

**4TNV84T-GGE**

for 20kVA Generator

**SPECIFICATIONS & DRAWINGS FOR MASS PRODUCTION**

10.Mar.2004



***YANMAR CO.,LTD.***

# Contents

G3-29649-0020

Drawing No.	Part No.	Name	Qty.	Remarks
B3-29649-0040		Out line		
E3-29004-0050		Wiring Diagram		
Z3-71301-0031		Detail of Flywheel		
		LOOSE PARTS		
	129508-18090	GASKET, TURBOCHARGER	1	
	119225-52102	PUMP, FUEL FEED	1	
	119802-55700	SEPARATOR ASSY	1	
	<del>119802-77200</del>	<del>RELAY, SAFETY</del>	1	
	119650-77910	RELAY ASSY, GLOW	1	
	<del>128300-77920</del>	<del>TIMER, GLOW PLUG</del>	1	
	129211-77920	TIMER, SECTION 1	1	

Note : ① Since the durability of electric parts basically apply to R2 level of JIS D0203, please inform  
 ② Electric parts should not mounted on the engine directly (relay, timer etc.) must be kept from  
 Regarding the vibration of the electrical components, these vibration level must be

Engine Development Dept.

Manager

Sec. Manager

	QTY			
Customer				
Branch				
Exp. Dept.				
Copy				
Total				

Checked	Drawn
	K. Yokoi

**ENGINE SPECIFICATIONS**

G3-29649-0020

No	Model name		4TNV84T-GGE		Remarks			
1	Type		4 cycle, Inline, Water-cooled Diesel					
2	No. of cylinders-Bore×stroke		mm	4-φ84×90				
3	Combustion system		Direct Injection					
4	Compression ratio		18.9					
5	Displacement		litter	1.995				
6	Rated output		kW(PS)	21(28.6)/26.8(36.4)				
			min <sup>-1</sup>	1500/1800				
7	Continuous rating		kW(PS)	19.1(26)/24.2(32.9)				
			min <sup>-1</sup>	1500/1800				
8	Max. torque		N·m	~				
			min <sup>-1</sup>	(+/-)				
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 <sup>-1</sup>	1925	+25/-25		
			Min.	min <sup>-1</sup>	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			
Gradients	Longitudinal	deg	30(25)		intermittent			
		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.180				
17	Fuel injection timing		deg	18(+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		effective.
			Oil pressure		kgf/cm <sup>2</sup>	3.4		at rated output
kgf/cm <sup>2</sup>	0				at low idle			
20	Cooling system		Heat exchanger		none			
			Pressure cap		kgf/cm <sup>2</sup>	0.9		

	Fan		6-φ380	
	Coolant capacity	liter	2.7	

4TNV84T-GGE

<b>ENGINE SPECIFICATIONS</b>	<b>G3-29649-0020</b>
------------------------------	----------------------

No	Model name	4TNV84T-GGE		Remarks
21	Air cleaner		none	
22	Breather system		open	
23	Muffler		none	
24	Starting system	Starter	12V-1.4kW	
		Battery	95D31	
		Starting aid	air heater 400W	
25	Generator		12V-40A	
26	Engine color		Black 银色	
27	Applied regulation		EPA , ARB-OR	

<Career>

Messrs : General	W.No.	4TNV84T-GGE
------------------	-------	-------------