



# Diesel Generator Set

## QSM15 Series

380 - 500 kVA, 304 - 400 kWe Prime  
CPCB IV+ Emission Compliant



Specification Sheet

### Latest Technology and Unmatched Performance

- The Cummins® QSM15 series rugged engine and world class Stamford alternator powered diesel generator set
- Proven technology with common rail electronic fuel system
- Exhaust after-treatment and in-cylinder solution to meet stringent emission norms
- Superior finish and aesthetics
- Compact in size with optimum power to weight ratio

### Environment Friendly Power

- Class defining and technologically advanced engine to meet stringent exhaust emission norms as per the latest MoEF notification
- The Cummins® diesel generator sets are available with the lowest noise levels in its range

### Lowest Operating Cost and Comprehensive Warranty

- Highly reliable and durable product
- Maximum efficiency even at part loads, offering the advantage of lowest operating costs
- 500 Hours/ 1 year service interval
- Industry acknowledged best-in-class comprehensive warranty on the entire package including rubber components

### Single Source Power Assurance

- All the major components - the engine, alternator, aftertreatment system, control system and canopy are designed, manufactured, and tested by Cummins India
- Best and largest customer support network in India, capable of providing round-the-clock service and spares support



### Acoustic Enclosure

- Specially designed to meet stringent MoEF/ CPCB norms of 75 dBA@1mtr at 75% load under free field conditions
- The acoustic enclosure is made CRCA sheets in Munsell green shade and a structural/sheet metal base frame painted in black
- 11 tank pretreatment process and UV resistant powder coating of all parts to withstand extreme environment
- High quality noise absorbent and fire-retardant grade acoustic Insulation material (Rockwool) complying to IS 8183
- Top lifting for easy handling at customer site
- External fuel & DEF filling provision

### Remote monitoring system

- Compact & robust device
- Real time DG status & monitoring
- 4G compatible
- Compatible for 12/24 V DC
- Reports & Notification – Alerts & Warning
- Isolated RS 485 interface
- Device location using triangulation

### Technical Data

Generator Set Specification			
Model	CI 380D5P	CI 400D5P	CI 500D5P
Duty	Prime	Prime	Prime
Power Rating kVA / kWe	380/304	400/320	500/440
No. of Phases	3 Phase	3 Phase	3 Phase
Output Voltage and Frequency (V and Hz)	415 V, 50 Hz	415 V, 50 Hz	415 V, 50 Hz
Power Factor	0.8	0.8	0.8
Current (A)	528.6	556.5	695.6
RPM	1500	1500	1500

Engine Specification			
Make	Cummins®		
Model	QSM15-G1	QSM15-G1	QSM15-G1
Required Power for Rated kVA (hp)	594	594	594
Cooling	Liquid Cooled (EG Compleat 50:50)		
DEF	AUS 32 (Premix) as per ISO 22241		
Aspiration	Turbocharged, Charge Air Cooled		
No. of cylinders	6, In-line	6, In-line	6, In-line
Bore (mm) x Stroke (mm)	135 x 169	135 x 169	135 x 169
Compression ratio	23:1	23:1	23:1
Displacement (litre)	14.5	14.5	14.5
Fuel	High Speed Diesel	High Speed Diesel	High Speed Diesel
Performance class of generator set	ISO 8528-5 G2	ISO 8528-5 G2	ISO 8528-5 G2
Starting system	24 V DC Electrical	24 V DC Electrical	24 V DC Electrical
Lube oil specification	CK4	CK4	CK4
Lube oil sump capacity, High-Low level (litre)	50-35	50-35	50-35
Total lubrication system capacity (litre)	52	52	52
Total coolant capacity (litre)	67	67	67
Exhaust pipe size (inch)	6	6	6
Total wet weight (Engine+Radiator)* (kg)	1460	1460	1460
Length X Width X Height (Coolpac) (mm)	2400 X 1540 X 1716	2400 X 1540 X 1716	2400 X 1540 X 1716
Mean Piston speed (m/s)	8.45	8.45	8.45
Combustion air intake @100% load (±5%) (cfm)	980	980	980
Exhaust Temperature (°C)	556	556	556

Alternator Specification			
Make	STAMFORD (CGT)	STAMFORD (CGT)	STAMFORD (CGT)
Alternator Frame	HCI444E	HCI444F	HCI544D
Enclosure	IP 23	IP 23	IP 23
Voltage regulation (Max.)	±1%	±1%	±1%
Class of Insulation	H Class	H Class	H Class
Winding Pitch	2/3	2/3	2/3
Stator Winding	Double layer concentric		
Rotor	Dynamically Balanced		
Waveform distortion/ Total Harmonic Distortion	No load < 1.5%, Non distorting balanced linear load < 5 %		
Maximum Unbalanced Load across phases*	less than or equal to 25%		
Telephonic Harmonic factor	< 2%		

Rating Definitions	Conformance Standards
<p>Prime Power (PRP): Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528.</p>	<ul style="list-style-type: none"> <li>• IS/IEC 60034-1</li> <li>• ISO 1460</li> <li>• ISO 8528</li> <li>• ISO 3046</li> <li>• ISO 9001</li> <li>• ISO 13018</li> </ul>

Typical Enclosed Genset Dimensions							
Genset Model	Rating (kVA)	Length (mm)	Width (mm)	Height (mm)	Wet Weight <sup>1</sup> (kg)	DEF Tank Capacity (litre)	Standard Fuel tank Capacity (litre)
CI 380D5P	380	5300	1900	2490	5515	87	715
CI 400D5P	400	5300	1900	2490	5650	87	715
CI 500D5P	500	5300	1900	2490	5915	87	745

<sup>1</sup> Approximate Weight

Authorised Representative

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