06CC COMPOUND COOLING 2-STAGE RECIPROCATING COMPRESSORS

THE PROVEN APPROACH IN LOW-TEMPERATURE REFRIGERATION





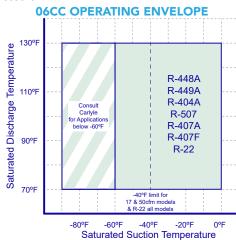
TWO COMPRESSORS IN ONE

The Carlyle 06CC reciprocating compressor offers an impressive list of advantages:

• Sustained Efficiency Across A Wider Operating Range

Carlyle 06CC compressors use six cylinders to provide two distinct compression cycles. Four cylinders act as the low stage, boosting the suction pressure from the refrigeration load to intermediate pressure where the motor is cooled and vapor can be injected from a mechanical subcooler. The remaining two cylinders act as the high stage, completing the compression cycle at normal discharge temperatures.

The result is a compressor that can be applied to deeper frozen applications. The lower internal losses provide higher capacities with substantially higher efficiencies than comparable size single-stage compressors.



Superior Reliability

A major concern with single-stage low temperature is reliability. That's because the singlestage compression can cause overheating at high compression ratios. To compensate for the higher discharge temperatures, liquid refrigerant must be injected into the cylinders - a dangerous risk to the compressor. Carlyle 06CC 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 compressors can't match.

Advanced Capacity Control Options

The 06CC compressors can be applied with either variable speed or pulse width modulation (PWM) capacity control. With variable speed drives the speed can be varied between 30 Hz and 60Hz. Or, with Carlyle's patented PWM technology down to 20% of full load.

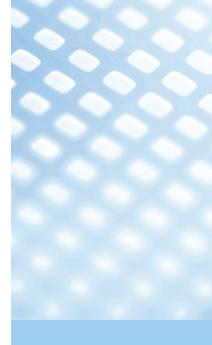
Serviceability

The 06CC reciprocating compressor is fully serviceable, unlike a scroll. In the unlikely event that the compressor sustains damage, the 06CC can often be repaired on site with minimal downtime. The semi-hermetic design of the 06CC can also be remanufactured, making it a more sustainable choice than the unrepairable scroll.

Regardless of your needs in process cooling or refrigeration,

the 06CC is the right choice for reliable, efficient operation.

It's one of the innovations in compressor technology – and just one more reason to count on Carlyle.



06CC at a glance:

- Variable frequency drive capable from 30 Hz to 60 Hz
- Optimized for R-448A, and R-449A, in addition to the former refrigerants, such as R-404A, R-407A, R407C, R407F, R-507 and R-22
- Wider operating envelope with applications down to -60°F (-51°C)
 *for applications down to -90°F (-68°C) contact Carlyle
- Advanced factory-installed motor (models 17-37 cfm) and low oil protection
- Optimizes system operation
- Narrow-seat valve design makes it an efficient lowtemperature compressor in the 5 HP to 30 HP ranges.

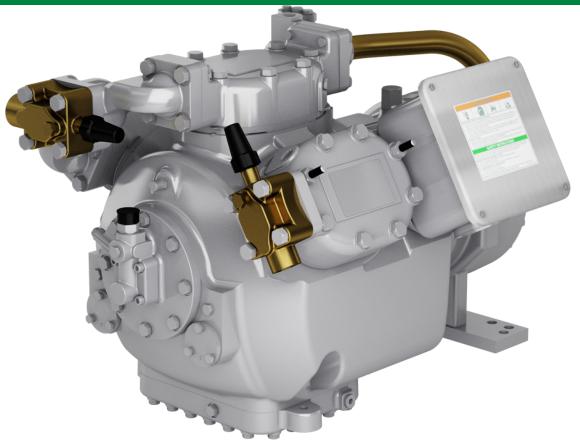
Carlyle 06CC Compound Cooling compressors provide efficient refrigeration in

two complete, internally-compounded stages.

THE PROVEN APPROACH IN LOW-TEMPERATURE REFRIGERATION.

MODEL NUMBER	НР	СҒМ	R-448A	R-449A]
			-25°F (-31°C) MET / 110°F (43°C) MCT		
			Capacity (btu/hr) @ 60Hz - 460-3-60		
06CC*17	5	17	18,250	17,250	208/230v-3-60Hz
06CC*25	6 1/2	25	27,550	26,100	460v-3-60Hz
06CC*28	7 1/2	28	31,750	30,100	575v-3-60Hz
06CC*37	10	37	43,950	41,650	200v-3-50Hz
06CC*50	15	50	52,700	49,900	400v-3-50Hz
06CC*65	20	65	77,300	73,250	
06CC*75	20	75	86,650	82,150	
06CC*99	30	99	115,200	109,200	MET = Mean Evaporating Temperature MCT = Mean Condensing Temperature

Performance data available using Carlyle's CARWIN™ Selection Software at <u>carwin.carlylecompressor.com</u>



With our 06CC family, Carlyle's innovative design makes it literally two compressors in one, with both high and low stages built in. Whether it's used in, process cooling or refrigeration, 06CC provides countless benefits – all from one complete compressor family.



For more information or to find a distributor in your area, please visit us online at www.carlylecompressor.com





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