

Name 10V1600G10F Speed [rpm] 1500 **Application Group** 3B Nominal power [kW] 407 Dataset Ref. 25°C/-Nominal power [bhp] 546 Frequency [Hz] 50

**Exhaust Regulations** NOx emission optimized;

### Reference conditions

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

0. Data-relevant engine design configuration

	ti zata reiorani engine aceign connigaranon				
No.	Description	Index	Value	Unit	
0	Engine rated speed switchable				
°	(1500/1800 rpm)		-	-	
13	Engine without sequential turbocharging		v		
13	(turbochargers without cut-in/cut-out control)		^	-	
31	Engine with air-cooled charge air		х	-	

### 1. Power-related data

No.	Description	Index	Value	Unit
1	Engine rated speed	Α	1500	rpm
3	Mean piston speed		7.5	m/s
4	Continuous power ISO 3046 (10% overload capability)	۸	407	kW
4	(design power DIN 6280, ISO 8528)	А	407	KVV
5	Fuel stop power ISO 3046	Α	448	kW
0	Mean effective pressure (MEP)		18.6	har
8	(Continuous power ISO 3046)		18.0	bar
19	Mean effective pressure (MEP)		20.5	la a u
	(Fuel stop power ISO 3046)		20.3	bar

2. General Conditions (for maximum power)

No.	Description Description	lua d'acc	Value	Linia
INO.	'	index	value	Unit
1	Intake air depression (new filter)	Α	15	mbar
2	Intake air depression, max.	L	50	mbar
3	Exhaust back pressure	Α	30	mbar
4	Exhaust back pressure, max.	L	85	mbar
5	Fuel temperature at fuel feed connection	R	38	°C
0	Fuel temperature at fuel feed connection, max.		60	°C
9	(w/o power reduction)	L	60	C
10	Fuel temperature at fuel feed connection, max.	L	70	°C
49	Max. ambient temperature in direct vicinity		FF	0.0
	of vibration damper	L	55	1.0

3. Consumption

No.	Description	Index	Value	Unit
17	Specific fuel consumption (be) - 100 % CP	D	210	a /lawh
17	(+ 5 %; EN 590; 42.8 MJ/kg)	K	210	g/kWh

BL Reference value: fuel stop power
Maximum engine power that cannot be run continuously on
some applications (stabilization reserve)
DC Reference value: continuous power
Engine power that can be run continuously under standard
conditions

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

IX Applicable
The module is valid for this product type
In Non-applicable
The module is not valid for this product type
IX 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%)



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	Consider final announce tion (ba) 75 0/ CD			
18	Specific fuel consumption (be) - 75 % CP	R	214	g/kWh
	(+ 5 %; EN 590; 42.8 MJ/kg)			8/
19	Specific fuel consumption (be) - 50 % CP	R	220	g/kWh
19	(+ 5 %; EN 590; 42.8 MJ/kg)	<b>n</b>	220	g/KVVII
20	Specific fuel consumption (be) - 25 % CP	2	234	- /L->A/In
20	(+ 5 %; EN 590; 42.8 MJ/kg)	R	234	g/kWh
56	Specific fuel consumption (be) - 100 % FSP	R	212	g/kWh
30	(+ 5 %; EN 590; 42.8 MJ/kg)	l <sup>r</sup>	212	g/KVVII
57	Specific fuel consumption (be) - 75 % FSP	R	211	a/la/A/la
37	(+ 5 %; EN 590; 42.8 MJ/kg)	ĸ	211	g/kWh
58	Specific fuel consumption (be) - 50 % FSP	R	219	g/kWh
36	(+ 5 %; EN 590; 42.8 MJ/kg)	ĸ		g/KVVII
59	Specific fuel consumption (be) - 25 % FSP	R	232	a/la/A/b
33	(+ 5 %; EN 590; 42.8 MJ/kg)	ĸ	232	g/kWh
73	No-load fuel consumption	R	2.1	kg/h
61	Lube oil consumption after 100 h of operation	R	<0.2	% of B
01	(B = fuel consumption per hour)	K	C0.2	% UI B
62	Lube oil consumption after 100 h of operation, max.		<0.5	% of B
02	(B = fuel consumption per hour)	-	<0.5	70 UI B

4. Model-related data (basic design)

	de l'elatea data (baele design)		T .	
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		10	-
7	Cylinder configuration: V angle		90	degrees (°)
10	Bore		122	mm
11	Stroke		150	mm
12	Displacement, cylinder		1.75	liter
13	Displacement, total		17.5	liter
14	Compression ratio		17.5	-
41	Cylinder liners: wet, replaceable		Х	-
24	Number of inlet valves, per cylinder		2	-
25	Number of exhaust valves, per cylinder		2	-
15	Number of turbochargers		2	-
28	Standard flywheel housing flange (engine main PTO)		01	SAE
43	Flywheel interface (DISC)		14"	-

5. Combustion air / exhaust gas

No.	Description	Index	Value	Unit
19	Charge-air temperature before cylinder	Α	50	°C
33	Charge-air flow through external air-to-air intercooler	Α	0.26	m³/s



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			1	1
34	Charge-air temperature before external	Α	199	°C
	air-to-air intercooler		155	Č
35	Charge-air temperature after external	Α	50	°C
33	air-to-air intercooler	^	30	C
36	Charge-air temperature after external		65	°C
30	air-to-air intercooler, max.	L	03	C
37	Charge-air temperature after external		-15	°C
37	air-to-air intercooler, min.	L .	-13	C
39	Pressure differential in external		130	mbar
39	air-to-air intercooler, max.	_	130	IIIDai
8	Charge-air pressure before cylinder - CP	R	2.65	bar abs
27	Charge-air pressure before cylinder - FSP	R	2.92	bar abs
9	Combustion air volume flow - CP	R	0.46	m³/s
10	Combustion air volume flow - FSP	R	0.50	m³/s
11	Exhaust volume flow (at exhaust temperature) - CP	R	1.44	m³/s
12	Exhaust volume flow (at exhaust temperature) - FSP	R	1.61	m³/s
15	Exhaust temperature after turbocharger - CP	R	548	°C
16	Exhaust temperature after turbocharger - FSP	R	540	°C

### 6. Heat dissipation

No.	Description	Index	Value	Unit
116	Heat dissipated by engine coolant - FSP	R	222	kW
	with oil heat, without charge-air heat			
26	Charge-air heat dissipation - CP	R	83	kW
27	Charge-air heat dissipation - FSP	R	104	kW
31	Heat dissipated by return fuel flow - CP	R	4.6	kW
32	Heat dissipated by return fuel flow - FSP	R	4.6	kW
33	Radiation and convection heat, engine - CP	R	21	kW

7. Coolant system (high-temperature circuit)

7. CO	olant system (nign-temperature circuit)			
No.	Description	Index	Value	Unit
17	Coolant temperature	^	95	°C
17	(at engine outlet to cooling equipment)	Α	93	C
20	Coolant temperature after engine, limit 1	L	105	°C
21	Coolant temperature after engine, limit 2	L	109	°C
25	Coolant antifreeze content, max.	L	50	%
30	Cooling equipment: coolant flow rate	А	23.3	m³/h
35	Coolant pump: inlet pressure, min.	L	1.4	bar
36	Coolant pump: inlet pressure, max.	L	3.5	bar
41	Pressure loss in off-engine cooling system, max.	L	0.7	bar
47	Breather valve (expansion tank)	ь	1.0+0.3	har
47	opening pressure (excess pressure)	R	1.0+0.3	bar
54	Cooling equipment: height above engine, max.	L	15	m
48	Breather valve (expansion tank)		-0.2	la a si
40	opening pressure (depression)	R	-0.2	bar
49	Pressure in cooling system, max.	L	5.0	bar

Applicable
 The module is valid for this product type
 Non-applicable
 The module is not valid for this product type
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### 10. Lube oil system

	e en system			
No.	Description	Index	Value	Unit
1	Lube oil operating temp. before engine, from	R	105	°C
2	Lube oil operating temp. before engine, to	R	115	°C
8	Lube oil operating press. bef. engine, from	R	4.5	bar
9	Lube oil operating press. bef. engine, to	R	5.5	bar
10	Lube oil pressure before engine, alarm	L	2.6	bar
11	Lube oil pressure before engine, shutdown	L	2.4	bar
19	Lube oil fine filter (main circuit):		1	
19	number of units		1	-
20	Lube oil fine filter (main circuit):		4	
20	number of elements per unit		4	-
56	Lube-oil fine filter (main flow), particle size 1		10	μm
57	Lube-oil fine filter (main flow), filtering efficiency re 1		26	%
58	Lube-oil fine filter (main flow), particle size 2		15	μm
59	Lube-oil fine filter (main flow), filtering efficiency re 2		50	%
60	Lube-oil fine filter (main flow), particle size 3		20	μm
61	Lube-oil fine filter (main flow), filtering efficiency re 3		75	%
32	Lube oil fine filter (main circuit):		2	
32	pressure differential, max.	L		bar

### 11. Fuel system

No.	Description	Index	Value	Unit
	Fuel pressure at engine fuel feed connection, min.	acx		
1	(when engine is starting)	L	-0.5	bar
2	Fuel pressure at engine fuel feed connection, max.		0.5	la a u
2	(when engine is starting)	L	0.5	bar
4211	Max. fuel supply volume	^	4.2	liter/min
4211	Normal mode	Α	4.2	liter/min
4212	Max. fuel supply volume	_	5.1	litor/min
4212	Failure mode	A	5.1	liter/min
4213	Max. fuel return volume	^	2.0	litar/min
4213	Normal mode	Α	2.0	liter/min
4214	Max. fuel return volume	_	4.1	liter/min
4214	Failure mode	A	4.1	liter/min
10	Fuel pressure at return connection on engine, max.	L	<0.4	bar
18	Fuel fine filter (main circuit): number of units	А	1	-
19	Fuel fine filter (main circuit): number of elements per unit	А	1	-
68	Fuel fine filter, particle size 1		4	μm
69	Fuel fine filter, filtering efficiency re 1		99.5	%
70	Fuel fine filter, particle size 2		6	μm
71	Fuel fine filter, filtering efficiency re 2		99.8	%
72	Fuel fine filter, particle size 3		14	μm
73	Fuel fine filter, filtering efficiency re 3		99.8	%
21	Fuel fine filter (main circuit): pressure differential, max.	L	2	bar

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 The module is valid for this product type
 Non-applicable
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12. General operating data

	ierai operating data			
No.	Description	Index	Value	Unit
1	Cold start capability: air temperature	R	-20	°c
1	(w/o starting aid, w/o preheating) - (case A)	ĸ	-20	C
2	Additional condition (to case A):	R	-20	°c
۷	engine coolant temperature	K	-20	
3	Additional condition (to case A): lube oil temperature	R	-20	°C
4	Additional condition (to case A): lube oil viscosity	R	10W40	SAE
9	Cold start capability: air temperature	R	-40	°C
9	(w/o starting aid, w/ preheating) - (case C)	ĸ	-40	C
10	Additional condition (to case C):	R	-40	°c
10	engine coolant temperature	K	-40	C
11	Additional condition (to case C): lube oil temperature	R	-40	°C
12	Additional condition (to case C): lube oil viscosity	R	10W40	SAE
21	Coolant preheating, heater performance (standard)	R	3	kW
22	Coolant preheating, preheating temperature, min.	L	32	°C
3506	Coolant preheating, preheating temperature, max.	L	55	°C
28	Breakaway torque (without driven machinery)	2	720	Nima
20	coolant temperature +5°C	R	720	Nm
30	Breakaway torque (without driven machinery)		430	Nice
30	coolant temperature +40°C	R	430	Nm
20	Cranking torque at firing speed (without driven machinery)	_	200	Nice
29	coolant temperature +5°C	R	360	Nm
24	Cranking torque at firing speed (without driven machinery)	_	225	1
31	coolant temperature +40°C	R	225	Nm
0.0	Starting is blocked if the engine coolant temperature is		20	
96	below		-20	°C
37	High idling speed, max. (static)	L	1560	rpm
38	Limit speed for overspeed alarm / emergency shutdown	L	1800	rpm
42	Firing speed, from	R	80	rpm
43	Firing speed, to	R	120	rpm
44	Engine coolant temperature before starting full-load operation, recommended	R	60	°C
44	min.	K	60	
48	Minimum continuous load	R	20	%
F0	Engine mass moment of inertia		2.116	12
50	(without flywheel)	R	2.116	kgm²
52	Standard flywheel mass moment of inertia	R	1.44	kgm²
1982	Block bending moment - SAE 1	R	3	kNm
Г1	Engine mass moment of inertia	n	3.556	12
51	(with standard flywheel)	R	3.556	kgm²
109	Speed droop (with electronic governor) adjustable P1	R	4	%
110	Speed droop (with electronic governor) adjustable P2	R	0.4	%
95	Number of starter ring-gear teeth on engine flywheel		157	-

### 13. Starting (electric)

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



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3B

No.	Description	Index	Value	Unit
2309	Manufacturer	- IIIGCX	Prestolite	-
2310	Number of starter		1	-
2312	Starter electrically redundant		-	-
2313	Rated power per starter	R	7.5	kW
2314	Starter, rated voltage	R	24	VDC
2315	Rated short-circuit current per starter	L	1730	A
	Power consumption per starter	_		
3000	(at an engine speed of 100 rpm, SAEO)	R	400	Α
3002	Power consumption per starter	R	540	Α
3002	(at an engine speed of 100 rpm, SAE1)	IX.	1340	^
2317	Internal resistance of power supply + line resistance per starter	Α	0.008	Ω
2318	Manufacturer		Prestolite	-
2319	Number of starter		1	-
2320	Starter electrically redundant		Х	-
2321	Rated power per starter	R	7.5	kW
2322	Starter, rated voltage	R	24	VDC
2323	Rated short-circuit current per starter	L	1730	Α
3001	Power consumption per starter	R	400	Α
3001	(at an engine speed of 100 rpm, SAE0)	ĸ	400	A
3003	Power consumption per starter	R	540	Α
	(at an engine speed of 100 rpm, SAE1)	1	340	^
2325	Internal resistance of power supply + line resistance per starter	Α	0.008	Ω
2326	Manufacturer		Prestolite	-
2327	Number of starter		2	-
2328	Starter electrically redundant		-	-
2329	Rated power per starter	R	7.5	kW
2330	Starter, rated voltage	R	24	VDC
2331	Rated short-circuit current per starter	L	1730	Α
3251	Power consumption per starter	R	400	Α
3231	(at an engine speed of 100 rpm, SAE0)	N	400	A
3252	Power consumption per starter	R	540	Α
3232	(at an engine speed of 100 rpm, SAE1)	IN.	340	A
2333	Internal resistance of power supply + line resistance per starter	Α	0.008	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	L	5	c
2343	(at rated starting-attempt duration), min.	L		S
2345	Maximum acceptable starting-attempt duration	L	15	S
2344	Interval between starts	R	60	s
2344	(when starting-attempt duration > rated starting-attempt duration)	n	00	3
2346	Starting attempts within 30 minutes	L	6	_
2340	(at +20°C ambient temperature with battery full), max.			

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

No. Description	Index	Value	Unit
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Adequate verification not yet available (tolerance +/- 10%)
Adequate verification not yet available (tolerance +/- 5%)

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	Longitudinal inclination, continuous max.			
15	driving end down	L	15	degrees (°)
	(Option: max. operating inclinations)			
	Longitudinal inclination, continuous max.			
17	driving end up	L	15	degrees (°)
	(Option: max. operating inclinations)			
19	Transverse inclination, continuous max.		15	dograps (°)
13	(Option: max. operating inclinations)	L	13	degrees (°)

18. Capacities

10. 0	apacities			
No.	Description	Index	Value	Unit
1	Engine coolant capacity (without cooling equipment)	R	60 *	liter
11	On-engine fuel capacity	R	3 *	liter
	Engine oil capacity, initial filling			
14	(standard oil system)	R	60.5	liter
	(Option: max. operating inclinations)			
	Oil change quantity, max.			
20	(standard oil system)	R	53	liter
	(Option: max. operating inclinations)			
	Oil pan capacity, dipstick mark min.			
28	(standard oil system)	L	46	liter
	(Option: max. operating inclinations)			
	Oil pan capacity, dipstick mark max.			
29	(standard oil system)	L	53	liter
	(Option: max. operating inclinations)			

#### 19. Masses / dimensions

No.	Description	Index	Value	Unit	
7	Engine dry mass (with engine-mounted	0	1694 *	ka	
	standard accessories, without coupling)	l K	1694	kg	
12	Engine mass, wet	0	1752	ka	
	(with engine-mounted standard accessories, without coupling)	K	1732	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	1500	rpm

### 21. Exhaust emissions

No. Description	Index	Value	Unit
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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 <a></a> Actual value must be less than specified value

IX Applicable
The module is valid for this product type
In Non-applicable
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1	.947	Emissions data sheet:	EDS16000072	
1	.947	"TA-Luft" - CP	ED316000072	-

#### 22. Acoustics

Exhaust noise, unsilenced - CP		ustics			
International Content   Inte	No.	·	Index	Value	Unit
SO 6798, +3dB(A) tolerance		Exhaust noise, unsilenced - CP			
Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798, +3dB(A) tolerance) Exhaust noise, unsilenced - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +3dB(A) tolerance)  Exhaust noise, unsilenced - FSP (sound power level LW, ISO 6798, +3dB(A) tolerance)  Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798, +3dB(A) tolerance)  Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798, +3dB(A) tolerance)  Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798) Spectrum No.  Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798) R - Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, PSectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, 2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, 2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - ESP	101	(free-field sound-pressure level Lp, 1m distance,	R	109	dB(A)
(Sound power level LW, ISO 6798, +3dB(A) tolerance)   Exhaust noise, unsilenced - FSP (Sound power level LW, ISO 6798, +3dB(A) tolerance)   R   109   dB(A)	201	Exhaust noise, unsilenced - CP	D	121	dB(A)
(free-field sound-pressure level Lp, 1m distance, ISO 6798, +3dB(A) tolerance)   R   109   dB(A)	201	(sound power level LW, ISO 6798, +3dB(A) tolerance)	N.	121	ub(A)
ISO 6798, +3dB(A) tolerance   Exhaust noise, unsilenced - FSP (sound power level LW, ISO 6798, +3dB(A) tolerance)   R   122   dB(A)		Exhaust noise, unsilenced - FSP			
Exhaust noise, unsilenced - FSP (sound power level LLW, ISO 6798, +3dB(A) tolerance)  Exhaust noise, unsilenced - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798)  Spectrum No.  Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798)  Spectrum No.  Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798)  R	102	(free-field sound-pressure level Lp, 1m distance,	R	109	dB(A)
Sound power level LW, ISO 6798, +3dB(A) tolerance)   R   122   dB(A)		ISO 6798, +3dB(A) tolerance)			
Sound power level LW, ISO 6798, +3d8(A) tolerance)   Exhaust noise, unsilenced - CP	202	Exhaust noise, unsilenced - FSP	D	122	dD(A)
(free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Exhaust noise,unsilenced - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) R  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) R  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)	202	(sound power level LW, ISO 6798, +3dB(A) tolerance)	N.	122	ub(A)
ISO 6798) Spectrum No.  Exhaust noise,unsilenced - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance) Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance) Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance) Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance) Engine surface noise with attenuated intake noise (intake silencer) - FSP		Exhaust noise, unsilenced - CP			
ISO 6798    Spectrum No.   Exhaust noise, unsilenced - CP   (sound power level LW, ISO 6798)   R   -   -	103	(free-field sound-pressure level Lp, 1m distance,	D	N	
Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	103	ISO 6798)	N.	IN .	-
Spectrum No.   Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.   Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.   Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798)   Spectrum No.   Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filtake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filtake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filtake silencer) - FSP   Page 101   de(A)		Spectrum No.			
Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Exhaust noise,unsilenced - CP			
Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP  Engine surface noise with attenuated intake noise (intake silencer) - FSP	203	(sound power level LW, ISO 6798)	R	-	-
intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Spectrum No.			
(free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Engine surface noise with attenuated			
(free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.   Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.   Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.   Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)   Engine surface noise with attenuated intake noise (intake silencer) - FSP	100	intake noise (filter) - CP	В		dD(A)
Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP  P. 101	109	(free-field sound-pressure level Lp, 1m distance,	K		dB(A)
intake noise (filter) - CP (sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP  P. 101  dB(A)		ISO 6798, +2dB(A) tolerance)			
(sound power level LW, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Engine surface noise with attenuated			
Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	209	intake noise (filter) - CP	R	-	dB(A)
intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		(sound power level LW, ISO 6798, +2dB(A) tolerance)			
(free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Engine surface noise with attenuated			
(free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	111	intake noise (filter) - CP		-	-
Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798)  Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	111	(free-field sound-pressure level Lp, 1m distance,	K		
intake noise (filter) - CP (sound power level LW, ISO 6798)  Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP  R  100  dB(A)		ISO 6798) Spectrum No.			
(sound power level LW, ISO 6798)  Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Engine surface noise with attenuated			
(sound power level LW, ISO 6798)  Spectrum No.  Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	211	intake noise (filter) - CP			
Engine surface noise with attenuated intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	211	(sound power level LW, ISO 6798)	K	-	-
intake noise (intake silencer) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP  P 101		Spectrum No.			
(free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP		Engine surface noise with attenuated			
(free-field sound-pressure level Lp, 1m distance, ISO 6798, +2dB(A) tolerance)  Engine surface noise with attenuated intake noise (intake silencer) - FSP	112	intake noise (intake silencer) - CP		100	4D(A)
Engine surface noise with attenuated intake noise (intake silencer) - FSP	113	(free-field sound-pressure level Lp, 1m distance,	К	100	aB(A)
intake noise (intake silencer) - FSP		ISO 6798, +2dB(A) tolerance)			
11/4   D   11/11   14/2/A)		Engine surface noise with attenuated			
114   (free-field sound-pressure level I n 1m distance   K   101   (dB(A)	114	intake noise (intake silencer) - FSP		101	-ID(A)
(free field 30dfid pressure level Ep, 1111 distance,	114	(free-field sound-pressure level Lp, 1m distance,	K	101	ar(y)
ISO 6798, +2dB(A) tolerance)		ISO 6798, +2dB(A) tolerance)			



Speed [rpm] Name 10V1600G10F 1500 407 **Application Group** 3B Nominal power [kW] Dataset Ref. 25°C/-Nominal power [bhp] 546 Frequency [Hz] 50

**Exhaust Regulations** NOx emission optimized;

	Structure borne noise at engine mounting brackets in vertical direction above resilient engine mounts - CP	R	_	_
123	Spectrum No.	IX.		
	Structure borne noise at engine mounting brackets			
126	in vertical direction above resilient engine mounts - FSP	R	-	-
	Spectrum No.			