



# MODEL: TD275



Shown with optional equipment.

## Ratings Range — 60 Hertz Operation

Standby:	kW	275
	kVA	343
Prime:	kW	245
	kVA	306

## 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 Tier 3 Certified for Stationary Emergency Standby use only.

## GEN SET RATINGS

Genset Model Number	Alternator	Voltage L-N / L-L	Phase	Hertz	130° Rise Standby Rating		105° Rise Prime Rating	
					kW / kVA	Amps	kW / kVA	Amps
TD275	432CSL6210	277/480	3	60	280/350	421	260/325	391
		139/240	3	60	280/350	842	260/325	782
		127/220	3	60	283/354	928	261/326	856
		240/416	3	60	280/350	486	260/325	451
		120/208	3	60	280/350	972	260/325	902
		120/240	3	60	280/350	842	260/325	782
		220/380	3	60	265/331	521	245/306	465
		120/240	1	60	201/185	484	201/201	484

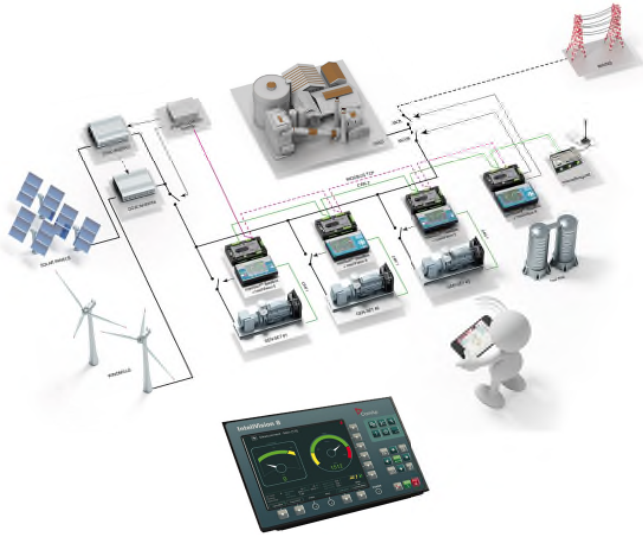
RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor.  
 STANDBY RATINGS: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There 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, over load 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

<b>Basic Technical Data</b>		<b>Lubrication System</b>	
Manufacturer	MTU	Lubricating oil capacity total system	12.2 gal (46 L)
Model	6R1600G70S	Maximum sump capacity	
Number of cylinders	6	Minimum sump capacity	
Cylinder arrangement	Vertical in-line	Maximum engine operating angles (front up, front down, right side or left side)	
Cycle	Four stroke		
Induction system	N/A		
Compression ratio	17.5:1	<b>Lubricating Oil Pressure</b>	
Bore	4.8 in (12.2 cm)	Oil Temperature (continuous operation)	
Stroke	5.91 in (15 cm)	Oil Temperature (maximum intermittent operation)	
Cubic capacity	641 cu in (10.5 L)		
Direction of rotation	N/A	<b>Electrical System</b>	
Firing order		Type	
Governor type	ECU, Isochronous 0.25%	Alternator type	
Gross engine power	418 bhp (312 kWm)	Alternator Voltage	24 V
Electropak net engine power	N/A	Alternator Output	
Brake mean effective pressure	N/A	Starter motor type	
Engine coolant flow (against 5 psi (35 kPa) restriction)	73.1 gpm (277 Lpm)	Starter motor voltage	24 V
Cooling fan air flow (29 psi (200 kPa) external restriction)	654 m <sup>3</sup> /min	Starter motor power	
Combustion air flow (at rated speed)	84 m <sup>3</sup> /min	Minimum cranking speed	
Exhaust gas flow (max)	2542.7 cfm (72 m <sup>3</sup> /min)	<b>Induction System</b>	
Exhaust gas mass flow (max)		Maximum air intake restriction	
Exhaust gas temperature in manifold (max)	806° F (430° C)	Clean filter	
Boost pressure ratio	N/A	Dirty filter	
Overall thermal efficiency (net)	N/A	Air filter type	Dry
		<b>Duct allowance with 50% glycol</b>	
		Air flow required for radiator	17374 scfm (117 m <sup>3</sup> /min)
<b>Cooling System</b>		<b>Fuel System</b>	
Coolant		Type of injection	
Total System Capacity	21.7 gal (82 L)	Fuel injection pump	
With radiator		Fuel atomizer	
Without radiator	11.9 gal (45 L)	<b>Fuel Lift Pump</b>	
Coolant Pump Drive		Max flow through customer filter	60.4 gph (198 Lph)
Coolant pump drive ratio		Maximum suction head	16 ft (5 m)
Maximum top tank temperature		<b>Fuel Consumption</b>	
Temperature rise across engine (rating dependent)		110% Load	
Thermostat operation range		100% Load	19.5 gph (73.7 Lph)
Recommended coolant:		75% Load	15.1 gph (57.1 Lph)
		50% Load	11.6 gph (43.8 Lph)
		<b>Exhaust System</b>	
Maximum back pressure	60.2 in H <sub>2</sub> O (15 kPa)		
Exhaust outlet size			

## 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

<b>Manufacturer</b>	Marathon	<ul style="list-style-type: none"> <li>• NEMA MG1, IEEE, AND ANSI standards compliance for temperature and motor starting.</li> <li>• Sustained short-circuit current of the rated current for up to 10 seconds.</li> <li>• Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.</li> <li>• Self-ventilated and dripproof construction.</li> <li>• Superior voltage waveform from a two-thirds pitch stator and skewed rotor.</li> <li>• Linkboards</li> <li>• Optimized Electrical Design</li> <li>• Enhanced Ventilation</li> <li>• Fully Guarded</li> <li>• Heavy Duty Bearings</li> </ul>
<b>Type</b>	Ext. Voltage Regulated, Brushless	
<b>Gen Frame</b>	MAGNAPLUS	
<b>Insulation</b>	NEMA	
<b>Material</b>	Class H	
<b>Temperature Rise</b>	130 °C, Standby	
<b>Hertz</b>	60	
<b>Phase</b>	3	
<b>RPM</b>	1800	
<b>Exciter</b>	Rotating	
<b># Leads</b>	12 Reconnectable or 4 Single Phase	
<b>PF</b>	0.8	
<b>Ambient</b>	40°C	
<b>Coupling Single Bearing</b>	Flexible	
<b>Amortisseur Windings</b>	Full	
<b>Cooling Air Volume</b>	250 CFM	
<b>Peak Motor Starting</b>	30% Voltage Dip, 1025 kVA	
<b>Voltage Regulation</b>	1 Phase Sensing 1%	
<b>no-load and full-load</b>	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
- Sub-Base Fuel Tank

### CONTROLLER

- InteliLite 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

## WARRANTY

- 3 Year Warranty
- 5 Year Warranty

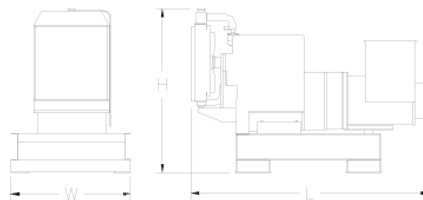
## APPROVALS AND LISTINGS

- UL Standard 2200

## WEIGHTS AND DIMENSIONS

OVERALL SIZE, L x W x H, in.: 132 in. x 66 in. x 71 in.  
WEIGHT: 6900 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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