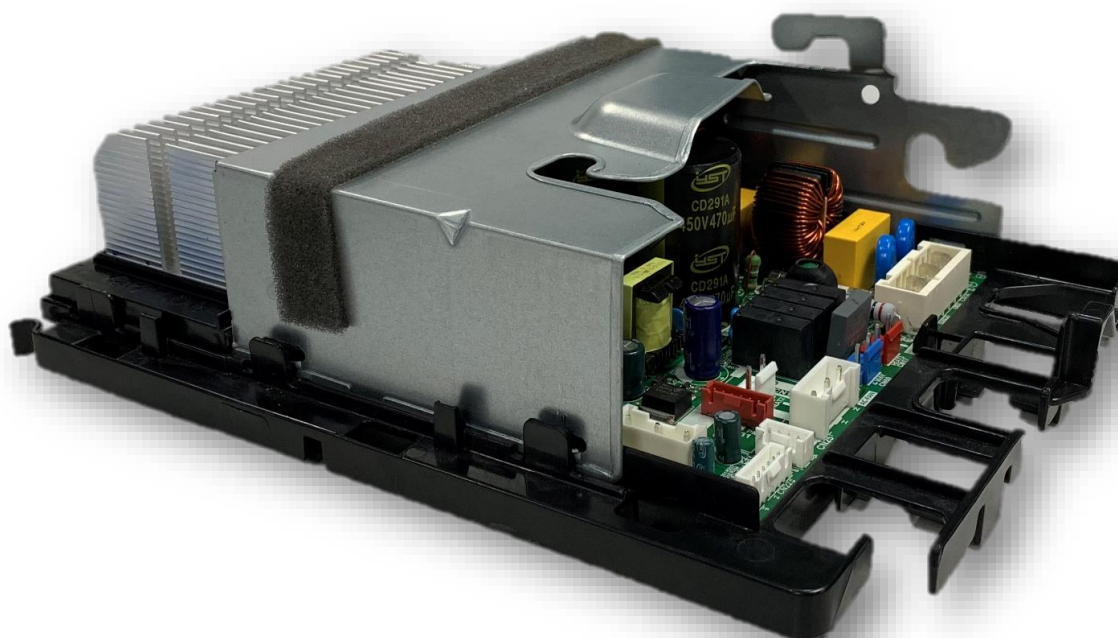


# Operation Instructions of Universal Outdoor PBA for Inverter



Thanks for using the Universal Outdoor PBA for Inverter Outdoor Unit. This manual will provide you with information on how to connect and set this part to repair inverter outdoor unit. Please read it and save it carefully.

Note: Products shall be subject to any changes without additional notices.

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## Tips and important info from TMQ Brands

Important: Before starting to change the PCB it is important to know what type of compressor you have. It should be visible on the compressor.

If you have any trouble you can always contact Qlima customer support.

**TMQ Brands; email: [service@tmq.dk](mailto:service@tmq.dk) or +45 77 34 33 30 / +46 31 30 45 665.**

Please send picture of outdoor serial number and we can help with figuring out what compressor you have.

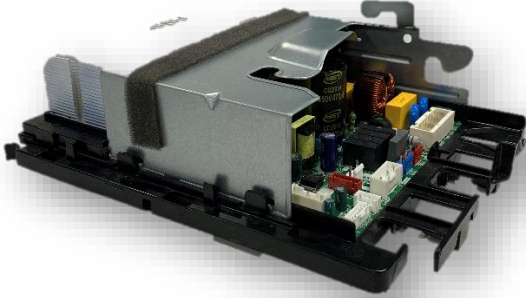
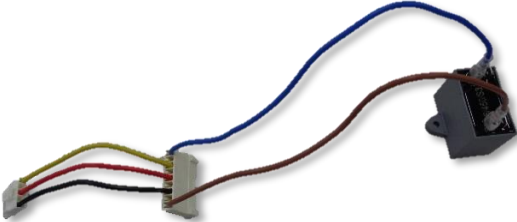
## Features

This PBA is universal for inverter outdoor units with:

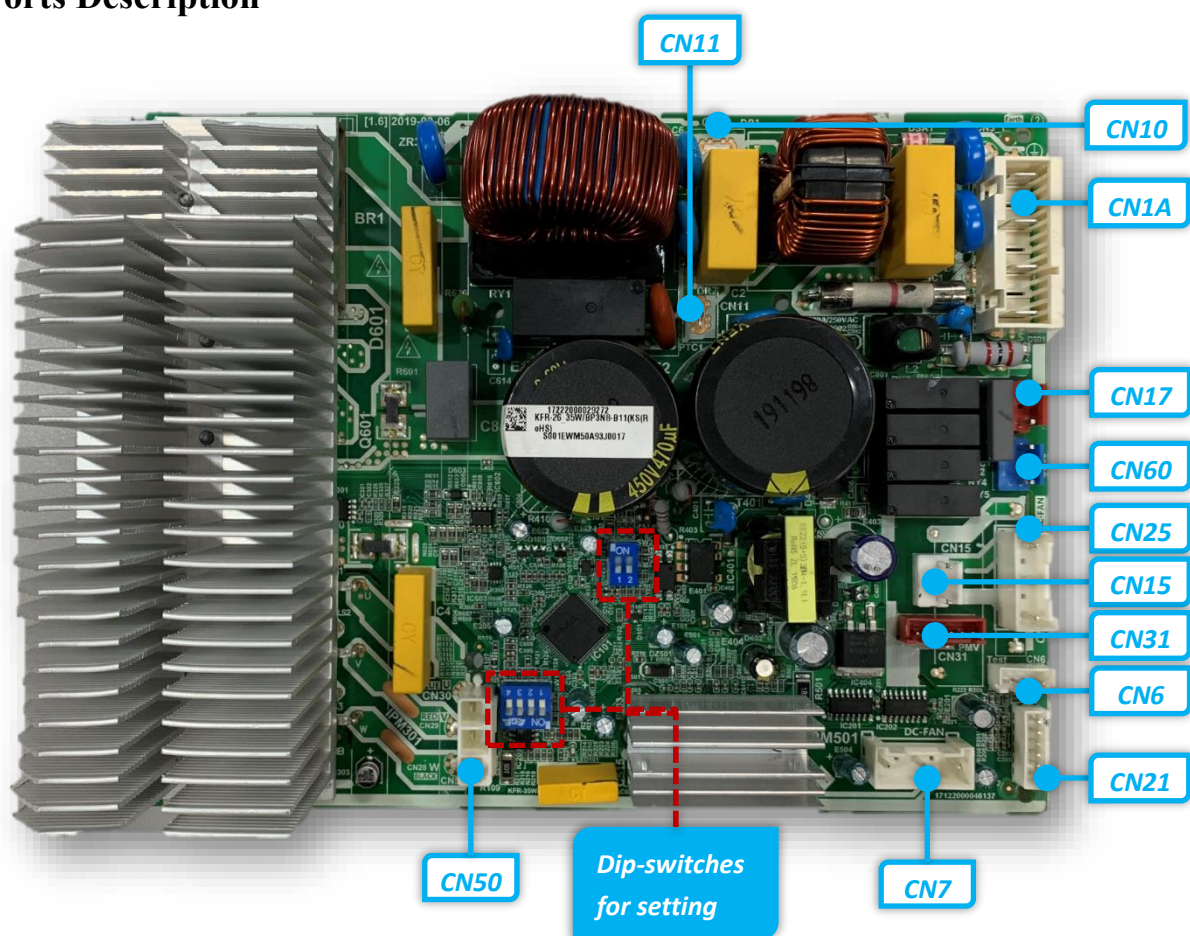
1. Capacity: 9K and 12K Btu/h
2. Power supply: 220V-240V, 1Ph, 50 or 60 Hz
3. Fan type: DC motor or AC motor
4. With or without electronic expansion valve
5. 11 different types compressors.

## Packing List

Please check if all items are inside the packing box when you get the product.

Item	Appearance	Quantity	Specifications
Universal PBA		1	Power Input: 220-240V, 1Ph, 50/60Hz
Accessory		1	
Operation Manual	放个说明书封面图	1	

## Ports Description



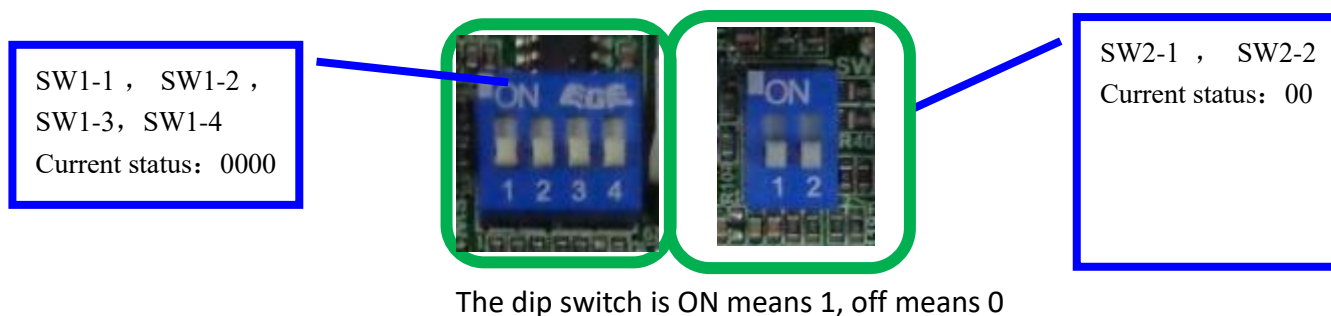
Port	Description	Parameter
CN1A	Port for L, N, S and E	220~240V/AC
CN60	Power output for 4-way valve	220~240V/AC
CN17	Power output for compressor heater	220~240V/AC
CN15	Power output for chassis heater	220~240V/AC
CN31	Power output for EEV	12V/DC
CN25	Power output for AC FAN	220~240V/AC
CN7	Power output for DC FAN	0~240V/AC
CN21	Port for temperature sensors	5V/DC
CN6	Port for test board	5V/DC
CN50	Power output for Compressor	0~240V/AC
SW1	Switch1	5V/DC
SW2	Switch2	5V/DC
CN10/CN11	Power output for DR module	220~240V/AC

**Note:** The ports for AC fan and DC fan are same type connector, watch the No. of the ports for correct connection. There is an accessory inside the packing box for connecting different AC fan design.

## Operations Instructions

**WARNING!** All universal boards must be switched BEFORE CONNECTED TO POWER. IT'S STRICTLY PROHIBITED to dip the switches after unit is connected to power. (Note: The DIP switch must be in place, and the DIP switch cannot be placed in the middle position.)

1. Confirm whether the electronic control is a small split unit with capacity is 9K or 12K Btu/h and power supply voltage is 220-240V, 1 Phase, 50 or 60Hz.
2. Before repair, the compressor model must be confirmed and must be one of the 11 models in Table 1
3. Before repair work, the outdoor fan must be confirmed to be AC motor or DC motor.
4. Guidance of using the dip switches.



**CAUTION: before using this after-sales universal PBA, compressor model must be confirmed!**



Model number label is shown in Figure 1, or consult your local dealer to confirm.



Fig.1 Compressor model No: ASK89D29UEZD

As shown in table 1, SW1-1, SW1-2, SW1-3 and SW1-4 are for compressor selection.

**Table 1 Dip-switch 1 settings for compressor**


Compressor \ Switch	SW1-1	SW1-2	SW1-3	SW1-4	Status	Figure
ASN98D22UEZ ASN98D22UFZ (S5125) (S3425) (SC-JA2516) KSN98D22UFZ	OFF(0)	OFF(0)	OFF(0)	OFF(0)	0000	
ASK89D53UEZ ASK103D53UFZ (SC-JA2518) KSK89D53UEZ	ON(1)	ON(1)	OFF(0)	OFF(0)	1100	

**(TMQ: Should be this compressor according to our info)**

CAUTION: WRONG settings may cause to ERROR CODE P4 or damage to the compressor.

As shown in table 2, SW2-1, SW2-2 are for area and outdoor motor type selection.

**Table 2 Dip-switch setting for area and outdoor motor type**

Area \ Switch	Motor type	SW2-1	SW2-2	Status	Figure
Australian, North American, European and Asia Pacific	DC	OFF(0)	OFF(0)	00	

Caution: WRONG settings may cause to INSUFFICIENT COOLING or HEATING.

Caution: SW2 status should be 00 only if the unit is equipped with DC fan.

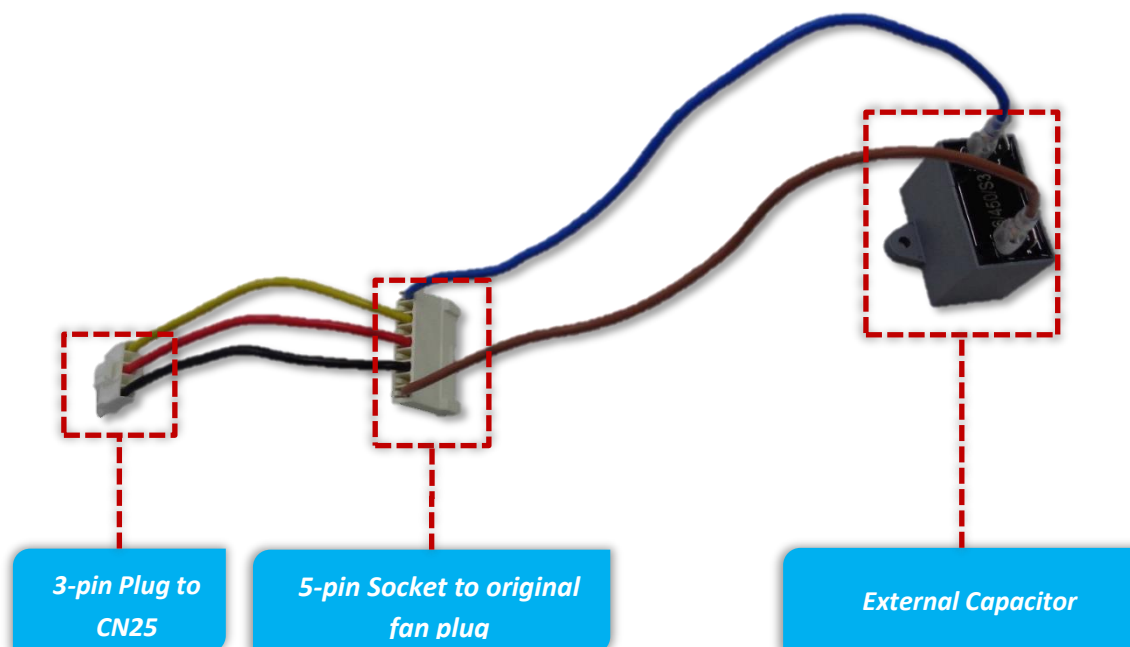
**Note from TMQ: All our Qlima models is DC type outdoor motor.**

Note: When the board is connected to power supply, pay attention to red LED. If SW1 selection is out of table 1, LED will flash at 2.5HZ, compressor will not start. Normal status is 0.5 Hz flash for standby and constant on for compressor running.



## Accessory Instructions

NOTE: It is used only for the units with AC fan motor and the capacitor is built-on original PBA.



When repairing this kind of unit, use this PBA to replace the original PBA, connect the original 5-pin plug of AC fan to the 5-pin socket of the accessory. And connect 3-pin plug of the accessory to the 3-pin socket for AC fan on this after-service PBA. Then fix the external capacitor of this accessory on isolation board of outdoor unit. Check below picture for connection details.

