

### **Generator set data sheet**

Model: C150 D2R Fuel type: Diesel

Document No.: EMERD-5930



	Standby			Prime	Prime kVA (kW)			
Fuel consumption 50 Hz	kVA (kW)		kVA (k\					
Ratings	165 (132)		150 (120)					
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
L/hr	14	23	32	39	12	22	30	37

	Standby			Prime				
Fuel consumption 60 Hz	kW (kVA)				kW (kVA)			
Ratings	150 (188)		135 (169)					
Load	1/4	1/2	3/4	Full	1/4	1/2	3/4	Full
L/hr	16	28	37	45	15	26	34	42

Engine (EU stage IIIA)	Standby rating	Prime rating	
Gross engine power output 50 Hz/60 Hz, kWm	213 / 242	182 / 208	
BMEP at set rated load 50 Hz/60 Hz, kPa	2537 / 2404	2172 / 2070	
Engine manufacturer	Cummins	·	
Engine model	QSB7G5		
Configuration	4 cycle; in-line; 6 cylinder		
Aspiration	Turbo-charged and charge air cooled		
Bore, mm	107		
Stroke, mm	124		
Rated speed 50 Hz/60 Hz, rpm	1500 / 1800		
Piston speed 50 Hz/60 Hz, m/s	6.2 / 7.4		
Compression ratio	17.2:1		
Lube oil capacity, L	18.9		
Overspeed limit 50 Hz/60 Hz, rpm	1800		
Regenerative power 50 Hz/60 Hz, kW	14 / 19		
Governor type	Elec.		

# **Fuel flow**

Maximum fuel flow, L/hr	106
Maximum fuel inlet restriction (clean/dirty filter), mm Hg	127-254
Maximum fuel inlet temperature, °C	71

# Air

Combustion air 50 Hz/60 Hz, m <sup>3</sup> /min	12.72 / 16.14	12.3 / 15.36
Maximum air cleaner restriction (clean/dirty filter), kPa	3.7-6.2	

# **Exhaust**

Exhaust gas flow at set rated load 50 Hz/60 Hz, m <sup>3</sup> /min	35.82 / 43.92	34.14 / 38.04
Exhaust gas temperature 50 Hz/60 Hz, °C	561 / 532	544 / 487
Maximum exhaust back pressure, kPa	10.2	

Standard set-mounted radiator cooling	Standby rating	Prime rating		
Ambient design, °C	50	•		
Fan load, kWm 1500 rmp/1800 rpm	6.9 / 12.7	6.9 / 12.7		
Coolant capacity (with radiator), L	26.7	26.7		
Cooling system air flow, m <sup>3</sup> /min 1500 rpm/1800 rpm	4.51 / 5.88			
Total heat rejection, Btu/min 1500 rpm/1800 rpm	6516 / 7644	5825 / 6730		
Max cooling air restriction, kPa	0.249	_		

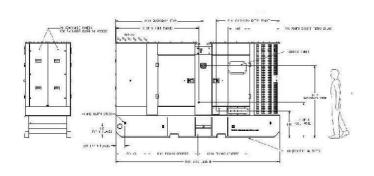
Weights*	
Unit dry weight kgs	2922
Unit wet weight kas	2948

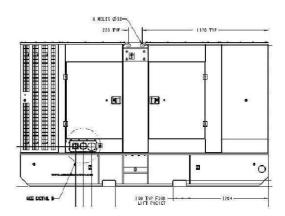
<sup>\*</sup> Weights represent a set with standard features. See outline drawing for weights of other configurations.

Dimensions	Length	Width	Height
Enclosed set standard dimensions, m	3.9	1.1	2.2

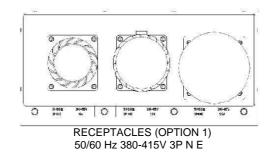
### **Genset outline**

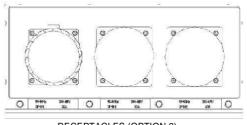
#### **Enclosed set**





#### Power Receptacle Socket on set: 125A, 63A, 32A, 16A 3 Phase sockets combination





RECEPTACLES (OPTION 2) 50/60 Hz 380-415V 3P N E

Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this model.

#### **Alternator data**

Alternator	Connection	Temp rise °C	Duty	Voltage 50 Hz, L-L	Voltage 60 Hz, L-L
•	Series Star, 3Ph	163/27 / 125/40	Standby/Prime	380, 400, 415, 440	416, 440, 460, 480
UC274F	Parallel Star, 3Ph	163/27 / 125/40	Standby/Prime	190, 200, 208, 220	208, 220, 230, 240
	Series Delta, 3Ph	163/27 / 125/40	Standby/Prime	220, 230, 240, 254	240, 254, 266, 277

### **Transient performance class**

Meets ISO 8528-5: 2005-Class G3

Details of voltage and frequency performance data available upon request

#### Noise data 50Hz

Enclosed set sound power level, LwA	95 dB
Enclosed set sound pressure level, dB(A) @ 75% prime, 7m	67 dB(A)

# **Ratings definitions**

Emergency standby power (ESP):	Limited-time running power (LTP):	Prime power (PRP):	Base load (continuous) power (COP):
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

# Formulas for calculating full load currents:

Three phase output

Single phase output

kW x 1000 Voltage x 1.73 x 0.8

kW x SinglePhaseFactor x 1000 Voltage

See your distributor for more information.

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