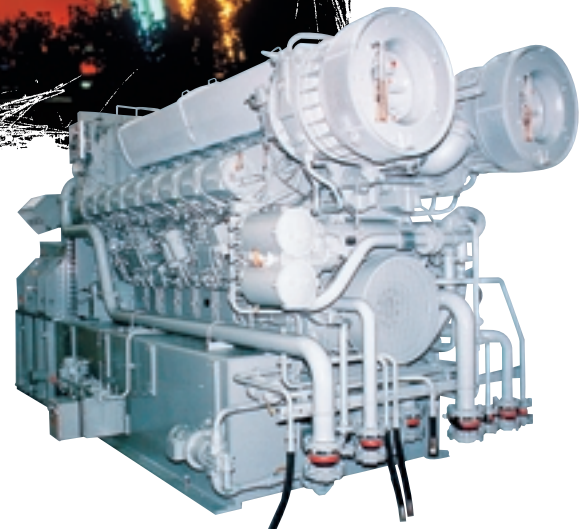


628. The Genset Engine.



1230-3680 kW at 900/1000 min⁻¹



These are the characteristics of the 628 GEN:

- Water-cooled 6, 8, 9 cylinder in-line engines.
- 12 and 16 cylinder V-engines.
- Mechanical-hydraulic or electronic governor.
- Application-specific cooling system.
- Engine technology tried and tested worldwide.
- High degree of integrated attachments.
- Suitable for heavy fuel operation.

Your benefits:

- ▶ Straight-forward and proven engine concept ensures high reliability and long engine life.
- ▶ Maintenance work is required only after many operating hours and can be done quickly without extended downtimes.
- ▶ Low operating cost through low fuel consumption.
- ▶ Low exhaust emissions for a clean environment.

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► Technical data

| Engine Type | | BV 6M 628 | | BV 8M 628 | | BV 9M 628 | | BV 12M 628 | | BV 16M 628 | |
|--|-------------------|-------------------------------|-------|-----------|-------|-----------|-------|------------|-------|------------|-------|
| Speed | min ⁻¹ | 1000 | 900 | 1000 | 900 | 1000 | 900 | 1000 | 900 | 1000 | 900 |
| Frequency | Hz | 50 | 60 | 50 | 60 | 50 | 60 | 50 | 60 | 50 | 60 |
| Basic engine data | | | | | | | | | | | |
| Bore/stroke | mm | 240/280 | | 240/280 | | 240/280 | | 240/280 | | 240/280 | |
| Displacement | dm ³ | 76.0 | | 101.3 | | 114.0 | | 152.0 | | 202.7 | |
| Mean piston speed | m/s | 9.3 | 8.4 | 9.3 | 8.4 | 9.3 | 8.4 | 9.3 | 8.4 | 9.3 | 8.4 |
| Engine/Genset ratings¹⁾ | | | | | | | | | | | |
| Continuous power, ICN (COP) ²⁾ | kW | 1350 | 1230 | 1800 | 1640 | 2025 | 1845 | 2700 | 2460 | 3600 | 3280 |
| Mean effective pressure (COP) | bar | 21.32 | 21.58 | 21.32 | 21.58 | 21.32 | 21.58 | 21.32 | 21.58 | 21.32 | 21.58 |
| Prime power, ICN (PRP) ³⁾ | kW | 1380 | 1245 | 1840 | 1660 | 2070 | 1865 | 2760 | 2490 | 3680 | 3320 |
| Mean effective pressure (PRP) | bar | 21.79 | 21.84 | 21.79 | 21.84 | 21.79 | 21.81 | 21.79 | 21.84 | 21.79 | 21.84 |
| Typical generator power output (COP) ⁴⁾ | kVA | 1610 | 1460 | 2150 | 1950 | 2416 | 2200 | 3222 | 2930 | 4295 | 3910 |
| Typical generator power output (PRP) ⁵⁾ | kVA | 1647 | 1485 | 2195 | 1980 | 2470 | 2225 | 3293 | 2975 | 4390 | 3980 |
| Governing | | | | | | | | | | | |
| Governor | | electronic injection system | | | | | | | | | |
| - Speed droop (static = option) | % | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Control quality ⁶⁾ | | depending on governor version | | | | | | | | | |
| Load acceptance | | | | | | | | | | | |
| Recovery time | | | | | | | | | | | |
| at 80 % continuous power (COP) | sec. | according to DIN 8528 | | | | | | | | | |
| at 100 % continuous power (COP) | sec. | according to DIN 8528 | | | | | | | | | |
| Fuel consumption | | | | | | | | | | | |
| Spec. fuel consumption at COP ⁷⁾ + 5 %, H _U = 42.7 MJ/kg | | | | | | | | | | | |
| 100 % load | g/kWh | 197 | 194 | 196 | 194 | 196 | 194 | 195 | 193 | 194 | 192 |
| 75 % load | g/kWh | 199 | 196 | 198 | 196 | 198 | 196 | 197 | 195 | 196 | 194 |
| 50 % load | g/kWh | 207 | 204 | 206 | 204 | 206 | 204 | 205 | 203 | 204 | 202 |
| Cooling system / cooling capacity | | | | | | | | | | | |
| Coolant volume engine | dm ³ | 225 | 225 | 275 | 275 | 300 | 300 | 425 | 425 | 550 | 550 |
| Heat to be dissipated in | | | | | | | | | | | |
| - Cooling water engine | kW | 426 | 403 | 569 | 537 | 640 | 604 | 853 | 806 | 1137 | 1075 |
| - Cooling water LLK HT WL-LLK | kW | 337 | 312 | 422 | 391 | 480 | 445 | 642 | 594 | 832 | 771 |
| - Cooling water LLK LT WL-LLK | kW | 104 | 94 | 135 | 121 | 153 | 137 | 200 | 181 | 258 | 232 |
| - Circulating water flow rate HT circuit | m ³ /h | 32.5 | 30 | 43 | 40 | 48.5 | 45 | 65 | 60 | 86 | 80 |
| - Circulating water flow rate LT circuit | m ³ /h | 35 | 35 | 35 | 35 | 35 | 35 | 70 | 70 | 70 | 70 |
| Max. permissible resistance | | | | | | | | | | | |
| - HT circuit, plant | bar | 1.4 | 1.5 | 1.2 | 1.3 | 1.0 | 1.2 | 1.4 | 1.5 | 0.9 | 1.1 |
| - LT circuit, plant | bar | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | 1.6 | 1.5 | 1.6 |
| Max. cooling water temperature at engine outlet (alarm) | °C | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heat radiation (Engine and generator) | kW | 145 | 132 | 194 | 176 | 219 | 198 | 291 | 263 | 387 | 350 |

► Technical data

| Engine type | | BV 6M 628 | | BV 8M 628 | | BV 9M 628 | | BV 12M 628 | | BV 16M 628 | |
|--|-------------------|---|--------|-----------|--------|---------------------|--------|----------------|----------------|----------------|----------------|
| Speed | min ⁻¹ | 1000 | 900 | 1000 | 900 | 1000 | 900 | 1000 | 900 | 1000 | 900 |
| Frequency | Hz | 50 | 60 | 50 | 60 | 50 | 60 | 50 | 60 | 50 | 60 |
| Lubrication system | | | | | | | | | | | |
| Lube oil consumption ⁸⁾ | g/kWh | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Lube oil quality grade | | SAE 40 acc. to Technical Circular 0199 - 2090 | | | | | | | | | |
| Lube oil volume, low-level oil pan | dm ³ | 525 | 525 | 680 | 680 | 760 | 760 | 615 | 615 | 800 | 800 |
| Oil temperature max. | °C | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Oil filter (main flow) | | Paper microfilter 30 µm + wire mesh disc-type filter 50 µm | | | | | | | | | |
| Oil filter (secondary flow) | | Mounted centrifuge or separator installed in plant | | | | | | | | | |
| Heat to be dissipated in lube oil | kW | 121 | 108 | 161 | 144 | 181 | 162 | 241 | 217 | 322 | 289 |
| Combustion air system | | | | | | | | | | | |
| Combustion air flow rate (COP) | m ³ /h | 8425 | 7675 | 10965 | 9990 | 12450 | 11340 | 16600 | 15120 | 21560 | 19640 |
| Max. vacuum (filter clean) | mbar | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Exhaust system | | | | | | | | | | | |
| Exhaust gas mass flow at full load (COP) | kg/h | 9790 | 8965 | 12745 | 11630 | 14480 | 13210 | 19115 | 17415 | 25270 | 23025 |
| Exhaust temperature behind turbine at full load and 25°C ambient temperature | °C | 355 | 355 | 365 | 365 | 365 | 365 | 355 | 355 | 365 | 365 |
| Max. permissible exhaust backpressure | mbar | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Exhaust flange turbine outlet | mm | DN 400 | DN 400 | DN 450 | DN 400 | DN 450 | DN 450 | 2 x DN 400/400 | 2 x DN 400/400 | 2 x DN 450/400 | 2 x DN 450/400 |
| TA-Luft (2000) | mg/m ³ | NO _x ≤ 2000 mg/m ³ feasible without exhaust gas after-treatment | | | | | | | | | |
| Engine electrics | | | | | | | | | | | |
| Electrical equipment | | | | | | | | | | | |
| - Voltage switch START/STOP | V | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| - Voltage monitoring system | V | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| - Voltage speed control | V | | | | | optional 24/110/220 | | | | | |
| - Coolant preheating unit | kW | 9 | 9 | 9 | 9 | 9 | 9 | 18 | 18 | 18 | 18 |
| Starting equipment | | | | | | | | | | | |
| Compressed air via cylinder heads | bar | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Cold-start capability | | | | | | | | | | | |
| Cold-start limit temperature (w/o direct load application) | °C | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Noise emission | | | | | | | | | | | |
| Sound pressure level at full load, 1 m distance ±2 dB(A) | dB(A) | 107 | 106 | 108 | 106 | 109 | 107 | 109 | 108 | 109 | 108 |

1-5) Power definition according to genset pocket book.

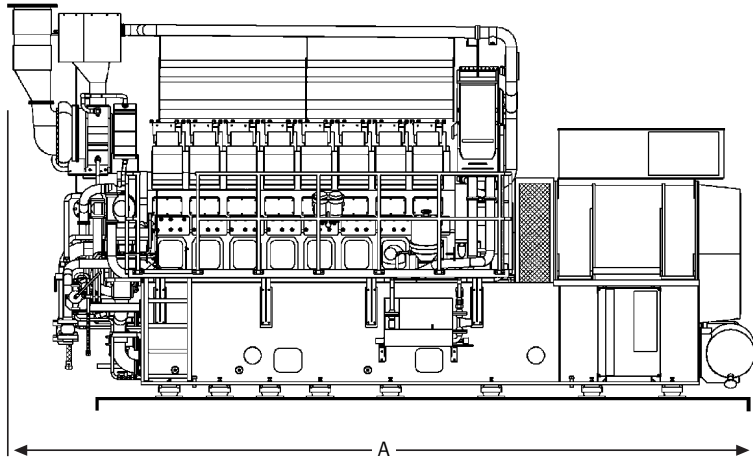
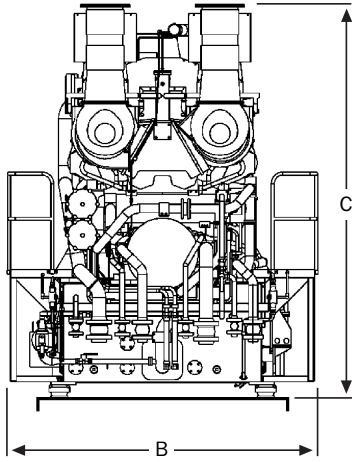
6) Performance acc. to ISO 8528.

7) Fuel according to Technical Circular 0199 - 99 - 2089.

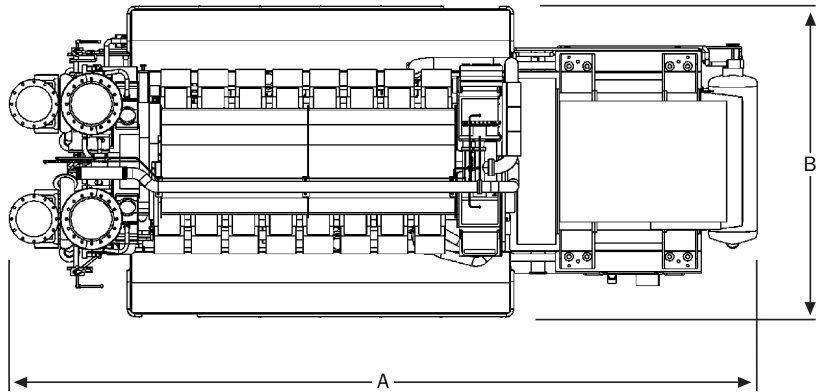
8) At full load, tolerance +20%.

The values given in this data sheet are for information purposes only and not binding. The information given in the offer is decisive.

► Dimensions



BV16M 628



| Engine type | Genset dimensions | A | B | C | Weight | Engine | Genset |
|-------------|-------------------|------|------|------|--------|--------|--------|
| BV6M628 | mm | 6900 | 2700 | 3900 | kg | 9500 | 24000 |
| BV8M628 | mm | 6350 | 2800 | 3900 | kg | 11500 | 26000 |
| BV9M628 | mm | 6800 | 3100 | 4050 | kg | 13400 | 36000 |
| BV12M628 | mm | 7000 | 3100 | 3900 | kg | 16300 | 34000 |
| BV16M628 | mm | 7450 | 3100 | 3900 | kg | 21195 | 40000 |

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