

Dual-Fuel System

This sheet helps HEINZMANN application engineers to calculate and advice the proper dual-fuel equipment for your engine application. Please fill in this form and do not hesitate to contact HEINZMANN in case of doubts or questions. For repeated identical applications this procedure will not be required. Please use always the latest order form which you can find at www.heinzmann.com/en/engine-turbine/dual-fuel-management/gas-mixer-based
www.heinzmann.com/en/engine-turbine/dual-fuel-management/gas-admission-valve-based

CUSTOMER INFORMATION

Company

Address

Email Phone Fax

Customer-ID Order No.

Contact person/Division Date

ACTUAL CONDITION

Total running hours h Running hours per day or year day or year

Commissioning date of the engine Last maintenance of the fuel system

Load collective (typical load when engine is running) % or kW

Actual diesel price Actual gas price

TECHNICAL DATA OF THE ACTUAL DIESEL ENGINE

GENERAL ENGINE DATA

Engine type and producer

Max. diesel power kW Cylinder displacement liter

Engine speed rpm Cylinder number and firing order

Inline-engine V-engine Mechanical efficiency of the diesel engine %

AIR INTAKE SYSTEM

Air system configuration (flow diagram)

Turbocharger Yes No Number Configuration

Max. boost pressure abs. bar

Max. inlet air temperature after intercooler at full load °C

Valve timing (Important for engine speed < 1000 rpm)

Intake valve open °crank Intake valve close °crank

Exhaust valve open °crank Exhaust valve close °crank

DIESEL FUEL SYSTEM

Diesel fuel pump Diesel governor type

Diesel fuel type Heat value MJ/kg

Diesel flow meter available Yes No Lambda at diesel full load

SIGNAL AVAILABILITY

- Actual diesel position/quantity** Yes No
- Actual load (generator)** Yes No
- Exhaust temperature for every cylinder** Yes No

APPLICATION

Generator (Island or mains-parallel operation)

Other? Please explain

DUAL-FUEL SYSTEM

GAS SPECIFICATIONS

- Gas type** **Lower heat value** MJ/scm
- Gas density** kg/scm **Stoichiometric air requirement** m³/m³
- Range (only for variable fuel quality)** % CH₄
- Available gas pressure** bar **Available gas flow** scm
- Availability of the gas (always available)**

GAS TRAIN

- Is gas train requested from HEINZMANN** Yes No
- Is gas flow meter available** Yes No

SYSTEM COMMUNICATION AND MOUNTING PLACE FOR HEINZMANN COMPONENTS

Mounting place for controller extra switch cabinet customer switch cabinet

Is camshaft trigger disc available? Yes No

Is it possible to change diesel specific injection parameters to optimise dual-fuel efficiency?

Yes No

If yes, how can we communicate with diesel ECU?

Is it possible to use sensors from the actual diesel configuration? Yes No

If yes, how can our controller communicate with the PLC?

Monitoring and parameter setting 4-lines display touch screen DcDesk

IMPORTANT INFORMATION

ASSEMBLY AND COMMISSIONING

- HEINZMANN can not perform the mechanical installation of the dual-fuel components at your engine system. This is customer's responsibility.
- HEINZMANN can offer a training course to enable the service personal to start-up, operate and calibrate the dual-fuel system.
- HEINZMANN can do the commissioning of the dual-fuel system only after assembly of the engine systeme is finished.

SCOPE OF DELIVERY FROM HEINZMANN SIDE

- Please be aware that extra materials (such as adapters, supports, gas pipes, etc.) needed for the installation of the gas valves are not included.
- Please look into the cost estimation to see the scope of supply (depends on the project).