



MODEL | MPW 655-1850

- > PERKINS Diesel engine.
- > Water cooling system.
- > AIR-TO-AIR Intercooler (engine Series TAG).
- > AIR-TO-WATER Intercooler (engine Series TWG).
- > Residential muffler.
- > Sound pressure level 70dB(A) at 7m.
- > Manual oil draining pump with pipe.
- > Automatic control panel mounted on the genset.
- > Main circuit breaker mounted on the genset.



MODEL		MPW655	MPW740	MPW800	MPW975	MPW1020	MPW1250	MPW1320	MPW1500	MPW1700	MPW1850
CODE		SI651TPA	SI741TPA	SI801TPA	SI971TPA	SI102TPA	SI122TPA	SI132TPA	SI152TPA	SI172TPA	SI182TPA
PRIME POWER PRP	kVA (kW)	642 (514)	731 (585)	800 (640)	980 (784)	1006 (805)	1235 (988)	1315 (1052)	1499 (1199)	1689 (1351)	1846 (1477)
STANDBY POWER LTP	kVA (kW)	710 (568)	807 (646)	860 (688)	1010 (808)	1110 (888)	1350 (1080)	1350 (1080)	1649 (1319)	1770 (1416)	2030 (1624)
Voltage (three phases)	Volt	400/231	400/231	400/231	400/231	400/231	400/231	400/231	400/231	400/231	400/231
Frequency	Hz	50	50	50	50	50	50	50	50	50	50
Power factor	Cos φ	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Fuel capacity	Litres	120	120	120	120	120	120	120	120	120	120
Autonomy (100% load PRP)	h	0,82	0,69	0,63	0,50	0,48	0,41	0,40	0,35	0,30	0,28
Dimensions (LxWxH)	mm	5075x1870x2620	6550x2000x3450	6550x2000x3450	7260x2100x3500	7160x2100x3500	7410x2100x3700	7410x2500x4050	7410x2500x4050	7980x2400x3800	8970x3000x3820
Weight	kg	6.410	8.456	8.456	9.873	10.105	12.150	13.260	13.558	16.450	17.750
DIESEL ENGINE	PERKINS	2806C-E18TAG2	4006C-23 TAG2A	4006-23 TAG3A	4008 TAG2A	4008 TAG2A	4012 TWG2	4012 TAG1A	4012 TAG2A	4016 TWG2	4016 TAG1A
Cooling system	Type	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Speed	r.p.m.	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Displacement	c.c.	18.100	22.921	22.921	30.561	30.561	45.842	45.842	45.842	61.123	61.123
Cylinders and disposition	n° disp.	6 L	6 L	6 L	8 L	8 L	12 V	12 V	12 V	16 V	16 V
Aspiration	Type	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CWC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CWC	Turbocharged with CAC
Net engine power PRP (with fan)	kWm	542	620	679	861	861	1.044	1.136	1.254	1.406	1.537
Net engine power LTP (with fan)	kWm	599	685	760	947	947	1.154	1.250	1.380	1.550	1.690
Fuel consumption (100% load)	l/h	128	151	166	211	219	255	263	300	348	375
Engine governor (standard)	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
SYNCHRONOUS ALTERNATOR	STAMFORD / MECC-ALTE	ECO 40 1.5L	Eco 40 2L	ECO 43 1S	ECO 43 2S	ECO 43 1L	ECO 43 2L	ECO 43 2L	PI 734 C	PI 734 D	ECO 46 2S
Insulation	Class	H	H	H	H	H	H	H	H	H	H
Mechanical degree of protection	Type	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
Voltage regulation	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Sustained short circuit current	Icc / Time	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 10 sec.	3 x In / 10 sec.	3 x In / 20 sec.

AUTOMATIC/MANUAL CONTROL PANEL (ACP)	MPW655	MPW740	MPW800	MPW975	MPW1020	MPW1250	MPW1320	MPW1500	MPW1700	MPW1850
 <p>Automatic control panel mounted on the genset, complete with digital control unit DST4600A for monitoring, control and protection of the generating set.</p> 	<ul style="list-style-type: none"> • Generating set voltage (3 phases). • Mains voltage. • Generating set frequency. • Generating set current (3 phases). • Battery voltage. • Active power (kW). • Reactive power (kVAR). • Apparent power (kVA). • Power factor (cos φ). • Start-counter. • Active energy counter (kWh) no fiscal. • Hours-counter. • Oil pressure (optional). • Engine coolant temperature (optional). 	<ul style="list-style-type: none"> • Key operated mode selector switch: Automatic starting - Manual starting - Program - OFF/RESET - Test. • Engine start push button. • Engine stop push button. • Emergency stop push button. • Acoustic alarm silencing push button. • UP/DOWN push button for display selection. 	<ul style="list-style-type: none"> • Automatic battery charger. • Engine coolant preheating system power supply (single phase). • Acoustic alarm. • Programmable periodic test. • Genset report. 	<p>Battery failure (maximum/minimum voltage), pre-alarm for low oil pressure, pre-alarm for high engine coolant temperature.</p>	<p>High engine coolant temperature, low oil pressure, overspeed (derived from generator frequency), engine over-crank, generator overload (derived from external contact of MCB), fuel reserve with delayed shutdown, no fuel, emergency stop.</p>	<p>Belts failure, overload and short circuit (electronic protection), running under conditions not reached, generator under voltage, generator over voltage, generator under frequency, generator over frequency, maximum power, free alarm (w/o shutdown), power reverse, closing of Mains contactor or genset contactor failed, stop failure.</p>				
Digital instrumentation through DST4600A control unit.										
Commands and others										
Auxiliary services										
Protections without shutdown										
Protections with shutdown										
Alarms shown on display										

TECHNICAL CHARACTERISTICS NOT IMPREGIATIVE. RESERVATION OF MODIFICATIONS FOR INNOVATION OF THE PRODUCT.

MAIN CIRCUIT BREAKER PANEL		MPW655	MPW740	MPW800	MPW975	MPW1020	MPW1250	MPW1560	MPW1880	MPW1700	MPW1850
MAIN CIRCUIT BREAKER PANEL	Nominal current (In)	1000A	1250A	1250A	1600A	1600A	2000A	2500A	3200A	3200A	4000A
	Main features	<ul style="list-style-type: none"> Number of poles: III poles. Type of construction: fix moulded case. Operating type: automatic. Use category (EN60947-2): Curve B. Current transformers and tripping coil. Electronic protection by interchangeable relays for maximum current against overloads and short-circuits for alternate current. Rated service voltage (Ue) 50/60Hz: 690V. 									
		Supplied in a separate panel (made of steel sheets) for mounting on the baseframe. It protects the generator against overloads (thermal section) and short circuits (magnetic section).									



GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

GS	> EFO: EXTENDED CAPACITY ON BASE FUEL TANK.
	> DPP: DIFFERENTIAL PROTECTION.
	> AFP: AUTOMATIC REFUELING SYSTEM.
	> RES: RESIDENTIAL SILENCER.
	> PHS: COOLANT PREHEATING SYSTEM. It is absolutely necessary for starting under ambient conditions < +10°C.

CONTROL PANEL SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

CPS	> TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.
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ACCESSORIES

LOAD TRANSFER SWITCH PANEL		MPW655	MPW740	MPW800	MPW975	MPW1020	MPW1250	MPW1560	MPW1880	MPW1700	MPW1850
ACCESSORIES	Motorized change over contactors	IV poles - 1250A			IV poles - 1600A		IV poles - 2000A	IV poles - 2500A	IV poles - 3200A		IV poles - 4000A
	Commands	<ul style="list-style-type: none"> Motorized contactors integrated into Sircover (SOCOME) device. 3 positions selector switch, placed on the front of the panel, which allows selecting manually the following positions: <ul style="list-style-type: none"> ⇒ AUTO: operating mode based on the automatic logic control DST4600A. ⇒ MAINS: Mains power supply forcement. ⇒ GENSET: Genset power supply forcement. Manual pulley, placed on the own change over contactors, for emergency load transfer. 									
	Connections	<ul style="list-style-type: none"> Plinth row for connection from MCB (main circuit breaker) to LTS panel. Terminals board for power cables connection (GENSET - MAINS - LOAD). 									
	Protections	<ul style="list-style-type: none"> Mechanically and electrically interlocked. 2 visual LED's to show the contactors position: MAINS - GENSET. Mechanical degree of protection: IP40 (external) and IP20 (internal). 									
	  Load transfer switch panel built in a metal cabinet and supplied loose from the genset.	<p>Automatic control panel + LTS panel measures the Mains voltage and starts automatically the genset within few seconds to supply load in case of Mains failure. It transfers immediately the load back to the Mains when its voltage returns within the rated values.</p> 