MASONS POWER GENERATION

A new generation of power

REF. MPG **25.**00

MODEL | MBW65-110

- **> New PERKINS Diesel engine.**
- **> Mecc-Alte synchronous alternator.**
- **> Water cooling system.**
- **> Central lifting point**
- **> Internal residential exhaust silencer.**
- **> Baseframe capable to be moved with hand pallet truck**
- **> Complete with engine and battery liquids.**
- **> Oil draining pipe**

CONFORMS TO THE EU DIRECTIVE 2000/14

CE

TECHNICAL FEATURES					
MODEL			**MBW65P** (*)	**MBW80P** (*)	**MBW110P** (*)
CODE			SB610TPA	SB800TPA	SB101TPA
PRIME POWER PRP	**kVA** (kW)		**60,7 (48,6)**	**74,3 (59,4)**	**103 (82,1)**
EMERGENCY POWER LTP	**kVA** (kW)		**66,5 (53,2)**	**77,7 (62,2)**	**113 (90,4)**
Voltage	VAC		400/231	400/231	400/230
Frequency	Hz		50	50	50
Power factor	Cos φ		0,8	0,8	0,8
Tank capacity	Litres		120	120	120
Autonomy (100% load PRP)	h		8,6	6,6	4,1
Acustic power	LWA		94	94	95
Acustic pressure at 7m	dB(A)		69	71	70
Dimensions (LxWxH)	mm		2.380 x 1.000 x 1.301	2.380 x 1.000 x 1.301	2.380 x 1.000 x 1.301
Weight	kg		1226 / 1255	1285 / 1324	1493 / 1480
DIESEL ENGINE	**PERKINS**		**1103A-33TG2**	**1104A-44TG2**	**1104C-44TAG2**
Cooling system	Type		Water	Water	Water
Speed	r.p.m.		1.500	1.500	1.500
Displacement	c.c.		3.300	4.400	4.400
Cylinders and disposition	n° disp.		3 L	4 L	4 L
Aspiration	Type		Turbocharged	Turbocharged	Turbo - Intercooler
Power (net) - PRP	kWm		54	72	89
Fuel consumption (100% load)	l/h		14,0	18,3	29,6
Specific consumption PRP	g/kWh		219	235	279
Electric circuit	VDC		12	12	12
Engine governor (standard)	Type		Mechanical	Mechanical	Electronic (L-Series)
ALTERNATOR	**MECC-ALTE**		**ECO 32 2L**	**ECO 32 3L**	**ECP 34 2S**
Insulation	Class		H	H	H
IP degree of protection	Type		IP21	IP21	IP21
Voltage regulation	Type		Electronic (± 1)	Electronic (± 1)	Electronic (± 1)

(*) Only for non mobile applications, according to COM II regulation.

TECHNICAL CHARACTERISTICS NOT IMPEGNATIVE RESERVATION OF MODIFICATIONS FOR INNOVATION OF THE PRODUCT

MANUAL CONTROL PANEL (MCP)				
MANUAL CONTROL PANEL (MCP)		**MBW65P**	**MBW80P**	**MBW110P**
 Manual control panel mounted on the genset behind a lockable door, complete with analogue instrumentation for monitoring, control and protection of the generating set.	**Instrumentation** (analogue)	• Voltmeter with selector switch (3 phases on three phase and 1 phase on single phase). • Frequency meter. • 3xAmmeter (3 phases on three phase and 1 phase on single phase). • Hours-counter. • Fuel level indicator (not available in single phase version).		
	Commands and others	• Start/stop selector switch with key. • Emergency stop button (installed on the front door).		
	Protections with alarm	• Engine protections: low fuel level, low oil pressure, high engine temperature, battery charger failure.		
	Protections with shutdown	• Engine protection unit: low fuel level, low pressure oil, high engine temperature, battery charger failure. • Circuit breaker protection: IV poles (III poles on single phase). • Differential protection.		
	Output sockets	• Power cables connection to terminals board (Internal).		

AUTOMATIC CONTROL PANEL (ACP)

AUTOMATIC CONTROL PANEL (ACP)	MBW65P	MBW80P	MBW110P
 Automatic control panel mounted on the genset behind a lockable door, complete with digital control unit AC01 for monitoring, control and protection of the generating set.			
Digital instrumentation through AC01 control unit.	• Genereting set voltage (3 phases on three phase and 1 phase on single phase). • Mains voltage. • Generating set frequency. • Generating set current (3 phases on three phase and 1 phase on single phase). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%).		
Commands and others	• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced. • Push-buttons: start/stop, up/down selection, reset. • Emergency stop button (installed on the front door). • Remote starting availability by means of the control unit. • Acoustic alarm. • Automatic battery charger.		
Protections with alarm	• Engine protection: low oil pressure, high engine temperature, low fuel level. • Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.		
Protections with shutdown	• Engine protection: low oil pressure, high engine temperature, low fuel level. • Genset protection: under/over voltage, overload, battery charger failure, battery voltage out of limits, under/over frequency, start failure. • Circuit breaker protection: IV poles (III poles on single phase). • Differential protection by means of the control unit.		
Output and sockets	• Plinth row for connection from ACP to LTS panel. • Power cables connection to terminals board (Internal).		

AUTOMATIC CONTROL PANEL (AMF)

AUTOMATIC CONTROL PANEL (AMF)	MBW65P	MBW80P	MBW110P
			
Digital instrumentation through AC01 control unit.	• Genereting set voltage (3 phases on three phase and 1 phase on single phase). • Mains voltage. • Generating set frequency. • Generating set current (3 phases on three phase and 1 phase on single phase). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%).		
Commands and others	• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced. • Push-buttons: start/stop, up/down selection, reset. • Emergency stop button. • Remote starting availability. • Acoustic alarm. • Automatic battery charger.		
Change over contactors Mains/Genset	IV poles - 90A.	IV poles - 110A.	IV poles - 200A.
Protections with alarm	• Engine protection: low oil pressure, high engine temperature, low fuel level. • Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.		
Protections with shutdown	• Engine protection: low oil pressure, high engine temperature, low fuel level. • Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.		
Output	• Plinth row for connection from pre-wired panel (mounted on the genset) to AMF panel. • Power cables connected to terminals board (internal).		

GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

SUPPLEMENTS

>	**SKB: SOCKETS KIT B WITH 5 SOCKETS.** (1x400V/63A 3P+N+T CEE, 1x400V/32A 3P+N+T CEE, 2x230V/16A 2P+T CEE, 1x230V/16A Schuko)
>	**PHS: COOLANT PREHEATING SYSTEM.**

ACCESSORIES

ACCESSORIES

> LOAD TRANSFER SWITCH PANEL.	MBW65P	MBW80P	MBW110P
			
Change over contactors	**IV poles - 90A.**	**IV poles - 110A.**	**IV poles - 200A.**
Connections	• Plinth row for connection from ACP to LTS panel. • Terminals board for power cables connection (Genset-Mains-Load).		
Protections	• Contactors mechanically and electrically interlocked. • Emergency stop button.		
Load transfer switch panel built in a metal cabinet and supplied loose from the genset.	Automatic control panel + LTS panel measures the Mains voltage and starts automatically the genset within few seconds in case of Mains failure. It transfers immediately the load again to the genset when the Mains voltage returns within the rated values.		