

## TM7.5

MODEL	TM7.5
Stand-by Power @ 50Hz	<b>8 kVA/6KW</b>
Prime Power @ 50Hz	<b>7 kVA/5KW</b>

### Standard Features

#### General

Engine ( Mitsubishi , L3E)  
 Charge alternator 12 V , Governor:Meca/Mechanical  
 Alternator ( Stamford , BCI164A)  
 Single bearing alternator IP 23 , insulation class H/H  
 Radiator 50°C [122°F]max.,with cooler  
 Skid and vibration isolators  
 Dry type air filter  
 Main line circuit breaker  
 Microprocessor control panel  
 12 V battery, rack and cable  
 Industrial silencer (loose)  
 User manual



### Generator Ratings

Voltage	HZ	Phase	P.F	Standby Amps	Standby Ratings kVA/kW	Prime Ratings kVA/kW
415/240	50	3	0.8	10	8 / 6	7 / 5
400/230	50	3	0.8	11	8 / 6	7 / 5
380/220	50	3	0.8	11	8 / 6	7 / 5

Stand-By ratings are available for the duration of any power outage. No overload capacity is specified at this ratings. Prime ratings are available per BS 5514, DIN 6271, ISO-3046 and IEC 34-1 with 10% overload capacity one hour in twelve hours.

### Conditions of sale

- Westinpower provide a full line of products with high quality recognized engines and alternators.
- Each and every units is factory tested. All generator sets are also prototype tested.

## ENGINE DATA

Manufacturer / Model	MITSUBISHI L3E ,4-cycle, Athmo , N/A
Cylinder Arrangement	3 X L
Displacement	0.95L [58.0C.I.]
Bore and Stroke	76mm [3.0in.] X 70mm [2.8in.]
Compression ratio	23 : 1
Rated RPM	1500 Rpm
Piston Speed	3.5m/s [11.5ft./s]
Max. stand by Power at rated RPM	7.37kW [10BHP]
Frequency regulation, steady state	+/- 2.5%
BMEP	5.62bar [81psi]
Governor : type	Meca/Mechanical

### Exhaust System

Exhaust gas flow	23.6L/s [50cfm]
Exhaust temperature	490°C [914°F]
Max back pressure	800mm CE [31in. WG]

### Fuel System

110% (Stand By power)	N/A
100% (of the Prime Power)	2.3L/h [0.6gal/hr]
75% (of the Prime Power)	1.7L/h [0.4gal/hr]
50% (of the Prime Power)	1.3L/h [0.3gal/hr]
Total fuel flow	18L/h [4.8gal/hr]

### Oil System

Total oil capacity w/filters	4.1L [1.1gal]
Oil Pressure low idle	0.5bar [7.2psi]
Oil Pressure rated RPM	4bar [58.0psi]
Oil consumption 100% load	0.006L/h [0.0gal/hr]
Oil capacity carter	3.6L [1.0gal]

### Thermal balance 100% load

Heat rejection to exhaust	7kW [398Btu/mn]
Radiated heat to ambient	0.5kW [28Btu/mn]
Heat rejection to coolant	8kW [455Btu/mn]

### Air intake

Max. intake restriction	310mm CE [12in. WG]
Engine air flow	9.9L/s [21cfm]

### Coolant System

Radiator & engine capacity	3.7L [1.0gal]
Max water temperature	111°C [232°F]
Outlet water temperature	93°C [199°F]
Fan power	0.2 kW
Fan air flow	0.4m <sup>3</sup> /s [848cfm]
Available restriction on air flow	10mm CE [0.4in. WG]
Type of coolant	Gencool
Thermostat	76.5-90 °C

## ALTERNATOR SPECIFICATIONS

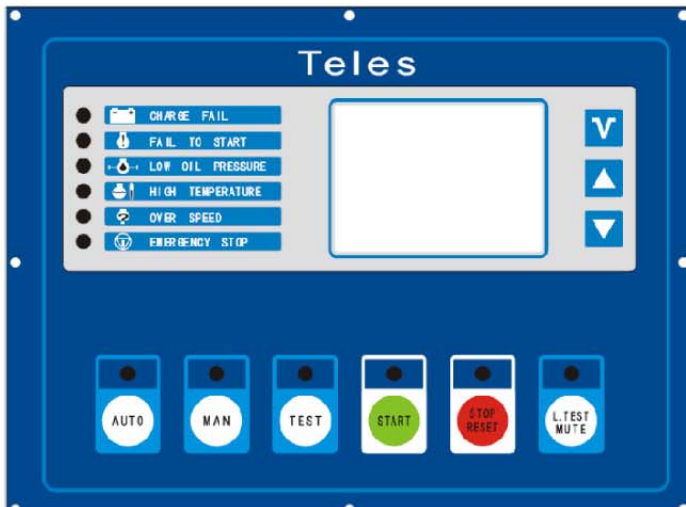
### GENERAL DATA

Compliance with NEMA MG21, UTE NF C51.111, VDE 0530, BS 4999, CSA standards. Vacuum-impregnated windings with epoxy varnish.  IP23 drip proof

### ALTERNATOR DATA

Manufacturer / Type	Stamford BCI164A
Number of Phase	3
Power factor (Cos Ph)	0.8
Pole : number	4
Bearing : number	1
Coupling	Direct
Exciter type	Brushless SHUNT
Continuous nominal rating @ 40°C	8KVA
Standby power @ 27°C	9KVA
Efficiency @ 100% load	83.5%
Direct axis synchro reactance unsaturated (Xd)	206%
Direct axis transient reactance saturated (X' d)	18.5%
Direct axis subtransient reactance saturated (X''d)	13.3%
Insulation : class, temperature rise	H/H
Protection	IP23
SkVA with 90 % of nominal sustained voltage (at 0.4 PF)	N/A

## Control panel



Specifications :Frequency meter, Ammeter, Voltmeter

Alarms and faults Oil pressure, water temperature, No start-up, Over speed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop.

Engine parameters:

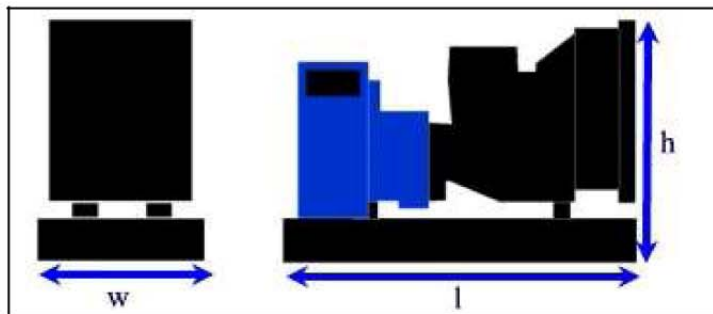
Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level

## Options

<p><b>Engine and Radiator</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Heat shield protection</li> <li><input type="checkbox"/> Oil drain extension</li> <li><input type="checkbox"/> Heavy duty air filter</li> <li>Lube oil drain pump</li> <li>Radiator core guard</li> <li><input type="checkbox"/> Battery charger</li> <li><input type="checkbox"/> Block heater</li> </ul>	<p><b>Alternator</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anti condensation heater</li> <li><input type="checkbox"/> Enforced impregnation</li> <li><input type="checkbox"/> Oversized alternator</li> </ul> <p><b>Exhaust</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Residential silencer</li> <li><input type="checkbox"/> Critical silencer</li> <li><input type="checkbox"/> Flexible exhaust conn.</li> </ul>	<p><b>Control panel</b></p> <p>NFPA 110 level 1 Remote annunciator Oil temperature shutdown</p> <p><b>Literature</b></p> <p>Parts</p>
<p><b>Fuel</b></p> <p>Day tank Subbase fuel tanks UL Water separator fuel filter</p>	<p><b>Enclosure</b></p> <ul style="list-style-type: none"> <li>• 75dB(A)@1m ≅ Mode SI° &lt; 80dB(A)@1m</li> <li>• 70dB(A)@1m ≅ Mode SII° &lt; 75dB(A)@1m</li> </ul>	

## Weight and Dimensions

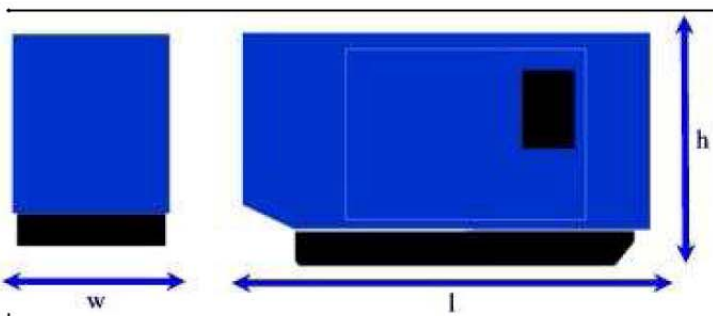
### Open Model



Overall size L\*W\*H :  
1410mm x 715mm x 1013mm

Weight :  
307kg

### With Optional Enclosure



Overall size L\*W\*H :  
1815mm x 745mm x 1270mm

Weight :  
468kg