MK3 FOR CLIMMA COMPACT CABIN SERIES

This instruction is for the replacement of the COMPACT control box and its remote mechanical control panel with a MK3 power board and control panel.

SERIES	CODE	FROM YEAR
COMPACT CABIN	M60000	1995

Please refer to the following table to identify the models for which the MK3 board and control panel are compatible and covered by this instruction.

Compact M60000	Part #	Fan Part #	Fan W	Fan run cap	Compressor model	Comp run cap uF	notes
5	M6008 M6009	M73950	100	2	DANFOSS SC12G R134A	-	
7	M60013	M73950	100	2	DANFOSS SC21G R134A	10	
9	M60019 M60018	M73950	100	2	DANFOSS SC21G R134A	10	
12	M61596R M61597R	M64785 M77310	125	4 3,15	CARRIER EBF110121A	20	
17	M60023R M60021R	M61560	280	6,3	CARRIER ECF 160121A	30	
17S	M65490R	2 x M73950	2 x 100	2x2	SANYO C-RHN110E5A R407C	25	
24S	M67800R M63071R	2xM64785 2 x M77310	2 x 125 2x130	2 x 4 2 x 3,15	CARRIER ECF215221A	35	

WARNING - AC 230V !!! Before opening any electric equipment make sure there is no electrical supply.



MK3 FOR CLIMMA COMPACT SERIES

Please refer to the following table in order to have the procedure suggested for every specific model

MODEL	COMPRESSOR MODEL	NOTES + PART #	INSTRUCTION
Compact 5 - Split 4	Compressor Danfoss SC12G	M81301 - MK3B – MCAV4 Start relay on the compressor incorporating the start capacitor. No need of compressor run capacitor	STEP 1 - STEP 4
Compact 9 - Split 8	Compressor Danfoss SC21G	M81301 - MK3B – MCAV4 + start booster M77320	STEP 1 – STEP 2
Compact 10 – Split 10	Rotary compressor	M81301 - MK3B – MCAV4	STEP 1 – STEP 3 – STEP 4
Compact 12 – Split 12	Rotary compressor	M81301 - MK3B – MCAV4	STEP 1 – STEP 3 – STEP 4
Compact 16 – Split 16	Rotary compressor	M81301 - MK3B – MCAV4	STEP 1 – STEP 3 – STEP 4
Compact 17S – Split 17S	Rotary compressor	M81301 - MK3B – MCAV4	STEP 1 – STEP 3 – STEP 4
Compact 24S – Split 24S	Rotary compressor	M81301 - MK3B – MCAV4	STEP 1 – STEP 3 – STEP 4

WARNING - AC 230V !!! Before opening any electric equipment make sure there is no electrical supply.



MK3 FOR CLIMMA COMPACT M600XX SERIES – STEP 1

- Disconnect all the harness from the old control box, marking the cables of the supply, pump, fan, compressor, pressure switch, reverse cycle valve (RC models) or electrical heater (EH models).
- Identify and remove the fan run capacitor (CM) from the old electrical box This capacitor will be needed when the fan is connected to the new MK3 power board as per schematic #1. WARNING: the run capacitor MUST be connected as shown while the 230V supply must be connected to the blue and black wires. A wrong connection can damage the fan motor.







MK3 FOR CLIMMA COMPACT SERIES – COMPACT 9 ONLY – STEP 2

- Identify the compressor run capacitor 10uF inside the old electrical box. This capacitor needs to be installed on the unit and connected as per schematic.
- The Compact Cabin 9 needs a special start device in order to convert it to the MK3 control. You will need the original run capacitor CM of 10 uF and the booster kit M77320, both to be installed on the unit assembly and connected as per the following schematic #2.



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MK3 FOR CLIMMA COMPACT SERIES – COMPACT 9 ONLY – STEP 2



MK3 FOR CLIMMA COMPACT SERIES – STEP 3

Identify the compressor run capacitor inside the old electrical box. This capacitor needs to be installed on the unit and connected as per schematic #3. Warning: The capacitor MUST be installed across the terminals R (run) and S (start) while the 230V supply must be between C(common) and R (run). A wrong connection can damage the compressor motor.



If the old electrical box has 2 compressor capacitors, the run capacitor can be identified being normally smaller in capacity and not having the discharge resistor





MK3 FOR CLIMMA COMPACT SERIES – STEP 4

