

4TNV88-GGE

for **20kVA Generator**

SPECIFICATIONS & DRAWINGS FOR MASS PRODUCTION

6.Jan.2003



YANMAR CO.,LTD.

W.No.

4TNV88-GGE

ENGINE SPECIFICATIONS

G3-29647-0010

No	Model name		4TNV88-GGE		Remarks			
1	Type		4 cycle, Inline, Water-cooled Diesel					
2	No. of cylinders-Bore×stroke		mm	4-φ88×90				
3	Combustion system		Direct Injection					
4	Compression ratio		19.1					
5	Displacement		litter	2.19				
6	Rated output		kW(PS)	17.7(24.1)/21.6(29.4)				
			min ⁻¹	1500/1800				
7	Continuous rating		kW(PS)	16.4(22.3)/19.6(26.6)				
			min ⁻¹	1500/1800				
8	Max. torque		N·m	~				
			min ⁻¹	(+/-)				
9	Specific fuel consumption		g/kW-h(g/PS-h)	245(180)	at rated output			
10	Ambient condition		25°C、750mmHg、30%					
11	Engine speed at no load		Max.	min ⁻¹	1925	+25/-25		
			Min.	min ⁻¹	1200	+25/-25		
12	Governorability		Governor type		centrifugal-all speed governor			
			Temporary	%	max.10		load 100% ↓ 0%	
			Permanent	%	max.5			
			Recovery time	sec	max.5			
			Stability	rev	max.15			
Longitudinal	deg	30(25)						
13	Gradients		Lateral	deg	30(25)			
					() : continuous			
14	Firing order		1-3-4-2-1		order from F.W.			
15	Direction of rotation		counterclockwise		viewed from F.W.			
16	Engine dry weight		kg	approx.170				
17	Fuel injection timing		deg	16.5(+1/-1)		FIT b.T.D.C		
18	Fuel system		Fuel type		Diesel oil			
			Fuel injection pump		Distributor type (YPD-MP2), Yanmar made			
			Fuel injection nozzle		hole type			
			Fuel filter		paper element			
19	Lubrication system		System		forced feed			
			Oil grade		SAE class CD, IPE grade 10W30			
			Oil pump		trochoid pump			
			Oil filter		paper element			
			Oil capacity		litter	7.4		max.
					litter	3.4		min.
			Oil pressure		kgf/cm ²	3.8		at rated output
kgf/cm ²	0.6				at low idle			
20	Cooling system		Heat exchanger		none			
			Pressure cap	kgf/cm ²	0.9			

	Fan		6-φ380	
	Coolant capacity	liter	2.7	

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No	Model name		4TNV88-GGE	Remarks
21	Air cleaner		none	
22	Breather system		closed	
23	Muffler		none	
24	Starting system	Starter	12V-1.4kW	
		Battery	95D31	
		Starting aid	air heater 500W	
25	Generator		12V-40A	
26	Engine color		Silver	
27	Applied regulation		EPA , ARB-OR	