



S E R V I C E

ELECTRIC COMPRESSORS
PRODUCED BY SANDEN



COMPRESSOR EXPERTISE MEETS SELLING SKILLS

The new SANDEN electric compressors.
Exclusively from BEHR HELLA SERVICE.

The thermal management expert, Behr Hella Service, has further expanded its extensive range of compressors: The range now also contains the latest generation of electrically driven, vehicle-specific units from the compressor specialist SANDEN – exclusively sold on the Independent European Aftermarket by Behr Hella Service.

BEHR HELLA SERVICE & SANDEN A POWERFUL COMBINATION

- Behr Hella Service, the expert for vehicle air-conditioning and engine-cooling systems, has been combining excellent service skills with a broad product range for over 10 years
- SANDEN, the compressor specialist, equips almost 25% of the air-conditioned vehicles worldwide with compressors. In 1990 SANDEN had already developed the first electric compressor for purely electric vehicles – and today still possesses various electric compressor patents.

2ND GENERATION SANDEN ELECTRIC COMPRESSORS THE BENEFITS

- Top efficiency across a broad operating range
- No start-up restrictions, quick acceleration
- An extremely long service life, highly resistant under exceptional operating conditions, such as liquid impact, low lubrication and engine vibrations
- Lower pulsation due to integrated mufflers
- Reduced vibration thanks to internal balancing
- Low oil circulation throughout the entire operating range

1st and 2nd generation electric compressors in comparison



GEN I

GEN II



TECHNICAL DETAILS

Compressor Type	Scroll
Displacement	33 ccm/rev.
Weight	6.2 kg (without oil)
Ambient temperature during operation	-25 to +125 °C
Ambient temperature during storage	-40 to +140 °C
Refrigerant	R134a or HFO1234yf
Oil Type	SP-A2 (PAG-Oil)
Compressor speed	800 – 8500 revs/min
Oil separator	Integrated
High Pressure relief valve settings	Opening pressure: 3.9 ± 0.3 MPa Closing pressure: min 3.1 MPa
Leakage rate according to EU Regulation 2006/40 EG	<5 g/year

PARAMETER	MIN	TYP	MAX	UNIT	REMARK
HV Range for operation guarantee (DC)	210	350	432	V	
Max. Permissible input High Voltage (DC)	–	–	500	V	could differ for each application
Current consumption at High Voltage input (DC)	–	–	25	A	
Phase current consumption of Motor	–	16	–	A	@ 6.2Nm @ 6000 revs/min.
LV Range for operation guarantee (communication only) (DC)	9	14	16	V	–
Current consumption at Low Voltage input (DC)	–	200	500	mA	TYP at 14V DC

ARTICLE NUMBER	SANDEN	PREMIUM LINE*	REMARK
8FK 351 342-021	SHS33-4155	■	Mercedes Benz B-Class
8FK 351 342-031	SHS33-4170	■	Volvo FH16 750EEV (also for stationary air-conditioning systems)
8FK 351 342-041	SHS33-4166	■	Volvo V60 HYBRID
8FK 351 342-051	SHS33-4182	■	Mercedes Benz S400 Hybrid
8FX 351 213-141	SP-A2	■	SANDEN compressor oil

* Additional information may be found on: www.behrhellaservice.com/premiumline

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