



MODEL: TD30



Shown with optional features.

Ratings for 3 Φ / 60 Hertz Operation

Standby:	kW	30
	kVA	38
Prime:	kW	27
	kVA	34

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 4i Certified Engine.

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
TD30	283CSL1507	277/480	3	60	30/38	45	27/34	41
		139/240	3	60	30/38	91	27/34	81
		254/440	3	60	30/38	49	27/34	44
		127/220	3	60	30/38	99	27/34	89
		240/416	3	60	30/38	52	27/34	47
		120/208	3	60	30/38	105	27/34	94
		120/240	3	60	30/38	91	27/34	81
		219/380	3	60	27/34	51	24/30	45
		120/240	1	60	25/25	104	22/22	91
	283CSL1518	120/240	1	60	30/30	125	27/27	112

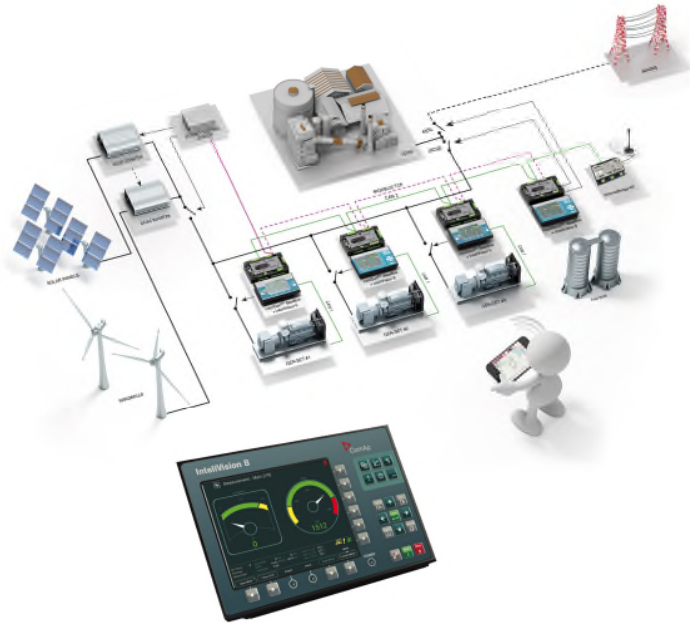
RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor.
 STANDBY RATINGS: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There 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-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	Perkins	Lubricating oil capacity total system	
Model	404D-22TAG	Maximum sump capacity	2.8 gal (10.6 L)
Number of cylinders	4	Minimum sump capacity	2.3 gal (8.9 L)
Cylinder arrangement	Vertical in-line	Maximum engine operating angles (front up, front down, right side or left side)	35°
Cycle	Four stroke		
Induction system	Turbocharged, air to air charge cooled	Lubricating Oil Pressure	
Compression ratio	23.3:1	Oil Temperature (continuous operation)	257 F (125 C)
Bore	3.3 in (84 mm)	Oil Temperature (maximum intermittent operation)	
Stroke	3.9 in (100 mm)	Electrical System	
Cubic capacity	135.2 cu in (2.216 L)	Type	12 V neg earth
Direction of rotation	Counter clockwise (from flywheel)	Alternator type	
Firing order	1,3,4,2	Alternator Voltage	12 V
Governor type	Electronic/mechanical 0.25% Isochronous	Alternator Output	65 A
Gross engine power	48.8 hp (36.4 kWb)	Starter motor type	Delco Remy
Electropak net engine power		Starter motor voltage	12 V
Brake mean effective pressure	158.8 psi (1095.4 kPa)	Starter motor power	
Engine coolant flow (against 5 psi (35 kPa) restriction)	14.8 gpm (56.2 Lpm)	Minimum cranking speed	
Cooling fan air flow (29 psi (200 kPa) external restriction)		Induction System	
Combustion air flow (at rated speed)	87.9 cfm (2.49 m ³ /min)	Maximum air intake restriction	
Exhaust gas flow (max)	17798 cfm (504 m ³ /min)	Clean filter	0.43 psi (3 kPa)
Exhaust gas mass flow (max)		Dirty filter	0.92 psi (6.4 kPa)
Exhaust gas temperature in manifold (max)	892 F (478 C)	Air filter type	Dry element
Boost pressure ratio		Duct allowance with 50% glycol	
Overall thermal efficiency (net)	33.1 %	1800 rev/min	
		150.8 °F (66 °C)	
		0.018 psi (125 Pa)	
		42.3 cfm (1.2 m ³ /sec)	
Cooling System		Fuel System	
Coolant		Type of injection	Indirect
Total System Capacity		Fuel injection pump	Cassette type
With radiator	TBA	Fuel atomizer	Pintle nozzle
Without radiator	0.95 gal (3.6 L)	Fuel Lift Pump	
Coolant Pump Drive		Max flow through customer filter	16.6 gph (63 Lph)
Coolant pump drive ratio		Maximum suction head	1.7 m
Maximum top tank temperature	233 F (112 C)	Fuel Consumption	
Temperature rise across engine (rating dependent)	45.5 F (7.5 C)	110% Load	2.6 gph (10.2 Lph)
Thermostat operation range	180-203 F (82-95 C)	100% Load	2.3 gph (8.9 Lph)
Recommended coolant:	50/50	75% Load	1.7 gph (6.5 Lph)
		50% Load	1.2 gph (4.6 Lph)
Exhaust System			
Maximum back pressure	1.5 psi (10.2 kPa)		
Exhaust outlet size	1.65 in (42 mm)		

Generator Controller Options



- Dashboard Style LCD Panel
- 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
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%

- 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

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.: 70 in. x 36 in. x 60.2 in.
WEIGHT: 1251 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.

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