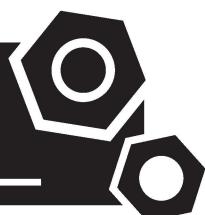




**Mobile light tower**

**MS2000-KAC**

## **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- GB T 1883.1-2005
- JB8891-1999
- GB252-2011
- GB20891-2014
- GB4208-2008
- AS3000: 2018
- AS3010: 2017

### Design Conditions

- Installation place: outdoors.
- Ambient temperature: 0°C to 50°C. The coolant heater is needed when the temperature is below 0°C
- Humidity: Less than 80%.
- Altitude: Less than one thousand (1000) meters above sea Level.

### Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

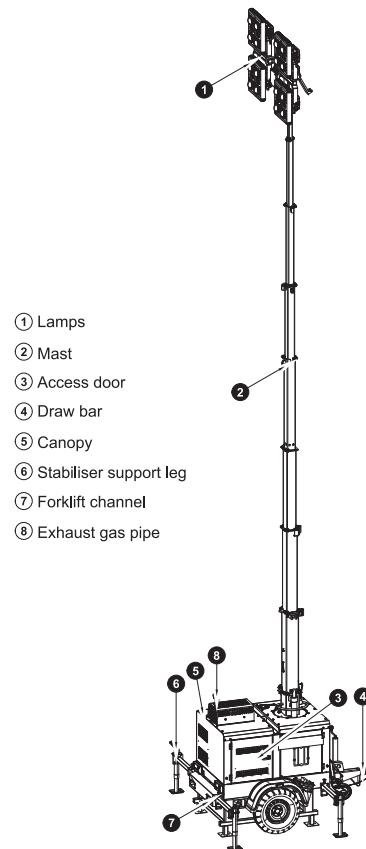
## 2 General Features

- Perkins engine Z482-B-CHN-1
- Close coupled to MECC alternator LT3N-75/4
- Microprocessor control module PLC-800
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited,SHUNT
- Nine masts with hydraulic extension and manual rotation
- Hydraulic power unit
- Hydraulic cylinder with explosion-proof valve
- 4x500W metal LED lamps
- Emergency stop switch
- 1x12V/38AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy, IP54 protection class
- Vibration isolators between the engine/alternator and base frame
- Dry type air cleaner
- Fuel tank ( 75 running hours under full load)
- Fuel drain outlet
- Multi-types of hitch tow point for client select
- Operation Manual / Specifications

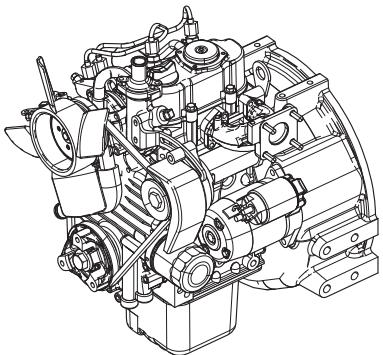
## 3 Equipment Specification

Model.....	MS2000-KAC
Light type.....	LED
Luminous flux(Max).....	240000 lm
Light intensity(Max).....	256324 cd
Tank capacity.....	90L
Wet weight.....	1185kg
Dry weight.....	1080kg
Total lighting wattage .....	4x500W
Tire size .....	175/R13 LT *2
Dimensions (Fully retracted).....	2315*1450*2345mm
Dimensions (Fully extended) .....	2315*2100*9000mm
Tilting Angle of Light Fixture rotation .....	90°
Maximun towing speed.....	80km/h
Maximun wind speed rating.....	102km/h
Sound pressure level @7m .....	53dB(A)
Fully extended/retracted time .....	12/15s
Hydraulic oil type .....	L-HM46
Hydraulic oil tank capacity .....	3.8L
Rated load output .....	3kW
Voltage/Frequency.....	AC 240V/50Hz

Light Tower Fuel Consumption		
Number of running lamp	2xLamps	4xLamps
Fuel Consumption(L/h)	0.54	0.87

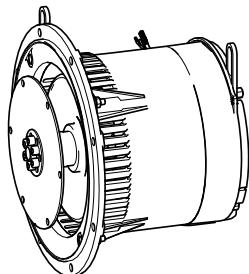


## Engine



Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	Z482-B-CHN-1
Dimensions L×W×H.....	487.9×412×564.2mm
Dry Weigh (approx.) .....	80Kg
Number of Cylinders.....	2
Bore .....	67mm
Stroke .....	68mm
Displacement.....	0.479L
Compression Ratio.....	23.5
Type of Injection.....	Spherical Type (E-TVCS)
Intake System.....	Natural aspirated
Intake Resistance.....	≤2.45kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	12V
Type of Fuel.....	No.2-D (ASTMD975)
Type of Oil .....	API -CH
Oil Capacity .....	2.5L
Type of Coolant .....	Glycol mixture
Back Pressure.....	9.33kPa
Speed .....	1800rpm
Prime Power .....	4.6kW

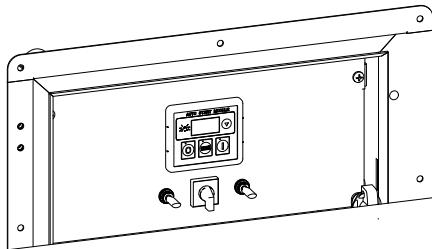
## Alternator



Alternator Manufacturer/Brand ..... Mecc alte

Alternator Model .....	LT3N-75/4
Exciter.....	Brushless
Cooling Fan .....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class .....	H
Winding Pitch.....	2/3
Terminals .....	12
Drip Proof .....	IP23
Altitude.....	≤1000m
Overspeed .....	2250rpm
Air Flow.....	5.3m³/min(50Hz),5.8m³/min(60Hz)
Voltage Regulation .....	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<45

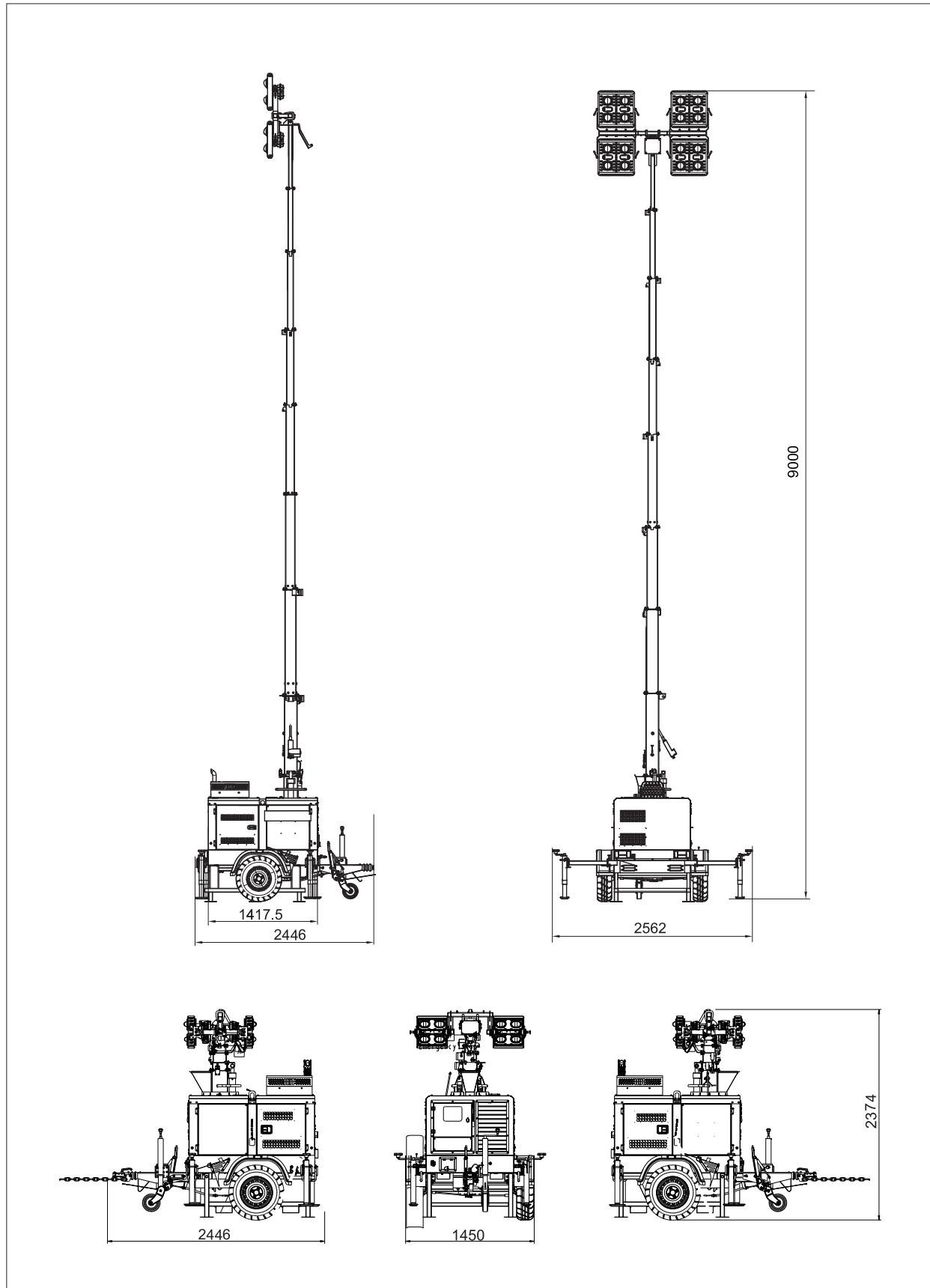
## PLC-800 Control System



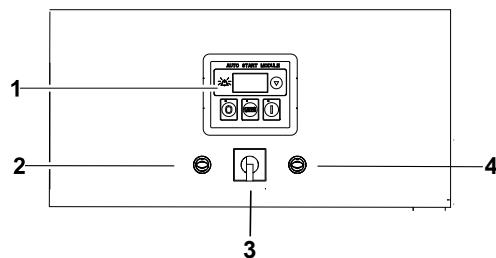
PLC-800 is an advanced control module based on microprocessor, apply to AC/DC light tower. The controller is equipped with a powerful graphic display showing icons, symbols and bar graphs for intuitive operation. Accurately measure various operational parameters and display all values and alarms information on the LCD.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of light tower
- Indicating operation status, fault conditions, all parameters and alarms
- Manual, automatic and remote work mode selectable
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Overall power output display
- Real time clock for time and date display, overall runtime display, 99 log entries
- Communication with PC via RS485 interface, using MODBUS protocol

## 5 Overall Dimension

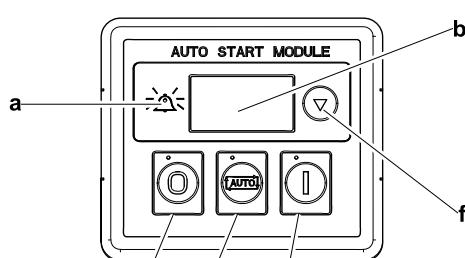


## 6 Control System



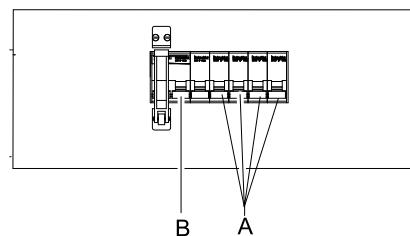
**Control cabinet**

Ref.	Description
1	PLC-800 control module
2	Lamp tilting switch
3	Control power switch
4	Mast up/down switch



**Control module**

Ref.	Description
a	Alarm indicator
b	Main status display
c	Stop/reset button; Next page (Configuration mode only)
d	Auto start button; Decrease value/next item (Configuration mode only)
e	Start button; Increase value/next item (Configuration mode only)
f	Navigation button; Accept (Configuration mode only)



**switch box**

Ref.	Description
A	Lamp MCB's (mini circuit breakers)
B	R.C.C.B (main circuit breaker with residual current device)

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