



THE NEW STANDARD IN LOW-TEMPERATURE R-22 REFRIGERATION.



These days, there's a lot to look into when choosing a compressor for low-temperature refrigeration applications. If you want to match the efficiencies and reliability of R-502 units, you have to specify a two stage booster system. If you want the ease and convenience of a single unit, you have to specify a single-stage, demand-type compressor.

That's why Carlyle is proud to introduce Carlyle Compound Cooling[™]. It's the first R-22 compressor to offer two-stage booster system efficiencies from a single, easy-to-specify and install unit. And it's going to change the way you look at R-22 compressors.

TWO COMPRESSORS IN ONE.

Carlyle Compound Cooling uses six cylinders to provide two complete compression cycles. The first of four act as the low stage, boosting the suction pressure from the refrigeration load to intermediate pressure. The remaining two act as the high stage, completing the compressor cycle at normal discharge temperatures.

The result is a lower internal losses from from a compressor that delivers the same capacities as R-502 units. Not to mention higher operating efficiencies than single-stage units of the same displacement.





THE NEW STANDARD IN LOW-TEMPERATURE R-22 REFRIGERATION. (continued)

TWO-STAGE SYSTEM RELIABILITY.

A major concern with single stage units is reliability. That's because the single-stage compression of R-22 can easily cause overheating at high compression ratios. To compensate for higher the higher discharge temperatures, liquid refrigerant must be injected into the cylinders - a dangerous risk to the compressor.Carlyle Compound Cooling compressors are designed to avoid these risks.

That's because they operate steadily, at low compression ratios, free from dangerous injections of liquid refrigerant directly into the cylinders. And since each unit operates at such a constant capacity, stress caused by short cycling is reduced. The result is 'round-the-clock' reliability that single-stage units can't match. **EASY TO INSTALL . . .**

With nine models available, Carlyle Compound Cooling fits in comfortably with virtually any lowEVAPORATOR VALVE UNIVE U

Carlyle Compound Cooling provides efficient R-22 refrigeration in two complete, internally-compounded stages.



temperature application. Units dimensions are similar to other Carlyle compressors, making them the perfect unit for new supermarket rack designes. Installation is as easy as bolting the unit into place, attaching the economizer, and making standard suction and discharge connections. It's the user-friendliest two-stage system on the market today!

... EASIER TO KEEP UP AND RUNNING.

Every Carlyle Compound Cooling model offers everything necessary to ensure years of efficient, trouble free performance. Like low oil circulation rates. Oil controls that are identical to R-502 rack systems. And the backing of Carlyle's Green Carpet Program, program support S0 а comprehensive, it offers a toll-free support line, instant credit for qualified customers, and 24-hour replacements for down compressors - guaranteed.





- ① Connection from subcooling heat exchanger or liquid injection port to desuperheat low stage discharge.
- (2) Interstage manifold.
- (3) 1/2" 13 UNC -- lifting lug connection (lug not supplied with compressor).
- (4) 1/4" NPT interstage pressure tap (includes Schrader fitting to relieve crankcase pressure).
- 5 Suction valve location.
- **(6)** 1/4" NPT high side oil safety switch connection.
- O Suction manifold (to low stage cylinders).

| CARLYLE COMPOUND COOLING (ECONOMIZED 40°F LIQUID) | | | | THE COMPETITION SINGLE-STAGE LIQUID INJECTION | | |
|--|------|------------------|------|--|------------------|------|
| Model Number | CFM | R-22 Capacity | EER | CFM | R-22 Capacity | EER |
| 06CC016 | 15.8 | 17,600 | 5.50 | 16.8 | 15,200 | 4.62 |
| 06CC018 | 18.6 | 22,700 | 5.70 | 18.9 | 17,700 | 4.55 |
| 06CC124 | 23.9 | 24,750 | 5.77 | 22.9 | 22,200 | 4.66 |
| 06CC228 | 28.0 | 30,000 | 6.05 | 27.0 | 27,300 | 4.83 |
| 06CC337 | 37.1 | 40,850 | 5.60 | 35.3 | 35,700 | 4.69 |
| 06CC550 | 50.0 | 54,000 | 5.70 | 50.3 | 49,300 | 4.52 |
| 06CC665 | 68.3 | 71,000 | 5.72 | 60.1 | 59,900 | 4.61 |
| 06CC675 | 75.4 | 81,000 | 5.64 | 75.5 | 74,700 | 4.55 |
| 06CC899 | 99.0 | 104,000 | 5.40 | 90.1 | 89,500 | 4.57 |

(Comparison Point - 25/110/65/0)

- (8) 1/4" NPT oil drain pan connection.
- (9) 1/4" NPT oil fill (sump) connection. Also low side oil safety switch connection.
- 1/4" NPT low stage pressure tap.
 * Bottom of cylinder head has a boss a
 - * Bottom of cylinder head has a boss and 1/4" NPT just like the top.



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