MWM 25H2-Kit for TCG 2032

Natural gas applications with hydrogen admixture of up to 25 vol.%

- **TCG 2032 factory fit for hydrogen admixture of up to 25 vol.%***
- **Supports energy transition and greenhouse gas reduction**
- **Flexible operation for natural gas with hydrogen admixture of up to 25 vol.%**

*TCG 2032 and TCG 2032B retrofit kit available

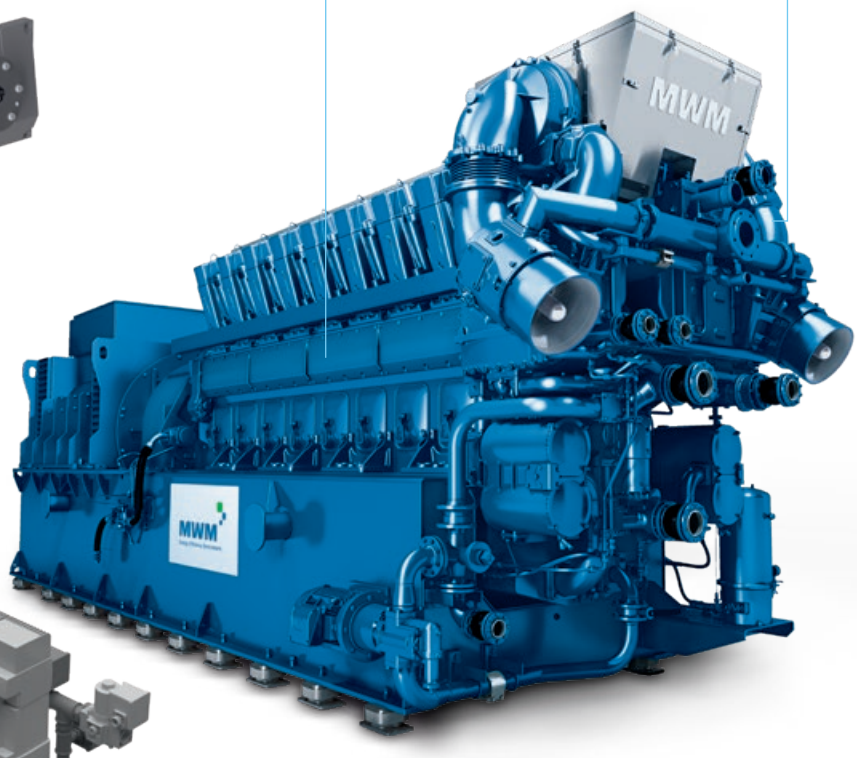
The TCG 2032 series now offers the possibility of natural gas operation with hydrogen admixture of up to 25 vol.% for both 50 Hz and 60 Hz. In addition to new engines, retrofit solutions are available for existing units in the field. It should be noted that the natural gas generator set can already be operated with a hydrogen admixture of up to 10 vol.% without any technical modifications.

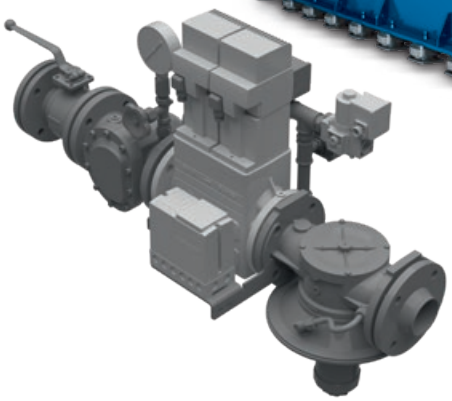
TCG 2032 – 25H2-Kit for admixture of 10–25 vol.%

Explosion relief valves

Controls

Optimized ignition and combustion parameters





Gas trains (zero- and pre-pressure)

H_2-capable gas trains

Product improvements and changes

Controls

- Optimized ignition parameters to achieve best performance with hydrogen admixture

Gas trains (zero- and pre-pressure)

- Compatible with applicable hydrogen and safety standards to ensure safe operation

Explosion relief valves

- Safe operation with hydrogen

Natural gas applications with 25 vol.% H_2

NO_x ⩽ 500 mg/Nm³, 1.0 g/bhp·h[1]

Engine type	TCG 2032	V12	V12	V16	V16	V16	V16
Configuration		R+[5]	R+[5]	R+[5]	R+[5]	R+[5]	R+[5]
Frequency	Hz	50	60	50	60	50	60
Electrical power[2]	kW	3,333	3,000	4,300	4,000	4,500	4,050
Thermal output[3]	kW	3,255	2,893	4,185	3,879	4,385	3,906
Electrical efficiency	%	43.7	43.7	44.0	43.8	44.5	44.3
Thermal efficiency[4]	%	42.7	42.2	42.8	42.5	43.3	42.7
Total efficiency	%	86.4	85.9	86.8	86.3	87.8	87.0

1) 5% O_2 and dry exhaust gases.
2) According to ISO 8528-1 at U = 11 kV (50 Hz) / 4.16 kV (60 Hz), cosphi = 1.0.
3) ± 8%.
4) Exhaust gas cooled to 120 °C for natural gas.
5) R+ = High Response plus 25H2-Kit. Optimized for high total efficiency with 25 vol.% hydrogen kit.

TCG 2032 with 25H2-Kit:

Ready today for tomorrow's natural gas grid introduction of 25 vol.% hydrogen.

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