



Service Manual

Cooling Only Side Discharge Condensing Units

UUC112WC*
UUC118WC*
UUC124WC*
UUC130WC*
UUC136WC*
UUC148WC*



GE APPLIANCES
a Haier company

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Safety Notifications

Maintenance Safety

PROHIBITED:

- Do not pierce or burn.
- Please note that refrigerant may be odorless.
- The appliance shall be stored in a room without continuously operating ignition sources (For example: open flames, an operating gas appliance or an operating electric heater).
- Indoor unit adopts special joints that can't be detached. The installation method is the same with the common joints. Because the joint can't be detached and if it is leaking; it must be cut out and replaced with a braze joint.
- Using unsuitable parts or tools may lead to electric shock or fire hazard.
- Please ventilate the room immediately if refrigerant leaks during maintenance. Heavy leakage may lead to breathing difficulty, severe injury or death.
- Disconnect power before disassembling the appliance for maintenance.
- The appliance should be maintained and cared by authorized technical personnel with necessary qualifications.

NOTICE:

- This unit requires a proper earth ground per local and national electrical codes.
- Never repair the unit with wet hands. Operating the unit with wet hands may lead to electric shock.
- Isolate all power sources before cleaning the unit.
- All field installed wiring must conform to local and national electric codes.
- Brazing, welding and cutting must be done in properly ventilated areas.
- Gas appliances, heaters and other fire sources should be kept away from the installation and maintenance site.
- Maintenance should be done according to manufacturer's instructions.

OBSERVED:

- Check all condensate drain outlets during maintenance and operational checks.
- Unit should be installed level and on a surface that will sufficiently support its weight.
- Disassembly of the unit, handling of the refrigerant, oil and accessories should all be done according to applicable local rules and regulations.

WARNING:

- If the unit location is more than 6 feet high, please wear a safety helmet, gloves and a safety belt.
- Never mix any other substances except the specified refrigerant into the refrigerant circuit.
- Check the location to see if the weight can be properly supported before installing the unit.
- Please test the system for leaks prior to charging. Leaks discovered after the unit start up require refrigerant pump-down, leak repair and recharging. Do not allow refrigerant to leak into unventilated spaces.
- Prepare suitable tools and protectors.
- Please isolate all power to the system while making repairs and performing maintenance.

Operation Safety

PROHIBITED:

- Never try to modify the unit, otherwise, it may cause electric shock, overheat or fire hazard.
- Replace all wires that have worn or damaged insulation.
- This equipment must have a dedicated electrical circuit and service disconnect switch.

WARNING:

- Maintain a regular schedule for preventative maintenance.

NOTICE:

- Do not remove the fan cover while the unit is running.
- Use soap and water only to clean the unit. Do not use any solvents to clean the control panel.
- Isolate all power to the system before cleaning the unit.

Specifications

		115V					
							
		12k*	18k**		24k**		
Outdoor Unit		UUC112WCDA	UUC118WCDA	UUC118WCDBA	UUC124WCDA	UUC124WCDBA	
UPC		0-84691-85479-1	0-84691-85480-7	0-84691-86338-0	0-84691-85481-4	0-84691-86339-7	
Cooling	Rated Capacity Btu/hr	12,000	17,500	18,000	23,500	24,000	
	SEER/EER	14/12	14.5/12	14.2/12.2	14.5/12	14.5/12.2	
	Operating Range	50-115°F (10-46°C)	50-115°F (10-46°C)	50-115°F (10-46°C)	50-115°F (10-46°C)	50-115°F (10-46°C)	
Outdoor Unit	Voltage/Cycle/Phase	115/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	
	Maximum Fuse Size A	15	15	15	15	15	
	Minimum Circuit Amp A	11	10	10	12	11.4	
	Outdoor Noise Level dB	52	55	55	58	59	
	Fan Speed RPM	820	890	890	880	880	
	Outdoor Airflow CFM	1220	2012	2012	2492	2492	
	Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary	
	TXV	Bleed	Bleed	Bleed	Bleed	Bleed	
	Dimension: H in. (mm)	21.9 (555)	27.6 (702)	27.6 (702)	31.9 (810)	31.9 (810)	
	Dimension: W in. (mm)	33.5 (850)	36.0 (914)	36.0 (914)	40.0 (1015)	40 (1015)	
	Dimension: D in. (mm)	13.6 (345)	15.0 (382)	15.0 (382)	17.5 (445)	17.5 (445)	
	Ship Dimension: H in. (mm)	24.5 (622)	30.8 (782)	30.8 (782)	38.4 (975)	38.4 (975)	
	Ship Dimension: W in. (mm)	36.0 (915)	38.4 (975)	38.4 (975)	42.3 (1075)	42.3 (1075)	
	Ship Dimension: D in. (mm)	15.0 (380)	16.5 (420)	16.5 (420)	19.5 (495)	19.5 (495)	
	Weight (Net/Gross) lbs (kg)	86/90.4 (39/41)	106/117 (48/53)	106/117 (48/53)	141/152 (64/69)	141/152 (64/69)	
AHRI Matching Indoor Coil	Aspen Model	C(A,C,E)24A24+TDR	C(A,C,E)24B44+TDR	-	C(A,C,E)24B44+TDR	-	
	ADP Model	-	-	HE81(6,9)36+TDR	-	HE81(6,9)36+TDR	
	CFM with rated coils	445	620	650	727	780	
Refrigerant Lines	Liquid Suction O.D. in	1/4 1/2	1/4 1/2	1/4 1/2	3/8 5/8	3/8 5/8	
	Refrigerant	R410A	R410A	R410A	R410A	R410A	
	Factory Charge lbs	4.2	4.7	5.1	6.1	6.3	
	Maximum Line Length Ft / m	82/25	82/25	82/25	82/25	82/25	
	Maximum Height Ft / m	33/10	33/10	33/10	33/10	33/10	

* Federal law allows the unit to be installed only in AK, CO, CT, ID, IL, IA, IN, KS, MA, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, OR, PA, RI, SD, UT, VT, WA, WV, WI, WY, and U.S. territories.

** Federal law allows the unit to be installed only in AK, AL, AR, CO, CT, DC, DE, FL, GA, HI, ID, IL, IA, IN, KS, KY, LA, MA, ME, MD, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WV, WI, WY, AND U.S. territories

Specifications

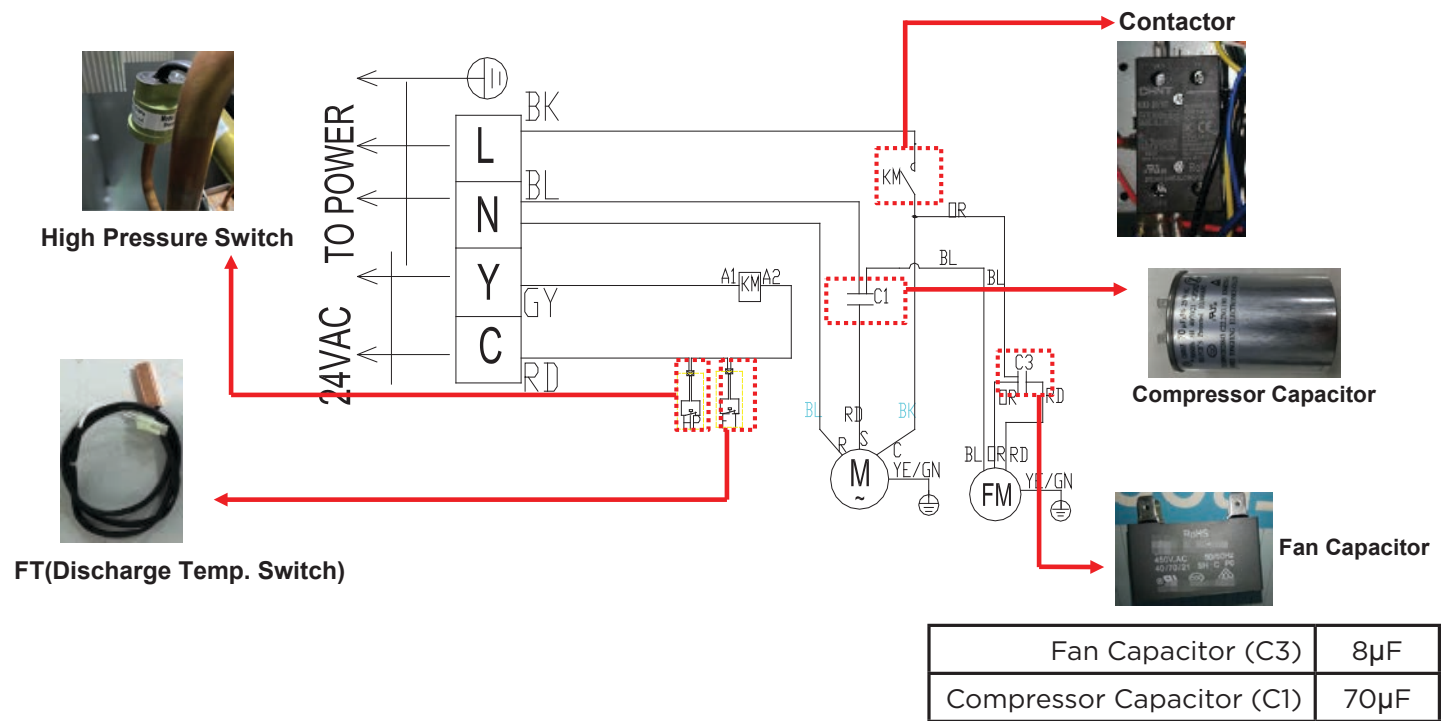
208-230V



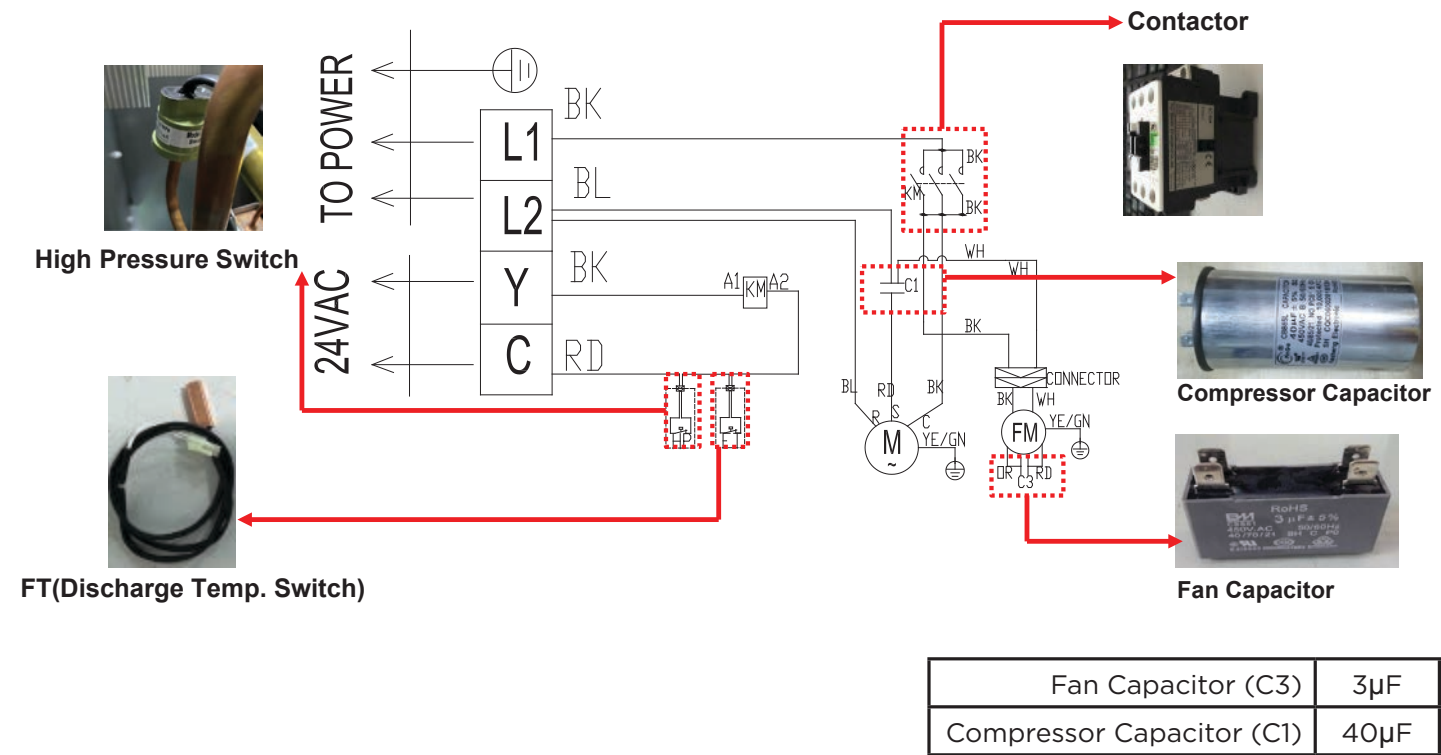
	30k**		36k**		48k**
	UUC130WCDA	UUC130WCDBA	UUC136WCDA	UUC136WCDBA	UUC148WCDA
	0-84691-85483-8	0-84691-86340-3	0-84691-85484-5	0-84691-86341-0	0-84691-85486-9
	30,000	30,000	34,000	35,000	46,000
	14.5/12	14.5/12.2	14.5/12	14.2/12.2	14/11.7
	50-115°F (10-46°C)	50-115°F (10-46°C)	50-115°F (10-46°C)	50-115°F (10-46°C)	50-115°F (10-46°C)
	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
	20	20	25	25	40
	14	14	16	16	26
	58	59	58	59	60
	880	880	890	900	900
	2324	2324	2300	2300	2600
	Rotary	Rotary	Rotary	Rotary	Scroll
	Bleed	Bleed	Bleed	Bleed	Bleed
	31.9 (810)	31.9 (810)	31.9 (810)	31.9 (810)	34.25 (870)
	40.0 (1015)	40 (1015)	40.0 (1015)	40 (1015)	43.31 (1100)
	17.5 (445)	17.5 (445)	17.5 (445)	17.5 (445)	20.79 (528)
	38.4 (975)	38.4 (975)	38.4 (975)	38.4 (975)	40.6 (1030)
	42.3 (1075)	42.3 (1075)	42.3 (1075)	42.3 (1075)	45.0 (1145)
	19.5 (495)	19.5 (495)	19.5 (495)	19.5 (495)	21.5 (545)
	143/154 (65/70)	143/154 (65/70)	145/156 (66/71)	145/156 (66/71)	218/238 (99/108)
	C(A,C,E)36B44+TDR	-	C(A,C,E)48C34+TDR	-	C(A,C,E)48C34+TDR
	-	HE81(6,9)36+TDR	-	HE35(6,9)48+TDR	-
	1050	1080	1025	1150	1325
	3/8 3/4	3/8 3/4	3/8 3/4	3/8 3/4	3/8 3/4
	R410A	R410A	R410A	R410A	R410A
	7.3	7.5	7.3	7.7	8.8
	82/25	82/25	82/25	82/25	98/30
	33/10	33/10	33/10	33/10	50/15

Wiring Diagrams

UUC112WC*

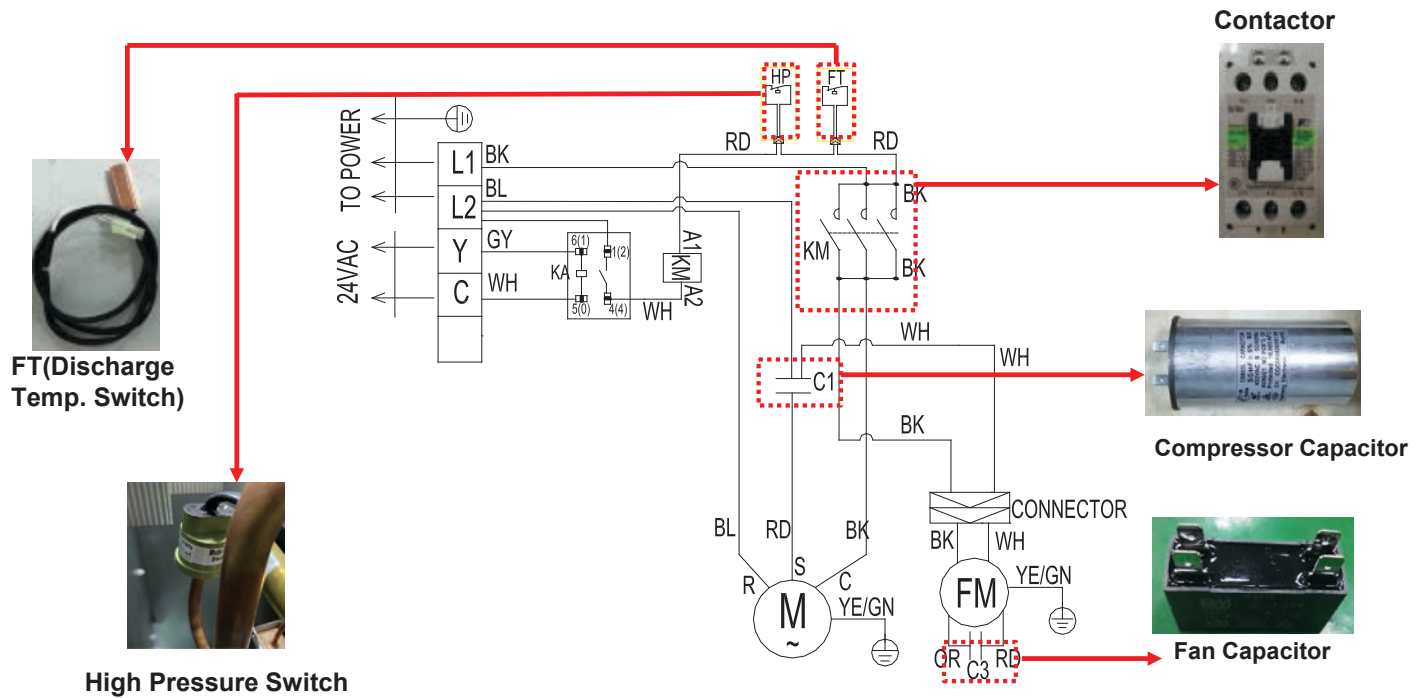


UUC118WC*



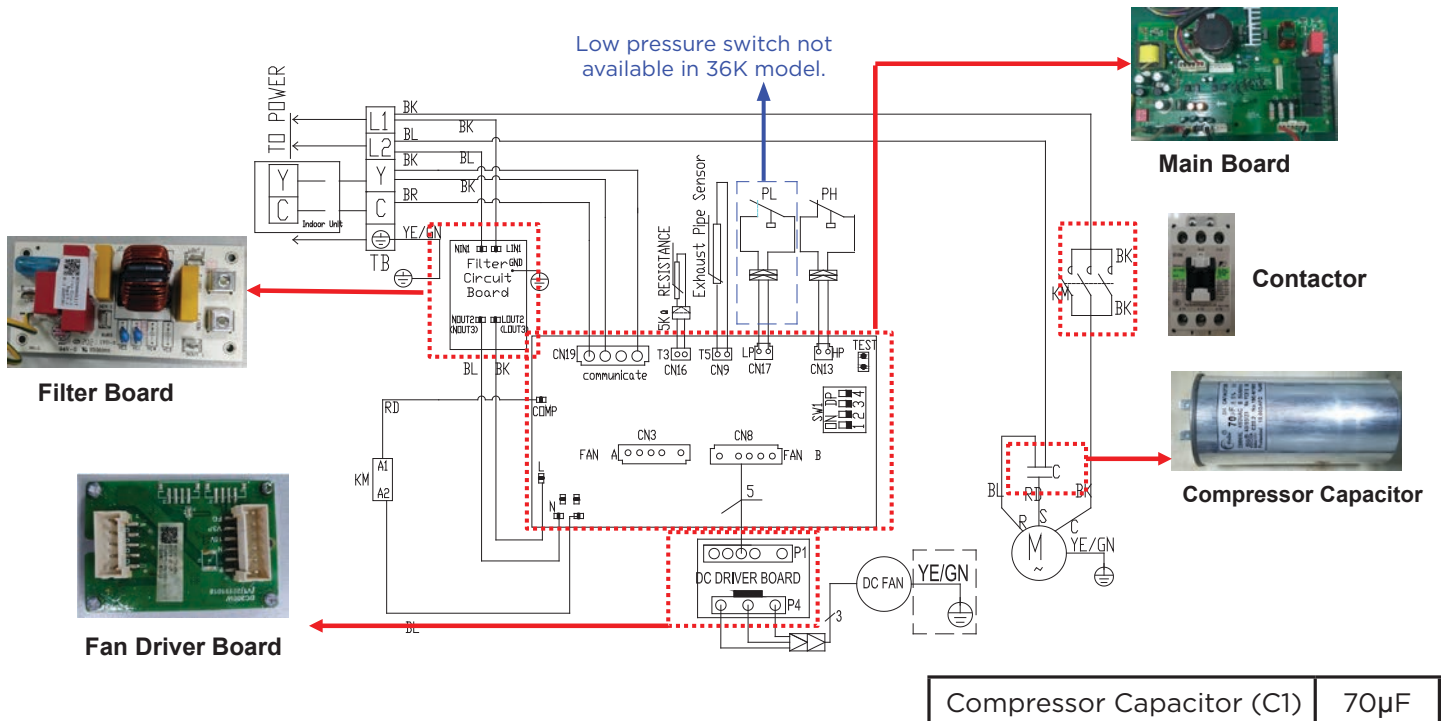
Wiring Diagrams

UUC124WC*/ UUC130WC*



	24K	30K
Fan Capacitor (C3)	5μF	5μF
Compressor Capacitor (C1)	40μF	55μF

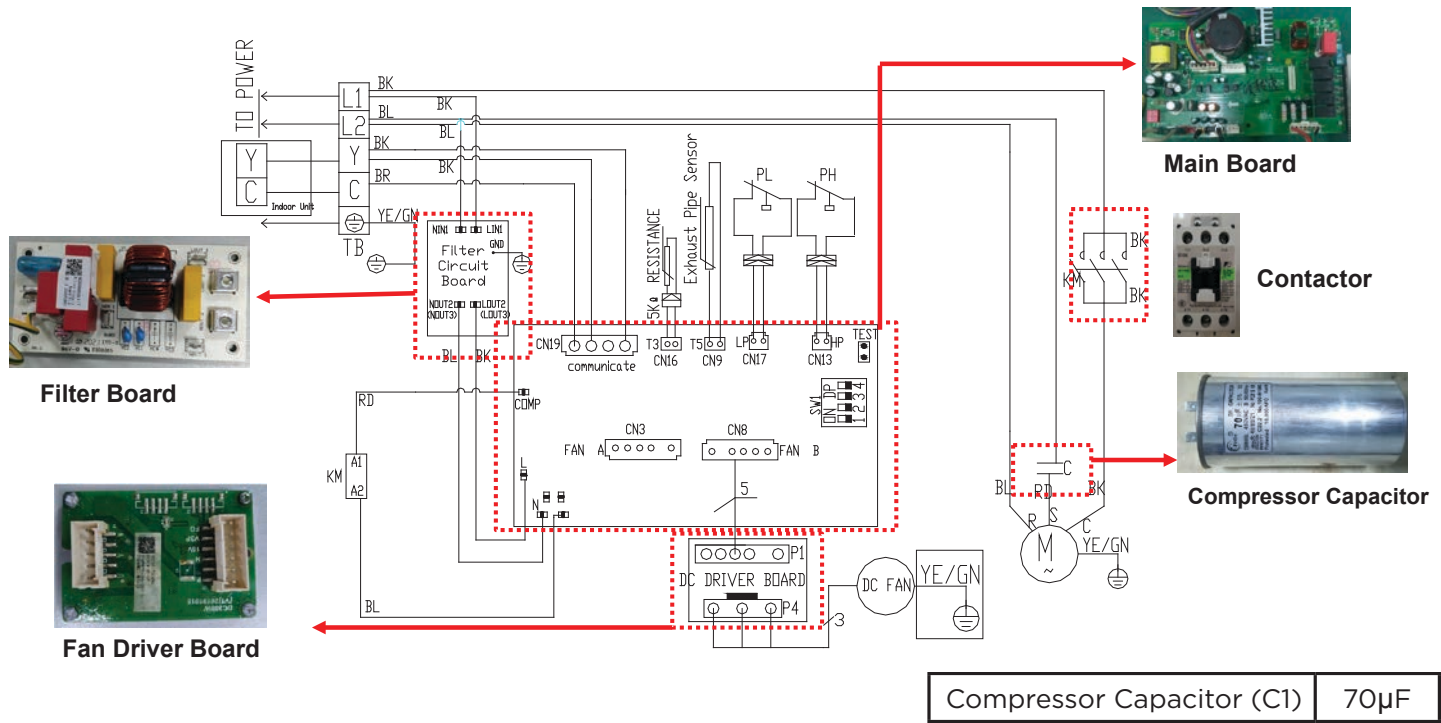
UUC136WC*



Compressor Capacitor (C1)	70μF
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Wiring Diagrams

UUC148WC*



Settings

Outdoor Unit PCB (UUC136WC*/UUC148WC* Only)

Select Fan Speed (SW1-1 & SW1-3)

	SW1-1	SW1-3
800 rpm	OFF	ON
830 rpm	ON	ON
830 rpm	ON	OFF
900 rpm (default)	OFF	OFF

Select Power Supply (SW1-2)

	SW1-2
380V, 3 ph	ON
220V, 1 ph (default)	OFF

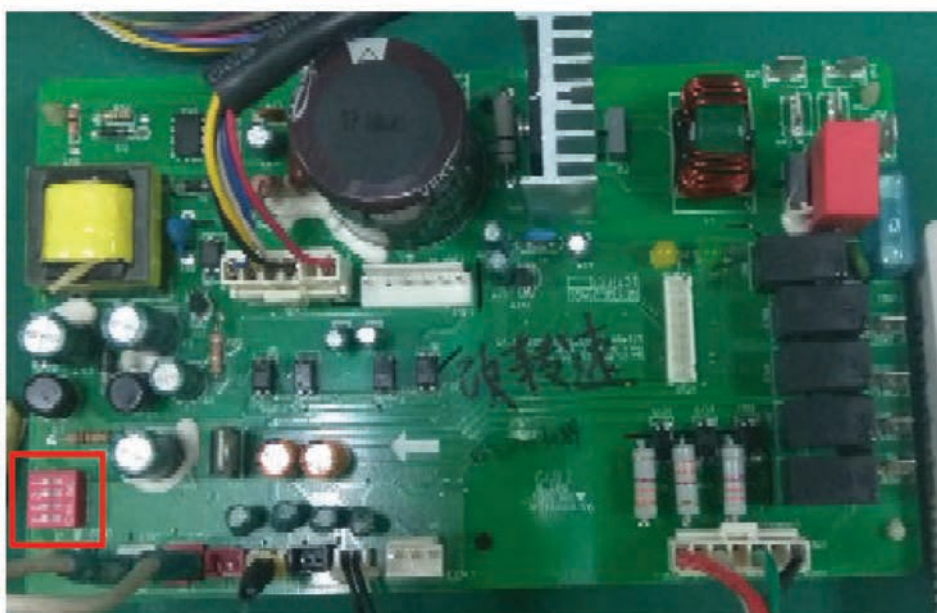
Select Condenser Protection Temperature and Recovery Temperature (SW1-4)

	SW1-4
154°F (68°C) / 126°F (52°C)	ON
149°F (65°C) / 118°F (48°C) (default)	OFF
Example: When T3 is over 154°F (68°C), unit will stop. When T3 is lower than 126°F (52°C), unit will run.	

SW1



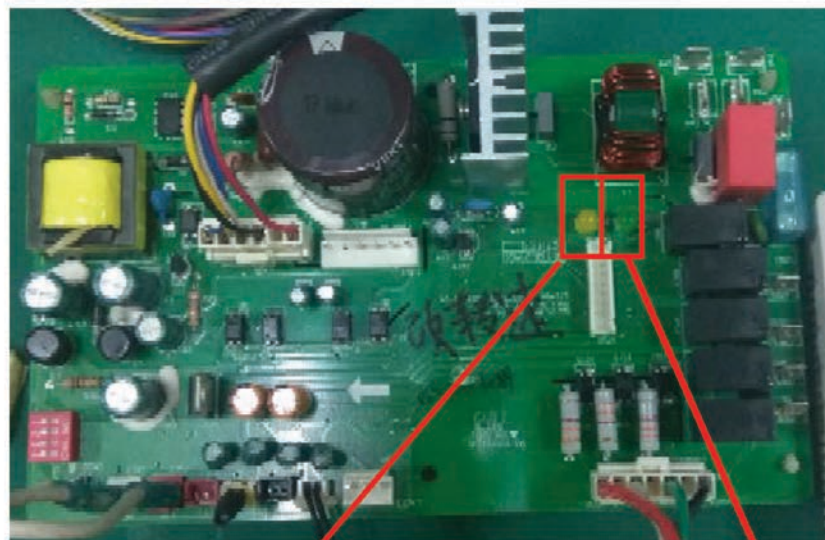
(Shown in default configuration - all switches OFF)



Error Codes

Outdoor Unit Error Codes (UUC136WC*/UUC148WC* Only)

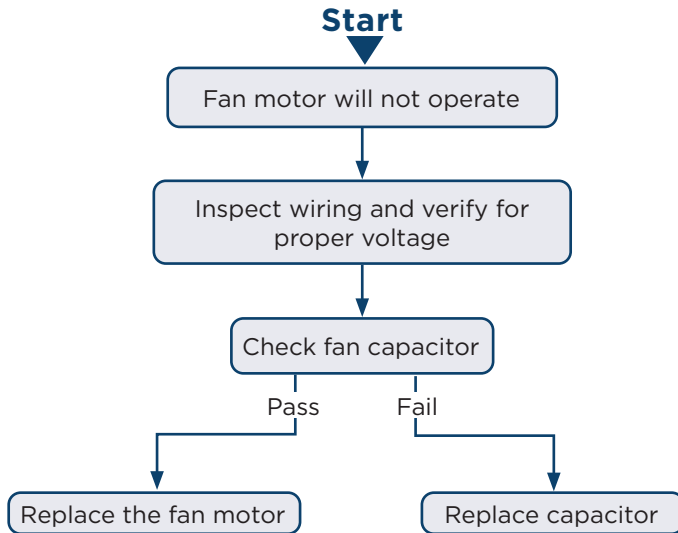
Fault	LED Status	Remarks
Normal Operation	Green LED on	
High Pressure Error	Green LED flash 1 time every 5s	If it occurs 3 times within 20 mins, unit can not reset unless power is disconnected and then reapplied.
T3 (Outdoor Unit Heat Exchanger Sensor) Temperature Sensor Error	Green LED flash 2 times every 5s	
Over Current Error	Green LED flash 3 times every 5s	Reserved for 36/48K model.
Power Phase Error	Green LED flash 4 times every 5s	Only applicable for models with three-phase power supply.
T5 (Compressor Discharge Temperature Sensor) Temperature Sensor Error	Green LED flash 5 times every 5s	
Low Pressure Error (48K model only)	Green LED flash 6 times every 5s	If it occurs 3 times within 20 mins, unit can not reset unless power is disconnected and then reapplied.
Fan Motor Error	Green LED flash 7 times every 5s	



Troubleshooting

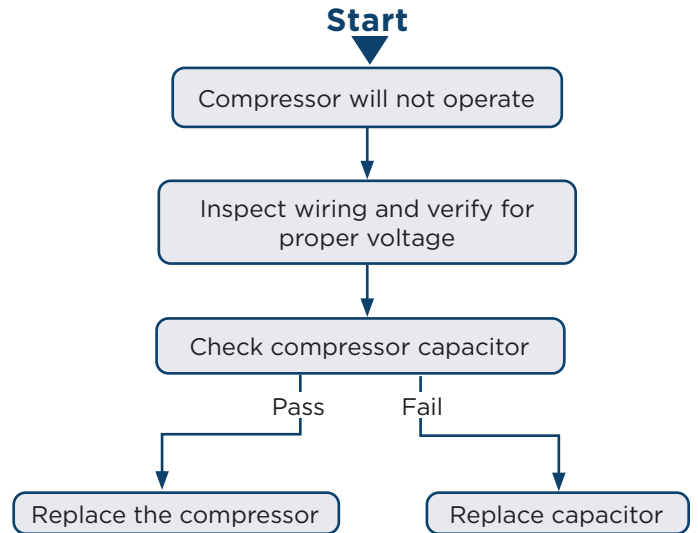
UUC112WC* / UUC118WC* / UUC124WC* / UUC130WC*

Fan Motor Not Operating



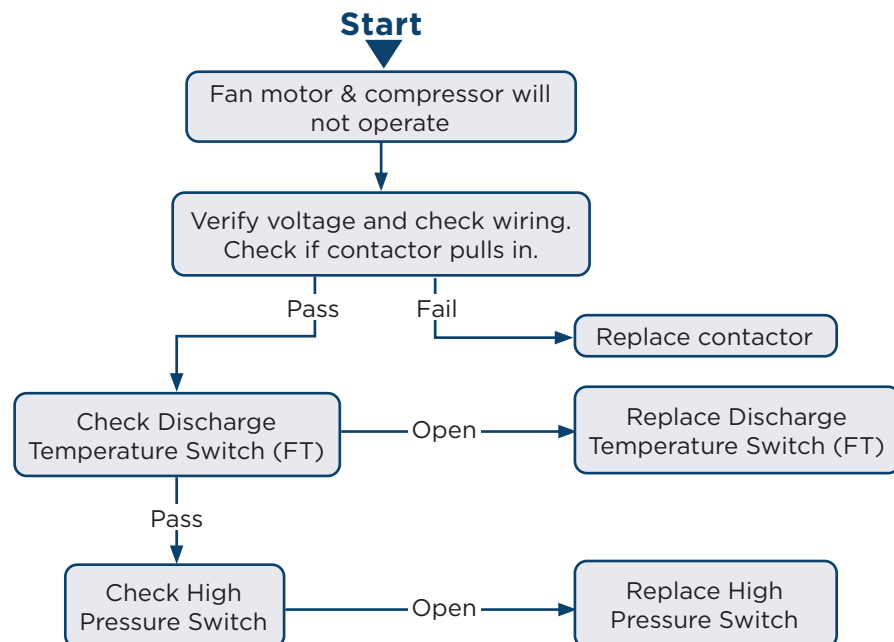
Model	Capacitor μF
UUC112WC*	8
UUC118WC*	3
UUC124WC* / UUC130WC*	5

Compressor Not Operating



Model	Capacitor μF
UUC112WC*	70
UUC118WC*/UUC124WC*	40
UUC130WC*	55

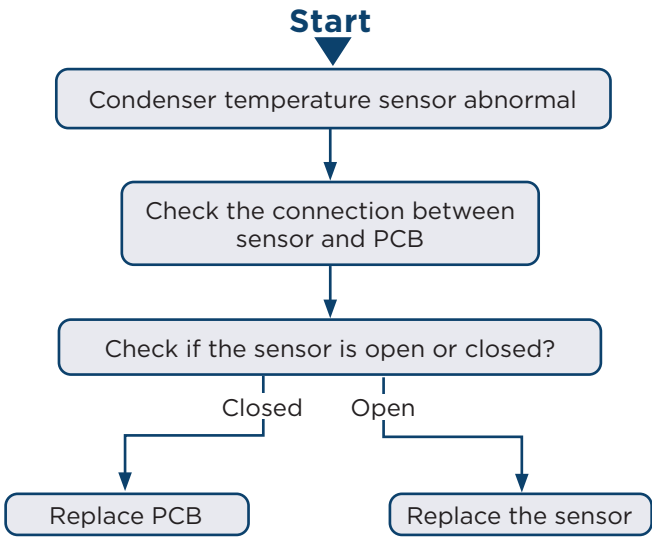
Both Fan Motor and Compressor Not Operating



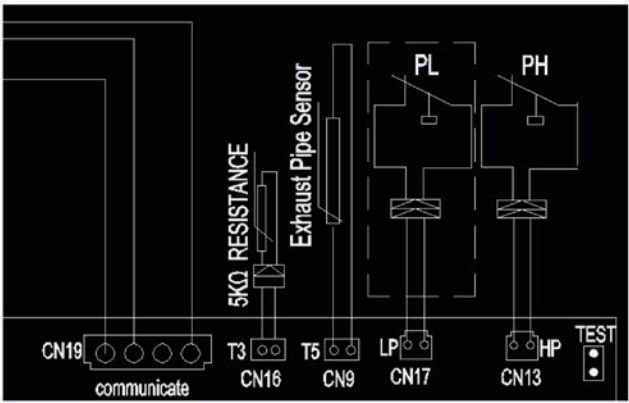
Troubleshooting

UUC136WC* / UUC148WC*

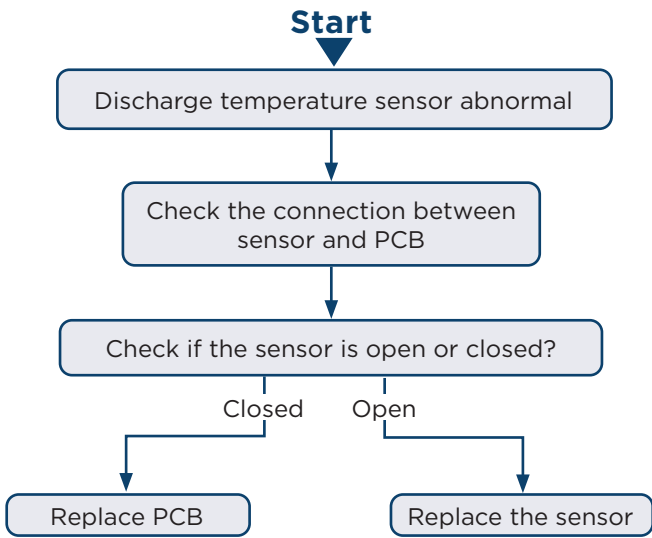
T3 Condenser Temperature Sensor



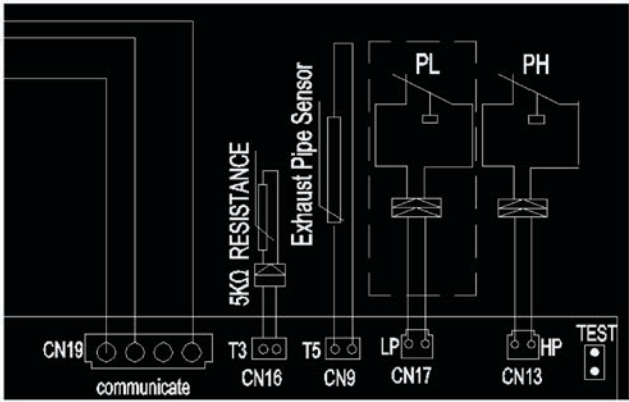
CN16 is the T3 outdoor unit heat exchanger sensor connection. For the 36/48K models, this is connected to a fixed resistor - the resistor is 5KΩ.



T5 Discharge Temperature Sensor

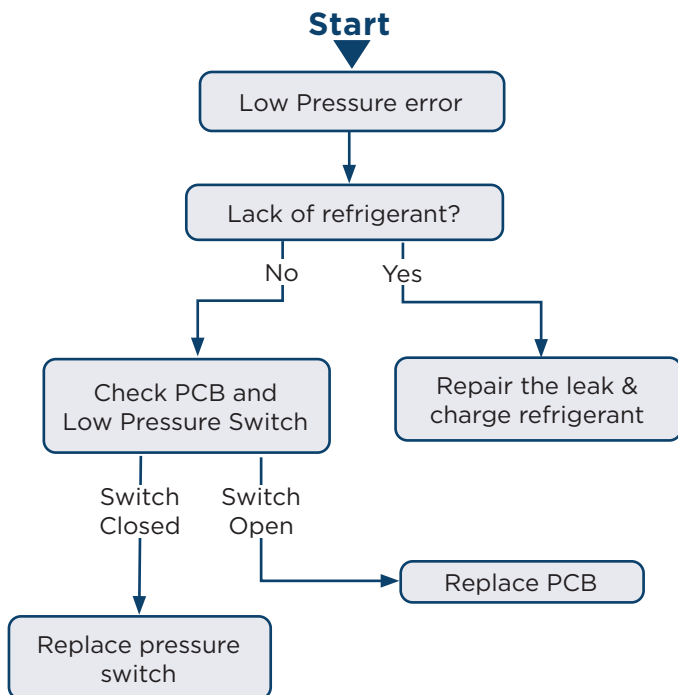


CN9 is the T5 compressor discharge temperature sensor connection. The resistance of T5 at 77°F is 50KΩ.

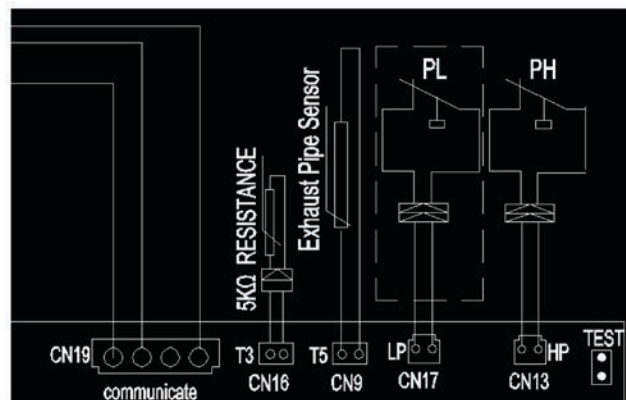


Temp (F°/C°)	KΩ
77/25	50
95/35	33

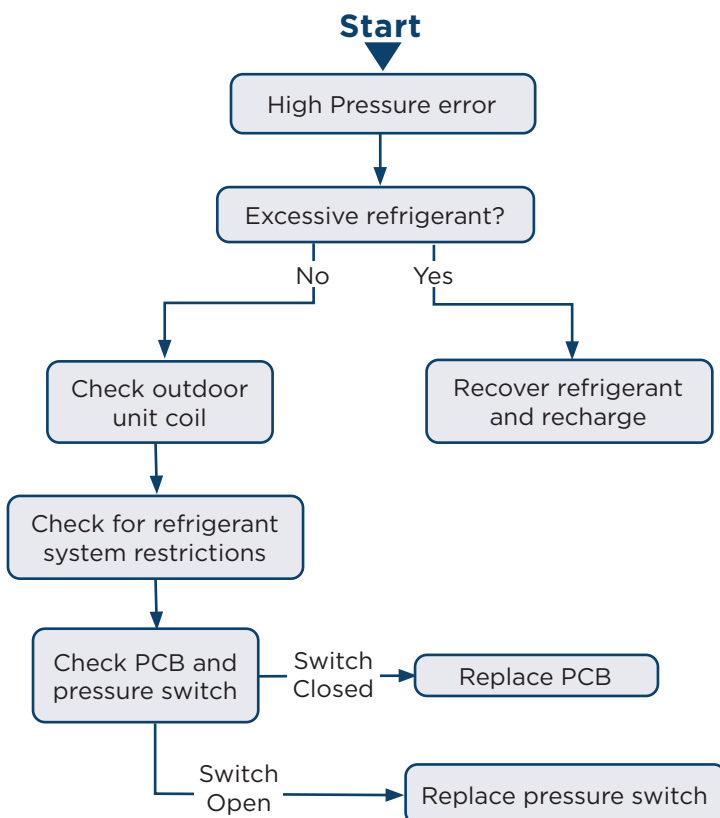
Low Pressure Error (UUC148WC* unit only)



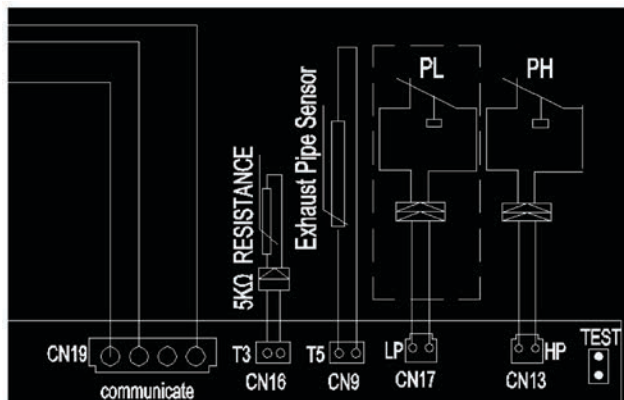
CN17 is the low pressure switch connection. When this connection is open, the unit will show low pressure error. When this connection is closed, unit will be normal, or it is PCB problem.



High Pressure Error

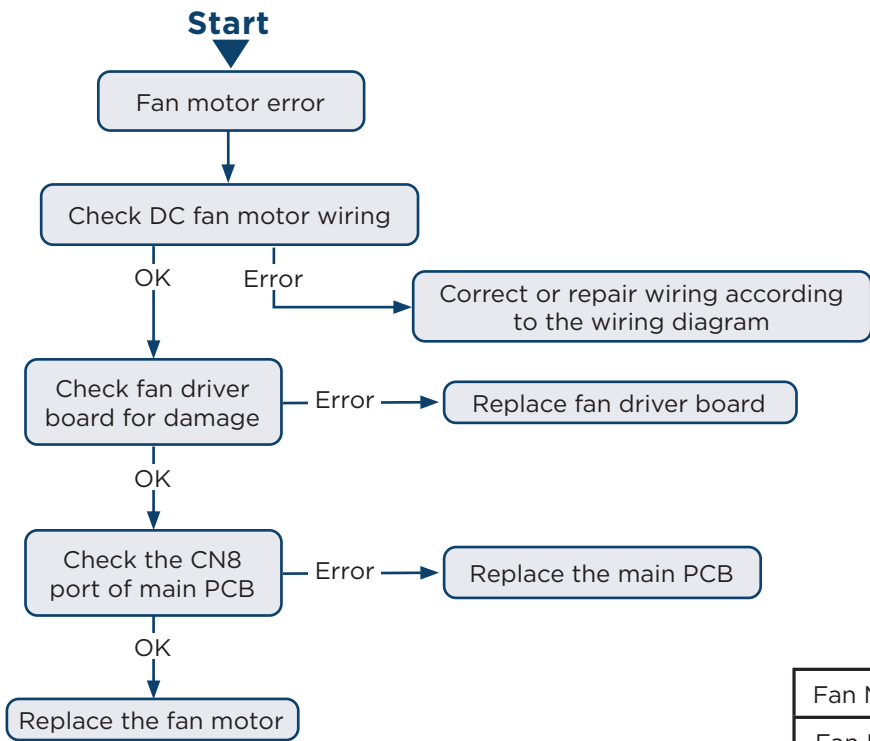


CN13 is high pressure switch connection. When this connection is open, the unit will show high pressure alarm. When this connection is closed, unit will be normal, or it is PCB problem.



Troubleshooting

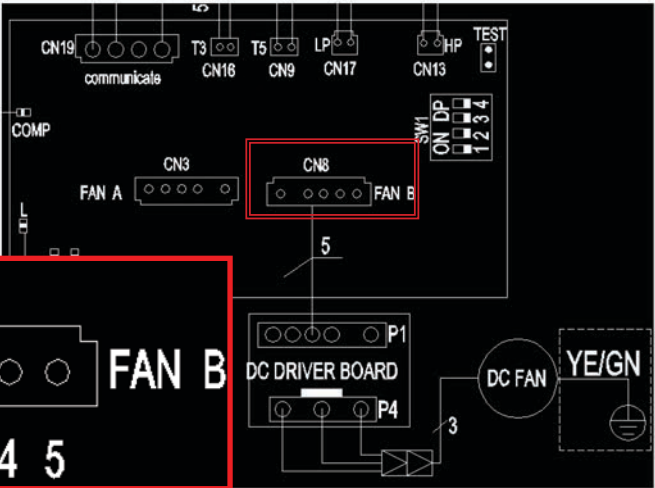
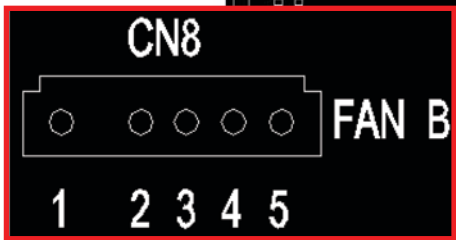
Fan Motor Error



Fan Motor Rated Voltage	310VDC
Fan Motor Power Output	220W
Fan motor Rated Speed	870 RPM

How to check CN8 port:

- The voltage between 1 and 2 should be 310V DC.
- The voltage between 3 and 2 should be 15V DC.
- The voltage between 4 and 2 should be 0-5V DC.
- The voltage between 5 and 2 should be 0-5V DC.



- 5 (Blue wire): Fan speed signal back wire
- 4 (Yellow wire): Fan speed signal out wire
- 3 (White wire): Modular chip power wire
- 2 (Black wire): Ground wire
- 1 (Red wire): Fan motor power wire

3rd Party Coil Matching

For customers installing our 14 SEER Side-discharge product to match with the AHRI approved 3rd Party coils, it will eligible for a standard 7 year compressor/5 year parts limited warranty and the 10 year compressor and parts standard registered limited warranty, subject to the other limitations in the standard warranty document. Registration is available at:
<https://www.haierappliances.com/support/register-ductless>.

We recommend installing AHRI listed matched indoor and outdoor system. Installing approved matched indoor and outdoor system will provide optimum efficiency and best overall system reliability. AHRI certification for approved matched system can be verified in the AHRI site, Residential AC and AC coil section:
<https://www.ahridirectory.org/Search/SearchHome>

www.geappliances.com