

TECHNICAL DATA SHEET



PHASE 9
ESB4-24/200

9 phases low voltage DC alternators

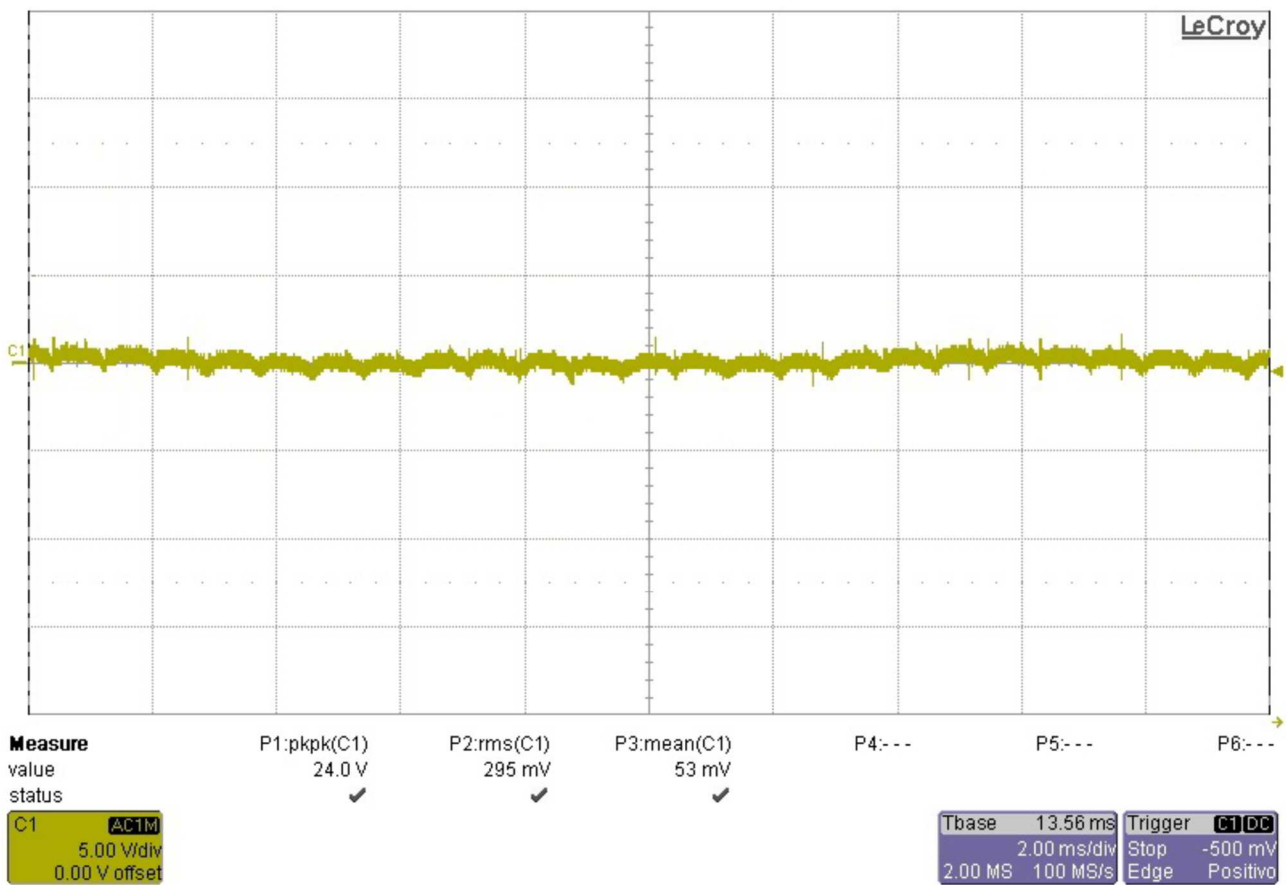
KEY FEATURES

- Very low output ripple: < 1% without battery (see picture 1)
- Output voltage: 24V_{DC}
- Max. power output: 5.6kW @ 1500RPM (see picture 2)
- Max. rectified current: 200A_{DC}
- From 1300 to 2100 RPM
- AVR output voltage:
 - ±0,5% of voltage accuracy
 - Over-excitation protection
 - Under-speed protection
- Brushless alternator with auxiliary winding
- Nine Phases AC source
- Oversized and reliable built-in DC power rectifier: up to 250A with fan
- Protection of stator winding and rectifier with thermal trips
- Special nut socket to guarantee simple, safe, and durable connections.
- IP23
- Weight 85kg

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TECHNICAL DATA

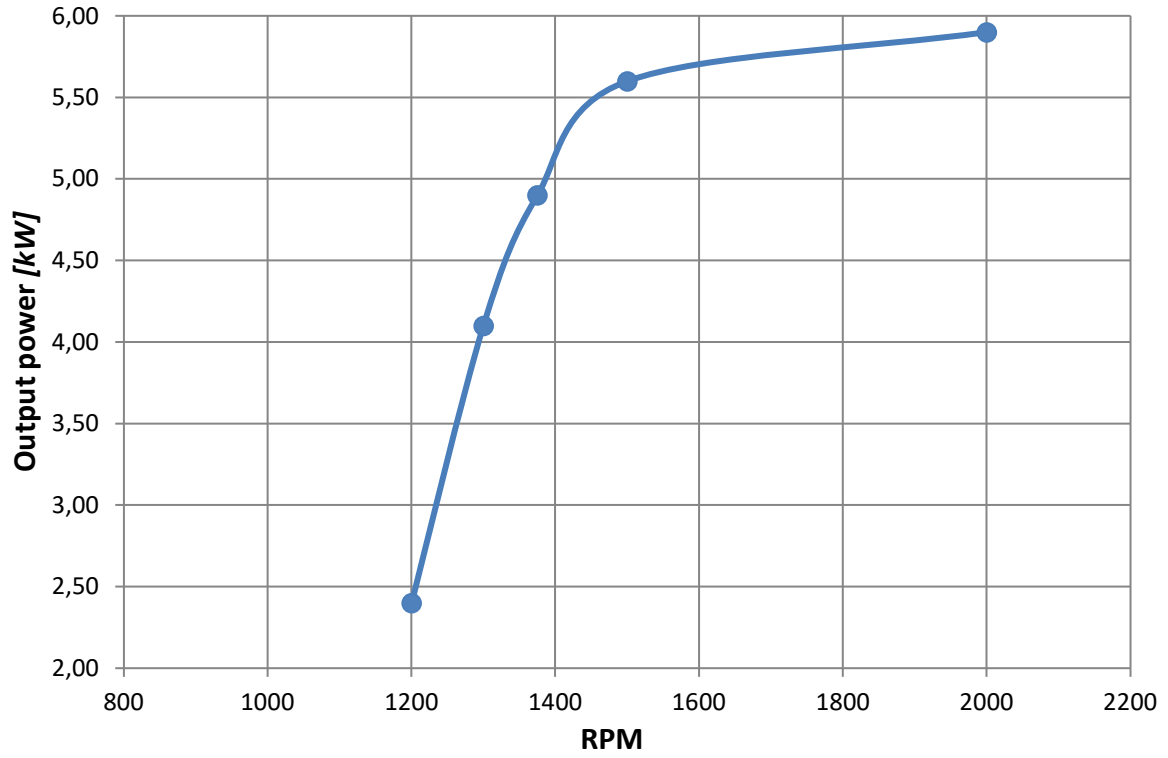
DC Output (Vdc)	24 ÷ 29
Power Outlet @ 1500RPM & 28Vdc	5.6 kW
DC Output Current @ 1500RPM	Up to 200A
Efficiency	> 84%
RPM	From 1300 to 2100 RPM
Output Ripple	< 1% Without Battery (see picture 1)
Output Accuracy	± 0,5%



Picture 1: AC ripple waveform @ 27.5Vdc and full load. The RMS value of the ripple is 295mV that is 0.54% of the nominal output voltage.

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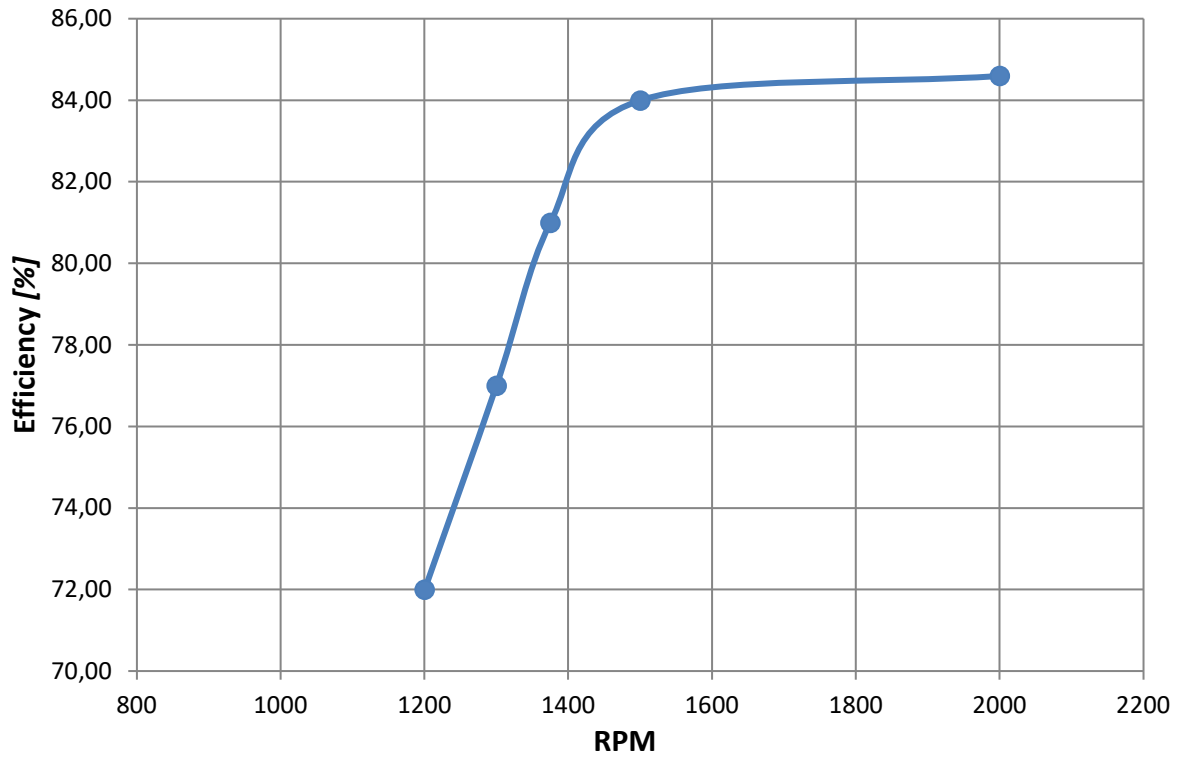
OUTPUT POWER



Picture 2: output power at different RPM.

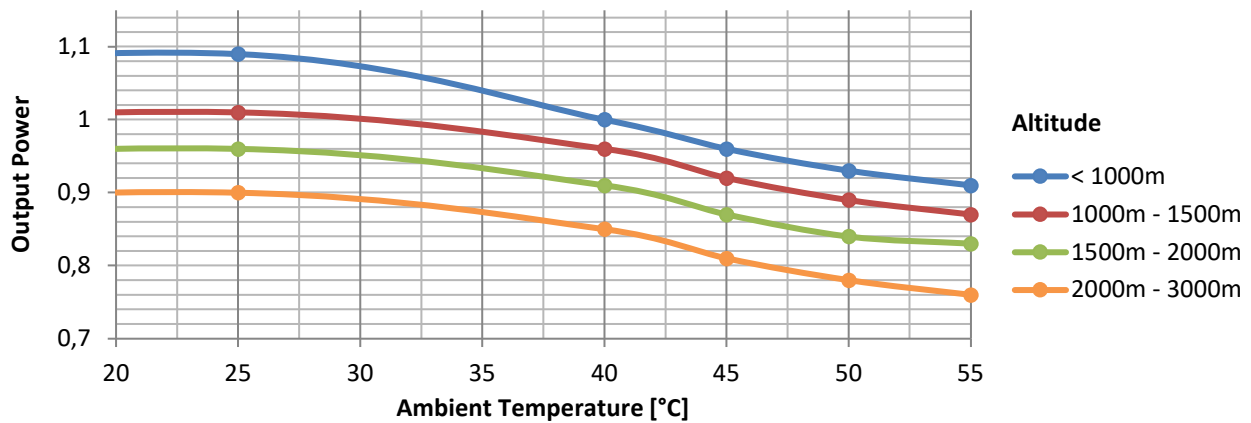
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EFFICIENCY @ 5.6kW 28Vdc



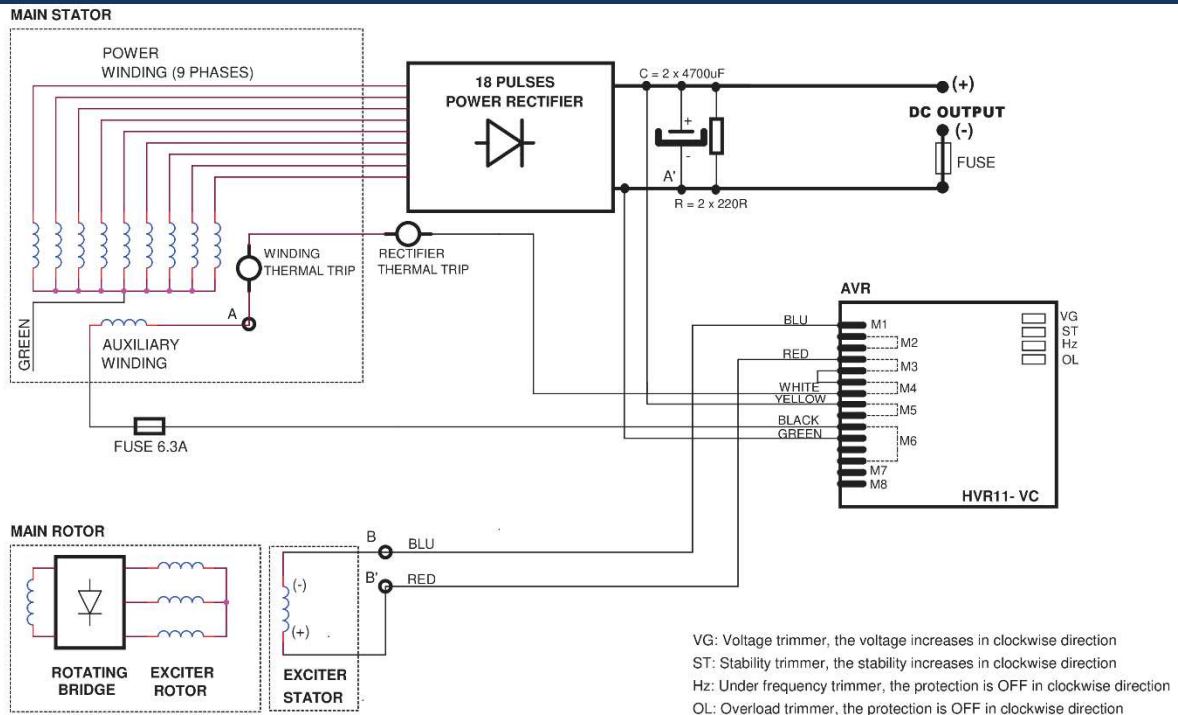
Picture 3: Efficiency at different RPM.

DERATING CURVES



ESB4-24/200

ELECTRIC DIAGRAM STANDARD VERSION



ELECTRIC DIAGRAM WITH CURRENT LIMITER

