



POWER PRODUCTS

50Hz

7,5kVA - 880kVA

ENGLISH

PPR50/GB-2002/1



**Global Power
Solution™**



POWER PRODUCTS

50_{Hz}



Since its creation in 1966, SDMO[®] Industries has chosen to specialize exclusively in generating sets, so as to concentrate on the competitiveness and quality of its services. From this specialization, SDMO[®] has acquired skills recognized by all of its customers.

SDMO[®] is now one of the world's leading companies in the generating set market and is committed to supplying you with impeccable products.



Specializing in the manufacture of generating sets, SDMO[®] offers you a wide range of standard sets, from 1 to 2250 kVA. Its teams, spread over 3 production sites, have skills at the leading edge of the new technologies and of manufacturing processes. Each team works on a common data base, and specializes in a range of standard products, thus increasing its efficiency. SDMO[®] undertakes to supply you with a reliable, innovative and quality electrical energy source, to accompany you in each of your projects.

the generating set specialist



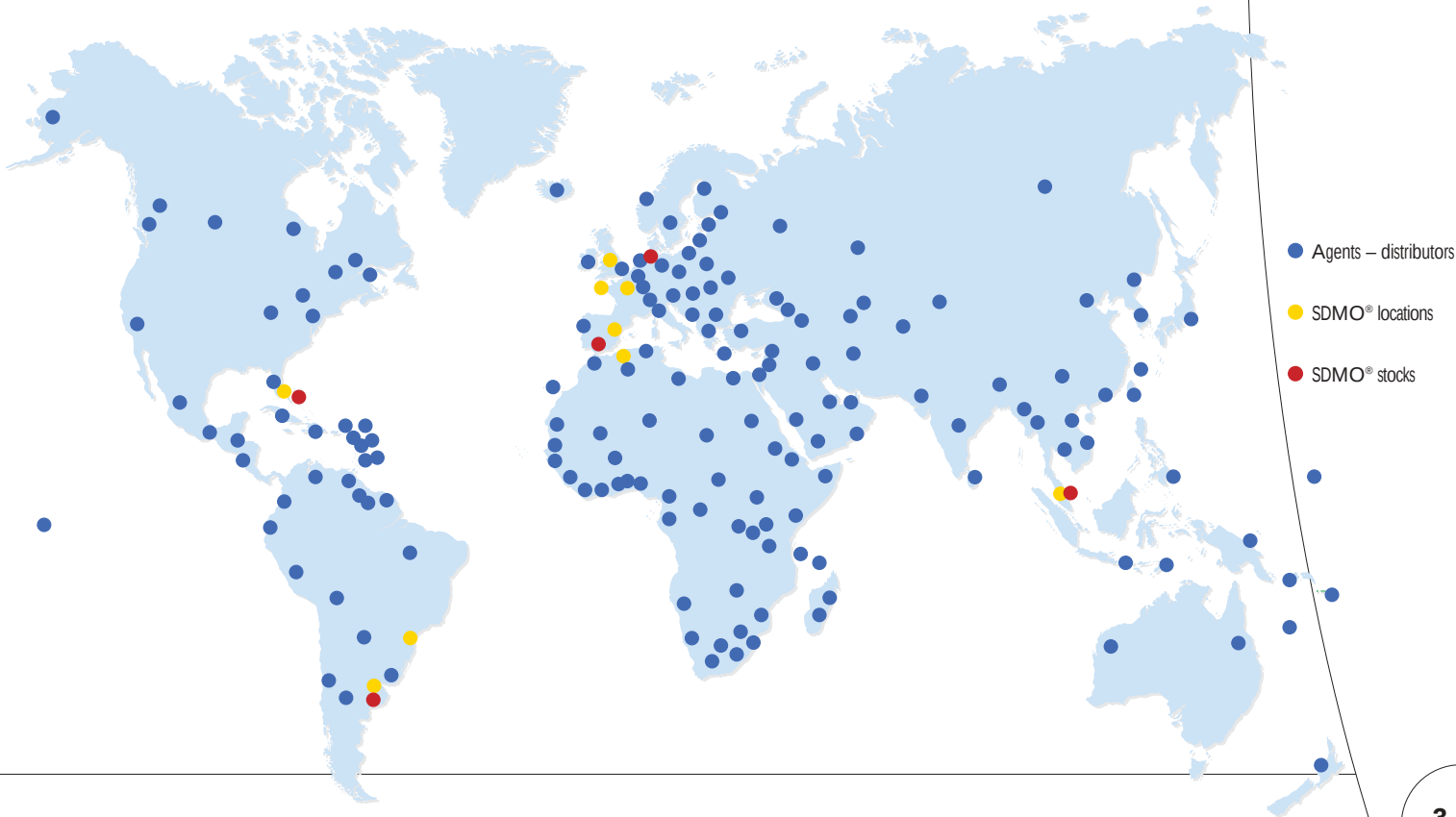
In order to provide you with proof of reliability, SDMO® has introduced a quality procedure. Its careful compliance with this commitment has made it possible to obtain ISO 9001 certification. For you this is the guarantee that delivery will take place on time, with the best possible monitoring of your order. The reputation for service quality acquired by SDMO® all over the world is the result of this continuous search for improvement.



From its strong base in France, SDMO® has developed its export business. Now present in over 150 countries, through a network of agents, distributors, 6 subsidiaries and a liaison office, all established in England, Spain, Singapore, Brazil, Argentina, the United States and in North Africa, SDMO® devotes its energy to accompanying you in the successful completion of each of your projects, all over the world.



SDMO® is committed to supplying you with the energy source which suits you, where you need it





POWER PRODUCTS

50Hz

SDMO® Power Products from 7,5 kVA to 880 kVA



SDMO® Industries offer you a complete Power Products range of standard generating sets, from 7.5 to 880 kVA.

Multi-voltage, whether for continuous use or standby use, you choose the set which suits you and you define its functionalities by means of a wide range of options.



MODULARITY :

Simplicity and adaptability :

this is the assurance SDMO® Industries make in offering you modular sets. Indeed, the particularly easy addition of electric options is made possible by standardized modules, with an optimized layout of the control equipment, as well as increased accessibility for maintenance.

From 7.5 to 80 kVA, you have additional modularity with the concept of a canopy which can be installed at a later date.

Thus, you can at any time upgrade your set's functionalities to suit your needs.



THE ELECTRICAL EQUIPMENT PANELS :

MICS® TELYS

From 16 kVA upwards, all generator sets can be equipped with the MICS® Telys.

This monitoring/control panel incorporates all the controls, safety devices and display of the states of the set.

It covers all alternator voltages from 208 Volts to 600 Volts (3-phase), irrespective of battery voltage, frequency, current and engine power output.

With a very user-friendly man-machine interface, it is possible to program many facilities thanks to a microcontroller. The latter makes it possible to have 150 configuration parameters, accessible in read only in order to monitor the set's operating state, or by access code for modification.

In addition, the MICS® Telys has a new wiring concept, permitting the connection of options via an array of marked connectors.



THE CANOPIES :

MODULARITY AND EASE OF USE :

10 canopies are available on the whole of the range, to suit the set's power output and the sound level required where the set is to be used. From 7.5 to 80 kVA, the modularity concept features again. There is a kit for converting the material on site or for fitting outside the factory, from centralized stock. Thus, you can convert a compact set into a soundproofed version.

LWA 99 max. (3000 rpm)/

LWA 96,4 max. (1500 rpm).

SDMO® Power Products from 7,5 kVA to 44 kVA



POWER PRODUCTS

50Hz



JOHN DEERE



**PACIFIC
TN 20**



**MONTANA
JM 20**

3-PHASE GENSETS

GENERAL SPECIFICATIONS														PACIFIC / MONTANA					
Range	Type of genset	Genset specifications 400/230 V ⁽¹⁾						Engine specifications						Alternator		Compact Version ⁽⁴⁾			
		kVA Cos φ 0,8		kWe ISO 8528*		Engine		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	TA Luft ⁽³⁾	Brand	Type	Dimensions L x w x h (m)	Weight ⁽⁵⁾ (kg)	Tank (L)	
		PRP ⁽⁶⁾	ESP ⁽⁷⁾	PRP ⁽⁶⁾	ESP ⁽⁷⁾	kWm net ⁽²⁾	Consump. 75% load (L/h)												
3000 rpm	TN 16 K	-	15	-	12	19	4,4	S3L2 SDH	3L	78	92	1,3	●	MA	BTO3-1L	1,28x0,67x0,95	335	43	
	TN 20 K	-	20	-	16	19	5,0	S3L2 SDH	3L	78	92	1,3	●	MA	ECO3-2L	1,28x0,67x0,95	335	43	
1500 rpm	TM 7,5 K	-	7,5	-	6	6,7	1,7	L3 E SD	3L	76	70	1,0	●	MA	ECO3-2S	1,28x0,67x0,89	260	43	
	TM 11,5 K	-	11,5	-	9,2	10,3	2,5	S3L2 SD	3L	78	92	1,3	●	MA	ECO3-1L	1,28x0,67x0,95	335	43	
	TM 16 K	-	16	-	12,8	15,1	3,1	S4L2 SD	4L	78	92	1,8	●	MA	ECO28S	1,4x0,78x1,02	443	100	
	JM 20	20	22	16	17,6	27	3,6	3029 DF 120	3L	106	110	2,9	X	MA	ECO28-1L	1,46x0,78x1,18	758	100	
	JM 30	30	33	24	26,4	27	5,2	3029 DF 120	3L	106	110	2,9	X	MA	ECO 28 VL	1,53x0,78x1,18	795	100	
	JM 40 K	40	44	32	35,2	36,4	8,4	3029 TF 120	3L	106	110	2,9	●	MA	ECO32-3S	1,52x0,78x1,18	847	100	

1-PHASE GENSETS

GENERAL SPECIFICATIONS											PACIFIC / MONTANA					
Range	Type of genset	Genset specifications 230 V ⁽¹⁾				Engine specifications						Alternator		Compact Version ⁽⁴⁾		
		kW _e ISO 8528*		Engine		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	TA Luft ⁽³⁾	Brand	Type	Dimensions L x w x h (m)	Weight ⁽⁵⁾ (kg)	Tank (L)
		PRP ⁽⁶⁾	ESP ⁽⁷⁾	kW _m net ⁽²⁾	Consump. 75% load (L/h)											
3000 tr/mn	TN 15 KM	-	11,5	19	5,0	S3L2 SDH	3L	78	92	1,3	●	MA	ECO3-2L	1,28x0,67x0,95	335	43
1500 tr/mn	TM 7,5 KM	-	5,5	6,7	1,7	L3 E SD	3L	76	70	1,0	●	MA	ECO3-2S	1,28x0,67x0,89	260	43
	TM 11,5 KM	-	8,6	10,3	2,5	S3L2 SD	3L	78	92	1,3	●	MA	ECO28S	1,28x0,67x0,95	390	43
	TM 16 KM	-	12,1	15,1	3,4	S4L2 SD	4L	78	92	1,8	●	MA	ECO28-1L	1,4x0,78x1,02	500	100
	JM 20 M	18,5	20,4	27	3,6	3029 DF 120	3L	106	110	2,9	X	MA	ECO28VL	1,46x0,78x1,18	795	100

(1) Available in the following voltages : 415/240 V - 400/230 V - 380/220 V - 240 V - 230 V - 220 V - 220/127 V - 200/115 V - 240/120 V - 230/115 V - 220/110 V (2) Prime Power (PRP)

(3) Generating sets equipped with TA LUFT certified engines (Nox<4000 mg/Nm³, CO<650 mg/Nm³, HC<150 mg/Nm³, PM<130 mg/Nm³) (4) Version with canopy, see page 13 (5) Dry weight, without fuel

(6) PRP : Prime Power - Continuous duty 24/24 H under variable load - 10% overcharge acceptable 1 h / 12 h (ISO 8528 PRP) (7) ESP : Standby Power - Standby duty - Operation under variable charge 500 h/year without overcharge - For continuous use, derated 10% * ISO 8528 : Ratings are given for a 25°C ambient temperature. Derating, please contact us or refer to Data sheet - Alt : 100 m above sea level.

● Standard X Impossible



POWER PRODUCTS

50Hz



JOHN DEERE

**MONTANA
JS 100**



**MONTANA
JS 150**



3-PHASE GENSETS

GENERAL SPECIFICATIONS

MONTANA

Type of genset	Genset specifications 400/230 V ⁽¹⁾						Engine specifications						Alternator		Compact Version ⁽⁴⁾		
	kVA Cos φ 0,8		ISO 8528*		Engine		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	TA Luft ⁽³⁾	Brand	Type	Dimensions ⁽⁵⁾ L x w x h (m)	Weight ⁽⁶⁾ (kg)	Tank (L)
	PRP ⁽⁶⁾	ESP ⁽⁷⁾	PRP ⁽⁶⁾	ESP ⁽⁷⁾	kW/m net ⁽²⁾	Consump. 75% load (L/h)											
JS 60 K	60	66	48	52,8	61	12	4045 TF 120	4L	106	127	4,5	●	LS	432 L6	1,87x0,99x1,36	1090	180
JS 70 K	70	77	56	61,6	61	12	4045 TF 120	4L	106	127	4,5	●	LS	432 L8	1,87x0,99x1,36	1110	180
JS 80 K	80	88	64	70,4	73	14	4045TF220	4L	106	127	4,5	●	LS	432 L8	1,87x0,99x1,36	1110	180
JS 100 K	100	110	80	88	88	16,5	4045HF120	4L	106	127	4,5	●	LS	442 S7	1,91x0,81x1,43	1210	140
JS 120 K	120	132	96	106	106	18,5	6068 TF 220	6L	106	127	6,7	●	LS	442 S7	2,42x0,91x1,75	1450	300
JS 150 K	150	165	120	132	136	25	6068 HF 120	6L	106	127	6,7	●	LS	442 L11	2,42x0,95x1,75	1580	300
JS 180 K	180	198	144	158	163	34,5	6068 HF 160	6L	106	127	6,7	●	LS	462 M3	2,42x0,95x1,75	1610	300

(1) Available in the following voltages : 415/240 V - 400/230 V - 380/220 V - 220/127 V - 200/115 V - 240/120 V - 230/115 V - 220/110 V (2) Prime Power (PRP)

(3) Generating sets equipped with TA LUFT certified engines (Nox<4000 mg/Nm³, CO<650 mg/Nm³, HC<150 mg/Nm³, PM<130 mg/Nm³) (4) Version with canopy, see page 13 (5) Dimensions given with alternator box, except JS 60 to 80 (6) PRP : Prime Power - Continuous duty 24/24 H under variable load - 10% overcharge acceptable 1 h / 12 h (ISO 8528 PRP) (7) ESP : Standby Power - Standby duty - Operation under variable charge 500 h/year without overcharge - For continuous use, derated 10% (8) Dry weight, without fuel * ISO 8528 : Ratings are given for a 25°C ambient temperature. Derating, please contact us or refer to Data sheet - Alt : 100 m above sea level.



POWER PRODUCTS

50Hz

VOLVO
PENTA



ATLANTIC
GS 250



ATLANTIC
GS 500



3-PHASE GENSETS

GENERAL SPECIFICATIONS														ATLANTIC				
Type of genset	Genset specifications 400/230 V ⁽¹⁾						Engine specifications						Alternator		Compact Version ⁽⁴⁾			
	kVA Cos φ 0,8		kW _e ISO 8528*		Engine		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	TA Luft ⁽³⁾	Brand	Type	Dimensions L x w x h (m)	Weight ⁽⁵⁾ (kg)	Tank (L)	
	PRP ⁽⁶⁾	ESP ⁽⁷⁾	PRP ⁽⁶⁾	ESP ⁽⁷⁾	kW _{net} ⁽²⁾	Consump. 75% load (L/h)												
GS 200 K	200	220	160	176	178	31,8	TWD 740 GE	6L	107	135	7,3	●	LS	462 M5	2,70x0,91x1,77	1965	300	
GS 250 K	250	275	200	220	217	37,5	TAD 740 GE	6L	107	135	7,3	●	LS	462 L6	3,02x1,07x1,83	2235	380	
GS 300 K**	300	330	240	264	262	47	TWD 1210 G	6L	130	150	12,0	●	LS	462 VL12	3,13x1,07x1,82	2665	360	
GS 375 K**	375	413	300	330	323	58,9	TAD 1232 GE	6L	130	150	12,0	●	LS	471 M6	3,25x1,07x1,88	2760	360	
GS 400 K**	400	440	320	352	353	63,1	TWD 1630 G	6L	144	165	16,1	●	LS	471 M6	3,27x1,27x1,95	3180	500	
GS 450 K	450	495	360	396	398	70,8	TAD 1630 GE	6L	144	165	16,1	●	LS	471 L9	3,56x1,27x2,00	3365	500	
GS 500 K	500	550	400	440	430	76,9	TAD 1631 GE	6L	144	165	16,1	●	LS	471 VL12	3,64x1,27x1,95	3370	500	

GENERAL SPECIFICATIONS														OCEANIC			
Type of genset	Genset specifications 400/230 V ⁽¹⁾						Engine specifications						Alternator		Compact Version ⁽⁴⁾		
	kVA Cos φ 0,8		kW ISO 8528*		Engine		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	TA Luft ⁽³⁾	Brand	Type	Dimensions L x w x h (m)	Weight ⁽⁵⁾ (kg)	Tank (L)
	PRP ⁽⁶⁾	ESP ⁽⁷⁾	PRP ⁽⁶⁾	ESP ⁽⁷⁾	kW _m net ⁽²⁾	Consump. 75% load (L/h)											
PW 650 K	650	715	520	572	551	101,9	3012 TAG 1B	12 V	135	152	26,1	●	NW	HCKI 544 F	3,48x1,39x1,94	4675	X
PW 800 K	800	880	640	704	689	127,5	3012 TAG 3A	12 V	135	152	26,1	●	NW	HCI 634 G	3,72x1,40x1,95	5020	X

(1) Available in the following voltages : 415/240 V - 400/230 V - 380/220 V - 200/115 V - 240/120 V - 230/115 V - 220/110 V (2) Prime Power (PRP)

(3) Generating sets equipped with TA LUFT certified engines (Nox<4000 mg/Nm³, CO<650 mg/Nm³, HC<150 mg/Nm³, PM<130 mg/Nm³) (4) Version with canopy, see page 13 (5) Dry weight, without fuel

(6) PRP : Prime Power - Continuous duty 24/24 H under variable load - 10% overcharge acceptable 1 h / 12 h (ISO 8528 PRP) (7) ESP : Standby Power - Standby duty - Operation under variable charge 500 h/year without overcharge - For continuous use, derated 10% * ISO 8528 : Ratings are given for a 25°C ambient temperature. Derating, please contact us or refer to Data sheet - Alt : 100 m above sea level. ** New engine scheduled for 2nd half 2002

● Standard

GAS-POWERED GENERATING SETS

SDMO® Industries are offering a new series of sets from 25 to 95 kVA, equipped with gas engines. Tuned to run when they leave the factory on natural gas, each set has the LPG tuning option. The combustion of gas (natural or LPG) permits a significant reduction in vibrations and consequently in the sound volume of the engines : the noise level is halved compared with a diesel engine. Of all the fuels, natural gas and LPG are those which emit least carbon monoxide, so emissions of carbon monoxide and particles are very limited. From all the tests carried out to date on these new gas engines we note a very good pick-up capability, all the more so when LPG is used.



POWER PRODUCTS

50Hz

GM
GENERAL
MOTORS

NEVADA
KM 25



NEVADA
KS 60



3-PHASE GENSETS

GENERAL SPECIFICATIONS

NEVADA

Range	Type of genset	Genset specifications 400/230 V ⁽¹⁾						Engine specifications					Alternator		Compact Version ⁽⁴⁾	
		kVA ⁽²⁾ Cos φ 0,8 PRP ⁽⁶⁾ ESP ⁽⁷⁾		kWe ⁽²⁾ ISO 8528* PRP ⁽⁶⁾ ESP ⁽⁷⁾		Engine kWm net ⁽³⁾ Consump. 75% load (m³/h)		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	Brand	Type	Dimensions ⁽⁵⁾ L x w x h (m)	Weight (kg)
1500 rpm	KM 25 G	25	27,5	20	22	24,4	5,66	GMC430	4L	102	91	3,0	MA	ECO 28 VL/4	1,58x0,78x1,22	580
	KM 40 G	40	44	32	35,2	34,5	8,32	GMC 643	6V	102	88	4,3	MA	ECO 32.3 S	1,97x0,75x1,42	780
	KS 60 G	55	60	44	48	51,5	12,57	GMC 857	8V	102	88	5,7	LS	432 L 6	2,03x0,75x1,42	860
	KS 85 G	85	93,5	68	74,8	91	20,97	GMC 874 T	8V	108	102	7,4	LS	442 S 7	2,15x0,75x1,42	1160

1-PHASE GENSETS

GENERAL SPECIFICATIONS

NEVADA

Range	Type of genset	Genset specifications 230 V ⁽¹⁾				Engine specifications					Alternator		Compact Version ⁽⁴⁾	
		kWe ⁽²⁾ ISO 8528* PRP ⁽⁶⁾ ESP ⁽⁷⁾		Engine kWm net ⁽³⁾ Consump. 75% load (m³/h)		Engine type	Cyl.	Bore (mm)	Stroke (mm)	Cyl. (L)	Brand	Type	Dimensions ⁽⁵⁾ L x w x h (m)	Weight (kg)
1500 rpm	KM 25 GM	20	22	24,4	5,66	GMC430	4L	102	91	3,0	MA	ECO 32.3S	1,58x0,78x1,22	630

(1) Available in the following voltages : 415/240 V - 400/230 V - 380/220 V - 240 V - 230 V - 220 V - 220/127 V - 200/115 V - 240/120 V - 230/115 V - 220/110 V
 (2) The power outputs are given for an engine tuned to run on natural gas (3) Prime Power (4) Version with canopy, see page 13 (5) Dimensions given with alternator box, except KM 25 to 40
 (6) PRP : Prime Power - Continuous duty 24/24 H under variable load - 10% overcharge acceptable 1 h / 12 h (ISO 8528 PRP) (7) ESP : Standby Power - Standby duty - Operation under variable charge 500 h/year without overcharge - For continuous use, derated 10%
 * ISO 8528 : Ratings are given for a 25°C ambient temperature. Derating, please contact us or refer to Data sheet - Alt : 100 m above sea level.



POWER PRODUCTS

50Hz



Air - filter with replaceable cartridge

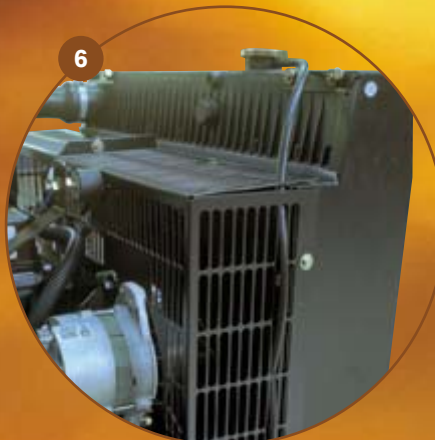


(delivered loose)

29 dB residential silencer and flexible



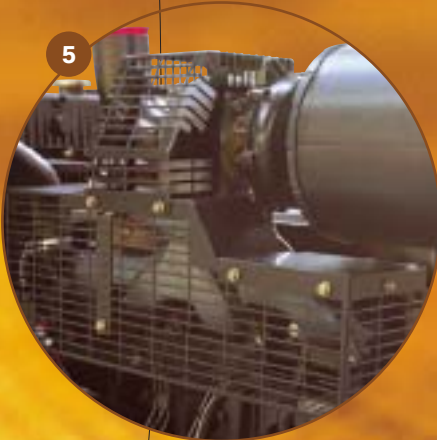
Automatic fuel fill kit
for frame tank



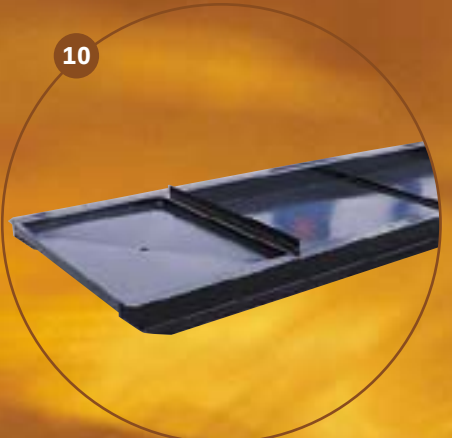
Protective guards
for rotating parts



29 dB residential silencer



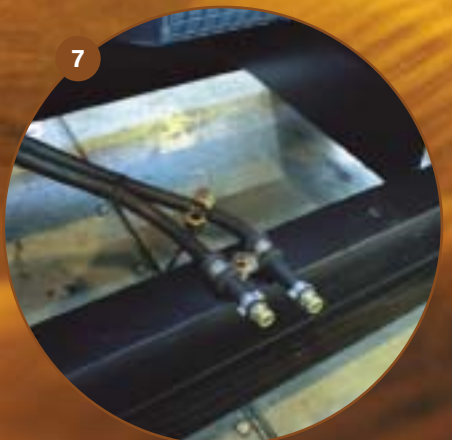
Protective guard
for hot parts



Retention tank



Disposable fuel filter



Fuel inlet/return connections
(when tank deleted)



Security kit



optional equipment

EQUIPMENTS

Standard and Options

	PACIFIC		MONTANA			ATLANTIC	OCEANIC	NEVADA	
	TN 16 TN 20 TM 7,5 TM 11,5	TM 16	JM 20 JM 30 JM 40	JS 60 JS 70 JS 80	JS 100 JS 120 JS 150 JS 180			KM 25	KM 40 KS 60 KS 85
Motor	4-stroke liquid-cooled diesel engine	●	●	●	●	●	●	X	X
	4-stroke liquid-cooled gas engine	X	X	X	X	X	X	●	●
	Mechanical governor	●	●	●	●	X	X	X	X
	Electronic governor	X	X	EN 01	EN 01	EN 01	●	●	●
	Standard air-filter	●	●	●	●	●	●	●	●
	Air filter with replaceable cartridge ⁽¹⁾	X	EN 02	EN 02	EN 02	EN 02	X	X	X
	Coolant heater 220/240 V	EN 20	EN 20	EN 20	EN 20	EN 20	EN 20	EN 20	EN 20
	Coolant heater 120v with thermostat	X	X	X	X	X	X	X	EN 21
Alternator	IP 21 single-bearing alternator class H insulation	●	●	●	X	X	●	●	●
	Anti condensation heater	X	X	X	AL 01	AL 01	AL 01	X	AL 01
	Tropical impregnation	X	X	X	AL 05	AL 05	AL 05	X	AL 05
	Synchronizing C.T. + 3 fonction regulator	X	X	X	X	O ⁽¹⁾	O	X	X
	PMG + R438 Regulator	X	X	X	AL 06	AL 06 ⁽²⁾	X	AN 04	AL 06
	IP 23	X	X	X	●	●	AN 07	X	● ⁽³⁾
Genset	Electric panel compliance	●	●	●	●	●	●	●	●
	Compliance with CSA NRTL/C	O	O	O	O	O	CEL 04	●	●
	Output breaker	●	●	●	●	●	●	●	●
	Fabricated all welded baseplate with anti-vibration mountings	●	●	●	●	●	●	●	●
	Users multilingual ⁽⁴⁾ manual level A ⁽⁶⁾ (1 copy)	●	●	●	●	X	X	●	●
	Technical documentation language to choice ⁽⁵⁾ level A ⁽⁶⁾ (1 copy)	X	X	X	X	●	●	X	X
	German version	AD 12	AD 12	AD 12	AD 12	X	X	X	X
Oil	Standard colour RAL9005/5007 (black/blue) delivered in shrinkwrap	●	●	●	●	●	●	●	●
	Supplied with oil and coolant (-30°C)	●	●	●	●	●	●	●	●
	Lub oil drain valve + diesel oil or gas flexible	●	●	●	●	●	●	●	●
	Lub oil drain pump	X	EN 04	EN 04	EN 04	O ⁽⁹⁾	O ⁽⁹⁾	X	O
Exhaust	Silencer 9 dB(A) supplied separately ⁽²⁾	●	●	●	●	●	X	●	●
	Silencer 9 dB(A) not supplied	EN 07	EN 07	EN 07	EN 07	EN 07	X	EN 07	EN 07
	Silencer 9 dB(A) supplied fitted (not compatible with CEL 02)	EN 12	EN 12	EN 12	EN 12	X	X	X	X
	Silencer 29 dB(A) supplied separately ⁽⁴⁾	EN 08	EN 08	EN 08	EN 08	EN 08	X	EN 08	EN 08
	Silencer 40 dB(A) supplied separately	EN 09	EN 09	EN 09	EN 09	EN 09	X	EN 09	EN 09
	40 cm extension	EN 13	EN 13	EN 13	EN 13	X	X	X	X
	Exhaust outlet with flexible and flanges	X	X	X	X	EN 11	X	X	X
	Flexible ⁽³⁾	EN 10	EN 10	EN 10	EN 10	X	X	EN 10	EN 10
Cooling	Heat hand protection ("CE" requirement) ⁽⁵⁾	CEL 02	CEL 02	CEL 02	CEL 02	CEL 02	X	CEL 02	CEL 02
	Mounted radiator for "air on" temp. 50°C (depending on version) with drain cock	●	●	●	●	●	●	●	●
	Delivered without coolant	FD 11	FD 11	FD 11	FD 11	FD 11	FD 11	FD 11	FD 11
	Protection mesh for fan and revolving parts ⁽⁶⁾	●	●	●	●	●	●	●	●
	Front rad protection	EN 14	EN 14	EN 14	EN 14	EN 14	EN 14	EN 14	EN 14
Starting	Starter and charge alternator	12 V	12 V	12 V	12 V	24 V	24 V	12 V	12 V
	Battery with cables and battery tray	●	●	●	●	●	●	●	●
	Non-supply of batteries and tray (cables still supplied)	EN 15	EN 15	EN 15	EN 15	EN 15	EN 15	EN 15	EN 15
	Battery isolator	EN 16	EN 16	EN 16	EN 16	EN 16	EN 16	EN 16	EN 16
Fuel	Inbuilt fuel tank	●	●	●	●	●	●	X	X
	Fuel inlet/return connections (when tank deleted) ⁽⁷⁾	FD 01	FD 01	FD 01	FD 01	FD 01 ⁽¹⁰⁾	FD 01	X	X
	Non-supply of fuel tank	X	X	X	X	O ⁽¹¹⁾	FD 03	X	X
	Loose manual fuel pump for barre	FD 09	FD 09	FD 09	FD 09	X	X	X	X
	Automatic fuel fill kit for frame tank ⁽⁹⁾	X	X	X	FD 15	FD 15	FD 15	X	X
	Automatic fuel fill kit for separate tank	FD 08	FD 08	FD 08	FD 08	O	O	X	X
	Retention bund on DT ⁽¹⁰⁾	FD 04 ⁽⁹⁾	FD 04 ⁽⁹⁾	FD 04 ⁽⁹⁾	●	FD 04	FD 04	FD 04 ⁽⁹⁾	FD 04
	Retention bund alarm	X	X	X	FD 14	FD 14	FD 14	X	X
	W separator fuel prefilter ⁽⁸⁾	FD 05	FD 05	FD 05	FD 05	FD 05	FD 05	X	X
Gas	Tank with retention bund	FD 06	FD 06	FD 06	FD 06	O	O	X	X
	Gas pressure regulator	X	X	X	X	X	X	●	●
	Solenoid valve	X	X	X	X	X	X	●	●
	Rigid gas link	X	X	X	X	X	X	●	●
	Flexible link with crimped nozzle	X	X	X	X	X	X	●	●
	Connection with 1/4 turn 3/4' valve	X	X	X	X	X	X	●	●
	Natural gas adjustment	X	X	X	X	X	X	●	●
Miscellaneous	LPG adjustment	X	X	X	X	X	X	CEL 05	CEL 05
	Multilingual ⁽⁴⁾ technical documentation level A ⁽⁶⁾ (extra copy)	AD 21	AD 21	AD 21	AD 21	X	X	AD 21	AD 21
	Technical documentation language to choice ⁽⁵⁾ level A ⁽⁶⁾ (extra copy)	X	X	X	X	AD 23	AD 23	X	X
	German version level A ⁽⁶⁾ (extra copy)	AD 22	AD 22	AD 22	AD 22	X	X	X	X
	Multilingual ⁽⁴⁾ technical documentation level B ⁽⁷⁾	AD 23	AD 23	AD 23	AD 23	X	X	X	AD 31
	Technical documentation language to choice ⁽⁵⁾ level B ⁽⁷⁾	X	X	X	X	AD 33	AD 33	X	X
	German version level B ⁽⁷⁾	AD 24	AD 24	AD 24	AD 24	X	X	X	X
	Multilingual ⁽⁴⁾ technical documentation level C ⁽⁸⁾	AD 25	AD 25	AD 25	AD 25	X	X	X	X
	German version level C ⁽⁸⁾	AD 26	AD 26	AD 26	AD 26	X	X	X	X
	Technical documentation language to choice ⁽⁵⁾ level C ⁽⁸⁾	X	X	X	X	AD 41	AD 41	X	AD 41
	Standard tool set	AD 05	AD 05	AD 05	AD 05	AD 05	X	X	X
	Standard tool box	AD 06	AD 06	AD 06	AD 06	AD 06	X	X	X

● Standard X Impossible O Different options available EN 01 Option code EN 01 Free option EN 01 Option on apply

(1) Impossible on JS 100 à 150 (2) Impossible on JS 180 (3) Impossible on KM 40 (4) French, english, spanish, portugese (5) French or english or spanish or portugese (6) Level A documentation including : Maintenance manual and diagrams + Genset user manual and description of switchboard + Genset installation guide (7) Level B including : level A + list of engines and alternator parts (8) Level C including : Level B + workshop manual (9) Standard on gensets with canopy (10) On apply for GS 400/450/500 (11) Impossible on GS 200 and 250

canopies



POWER PRODUCTS

50Hz



CANOPY 106



CANOPY 107



CANOPY 128



CANOPY 214



CANOPY 216



CANOPY 413



CANOPY 424



CANOPY 425



Option : galvanised
sheet metal
air outlet duct



CANOPY 426



CANOPY 407



GENSETS AND CANOPY

THREE PHASE GENSETS

	Type	Canopy	Tank (L)	Dimensions L x w x h (m)	Weight (kg)	Acoustic power - 50 Hz		
						LWA	dB(A)@1m	dB(A)@7m
PACIFIC	TN 16 K	106	43	1,68x0,77x1,04	535	99	84,8	74
	TN 20 K	106	43	1,68x0,77x1,04	535	99	84,8	74
	TM 7,5 K	106 ①	43	1,68x0,77x1,04	455	88,5	73	63
	TM 11,5 K	106	43	1,68x0,77x1,04	535	92	76,5	66
MONTANA	TM 16 K	107	100	2,01x0,92x1,33	810	87,9	71,7	62
	JM 20	107	100	2,01x0,92x1,33	1080	95	78,4	68
	JM 30	107 ②	100	2,01x0,92x1,33	1120	95	78,4	68
	JM 40 K	107	100	2,01x0,92x1,33	1192	93,5	77	67
MONTANA	JS 60 K	128	180	2,30x1,08x1,68	1490	96,4	79,5	70
	JS 70 K	128 ③	180	2,30x1,08x1,68	1530	96,4	79,5	70
	JS 80 K	128	180	2,30x1,08x1,68	1530	96,4	79,5	70
	JS 100 K	214 ④	200	2,70x1,07x1,61	1640	95,8	78,6	69
	JS 120 K	216	410	3,74x1,27x1,76	2120	96	77,9	67
	JS 150 K	216 ⑤	410	3,74x1,27x1,76	2250	95,3	77,2	67
NEVADA	JS 180 K	216	410	3,74x1,27x1,76	2290	98,5	80,5	71
	KM 25 G	107 ②	-	2,01x0,92x1,33	1010	87	70,7	61
	KM 40 G	214 ④	-	2,70x1,07x1,61	1220	92,8	75,6	65,6
	KS 60 G	214	-	2,70x1,07x1,61	1310	90,9	73,7	64
ATLANTIC	KS 85 G	216 ⑤	-	3,74x1,27x1,76	1880	96,2	78,1	68
	GS 200 K	413 ⑥	350	3,99x1,26x1,88	2685	95,6	77,3	67
	GS 250 K	424 ⑦	480	4,49x1,38x2,16	3400	99,3	80,3	71
	GS 300 K	425 ⑧	480	4,44x1,47x2,23	4150	99,4	81,2	71
	GS 375 K	425	480	4,44x1,47x2,23	4260	99,5	81,3	71,5
	GS 400 K	426	500	6,04x1,68x2,40	4962	98,5	78,5	69
	GS 450 K	426 ⑨	500	6,04x1,68x2,40	5112	98,6	78,6	69
OCEANIC	GS 500 K	426	500	6,04x1,68x2,40	5162	98,6	78,6	69
	PW 650 K	407 ⑩	500	5,84x1,78x2,60	6467	105	85	75
	PW 800 K	407	500	5,84x1,78x2,60	6790	105	85	75

SINGLE PHASE GENSETS

	Type	Canopy	Tank (L)	Dimensions L x w x h (m)	Weight (kg)	Acoustic power - 50 Hz		
						LWA	dB(A)@1m	dB(A)@7m
PACIFIC	TN15 KM	106	43	1,68x0,77x1,04	535	100	84,8	74
	TM 7,5 KM	106 ①	43	1,68x0,77x1,04	455	88,5	73	63
	TM 11,5 KM	106	43	1,68x0,77x1,04	585	92	76,5	66
MONTANA	TM 16 KM	107 ②	100	2,01x0,92x1,33	840	87,9	71,7	62
	JM 20 M	107	100	2,01x0,92x1,33	1090	95	78,4	68
NEVADA	KM 25 GM	107 ②	-	2,01x0,92x1,33	1010	87	70,7	61

EQUIPMENT

STANDARD AND OPTIONS

		106	107	128	214	216	407	413 - 424 425 - 426
High corrosion resistance	SILENT type mounted soundproof canopy	SIM	SIM	SIM	X	X	X	X
	EUROSILENT type mounted soundproof canopy	X	X	X	ESI	ESI	ESI	ESI
	Soundproofed canopy kit ⁽¹⁾	SiK	SiK	X	X	X	X	X
	Colour black/blue (RAL 9005/RAL 5007)	●	●	●	●	●	●	●
	Special paintwork (RAL 5007 replaced) (caution delay : 8 weeks min.)	CN 08	CN 08	CN 08	CN 08	CN 08	CN 08	CN 08
	Modular sheet steel structure	●	●	●	●	●	●	●
	Phosphate priming followed by anti-corrosion polyester powder coat	●	●	●	●	●	●	●
Lifting	Flexible seals between body sections	●	●	●	●	●	●	●
	Central lifting eye tested and approved (number)	1	1	1	1	1	2	2
	Baseplate with retention tank	FD 04	FD 04	FD 04	FD 04	FD 04	FD 04	FD 04
Safety	Simple baseplate	X	X	X	CN 05	CN 05	CN 05	CN 05
	Lockable doors with single key	●	●	●	●	●	●	●
	Lockable control panel	X	●	●	●	●	●	●
	Exterior emergency stop button	●	●	●	●	●	●	●
	Access to fuel, oil and battery through lockable doors	●	●	●	●	●	●	●
	Protective mesh for rotating parts	●	●	●	●	●	●	●
	Protective mesh for hot parts (compulsory in EEC)	CEL 02	CEL 02	CEL 02	CEL 02	CEL 02	CEL 02	CEL 02
Easy maintenance access	Silencer inside canopy	●	●	●	●	●	●	●
	Galvanised sheet metal air outlet duct ⑪	X	X	CN 03	CN 03	CN 03	CN 03	CN 03
	Sockets panel (400 V tri + N)	CN 04	CN 04	CN 04	CN 04	CN 04	X	X
	External connection board	X	CN 09	X	CN 09	X	X	X
Trailers	Doors on each side (number)	1 hatchback	2	2	4	4	6	4
	Lub oil drain pump	X	EN 06	EN 06	EN 06	EN 06	●	●
	Electric panel door	●	●	●	●	●	●	●
	Road trailer for soundproofed canopy	TR 11	TR 11	TR 11	TR 11	TR 11	TR 11	TR 11
	Eye 40 mm (DIN German)	TR 21	TR 21	TR 21	TR 21	TR 21	TR 21	TR 21
	Eye 68 mm (French)	●	●	●	●	●	●	●
	Eye 76 mm (OTAN / NATO)	TR 25	TR 25	TR 25	TR 25	TR 25	TR 25	TR 25
	Ball 50 mm (universal)	TR 26	TR 26	TR 26	TR 26	TR 26	X	X
	Spare wheel kit	TR 31	TR 31	TR 31	TR 31	TR 31	X	X

POWER PRODUCTS

50Hz

1

M 50



M 150

2



S 2500

3



R 3000

4



S 3500

6



A 400

5



E/p key and V and T potentiometers optional

PANELS RANGE

Various solution available

	M80 ⁽¹⁾	M50	M150	A50	S2500	R3000	S3500	A400
PACIFIC/MONTANA								
TN 16 - TN 20 - TM 7,5/11,5	X	●	X	O	X	X	X	X
TM 16	X	●	O	O	O	X	O	X
JM 20/30/40	X	X	●	X	O	X	O	X
MONTANA								
JS 60/80	X	X	X	X	O	X	● ⁽²⁾	X
JS 100/180	O	X	X	X	X	● ⁽²⁾	X	X
ATLANTIC								
GS 200/500	O	X	X	X	X	● ⁽²⁾	X	O
OCEANIC								
PW 650 - PW 800	O	X	X	X	X	● ⁽²⁾	X	O
NEVADA								
KM 25 G	X	X	X	X	●	X	O	X
KM 40 G - KS 85 G	O	X	X	X	X	● ⁽²⁾	X	X

● Standard X Impossible O Option

(1) For more information on this panel, see our 650-2250 kVA brochure (2) CB12 card in option

PANEL TYPE

		M 50	M 150	A 50	S 2500	R 3000	S 3500	A 400				
Measurements	Line voltages (U12, U23, U31) in Volts	X	●	●	● LCD	● LCD	● LCD	● LCD	Instruments	Genset voltage between phases and neutral (NU, NV, NW)	Volt + Menu "Generator"	
	Single voltages (V1, V2, V3) in Volts	X	●	●	● LCD	● LCD	● LCD	● LCD		Genset voltage between phases (UV, VW, WU)	Volt + Menu "Generator"	
	Phase currents (I1, I2, I3) in Amps	X	●	●	● LCD	● LCD	● LCD	● LCD		Genset current on each phase	Amp + Menu "Generator"	
	Neutral current (In) in Amps	X	X	X	● LCD	● LCD	● LCD	X		Rate of harmonic distortion (%) on each phase	Menu "Generator"	
	Frequency (F) in Hertz	X	○	X	● LCD	● LCD	● LCD	● LCD		Apparent genset power on each phase (kVA)	Menu "Generator"	
	All generating set states, all starter phases	X	X	X	● LCD	● LCD	● LCD	● LCD		Reactive genset power on each phase (kVAr)	Menu "Generator"	
	Analogical indicator	X	X	X	○	○	○	●		Active genset power on each phase (kW)	Menu "Generator"	
	Engine parameters	Indication of engine speed (after automatic extinction)	X	○	X	● LCD	● LCD	● LCD		● LCD	Total apparent power, alternator (kVA)	Menu "Generator"
Operation	Indication of battery voltage	X	X	X	● LCD	● LCD	● LCD	● LCD	Total active power, alternator (kW)	Menu "Generator"		
	Elapsed hour meter	●	●	X	● LCD	● LCD	● LCD	●	Total reactive power, alternator (kVAr)	Menu "Generator"		
	Powering up (after automatic standby)	X	X	X	●	●	●	X	Genset power factor on each phase (Cos φ)	Menu "Generator"		
	Fuel solenoid-operated valve control	●	●	X	●	●	●	●	Total active energy (kWh)	Menu "Engine"		
	Starter control	●	●	X	●	●	●	●	Bus/mains frequency	Menu "Mains-Bus"		
	Plug preheating control	●	●	X	○	○	○	○	Voltage on phase 1 of bus or mains (U)	Menu "Mains-Bus"		
	Water preheating control	X	X	●	○	○	○	●	Harmonic distortion (%) on phase 1 of bus or mains (U)	Menu "Mains-Bus"		
	Mains contactor control (normal)	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	●	Analogue measurement (PH, TE, fuel level, TH with IOB2 only)	○		
Operation and/or safety lights	Generating set contactor control (standby)	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	●	Engine	Battery voltage	Menu "Engine"	
	Oil pressure fault (LED)	●	●	X	●	●	●	X LCD message		Speed in rpm (optional magnetic sensor)	Fréq + Menu "Engine"	
	Water temperature fault (LED)	●	●	X	●	●	●	X LCD message		Engine water temperature (analogue)	Mano / Gauge	
	Fail to start fault (LED)	X	X	X	●	●	●	X LCD message		Engine oil pressure (analogue)	Mano / Gauge	
	Overspeed fault (LED)	X	X	X	●	●	●	X LCD message		Push-button (ON/OFF)	MICS® Progress	
	Set ready for load (LED)	X	X	●	●	●	●	X		Reset button	MICS® Progress	
	Charging alternator fault (LED)	●	●	X	●	●	●	X		LCD (4 lines, 20 characters)	MICS® Progress	
	General alarm (Flashing LED)	X	X	X	●	●	●	●		Storage of last 8 events or faults	MICS® Progress	
Safety devices	General fault (Flashing LED)	X	X	●	●	●	●	●	Operation	Control keyboard	MICS® Progress	
	Panel lamp, 22 dia.	X	●	●	●	●	●	●		Adjustable and permanent parameters	MICS® Progress	
	STOP/MANU/AUTO/TEST mode (LEDs)	X	X	X	●	●	●	X		Two-level "magic numbers"	MICS® Progress	
	Generating set side contactor closed (normal) (LED)	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	X		Safety lights	Oil pressure	● Message LCD
	Mains side contactor closed (standby) (LED)	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	X			Oil temperature	● Message LCD
	Any fault or any alarm message (LED)	X	X	X	● LCD	● LCD	● LCD	● LCD			Water level low	○ Message LCD
	Oil pressure fault	●	●	X	●	●	●	●			Over- and under-frequency	● Message LCD
	Water temperature fault	●	●	X	●	●	●	●			Contradictory "frequency/speed" data (optional magnetic sensor)	● Message LCD
Emergency stop fault	●	●	X	●	●	●	●	Protection against voltage surge or drop	● Message LCD			
Overload or short-circuit alarm or fault	X	X	● ⁽⁵⁾	● ⁽⁵⁺⁸⁾	● ⁽⁵⁺⁸⁾	● ⁽⁵⁺⁸⁾	●	Protection against alternator overload	C/B + Progress			
Min/max battery voltage alarm or fault	X	X	X	● ⁽⁸⁾	● ⁽⁸⁾	● ⁽⁸⁾	● ⁽⁸⁾	Display of alternator overload and fault indication	● Message LCD			
Automation	Min/max alternator voltage alarm or fault	X	X	X	● ⁽⁸⁾	● ⁽⁸⁾	● ⁽⁸⁾	● ⁽⁸⁾	Alarm	Protection against high rate of harmonic distortion	● Message LCD	
	Min/max alternator frequency alarm or fault	X	X	X	● ⁽⁸⁾	● ⁽⁸⁾	● ⁽⁸⁾	● ⁽⁸⁾		Protection against loss of excitation	● Message LCD	
	Overspeed fault	X	○	X	●	●	●	●		"Loss of mains during paralleling" display (if paralleling)	● Message LCD	
	Differential relay present fault	X	X	X	○ ⁽⁴⁾	○ ⁽⁴⁾	○ ⁽⁴⁾	X		Protection of alternator voltage not achieved	● Message LCD	
	Differential triggering alarm or fault	X	○	X	○ ⁽⁴⁺⁸⁾	○ ⁽⁴⁺⁸⁾	○ ⁽⁴⁺⁸⁾	○		Protection of alternator frequency not achieved	● Message LCD	
	Automatic standby (turn-off back-light)	X	X	X	●	●	●	●		Protection, inactive set of bars	● Message LCD	
	Automatic extinction (in stop mode)	X	X	X	●	●	●	X		Water preheating fault	Message LCD	
	4 modes (STOP, MANU, AUTO, TEST)	X	X	● ⁽³⁾	●	●	●	●		Battery over- or under-voltage	Message LCD	
Automation	Engine stopping for cooling (adjustable time-delayed)	○	X	●	●	●	●	●	Automation and paralleling	INS instruction control logic	MICS® Progress	
	Voltage and speed stabilization (adjustable time-delayed)	X	X	●	●	●	●	●		Contactor or motorised cut-out switch control	MICS® Progress	
	Plug preheating (adjustable time-delayed)	●	●	●	○	○	○	○		Bus contactor timer	MICS® Progress	
	ATS changeover presence choice	X	X	X	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	●		Automatic sync function	MICS® Progress	
	Mains contactor position return (adjustable)	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	●		Frequency sync function	MICS® Progress	
	Generating set contactor position return (adjustable)	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	●		Voltage sync function	MICS® Progress	
	Generating set contactor manual closing (standby)	X	X	X	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	X		Sync control	MICS® Progress	
	Generating set contactor manual opening (standby)	X	X	X	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	X		Load distribution function kW	MICS® Progress	
Miscellaneous	Starting on clock (daily, weekly, annual)	X	X	X	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	X	Applications	Load distribution function kVAr	MICS® Progress	
	External starting order	X	X	●	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	●		Export control kW	MICS® Progress	
	Mains sensing 3-ph	X	X	X	○ ⁽¹⁰⁾	○ ⁽¹⁰⁾	○ ⁽¹⁰⁾	○		Export control kVAr	MICS® Progress	
	Mains sensing 1-ph	X	X	●	○ ⁽¹⁰⁾	○ ⁽¹⁰⁾	○ ⁽¹⁰⁾	●		Measurement of phase difference	"Sync" menu	
	Water preheating thermostat	X	X	○	○	○	○	○		Measurement of voltage difference	"Sync" menu	
	Test LEDs	●	●	●	●	●	●	X		Measurement of frequency slip	"Sync" menu	
	Fault reset	●	●	X	●	●	●	●		Real-time display of synchronism	"Sync" menu	
	External AMF predisposition (for manual panels)	● ⁽²⁾	●	X	○	○	○	●		Genset without mains	○	
Miscellaneous	3-phase with or without neutral, 2-phase or single-phase use	●	●	X	● ⁽⁶⁾	● ⁽⁶⁾	● ⁽⁶⁾	●	Communication	Genset with INS and LV mains without paralleling	●	
	2,5A/12V battery charger	X	X	●	X	○	○	● ⁽¹¹⁾		Genset with permanent paralleling	○	
	1A/12V battery charger	X	X	X	○	X	○	X		Genset with temporary LV mains paralleling and INS	○	
	GES Pack fitted inside the genset ⁽⁹⁾	X	X	X	X	○	○	X		Genset with permanent LV mains paralleling and INS + 0 power step (25)	○	
	GES panel delivered loose ⁽⁹⁾	X	X	X	X	○	○	X		LV production plant	○	
	AMPG module	X	X	X	X	○	○	X		LV production plant couplee with paralleling to LV mains and special projects	MICS® Progress and automaton	
	Differential protection with time and sensitivity adjustment	X	○	X	○ ⁽⁴⁾	○ ⁽⁴⁾	○ ⁽⁴⁾	○		Load transfer with rising and falling ramp	●	
	Alarm hooter	X	X	X	○	○	○	○		"Communicator" module	○	
										Local mode via an RS485 twisted cable	< 1200 m	
										Remote control	○	
										RS 485/RS 232 adapter (not supplied)	On request	
										PC-DOS (not supplied)	On request	
										Remote management is possible via a modem equipped with an RS 232	Telephonique network	
										Modem equipped with an RS 232 (not supplied)	On request	

● Standard ○ Option X Not available

(1) Control and automations installed, but necessity to have the option "External AMF predisposition" and the possible configuration of one parameter on the MICS® Telys (2) Necessity to select the A50 PANEL for the M50 (3) No MANU or TEST position on the A50 (4) The earth fault protection is ensured by one external module connected to the CB12 card and through connecting of one tiny relay on the CB12 card. A local configuration is also needed (5) Automatic or delayed adjustable on S2500 or R3000 - automatic on A50 (6) Choice is revised through programming - The alternator's voltage reference connecting wire modification is necessary (7) The relays' adjustment parameters are available on the MICS® Telys (8) The choice Alarm or Fault is programmed through the keyboard (9) NFE 37312 Norm (10) MICS DS mains detection is proposed as a base in the source inverter. In the case whereby the source inverter is not chosen, the MIC DS module can be moulded in the panel (11) 24V-3 A battery charger in panel and 24V-5A battery charger in control desk



MICS® Telys - GENERAL POINTS

POWER PRODUCTS

50Hz

ELECTRONICS

- Digital technology with 16-bit micro-controller (10MHz)
- Cycle time less than 250ms
- Quartz and watchdog memories

MAN/MACHINE INTERFACE

- 8-line 21-character LCD screen, with built-in back-light
- Integrated keyboard (28 keys)
- 15 LEDs for displaying the set states and main faults and alarms
 - LED test and fault reset
 - Key-adjustable contrast
 - Easy-to-read screen messages
 - 4 languages integrated
- 1 international language from pictograms

CONNECTION

- Integral connection using marked connectors
- Connection of the "option 3" module using A/D converter bus
- Connection to options, battery charger, water pre-heating, etc... by connectors

PROCESS CONTROLLERS-PROGRAMMING-ENQUIRY

- Reading and display of main electrical and mechanical statistics
 - 150 adjustable parameters
- Numerous configuration possibilities (alarms and faults)
- Access to the parameters by access codes (3 levels)
 - Basic functions :
 - Manual, Auto, Test, Stop
 - starting according to 2 automatic modes
- Normal/Standby control using keyboard keys
- Starting on clock (daily, weekly, annual), four programmable time segments
- Timed and dated faults and alarms battery
- Status (time/date) battery (press function buttons : Stop, Manu, Test, Auto, On, Off, Normal/Standby Command)



SAFETY DEVICES

- Conventional generating set safety devices (oil pressure, water temperature, etc ...)
- Overspeed
- Min/max alternator voltage
- Min/max battery voltage
- Min/max alternator frequency

COMMUNICATION

- RS485 serial interface (J-Bus protocol) permitting remote management or in-plant configuration (1000 metres)
- Remote management possibilities using modem and public switched telephone network (PSTN)

TRANSFERS AND I/O EXPANSION

- Remote transfer on potential-free contact, by addition of an "option 3" module (10 relays) possible combination of 43 different transfers
- Possible expansion by addition of "option3" module, permitting the wiring of unusual options

A FEW CHARACTERISTICS

- UL, CSA conformity
- EC conformity (directives : machine, low voltage, EMC)
 - Operating temperature : -15°C to +60°C
 - 50 or 60 Hz use
 - Supply voltage : 12 or 24 Volts
- Working range in voltage : 208 to 600 Volts (direct up to 500Volts, with step-down external transformer for 600Volts)
- Working range in current : 60 to 5000A on 5A current transformer
 - Basic version (CB) : 11 digital inputs, 3 analogue inputs, 7 digital outputs programmed, 1 charging alternator excitation input
 - Standard version available with option1 and option2 (CB12) : extra 16 logical inputs, 5 logical outputs (programmed) and 1 analogue input
 - "Option 3" module : 8 digital inputs, 10 programmable digital outputs



MICS® Telys - Presentation

FRONT PANEL

The display module is commonly referred to as the man/machine interface. It is the only visible contact the user has with the generating set. POLYCARBONATE FRONT (lexan) 28 x 10 and 13 diameter touch keys, recessed so that the finger stays right over the key.

LCD SCREEN with positive nematic Super Twist technology, incorporated back-lighting, featuring 8 lines x 21 characters

DISPLAY
Examples



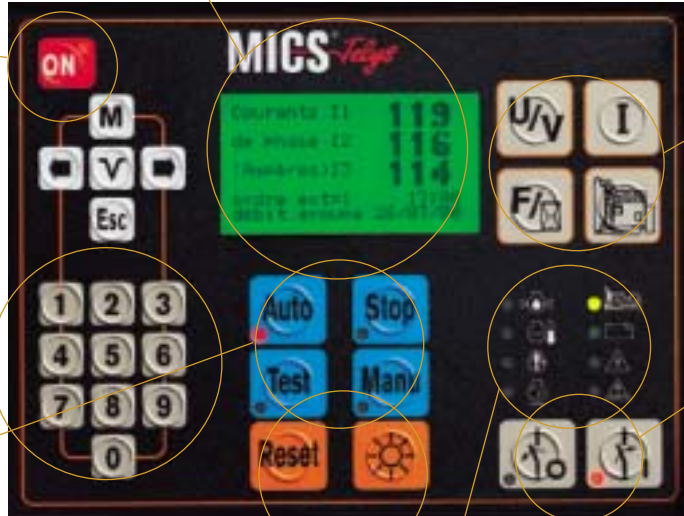
1 "ON" KEY

4 electrical
QUANTITIES
AND ENGINE
PARAMETERS
KEYS

15 PROGRAMMING
KEYS
NUMBER KEY PAD
(0 TO 9)

2 generating
SET REGULATION
OUTPUT KEYS
(+/-)

4 OPERATING MODE
SELECTION KEYS



8 DISPLAY LEDs, including 6 red (R), 1 green (G) and 1 yellow (Y) :

2 ERROR RESET
AND LED TEST KEYS

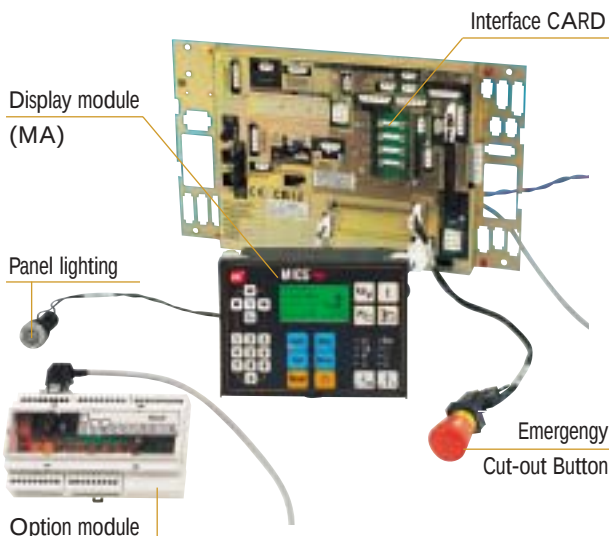
- 1 - Oil pressure fault (R)
- 2 - Water temperature fault (R)
- 3 - Failure to start fault (R)
- 4 - Overspeed fault (R)



- 5 - Set ready to output (G)
- 6 - Charging alternator fault (R)
- 7 - General alarm (Y)
- 8 - General fault (R)
- Stop, Manu, Auto, Test, 0, I, ON (R) keys

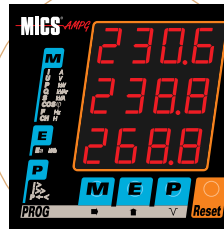
CONNECTION

Standard version comes with complete set of interface cards, RS485-type series circuit which enables a PC to be connected locally and remotely (using the telephone system and 2 modems). Allows the unit to be switched on and off remotely, perform full parameter settings and retrieve all available data on MICS® Telys.



DIGITAL MEASUREMENT MONITORING (AMPG)

(for Interface CB 12 card only)



- Indicate the faults of : over-load and short-circuit, reverse power
- Provides readings : Volts, Amps, kW, kVA, kVA_r, Power factor, Frequency
- Acts as a counter : user consumption (active Ea energy), unit operation time (elapsed hour meter)
- Able to communicate : permanent remote control via a RS485 connection, J-BUS/MODBUS protocol

INTERFACE CARD



BASIC CB MODEL
(Engine preheating option mounted)
220/240V (CM405)



OPTIONAL CB 12 INTERFACE CARD
It features more connectors than the CB card for greater modularity.
(Voltage protection option mounted (CM606))

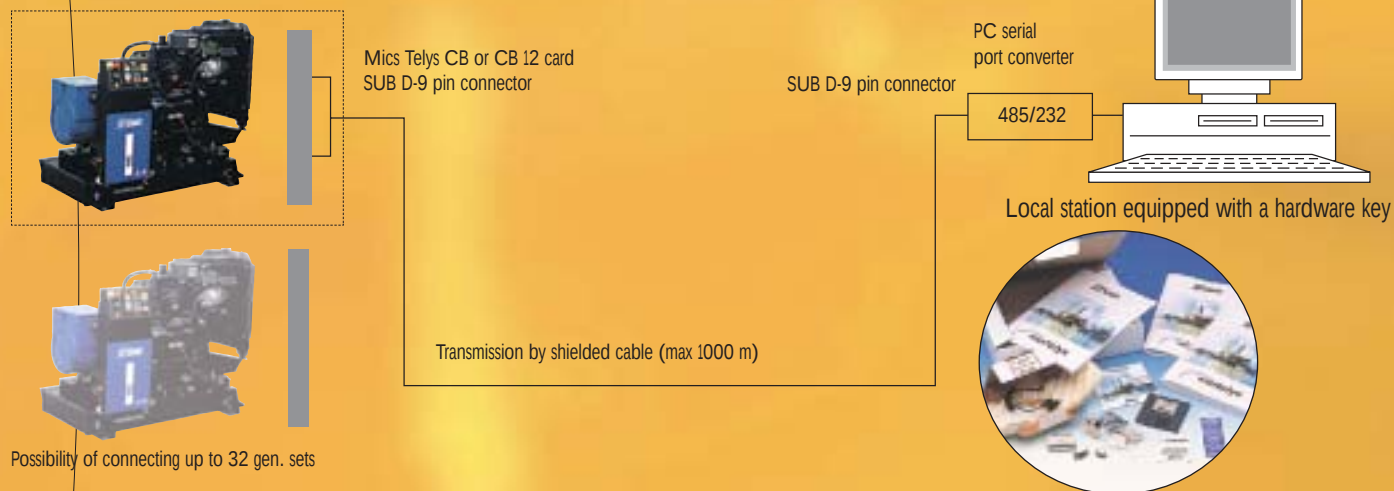
wintelys[®] with MICS[®] Telys

This software developed by SDMO enables the user to set up the dialog between the MICS Telys panel fitted on our gensets and the PC type computer on which it is installed in order to control from a distance the operating system.

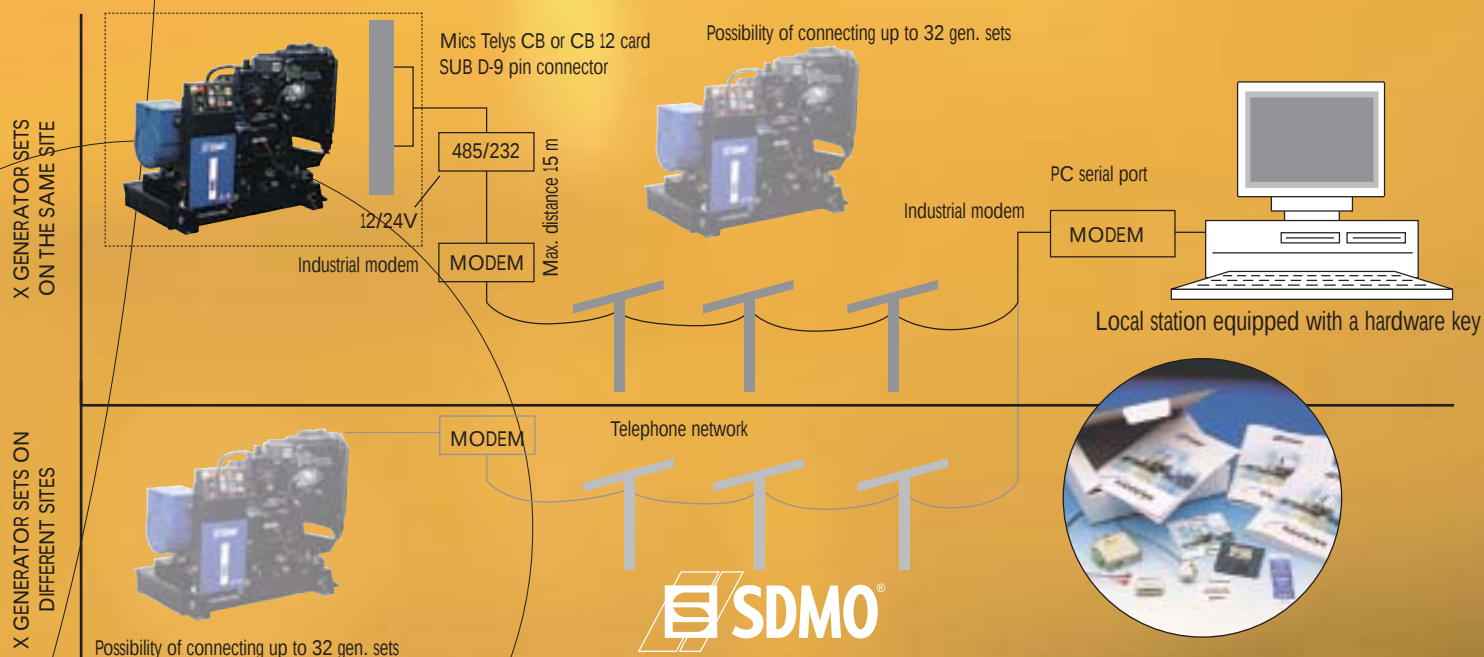
Depending on his needs the user will choose either the supervision or the remote processing system, with the possibility for the latter to increase its functionality if a relocated installation is set-up (with a new modem) thanks to an additional pack Remote processing 2.

	Characteristics	Type of link	Number Maximum of connections	Detailed description	Minimum configuration required	Option code
Supervision Package	Connection in local mode through a shielded cable (max 1000m)	Permanent	32	One converter One hardware protection key 2 connectors One CD ROM One installation guide One user manual One license contract	Pentium 233 processor Screen 800 x 600 pixels or more	CEA 10
Remote Processing Package	Connection unlimited in distance via telephone network	Selective	32 on a same installation	Two cables One converter One hardware protection key One CD ROM One installation guide One user manual One license contract	64 Mb RAM memory advised CD ROM drive	CEA 20
Remote Processing Package 2	Creation of one connection towards a new installation of gensets when the first installation is already remote controlled	Selective	32 per fleet	Two cables One converter	35 Mb free space on disk	CEA 30

SUPERVISION PRINCIPLE



REMOTE PROCESSING PRINCIPLE



POWER MODULES

GENERAL SPECIFICATIONS

POWER SECTION

	3P	4P
Miniature CB, 10-125A (Merlin Gérin)	X	●
Moulded case CB, 160-630A (Merlin Gérin)	●	○
Moulded case CB, 800-2000A (Siemens)	●	○
Without CB (power terminals only)	○	○

Place left to fit
module 3

Customer's connecting
terminal block

Mains power
connection

SEPARATE "MAINS/STANDBY" CHANGEOVERS

GENERAL SPECIFICATIONS

SDMO supplies a full range of separate "Mains-Standby" changeover switches. This technical solution has several advantages : cost (positioned near mains input panel), easy installation (single heavy cable run). This range is standard and always in stock.

Two factors make the option very good value : IP 54 housing with easy access to cable connections and four lamps on the front panel face ; mains available, mains on load, genset available, genset on load.

The MICS DS "mains detection" module is built into the panel.

The panel conforms with EMC requirements.

45A

700A

	INS 45 A	INS 63 A	INS 72 A	INS 90 A	INS 100 A	INS 140 A	INS 144 A	INS 200 A	INS 224 A	INS 275 A	INS 350 A	INS 400 A	INS 500 A	INS 700 A	INS 1000 A	INS 1600 A	INS 2000 A	INS 2500 A
2 poles	X	X	●	X	●	X	●	X	●	X	X	X	X	X	X	X	X	X
3 poles	●	●	X	●	X	●	X	●	X	●	●	●	●	●	●	●	●	●
4 poles	●	●	X	●	X	●	X	●	X	●	●	●	●	●	●	●	●	●
208-440V (3-phase)	●	●	X	●	X	●	X	●	X	●	●	●	●	●	●	●	●	●
220-240V (1-phase)	X	X	●	X	●	X	●	X	●	X	X	X	X	X	X	X	●	●
Changeover by contactor	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	X	X
Changeover by motorised CB	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	●	●
Protection of auxiliaries ⁽¹⁾	Fuse	Fuse	Fuse	Fuse	Fuse	Fuse	Fuse	Fuse	Fuse	C/B	C/B	C/B	C/B	C/B	C/B	C/B	C/B	C/B
Terminals	●	●	●	●	●	●	●	●	●	X	X	X	X	X	X	X	X	X
Copper barse	X	X	X	X	X	X	X	X	X	●	●	●	●	●	●	●	●	●
Height (mm)	500	500	500	600	500	600	600	800	600	900	900	900	900	1000	1200	2000	2000	2000
Width(mm)	400	400	400	400	400	400	400	600	400	700	700	700	700	800	1200	1200	800	800
Depth (mm)	200	200	200	200	200	200	200	300	200	300	300	300	300	400	400	500	800	800
Adjustable mains sensing relay	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wall panel IP 54	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	X	X	X
Free-standing panel IP 54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	●	●	●

(1) Protection of auxiliaries : mains power detection, panel relay, water heater, battery charger.

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