

# 06M RECIPROCATING COMPRESSORS WITH R-410A REFRIGERANT

INTRODUCING ONE OF THE LATEST IN RELIABLE,  
EFFICIENT COMPRESSOR TECHNOLOGY



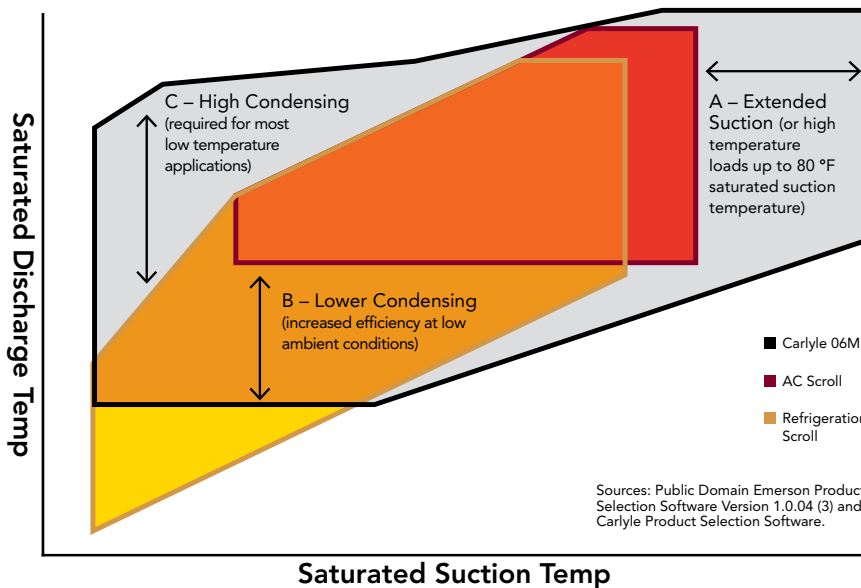
 Carlyle™

When compared to scroll compressors, the Carlyle 06M reciprocating compressor offers an impressive list of advantages. Here are a few:

- **Sustained Efficiency Across A Wider Operating Range**

The valve system in Carlyle’s 06M reciprocating compressors automatically adjusts to ever-changing operating conditions for maximum performance around the entire operating envelope. This enables operation at extremely low to very high saturated suction temperatures – ideal for applications with low latent cooling loads or those that require pull down at high temperatures. On the other hand, scroll technology can only be optimized for efficiency at a specific rating point, resulting in either over- or under-compression away from their design point.

### 06M OPERATING ENVELOPE—R-410A



- **Superior Reliability**

Unlike scroll compressors, the 06M contains an integrated positive displacement oil pump to help maintain reliable operation even under marginal lubrication. This advantage is critical in ensuring durability over a wide variety of applications – particularly in refrigeration, where systems may have large refrigerant charges or experience frequent start-stop cycles and transients like defrost cycling.

- **Advanced Capacity Control Options**

With the 06M, cylinder unloading is available over the entire product range. For more precise capacity control, the 06M can be applied with two different types of infinite capacity control: either Carlyle’s patented pulse width modulation technology for reducing capacity down to 20% of full load or with variable speed drives where the speed can be varied between 25Hz and 80Hz for a capacity range of 42% to 133% of full load.

- **Serviceability**

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

**Regardless of your needs in air conditioning, process cooling or refrigeration, the 06M is the right choice for reliable, efficient operation. It’s one of the latest innovations in compressor technology – and just one more reason to count on Carlyle.**

### 06M at a glance:

- Variable frequency drive capable from 25 Hz to 80 Hz
- Optimized for R-410A
- Dual suction connection locations
- Wider operating envelope
- Three-cylinder in-line with standard unloading and smart unloading
- Smaller footprint– 4" narrower than the O6D compressor
- Advanced factory-installed motor and low oil protection