

MODEL	GS350
Stand-by Power @ 60Hz	350kW / 438 kVA
Prime Power @ 60Hz	319 kW / 398 kVA

Standard Features

General features :

- Engine (VOLVO , TAD1241GE)
- Engine EPA Carb Charge alternator 24 V , Governor:Electronic type ECU
- Alternator (LEROY SOMER , LSA472VS2)
- Single bearing alternator IP 23 , insulation class H /H
- Radiator 50°C [122°F]°C max. T° air inlet with coolant cap
- Skid and vibration isolators
- Dry type air filter
- Main line circuit breaker
- Microprocessor control panel
- 24 V battery, rack and cable
- Industrial silencer (loose)
- User manual
- CSA Certified



Generator Ratings

Voltage	HZ	Phase	P.F	Standby Amps	Standby Ratings kW/kVA	Prime Ratings kW/kVA
480/277	60	3	0.8	527	350 / 438	319 / 398
440/254	60	3	0.8	575	350 / 438	319 / 398
380/220	60	3	0.8	665	350 / 438	319 / 398
240/120	60	3	0.8	1006	334 / 418	304 / 380
230/115	60	3	0.8	1004	320 / 400	291 / 364
220/127	60	3	0.8	1149	350 / 438	319 / 398
208/120	60	3	0.8	1160	334 / 418	304 / 380
600/347	60	3	0.8	421	350 / 438	319 / 398

Stand-By ratings are available for the duration of any power outage. No overload capacity is specified at this ratings. Prime ratings are available per BS 5514, DIN 6271, ISO-3046 and IEC 34-1 with 10% overload capacity one hour in twelve hours.

Conditions of sale

- We provide a full line of products with high quality recognized engines and alternators.
- Service and parts are available from our distributors as a single source of responsibility.
- Each and every unit is factory tested. All generator sets are also prototype tested.
- Two years limited warranty , please refer to the conditions terms . Five years extended are also available.



ENGINE DATA

Manufacturer / Model	VOLVO TAD1241GE , 4-cycle, Turbo , Air/Air DC
Cylinder Arrangement	6 X L
Displacement	12.13L [740.2C.I.]
Bore and Stroke	131mm [5.2in.] X 150mm [5.9in.]
Compression ratio	17.5 : 1
Rated RPM	1800 Rpm
Piston Speed	9m/s [29.5ft./s]
Max. stand by Power at rated RPM	378kW [507BHP]
Frequency regulation, steady state	+/-0. 5%
BMEP	19.7bar [285psi]
Governor : type	Electronic type ECU

Exhaust System

Exhaust gas flow	1100L/s [2331cfm]
Exhaust temperature	465°C [869°F]
Max back pressure	1000mm CE [39in. WG]

Fuel System

110% (Stand By power)	89.2L/h [23.6gal/hr]
100% (of the Prime Power)	79.2L/h [20.9gal/hr]
75% (of the Prime Power)	58.5L/h [15.5gal/hr]
50% (of the Prime Power)	39.8L/h [10.5gal/hr]
Total fuel flow	550L/h [145.3gal/hr]

Oil System

Total oil capacity w/filters	35L [9.2gal]
Oil Pressure low idle	2.5bar [36.2psi]
Oil Pressure rated RPM	5.5bar [79.7psi]
Oil consumption 100% load	0.12L/h [0.0gal/hr]
Oil capacity carter	31L [8.2gal]

Thermal balance 100% load

Heat rejection to exhaust	272kW [15466Btu/mn]
Radiated heat to ambient	20kW [1137Btu/mn]
Heat rejection to coolant	139kW [7904Btu/mn]

Air intake

Max. intake restriction	500mm CE [20in. WG]
Engine air flow	467L/s [990cfm]

Coolant System

Radiator & engine capacity	44L [11.6gal]
Max water temperature	103°C [217°F]
Outlet water temperature	93°C [199°F]
Fan power	15 kW
Fan air flow	9.35m ³ /s [19813cfm]
Available restriction on air flow	77mm CE [3.0in. WG]
Type of coolant	Glycol-Ethylene
Thermostat	82-95 °C

Emissions

HC	42.52 gr/bhp/h
CO	4.48 gr/bhp/h
Nox	42.52 gr/bhp/h
PM	7.46 gr/bhp/h



ALTERNATOR SPECIFICATIONS

GENERAL DATA

- Compliance with NEMA MG21, UTE NF C51.111, VDE 0530, BS 4999, CSA standards.
- Vacuum-impregnated windings with epoxy varnish.
- IP21 drip proof.

ALTERNATOR DATA

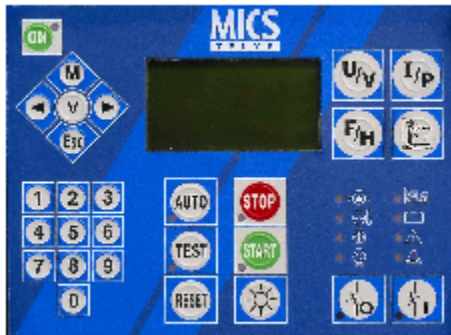
	LEROY SOMER LSA472VS2
Manufacturer / Type	LEROY SOMER LSA472VS2
Number of phase	3
Power factor (Cos Phi)	0.8
Altitude	< 1000 m
Overspeed	2250 rpm
Pole : number	4
Exciter type	SHUNT
Insulation : class, temperature rise	H / H
Voltage regulator	R448
Sustained short circuit current	3 IN = 10s
Total harmonics (TGH/THC)	< 4%
Wave form : NEMA = TIF – TGH/THC	< 50
Wave form : CEI = FHT – TGH/THC	< 2%
Bearing : number	1
Coupling	Direct
Voltage regulation 0 to 100% load	+/- 0.5%
Recovery time (20% Volt dip) ms	500 ms
SkVA with 90 % of nominal sustained voltage (at 0.4 PF)	N/A

OTHER ALTERNATOR DATA

Continuous nominal rating @ 40°C	456 kVA
Standby rating @ 27°C	518 kVA
Efficiencies @ 4/4 load	93.3 %
Air flow	1.1m ³ /s [2330.76cfm]
Short circuit ratio;50 (Kcc)	0.36
Direct axis synchro reactance unsaturated (Xd)	349 %
Quadra axis synchro reactance unsaturated (Xq)	209 %
Open circuit time constant;50 (T'do)	1738 ms
Direct axis transient reactance saturated (X'd)	20.1 %
Short circuit transient time constant (T'd)	100 ms
Direct axis subtransient reactance saturated (X''d)	16.1 %
Subtransient time constant (T''d)	10 ms
Quadra axis subtransient reactance saturated (X''q)	21.8 %
Zero sequence reactance unsaturated (Xo)	0.1 %
Negative sequence reactance saturated (X2)	19 %
Armature time constant (Ta)	15 ms
No load excitation current (io)	1 A
Full load excitation current (ic)	3.9 A
Full load excitation voltage (uc)	40 V
Recovery time (Delta U = 20% transitoire)	500 ms
Motor start (Delta = 20% perm. Or 50% trans.)	890 kVA
Transient dip (4/4 charge) – PF : 1.8 AR	17.3 %
No load losses	8.54 kW
Heat rejection	25.65 kW

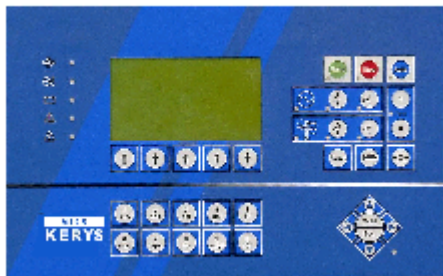
Control Panels

TELYS



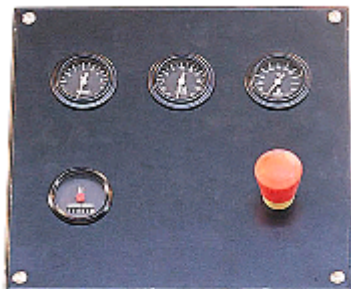
Specifications :Frequency meter, Ammeter, Voltmeter
 Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop Engine parameters Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level

KERYS



Specifications :Frequency meter, Ammeter, Voltmeter
 Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop Engine parameters Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level Additional specifications Website, Troubleshooting, Assistance and Maintenance, Plotting and logging, Load impact, 8 configurations available, Compliance with international standards...

M80



Specifications : Tachometer, Emergency stop button, client connection terminal strip, EC certified
 Engine parameters :Hours counter, Oil pressure gauge, Water temperature indicator, Oil pressure indicator

Options

Engine and Radiator

- Heat shield protection
- Oil drain extension
- Heavy duty air filter
- Lube oil drain pump
- Radiator core guard
- Battery charger
- Block heater

Alternator

- Anti condensation heater
- Enforced impregnation
- Oversized alternator

Control panel

- NFPA 110 level 1
- Paralleling system
- Remote annunciator
- Oil temperature shutdown
- Key start panel

Exhaust

- Residential silencer
- Critical silencer
- Flexible exhaust conn.

Literature

- Parts
- Maintenance

Fuel

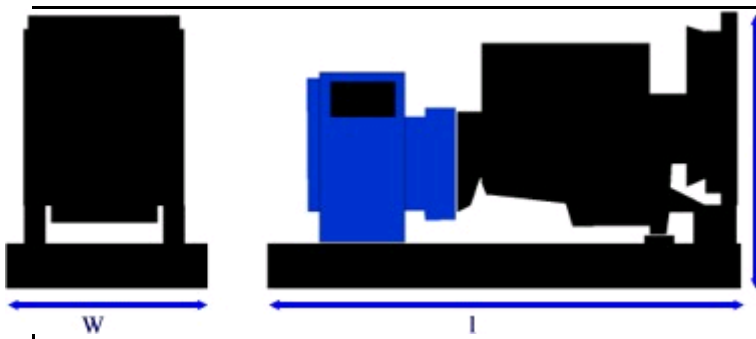
- Day tank
- Subbase fuel tanks UL
- Water separator fuel filter

Enclosure M228

- Silent 73 db @ 23 Ft (stby)

Weight and Dimensions

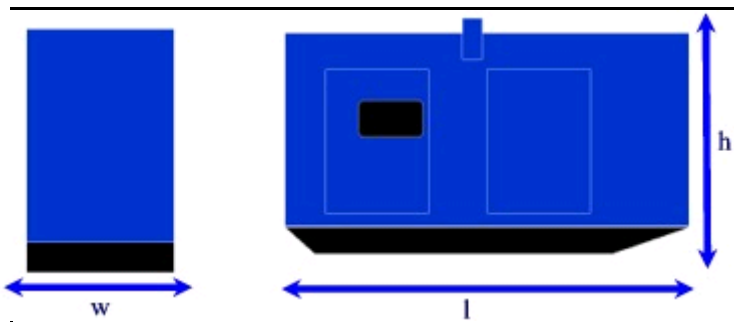
Open Model



Overall size l x w x h :
3160mm [124in] x 1340mm [53in] x 1805mm [71in]

Weight :
2900kg [6392lbs] Net 2970kg [6546lbs] Brut

With Optional Enclosure



Overall size l x w x h :
4475mm [176in] x 1410mm [56in] x 2430mm [96in]

Weight :
4020kg [8860lbs] Net 4100kg [9036lbs] Brut