



Carrier

A United Technologies Company

REPLACEMENT COMPONENTS DIVISION

SERVICE BULLETIN

SUBJECT: PIC R-134a Retrofit Kit

NUMBER: C9810

DATE: 4-27-98

SUPERSEDES:

MODELS AFFECTED: 17/19 Series Chillers Using R-134a

DATE:

PAGE: 1 **OF:** 2

Installation, repair and service and equipment referenced in this Service Bulletin should be undertaken only by qualified persons. Carrier Corporation: (1) makes no representations or warranties, expressed or implied, concerning the accuracy, completeness or right to use the information contained herein. (2) Disclaims all liability for injuries, damages, infringements and other losses which may arise on account of, or which may result from, the use or application of any information, method or apparatus disclosed herein.

PURPOSE:

This bulletin is to inform the field of a Product Integrated Control (PIC) Retrofit kit for R-134a systems to upgrade older control systems to CCN compatible controls. This kit was designed for comfort cooling applications only.

INFORMATION:

The Replacement Components Division (RCD) has set-up two separate packages for conversions to PIC controls from any control system. If the compressor sump is vented to the cooler, such that the oil sump is at cooler pressure, use the hermetic conversion kit. If this is not the case, the open-drive retrofit kit will be required. The hermetic conversion kit, Part Number 19EX-660-003, has all of the required items to convert a machine similar to the current 19EX. The open-drive conversion kit, Part Number 17EX-660-001, has all of the required items to convert a machine similar to the current 17EX. The control system logic operates for machines using R-134a **only**.

Part Number	Description	17EX-660-001	19EX-660-003
HF-26BB-025	Actuator Motor	1	1
HH-79NZ-047	Temperature Sensor	6	6
HK-05YZ-002	Pressure Transducer	4	3
HH-79NZ-073	Thrust Sensor	1	1
19EX0400-2601	High Pressure Switch	1	1
AT-225	Temperature Sensor Well	4	4
17EX5400-1702	PIC Control Panel	1	-
19EX5400-5002	PIC Control Panel	-	1
19EX5400-0302	PIC Power Panel	1	-
19EX0400-0202	PIC Power Panel	-	1
E950705-2	PIC Starter Conversion Panel with SMM	1	1
06DA-403-844	Valve Assembly	5	4
32MP-500-354	Motor Sensor	-	2
Cat.# 531-724	Start-up, Operation & Maintenance	1	1
Form 17/19-1SI	Instructions		



Carrier

A United Technologies Company

REPLACEMENT COMPONENTS DIVISION

SERVICE BULLETIN

SUBJECT: PIC R-134a Retrofit Kit	NUMBER: C9810 DATE: 4-27-98 SUPERSEDES: DATE: PAGE: 2 OF: 2
MODELS AFFECTED: 17/19 Series Chillers Using R-134a	

The above list assumes the original control panel is a 32SM. If the original control panel is a 32MP, the motor (32MP500354) and thrust bearing sensor (HH79NZ073) are not required.

Additional Items required:

- Job/machine "as built" wiring diagrams including chiller and starter data from the local Carrier Office
- Electric drill, bits, and taps for installing sensors
- Standard refrigeration tools
- Touch-up paint, as required

The following hardware is required for mounting the inlet guide vane actuator:

- (3) 1/4-20 x 1-3/4 long hex head bolts (use longer ones if required.)
- (6) 1/4-20 hex nuts
- (3) 1/4" washers
- bushings, if needed

In addition to the above list, the inlet guide vane actuator linkage must be determined based on the application. The guide vane actuator converts a 4 to 20 mA signal sent by the PSIO to a rotational position. Full rotation of the actuator is 308 degrees. It has a rated torque value of 400 in-lbs. (45.1 N-m) at 103.5 VAC.

The PIC Starter Conversion Panel with the SMM is a separate enclosure to convert the existing starter to the current Z-375 specification. The panel can be mounted inside, if space is available, or outside of the starter. The panel enclosure currently measures 24.38 x 20.38 x 6.75 inches (619 x 518 x 171 mm). It is supplied with its own power supply and pilot relays.

In some cases, the oil pump overloads in older machines are in the 115 volt control circuit. If this is the case, use the contactor 2C in the power panel as a pilot relay. Wire one of the terminals of the contactor in series with the overloads and oil pump contactor, M3, in the existing oil pump contactor coil circuit. This will keep the overloads in the circuit.

The PIC Retrofit kit is currently available through RCD. Contact your RCD Order Correspondent for price and availability information.