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 Carrier A United Technologies Company	 Carrier s.a.	Instruction <hr/> Research and development	
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Addendum to the instructions 00PSG003360000 and 00PSG003360100

This document is an addendum to the installation and wiring instruction that is provided as part of retrofit kits 00PSG003360000 and 00PSG003360100.

It applies to 30XA machines equipped with power factor correction box (opt or QM231) that have been built before march 2015. For these machines, the relay that controls the power contactors that supply the capacitors is NOT located inside the cabinet that encloses the capacitors but inside the main electrical panel.

Parts and tool required

- All parts and tools listed in instructions from kits 00PSG003360000 or 00PSG003360100.
- Tool to drill two M16 holes inside the capacitor cabinet.
- Two 2x0.75 cables that shall be delivered with this instruction.

Target:

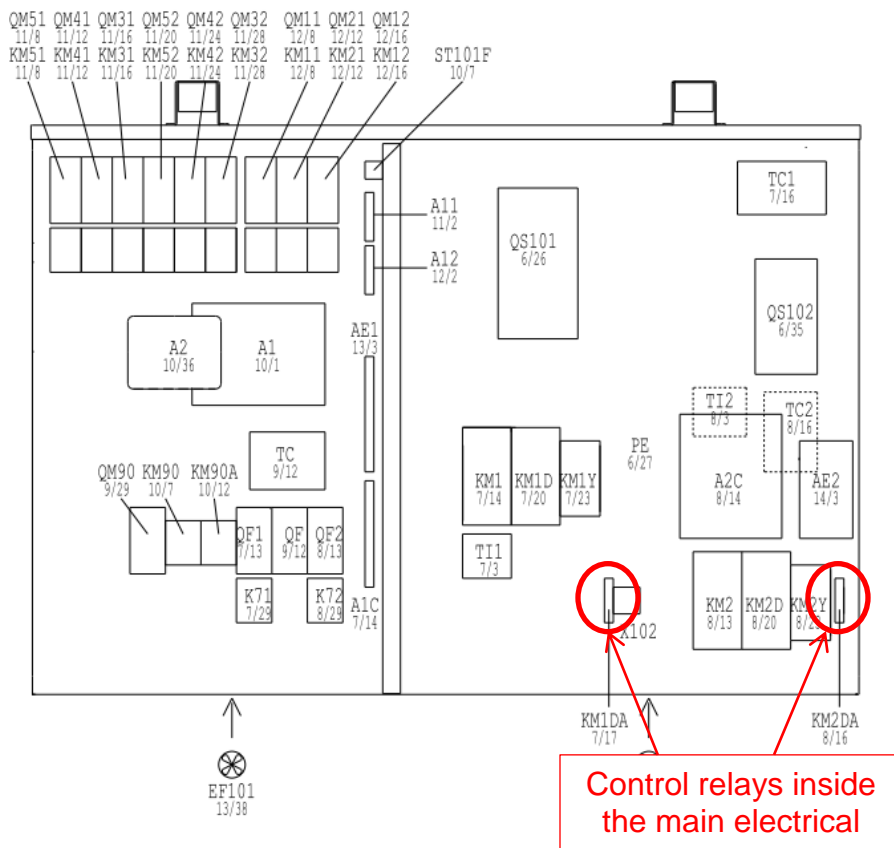
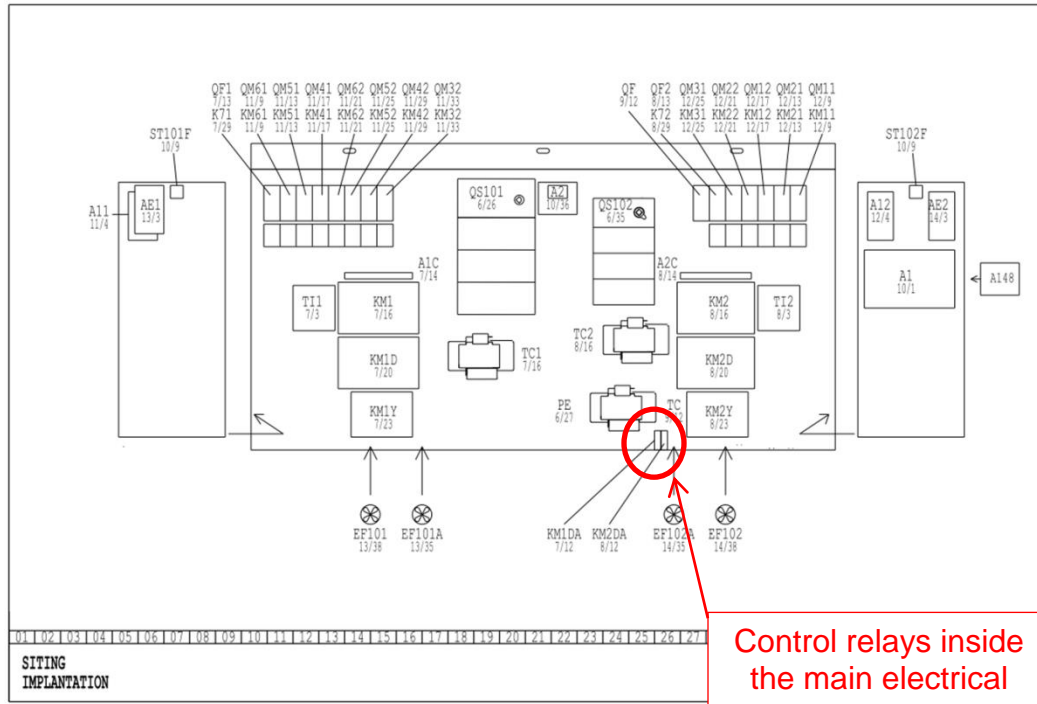
Insert a thermostat contact in the control signal of the relay that supplies the coil of the capacitor contactor.

Step 1: confirm this instruction applies to your cabinet

- ⇒ Check that control relays KM1DA and KM2DA are located inside the main electrical box.






Below are illustrations where to find these relays for two types of main electrical cabinets :

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Step 2: Apply instructions from kits 00PSG003360000 and 00PSG003360100 until step 8.

#	Actions	Documents / procedures / tools / part(s)	Pictures	Control / other actions
1	Mark and secure the working area	Cardinal rules		
2	Identify, log out and tag out power supply	Cardinal rules electrical tool, voltage detector		LO - TO
3	Take picture of the nameplate	Camera		
4	Disassemble the door in place, remove the earth connection keep pins, accessories and braid	flat screwdriver Pipe wrench M6		
5	Remove the wires: 1: between terminal block 1 and A1 (from KC1-1) 3: between terminal block 3 and A1 (from KC1-2)	electrical diagram (to be define by UTC)		
6	Install the door instead of the old one	Use the pins and accessories of the old door to mount it Make the connection with the earth braid		Check the easy and collision-free closure
7	Carry out the routing of the sock cables	see photo opposite		
8	Wire the transformer	Wire 1 of the kit on L1 downstream of FU Wire 2 of the kit on L2 downstream of FU		Torque tighten (2.5 Nm) / mark the torque with the marker

Step 3: from this step, the instructions from 00PSG003360000 and 00PSG003360100a shall be replaced by the ones below:

⇒ Drill two M16 holes inside the capacitor cabinet in order to fit the two 2x0.75mm² cables that were delivered as part of this additional kit.

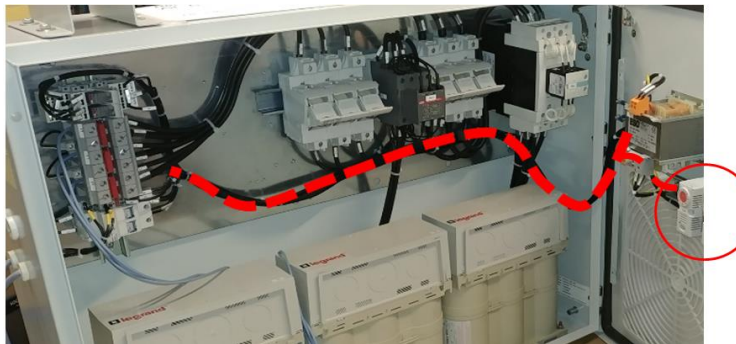
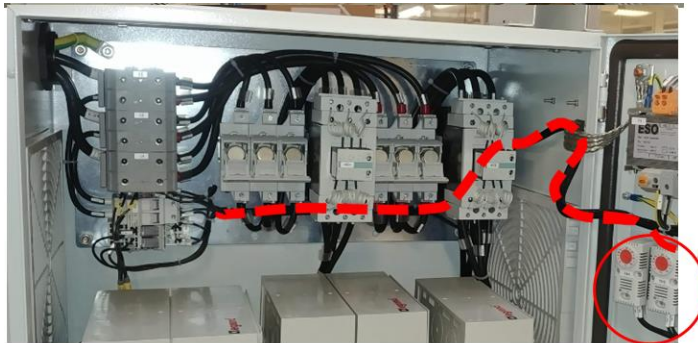
Addendum to 00PSG003360000 and 00PSG003360100

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Make sure to protect the devices inside the cabinet in order that they will not be contaminated by metal chips/dust.
Clean the cabinet.

Step 4:

- ⇒ Disconnect the conductors of the 00PSG003360000 or 00PSG003360100 kit that are plugged to the protective thermostats (red thermostats Th1 and Th2). Remove these conductors from the wires assembly that is shown in red in below illustrations.



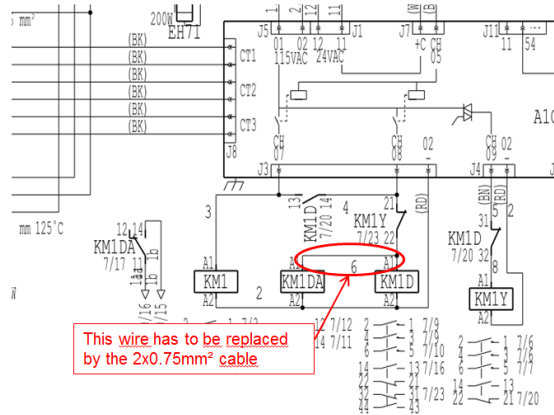
Replace these conductors by the two $2 \times 0.75\text{mm}^2$ cables:
Connect each cable to one thermostat

Step 5:

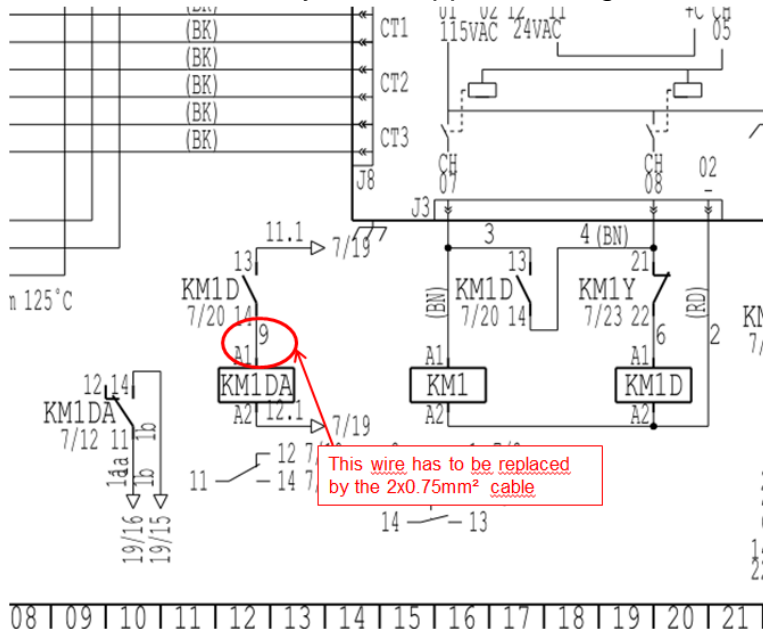
- ⇒ Route the two $2 \times 0.75\text{mm}^2$ cables inside the machine until the main electrical cabinet. Connect these cables in place of the control wire that supplies the coils of KM1DA and KM2DA relays. Refer to electrical diagram. Two wiring configuration can exist as per below illustrations.

Case #1: KM*DA relays are supplied through 115Vac voltage:

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Case #2: KM*DA relays are supplied through 24Vac voltage:



Step 6: check installation:

- ⇒ Check that wiring is according to wiring diagram
- ⇒ Check proper operation of the kit:
 - A: Start compressor and make sure that capacitor is switched ON when compressor starts. Verify proper assignment between capacitor and compressor:
 - C1(A) capacitors shall be switched together with B compressor**
 - C2(A) capacitors shall be switched together with A compressor**
 - B: If possible, reduce the setting of the protective thermostats (red thermostats Th1 and Th2) at a value below ambient temperature. Start compressor and make sure that capacitor is NOT switched ON.

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C: Reduce the setting of the fan control thermostat (blue thermostat Th100) at a value below ambient temperature and make sure that fan runs as soon as power is switched ON to the capacitor cabinet.

⇒ Set or check thermostats settings

Th100 : 35°C

Th1: 52°C

Th2: 52°C