

### Delphi Compact Variable Compressors

The next generation of variable displacement piston compressor technology, Delphi's Compact Variable Compressors (CVC), are based on a swash plate simple harmonic motion mechanism. The enhanced mechanism performance makes the CVC adaptable to both pneumatic and electronic control.

#### ► Benefits

- Compact design, better packaging, and lower mass
  - Lower mass enhances fuel economy improvement
  - Smaller diameter, shorter length for easier installation
- Die-cast aluminum shell for a lightweight, high strength compressor
- Variable displacement design provides:
  - Smooth, continuous operation
  - Improved operator comfort
  - Improved fuel economy
  - Improved dehumidification
- Integrated control valve enables compact packaging
- Electronic control system capability enhances system performance and improves cool-down
- Compact clutch arrangements provide design flexibility
- Best in class NVH (noise, vibration, handling) characteristics for quiet operation and customer satisfaction
- High speed capability for uninterrupted air conditioning at high engine speeds
- Options available include:
  - Clutchless or with clutch
  - Electronic control valve or pneumatic control valve
  - Discharge shut-off valve
  - Suction shut-off valve
  - Thermal fuse or thermal switch
  - High pressure relief valve for safety
  - Flexible pulley configuration options
  - Various vehicle engine and refrigeration interface options

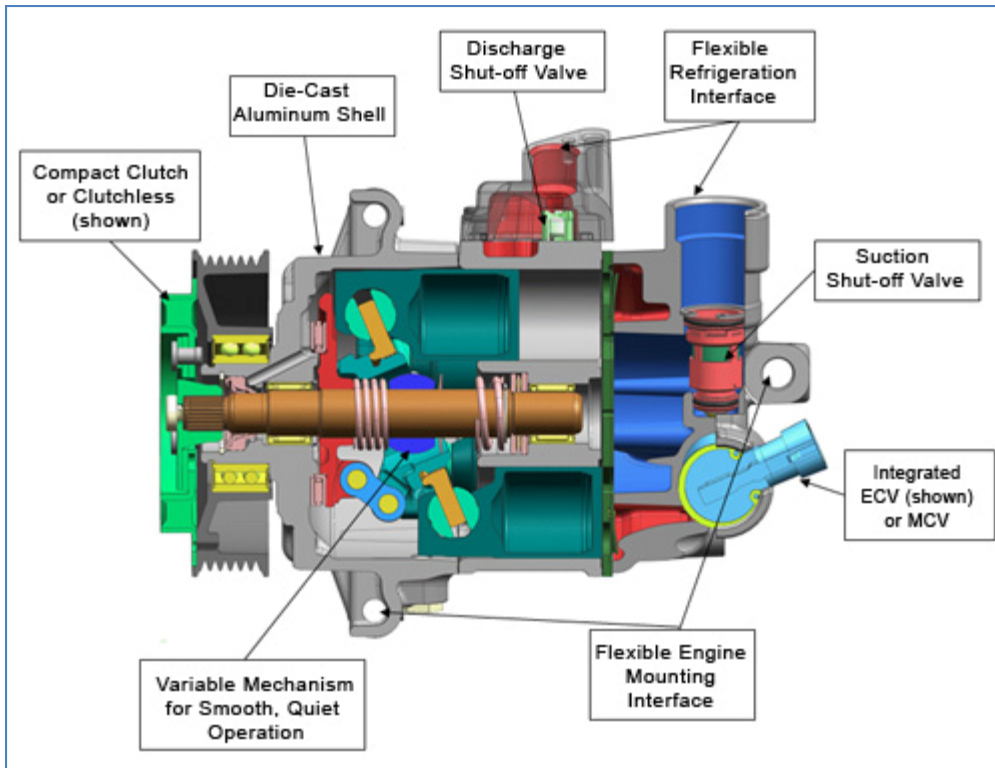


Delphi Compact Variable Compressor

#### ► Typical Applications

Delphi's CVC is adaptable to a full range of vehicles. While our current product portfolio includes CVC ranging from 100 cc displacement to 185 cc displacement, Delphi can design and validate a CVC for a specific application. The CVC can be applied to both thermostatic expansion valve and orifice tube systems.

► **Illustration of a Delphi Compact Variable Compressor**



► **Specifications**

	<b>5CVC100</b>	<b>5CVC120</b>	<b>6CVC125</b>	<b>6CVC140</b>	<b>6CVC160</b>	<b>7CVC165</b>	<b>7CVC185</b>
Length (mm)	182	192	192	192	192	203	206
Diameter (mm)	105	114	114	114	115	125	125
Displacement (cc)	4 - 100	5 - 120	5 - 125	6 - 140	6 - 160	6 - 160	7 - 185
Dry weight (kg)	4.2	5.0	5.2	5.2	6.1	6.5	6.6
Capacity (watts)@ 2000 rpm	4100	4600	4900	5500	6200	6800	7000
Max rpm continuous	9500*	9500*	9500*	9500*	9500*	9500*	9500*
transient	10500*	10500*	10500*	10500*	10500*	10500*	10500*
Availability	Validated	In production	In production	In production	In production	In production	Validated

► **Performance Advantages**

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