



Name	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60
Exhaust Regulations	EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp		

Reference conditions

No.	Description	Index	Value	Unit
3	MTU data code		34	-
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
10	Raw-water inlet temperature		-	°C

0. Data-relevant engine design configuration

No.	Description	Index	Value	Unit
2	Exhaust-emissions optimized (limit values see Exhaust Emissions, Chapter 21)		X	-
25	Complies with: US EPA, regulation for nonroad engines (40 CFR 89 - Tier 2 -)		X	-
8	Engine rated speed switchable (1500/1800 rpm)		-	-
12	Engine with sequential turbocharging (turbochargers with cut-in/cut-out control)		-	-
13	Engine without sequential turbocharging (turbochargers without cut-in/cut-out control)		X	-
31	Engine with air-cooled charge air		X	-
32	Engine with water-cooled charge air (external)		-	-

1. Power-related data

No.	Description	Index	Value	Unit
1	Engine rated speed	A	1800	rpm
3	Mean piston speed		9.0	m/s
5	Fuel stop power ISO 3046	A	1310	kW
9	Mean effective pressure (MEP) (Fuel stop power ISO 3046)		24.4	bar

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	50	mbar
3	Exhaust back pressure	A	30	mbar
4	Exhaust back pressure, max.	L	85	mbar
5	Fuel temperature at fuel feed connection	R	25	°C
6	Fuel temperature at fuel feed connection, max.	L	60	°C

3. Consumption

No.	Description	Index	Value	Unit
56	Specific fuel consumption (be) - 100 % FSP (+ 5 %; EN 590; 42.8 MJ/kg)	R	204	g/kWh
57	Specific fuel consumption (be) - 75 % FSP (+ 5 %; EN 590; 42.8 MJ/kg)	R	211	g/kWh

[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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

58	Specific fuel consumption (be) - 50 % FSP (+ 5 %; EN 590; 42.8 MJ/kg)	R	213	g/kWh
59	Specific fuel consumption (be) - 25 % FSP (+ 5 %; EN 590; 42.8 MJ/kg)	R	228	g/kWh
73	No-load fuel consumption	R	20	kg/h
61	Lube oil consumption after 100 h of operation (B = fuel consumption per hour)	R	0.5	% of B
62	Lube oil consumption after 100 h of operation, max. (B = fuel consumption per hour)	L	1.0	% of B

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	-
5	Exhaust piping, liquid-cooled		-	-
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		130	mm
11	Stroke		150	mm
12	Displacement, cylinder		1.99	liter
13	Displacement, total		35.82	liter
14	Compression ratio		16	-
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
43	Flywheel interface (DISC)		18"	-
46	Engine mass diagram, drawing No.		N	-
47	Engine mass diagram, drawing No. (cont.)		N	-

5. Combustion air / exhaust gas

No.	Description	Index	Value	Unit
39	Pressure differential in external air-to-air intercooler, max.	L	130	mbar
27	Charge-air pressure before cylinder - FSP	R	3.45	bar abs
10	Combustion air volume flow - FSP	R	1.8	m³/s
12	Exhaust volume flow (at exhaust temperature) - FSP	R	4.4	m³/s
16	Exhaust temperature after turbocharger - FSP	R	530	°C

6. Heat dissipation

No.	Description	Index	Value	Unit
16	Heat dissipated by engine coolant - FSP with oil heat, without charge-air heat	R	510	kW
27	Charge-air heat dissipation - FSP	R	360	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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

34	Radiation and convection heat, engine - FSP	R	50	kW
----	---	---	----	----

7. Coolant system (high-temperature circuit)

No.	Description	Index	Value	Unit
17	Coolant temperature (at engine outlet to cooling equipment)	A	95	°C
20	Coolant temperature after engine, limit 1	L	97	°C
21	Coolant temperature after engine, limit 2	L	102	°C
25	Coolant antifreeze content, max.	L	50	%
30	Cooling equipment: coolant flow rate	A	52	m³/h
35	Coolant pump: inlet pressure, min.	L	0.4	bar
36	Coolant pump: inlet pressure, max.	L	1.52	bar
41	Pressure loss in off-engine cooling system, max.	L	0.7	bar
47	Breather valve (expansion tank) opening pressure (excess pressure)	R	N	bar
54	Cooling equipment: height above engine, max.	L	15.2	m
53	Cooling equipment: operating pressure	A	2.2	bar
74	Coolant level in expansion tank, below min. shutdown	L	X	-
48	Breather valve (expansion tank) opening pressure (depression)	R	N	bar
49	Pressure in cooling system, max.	L	N	bar

8. Coolant system (low-temperature circuit)

No.	Description	Index	Value	Unit
76	Temperature differential between intake air and charge-air coolant before intercooler	A	-	K
75	Temperature differential between intake air and charge-air coolant before intercooler, max.	L	-	K

10. Lube oil system

No.	Description	Index	Value	Unit
1	Lube oil operating temp. before engine, from	R	88	°C
2	Lube oil operating temp. before engine, to	R	98	°C
5	Lube oil temperature before engine, limit 1	L	103	°C
6	Lube oil temperature before engine, limit 2	L	-	°C
8	Lube oil operating press. bef. engine, from	R	6.5	bar
9	Lube oil operating press. bef. engine, to	R	8.5	bar
10	Lube oil pressure before engine, alarm	L	5.5	bar
11	Lube oil pressure before engine, shutdown	L	5.0	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	-
21	Lube oil fine filter (main circuit): particle retention	R	0.009	mm
32	Lube oil fine filter (main circuit): pressure differential, max.	L	0.8	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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

11. Fuel system

No.	Description	Index	Value	Unit
1	Fuel pressure at fuel feed connection, min. (when engine is starting)	L	-0.3	bar
2	Fuel pressure at fuel feed connection, max. (when engine is starting)	L	0.5	bar
37	Fuel supply flow, max.	A	8.0	liter/min
8	Fuel return flow, max.	A	3.5	liter/min
10	Fuel pressure at return connection on engine, max.	L	0.5	bar
12	Fuel temperature differential before/after engine	R	50	K
15	Fuel prefilter: number of units	A	-	-
16	Fuel prefilter: number of elements per unit	A	-	-
17	Fuel prefilter: particle retention	A	-	mm
18	Fuel fine filter (main circuit): number of units	A	1	-
19	Fuel fine filter (main circuit): number of elements per unit	A	1	-
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

12. General operating data

No.	Description	Index	Value	Unit
1	Cold start capability: air temperature (w/o starting aid, w/o preheating) - (case A)	R	0 **	°C
2	Additional condition (to case A): engine coolant temperature	R	N	°C
3	Additional condition (to case A): lube oil temperature	R	10 **	°C
4	Additional condition (to case A): lube oil viscosity	R	30 **	SAE
9	Cold start capability: air temperature (w/o starting aid, w/ preheating) - (case C)	R	-10 **	°C
10	Additional condition (to case C): engine coolant temperature	R	40 **	°C
11	Additional condition (to case C): lube oil temperature	R	-5 **	°C
12	Additional condition (to case C): lube oil viscosity	R	10W30	SAE
21	Coolant preheating, heater performance (standard)	R	6	kW
22	Coolant preheating, preheating temperature, min.	L	32	°C
28	Breakaway torque (without driven machinery) coolant temperature +5°C	R	870	Nm
30	Breakaway torque (without driven machinery) coolant temperature +40°C	R	500 *	Nm
29	Cranking torque at firing speed (without driven machinery) coolant temperature +5°C	R	570 *	Nm
31	Cranking torque at firing speed (without driven machinery) coolant temperature +40°C	R	455 *	Nm
96	Starting is blocked if the engine coolant temperature is below		0	°C
93	Run-up period to rated speed (with driven machinery) (* at general conditions)	R	N	s
37	High idling speed, max. (static)	L	1920	rpm
38	Limit speed for overspeed alarm / emergency shutdown	L	2100	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.	R	40	°C

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

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%)

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

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

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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

48	Minimum continuous load	R	20	%
49	Extended low or no-load operation possible (consultation required)		X	-
50	Engine mass moment of inertia (without flywheel)	R	4.068	kgm ²
52	Standard flywheel mass moment of inertia	R	2.920	kgm ²
51	Engine mass moment of inertia (with standard flywheel)	R	6.988	kgm ²
69	Speed droop (with electronic governor) adjustable, from	R	0	%
70	Speed droop (with electronic governor) adjustable, to	R	5	%
95	Number of starter ring-gear teeth on engine flywheel		118	-

13. Starting (electric)

No.	Description	Index	Value	Unit
1	Starter, rated power (make BOSCH) (standard design)	R	-	kW
12	Starter, rated power (make DELCO) (standard design)	R	9.5	kW
22	Starter, rated power (make PRESTOLITE) (standard design)	R	9.2	kW
2	Starter, rated voltage (standard design)	R	24	VDC
3	Starter, rated short-circuit current (make BOSCH)	R	-	A
13	Starter, rated short-circuit current (make DELCO)	R	64	A
23	Starter, rated short-circuit current (make PRESTOLITE)	R	64	A
4	Starter, power requirement max. (make BOSCH)	R	-	A
14	Starter, power requirement max. (make DELCO)	R	1600	A
24	Starter, power requirement max. (make PRESTOLITE)	R	1800	A
5	Starter, power requirement at firing speed (make BOSCH)	R	-	A
15	Starter, power requirement at firing speed (make DELCO)	R	800	A
25	Starter, power requirement at firing speed (make PRESTOLITE)	R	800	A
6	Recommended battery capacity (automotive starter battery, DIN 72311)	A	N	Ah/20h
10	Recommended battery capacity, from (automotive starter battery, DIN 72311)	A	N	Ah/20h
11	Recommended battery capacity, to (automotive starter battery, DIN 72311)	A	N	Ah/20h
7	Recommended battery capacity (NiCd battery)	A	N	Ah/ 5h
8	Recommended battery capacity (NiCd battery, VDE 0108)	A	N	Ah/ 5h
16	Start attempt duration (engine preheated)	R	2	s
17	Start attempt duration (engine not preheated)	R	6	s
18	Start attempt duration, max.	L	15	s
2309	Manufacturer		DELCO	-
2310	Number of starter		1	-
2312	Starter electrically redundant		-	-
2313	Rated power per starter	R	9	kW
2314	Starter, rated voltage	R	24	VDC
2315	Rated short-circuit current per starter	L	1900	A
2316	Power consumption per starter (at an engine speed of 100 rpm)	R	930	A
3000	Power consumption per starter (at an engine speed of 100 rpm, SAE0)	R	-	A

[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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

3002	Power consumption per starter (at an engine speed of 100 rpm, SAE1)	R	-	A
2317	Internal resistance of power supply + line resistance per starter	A	0.008	Ω
2318	Manufacturer		DELCO	-
2319	Number of starter		2	-
2320	Starter electrically redundant		X	-
2321	Rated power per starter	R	9	kW
2322	Starter, rated voltage	R	24	VDC
2323	Rated short-circuit current per starter	L	1900	A
2324	Power consumption per starter (at an engine speed of 100 rpm)	R	930	A
3001	Power consumption per starter (at an engine speed of 100 rpm, SAE0)	R	-	A
3003	Power consumption per starter (at an engine speed of 100 rpm, SAE1)	R	-	A
2325	Internal resistance of power supply + line resistance per starter	A	0.008	Ω
2326	Manufacturer		PRESTOLITE	-
2327	Number of starter		1	-
2328	Starter electrically redundant		-	-
2329	Rated power per starter	R	9	kW
2330	Starter, rated voltage	R	24	VDC
2331	Rated short-circuit current per starter	L	1900	A
2332	Power consumption per starter (at an engine speed of 100 rpm)	R	830	A
3251	Power consumption per starter (at an engine speed of 100 rpm, SAE0)	R	-	A
3252	Power consumption per starter (at an engine speed of 100 rpm, SAE1)	R	-	A
2333	Internal resistance of power supply + line resistance per starter	A	0.005	Ω
2334	Manufacturer		PRESTOLITE	-
2335	Number of starter		2	-
2336	Starter electrically redundant		X	-
2337	Rated power per starter	R	9	kW
2338	Starter, rated voltage	R	24	VDC
2339	Rated short-circuit current per starter	L	1900	A
2340	Power consumption per starter (at an engine speed of 100 rpm)	R	830	A
3372	Power consumption per starter (at an engine speed of 100 rpm, SAE0)	R	-	A
3373	Power consumption per starter (at an engine speed of 100 rpm, SAE1)	R	-	A
2341	Internal resistance of power supply + line resistance per starter	A	0.005	Ω
3374	Manufacturer		PRESTOLITE	-
3375	Number of starter		2	-
3376	Starter electrically redundant		-	-
3377	Rated power per starter	R	9	kW
3378	Starter, rated voltage	R	24	VDC
3379	Rated short-circuit current per starter	L	1900	A
3380	Power consumption per starter (at an engine speed of 100 rpm)	R	830	A
3381	Power consumption per starter (at an engine speed of 100 rpm, SAE0)	R	-	A
3382	Power consumption per starter (at an engine speed of 100 rpm, SAE1)	R	-	A

[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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

3383	Internal resistance of power supply + line resistance per starter	A	0.005	Ω
2347	Generally valid data for starter		X	-
2342	Rated starting-attempt Duration (at +20°C ambient temperature with battery	R	3	s
2343	Interval between starts (at rated starting-attempt duration), min.	L	5	s
2345	Maximum acceptable starting-attempt duration	L	15	s
2344	Interval between starts (when starting-attempt duration > rated starting-attempt duration)	R	60	s
2346	Starting attempts within 30 minutes (at +20°C ambient temperature with battery full), max.	L	6	-

15. Starting (pneumatic/oil pressure starter)

No.	Description	Index	Value	Unit
5	Starting air pressure before starter motor, min.	R	17	bar
6	Starting air pressure before starter motor, max.	R	N	bar
7	Starting air pressure before starter motor, min.	L	N	bar
8	Starting air pressure before starter motor, max.	L	N	bar
18	Start attempt duration (engine preheated)	R	N	s
19	Start attempt duration (engine not preheated)	R	N	s
20	Start attempt duration, max.	L	N	s
21	Air consumption/start attempt (engine preheated)	R	0.84	m ³ n
23	Starting air tank for 3 start attempts (max. 40 bar) (engine preheated)	R	N	liter
24	Starting air tank for 3 start attempts (max. 30 bar) (engine preheated)	R	N	liter
25	Starting air tank for 6 start attempts (max. 40 bar) (engine preheated)	R	N	liter
26	Starting air tank for 6 start attempts (max. 30 bar) (engine preheated)	R	N	liter
27	Starting air tank for 10 start attempts (max. 40 bar) (engine preheated)	R	N	liter
28	Starting air tank for 10 start attempts (max. 30 bar) (engine preheated)	R	N	liter

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 (°)

18. Capacities

No.	Description	Index	Value	Unit
1	Engine coolant capacity (without cooling equipment)	R	120	liter
11	On-engine fuel capacity	R	N	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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

14	Engine oil capacity, initial filling (standard oil system) (Option: max. operating inclinations)	R	130	liter
20	Oil change quantity, max. (standard oil system) (Option: max. operating inclinations)	R	114	liter
28	Oil pan capacity, dipstick mark min. (standard oil system) (Option: max. operating inclinations)	L	87	liter
29	Oil pan capacity, dipstick mark max. (standard oil system) (Option: max. operating inclinations)	L	110	liter

19. Masses / dimensions

No.	Description	Index	Value	Unit
9	Engine mass, dry (basic engine configuration acc. to scope of supply specification)	R	3500	kg
10	Engine mass, wet (basic engine configuration acc. to scope of supply specification)	R	3750	kg

20. Fan / fan cooler

No.	Description	Index	Value	Unit
3	Fan, pusher-type		X	-
18	Fan arrangement: vertical above crankshaft		X	-
9	Fan drive: mechanical via V-belt		X	-
13	Fan: speed	R	N	rpm
19	Standard fan cooler, supplied by MTU, design and specific data acc. to case A / B / C		N	-
21	(Case A) - fan cooler, designed for: - ambient temperature	A	N	°C
54	(Case A) - fan cooler, designed for: - site altitude, max.	A	N	m
22	(Case A) - fan cooler, designed for: - coolant antifreeze content, max.	A	N	%
55	(Case A) - fan: power consumption at 1 mbar / 100 Pa duct allowance (pressure and suction sides, total)	R	N	kW
56	(Case A) - fan: power consumption at 2 mbar / 200 Pa duct allowance (pressure and suction sides, total)	R	N	kW
57	(Case A) - fan: power consumption at 3 mbar / 300 Pa duct allowance (pressure and suction sides, total)	R	N	kW
27	(Case A) - cooling-air flow rate at 1 mbar / 100 Pa duct allowance (pressure and suction sides, total)	R	N	m³/s
28	(Case A) - cooling-air flow rate at 2 mbar / 200 Pa duct allowance (pressure and suction sides, total)	R	N	m³/s

[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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

29	(Case A) - cooling-air flow rate at 3 mbar / 300 Pa duct allowance (pressure and suction sides, total)	R	N	m ³ /s
58	(Case A) - fan: weight	R	N	kg
59	(Case A) - fan cooler: weight, dry (incl. pipework)	R	N	kg
31	(Case A) - fan cooler: coolant capacity	R	N	liter
32	(Case B) - fan cooler, designed for: - ambient temperature	A	N	°C
60	(Case B) - fan cooler, designed for: - site altitude, max.	A	N	m
33	(Case B) - fan cooler, designed for: - coolant antifreeze content, max.	A	N	%
61	(Case B) - fan: power consumption at 1 mbar / 100 Pa duct allowance (pressure and suction sides, total)	R	N	kW
62	(Case B) - fan: power consumption at 2 mbar / 200 Pa duct allowance (pressure and suction sides, total)	R	N	kW
63	(Case B) - fan: power consumption at 3 mbar / 300 Pa duct allowance (pressure and suction sides, total)	R	N	kW
38	(Case B) - cooling-air flow rate at 1 mbar / 100 Pa duct allowance (pressure and suction sides, total)	R	N	m ³ /s
39	(Case B) - cooling-air flow rate at 2 mbar / 200 Pa duct allowance (pressure and suction sides, total)	R	N	m ³ /s
40	(Case B) - cooling-air flow rate at 3 mbar / 300 Pa duct allowance (pressure and suction sides, total)	R	N	m ³ /s
64	(Case B) - fan: weight	R	N	kg
65	(Case B) - fan cooler: weight, dry (incl. pipework)	R	N	kg
42	(Case B) - fan cooler: coolant capacity	R	N	liter
43	(Case C) - fan cooler, designed for: - ambient temperature	A	N	°C
66	(Case C) - fan cooler, designed for: - site altitude, max.	A	N	m
44	(Case C) - fan cooler, designed for: - coolant antifreeze content, max.	A	N	%
67	(Case C) - fan: power consumption at 1 mbar / 100 Pa duct allowance (pressure and suction sides, total)	R	N	kW
68	(Case C) - fan: power consumption at 2 mbar / 200 Pa duct allowance (pressure and suction sides, total)	R	N	kW
69	(Case C) - fan: power consumption at 3 mbar / 300 Pa duct allowance (pressure and suction sides, total)	R	N	kW
49	(Case C) - cooling-air flow rate at 1 mbar / 100 Pa duct allowance (pressure and suction sides, total)	R	N	m ³ /s

[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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

50	(Case C) - cooling-air flow rate at 2 mbar / 200 Pa duct allowance (pressure and suction sides, total)	R	N	m³/s
51	(Case C) - cooling-air flow rate at 3 mbar / 300 Pa duct allowance (pressure and suction sides, total)	R	N	m³/s
70	(Case C) - fan: weight	R	N	kg
71	(Case C) - fan cooler: weight, dry (incl. pipework)	R	N	kg
53	(Case C) - fan cooler: coolant capacity	R	N	liter

21. Exhaust emissions

No.	Description	Index	Value	Unit
1956	Emissions data sheet: US EPA Tier 2		EDS20000107	-

22. Acoustics

No.	Description	Index	Value	Unit
102	Exhaust noise, unsilenced - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +3dB(A) tolerance)	R	118	dB(A)
202	Exhaust noise, unsilenced - FSP (sound power level LW, ISO 6798, +3dB(A) tolerance)	R	130	dB(A)
104	Exhaust noise, unsilenced - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.	R	734 396e	-
204	Exhaust noise,unsilenced - FSP (sound power level LW, ISO 6798) Spectrum No.	R	N	-
110	Engine surface noise with attenuated intake noise (filter) - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)	R	106	dB(A)
210	Engine surface noise with attenuated intake noise (filter) - FSP (sound power level LW, ISO 6798, +2dB(A) tolerance)	R	124	dB(A)
112	Engine surface noise with attenuated intake noise (filter) - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.	R	734 395e	-
212	Engine surface noise with attenuated intake noise (filter) - FSP (sound power level LW, ISO 6798) Spectrum No.	R	N	-
126	Structure borne noise at engine mounting brackets in vertical direction above resilient engine mounts - FSP Spectrum No.	R	N	-
129	Test stand impedance spectrum, Diagram No.		N	-
130	Test stand impedance spectrum, Diagram 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	18V2000G85	Speed [rpm]	1800
Application Group	3D	Nominal power [kW]	1310
Dataset	Ref. 25°C/- ; Air charge air cooling	Nominal power [bhp]	1757
		Frequency [Hz]	60

Exhaust Regulations EPA Stationary EMERG T2 (40CFR60) ; EPA Nonroad T2 Comp

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