

# **BULLETIN # 09T-03**

Carlyle Compressor Division PO Box 4808 Carrier Parkway, TR2 Syracuse, NY 13221

## **SUBJECT: 06D/E & 06CC Models Approved for R-407A Applications**

DATE: November 16<sup>th</sup>, 2009

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☑ PRODUCT ☑ SERVICE & PARTS ☑ GENERAL	☐ SERVICE & PARTS ☐ GENERAL
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Product Name: 06D, 06E, 06CC Models

#### **DESCRIPTION**

Carlyle is pleased to announce the approval of R-407A refrigerant for low and medium temperature refrigeration applications with the 06D/E and 06CC model types. With the phase-out of R-22 at hand we now have the opportunity to apply R-407A refrigerant in new OEM equipment. Refrigerant 407A delivers comparable capacity and efficiency to R-22 while offering a zero Ozone Depletion Potential (ODP) and comparable Global Warming Potential (GWP).

### APPROVED APPLICATION RANGES

# <u>06DR/06ER - Low Temperature Models</u> <sup>1, 2, 3 & 4</sup>

- SST =  $-35^{\circ}$  F to  $0^{\circ}$  F
- SDT =  $70^{\circ}$  F to  $120^{\circ}$  F

## 06DM/06EM - Medium Temperature Models <sup>4</sup>

- $SST = 0^{\circ} F \text{ to } 45^{\circ} F$
- SDT =  $70^{\circ}$  F to  $130^{\circ}$  F

## 06DA/06EA - High Temperature Models<sup>4</sup>

- $SST = 0^{\circ} F \text{ to } 55^{\circ} F$
- SDT =  $70^{\circ}$  F to  $130^{\circ}$  F

## 06CC - Low Temperature Models<sup>3 & 4</sup>

- $SST = -40^{\circ} F \text{ to } -10^{\circ} F$
- SDT =  $70^{\circ}$  F to  $130^{\circ}$  F

#### NOTES

- 1. Extended Range 06DR models are <u>not</u> approved at SST's above 0 degrees F with R-407A
- 2. Operation below 0° F SST requires a cylinder head cooling fan and de-superheating valve.
- 3. Cylinder head cooling fan recommended, de-superheating valve required, same packages as R-22 Applications.
- 4. Maximum Return Gas Temperature is 65° F

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#### RECOMMENDED LUBRICANTS AND ACCESSORIES

### • Approved Lubricants:

#### See below table:

Castrol	E68
ICI Emkerarate	RL68H
CPI	CP-2916S
CPI	
BP Marine Enersyn	

## • Capacity Control Packages:

- o Same packages as currently offered for all 06D/E models.
- o Follow R-22 Application Guidelines for unloading at various SST ranges.
- o 06CC Models may not be unloaded.

#### • Service Valves:

o Same Packages as currently offered.

## • De-Superheating:

- o Required for all Low Temperature, 06D/E applications with R-407A.
- o Required for all 06CC applications with R-407A.
- o Same packages as currently offered for R-22 applications.

## • Cylinder Head Cooling Fans:

- o Required for 06D/E Models with design SST's at 0° F and lower
- o Same packages as specified in Carlyle Technical Bulletin 08T-3.
- o Recommended for all 06CC models.

### • Oil Pressure Safety Switches:

- o Recommended for all applications.
- o Same packages as specified for 06D/E/CC models in R-22 applications.

## • Crankcase Heaters:

- o Recommended for all applications.
- o Same packages as specified for 06D/E/CC models in R-22 applications.

## • Mufflers / Baffle Plates:

o Same packages as specified for 06D/E/CC models in R-22 Applications

#### • Sub-Coolers:

- o Recommended for all 06CC applications
- o Same as specified for 06CC models in R-22 Applications
- o Use Carlyle Solutions software to calculate the sub-cooler loads

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## MOTOR PROTECTION AND CODE APPROVALS

Motor protection device recommendations do not change for the 06D/E/CC models applied with R-407A. Please refer to the Application Guides for the 06D/E and 06CC models for further details. Carlyle 06D/E and 06CC Compressor model types are UL and CSA listed with R-407A.

Feel free to contact Application Engineering at 800-GO-CARLYLE (800-462-2759) if you have any questions related to this bulletin.

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