

## TM16

MODEL	TM16
Stand-by Power @ 50Hz	<b>16 kVA/13KW</b>
Prime Power @ 50Hz	<b>15kVA/12KW</b>

### Standard Features

#### General

Engine ( Mitsubishi , S4L2)  
 Charge alternator 12 V , Governor:Meca/Mechanical  
 Alternator ( Stamford , BCI164D )  
 Single bearing alternator IP 23 , insulation class H /H  
 Radiator 50°C [122°F]max.,with coolant cap  
 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	23	16 / 13	15 / 12
400/230	50	3	0.8	24	16/ 13	15 /12
380/220	50	3	0.8	25	16/ 13	15 /12

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 S4L2 , 4-cycle, Athmo , N/A
Cylinder Arrangement	4 X L
Displacement	1.75L
Bore and Stroke	78mm X 92mm
Compression ratio	22 : 1
Rated RPM	1500 Rpm
Piston Speed	4.6m/s
Max. stand by Power at rated RPM	16.61kW
Frequency regulation, steady state	+/- 2. 5%
BMEP	6.68bar
Governor : type	Meca/Mechanical

### Exhaust System

Exhaust gas flow	48.7L/s
Exhaust temperature	410°C
Max back pressure	700mm CE

### Fuel System

110% (Stand By power )	4.8L/h
100% (of the Prime Power)	4.4 L/h
75% (of the Prime Power)	3.4 L/h
50% (of the Prime Power)	2.6L/h
Total fuel flow	18 L/h

### Oil System

Total oil capacity w/filters	5.9L
Oil Pressure low idle	1bar
Oil Pressure rated RPM	4bar
Oil consumption 100% load	0.025L/h
Oil capacity carter	5.4L

### Thermal balance 100% load

Heat rejection to exhaust	14kW
Radiated heat to ambient	2kW
Heat rejection to coolant	14kW

### Air intake

Max. intake restriction	200mm CE
Engine air flow	18.2L/s

### Coolant System

Radiator & engine capacity	4.9L
Max water temperature	111°C [232°F]
Outlet water temperature	93°C [199°F]
Fan power	0.5 kW
Fan air flow	0.8m3/s
Available restriction on air flow	10mm CE [0.4in. WG]
Type of coolant	Gencool
Thermostat	76.5-90 °C

## ALTERNATOR SPECIFICATIONS

### GENERAL DATA

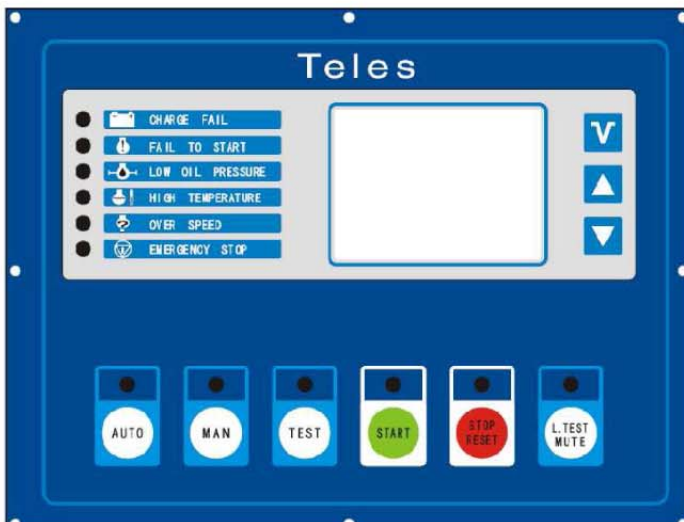
Compliance with NEMA MG21, UTE NF C51.111, VDE 0530, BS 4999, CSA standards.

Vacuum-impregnated windings with epoxy varnish.  
IP23 drip proof

### Generator DATA

Manufacturer / Type	Stamford BCI164D
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	16KVA
Standby power @ 27°C	18KVA
Efficiency @ 100% load	81.7%
Insulation : class, temperature rise	H/H
Protection	IP23

## 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:

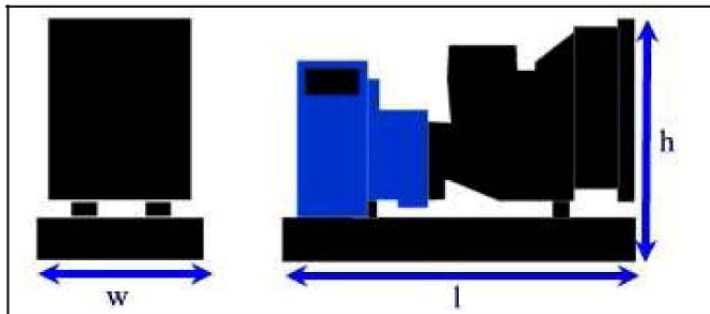
Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level

## Options

<p><b>Engine and Radiator</b></p> <p>Heat shield protection Oil drain extension Heavy duty air filter Lube oil drain pump Radiator core guard Battery charger Block heater</p>	<p><b>Alternator</b></p> <p>Anti condensation heater Enforced impregnation Oversized alternator</p> <p><b>Exhaust</b></p> <p>Residential silencer Critical silencer Flexible exhaust conn.</p>	<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> <p><input type="checkbox"/> 75dB(A)@1m <math>\leq</math> Mode SI* &lt; <input type="checkbox"/> 80dB(A)@1m</p>	

## Weight and Dimensions

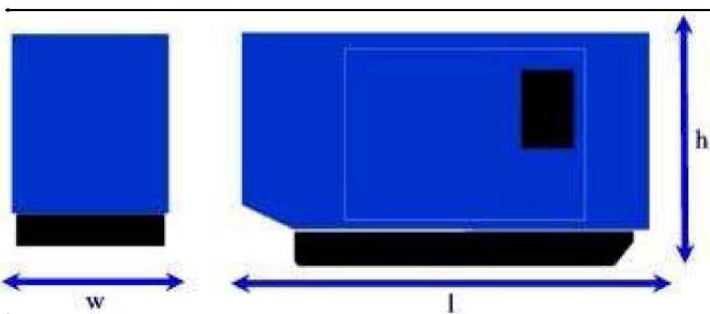
### Open Model



Overall size L\*W\*H :  
1410mm x 715mm x 1030mm

Weight :  
427kg

### With Optional Enclosure



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

Weight :  
591kg