



Model: TG30



Shown with optional features.

Ratings Range — 60 Hertz Operation

Standby:	kW	30
	kVA	38
Prime:	kW	31
	kVA	39

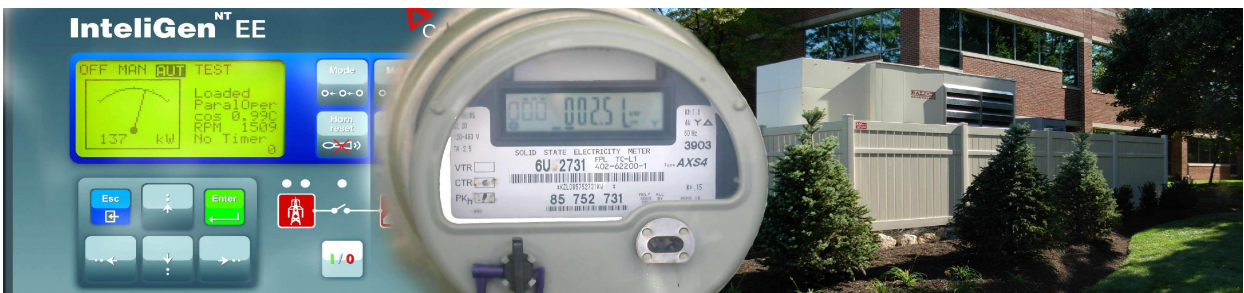
FEATURES

- Single source responsibility for the generator set and accessories.
- Prototype and production tested to insure one step load acceptance per NFPA 110.
- Two year limited warranty on generator sets and accessories. Extended warranties also available.
- Unit conforms to CSA, NEMA, EGSA, ANSI and other standards.
- Heavy duty 4 cycle industrial engine for reliability and fuel efficiency.
- Brushless rotating field generator with class H insulation.
- Heavy duty steel base with integral vibration isolators.
- EPA Certified Engine.

GEN SET RATINGS

Genset Model Number	Alternator	Voltage L-N / L-L	Phase	Hertz	Natural Gas 130° Rise Standby Rating		LP Gas 130° Rise Standby Rating	
					kW / kVA	Amps	kW / kVA	Amps
TG30	283CSL1507	277/480	3	60	30/38	45	31/39	47
		139/240	3	60	30/38	90	31/39	93
		127/220	3	60	30/38	98	31/39	102
		240/416	3	60	30/38	53	31/39	54
		120/208	3	60	30/38	104	31/39	108
		120/240	3	60	30/38	90	31/39	93
		220/380	3	60	30/38	57	31/39	59
	120/240	1	60	25/25	104	25/25	104	
	283CSL1718	120/240	1	60	30/30	125	28/28	117

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor.
 STANDBY RATINGS: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271.
 PRIME POWER RATINGS: Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS5514, AS2789, and DIN 6271. For limited running time and base load ratings consult the factory. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.
 GENERAL GUIDELINES FOR DERATION: Altitude: Derate 0.5% per 100m (328 ft.) elevation above 1000m (3279 ft.) Temperature: Derate 1.0% per 10°C (18°F) temperature above 40°C (104°F).



Application and Engineering Data

Basic Technical Data		Lubrication System	
Manufacturer	General Motors	Type	Full Pressure
Model	3.0 L	Oil pan capacity	4.0 qt (3.8 L)
Number of cylinders	4	Oil pan capacity with filter	4.3 qt (4.1 L)
Cylinder arrangement	In-Line	Oil filter: qty and type	1, Cartridge
Cycle	4		
Induction system	Natural Aspiration	Electrical System	
Compression ratio	8.2:1	Ignition system	Electronic
Bore	4 in (101.6 mm)	Battery charging alternator:	
Stroke	3.60 in (91.4 mm)	Ground	negative
Cubic capacity	181 cu in (3 L)	Volts	12
Piston speed	1080 ft/min (329 m/min)	Ampere rating	70
Main bearings: qty and type	2, Bolt	Starter motor rated voltage	12
Governor type	Electronic	Battery, recommended cold cranking amps (CCA):	
Rated rpm	1800	Qty rating for -18 °C (0 °F)	1,630
Max power at rated rpm	49 hp (36.5 kW)	Battery voltage	12
Engine power at Standby rating	49 hp (36.5 kW)	Operation Requirements	
Frequency regulation, no-load to full-load	Isochronous	Radiator-cooled cooling air, m ³ /min (scfm) ‡	7100 scfm (200 m ³ /min)
Frequency regulation, steady state	± 0.5%	Combustion air	74 cfm (2.1 m ³ /min)
Frequency	Fixed	Heat rejected to ambient air:	
Air cleaner type	Dry	Engine	522 Btu/min (9.2 kW)
		Alternator	259 Btu/min (4.5 kW)
		Fuel System	
		Fuel Type	LP Gas, Natural Gas or Dual Fuel
		Fuel Consumption	
Exhaust System		<u>Natural Gas</u>	
Exhaust manifold type	Dry	100% Load	430 cfm (12.2 m ³ /hr)
Exhaust flow at rated kW	7.1 cfm (250 m ³ /min)	75% Load	340 cfm (9.6 m ³ /hr)
Exhaust temperature at rated kW	1270 °F (688 °C)	50% Load	255 cfm (7.2 m ³ /hr)
Maximum allowable back pressure	3.0 in (10.2 kPa)	25% Load	179 cfm (5.1 m ³ /hr)
Exhaust outlet size at engine hookup	2.5 in (64 mm) O.D.	<u>LP Gas</u>	
		100% Load	175 cfm (5 m ³ /hr)
		75% Load	144 cfm (4.1 m ³ /hr)
		50% Load	108 cfm (3.1 m ³ /hr)
		25% Load	74 cfm (2.1 m ³ /hr)
Cooling System			
Ambient temperature	122 °F (50 °C)		
Engine jacket water capacity	1.8 gal (6.8 L)		
Radiator system capacity, including engine	3.9 gal (14.9 L)		
Engine jacket water flow	11 gpm (42 Lpm)		
Heat rejected to cooling water at rated kW	1940 Btu/min (34.1 kW)		
Max restriction of cooling air, intake and discharge side of radiator	0.5 H ₂ O (0.125 kPa)		

Generator Controller Options



- Dashboard Style LCD Panel
- NFPA 110
- SAE J1939 ECU Communications
- Load Share Synch Features
- Metering, Data Trending, Alarms
- Engine Status Indicators
- Fuel Consumption
- CanBus, ModBus
- Ethernet Communications
- Remote Contacts Form C, RS 232/485



- Internet Bridge Module
- Internet Connection & Web Browser
- Remote Access & Control
- IntelliMonitor Network Management
- SNMP, PC SCADA
- Site Overview & Statistic Settling
- Automatic Downloads, Report Writer
- Receive Emails or IM Text
- CAT 5e, RS232/485, RJ 45
- Ethernet or Dial Up Connection
- Fleet Scalability

Alternator Specifications

Manufacturer	Marathon	<ul style="list-style-type: none"> • NEMA MG1, IEEE, AND ANSI standards compliance for temperature and motor starting. • Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field. • Self-ventilated and dripproof construction. • Superior voltage waveform from a two-thirds pitch stator and skewed rotor. • Linkboards • Optimized Electrical Design • Enhanced Ventilation • Fully Guarded • Heavy Duty Bearings
Type	Ext. Voltage Regulated, Brushless	
Gen Frame	MAGNAPLUS	
Insulation	NEMA	
Material	Class H	
Temperature Rise	130 °C, Standby	
Hertz	60	
Phase	3	
RPM	1800	
Exciter	Rotating	
# Leads	12 Reconnectable or 4 Single Phase	
PF	0.8	
Ambient	40°C	
Coupling Single Bearing	Flexible	
Amortisseur Windings	Full	
Cooling Air Volume	250 CFM	
Peak Motor Starting	30% Voltage Dip, 90 skVA	
Voltage Regulation	1 Phase Sensing 1%	
no-load and full-load	Optional 3 Phase Sensing 1/2%	

STANDARD FEATURES

- Heavy Duty Steel Base
- Vibration Isolators
- Oil Drain Valve with Extension
- Battery Rack
- Battery Cables
- High Ambient Unit Mounted Radiator
- Battery Charging Alternator
- Factory Paint
- Factory Test Prior to Shipment
- 2 Year Warranty
- Owners Manual

AVAILABLE ACCESSORIES

OPEN UNIT

- Narrow Skid Base
- Radiator Duct Flange
- Ship Loose Flex Exhaust
- Ship Loose Critical Silencer

ENCLOSED UNIT

- Wide Skid Base
- Standard Enclosure With Internal Silencer
- Sound Attenuated Enclosure With Silencer
- Load Center With Lights and GFI Receptacle

CONTROLLER

- IntelliLite Model IL-NT-MRS19
- Ethernet Bridge
- Remote Annunciator

MISCELLANEOUS

- Flexible Fuel Lines
- Coolant Drain Kit
- Water Jacket Heater
- Oil Pan Heater
- Generator Strip Heater
- Battery
- Battery Charger
- Pad Type Battery Heater
- Battery Heater Blanket with Thermostat
- Line Circuit Breaker
- Dual Fuel

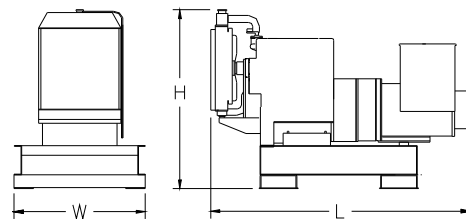
WARRANTY

- 3 Year Warranty
- 5 Year Warranty

WEIGHTS AND DIMENSIONS

OVERALL SIZE, L x W x H, in.: 70 in x 36 in x 48 in
WEIGHT: 1005 lbs

Note: Dim and weights reflect standard open unit with no options



Note: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

DISTRIBUTED BY:

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