

Bowman Power Group's ETC product range delivers a step change in the efficiency of reciprocating engines.

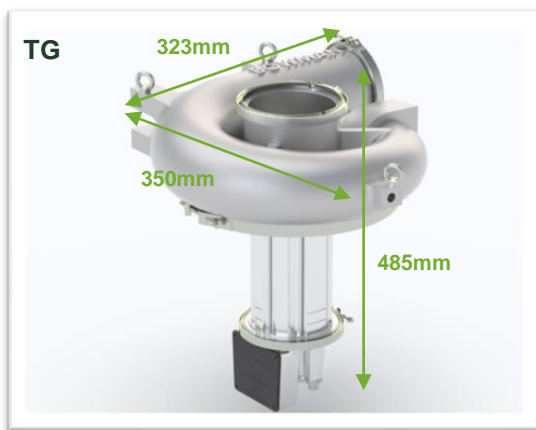
The ETC system consists of a turbo generator (TG) and a power electronics (PE) unit.

The host engine turbocharger is replaced or modified, but this is based on customer specific requirements and variables including host engine type, size, operating load and environment

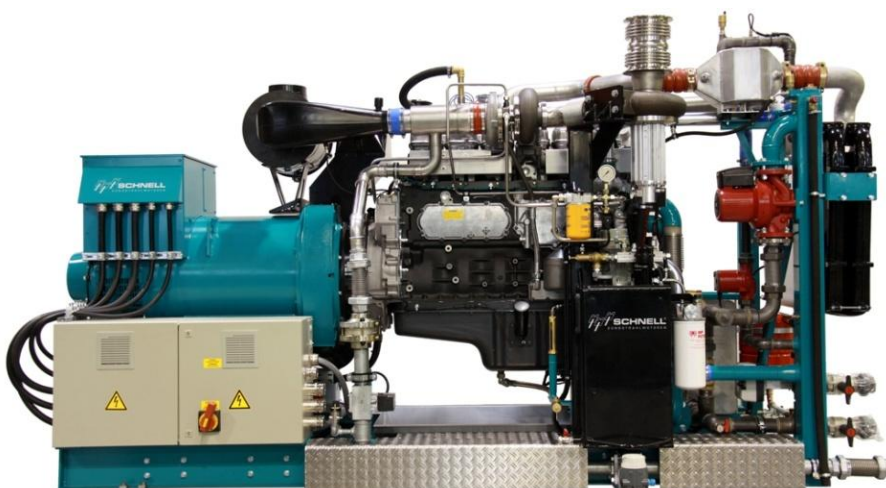
Please note that the application of the ETC system on-engine is also customer-specific, and therefore this information sheet does not include information about system ancillaries (hoses, brackets, frame etc.).

The **ETC 300** is suited to gas and diesel-fuelled engines in the 150kW-400kW range.

System components



- TG weight: 50kg
- PE weight: 255kg (not including external brake or coolant)



Single ETC 300 system

Schnell Scania DC12 package

ETC 300 Turbo Generator

Electrical power	30kWe per module
Speed	49,000-60,000rpm
Alternator efficiency	96.6%
Operating temperature range	-25°C to +50°C (ambient air temperature)
Storage temperature	-25°C to +70°C

Power Electronics

Output voltage	400 VAC, 3 ph, $\pm 10\%$
Output frequency	50 Hz or 60 Hz nominal / -6 Hz to +5 Hz
Output current	221 A RMS
Power factor (selectable range)	0.8 lead to 0.8 lag
Operating temperature range	-20 to +55 °C (ambient air temperature)
Storage temperature (power off)	-25 to +70 °C
EMC standard	EN 61000: (4.4, 5.4, 4.2
Vibration	Transport Simulation Random Vibration IEC 60068-2-64 Test Fh
Shock	IEC 60068-2-27
Ingress Protection Rating	IP23
Quality assurance system	ISO9001
Environmental system	ISO14001