Generator set data sheet

Model:	**C3750 D5e**
Frequency:	**50 Hz**
Fuel type:	**Diesel**
kVA rating:	**3350 Data Center Continuous (DCC)**
Emissions level:	**EPA Tier 2**

Fuel consumption

Fuel consumption	**kVA (kW)**			
Ratings	3350 (2680)†			
Ratings without fan[1]	3448 (2758)			
Load	**1/4**	**1/2**	**3/4**	**Full**
US gph	53	96	136	176
L/hr	201	363	514	664

[1]Ratings for reference with the optional remote radiator cooling configuration. See note 1 under “Alternator data” section.
†DCC available at standby power subject to Cummins’ site-specific assessment. Please contact your Cummins Distributor.

Engine

Engine model	QSK95-G10
Configuration	Cast iron, Vee, 16 cylinder
Aspiration	Turbocharged and after-cooled
Gross engine power output, kWm (bhp)	2903 (3892)
BMEP at set rated load, kPa (psi)	2434 (353)
Bore, mm (in.)	190.0 (7.48)
Stroke, mm (in.)	210.1 (8.27)
Rated speed, rpm	1500
Piston speed, m/s (ft/min)	10.5 (2067)
Compression ratio	15.5:1
Lube oil capacity, L (qt)	647 (684)
Overspeed limit, rpm	1725
Regenerative power, kW	430

Fuel flow

Maximum fuel flow, L/hr (US gph)	1427 (377)
Maximum fuel inlet restriction with clean filter, kPa (in Hg)	30.48 (9)
Maximum fuel return line restriction, kPa (in Hg)	34 (10)
Maximum fuel inlet temperature, °C (°F)	71.1 (160)
Maximum fuel outlet temperature, °C (°F)	92.2 (198)

Air

Combustion air, m^3/min (scfm)	245 (8634)
Maximum air cleaner restriction with clean filter, mm H_2O (in H_2O)	457 (18)
Alternator cooling air, m^3/min (scfm)	240 (8476)

Exhaust

Exhaust flow at set rated load, m^3/min (cfm)	569 (20064)
Exhaust temperature at set rated load, °C (°F)	406 (762)
Maximum back pressure, kPa (in H_2O)	7 (28)

Set-mounted radiator cooling	High Ambient	High Ambient Compact
Ambient design, °C (°F)	43 (109)	44 (111)
Fan load, kWm (HP)	78 (105)	130 (175)
Coolant capacity (with radiator), L (US gal)	1120 (296)	1238 (327)
Cooling system air flow, m^3/min (scfm)	3135 (110700)	2352 (83054)
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)	0.12 (0.5)

Set-mounted radiator cooling	Enhanced High Ambient
Ambient design, °C (°F)	52 (126)
Fan load, kWm (HP)	78 (105)
Coolant capacity (with radiator), L (US gal)	1120 (296)
Cooling system air flow, m^3/min (scfm)	3135 (110700)
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)

Optional remote radiator cooling

Engine coolant capacity, L (US gal)	379 (100)
Max flow rate at max friction head, jacket water circuit, L/min (US gal/min)	2419 (639)
Max flow rate at max friction head, after-cooler circuit, L/min (US gal/min)	579 (153)
Heat rejected, jacket water circuit, MJ/min (Btu/min)	76.8 (72706)
Heat rejected, after-cooler circuit, MJ/min (Btu/min)	19.5 (18444)
Heat rejected, fuel circuit, MJ/min (Btu/min)	0.33 (310)
Total heat radiated to room, MJ/min (Btu/min)	22.6 (21334)
Maximum friction head, jacket water circuit, kPa (psi)	59 (8.5)
Maximum friction head, after-cooler circuit, kPa (psi)	59 (8.5)
Maximum static head above engine crank centerline, jacket water circuit, m (ft)	18 (60)
Maximum static head above engine crank centerline, after-cooler circuit, m (ft)	18 (60)
Maximum jacket water outlet temp, °C (°F)	110 (230)
Maximum after-cooler inlet temp, °C (°F)	71.1 (160)
Maximum after-cooler inlet temp at 25 °C (77 °F) ambient, °C (°F)	46.1 (115)

Note: For non-standard remote installations contact your local Cummins representative.

Weights

Unit dry weight kg (lbs)	28801 (63496)
Unit wet weight kg (lbs)	30668 (67611)

Note: Weights represent a set with standard features and alternator frame S9. See outline drawing for weights of other configurations.

Derating factors

High Ambient Cooling System: Full genset power available up to 1809 m (5935 ft) at ambient temperatures up to 40 °C (104 °F). Above these conditions, derate at 4.1% per 305 m (1000 ft) and 12.1% per 10 °C (18 °F).

High Ambient Compact Cooling System: Full genset power available up to 1375 m (4511 ft) at ambient temperatures up to 40 °C (104 °F). Above these conditions, derate at 4.9% per 305 m (1000 ft) and 22.6% per 10 °C (18 °F).

Enhanced High Ambient Cooling System: Full genset power available up to 1825 m (5987 ft) at ambient temperatures up to 40 °C (104 °F) and 1686 m (5532 ft) at ambient temperatures up to 50 °C (122 °F). Above these conditions, derate at 4.1% per 305 m (1000 ft) and 11.3% per 10 °C (18 °F).

Ratings definitions

Data Center Continuous (DCC): Applicable for supplying power continuously to a constant or varying electrical load for unlimited hours in a data center application.

Alternator data[1]

Voltage	Connection	Temp rise degrees C	Duty[2]	Ambient Temp C	Max surge kVA[3]	Winding number	Alternator data sheet	Feature code
380	Wye, 3-phase	105	DCC	40	11145	12	ADS-532	BB32-2
380	Wye, 3-phase	125	DCC	40	11145	12	ADS-532	BB33-2
380	Wye, 3-phase	150	DCC	40	9956	12	ADS-531	BB34-2
400	Wye, 3-phase	105	DCC	40	11146	12	ADS-532	BB36-2
400	Wye, 3-phase	125	DCC	40	9954	12	ADS-531	BB37-2
400	Wye, 3-phase	150	DCC	40	9954	12	ADS-531	BB38-2
415	Wye, 3-phase	105	DCC	40	11146	12	ADS-532	BB40-2
415	Wye, 3-phase	125	DCC	40	10132	12	ADS-531	BB41-2
415	Wye, 3-phase	150	DCC	40	10132	12	ADS-531	BB42-2
440	Wye, 3-phase	105	DCC	40	11025	12	ADS-532	BB43-2
440	Wye, 3-phase	125	DCC	40	11025	12	ADS-532	BB44-2
440	Wye, 3-phase	150	DCC	40	9853	12	ADS-531	BB45-2
690	Wye, 3-phase	105	DCC	40	11970	65	ADS-586	BB46-2
690	Wye, 3-phase	125	DCC	40	9960	65	ADS-531	BB47-2
690	Wye, 3-phase	150	DCC	40	9960	65	ADS-531	BB48-2
3300	Wye, 3-phase	125	DCC	40/50	12276	851	ADS-652	BB51-2
3300	Wye, 3-phase	150	DCC	40	10428	851	ADS-651	BB52-2
3300	Wye, 3-phase	150	DCC	50	12276	851	ADS-652	BB52-2
3300	Wye, 3-phase	105	DCC	40	12276	851	ADS-652	BE33-2
3300	Wye, 3-phase	105	DCC	50	14043	851	ADS-653	BE33-2
3300	Wye, 3-phase	80	DCC	40	14043	851	ADS-653	BE32-2

Notes:

[1]Alternator data is configured for a set with ratings including engine cooling fan losses and standard features at 40 °C ambient temperature. For non-standard configurations, including remote radiator applications, check appropriate alternator data sheets or contact your local Cummins representative.

[2]Standby (S), Prime (P) and Continuous ratings (C).

[3]Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.

Alternator data[1] (Continued)

Voltage	Connection	Temp rise degrees C	Duty[2]	Ambient Temp C	Max surge kVA[3]	Winding number	Alternator data sheet	Feature code
6300	Wye, 3-phase	80	DCC	40	13770	8008	ADS-589	BB57-2
6300	Wye, 3-phase	125	DCC	40/50	12789	961	ADS-660	BB59-2
6300	Wye, 3-phase	105	DCC	40	12789	961	ADS-660	BE35-2
6300	Wye, 3-phase	105	DCC	50	14058	961	ADS-661	BE35-2
6600	Wye, 3-phase	80	DCC	40	14175	8008	ADS-589	BB82-2
6600	Wye, 3-phase	125	DCC	40	11253	961	ADS-659	BB62-2
6600	Wye, 3-phase	125	DCC	50	12789	961	ADS-660	BB62-2
6600	Wye, 3-phase	105	DCC	40/50	15675	961	ADS-660	BE36-2
10k	Wye, 3-phase	80	DCC	40	13500	8022	ADS-589	BB64-2
10.5k	Wye, 3-phase	80	DCC	40	13770	8022	ADS-589	BB68-2
10.5k	Wye, 3-phase	105	DCC	40	12294	983	ADS-660	BB69-2
10.5k	Wye, 3-phase	105	DCC	50	13398	983	ADS-661	BB69-2
10.5k	Wye, 3-phase	125	DCC	40/50	12294	983	ADS-660	BB70-2
11k	Wye, 3-phase	80	DCC	40	13770	8022	ADS-589	BB72-2
11k	Wye, 3-phase	125	DCC	40/50	12294	983	ADS-660	BB74-2
11k	Wye, 3-phase	105	DCC	40	12294	983	ADS-660	BE38-2
11k	Wye, 3-phase	105	DCC	50	13398	983	ADS-661	BE38-2

Notes:
[1]Alternator data is configured for a set with ratings including engine cooling fan losses and standard features at 40 °C ambient temperature. For non-standard configurations, including remote radiator applications, check appropriate alternator data sheets or contact your local Cummins representative.
[2]Standby (S), Prime (P) and Continuous ratings (C).
[3]Maximum rated starting kVA that results in a minimum of 90% of rated sustained voltage during starting.

For more information contact your local Cummins distributor or visit power.cummins.com

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