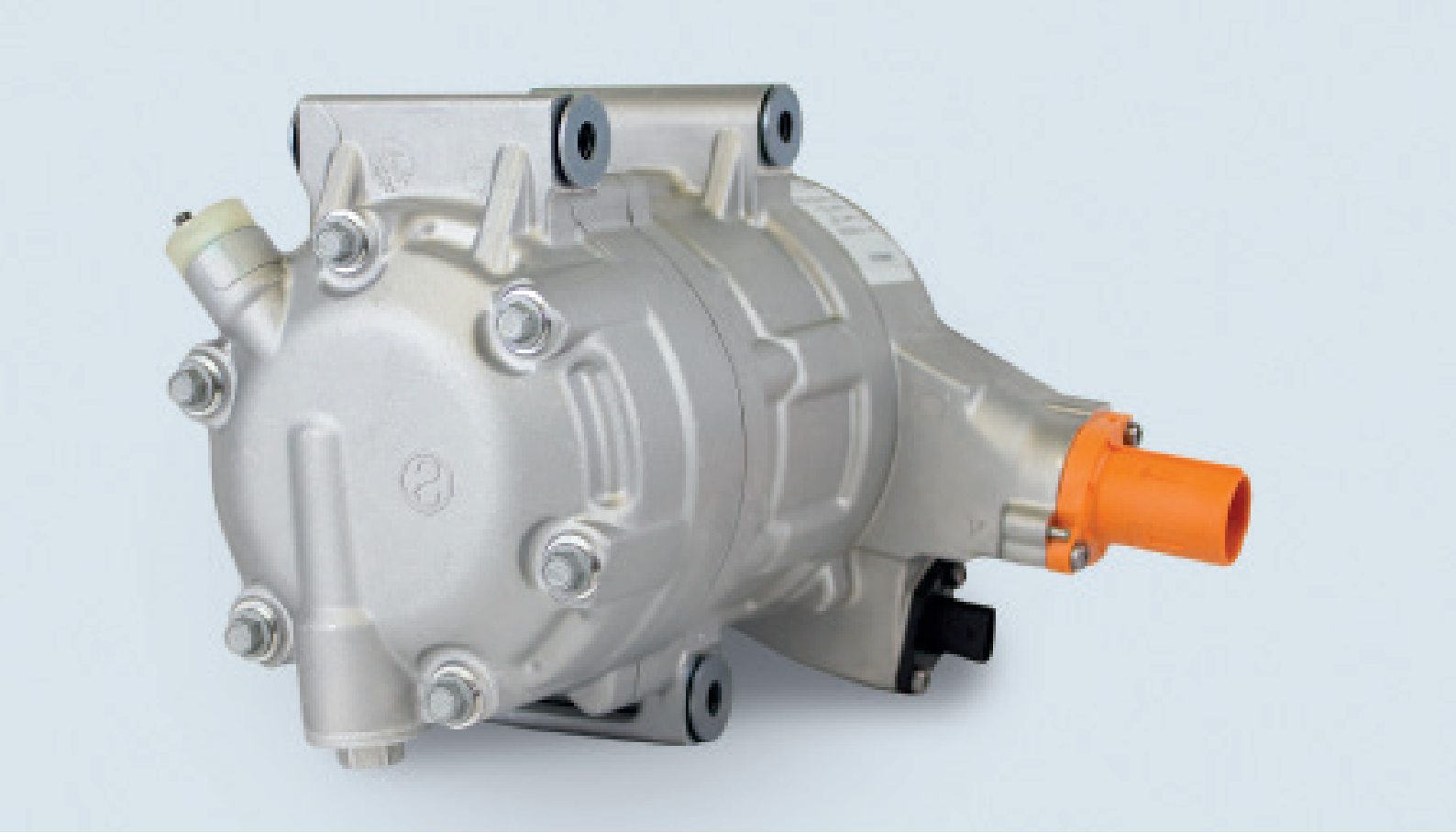
Electrical compressor for air conditioning and battery cooling

TME 34



Performance and durability count

Designed for high-performance thermal management, the TME 34 electric compressor is a key component in the cooling systems of electric and hybrid vehicles.
It ensures optimal battery temperatures, supports vehicle range and fast charging efficiency, especially in medium and heavy-duty applications. The TME 34 is designed for difficult operating conditions and offers reliable cabin comfort and battery cooling with a wide high-voltage operating range, making it the ideal solution for advanced electromobility.

TME 34 - KEY COMPONENT IN THE COOLING SYSTEMS OF ELECTRIC AND HYBRID VEHICLES

HIGHLIGHTS

- Compact
- Lightweight
- Best in Class NVH
- Heat pump and battery cooling functions

PRODUCT CHARACTERISTICS

GENERAL ITEMS

COMPRESSOR TYPE	Horizontal scroll
MOTOR TYPE	Brushless DC Motor
USAGE	Cabin / Battery cooling and heat pump
SCROLL TIGHTNESS	Wear plate and top seal
DISPLACEMENT	33.5 cc
SHELL TYPE	Low pressure
SPEED	600-9000 rpm
WEIGHT	6.3 kg
SIZE	ø=123mm L=205mm
MOUNTING	VDA-L and multiple possibilities
VOLTAGE RANGE	200-470 V
CONTROL VOLTAGE	12 V (Min 8 - Max 16)
OPERATING TEMPERATURE	-30 degC / +125 degC (start = -25 degC / +125 degC)
COMMUNICATION	LIN
EMC	CISPR 2.5 - Radiated emission Class 5 above 2MHz
REFRIGERANT	R134a / R1234yf / R404A
OIL	POE (RG100EV) (150cc)

SAFETY ITEMS

BURST PRESSURE	Discharge = 99 bar abs Suction = 45 bar abs
SAFETY VALVE PRESSURE	Discharge = 93 bar abs Suction = 31 bar abs

OTHERS

WORKING PRESSURE	0.11 MPaG < > 3.0 MPaG
DISCHARGE TEMPERATURE	Max = 130 degC
MOUNTING ANGLE	+/- 20 degC Max

SPHEROS

Spheros North America, Inc.
22150 Challenger Drive - Elkhart, IN 46514 - Tel. (800) 462-6322 I (574) 264-2190
www.spheros.com/us