



DEEPSEA CONTROLLER



DeepSea brand originated from UK. Besides basis functions such as: over - under voltage overload, phase rotation protection, the controller could link to engine ECU diagnostics via electronic engine interface (CANBUS) in order to monitor engine, analysis to assist in the detection of patterns in engine status. Auto main failure control function is designed to be convenience for operating and reduce cost when end-user installs ATS. Controller is equipped with RS232 and RS485 ports that have the ability to be configured and monitored from a remote PC (SCADA)



MECC ALTE ALTERNATOR



Mecc Alte is a world leader in the production of synchronous alternators. The standard of products are listed in every section, divided into four categories for simplicity of consultation. Mecc alte alternators are well known around the world for quality, versatility, enhanced performance and rugged reliability. Reliability and performances at the top from one to three thousand kVA.



FPT ENGINE



TTTT uses FPT engines made in Italy for 60 kVA to 400 kVA Gensets. FPT engines deliver low fuel consumption and minimal exhaust emissions. These engines are equipped with CAN bus interfaces allowing technicians to detect the engine troubleshooting with great accuracy and speed.



**GENERATOR DIESEL
FPT SERIES**

Specifications

GENERATOR MODEL		HT5F6	HT5F8	HT5F10	HT5F12	HT5F15	HT5F20	HT5F30	HT5F35	HT5F40	
Type		Synchronous generator, direct coupling, brushless.									
Insulation and protection		Class H, IP21 (other on request)									
Voltage regulation		±1% from no-load to nominal load in static condition with frequency variations ranging from -5% to +20% of the nominal value.									
Frequency	Hz	50/60									
Voltage	V	220/380V-50Hz / 240/415V-60Hz									
Phase - Wires - Power factor		3 phases - 4 wires - cosphi 0.8									
Standby power	kVA	66 / 69	90 / 104	110 / 121	133 / 146	164 / 163	220 / 247.5	330 / 357.5	370 / 402	437 / 459	
Prime power*	kVA	60 / 63	82 / 95	100 / 110	122 / 133	150 / 150	200 / 225	300 / 325	350 / 380	400 / 420	
ENGINE MODEL		FPT	N45 SM1A	N45 SM3	N45 TM2A	N45 TM3	N67 TM4	N67 TE2A	C10 TE1D	C13 TE2A	C13 TE3A
Type		Diesel 4 stroke									
Aspiration		Turbo Charged	Turbo Charged	Turbo charged with Aftercooler							
Speed governor		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Electronic	Electronic	Electronic	Electronic	
Compression ratio		17.5 : 1	17.5 : 1	17.5 : 1	17.5 : 1	17.5 : 1	17.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	
Cylinder - Arrangement		4-Inline	4-Inline	4-Inline	4-Inline	6-Inline	6-Inline	6-Inline	6-Inline	6-Inline	
Bore x stroke		mm	104 x132	104 x132	104 x132	104 x132	104 x132	125x140	135x150	135x150	
Total displacement		L	4.5	4.5	4.5	4.5	6.7	6.7	10.3	12.9	12.9
Revolutions		rpm	1500/1800								
Standby power	kW	59 / 65	81 / 97	96.2 / 107.2	118.2 / 127	165 / 187	193 / 215	290 / 317	330 / 360	387 / 398	
Prime power	kW	53.3 / 59	73.5 / 88	87.5 / 97.5	107.2 / 115	149 / 170	175 / 195	264 / 287	300 / 327	352 / 360	
Fuel type		Diesel EN 590									
Fuel Consumption	100%	L/h	13.7 / 15.5	19.4 / --	22 / 26.3	27.6 / --	36.6 / --	44 / --	62.8 / 79.4	70 / 76.1	85.8 / 98.1
	80%	L/h	10.2 / 11.7	15.4 / --	16.2 / 19.6	21.6 / --	29.5 / --	35.3 / --	53.7 / 63.8	57.3 / 67.4	70.4 / 82.5
	50%	L/h	7 / 8.2	9.6 / --	11 / 13.5	14.4 / --	18 / --	25.6 / --	36.4 / 43.7	38.8 / 43.8	42.8 / 55
Fuel tank capacity (OP/SP)		L	170 / 200	220 / 210	220 / 300	350 / 300	350 / 400	380 / 460	700 / 700	700 / 700	950 / 950
Oil consumption		<0.1% of fuel consumption									
Oil grade		ACEA E3-E5									
Oil capacity	L	12.8	12.8	12.8	12.8	17.2	17	30	35	35	
Coolant capacity (engine only)	L	18.5	18.5	18.5	18.5	25.5	25.5	63	67	67	
CONTROL SYSTEM											
Type		AMF (Auto mains failure control module) -12/24VDC - MCB / MCCB output protection - CANbus system									
Basic function		Indication : LN/LL voltage, L1/L2,L3 current, Frequency, Power (kW, kVA,kVAh,kWh, kVAh,kVAh) , Rpm, Oil pressure, Coolant temperature, Hours run, Charging voltage, Battery voltage. ALarm: Low fuel level. Shutdown with indication: Over voltage, Under voltage, Over frequency, Under frequency, Overload, Short circuit, High water temperature, Low oil pressure.									
Dimensions (Open / Soundproof)	Length	mm	1841 / 2500	2000 / 2600	2000 / 2800	2400 / 2800	2400 / 3250	2400 / 3350	3000 / 3900	3000 / 4000	3300 / 4330
	Width	mm	800 / 880	840 / 960	840 / 1100	850 / 1100	850 / 1100	850 / 1200	1140 / 1400	1140 / 1400	1200 / 1500
	Height	mm	1234 / 1330	1476 / 1480	1476 / 1650	1540 / 1650	1540 / 1750	1630 / 1750	1790 / 1950	1792 / 1950	1800 / 1950
Dry weight (Open / Soundproof)		kg	910 / 1200	1200 / 1670	1260 / 1780	1350 / 1990	1350 / 2070	1500 / 2260	2290 / 3120	2500 / 3350	2900 / 4170
Noise level at 7m (Open / Soundproof)		dB	--/75	--/75	--/75	--/75	--/75	--/75	--/80	--/80	--/80
Optional devices		Automatic transfer switch (ATS), Synchronizing system									

*The prime power is the maximum power available with varying loads for an unlimited number of hours.

The average power output during a 24h period of operation must not exceed 80% of the declared prime power. (ISO 8528-1)