

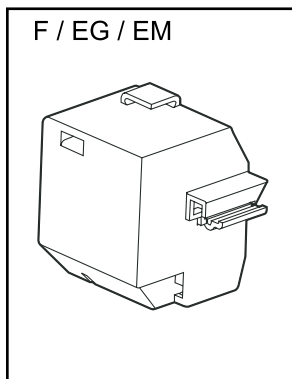
1 - INTRODUCTION

Aiming at electrical components isolation and the customer safety, Embraco supplies terminal boards and relay covers. These components make our compressors handling easier, with more value-added to the products. The application of Embraco components has advantages:

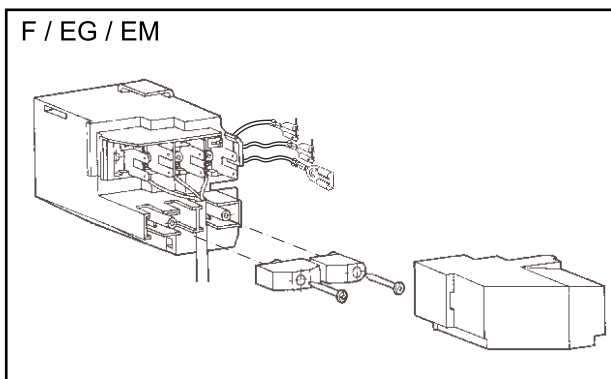
- International Safety Standards compliance, what will make institutes approval process easier for different markets.
- Relay covers and terminal boards produced in non-inflammable material, attending Glow Wire European directive IEC 60335.
- Attending the main safety standards (UL e IEC).
- Simplifying assemble process.
- Front access to terminal board connections.

2 - TERMINAL BOARD AND ELECTRICAL COVER OPTIONS

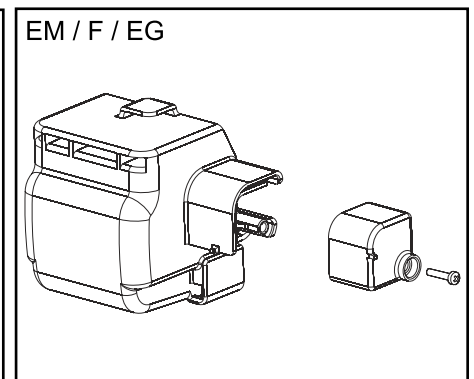
- EM, F and EG series use relay covers and terminal board (Pictures 1 and 2).
- The EM, F, and EG models, which use the 4TM overload protector, use the new relay cover (Picture 3).
- VCC2 (VEGT) models use hermetic terminal cover (Picture 4).
- VCC3 (VEGY and VEM) can use hermetic cover (standalone version) (Picture 6) or a inverter coupled (attached version) (Picture 5).



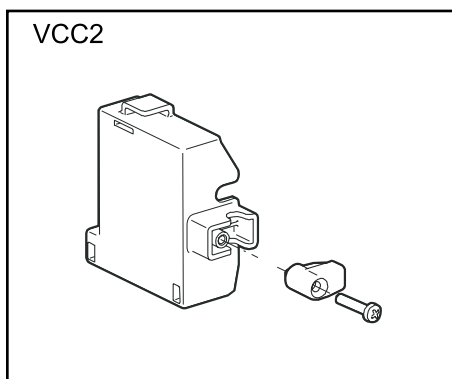
Picture 1



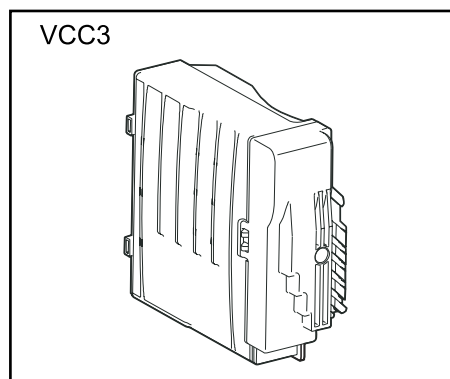
Picture 2



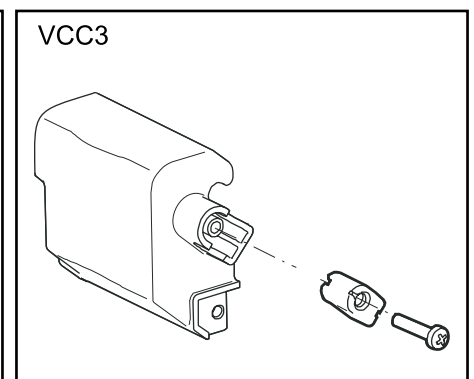
Picture 3



Picture 4

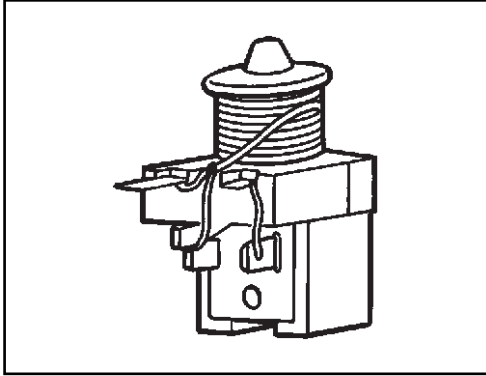


Picture 5

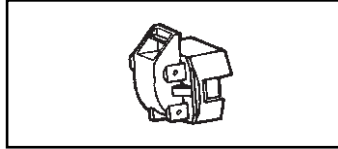


Picture 6

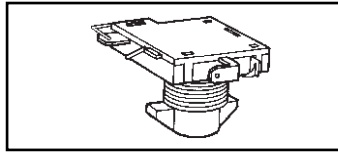
3 - START DEVICES EXAMPLES



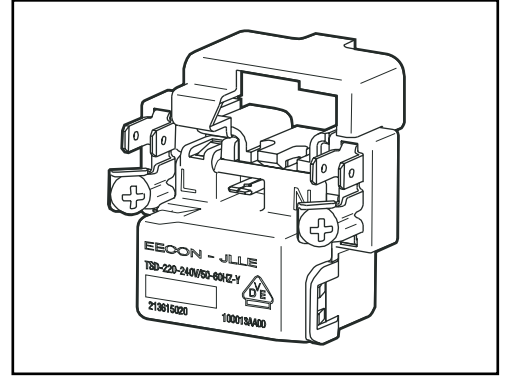
Short Relay



PTC Relay

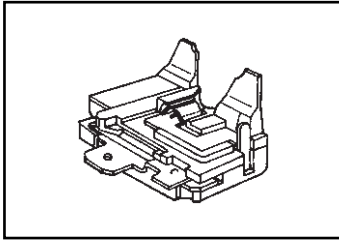


EM Relay

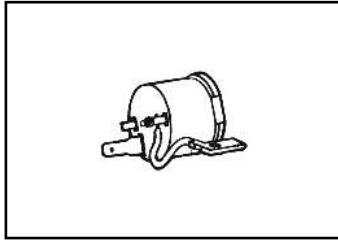


TSD

4 - OVERLOAD PROTECTORS EXAMPLES



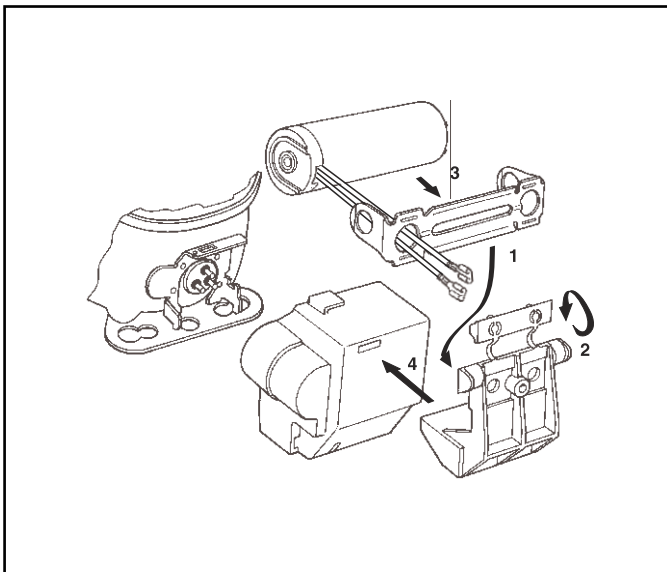
4TM Overload Protector



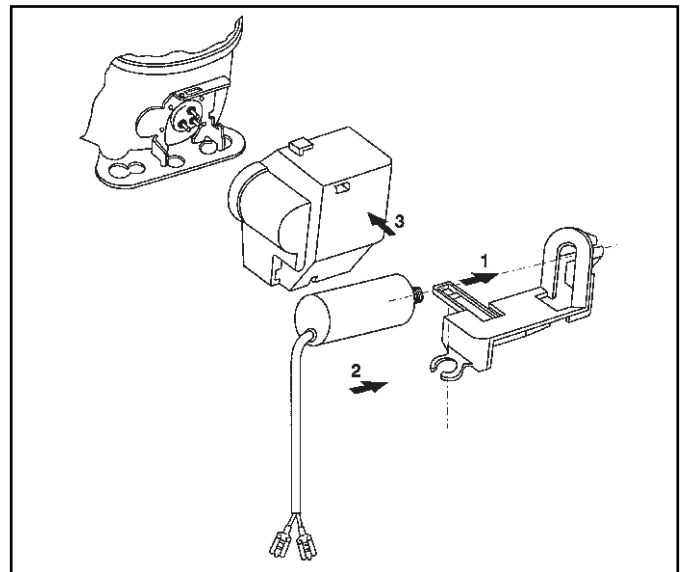
3/4" Overload Protector

5 - SUPPORT AND CAPACITOR ASSEMBLY

After assembling start device and overload protector, proceed with electrical connection of capacitor and assemble support and capacitor, as shown in detailed assembly sequence below.



Support and Starting Capacitor

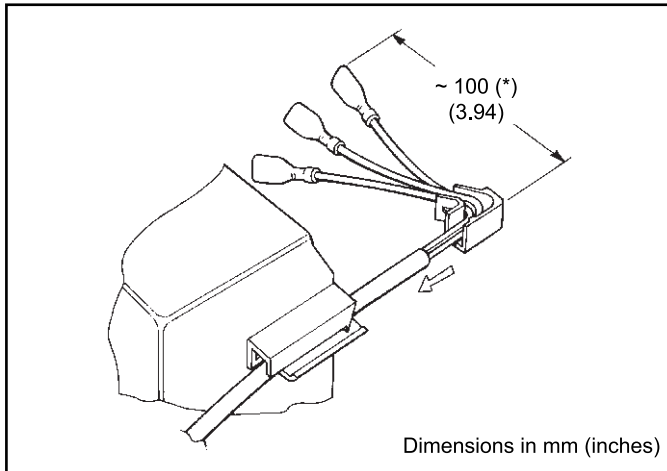


Support and Run Capacitor

Remarks: These supports can be used in the terminal boards and relay covers (current and new).

6 - TERMINAL BOARD AND RELAY COVER ASSEMBLY AND DISSASSEMBLY PROCEDURE (EM, F/EG AND VCC2)

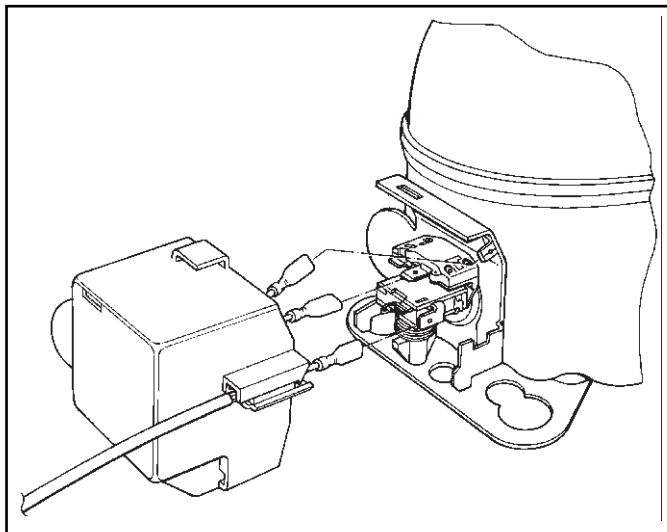
After assembling start device and overload protector, proceed assembly of cord relief to electric cable in right position*, see picture 7.



Picture 7

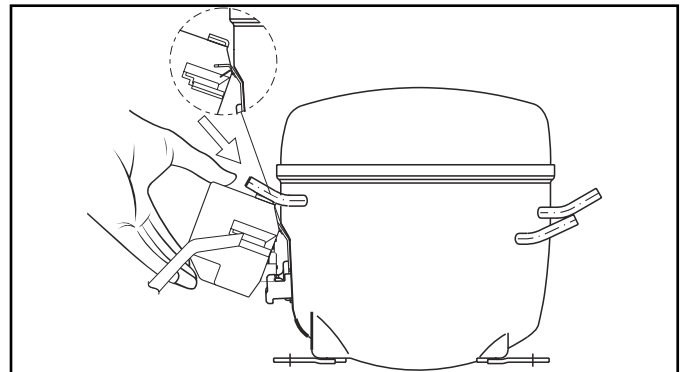
* By right position is understood that after assembling the cord relief to electric cable, there remains a space between the relay terminals and the cord relief.

Connect wire terminals of cable, (phase, neutral and ground) to overload protector, relay and ground terminal of compressor.



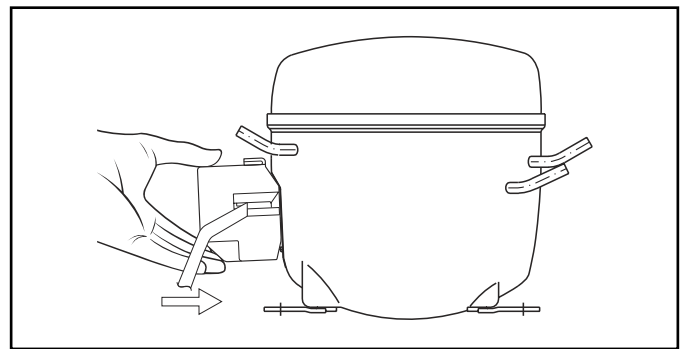
Picture 8

Initially the cover must be supported at 30 degrees from horizontal, supported by the upper fence, and then, pushed to connect its upper jutting to the fence (see picture 9). When cover is connected, observe correct alignment, which assures correct initial cover position.



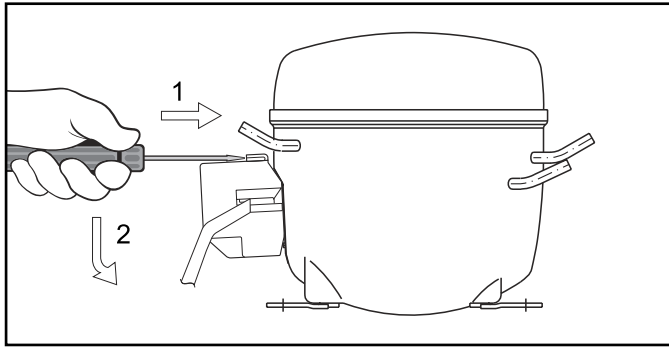
Picture 9

The next step is to press the relay cover until the base connects to the fence lower portion, until you hear a "click" (see picture 10).



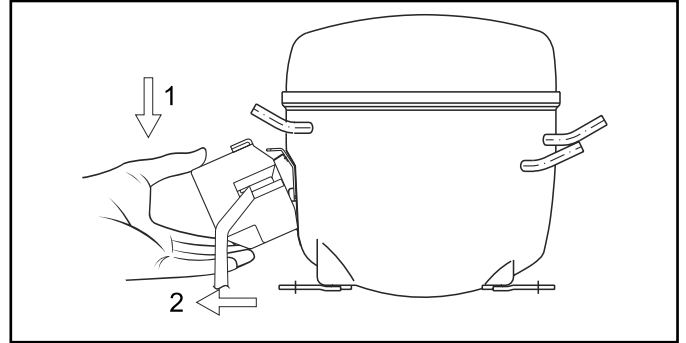
Picture 10

To disassemble the cover, a screw driver must be inserted to the upper orifice (see picture 11), and press it down, until it gets released from the base.



Picture 11

The last step is the relay cover removal, by pressing it down in angle, as showed in picture 12.

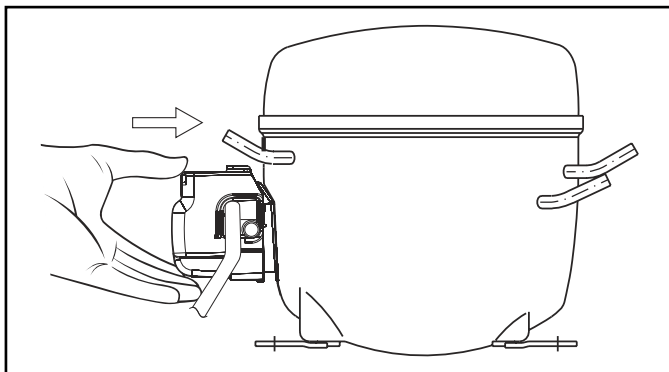


Picture 12

7 - ASSEMBLY AND DISASSEMBLY PROCEDURE FOR THE NEW RELAY COVER (EM AND F/EG)

After assembly of start device and overload protector, proceed with electrical connections.

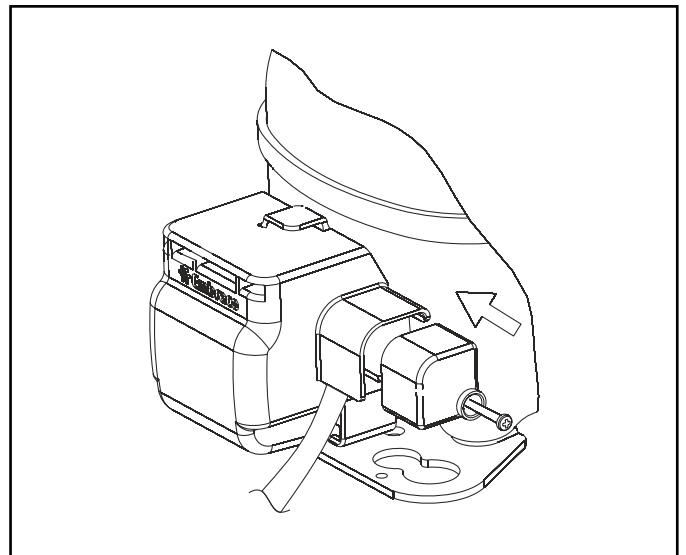
The next step is to support the cover so that the side and upper edge of fence get connected, see picture 13, observing correct alignment.



Picture 13

Next the cover must be pressed against the compressor until you hear a "click".

Insert cord anchorage in proper space, assuring that cords are in right position (Picture 14), screw it in at 1,2 N.m.

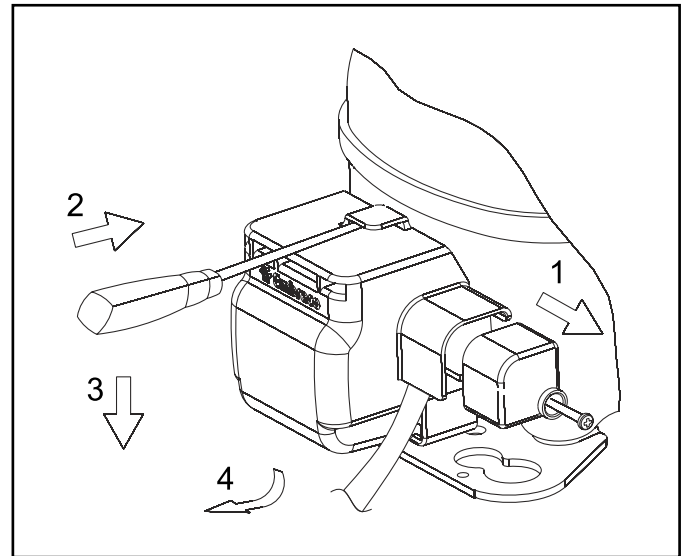


Picture 14

To disassemble the cover you must remove the screw until anchorage can be taken away from cover (Picture 15).

The next step is to insert a screwdriver in the upper orifice of the cover and to press it down, until it gets released from the base.

The last step is to remove the cover, pressing it down and taking it away from the compressor.

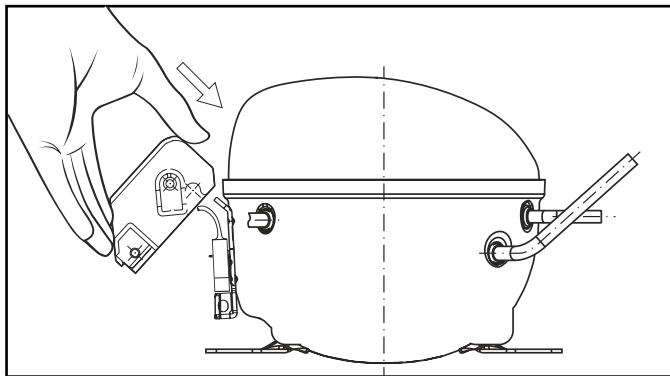


Picture 15

Remarks: The insertion and removal of capacitor support is similar to old cover.

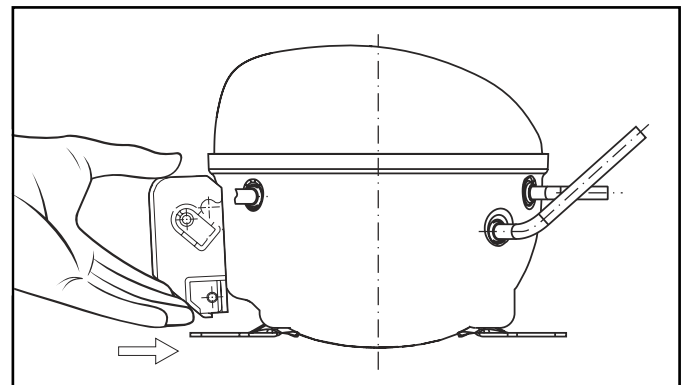
8 - ASSEMBLY AND DISSASSEMBLY PROCEDURE FOR VCC3 (STANDALONE AND ATTACHED VERSIONS)

The first step is to connect the cable to the hermetic terminal. After that, press the upper part of the hermetic cover (for standalone version) or the inverter (for the attached version) in the compressor fence. (See picture 16).



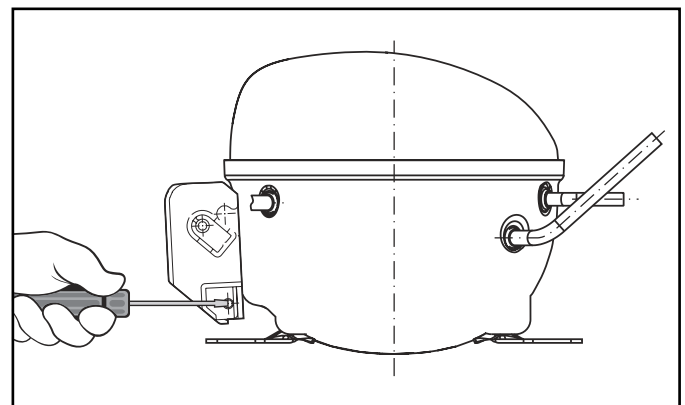
Picture 16

Next, the lower portion of the cover / inverter must be pressed until the side hole be aligned with the compressor fence hole (see picture 17).



Picture 17

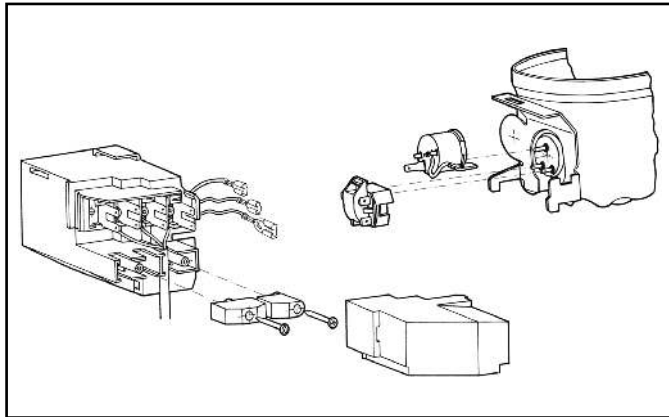
The final step is to tight the cover / inverter screw to the fence base (see picture 18).



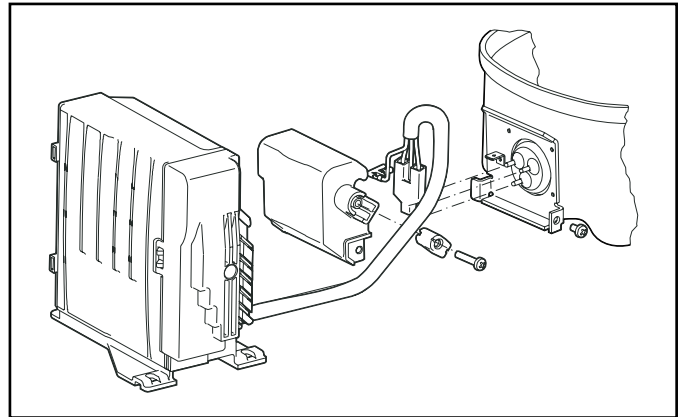
Picture 18

9 - COMPONENTS ASSEMBLY SEQUENCE EXAMPLES

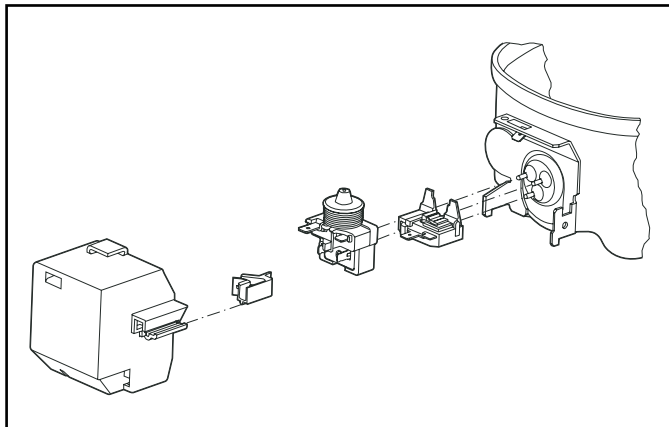
COMPRESSOR EM



COMPRESSOR VCC



COMPRESSOR F / EG



Note: The thermal protector 3/4" is fastened by means of a rabbit in the cover.

Note: Subject to alteration without previous notice.