

# Aeristech

## Electric Supercharging

With sufficient power and efficiency, the electric supercharger becomes an alternative to multi-stage turbocharging.



### 48V eSupercharger Specifications - AeS802C

- Rapid response to speed demand
- High efficiency permanent magnet motor (>91%)
- High efficiency controller (98% Peak)
- High power density – low cost
- Compact design – integrated controller

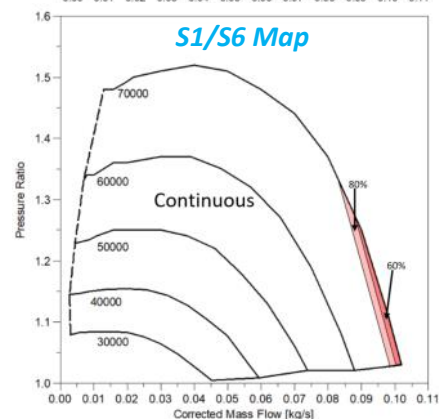
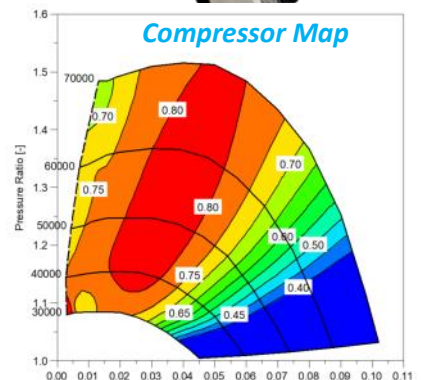


#### General Specification

|                         |   |
|-------------------------|---|
| Compressor type         | Centrifugal                                       |
| Bearings                | Rolling Element - greased (for life)              |
| Cooling                 | Water/glycol - $\leq 75^{\circ}\text{C}$ @ 1l/min |
| Ambient air temperature | $-40^{\circ}\text{C}$ to $100^{\circ}\text{C}$    |
| Input voltage           | 44–52V (48V nominal)                              |
| Mass                    | 2.8 kg  |

#### Performance\*

|  |  |
|--|--|
| Max compressor speed                     | 70,000 rpm   |
| Transient response                       | < 0.33 seconds   |
| Max pressure ratio                       | 1.53 @ 0.04 kg/s   |
| Max flow                                 | 0.107kg/s  |
| Input power (IEC 60034-1)<br>@70,000 RPM | S1: 4.7 kW*<br>S6: 5.3 kW (5 min, 30% CDF) *<br>Peak: 6.3 kW |



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