

IDLC1025-M



Standby or Prime Power Features

- · Heavy-duty industrial diesel engine
- Brushless synchronous alternators: four-pole construction, dynamically balanced
- Full featured microprocessor based controller: fully programmable for maximum flexibility
- · Prototype tested and production tested
- · Gen-set accepts rated load in one step
- UL2200 available consult factory

- Optional weather-proof and sound attenuated enclosures available
- · Full range of accessories and options available
- Heavy-duty construction for use in prime or standby application
- Manufactured in an ISO-9001 certified facility
- Backed by a world wide network of parts and service center

Gen Set Ratings

Baldor Genset Model	kW Rating Standby	kW Rating Prime	Voltage Hi-Wye	Voltage Low- Wye	Voltage Delta	Number of Leads	Phase	Hz	Power Factor
IDLC1025-MA	1025	925	480/277	240/139	N/A	12	3	60	0.8
IDLC1025-MB	1025	925	440/254	220/127	N/A	12	3	60	0.8
IDLC1025-MB	1025	925	416/240	208/120	240/120	12	3	60	0.8
IDLC1025-MC	1025	925	380/220	N/A	N/A	12	3	60	0.8
IDLC1025-MH	1025	925	600/347	N/A	N/A	12	3	60	0.8
IDLC1025-MBX	950	850	380/220	N/A	N/A	12	3	50	0.8

NOTES: For ratings and voltages not listed above refer to the Gen-Set Selector or consult factory

Standby ratings do not have an overload capability but can be used for the duration of the utility failure per ISO-3046, DIN6271 and BS5514

Prime (Unlimited Running Time) ratings are continuous per DIN 6271 and ISO-3046 with 10% overload capacity

Base Load (Continuous) ratings are continuous per DIN 6271, BS5514 and ISO-8528 with no sustained overload capacity

Temperature derate is 1% for 10°F over 100°F ambient

Consult factory for Base Load ratings

Altitude derate is 4% for each 1000 feet over 5000

Controls Digital Control Module					
MEC2 Features	Engine Protections				
 Large Backlit LCD with alpha-numeric readout 	Digital Oil Pressure Gauge				
 Microprocessor Based Design 	 Digital Water Temperature Gauge 				
 16 programmable alarms/shutdowns set points 	 Digital Battery Voltmeter 				
 4 programmable inputs 	Overspeed Shutdown				
Alarm horn	Emergency Stop Shutdown				
 Not in Automatic Alarm 	Loss of Speed Signal				
 Digital Three Phase Voltage and Current Monitoring 	Overcrank Shutdown				
 Password Protected Front Panel Programming 					
4 Programmable Outputs	Designed To Meet/Exceed the Standards Below:				
 Local Emergency Stop Switch 	• UL 508 • NFPA 70				
Optional NFPA110 Level I	• UL 2200 • NFPA 110				

Engine Technical Data

Hertz	50Hz		60 Hz		
Manufacturer	Mitsubishi		Mitsubishi		
Engine Model	S12H-Y	′1PTA-4	S12H-Y1PTA-3		
Engine Type	4 Cycle, Water Cooled		4 Cycle, Water Cooled		
Aspiration	Turbo-Charge	d, After Cooler	Turbo-Charged, After Cooler		
No. of Cylinders & Configuration	12,	60 ⁻ V	12,	60 ⁻ V	
Displacement - cu. in liters	2265 ((37.11)	2265	(37.11)	
Bore and Stroke - in mm	5.91 X 6.89 (150 X 175)		5.91 X 6.89 (150 X 175)		
Compression Ratio	14.5:1		14.5:1		
Air Filter Type	Dry		Dry		
Governor Type	Electronic		Electronic		
Governor Make	Woodward		Woodward		
Governor Model	Woodward Pro-Act II		Woodward Pro-Act II		
Frequency Regulation, steady state	+/- 0.25%		+/- 0.25%		
Frequency Regulation, no load to full load	Isochronous		Isochronous		
Battery Voltage	24 VDC		24 VDC		
Water Pump Type	Centrifugal		Centrifugal		
Coolant Cap radiator cooled - qts - liters	184 / 174		184 / 174		
Coolant Capacity - engine only - gals - liters	26.4/100		26.4/100		
Oil Pan Capacity - gals - liters	39.6-47.6/150-180		39.6-47.6/150-180		
Rec'd Oil Type - SF/CC/CD-10°F to 90°F	10V	V-40	10W-40		
Engine Operational Values	English 50 Hz	Metric 50 Hz	English 60 Hz	Metric 60 Hz	
Maximum ambient temperature - F° - C°	104/122	40/50	104/122	40/50	
Heat rejected to coolant - Btu/min - kWm	35,904	631	41,752	734	
Max. power at rated rpm - bhp - kWm	1367	1020	1528	1140	
Coolant flow - gpm - lpm	317	1200	383	1450	
Exhaust temperature - F° - C°	1044	562	1015	546	
Exhaust flow - cfm - m ³ /min	8,086	229	9,392	266	
Normal oil press. range idle/run - PSI - kgf/cm ²	29-43/71-86	2-3/5-6	29-43/71-86	2-3/5-6	
Max fuel flow to injection pump - gph - Lph	N/A	N/A	462	1750	



Gen Set Technical Data

Alternator	Technical	Data
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Generator Frame	erator Frame 6		llation NL - FL	+/- 0.5%		
Exciter	Brushless	Underspeed Protection		Standard		
Cooling Fan	Cast allov aluminum	Overexcitatio	n Protection	Standard		
Bearing	Single, double shielded	Overvoltage Protection		Standard		
Connection Type	Reconnectable	Loss of Sens	ing Protection	Standard		
Insulation Type	Class H	Overspeed		2250 RPM		
Windings	100% copper	Standards		NEMA, IEC, IEEE, CSA, BS		
Pitch	2/3	Phase Sequence				
Amortisseur Winding	Full	TIF (1960 Weightings)		<50		
Voltage Regulator	MX321	Excitation System		PMG - Standard		
Voltage Regulator		LACITATION Sy	3(611)	FIVIG - Stario		
Alternator Performance Data		Model IDLC1025-MA	Model IDLC1025-MB	Model IDLC1025-MC	Model IDLC1025-MH	
Temperature rise by resistance - °C	(Stand-By)	150/40	150/40	150/40	150/40	
Generator model number		HCI634J	HCI634K	HCI734E	HCI634J	
Generator kW at 125/105/80°C over (480 Volt, 60Hz)	er 40°C ambient	1040/950/828	1150/1050/900	1300/1200/1040	1040/950/828	
SkVA output with 30% voltage dip 100% recovery at 60 Hz	max.	3000	3800	3800	3000	
Maximum SkVA at 90% sustained	voltage dip	Consult Baldor	Consult Baldor	Consult Baldor	Consult Baldor	
Subtransient reactance at voltage li	sted	16%	15%	17%	16%	
Line - line harmonic maximum total		5.00%	5.00%	5.00%	5.00%	
Installation/Application Data		English 50 Hz	Metric 50 Hz	English 60 Hz	Metric 60 Hz	
Ventilation requirements						
a. Cooling airflow required - cfm - r	n ³ /min (unit mounted radiator)	52,965	1,500	63,558	1,800	
b. Combustion air required - cfm -	m³/min	3,037	86	3,566	101	
Total ventilation requirements - c	fm - m ³ /min (a. + b.)	56,002	1,586	67,124	1,901	
Maximum cooling air restriction - in	.H ₂ 0 - in.hg	0.5	0.037	0.5	0.037	
Recommended minimum intake louver size (based on "free area")		56.0	1.6	67.1	1.9	
a. Heat rejected to ambient, engine	4,309	76	5,010	88		
b. Heat rejected to ambient, genera	2,704	48	2,917	51		
Total heat rejection to ambient -	7,013	124	7,927	139		
Exhaust system requirements						
Exhaust gas flow - cfm - m ³ /min		8,086	229	9,392	266	
Exhaust temperature (dry manifold)	Exhaust temperature (dry manifold) - °F - °C		562	1015	546	
Maximum back pressure - in.H ₂ O -	mm H ₂ O (inclusive of silencer)	23.6	600	23.6	600	
Exhaust outlet size - in mm		10	254	10	254	
Emissions - NO _x - g/BHP-hr - g/kW-hr		Meets EPA Tier I		5.82	7.80	
Emissions - HC - g/BHP-hr - g/kW-hr				0.37	0.50	
Emissions - CO - g/BHP-hr - g/kW-hr		Consult Baldor for values		0.52	0.70	
Emissions - PM - g/BHP-hr - g/kW	Emissions - PM - g/BHP-hr - g/kW-hr			0.11	0.15	
Fuel system requirements						
Fuel consumption - 1/4 load - gph	uel consumption - 1/4 load - gph - Lph		72	23	87	
Fuel consumption - 1/2 load - gph	- Lph	34	129	39	148	
Fuel consumption - 3/4 load - gph - Lph		49	185	56	212	
Fuel consumption - Full load - gph	64	242	75	284		
Heat Exchanger Cooling system requirements						
Minimum raw water (city water) flow	Consul	t Baldor	Consult	Consult Baldor		
INaximum supply water temperature - "F - "C						
Remote Cooling system requirem	nents					
Maximum coolant static head - ft m		Consult Baldor		Consult Baldor		
Ventilation required (based on 25°F temp rise) - cfm - lps						



Accessories and Options

Control Panel

□ Louver Relay – 10 Amp Run Relay – 10 Amp Dry Contacts For Alarms Remote E-Stop Control Panel Heater **Tachometer** Remote Annunciator Remote Communication □ Panel Lights w/Switch Generator Voltage Adjust □ Modem For Remote Communication **Engine Exhaust System** □ Industrial Silencer □ Residential Silencer Critical Silencer Exhaust Flex Exhaust Extension Rain Cap

Generator Accessories □ Main Line Circuit Breaker Exciter Field Circuit Breaker Ground Fault Module w/Breaker Shunt Trip

- Ground Fault Module w/o Breaker Shunt Trip
- □ Reconnectable Link Bars
- Drip Cover IP22
- Manual Voltage Control
- □ Space Heater
- □ RTD's Stator Windings
- □ RTD's Bearing (Rear)
- □ PMG
- □ MVC300 Manual Voltage Control

Engine Electrical System

- Batteries
- Battery Rack
- □ Battery Cables
- Battery Charger Automatic
- Battery Charger Trickle

Engine Fuel System Dav Tank

- □ Sub-Base Fuel Tank
- □ Storage Tank
- □ Flexible Fuel Lines

Miscellaneous

 Weather Proof Enclosure □ Sound Attenuated Enclosure Trailer Mounted Vibration Isolators Coolant Heater Oil Heater Bypass Oil Filter Export Crating



Dimensions – in (mm)

Weight – Ibs. (Kg) 17,295 (7828)

Cubes (Approximate) 700 ft

*Open unit configuration, accessories not included





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