

## Model: TCLC 44

Powered by Cummins



### Output Rating

MODEL	Power rating		Voltage available
	PRIME(1)	STANDBY(2)	
LC44	400V/50HZ	32KW PF:0.8	35KW 40KVA
			380/220V 400/230V 415/27V

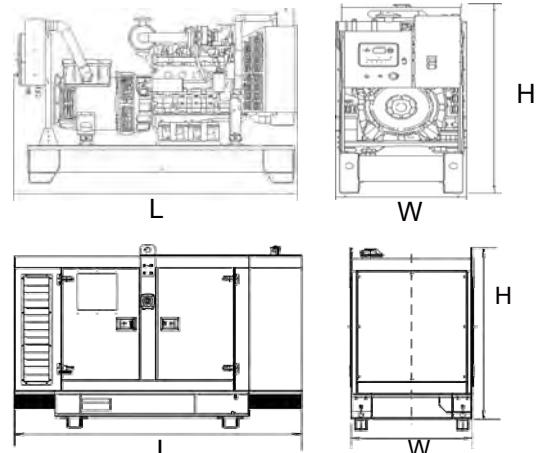
### General Information

Model	LC44
Engine	Cummins 4BT3.9G2
Speed control type	Electronical
Phase	3
Control System	Digital
System voltage	24V
Frequency	50HZ
Engine Speed(RPM)	1500
Fuel Consumption (L/hr)	Standby power(2) Prime Power(1) 75% prime power 50% prime power
	11.1 10.0 7.9 5.9



### Dimension and Weight

Dimension	Open	Silent
Length (L)	1783mm	2240mm
Width (W)	810mm	980mm
Height (H)	1370mm	1585mm
Net Weight	900KG	1200KG



\* 2006/42/EC Machinery safety.

\* 2006/95/EC Low voltage

\* EN 60204-1: 2006+A1:2009, EN ISO 12100:2010, EN ISO 13849-1: 2008, EN 12601: 2010

#### (1) Prime Power(PR):

According to ISO 8528-1:2005, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operation conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24h of operation shall not exceed 70% of the PRP.

#### (2) Standby Power (ESP):

According to ISO 8528-1:2005, standby power is the maximum power available during a variable electrical power sequence, under the stated operation conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24h of operation shall not exceed 70% of the ESP.

## ▪ Engine Specification

Compression Ratio:	<b>18.0:1</b>	Aspiration:	<b>Turbocharger</b>
Bore:	<b>102 mm</b>	Displacement:	<b>3.9 L</b>
Stroke:	<b>120 mm</b>	No. of Cylinders:	<b>4</b>
Emission Certification:		Fuel System:	<b>BYC A/Electronic Governor</b>
Governor Regulation:	<b>≤5%</b>		

## **GENERAL ENGINE DATA**

Approximate Engine Weight (wet).....	-kg	321
Mass Moment of Inertia of Rotating Components (No Flywheel).....	-kg·m <sup>2</sup>	0.143
Center of Gravity from Rear Face of Block.....	-mm	373
Center of Gravity above Crankshaft Centerline.....	-mm	163
Engine Idle Speed.....	-RPM	950-1050
Fire Order.....		1-3-4-2

# **ENGINE MOUNTING**

Maximum (Static) Bending Moment at Rear Face of Block..... -N.m 1356

## **EXHAUST SYSTEM**

Maximum Back Pressure..... -kPa 10

## AIR INTAKE SYSTEM

Maximum Intake Air Restriction with Heavy Duty Air Cleaner		
— Dirty Element.....	-kPa	6.2
— Clean Element.....	-kPa	3.7

## LUBRICATION SYSTEM

Engine Oil Pressure for Engine Protection Devices:		
— Idle Speed(Minimum )	-kPa	207
— Governed Speed(Maximum )	-kPa	345
Maximum Oil Temperature.....	-°C	121
Minimum Required Lube System Capacity - Sump plus Filters.....	-litre	10.9

## **FUEL SYSTEM**

Type Injection System.....	BYC A Direct Injection
Maximum Restriction at Lift Pump.....	-kPa 13.6
Maximum Fuel Inlet Temperature.....	-°C 70
Total Drain Flow (constant for all loads).....	-litre/hr 30

## **COOLING SYSTEM**

## ■ Alternator

Poles	Num	4
Winding Connections (standard)		Star-serie
Insulation	Class	H class
Enclosure (according IEC-34-5)		IP23
Exciter System		Brushless
Voltage Regulator		A.V.R. (Electronic)
Bearing		Single bearing
Coupling		Flexible disc
Coating type		Standard (Vacuum impregnation)

## Control Panel: AMF20

