

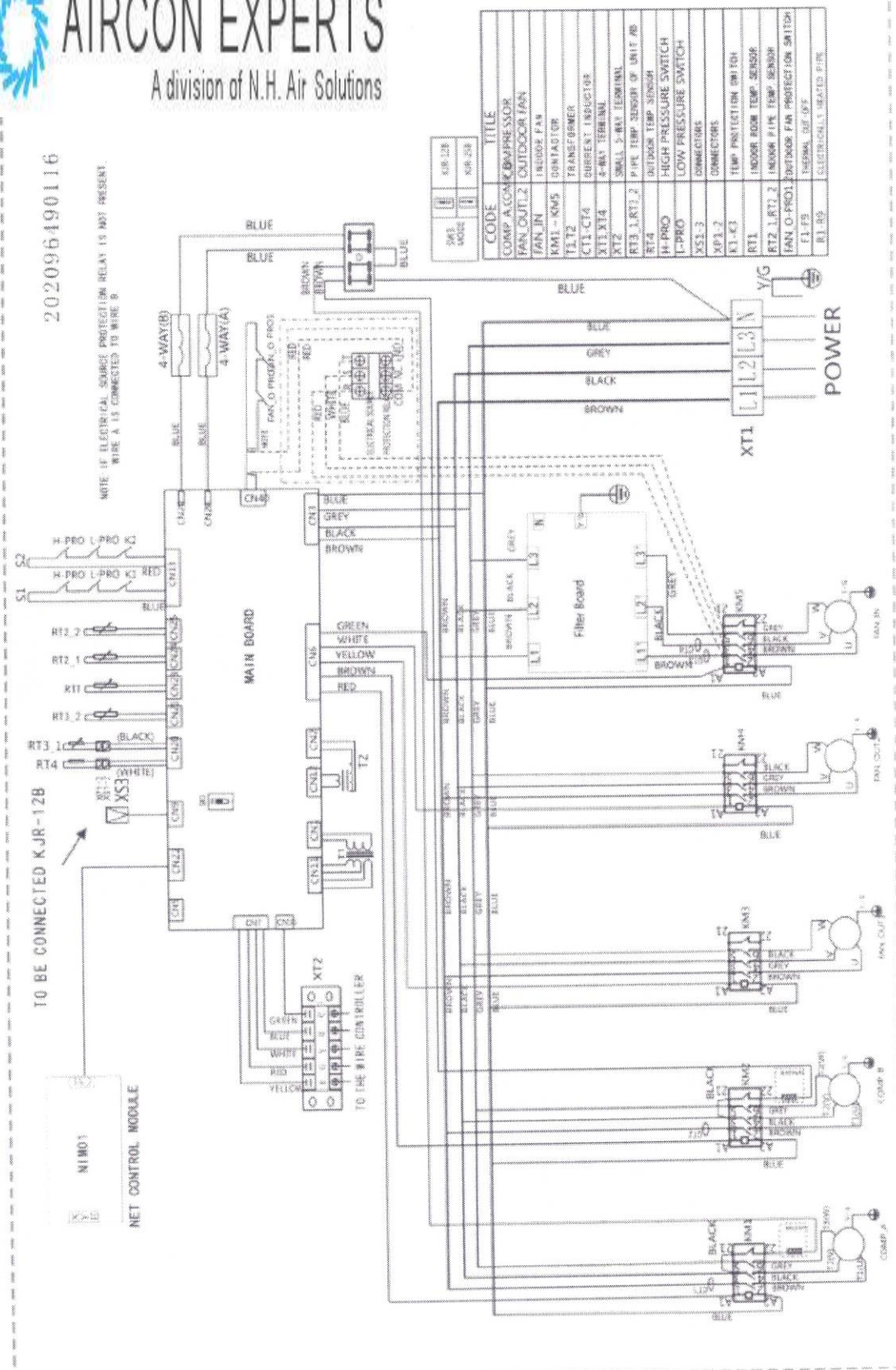


AIRCON EXPERTS

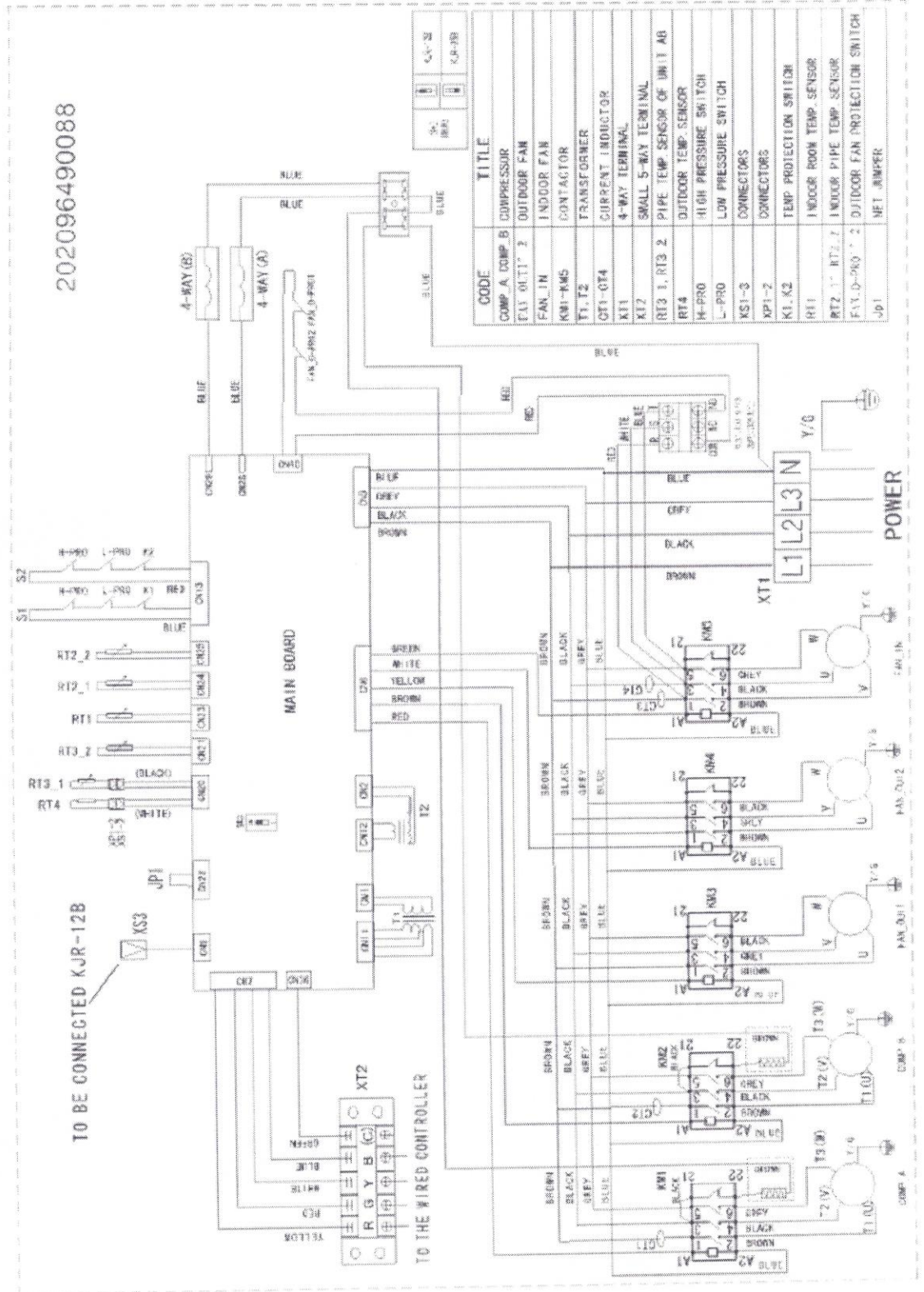
A Division of N.H. Air Solutions

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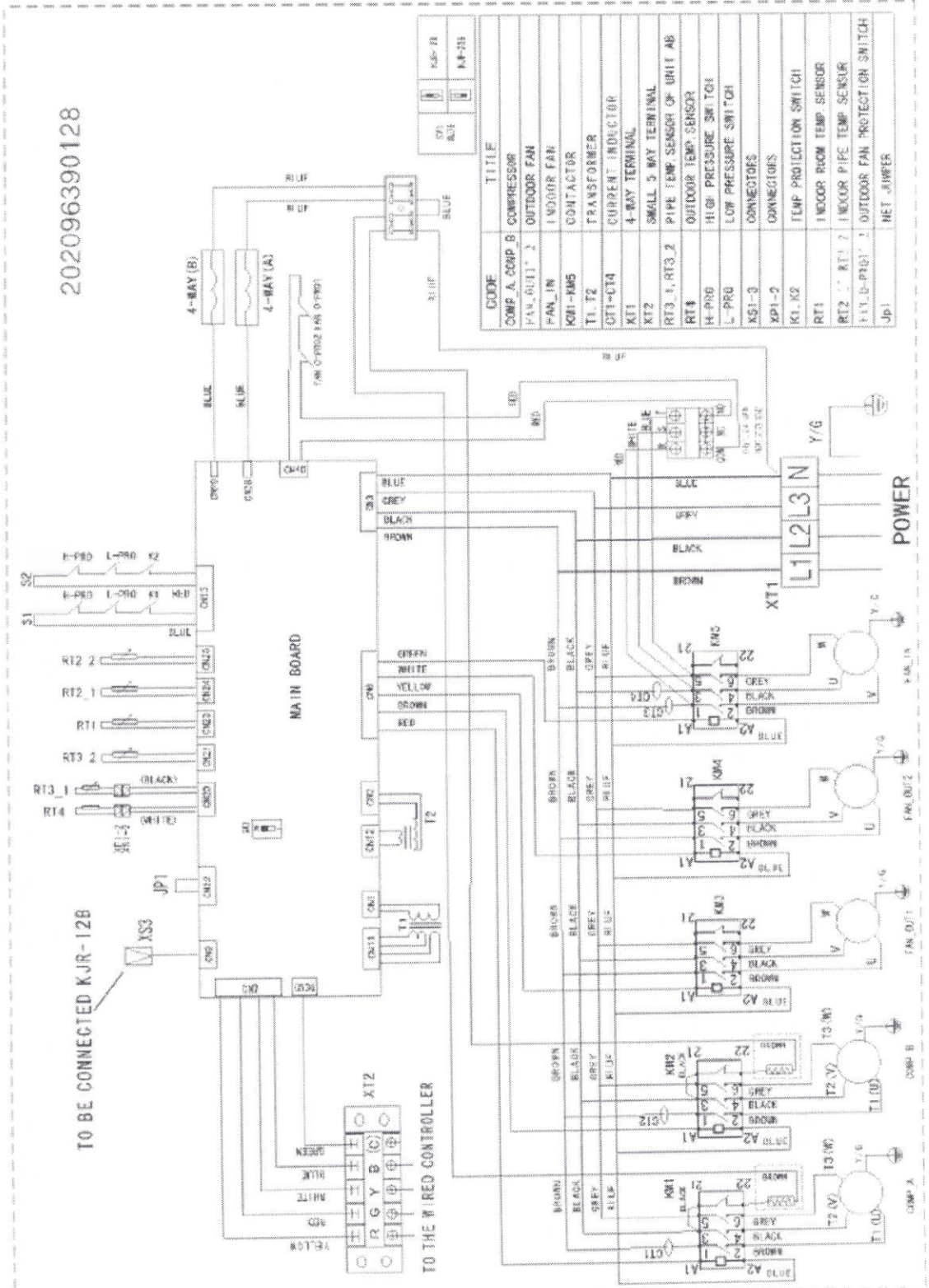
NOTE: IF ELECTRICAL SOURCE PROTECTION RELAY IS NOT PRESENT, WIRE A IS CONNECTED TO WIRE B



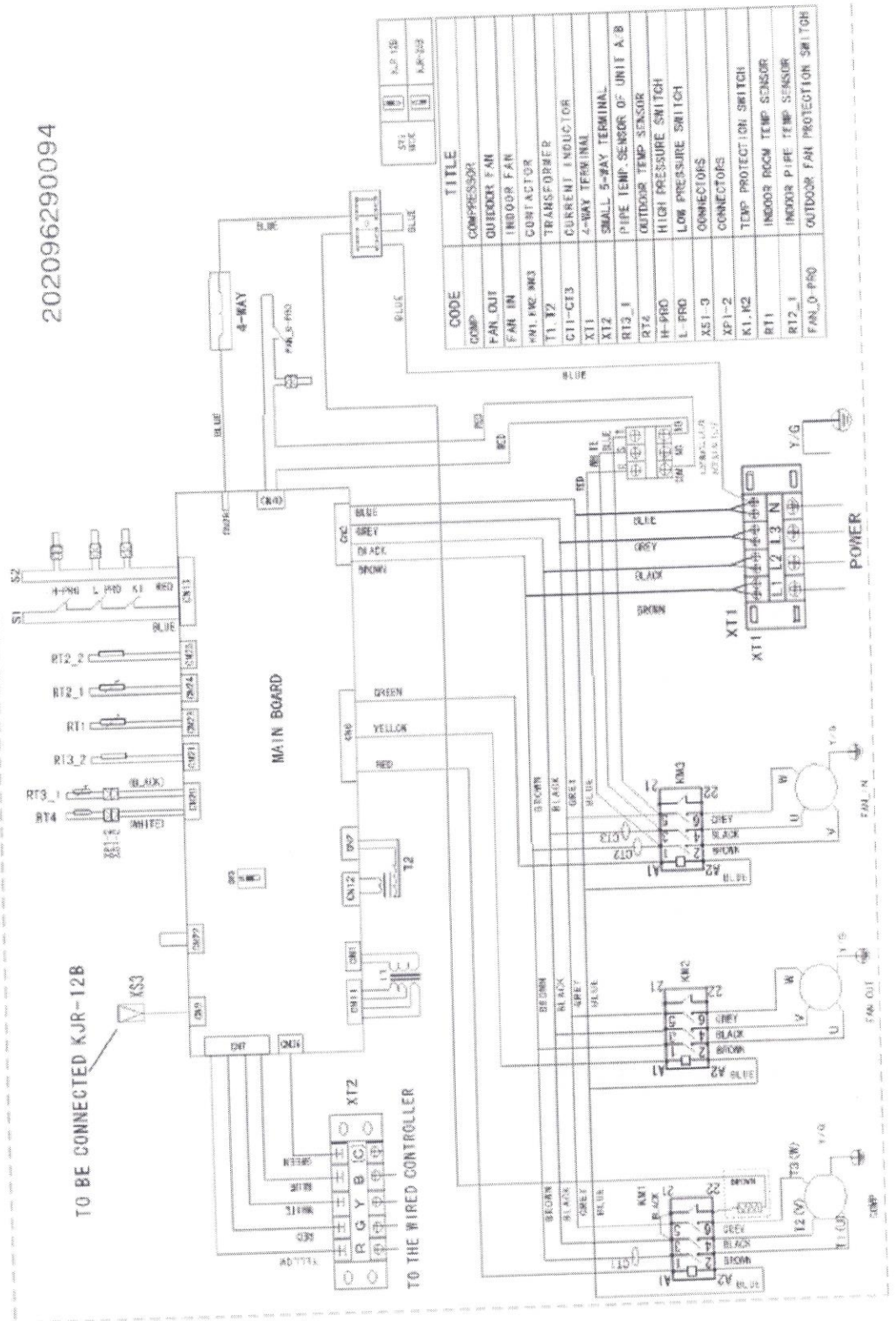
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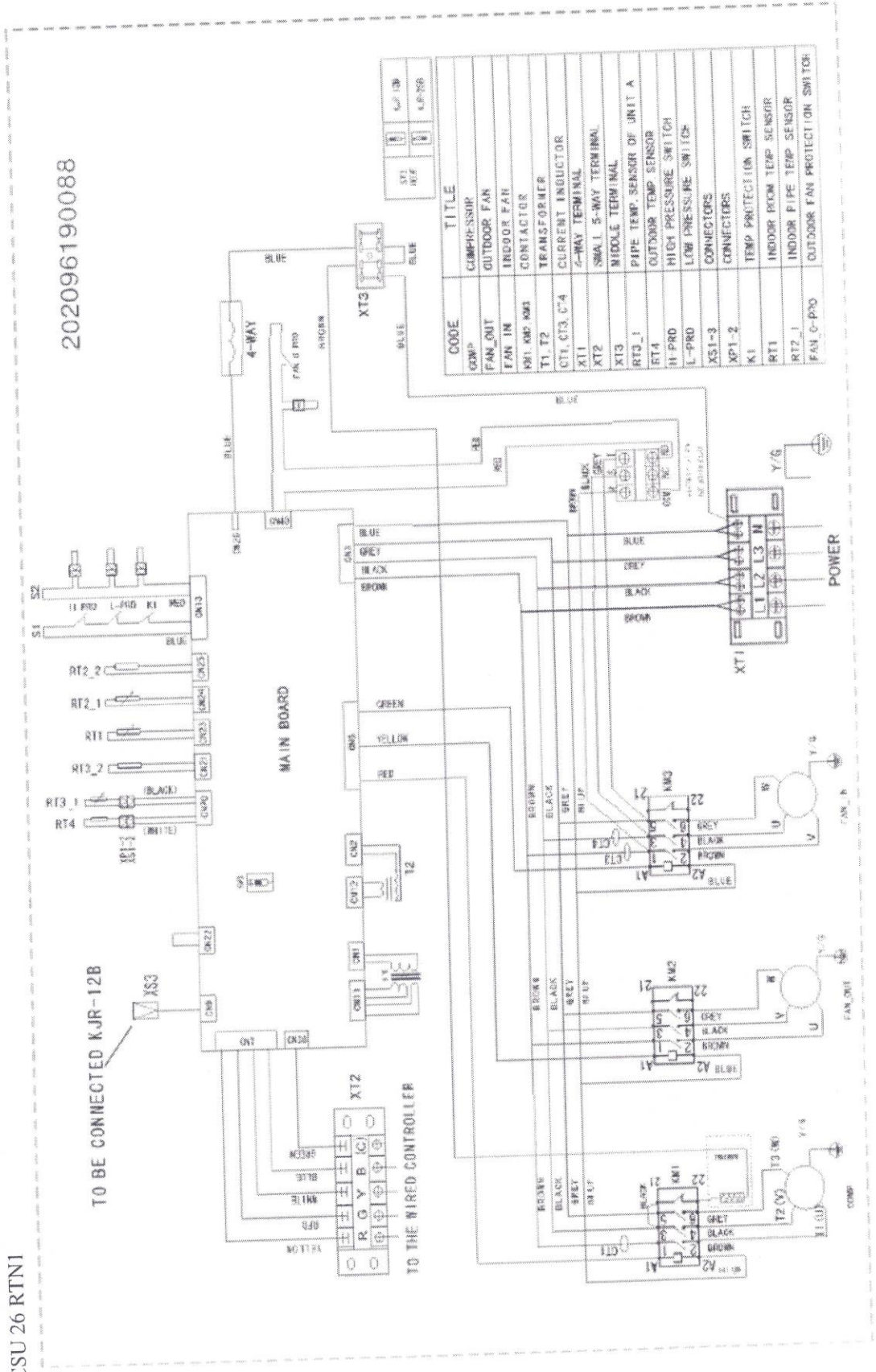


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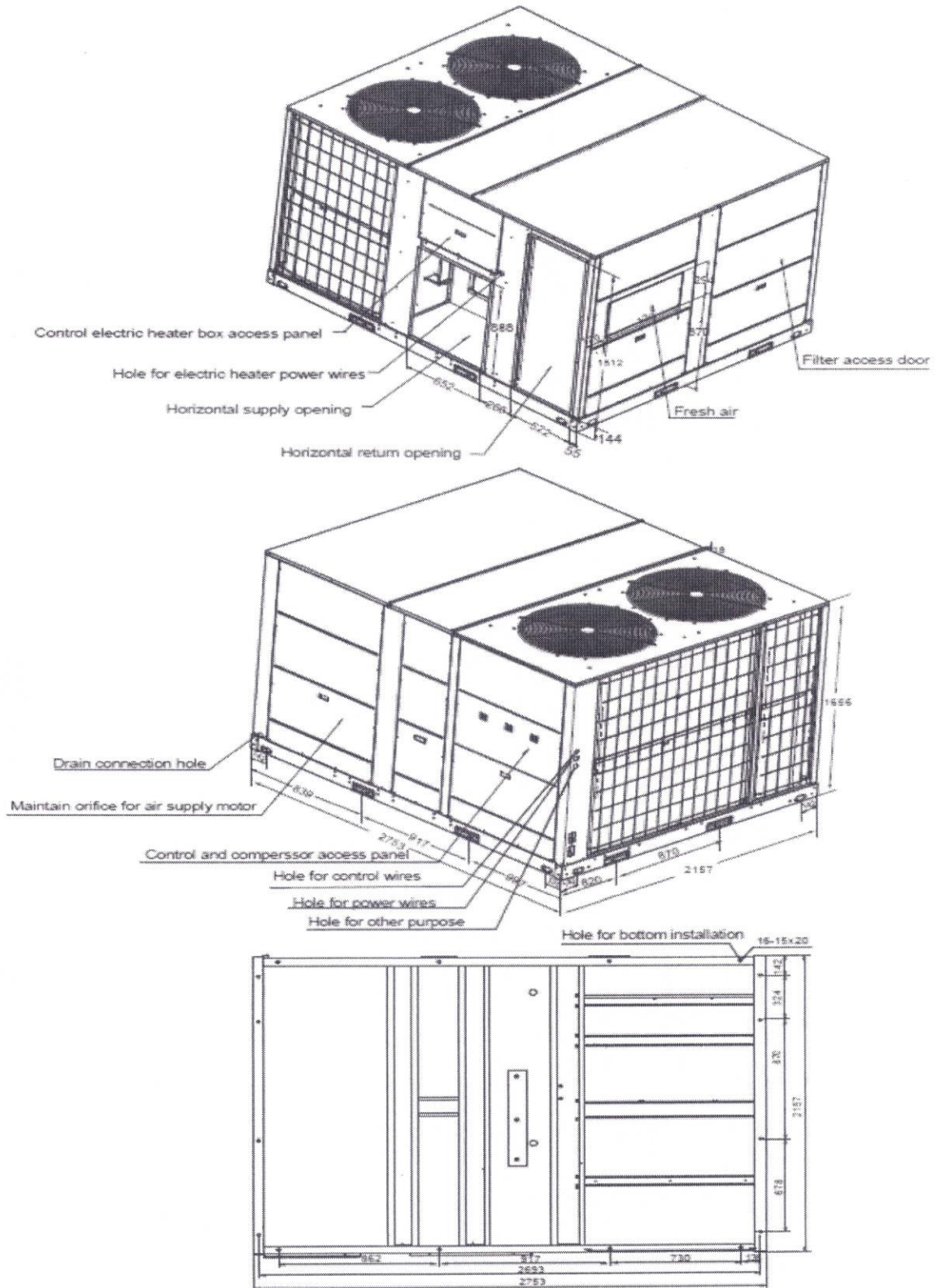


Wiring Diagrams

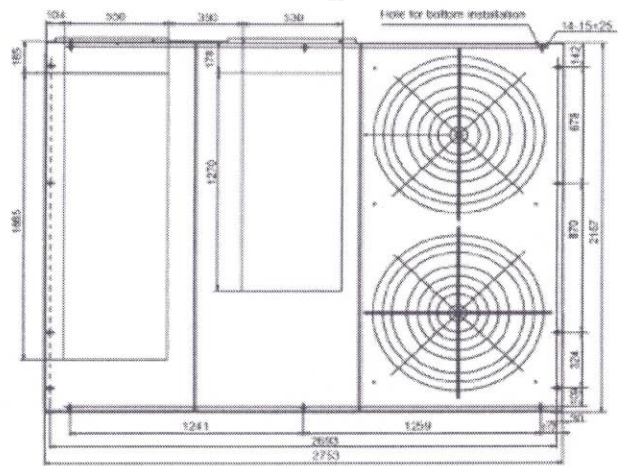
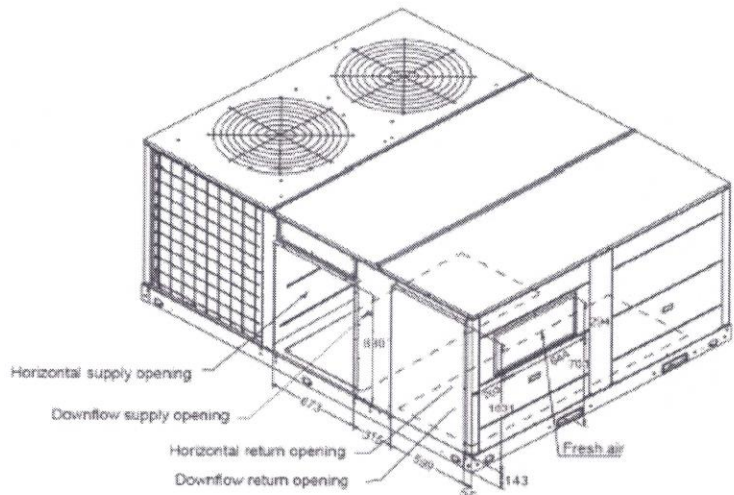
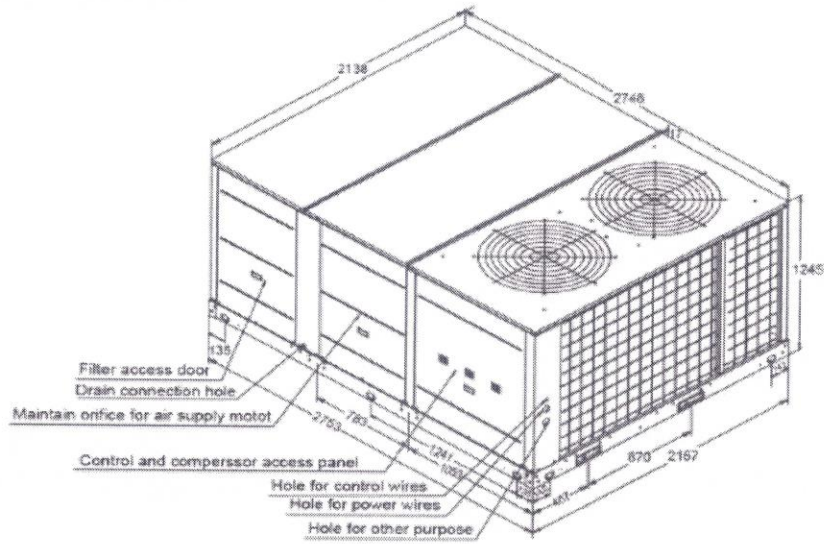
RTN1



V. CSU 98 TRN1

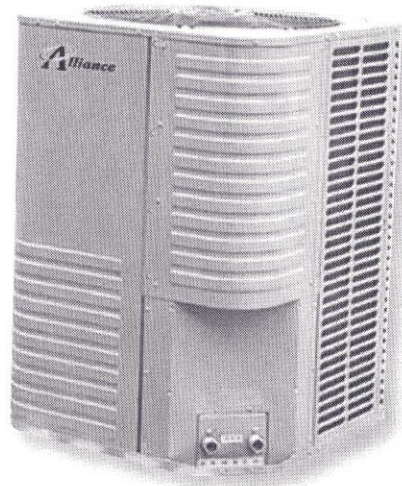


IV. CSU 70 RTN1



Commercial water heater

Display	Failure
E1	Phase rotation/phase missing
E2	Communication failure between wired remote and main unit
E3	Outlet water temp sensor failure
E4	Water temp sensor in the water tank failure
E5	Condenser temp sensor failure
E6	Outdoor ambient temp sensor failure
E7	Electric heating pipe temp sensor failure
Ec	Water inlet temp sensor error
Eb	Exhaust temp sensor error (TP temp)
P0	System LP protection
P1	System HP protection (deficient circulating pump/pump faulty also possible)
P2	Current protection for system 2
P3	Current protection for system 1
P8	Protection for excessive high outlet water temp
Pb	Anti-freezing protection



Swimming pool heaters

Display	Failure
E1	Phase rotation/phase missing
E2	Outdoor unit and wire controller communication error
E3	Outlet water temp sensor error
E4	Inlet water temp sensor error
E5	Evaporator pipe temp sensor error
E7	Ambient temp sensor error
E9	Water flow switch error
EE	Discharge pipe temp sensor error
P0	Discharge pressure over-high protection
P1	Low pressure protection
P4	Compressor over current protection
P6	Evaporator over temp protection
Pb	Anti-freeze protection
Pf	Discharge temp protection (too high)

Integrated water heater

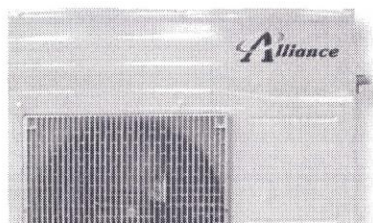
Display	Failure
E0	Error of sensor T5U
E1	Error of sensor T5L
E2	Tank and wired controller communication error
E4	Condensor pipe temp sensor error
E5	Outdoor ambient temp sensor error
E6	Sensor Tp error
E8	Electric leakage protection
LA	Ambient temp is outside of range 5° _ 43°
P0	Condensor pipe temp overflow protection
P2	High discharge temp
P3	Open compressor circuit protection
P4	Compressor overcurrent protection
P8	Open upper e-heater circuit protection
P9	Upper e-heater overloaded protection
Pa	Open lower e-heater circuit protection
Pb	Lower e-heater overloaded protection

8. Portable units

Display	Failure
HP	HP alarm
Ft	Full tray or full tank
Pf	Probe failure
Lt	Low temp
E1	Room temp sensor
E2	Evaporator temp sensor
E3	Condensor temp sensor
P1	Bottom tray is full

8. Water heaters (Retro fit)

Display	Failure
E1	Phase reversal/phase missing error
E2	Communication error between unit and wired control or sensor damaged
E3	Outlet water temp sensor error
E4	Water temp sensor failure in the water tank
E5	Condensor temp sensor error
E6	Outdoor ambient temp sensor error
E7	Sensor failure at water pump outlet
E9	T8 temp sensor error
Ed	Sensor failure at double pipe refrigerant outlet
P1	HP protection/air in system/pump not starting/no water
P2	System current protection
P4	Tt HP protection
P5	Condenser HP protection
P8	Protection for over temp at condenser outlet
P9	Anti-freezing protection
Pb	Anti-freezing protection
HO	Indoor and outdoor units unmatched



6. MAC Cassette units

Display	Failure
E2	Room temp sensor failure
E3	Coil temp sensor failure
E4	Condensor sensor failure
E5	Water pump temp sensor
E6	Outdoor malfunction
E7	EEPROM malfunction
E8	Water-level alarm

7. Package units

Display	Failure
E0	Phase rotation/phase missing
E1	Outdoor coil sensor in system A
E2	Outdoor coil sensor in system B
E5	Indoor coil sensor in system A
E6	Indoor coil sensor in system B
E9	Indoor temp sensor error
EA	Outdoor ambient sensor error
EB	Wire controller output error
P0	Overcurrent protection in system A
P1	Overcurrent protection in system B
P2	Overcurrent protection for outdoor fan
P3	Comprehensive protection for outdoor fan
P4	Protection for HP/LP or discharge temp in system A
P5	Protection for HP/LP or discharge temp in system B
P6	HP protection initiated inT2 evaporator stops the outdoor unit fan
P7	HP protection initiated inT2 evaporator stops the outdoor unit fan and compressor
P8	Protection for condenser at high temp in system A
P9	Protection for condenser at high temp in system B
PC	Anti-freezing protection for evaporator in system A
PD	Anti-freezing protection for evaporator in system B
PF	Defrosting

5. Inverter under ceiling/cassette/ducted units

Display	Failure
E0	Communication between indoor and outdoor
E1	Phase rotation/phase missing
E2	Communication error between indoor unit and master unit
E4	Outdoor temp sensor error
E5	Compressor discharge temp sensor
E8	Outdoor unit address error
E9	Power volt error
H0	Communication malfunction between IR341 and 780034
H1	Communication between 0537 or 9177 and 780034
H2	Quantity of outdoor unit decreases
H3	Quantity of outdoor unit increases
H4	P6 protection detected 3 times
H5	P2 detected 3 times in 30 minutes
H6	P4 detected 3 times in 100 minutes
H7	Indoor unit decrease error
H8	Discharge pressure sensor error
H9	P9 detected 3 times in 30 minutes
P0	Inverter compressor top temperature protection
P1	HP protection
P2	LP protection
P3	Inverter compressor current protection
P4	Compressor discharge temp protection (short of refrigerant)
P5	Outdoor condensor high temp protection
P6	Inverter module protection
P7	Current protection No.1 Fixed compressor
P8	Current protection No.2 Fixed compressor
P9	Fan motor protection
L0	DC inverter module protection
L1	DC supply low voltage
L2	DC supply high voltage protection
L4	MEC Failure
L8	Frequency protection
L9	Frequency protection

4. Fixed speed under ceiling/cassette/ducted units

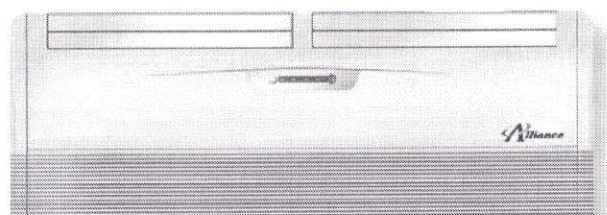
Display	Failure
E1	EEPROM error
E2	Zero crossing detection error
E3	Indoor fan error
E5	Room temp sensor open or short
E6	Indoor coil sensor open or short
EC	Refrigerant leak detected

Indoor

Oper.	Time	Def./Fan	Alarm	Fault
			Flash	Drain pump or float switch
	Flash			Return air sensor open or short
Flash				Indoor coil sensor open or short
Flash	Flash			EEPROM error
		Flash		Outdoor coil sensor open or short
Flash	Flash	Flash	Flash	Electrical abnormality
Flash	Flash		Flash	Over current protection

Outdoor

LED 1	LED2	LED3	Fault
Flash			Phase rotation/phase missing error
	Flash		HP switch open circuit
		Flash	Overcurrent protection
Flash	Flash		LP switch open circuit
Flash	Flash	Flash	High temperature of compressor discharge (Short of gas)
On		On	Normal operation
	Flash	Flash	Outdoor ambient sensor open or short



1. Fixed speed Vertu midwall units

Display	Failure
E1	EEPROM error
E2	Zero crossing detection error
E3	Indoor fan error
E5	Room temp sensor open or short
E6	Indoor coil sensor open or short
EC	Refrigerant leak detected

2. Atlantic Midwall units

Display	Failure
E1	Outdoor tube sensor fault
E2	Room temp sensor open or short
E3	Indoor coil sensor open or short
E5	Indoor fan fault
E6	EEPROM error
E7	External feedback fault - Check interconnecting wiring
E8	Overheat detection / defrosting

3. Inverter midwall units

Display	Failure
E0	EEPROM error
E1	Indoor and outdoor communication error
E2	Zero crossing detection error
E3	Indoor fan error
E4	Indoor room temp sensor open or short
E5	Indoor coil sensor open or short
EC	Refrigerant leak detected
F1	Outdoor temp sensor open or short
F2	Condensor coil sensor open or short
F3	Compressor discharge sensor open or short
F4	Outdoor EEPROM error
P0	IPM malfunction or IGBT over current
P1	Over or under voltage protection
P2	Temperature protection of compressor top (normally short of refrigerant)
P4	Inverter compressor drive error



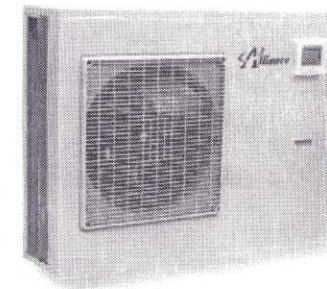
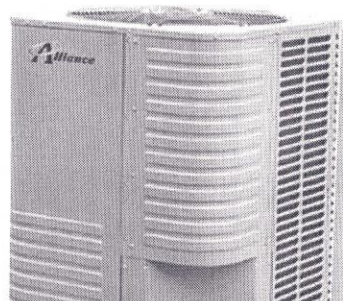
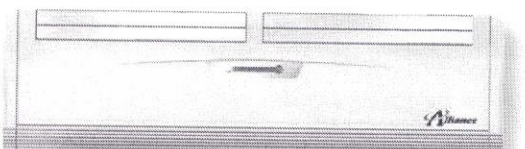
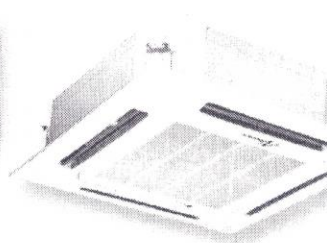
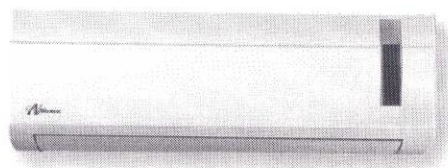
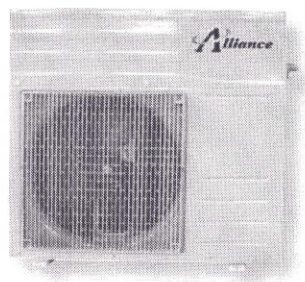
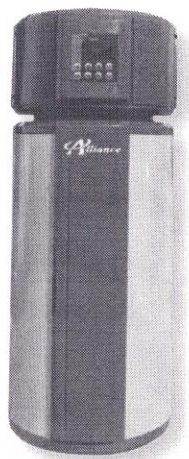
Alliance ERROR CODES

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Alliance

ERROR CODES



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