

INOVANCE'S CV800 AIR CONDITIONING INVERTER OFFERS A COST EFFECTIVE, HIGH PERFORMANCE AND ENVIRONMENTALLY FRIENDLY SOLUTION FOR ELECTRIC BUSES

Customer Profile

The customer is a highly flexible, India-based, automotive expert - fully vertically integrated, making its own engines, chassis, gearboxes, axles, and bodies. They provide rugged, reliable, and efficient vehicles for both goods and passengers in rural, urban, long-distance, and local contexts.

Their aim is to produce vehicles of the highest quality and at the most competitive prices. They also manufacture high performance, premium quality engines and axles for the Indian subsidiaries of major international automotive manufacturers. Their research & development centre is considered to be amongst the most advanced automotive R&D facilities in the country.



The Challenge

To ensure future competitiveness in a fast moving market, the company needed to get costs down while maintaining product standards as well as quality and vehicle life span. The main current challenge faced is to ensure compliance with evolving market needs and regulations as the shift from internal combustion vehicles to electric vehicles gathers pace globally.

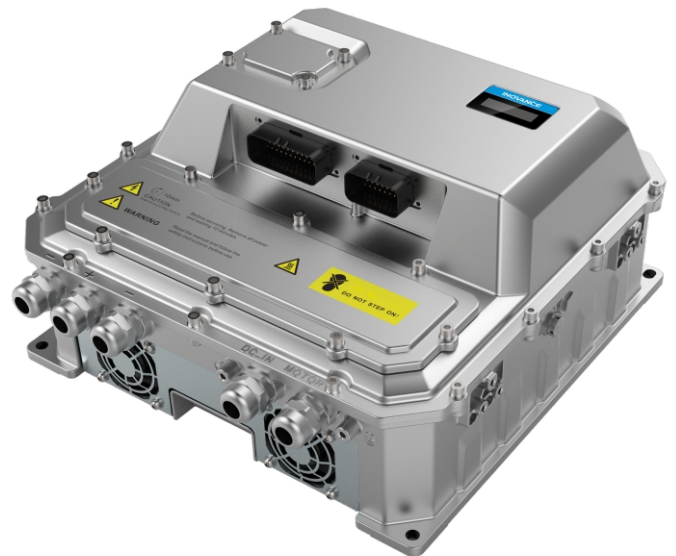
Key benefits:

- CV800 is the most advanced solution for air conditioning in electric vehicles
- Energy efficiency
- High performance in EMC:ECE R10
- IP65 as standard, with aluminium drive enclosure (IP67 option available)
- Flammability standard: UL94 V-0
- Compact, integrated design (PLC + DC-DC Unit + AC Drive)

The Solution

Global industrial automation company Inovance was called in to provide a tailored solution for all their requirements. Inovance was specifically chosen because of their expertise in automotive, and because they offered a bespoke EV product in the CV800.

The Inovance CV800 solution is a 3 In 1 vehicle air conditioning inverter – which includes two 1.5 kW DC/DC units and a 15 kW inverter. The inverter offers high EMC performance and IP65 as standard; all within a highly compact design that frees up space in the vehicle for other uses. The customer used CV800, with a WD control panel, for control of their compressor unit, evaporator, and condenser fan.



The Benefits

Inovance's automation solution was able to meet all the performance demands of the vehicles and delivered significant cost benefits compared to competitors. The customer chose the product due to Inovance's advanced EV inverter design, as well as due to its compact footprint. Additionally, Inovance offered strong application support to help the customer integrate the products with their machine and ensure smooth operations.