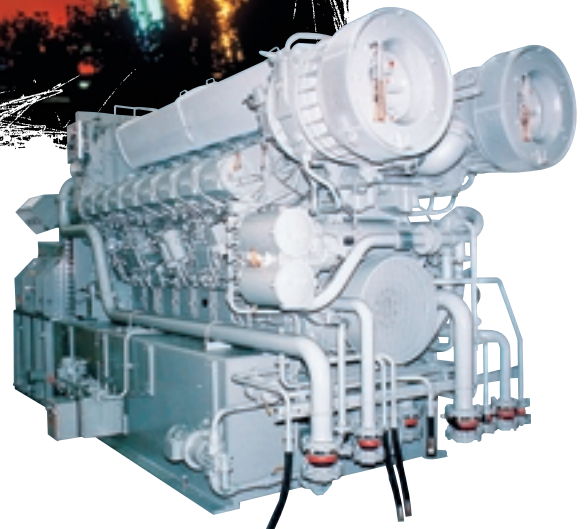


628. The Genset Engine.



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.

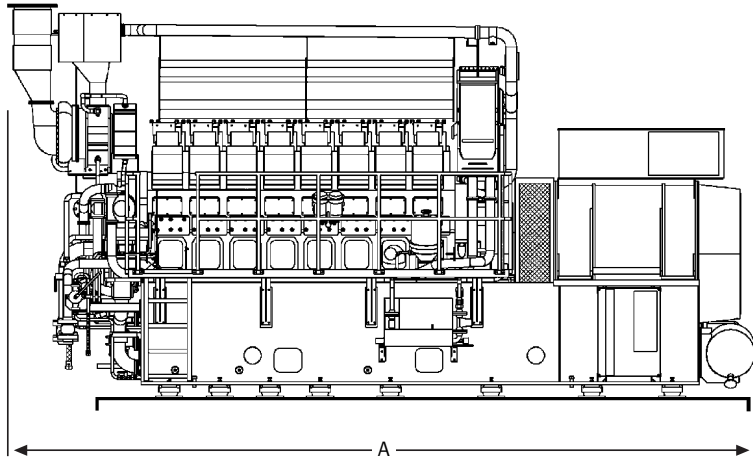
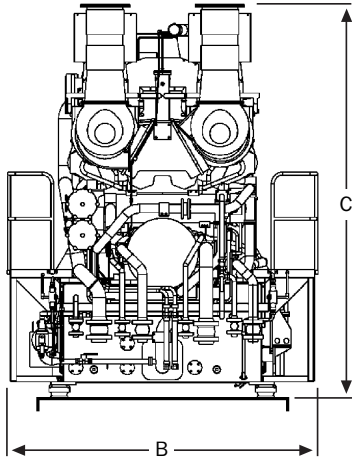
6) Performance acc. to ISO 8528.

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

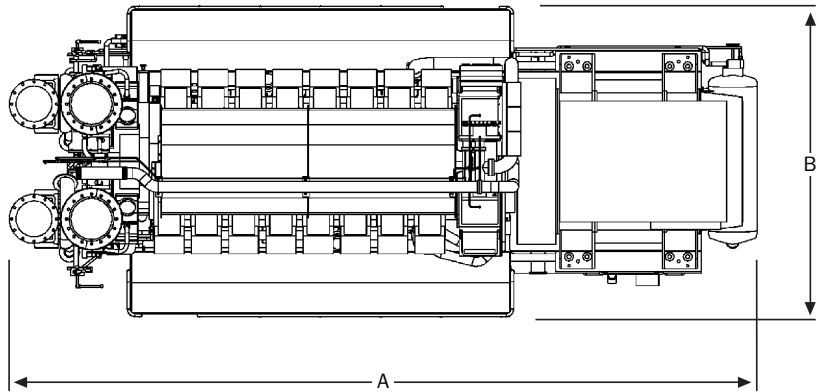
8) At full load, tolerance +20%.

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

DEUTZ ENERGY

Energy for You.

DEUTZ ENERGY GmbH

Carl-Benz-Straße 5

D-68167 Mannheim

Telephone: + 49 (0) 6 21-3 84-86 10

Fax: + 49 (0) 6 21-3 84-86 12

A DEUTZ AG Company

