, 2	Discharge pipe temperature anomaly (Tho-D1, D2)	System error	79
£30	E36-3	Liquid flooding anomaly	System error	80
E37	E37-1, 2, 3 E37-4, 5 E37-5, 6	Outdoor heat exchanger temperature thermistor (Tho-R) and subcooling coil temperature thermistor (Tho-SC, -H) anomaly	Thermistor wire breakage	81
E38	E38	Outdoor air temperature thermistor anomaly (Tho-A)	Thermistor wire breakage	82
E39	E39-1, 2	Discharge pipe temperature thermistor anomaly (Tho-D1, D2)	Thermistor wire breakage	83
E40	E40	High pressure anomaly (63H1-1, 2 activated)	System error	84
E41 (E51)	E41 (E51)-1, 2	Power transister overheat	System error	85
E42	E42-1, 2	Current cut (CM1, 2)	System error	86
E43	E43-1 E43-2	Excessive number of indoor units connected, excessive total capacity of connection	Site setting error	87
E45	E45-1, 2	Communication error between inverter PCB and outdoor control (PCB)	Communication error	88
E46	_	Mixed address setting methods coexistent in same network	Address setting error	89
E48	E48-1, 2	Outdoor DC fan motor anomaly	DC fan motor error	90
E49	E49	Low pressure anomaly	System error	91
E53/E55	E53/E55-1, 2	Suction pipe temperature thermistor anomaly (Tho-S), Under-dome temperature thermistor anomaly (Tho-C1, C2)	Thermistor wire breakage	92
E54	E54-1 E54-2	High pressure sensor (PSH)/Low pressure sensor (PSL) anomaly	Thermistor wire breakage	93
E56	E56-1, 2	Power transitor temperature thermistor anomaly (Tho-P1,Tho-P2)	Thermistor wire breakage	94
250				0.5
E58	E58-1, 2	Anomalous compressor by loss of synchronism	System error	95
	E58-1, 2 E59-1, 2	Anomalous compressor by loss of synchronism Compressor startup failure (CM1, 2)	System error System error	95 96
E58			-	
E58 E59	E59-1, 2	Compressor startup failure (CM1, 2)	System error	96

SL-1N-E SL-2N-E SL-3N-E		Indoor unit control PCB		Outdoor unit control PCB		Location	Description of trouble	Repair	
Error code	Red LED	Red LED	Green LED	Red LED	Green LED	trouble		method	
E75	Keeps flashing	Stays OFF	Keeps flashing	Stays OFF	flaching	SI 2N E		Replacement	

2. PAC Fault Codes MAINTENANCE DATA



2.1 FDT, FDEN, FDU, FDUM, FDF series

2.1.1 Diagnosing of microcomputer circuit

(1) Selfdiagnosis function

(a) Check indicator table

Whether a failure exists or not on the indoor unit can be know by the contents of remote control error code, indoor unit green LED (power pilot lamp and microcomputer normality pilot lamp) or red LED (check pilot lamp).

(i) Indoor unit

	In c	ase of t	hese inc	loor unit errors, the	butdoor control PCB Red LED stays OFF.		
Remote	control		ontrol PCB				D-(
Error code	ode Red LED Red LED LED (1)		Location of trouble	Description of trouble	Repair method	Reference page	
Elloi code	Ked LED	Keu LED	LED (1)				
		Store OFF	Keeps		Normal operation		
		Stays OFF	flashing		Tomas operation		
No-indication	Stays OFF	Stays OFF	Stays OFF	Indoor unit power supply	Power OFF, broken wire/blown fuse, broken transformer wire	Repair	73
		*	Keeps	Remote control wires	Poor connection, breakage of remote control wire * For wire breaking at power ON, the LED is OFF.	Repair	
		3-time flash	flashing	Remote control	Defective remote control PCB	Replacement of remote control	74
⊕WAI		Stays OFF	Keeps	Indoor-outdoor units connection wire	Poor connection, breakage of indoor-outdoor units connection wire	Repair	75 ~ 79
INSPE	CT I/U	Says of 1	flashing	Remote control	Improper setting of master and slave by remote control Poor connection of remote control signal wire (White)		
E f	-		* Keeps flashing	Remote control wires (Noise)	* For wire breaking at power ON, the LED is OFF Intrusion of noise in remote control wire * For wire breaking at power ON, the LED is OFF * Intrusion of noise in remote control wire * For wire breaking at power ON, the LED is OFF * Intrusion of noise in remote control wire * For wire breaking at power ON, the LED is OFF * Intrusion of noise in remote control wire * The property of the leaf of the l	Repair	00
_ '		Stays OFF		Remote control indoor control		Replacement of	80
				PCB	*• Defective remote control or indoor control PCB (defective communication circuit)?	remote control or PCB	
		2-time	Keeps	Indoor-outdoor units connection	Poor connection of wire between indoor-outdoor units during operation	TCB	
		flash	flashing	wire	(disconnection, loose connection) • Anomalous communication between indoor-outdoor units by noise, etc.	Repair	
E5		2-time flash	Keeps flashing	(Noise)	CPU-runaway on outdoor sub PCB	Power reset or Repair	81
				Outdoor sub PCB	*• Occurrence of defective outdoor sub PCB on the way of power supply (defective communication circuit)?	Replacement of	
		2-time flash	Keeps flashing	Outdoor sub PCB	Defective outdoor sub PCB on the way of power supply	PCB	
				Fuse Indoor heat exchanger tempera-	Blown fuse Defective indoor heat exchanger temperature thermistor(defective element, broken wire,	Replacement	
E5		1-time flash	Keeps flashing	ture thermistor	short-circuit) • Poor contact of temperature thermistor connector	of temperature thermistor	82
				Indoor control PCB	*• Defective indoor control PCB (Defective temperature thermistor input circuit)?	Replacement of PCB	
				Indoor return air temperature	Defective indoor return air temperature thermistor(defective element, broken wire, short-circuit)	Kepiacement, repair	
		1-time flash	Keeps flashing	thermistor	*Poor contact of temperature thermistor connector	of temperature thermistor	83
L 1				Indoor control PCB	*- Defective indoor control PCB (Defective temperature thermistor input circuit)?	Replacement of PCB	
	Keeps flashing		l	Installation or operating condi- tion	Heating over-load (Anomalously high indoor heat exchanger temperature)	Repair	
	inasining	1-time	Keeps	Indoor heat exchanger tempera-		Replacement of	
<u> </u>		flash	flashing	ture thermistor	Defective indoor heat exchanger temperature thermistor (short-circuit)	temperature therm-	84
: 13				Indoor control PCB	*- Defective indoor control PCB (Defective temperature thermistor input circuit)?	Replacement of PCB	
= 15				Drain trouble	• Defective drain pump (DM), broken drain pump wire, disconnected connector	Replacement, repair of DM	
<u>E 9</u> 7		1-time	Keeps	Float switch	Anomalous float switch operation (malfunction)	Repair	85
<u> 19</u>		flash	flashing	Indoor control PCB	*• Defective indoor control PCB (Defective float switch input circuit) *• Defective indoor control PCB (Defective DM drive output circuit)?	Replacement of PCB	
				Option	Defective optional parts (At optional anomalous input setting)	Repair	
				Number of connected indoor units	When multi-unit control by remote control is performed, the number of units is over	Repair	86

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Stays OFF	Keeps flashing	Address setting error	Address setting error of indoor units	Repaie	87
Keeps	Keeps	Indoor unit No. setting	No master is assigned to slaves.		
flash	flash flashing	Remote control wires	Anomalous remote control wire connection. broken wire between master and slave units	керан	00
1(2)-time	1(2)-time Keeps	Fan motor	Defective fan motor		
flash	flashing	Indoor power PCB	Defective indoor power PCB	Replacement	07
1-time flash	Keeps flashing	Address setting error	Address setting error of master and slave indoor units	Repair	90
1-time flash	Keeps flashing	Indoor control PCB	Improper operation mode setting	Repair	91

Remote	Remote control Indoor control PCB					Reference	
Error code	Red LED	Red LED	Green LED (1)	Location of trouble	Description of trouble	Repair method	page
	Compared to the content of the con		Keeps	Fan motor	Defective by rotation speed of fan motor	Replacement, repair	92
			flashing	Indoor power PCB	loor power PCB • Defective indoor power PCB		94
			Panel switch detection	Defective panel switch operation (FDT only)	Repair	93	
E28			, A	Broken wire of remote control temperature thermistor	Repair	94	

Notes (1) Normal indicator lamp (Indoor unit: Green) extinguishes (or lights continuously) only when CPU is anomalous. It keeps flashing in any trouble other than anomalous CPU.

(ii) Outdoor unit

Remote c	ontrol	Indoor control PCB Out		Outdoor control PCB				Reference				
Error code	Red LED	Red LED	Green LED	Red LED	Location of trouble	Description of trouble	Repair method	page				
					Installation, operation status	Higher outdoor heat exchanger temperature	Repair					
E35		Stays OFF	Keeps flashing	2-time flash	Outdoor heat exchanger temperature sensor	Defective outdoor heat exchanger temperature sensor	Replacement, repair of temperature sensor	95				
					Outdoor main PCB	*• Defective outdoor main PCB (Defective temperature sensor input circuit)?	Replacement of PCB					
					Installation, operation status	Higher discharge temperature	Repair					
E36		Stays OFF	Keeps flashing	5-time flash	Discharge pipe temperature sensor	Defective discharge pipe temperature sensor	Replacement, repair of temperature sensor	96				
					Outdoor main PCB	*• Defective outdoor main PCB (Defective temperature sensor input circuit)?	Replacement of PCB					
E37		Stays OFF	Keeps flashing	8-time flash	Outdoor heat exchanger temperature sensor	Defective outdoor heat exchanger temperature sensor, broken wire or poor connector connection	Replacement, repair of temperature sensor	97				
			nasning		Outdoor main PCB	*• Defective outdoor main PCB (Defective temperature sensor input circuit)?	Replacement of PCB					
E38		Stays OFF	Keeps	8-time flash	Outdoor air temperature sensor	Defective outdoor air temperature sensor, broken wire or poor connector connection	Replacement, repair of temperature sensor	98				
			masning						Outdoor main PCB	*• Defective outdoor main PCB (Defective temperature sensor input circuit)?	Replacement of PCB	
E 39	Keeps	Stays OFF	Keeps	8-time flash	Discharge pipe temperature sensor	Defective discharge pipe temperature sensor, broken wire or poor connector connection	Replacement, repair of temperature sensor	99				
	- Indoming		flashing		Outdoor main PCB	*• Defective outdoor main PCB (Defective temperature sensor input circuit)?	Replacement of PCB					
		Stays OFF	Keeps flashing	4-time flash	Installation, operation status	Service valve (gas side) closing operation	Replacement	100				
E42		Stays OFF	Keeps	1-time flash	Outdoor main PCB, compressor	Current cut (Anomalous compressor over-current)	Replacement of PCB	101 · 102				
			flashing		Installation, operation status	Service valve closing operation	Repair					
EYT		Stays OFF	Keeps	1-time flash	Outdoor main PCB	• Over voltage	Repair	103				
			flashing	2-time flash	7	Defective active filter	PCB replacement					
E48		Stays OFF	Keeps flashing	ON	Fan motor	Defective fan motor Defe	Replacement	104				
E5 1		Stays OFF	Keeps	1-time flash	Outdoor main PCB Power transistor error	Defective outdoor main PCB Power transistor error	Replacement of	105				
			flashing	<u> </u>	(outdoor main PCB) Operation status	Shortage in refrigerant quantity	PCB Repair					
E57		Stays OFF	Keeps flashing	2-time flash	Installation status	Service valve closing operation	Service valve opening check	106				
		Stays OFF	Keeps flashing	3-time flash	Overload operation Overcharge Compressor locking	Current safe stop	Replacement	107				
E59		Stays OFF	Keeps flashing	2-time flash	Compressor, outdoor main PCB	Anomalous compressor startup Voltage drop	Replacement	108				
E 50		Stays OFF	Keeps flashing	7-time flash	Compressor	Anomalous compressor rotor lock	Replacement	109				
_ WAIT	_	Stays OFF	Keeps flashing	6-time flash	indoor-outdoor connection wire	Poor connection, breakage of indoor-outdoor units connection wire	Repair	_				
Note (1) *		.1 1		1.1	no that in audinous di	is an axis it commot identify the cause definitely and if the trouble is	. 11	11				

Note (1) * mark in the description of trouble means that, in ordinary diagnosis, it cannot identify the cause definitely, and, if the trouble is repaired by replacing the part, it is judged consequently that the replaced part was defective.

^{(2) *} mark in the description of trouble means that, in ordinary diagnosis, it cannot identify the cause definitely, and, if the trouble is repaired by replacing the part, it is judged consequently that the replaced part was defective.