



**RICH MOTOR COMPANY**

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RMC Sells, Builds, & Operates  
**Power Generators**  
in Emerging markets



P 45 - 50

Data Sheet

**Output Ratings**

Voltage, Frequency	Prime	Standby
400V, 50HZ	45.0VA/36.0KWe	49.6KVA/39.7KWe
220/127, 60 HZ	53.1KVA/42.5KWe	58.7KVA/46.9KWe

**Ratings and Performance Data**

Engine Make & Model:	Perkins 1103A-33TG1		
Alternator Make and Model	OPTION A	OPTION B	OPTION C
	LSA42.3M7	TAL042F	LINZ PRO 18F/4

Control Panel	DSE6020MK2		
Base Frame	Heavy duty fabricated steel		
Circuit breaker type	3Pole MCB LS-ABB-Schneider 65A		
Frequency	50-60 Hz		
Engine Speed	1500-1800rpm		
Fuel Tank Capacity for OpenType	72L		

**Exhaust System**

	50hz	60hz
Maximum Allowable Back Pressure:		
kPa	10 kPa	15kPa
Exhaust Gas flow	m <sup>3</sup> /min	
Prime	7	8.8
Standby	7.7	9.5

Exhaust Gas temperature °C	Prime	492	510
	Standby	537	551

**Prime Rating**

Prime power: Variable load. Unlimited hours usage with an average load factor of 80% of the published prime power over each 24 hour period.

A 10% overload is available for 1 hour in every 12 hours of operation. Standby power:

Variable load. Limited to 500 hours annual usage, up to 300 hours of which may be continuous running. No overload is permitted.

**Standby Rating**

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO 8528-3).

**Standard Reference Conditions Note:**

Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A 2

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS5514/1.

**Specification**

Number of cylinders	3 vertical in-line	
Bore and stroke	105 x 127 mm	4.1 x 5 in
Displacement	3.3 litres	201 in <sup>3</sup>
Aspiration	TURBOCHARGED	
Cycle	4 stroke	
Combustion system	Indirect injection	
Compression ratio	17.25:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	7.9 litres	2.1 US gal
Cooling system	Water cooled	
Total coolant capacity	10.2 litres	2.7 US gal
Power Factor	0.8	

**Technical information**

**Air inlet**

-Mounted air filter

**Fuel system**

Rotary type pump

-Next generation fuel filter

**Lubrication system**

Wet steel sump with filler and dipstick

Spin-on full-flow lub oil filter

**Cooling system**

Thermostatically-controlled system with gear-driven circulation pump and belt-driven pusher fan

Mounted radiator, piping and guards

**Electrical equipment**

12 volt starter motor and 12 volt 65 amp alternator with DC output

Oil pressure and coolant temperature switches

12 volt shut-off solenoid energised to run

**Flywheel and housing**

1500/1800 rev/min

High inertia flywheel to SAE J620 size 10/11½

SAE 3 flywheel housing

**Mountings**

Front and rear engine mounting brackets

Data Sheet  
**P 45 - 50**



### Alternator Physical Data

Specially adapted to applications

The LSA 42.3 alternator is designed to be suitable for typical generator applications, such as: backup, marine applications, rental, telecommunications, etc.

Compliant with international standards

The LSA 42.3 alternator conforms to the main international standards and regulations: - IEC 60034, NEMA MG 1.32-33, ISO 8528-3, CSA C22.2 n°100-14, UL 1446 (UL 1004 on request), marine regulations, etc.

It can be integrated into a CE marked generator.

The LSA 42.3 is designed, manufactured and marketed in an ISO 9001 and ISO 14001 environment.

Manufactured By Leroy Somer / linz	LSA <sup>1</sup>	TAL <sup>2</sup>	LINZ <sup>3</sup>
Model	LSA42.3M7	TAL042F	LINZ PRO 18F/4
No. of Bearings:	1	1	1
Insulation Class	H	H	H
Winding Pitch Code:	2/3 (wdg 6)	2/3 (wdg 6S)	2/3 (wdg 6S)
Wires:	12	6	12
Ingress Protection Rating:	IP23	IP23	IP23
Excitation System:	SHUNT	SHUNT	SHUNT
AVR Model:	R220	R120	HVR11
Short-circuit current	-	-	-
Overspeed: rpm	2250 min-1	2250 min-1	2250 min-1
Voltage Regulation: (Steady state)	± 0.5%	± 1%	± 1%
Wave Form NEMA = TIF:	< 50	< 50	< 50
Wave Form IEC = THF:	< 2%	< 2%	< 2%
Total Harmonic content LL/LN:	< 4%	< 4%	< 4%
Radio Interference:	EN 61000-6-3, EN 61000-6-2, EN 55011 group 1 class B		
Radiant Heat: kW (Btu/min)	4022	4022	4022

Alternator	50Hz			60 HZ
	Performance Data			
Data Item	415/240V	400/230V	380/220V	220/127V
Motor Starting Capability KVA	227	130	105	*
Short Circuit Capacity %	*	*	*	*
Reactances: Per Unit				
Xd	272	245		
X'd	15	13.5		
X''d	8.2	7.4		

### Emissions

Certified against the requirements of EU 2007 (EU 97/68/EC Stage II) legislation for non-road mobile machinery, powered by constant speed engines.

### Warranty

All prime equipment, limited to 2,000 running hours per year, has a one year manufacturer's warranty. Standby equipment, limited to 500 running hours per year, has a two year manufacturer's warranty. For details on warranty cover please contact Rich Motor , or visit our website: [www.richmotor.com](http://www.richmotor.com)

Fuel consumption	1500rpm	1800rpm
Standby power	11.7L/H	14.3L/H
Prime power	10.8L/H	12.9L/H
75%	8.2L/H	9.9L/H
50%	5.83L/H	7.1L/H

**Built-In Fuel Tank Capacity: 72L**

### Recommended fuel Type and oil Type

Fuel specification: BS 2869:

Part 2 1998 Class A2 or DIN EN 590. Lubricating oil: 15W40 to API CG4.

### Controller Technical specs

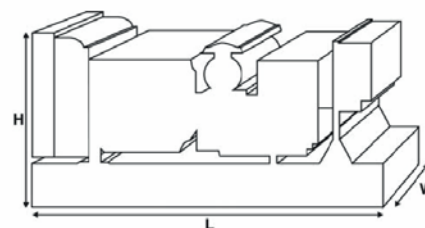
Make And **Deep Sea PLC 6020 MK2**

Model **AUTO START AND AUTO MAINS FAILURE CONTROL MODULES**

### Key

#### Feature:

- Efficient power save mode
- 3 phase generator sensing
- 3 phase mains (utility) sensing
- Generator/load power monitoring (kW, kV A, kV Ar, pf)
- Generator overload protection (kW)
- Generator/load current monitoring and protection
- Breaker control via fascia buttons
- Fuel and start outputs,
- 4 configurable DC outputs
- 4 configurable analogue/digital input
- 6 configurable digital inputs
- Support for 0-10 V & 4-20 mA oil pressure sensors
- Configurable staged loading outputs
- Configurable event log (50)
- LCD and LED alarm indicatio
- Comprehensive warning, electrical trip or shutdown protection upon fault conditio
- Engine speed protection
- Engine hours counter
- Engine pre-heat
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel pump control
- Real time cloc
- Battery voltage monitoring
- 3 engine maintenance alarms
- CAN, MPU and alternator speed sensing in one variant



### Dimensions And Weights

Length (L)	Width (W)	Height (H)	Weight (Kg)
in mm	in mm	in mm	810
1700	770	1250	

RMC is the most trusted supplier of power and O&M services in UAE and The Middle East . We build, install, and service power solutions tailored to fit any need up to 2MW.





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## Sound Proof 30-45-60 Kva

Our compact design of the 30-45-60 Kva Normal and Super enclosures ensure optimum performance in the harshest environments. Designed and Fabricated using the latest technology and high-tech equipments, RMC Enclosures are built to Last. Doors & access panels can be Opened 180 degrees to allow easy maintenace and service access. Extremely durable and robust, the enclosures are designed to resist corrosion and handling damage with the ability to withstand rough handling common on many construction sites. through the years RMC Specialist and Engineers have researched and developped the performance , looks and pratictality of the enclosure. All our enclosure are weather Proof , corrosion resistant using only galvanized steel sheet, sound absorbant material with rockwhool insulation covered with a layer of perforated galvanized steel sheet and a residential exhaust muffler . It offers durability and high sound suppression.

### Excellent Access for Maintenance

- \* 4 Access Doors for better service space
- \* 2 acces doors on the front and back
- \* Lube Oil and Coolant drainage valve
- \* external fuel filling Gauge with Level indicator

### Transportability

- \*Central Lifting points ontop of the roof
- \*Two Forklift pocket at the bottom of the Base frame facilitating handling

### Fuel Tank

- \*BuiltIn fuel tank - Extendable\*
- \*External bulk tank connection provision via ball valve mounted on the side of the enclosure

### Optional Equipment :

- Electronic fuel level sensor
- Fuel Leak detector
- Double skin tank

Manual/Automatic fuel filling pump

\* kindly referre to one of our sales team to know more about the extra options

### Sound Pressure Levels (dBA) Normal Enclosure

Generator Set Model	50Hz						60Hz						
	15m		7m		1m		15m		7m		1m		
	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	
P30	Prime	61.8	61.8	67.6	67.8	72.1	74.7	61.6	61.9	67.6	67.9	79.8	80.2
	Standby	61.7	61.8	67.7	67.8	74.0	75.3	61.7	62.0	67.7	68.0	79.9	80.4
P45	Prime	61.2	61.3	67.2	67.3	79.4	79.5	63.7	64.0	69.7	70.0	82.6	82.8
	StandBy	61.3	61.3	67.3	67.3	79.4	79.5	63.8	64.0	69.8	70.0	82.7	82.9
P60	Prime	61.6	61.5	67.6	67.5	80.5	80.4	62.4	62.7	68.4	68.7	81.9	82.3
	Standby	61.6	61.3	67.6	67.3	80.5	80.3	62.5	62.9	68.5	68.9	82.0	82.5

### Sound Pressure Levels (dBA) Super Silent Enclosure

Generator Set Model	50Hz						60Hz						
	15m		7m		1m		15m		7m		1m		
	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	75% Load	100% Load	
P30	Prime	58.8	58.8	63.6	63.8	65.9	66.2	58.8	58.8	63.6	63.8	65.9	66.2
	Standby	58.8	58.8	63.6	63.8	65.9	66.2	58.8	58.8	63.6	63.8	65.9	66.2
P45	Prime	57.2	57.3	62.2	62.3	65.4	65.5	57.2	57.3	62.2	62.3	65.4	65.5
	StandBy	57.2	57.3	62.2	62.3	65.4	65.5	57.2	57.3	62.2	62.3	65.4	65.5
P60	Prime	57.6	57.5	62.6	62.5	65.5	65.4	57.4	57.7	62.4	62.7	65.9	65.9
	Standby	57.6	57.5	62.6	62.5	65.5	65.4	57.4	57.7	62.4	62.7	65.9	65.9

### Dimensions and Weights

Genset Model	L in mm	W in mm	H in mm	Weight in Kg	Fuel Tank Capacity in L
Normal	2300	1000	1330	1050	110L
Super Silent	2670	1100	1480	1150	121L

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The mentioned data in this sheet are subject to change without prior notice , Due to continuous research and development.



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