



GP T40UC4i

Engine MITSUBISHI, S4S-Y3DT61, EPA/CARB Tier i4
Alternator LEROY SOMER, LSA42.3L9

40 KW MITSUBISHI GENERATOR

40 KW / 50 KVA DIESEL GENERATOR SET, FULLY PACKAGED:

- MITSUBISHI Heavy duty diesel engine, 4 stroke, 1800rpm, Turbo, EPA
- LEROY SOMER brushless alternator. IP23 protection, Insulation class H
- SCHNEIDER, Main line circuit breaker, wired, maximum output rated
- EPA Tier i4 compliant engine per U.S. Environmental Protection Agency
- Digital auto-start control panel. CE and UL compliant
- Incorporated metallic fuel tank for day use
- Auto Start control feature included for interoperation with ATS/AMF
- 12V charging alternator and 12V DC electric starter motor
- 12V charged DC starting battery with electrolyte and cables
- Dry type air filter, fuel filter and oil filter elements installed
- Mechanically welded chassis with vibration isolators
- Each unit prototype and individually factory load bank tested
- The generator accepts 100% rated load in one step as per NFPA110 and meets ISO8528-5 class G-3 for transient response
- Compliant with ISO3046, ISO8528, BS4999, BS5514, BS5000PT99, AS1359, IEC34, UTE5100, VDE0530 and ISO9001:2000



- Steel or Aluminum weather proof, sound attenuated enclosures
- UL142 listed, double wall fuel tanks from 50 to 10,000 Gal
- UL1008 listed, automatic transfer switches from 50 to 3000 Amp
- D.O.T. compliant heavy duty road trailers from 3000 to 30000 Lbs
- Automatic battery chargers, Engine preheaters, Remote annunciators and many more



Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions - Open	Weight - Open
480/277	40 / 50	36 / 45	60		
460/265	40 / 50	36 / 45	62	Length: 1700mm [67in]	656kg [1446lbs] Net
440/254	40 / 50	36 / 45	66	Width: 896mm [35in]	738kg [1628lbs] Gross
240/139	40 / 50	36 / 45	120	Height: 1223mm [48in]	
240/120	40 / 50	36 / 45	120		
220/127	40 / 50	36 / 45	131		
208/120	37 / 46	33 / 42	128		

POWER DEFINITION

PRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

TERM OF USE

Standard reference conditions ESP/PRP 25 C°/25 C° Air Intlet Temp, 1000 m/1000 m m A.S.L. 60 % relative humidity.

WEATHER PROOF / SUPER SILENT ENCLOSURES

	Model	dB(A)@3ft	dB(A)@23ft	Dimensions - Enclosed	Weight - Enclosed	Tank
0 0	M127	73	63	Length: 2080mm [82in] Width: 960mm [38in] Height: 1415mm [56in]	886kg [1953lbs] 968kg [2135lbs]	100 L 26 Gal

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ENGINE SPECIFICATIONS

		MITSUBISHI S4S-Y3DT61SD,		
	Engine model	4-stroke, TURBOCHARGED, AIR/AIR, 4 Cylinder,		
Cylinders-arrangement		U.S. EPA / CARB TIER i4		
	Cylinders-arrangement	4-L		
	Displacement (C.I.)	3.3		
	Bore (mm) X Stroke (mm)	94 X 120		
	Compression ratio	19 : 1		
DATA	Speed (RPM)	1800		
	Pistons speed (m/s)	7.2		
GENERAL DATA	Maximum stand-by power at rated RPM (kW)	45		
	Frequency regulation (%)	+/-2.5%		
	BMEP (bar)	8.5		
	Governor type	MECHANICAL		
	Exhaust gas temperature (°C)	600		
EXHAUST SYSTEM	Exhaust gas flow (L/s)	192		
	Max. exhaust back pressure (mm CE)	408		
	Fuel consumption 110% load	13.1 L/hr [5.1 gal/hr]		
	Fuel consumption 100% load	12.2 L/hr [4.6 gal/hr]		
FUEL SYSTEM	Fuel consumption 75% load	8.9 L/hr [3.6 gal/hr]		
	Fuel consumption 50% load	6.1 L/hr [2.5 gal/hr]		
	Maximum fuel pump flow	L/hr [gal/hr]		
	Oil capacity (L)	10		
	Min. oil pressure (bar)	1		
OIL	Max. oil pressure (bar)	3.9		
	Oil consumption 100% load (L/h)	0.13		
	Carter oil capacity (L)	9		
THERMAL BALANCE	Heat rejection to exhaust (kW)	44		
	Radiated heat to ambiant (kW)	N/A		
	Haet rejection to coolant (kW)	N/A		
AIR INTAKE	AIR INTAKE_entree_max%	200		
	Intake air flow (L/s)	55		
	Emissions PM (g/kWh)	N/A		
EMISSIONS	Emission CO (g/kW.h)	N/A		
	Emissions HCNOx (g/kWh)	N/A		
	Emission HC (g/kW.h)	N/A		





ALTERNATOR SPECIFICATIONS

	Alternator brand	LEROY SOMER	
	Alternator	LSA42.3L9	
	Number of phase	3	
	Power factor (Cos Phi)	0.8	
	Altitude (m)	<1000	
	Overspeed (rpm)	2250	
	Number of pole	4	
DATA	Excitation system	Self Excited	
	Insulation class / Temperature class	H/H	
GENERAL DATA	Regulation	R220	
	Total harmonics TGH/THC	<3	
	Wave form: NEMA=TIF-TGH/THC	<50	
	Wave form : CEI=FHT-TGH/THC	<2	
	Number of bearing	11	
	Coupling	DIRECT	
	Voltage regulation 0 to 100%	+/-0.5%	
	Recovery time (Delta U = 20% transitoire) (ms)	500	
	Continuous Nominal Rating 40°C (kVA)	75	
	Standby Rating 27°C (kVA)	82.5	
	Efficiencies 4/4 load (%)	91.1	
	Air flow (cfm)	0.13	
	Short circuit ratio (Kcc)	0.47	
	Direct axis synchro reactance unsaturated (Xd) (%)	217	
	Quadra axis synchro reactance unsaturated (Xq) (%)	108	
	Open circuit time constant (T'do) (ms)	992	
	Direct axis transient reactance saturated (X'd) (%)	11	
	Short circuit transient time constant (T'd) (ms)	50	
OTHER	Direct axis subtransient reactance saturated (X"d) (%)	6	
	Subtransient time constant (T"d) (ms)	5	
DATA	Quadra axis subtransient reactance saturated (X"q) (%)	7.7	
	Zero sequence reactance unsaturated (Xo) (%)	0.94	
	Negative sequence reactance saturated (X2) (%)	6.58	
	Armature time constant (Ta) (ms)	7.5	
	No load excitation current (io) (ms)	0.5	
	Full load excitation current (ic) (A)	1.99	
	Full load excitation voltage (uc) (A)	32.9	
	Recovery time (Delta U = 20% transitoire) (ms)	< 500	
	Motor start (Delta U = 20% perm. or 50% trans.) (ms)	143.8	
	Transient dip (4/4 charge) - PF: 0,8 AR (%)	18	
	No load losses (kW)	1336	
	Heat rejection (kW)	5854	



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CONTROL PANELS

Standard



NEXYS

Specifications: Frequency meter, Ammeter, Voltmeter Alarms and faults: Oil pressure, water temperature, Overcrank, Overspeed (>60 kVA), Min/max alternator, Low fuel level, Emergency stop Engine parameters: Hours counter, Engine speed, Battery

Engine parameters : Hours counter, Engine speed, Battery voltage, Fuel level, Alr preheating

Option



TELYS2

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

ACCESSORIES AND OPTIONS

Option

Automatic Transfer Switches, UL1008 listed: 100 to 4000 AMPS



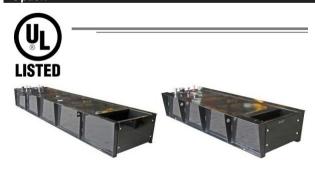
With a Series 300 transfer switch, you get a product backed by ASCO Power Technologies, the industry leader

- •True double-throw operation: single solenoid design is inherently interlocked & prevents contacts from stopping between sources
- Easy-to-read flush-mounted control and display panel provides LED indicators for switch position and source availability
- Standard engine exerciser for weekly automatic testing with or without load
- •UL 1008 listed for Transfer Equipment and CSA C22.2 listed
- ●NFPA 110 for Emergency & Standby Power & the National Electrical (NEC) Articles 700, 701 and 702

Option

Fuel Tanks, UL142 listed: 50 to 5000 GAL

Remote monitoring and control



- •UL listed. Secondary containment tank meeting UL 142 tank requirements
- NFPA compliant. Designed to comply with the installation standards of NFPA 30 and NFPA 37
- Emergency pressure relief vents. Meets UL requirements; ensures adequate venting of inner and outer tank under extreme pressure and/or emergency conditions
- •Electrical stub-up area with removable end channel
- •Normal vent Inner tank emergency vent sized to UL 142 specs
- •Direct reading mechanical fuel gauge Fuel in basin switch
- Satin black paint finish





Weatherproof / Super silent Enclosure

STANDARD FEATURES

- 12 gauge electro-zinc powder coated steel for maximum corrosion resistance (Phosphatizing degreasing, Non-chromic passivation, Osmosis purified rinsing and High durability polyester resin thermosetting powder paint)
- 29dB(A) Internal-mounted critical silencer and flexible exhaust connector offering maximum component life and operator safety
- Fade-, scratch-, and corrosion-resistant. Automotive-grade textured finish resulting in advanced corrosion and abrasion protection as well as enhanced edge coverage and color retention
- Up to 51mm (2in) Acoustic insulation with hydrocarbon sealing film that meets FMVSS 302 flammability classification and repels moisture absorption
- Interchangeable modular panel construction. Allows complete serviceability or replacement without compromising enclosure design
- Service access. Multi-personnel doors for easy access to generator set controller, breaker and service points
- Externally mounted emergency stop button, Single point lifting hook and Tamper proof "securit" viewing control window
- Cooling air discharge. Weather protective design featuring a vertical air discharge outlet grille. Redirects cooling air up and above enclosure to reduce ambient noise
- Cooling/combustion air intake with a horizontal air inlet. Sized for maximum cooling airflow
- Heavy duty Polyamide plastic hinges, Dichromate galvanized bolting and Stainless steel rivets for lifetime longevity
- Meets and exceeds NFX41002 Salt spray test, NFT30049 UV Performance test, NFT30038 Paint adhesion test and 2000/14EC Low sound directives



Model	Sound Level			Dimensions	Weight	Fuel Tank
	dB(A)@3ft	dB(A)@23ft	LWA	(in)	(Lbs)	(Gal)
GP T40UC4i	73	63	N/A	82 x 38 x 56	1953	26