



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWe]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

Reference conditions

No.	Description	Index	Value	Unit
6	Intake air temperature		25	°C
7	Charge-air coolant temperature		-	°C
8	Barometric pressure		1000	mbar
9	Site altitude above sea level		100	m

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
< Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/- 10%)
□ Adequate verification not yet available (tolerance +/- 5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

0. Data-relevant engine design configuration

No.	Description	Index	Value	Unit
8	Engine rated speed switchable (1500/1800 rpm)		-	-
13	Engine without sequential turbocharging (turbochargers without cut-in/cut-out control)		X	-
31	Engine with air-cooled charge air		X	-
61	Engine with water/charge air cooling (LT, on-engine)		-	-

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/-10%)
[]** Adequate verification not yet available (tolerance +/-5%)

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

1. Power-related data

No.	Description	Index	Value	Unit
1	Engine rated speed	A	1500	rpm
4	Continuous power ISO 3046 (10% overload capability) (design power DIN 6280, ISO 8528)	A	1102	kW
5	Fuel stop power ISO 3046	A	1212	kW
8	Mean effective pressure (MEP) (Continuous power ISO 3046)		21.9	bar
9	Mean effective pressure (MEP) (Fuel stop power ISO 3046)		24.1	bar

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
< Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/- 10%)
□ Adequate verification not yet available (tolerance +/- 5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWel]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

2. General Conditions (for maximum power)

No.	Description	Index	Value	Unit
1	Intake air depression (new filter)	A	15	mbar
2	Intake air depression, max.	L	40	mbar
3	Exhaust back pressure	A	30	mbar
4	Exhaust back pressure, max.	L	50	mbar
5	Fuel temperature at fuel feed connection	R	25	°C
9	Fuel temperature at fuel feed connection, max. (w/o power reduction)	L	-	°C
10	Fuel temperature at fuel feed connection, max.	L	65	°C
49	Max. ambient temperature in direct vicinity of vibration damper	L	-	°C
18	Fuel temperature at fuel feed connection, min.	L	N	°C

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
< Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/- 10%)
□ Adequate verification not yet available (tolerance +/- 5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWel]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

3. Consumption

No.	Description	Index	Value	Unit
17	Specific fuel consumption (be) - 100 % CP (+ 5 %; EN 590; 42.8 MJ/kg)	R	189	g/kWh
18	Specific fuel consumption (be) - 75 % CP (+ 5 %; EN 590; 42.8 MJ/kg)	R	189	g/kWh
19	Specific fuel consumption (be) - 50 % CP (+ 5 %; EN 590; 42.8 MJ/kg)	R	196	g/kWh
20	Specific fuel consumption (be) - 25 % CP (+ 5 %; EN 590; 42.8 MJ/kg)	R	220	g/kWh
21	Specific fuel consumption (be) - FSP (+ 5 %; EN 590; 42.8 MJ/kg)	R	192	g/kWh
73	No-load fuel consumption	R	15	kg/h
92	Lube oil consumption after 100 h of operation (B = fuel consumption per hour) Guideline value does not apply for the design of EGA systems. Please consult the Applications Center with regard to the layout of EGA systems.	R	0.35	% of B
62	Lube oil consumption after 100 h of operation, max. (B = fuel consumption per hour)	L	0.8	% of B

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on
some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard
conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[] Adequate verification not yet available (tolerance +/- 10%)
[] Adequate verification not yet available (tolerance +/- 5%)

[A] Design value
Value required for the design of an external system
(plant)

[R] Guideline value
Typical average value as information – only suitable
for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or
upper limit/maximum value that may not be
exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

4. Model-related data (basic design)

No.	Description	Index	Value	Unit
3	Engine with exhaust turbocharger (ETC) and intercooler		X	-
4	Exhaust piping, non-cooled		X	-
33	Working method: four-cycle, diesel, single-acting		X	-
34	Combustion method: direct injection		X	-
36	Cooling system: conditioned water		X	-
37	Direction of rotation: c.c.w. (facing driving end)		X	-
6	Number of cylinders		18	-
7	Cylinder configuration: V angle		90	degrees (°)
10	Bore		135	mm
11	Stroke		156	mm
12	Displacement, cylinder		2.233	liter
13	Displacement, total		40.2	liter
14	Compression ratio		17.5	-
40	Cylinder heads: single-cylinder		X	-
41	Cylinder liners: wet, replaceable		X	-
24	Number of inlet valves, per cylinder		2	-
25	Number of exhaust valves, per cylinder		2	-
15	Number of turbochargers		2	-
18	Number of intercoolers		1	-
28	Standard flywheel housing flange (engine main PTO)		0	SAE
50	Static bending moment at standard flywheel housing flange, max.	L	N	kNm
51	Dynamic bending moment at standard flywheel housing flange, max.	L	N	kNm

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/-10%)
[] Adequate verification not yet available (tolerance +/-5%)**

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

43	Flywheel interface (DISC)		18"	-
46	Engine mass diagram, drawing No.		N	-
47	Engine mass diagram, drawing No. (cont.)		N	-

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type
[] Non-applicable
The module is not valid for this product type
[N] Value not named
The value has not yet been named or will not be named

[] Adequate verification not yet available (tolerance +/-10%)
[] Adequate verification not yet available (tolerance +/-5%)

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

5. Combustion air / exhaust gas

No.	Description	Index	Value	Unit
8	Charge-air pressure before cylinder - CP	R	3.4	bar abs
27	Charge-air pressure before cylinder - FSP	R	3.7	bar abs
9	Combustion air volume flow - CP	R	1.34	m ³ /s
10	Combustion air volume flow - FSP	R	1.47	m ³ /s
11	Exhaust volume flow (at exhaust temperature) - CP	R	3.44	m ³ /s
12	Exhaust volume flow (at exhaust temperature) - FSP	R	3.85	m ³ /s
17	Exhaust temperature after engine - CP	R	485	°C
18	Exhaust temperature after engine - FSP	R	500	°C
58	Exhaust temperature after engine (turbocharger), max.	L	650	°C

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
< Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/- 10%)
□ Adequate verification not yet available (tolerance +/- 5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

6. Heat dissipation

No.	Description	Index	Value	Unit
60	Heat dissipated by engine coolant - CP (high-temperature circuit)	R	430	kW
61	Heat dissipated by engine coolant - CP (low-temperature circuit)	R	-	kW
62	Heat dissipated by engine coolant - FSP (high-temperature circuit)	R	455	kW
63	Heat dissipated by engine coolant - FSP (low-temperature circuit)	R	-	kW
26	Charge-air heat dissipation - CP	R	215	kW
27	Charge-air heat dissipation - FSP	R	265	kW
31	Heat dissipated by return fuel flow - CP	R	4.0	kW
32	Heat dissipated by return fuel flow - FSP	R	4.0	kW
33	Radiation and convection heat, engine - CP	R	45	kW
34	Radiation and convection heat, engine - FSP	R	45	kW

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
< Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/- 10%)
□ Adequate verification not yet available (tolerance +/- 5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

7. Coolant system (high-temperature circuit)

No.	Description	Index	Value	Unit
17	Coolant temperature (at engine outlet to cooling equipment)	A	100	°C
20	Coolant temperature after engine, limit 1	L	102	°C
21	Coolant temperature after engine, limit 2	L	105	°C
25	Coolant antifreeze content, max.	L	50	%
30	Cooling equipment: coolant flow rate	A	46.3	m ³ /h
35	Coolant pump: inlet pressure, min.	L	0.4	bar
36	Coolant pump: inlet pressure, max.	L	1.5	bar
41	Pressure loss in off-engine cooling system, max.	L	1.0	bar
72	Pressure loss in off-engine cooling system, min.	L	0.3	bar
47	Breather valve (expansion tank) opening pressure (excess pressure)	R	1.0	bar
54	Cooling equipment: height above engine, max.	L	20	m
50	Thermostat, starts to open	R	79	°C

[BL] Reference value: fuel stop power

Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power

Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value

[<] Actual value must be less than specified value

[X] Applicable

The module is valid for this product type

[] Non-applicable

The module is not valid for this product type

[N] Value not named

The value has not yet been named or will not be named

[] Adequate verification not yet available (tolerance +/- 10%)

[] Adequate verification not yet available (tolerance +/- 5%)

[A] Design value

Value required for the design of an external system (plant)

[R] Guideline value

Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value

A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWel]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

8. Coolant system (low-temperature circuit)

No.	Description	Index	Value	Unit
9	Coolant temperature before intercooler (at engine inlet from cooling equipment)	A	-	°C
13	Coolant antifreeze content, max.	L	-	%
17	Charge-air temperature after intercooler, max.	L	-	°C
76	Temperature differential between intake air and charge-air coolant before intercooler	A	-	K
20	Cooling equipment: coolant flow rate	A	-	m³/h
24	Coolant pump: inlet pressure, min.	L	-	bar
25	Coolant pump: inlet pressure, max.	L	-	bar
29	Pressure loss in off-engine cooling system, max.	L	-	bar
62	Pressure loss in off-engine cooling system, min.	L	-	bar
43	Cooling equipment: height above engine, max.	L	-	m
36	Breather valve (expansion tank) opening pressure (excess pressure)	R	-	bar
39	Thermostat, starts to open	R	-	°C

[BL] Reference value: fuel stop power

Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power

Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value

[<] Actual value must be less than specified value

[X] Applicable

The module is valid for this product type

[] Non-applicable

The module is not valid for this product type

[N] Value not named

The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/- 10%)

[]** Adequate verification not yet available (tolerance +/- 5%)

[A] Design value

Value required for the design of an external system (plant)

[R] Guideline value

Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value

A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

10. Lube oil system

No.	Description	Index	Value	Unit
1	Lube oil operating temp. before engine, from	R	75	°C
2	Lube oil operating temp. before engine, to	R	100	°C
5	Lube oil temperature before engine, limit 1	L	103	°C
6	Lube oil temperature before engine, limit 2	L	105	°C
8	Lube oil operating press. bef. engine, from	R	6.0	bar
9	Lube oil operating press. bef. engine, to	R	8.0	bar
10	Lube oil pressure before engine, alarm	L	4.5	bar
11	Lube oil pressure before engine, shutdown	L	4.0	bar
19	Lube oil fine filter (main circuit): number of units		1	-
20	Lube oil fine filter (main circuit): number of elements per unit		3	-
32	Lube oil fine filter (main circuit): pressure differential, max.	L	1.0	bar

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type
[] Non-applicable
The module is not valid for this product type
[N] Value not named
The value has not yet been named or will not be named

[] Adequate verification not yet available (tolerance +/- 10%)
[]** Adequate verification not yet available (tolerance +/- 5%)

[A] Design value
Value required for the design of an external system (plant)
[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent
[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWel]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

11. Fuel system

No.	Description	Index	Value	Unit
3307	Fuel pressure at fuel feed connection, min. (when engine is starting), absolute pressure	L	0.5	bar abs
3308	Fuel pressure at fuel feed connection, min. (when engine is running), absolute pressure	L	0.5	bar abs
3309	Fuel pressure at fuel feed connection, max. (when engine is starting), absolute pressure	L	1.5	bar abs
3310	Fuel pressure at fuel feed connection, max. (permanent), absolute pressure	L	1.0	bar abs
3311	Fuel pressure at fuel feed connection, specification		XZ54407000001	-
37	Fuel supply flow, max.	A	30	liter/min
8	Fuel return flow, max.	A	30	liter/min
10	Fuel pressure at return connection on engine, max.	L	0.5	bar
13	Fuel temperature differential before/after engine, max.	L	15	°C
18	Fuel fine filter (main circuit): number of units	A	1	-
19	Fuel fine filter (main circuit): number of elements per unit	A	5	-
20	Fuel fine filter (main circuit): particle retention	A	0.005	mm
21	Fuel fine filter (main circuit): pressure differential, max.	L	1.0	bar

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/- 10%)
[] Adequate verification not yet available (tolerance +/- 5%)**

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

12. General operating data

No.	Description	Index	Value	Unit
22	Coolant preheating, preheating temperature (min.)	L	32	°C
28	Breakaway torque (without driven machinery) coolant temperature +5°C	R	-	Nm
30	Breakaway torque (without driven machinery) coolant temperature +40°C	R	-	Nm
29	Cranking torque at firing speed (without driven machinery) coolant temperature +5°C	R	-	Nm
31	Cranking torque at firing speed (without driven machinery) coolant temperature +40°C	R	-	Nm
96	Starting is blocked if the engine coolant temperature is below		-20	°C
37	High idling speed, max. (static)	L	1660	rpm
38	Limit speed for overspeed alarm / emergency shutdown	L	1800	rpm
42	Firing speed, from	R	100	rpm
43	Firing speed, to	R	120	rpm
44	Engine coolant temperature before starting full-load operation, recommended min. (for emergency/standby sets with coolant preheating: at least the preheating temperature)	R	40	°C
48	Minimum continuous load	R	20	%
49	Extended low or no-load operation possible (consultation required)		X	-
69	Speed droop (with electronic governor) adjustable, from	R	0	%
70	Speed droop (with electronic governor) adjustable, to	R	5	%

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

Actual value must be greater than specified value
 Actual value must be less than specified value

Applicable
The module is valid for this product type

Non-applicable
The module is not valid for this product type

Value not named
The value has not yet been named or will not be named

Adequate verification not yet available (tolerance +/- 10%)
 Adequate verification not yet available (tolerance +/- 5%)

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

13. Starting (electric)

No.	Description	Index	Value	Unit
2	Starter, rated voltage (standard design)	R	24	V=

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
< Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/- 10%)
□ Adequate verification not yet available (tolerance +/- 5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

16. Inclinations - standard oil system (ref.: waterline)

No.	Description	Index	Value	Unit
15	Longitudinal inclination, continuous max. driving end down (Option: max. operating inclinations)	L	5	degrees (°)
17	Longitudinal inclination, continuous max. driving end up (Option: max. operating inclinations)	L	5	degrees (°)
19	Transverse inclination, continuous max. (Option: max. operating inclinations)	L	10	degrees (°)

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/-10%)
[] Adequate verification not yet available (tolerance +/-5%)**

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

18. Capacities

No.	Description	Index	Value	Unit
1	Engine coolant capacity (without cooling equipment)	R	73	liter
10	Intercooler coolant capacity	R	-	liter
11	On-engine fuel capacity	R	7	liter
14	Engine oil capacity, initial filling (standard oil system) (Option: max. operating inclinations)	R	122	liter
20	Oil change quantity, max. (standard oil system) (Option: max. operating inclinations)	R	110	liter
2024	Oil pan capacity, dipstick mark min. (standard oil system)	R	92	liter
2025	Oil pan capacity, dipstick mark max. (standard oil system)	R	102	liter

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

≥ Actual value must be greater than specified value
≤ Actual value must be less than specified value

X Applicable
The module is valid for this product type

□ Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/-10%)
□ Adequate verification not yet available (tolerance +/-5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

19. Weights / dimensions

No.	Description	Index	Value	Unit
9	Engine weight, dry (basic engine configuration acc. to scope of supply specification)	R	3360	kg
10	Engine weight, wet (basic engine configuration acc. to scope of supply specification)	R	3605	kg

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on
some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard
conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/-10%)
[] Adequate verification not yet available (tolerance +/-5%)**

[A] Design value
Value required for the design of an external system
(plant)

[R] Guideline value
Typical average value as information – only suitable
for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or
upper limit/maximum value that may not be
exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWe]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

20. Fan / fan cooler

No.	Description	Index	Value	Unit
3	Fan, pusher-type		X	-
9	Fan drive: mechanical via V-belt		X	-

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type
[] Non-applicable
The module is not valid for this product type
[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/-10%)
[] Adequate verification not yet available (tolerance +/-5%)**

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

21. Exhaust emissions

No.	Description	Index	Value	Unit
2005	Emissions data sheet: NEA Singapore for ORDE		-	-
1959	Emissions data sheet: US EPA Tier4i		-	-
2052	Emissions data sheet: India ARAI/2004 Stage II		-	-
1972	Emissions data sheet: Fuel-consumption optimized		EDS2000-0430	-

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

DL Reference value: continuous power
Engine power that can be run continuously under standard conditions

> Actual value must be greater than specified value
 < Actual value must be less than specified value

X Applicable
The module is valid for this product type

Non-applicable
The module is not valid for this product type

N Value not named
The value has not yet been named or will not be named

□ Adequate verification not yet available (tolerance +/-10%)
 □ Adequate verification not yet available (tolerance +/-5%)

A Design value
Value required for the design of an external system (plant)

R Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

L Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWeI]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

22. Acoustics

No.	Description	Index	Value	Unit
101	Exhaust noise, unsilenced - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +3dB(A) tolerance)	R	115	dB(A)
201	Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798, +3dB(A) tolerance)	R	128	dB(A)
103	Exhaust noise, unsilenced - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.	R	736774e	-
109	Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)	R	104	dB(A)
209	Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)	R	122	dB(A)
111	Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.	R	736608e	-

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/- 10%)
[] Adequate verification not yet available (tolerance +/- 5%)**

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes



Name	18V2000G26F	Speed [rpm]	1500
Application Group	3B	Nominal power [kW]	1102
Dataset	Ref. 25°C/-; Air charge air cooling (3)	Nominal power [bhp]	1477
		Nominal power [kVA]	-
		Nominal power [kWe]	-
		Frequency [Hz]	50

Exhaust Regulations Fuel-consumption optimized;

23. TBO and load profile (case A)

No.	Description	Index	Value	Unit
15	Maintenance schedule No.		N	-
16	Maintenance schedule No. (cont.)		N	-

[BL] Reference value: fuel stop power
Maximum engine power that cannot be run continuously on some applications (stabilization reserve)

[DL] Reference value: continuous power
Engine power that can be run continuously under standard conditions

[>] Actual value must be greater than specified value
[<] Actual value must be less than specified value

[X] Applicable
The module is valid for this product type

[] Non-applicable
The module is not valid for this product type

[N] Value not named
The value has not yet been named or will not be named

[*] Adequate verification not yet available (tolerance +/- 10%)
[] Adequate verification not yet available (tolerance +/- 5%)**

[A] Design value
Value required for the design of an external system (plant)

[R] Guideline value
Typical average value as information – only suitable for design purposes to a limited extent

[L] Limit value
A value representing the lower limit/minimum value or upper limit/maximum value that may not be exceeded. Not suitable for design purposes