

POWER  
PRODUCTS  
**EXEL**

**50HZ 60HZ**

650kVA - 3300kVA  
700kWe - 3200kWe

# THE ENERGY SOLUTION FOR YOUR INDUSTRIAL APPLICATIONS

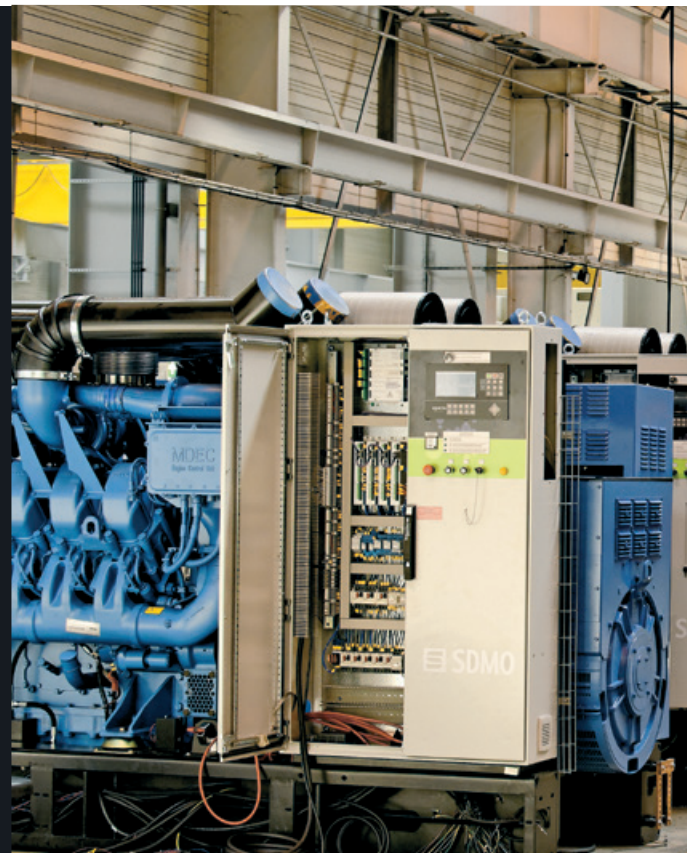


PPR-EX-D0-EN-51



*Energy Solutions Provider*

# NATIONAL COVERAGE, AN INTERNATIONAL PRESENCE. THINK GLOBAL, ACT LOCAL



In order for SDMO to continue to grow and expand into new markets, it relies on:

- a distribution network present in over 150 countries,
- 6 overseas subsidiaries,
- 7 offices,
- 8 sales offices and 3 regional divisions in France.

The responsiveness of the company is based on its development of 6 storage platforms which, in co-operation with the subsidiaries, constitute an efficient commercial network.

The links forged with the Kohler group have strengthened SDMO's standing amongst its customers through a strategy of synergistic installations.



SDMO  
INDUSTRIES

## SDMO, THE BEST ENERGY SOLUTIONS ON THE MARKET

In a variety of environments, from offshore drilling platforms to harsh desert conditions, from building sites to the most exacting industries, the reliability of SDMO generating sets has firmly established the company as one of the leading global manufacturers. SDMO was created in 1966, setting up its head office and three factories in Brest, along with another plant in Brazil. Backed by an international group structure, the company continues to underline its leading market position. Today, SDMO focuses exclusively on generating sets, and offers the widest range on the market. By relying on the proximity of its distribution network, SDMO can offer electricity solutions for all, any time and anywhere.

*In addition to its role as an industrial manufacturer of generating sets, SDMO is now positioning itself as a serious energy supplier.*

Energy Solutions Provider.





# SDMO EXPERTISE BENEFITING THE POWER PRODUCTS RANGE

SDMO invests heavily in Research & Development, with a view to anticipating demand and offering customers the most innovative and high-performance energy solutions on the market.

## AN INTEGRATED R&D FUNCTION

### Engineering & design offices

The engineering and design offices design products inspired by market trends, guided by the marketing department. These teams undergo continuous training in the latest 3D modelling and structural and stress calculation tools

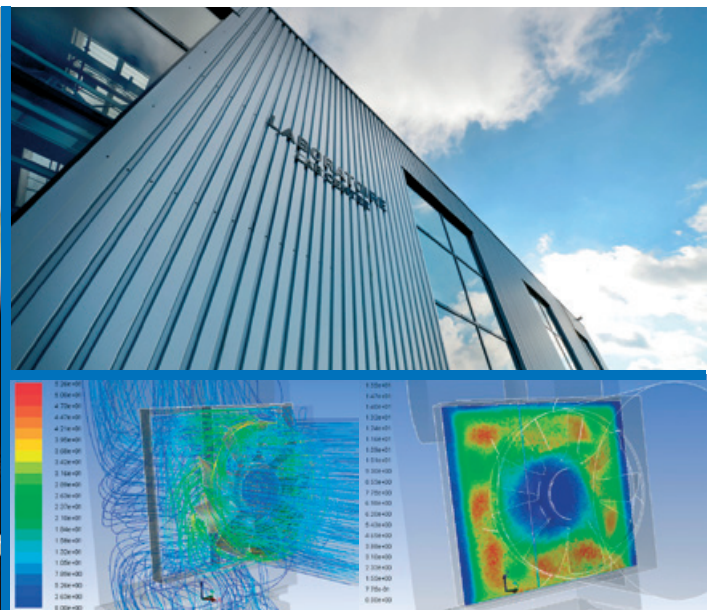


### Laboratory

SDMO invests in cutting edge technologies, with a view to optimising development of its bespoke products and solutions upstream of the production process. Our independent laboratory responds to the latest demands and benefits from specialist infrastructures that cover an area of 2,000 m<sup>2</sup>.



All SDMO products are certified by a laboratory with ISO 17025 accreditation



## PRODUCTION TOOLS

### Modern factory

Covering more than 38,000 m<sup>2</sup>, the premises offer high-performance operational tools.

The teams of specialists that work there ensure careful monitoring of component assembly.

# SDMO, OPTIMISING THE PERFORMANCE OF YOUR INSTALLATIONS IN COMPLETE SAFETY

SDMO's Service department provides day-to-day support for distributors and customers, so as to guarantee the reliability and performance of its generating sets and energy production plants.

## Training

The SDMO training centre is based in Brest, and its purpose is to transfer to our distributors and their customers the knowledge required for installing, commissioning, using and maintaining their generating sets. The Training department is housed in a dedicated building covering 600 m<sup>2</sup>, containing all the necessary resources: teaching rooms, mechanical workshop, test bench, simulator, etc.



## Spare Parts

While the hub of the spare parts management system is in Brest, SDMO draws on an international distribution network and dedicated specialist tools, ensuring it can react promptly to customers' needs.

## Technical Support

The after-sales service is able to respond to any technical questions encountered with a generating set from the moment it is installed. It organises events on the ground and assists the distributors in their operations on a day-to-day basis.

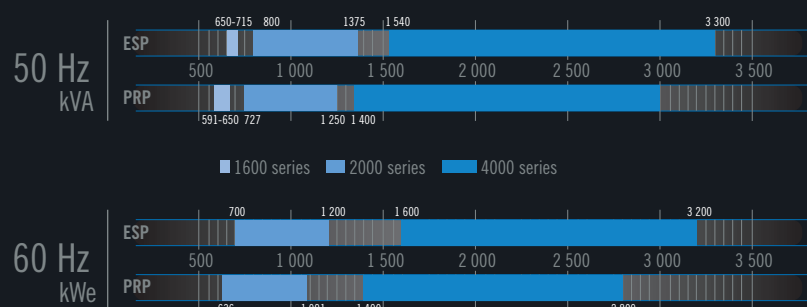




## AN ADAPTED "PRODUCT" RESPONSE

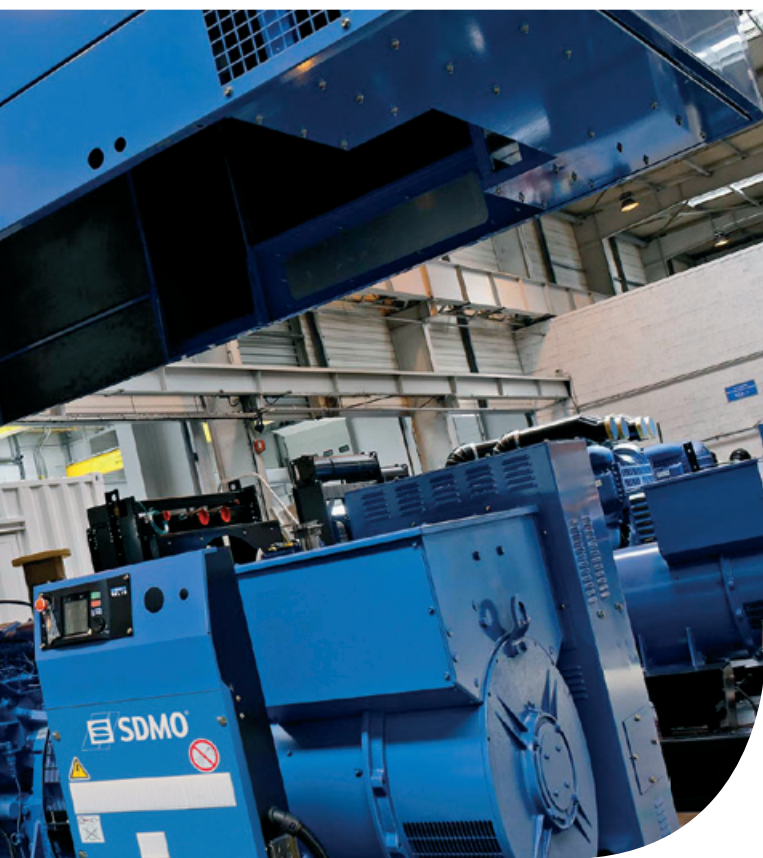
SDMO does not compromise when it comes to the quality of its products and their compliance with standards. They are designed to meet even more demanding criteria in terms of safety and use than those actually required by the directives. To reach these objectives, components are selected with care from partner manufacturers who are amongst the most well-known and safest on the market.

### AVAILABLE POWER FOR THE RANGE



## THE BALANCE IS STRUCK BETWEEN POWER, EXTREME CLIMATE CONDITIONS AND SOUND LEVELS

One of the most crucial points when designing generating sets is to be able to offer optimum power combined with a low sound level under climate conditions which may be extreme. SDMO has managed to find the perfect balance between these three factors thanks to an in-depth study carried out by experienced teams who have access to dedicated technical resources.



### Demanding choices

SDMO is committed to designing high-performance generating sets which meet a high standard of quality. To ensure this, SDMO takes great care when selecting materials and equipment and works closely with suppliers who are also market leaders. SDMO and its partners are constantly working together to develop the solutions of the future.

SDMO enjoys a long-standing partnership with engine manufacturer MTU, with the two working in conjunction to develop innovative and efficient products.

### High-performance engines

MTU engines are new generation Heavy Duty engines designed for both **continuous and emergency** operation in normal to very harsh environments.

They are equipped with highly efficient electronic control systems which enable them to respond to strict stability requirements in terms of frequency, voltage and waveform.

They fall within the **G3 application class**.

Common rail injection with electronic control enables optimisation of both fuel consumption (**VOC**) and emissions (**VOE**). These engines may be **dual frequency** and authorise high load factors: **75% in PRP and 85% in ESP**.



## > PRODUCT PLUS POINTS

DIRECT-FIT RADIATOR ENSURING  
A SMALLER FOOTPRINT

ENCLOSURE INSTALLATION POSSIBLE  
UP TO 1100 KVA EMERGENCY

SPECIALLY-DESIGNED SOUNDPROOFING SOLUTIONS  
TO OPTIMISE TRANSPORT COSTS

SOUND LEVEL AND FOOTPRINT AMONGST  
THE BEST ON THE MARKET

DESIGNED TO OPTIMISE HIGH TEMPERATURE  
PERFORMANCE

open version X1400

## SPECIFICATIONS 50 HZ - 400- 230 V

Generating sets <sup>(1)</sup>	VOC <sup>(3)</sup>	-	-	X800	X880	X1000	X1100	X1250	X1400
	VOE <sup>(4)</sup>	X650C2	X715C2	X800C	X880C	X1000C	X1100C	X1250C	X1400C
kVA Cos $\phi$ 0.8	PRP <sup>(5)</sup>	591	650	727	800	909	1000	1136	1250
	ESP <sup>(6)</sup>	650	715	800	880	1000	1100	1250	1375
Cons. 3/4 (L/h)	VOC <sup>(3)</sup>	-	-	113	123	140	152	174	184
	VOE <sup>(4)</sup>	94	103	119	131	154	169	192	193
Engine	Engine type	12V1600G10	12V1600G20	12V2000G65	12V2000G65	16V2000G25	16V2000G65	18V2000G65	18V2000G26
	Cyl. (no. and layout)	12V	12V	12V	12V	16V	16V	18V	18V
	Total cubic capacity (L)	21.04	21.04	23.89	23.89	31.86	31.86	35.84	40.19
Open version <sup>(2)</sup>	Dimensions	L (m)	3.47	3.47	3.97	4.32	4.32	4.45	4.75
		W (m)	1.63	1.63	1.85	1.85	1.85	2.13	1.82
		H (m)	2.08	2.08	2.15	2.15	2.15	2.26	2.07
	Weight (kg) <sup>(7)</sup>	4480	4510	5262	5474	6152	6257	7383	8200
Enclosures	M230	dB(A) @ 7 m <sup>(8)</sup>	78	78	-	-	-	-	-
		Weight (kg) <sup>(7)</sup>	6070	6100	-	-	-	-	-
	M427	dB(A) @ 7 m <sup>(8)</sup>	-	-	80	80	81	82	-
		Weight (kg) <sup>(7)</sup>	-	-	8268	8473	9060	9187	-
	M427 SSi	dB(A) @ 7 m <sup>(8)</sup>	-	-	76	76	77	78	-
		Weight (kg) <sup>(7)</sup>	-	-	8450	8720	9420	9840	-
20-foot containers	ISO20	dB(A) @ 7 m <sup>(8)</sup>	-	-	78	78	79	80	82
		Weight (kg) <sup>(7)</sup>	-	-	10181	10416	11140	11596	12365
	CIR20 SSi	dB(A) @ 7 m <sup>(8)</sup>	-	-	70	70	71	71	74
		Weight (kg) <sup>(7)</sup>	-	-	11800	12000	12770	12880	13890
		Weight (kg) <sup>(7)</sup>	-	-	11800	12000	12770	12880	13890
		Weight (kg) <sup>(7)</sup>	-	-	11800	12000	12770	12880	13890



5.03 x 1.69 x 2.66 m - 610 L fuel tank M230



6.40 x 2.17 x 2.72 m - 930 L fuel tank M427 and M427 SSi (Super Silent)

(1) Also available in the following voltages: 415/240 V - 380/220 V - 240/120 V - 220/110 V  
(2) The dimensions and weights apply to a generating set specified in the price list, without options  
(3) VOC: consumption optimisation variant  
(4) VOE: emissions optimisation variant

(5) PRP: main power available continuously with variable load for an unlimited time in accordance with ISO 8528-1.  
(6) ESP: Emergency Standby Power available for supplying emergency power in variable load applications in accordance with ISO 8528-1, no overload available for this service.  
(7) Dry weight - without fuel  
(8) at 3/4 load





open version X1200UC2

## SPECIFICATIONS 60 HZ - 480- 277 V

Generating sets <sup>(1)</sup>	VOC <sup>(4)</sup>	-	-	-	-	-
	VOE <sup>(5)</sup>	X700UC2 <sup>(9)</sup>	X800UC2 <sup>(9)</sup>	X900UC2 <sup>(9)</sup>	X1000UC2 <sup>(9)</sup>	X1200UC2
kWe ISO 8528 <sup>(2)</sup>	PRP <sup>(6)</sup>	636	727	818	909	1091
	ESP <sup>(7)</sup>	700	800	900	1000	1200
Cons. 3/4 (L/h)	VOC <sup>(4)</sup>	-	-	-	-	-
	VOE <sup>(5)</sup>	131	148	168	184	217
Engine	Engine type	12V2000G45	12V2000G85	16V2000G45	16V2000G85	18V2000G85
	Cyl. (no. and layout)	12V	12V	16V	16V	18V
	Total cubic capacity (L)	23.89	23.89	31.86	31.86	35.84
Open version <sup>(3)</sup>	Dimensions	L (m)	3.97	3.97	4.32	4.45
		W (m)	1.85	1.85	1.97	2.15
		H (m)	2.15	2.15	2.25	2.26
	Weight (kg) <sup>(8)</sup>	5278	5494	6198	6823	7383
Enclosure	M427	dB(A) @ 7 m <sup>(10)</sup>	84	84	86	-
		Weight (kg) <sup>(8)</sup>	8268	8473	9079	-
20-foot containers	ISO20	dB(A) @ 7 m <sup>(10)</sup>	85	85	85	87
		Weight (kg) <sup>(8)</sup>	9930	10190	11100	11420
	CIR20 SSi	dB(A) @ 7 m <sup>(10)</sup>	75	75	78	80
		Weight (kg) <sup>(8)</sup>	11800	12000	12750	13190



6.06 x 2.44 x 2.90 m - 500 L fuel tank ISO20 (Silent)



6.06 x 2.44 x 2.90 m - 500 L fuel tank CIR20 SSi (Super Silent)

(1) Also available in the following voltages: 440/254 V  
 (2) ISO 8528: powers specified in compliance with the legislation in force  
 (3) The dimensions and weights apply to a generating set specified in the price list, without options  
 (5) VOC: emissions optimisation variant  
 (4) VOC: consumption optimisation variant

(6) PRP: main power available continuously with variable load for an unlimited time in accordance with ISO 8528-1.  
 (7) ESP: Emergency Standby Power available for supplying emergency power in variable load applications in accordance with ISO 8528-1, no overload available for this service.  
 (8) Dry weight - without fuel  
 (9) Also available in the following voltages: 208/120 V  
 (10) at 3/4 load



open version X1540

## > PRODUCT PLUS POINTS

MOVABLE ELECTRICAL RADIATOR FOR EASE OF INSTALLATION

DATA CENTRE POWER OPTION AVAILABLE WITH A SPECIAL KIT

STANDARD SOLUTIONS AVAILABLE WITH CPU, THE MOST EFFECTIVE CONTAINER ON THE MARKET

DESIGNED TO RUN IN HARSH ENVIRONMENTS

## SPECIFICATIONS 50 HZ - 400- 230 V

Generating sets <sup>(1)</sup>	VOC <sup>(3)</sup>	X1540	X1650	X1850	X2000	X2200	X2500	X2700	X2850	X3100	X3300
	VOE <sup>(4)</sup>	X1540C	X1650C	X1850C	X2000C	X2200C	X2500C	X2700C	X2850C	X3100C	X3300C
kVA Cos φ 0.8	PRP <sup>(5)</sup>	1400	1500	1664	1818	2000	2273	2424	2568	2818	3000
	DCC <sup>(6)</sup>	1400	1500	1664	1818	2000	2273	2424	2568	2818	3000
	ESP <sup>(7)</sup>	1540	1650	1830	2000	2200	2500	2666	2825	3100	3300
Cons. 3/4 (L/h)	VOC <sup>(3)</sup>	210	231	241	266	306	331	374	374	407	434
	VOE <sup>(4)</sup>	226	251	266	298	336	369	409	409	450	492
Engine	Engine type	12V4000G23	12V4000G23	12V4000G23	12V4000G63	16V4000G23	16V4000G63	20V4000G23	20V4000G23	20V4000G63	20V4000G63
	Cyl. (no. and layout)	12V	12V	12V	12V	16V	16V	20V	20V	20V	20V
	Total cubic capacity (L)	57.2	57.2	57.2	57.2	76.27	76.27	95.33	95.33	95.33	95.33
Open version <sup>(2)</sup>	Dim.	L (m)	4.01	4.01	4.05	4.05	4.62	4.82	4.91	5.29	5.73
		W (m)	1.89	1.89	1.89	1.89	1.89	1.87	1.87	2.25	2.25
		H (m)	2.16	2.16	2.16	2.16	2.44	2.28	2.28	2.45	2.45
	Weight (kg) <sup>(8)</sup>	10640	10920	11405	11405	13473	14452	16010	16010	18365	18685
40-foot containers	CPU40	dB(A) @ 7 m <sup>(9)</sup>	78	78	78	78	78	-	-	-	-
		Weight (kg) <sup>(8)</sup>	23820	24100	24600	24900	26520	-	-	-	-
	SSi	dB(A) @ 7 m <sup>(9)</sup>	71	71	71	71	71	-	-	-	-
		Weight (kg) <sup>(8)</sup>	24830	25120	25620	25920	27540	-	-	-	-



12.19 x 2.44 x 2.90 m - 500 L fuel tank CPU40 (Silent or Super Silent)

(1) Also available in the following voltages: 440/254 V  
(2) The dimensions and weights apply to a generating set specified in the price list, without options  
(3) VOC: consumption optimisation variant  
(4) VOE: emissions optimisation variant  
(5) PRP: main power available continuously with variable load for an unlimited time in accordance with ISO 8528-1.

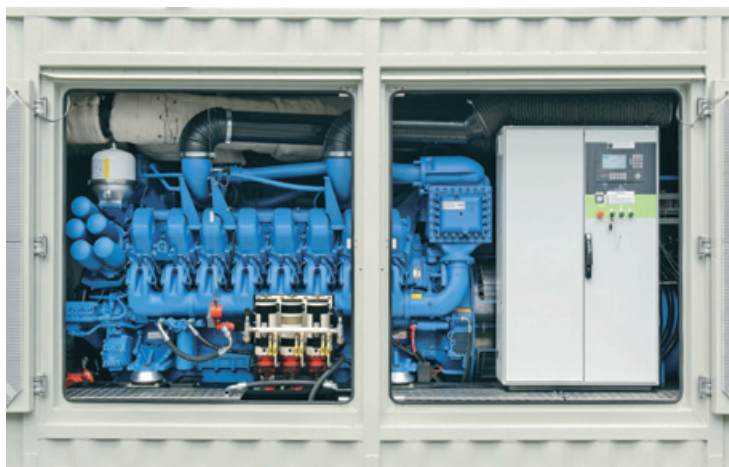
(6) DCC: Data Centre Continuous power applies to installations in data centres where a reliable power infrastructure is available. This definition complies with the requirements of the Uptime Institute Tier III and IV.  
At constant or variable load, the generating set can run for an unlimited number of hours.  
An overload capacity of 10% is available for one hour every twelve hours.  
Power in accordance with the ISO 8528-1, ISO 3046-1, BS 5514 and AS 2789 standards. Average load factor: ≤ 100%.  
(7) ESP: Emergency Standby Power available for supplying emergency power in variable load applications in accordance with ISO 8528-1, no overload available for this service.  
(8) Dry weight - without fuel  
(9) at 3/4 load



open version X2000U

## SPECIFICATIONS 60 HZ - 480- 277 V

Generating sets <sup>(1)</sup>	VOC <sup>(4)</sup>		X1600U	X1750U	X2000U	X2300U	X2500U	X2750U	X3200U
	VOE <sup>(5)</sup>		X1600UC2	X1750UC2	X2000UC2	X2300UC2	X2500UC2	X2750UC2	X3200UC2
kWe ISO 8528 <sup>(2)</sup>	PRP <sup>(6)</sup>		1400	1591	1818	2091	2273	2500	2800
	DCC <sup>(7)</sup>		1400	1591	1818	2091	2273	2500	2800
	ESP <sup>(8)</sup>		1600	1750	2000	2300	2500	2750	3200
Cons. 3/4 (L/h)	VOC <sup>(4)</sup>		265	301	358	398	-	468	509
	VOE <sup>(5)</sup>		282	319	377	422	-	504	549
Engine	Engine type		12V4000G43	12V4000G83	16V4000G43	16V4000G83	16V4000G83	20V4000G83	20V4000G83
	Cyl. (no. and layout)		12V	12V	16V	16V	16V	20V	20V
	Total cubic capacity (L)		57.2	57.2	76.27	76.27	76.27	95.33	95.33
Open version <sup>(9)</sup>	Dim.	L (m)	4.05	4.05	4.62	4.82	4.82 VOC <sup>(4)</sup> 5.11 VOE <sup>(5)</sup>	5.73	5.73
		W (m)	1.89	1.89	1.89	1.89	1.89 VOC <sup>(4)</sup> 2.25 VOE <sup>(5)</sup>	2.25	2.25
		H (m)	2.16	2.16	2.44 VOC <sup>(4)</sup> 2.16 VOE <sup>(5)</sup>	2.44 VOC <sup>(4)</sup> 2.16 VOE <sup>(5)</sup>	2.44 VOC <sup>(4)</sup> 2.54 VOE <sup>(5)</sup>	2.45	2.45
	Weight (kg) <sup>(9)</sup>		11405	11405	13473 VOC <sup>(4)</sup> 13280 VOE <sup>(5)</sup>	14452 VOC <sup>(4)</sup> 14235 VOE <sup>(5)</sup>	14524 VOC <sup>(4)</sup> 15643 VOE <sup>(5)</sup>	18365	18685
40-foot containers	CPU40 Si	dB(A) @ 7 m <sup>(10)</sup>	81	81	81	81	-	-	-
		Weight (kg) <sup>(9)</sup>	24600	24600	24900	27500	-	-	-
	CPU40 SSi	dB(A) @ 7 m <sup>(10)</sup>	73	73	73	73	-	-	-
		Weight (kg) <sup>(9)</sup>	25620	25620	25920	28520	-	-	-



double-doors opened CPU40

(1) Also available in the following voltages: 440/254 V  
 (2) ISO 8528: powers specified in compliance with the legislation in force  
 (3) The dimensions and weights apply to a generating set specified in the price list, without options  
 (4) VOC: consumption optimisation variant  
 (5) VOE: emissions optimisation variant  
 (6) PRP: main power available continuously with variable load for an unlimited time in accordance with ISO 8528-1.

(7) DCC: Data Centre Continuous power applies to installations in data centres where a reliable power infrastructure is available. This definition complies with the requirements of the Uptime Institute Tier III and IV.  
 At constant or variable load, the generating set can run for an unlimited number of hours.  
 An overload capacity of 10% is available for one hour every twelve hours.  
 Power in accordance with the ISO 8528-1, ISO 3046-1, BS 5514 and AS 2789 standards. Average load factor:  $\leq 100\%$ .  
 (8) ESP: Emergency Standby Power available for supplying emergency power in variable load applications in accordance with ISO 8528-1, no overload available for this service.  
 (9) Dry weight - without fuel  
 (10) at 3/4 load





## MODULAR GENERATING SETS, AN ADAPTED RESPONSE

For each of its generating sets, SDMO offers a large range of options to facilitate maintenance operations, enhance user safety and provide solutions for specific use requirements or demanding environments.

### OPTIONS

		MTU 1600 series VOE <sup>(1)</sup>	MTU 2000 series VOE <sup>(1)</sup> and VOC <sup>(2)</sup>	MTU 4000 series VOE <sup>(1)</sup> and VOC <sup>(2)</sup>
Engine	4 stroke water-cooled diesel engine	•	•	•
	Electronic control device	•	•	•
	Standard air filter	•	•	•
	Air filter with interchangeable cartridge	X	EN02 <sup>(3)</sup>	EN02 <sup>(3)</sup>
	220/240 V engine preheating (no control)	EN20	EN20	EN20
	Data centre power kit (DCC)	X	X	EN29
Alternator	IP 23 single bearing alternator, T° class =H, insulation class H/H	•	•	•
	Anti-condensation resistor	AL01	AL01	AL01
	Reinforced insulation (T26S002)	AL05-1	AL05 <sup>(4)</sup>	•
	Reinforced insulation and finish (T26S004)	X	AL06	AL06
	Synchronising CT coupling + 3-function regulator	0 <sup>(5)</sup>	0 <sup>(5)</sup>	0 <sup>(5)</sup>
	Oversized alternator	A0001B	A0001B	A0001B
Generating set	CE compliance of the control unit	•	•	•
	Mechanically welded base frame with antivibration dampers	•	•	•
	High-efficiency vibration damping	X	X	ISO1
Lubrication	Automatic oil make up with tank	X	EN18	EN18
	Oil centrifuge system	X	X	EN19
	Oil drainage pump	•	•	•
Cooling	Protective grille for fan and rotating parts	•	•	X
	Protective grille for radiator wiring	•	EN14	X
	Damper on air cooler	X	X	CS003
Exhaust	Exhaust compensators with clamps	EN11	•	•
	Protective grille for hot parts	CEL02	CEL02	X
	9 dB(A) silencer supplied separately	X	EN07	EN07
	29 dB(A) silencer supplied separately	EN08	EN08	EN08
	40 dB(A) silencer supplied separately	EN09	EN09	EN09
Starting	24 V charging alternator and starter motor	•	•	•
	Batteries with cables and battery support bracket	•	S0001	S0001
	Battery isolating switch	EN16	EN16	EN16
Fuel	Generating set without fuel tank	FD01	• <sup>(6)</sup>	•
	Separate fuel tank on 500 L container	FD06	FD06	FD06
	Separate fuel tank on 1000 L container	FD07	FD07	FD07
	500 L base frame fuel tank	•	FD03 <sup>(6)</sup>	X
	910 L base frame fuel tank, enclosed version	X	•	X
	Fuel cooling system	X	X	E0006
	Retention container level alarm	FD14	FD14	FD14
	1m³/h 1-pump auto kit	FD08	FD08	FD08
	1 m³/h 2-pump auto kit	FD09	FD09	FD09
	Diesel separator pre-filter	•	•	•

(1) VOE: emissions optimisation variant

(2) VOC: consumption optimisation variant

(3) Contact us

(4) Standard for X1250, X1250C, X1400 and X1400C

(5) Synchronizing CT coupling not necessary with APM802

(6) Except enclosed gensets

• As standard

X Not available

o Several options available - please contact us

EN01: option code

### 1 Diesel separator pre-filter (FD05)

This is a filter enabling water contained in the diesel to be removed, thereby improving the engine's protection.

### 2 Filter with interchangeable cartridge (EN02)

Dry air filters with removable and interchangeable cartridges for dusty environments which can be removed and cleaned with an air gun, if required. This option is required when the generating set is used in dusty environments.

### 3 Oversized alternator (A0001B)

For installations with significant electrical constraints, this option ensures improved performance.

### 4 Silencer in open version (EN07, EN08, EN09)

For "open" version generating sets, 3 noise reduction levels are available (9 dB(A), 29 dB(A) and 40 dB(A)), to meet the constraints of various installations.

### 5 Oil centrifuge (EN19, only for 4000 Series)

This allows the maintenance interval to be increased from 500 hours to 1500 hours (depending on the oil quality).

### 6 Automatic oil make up with tank (EN18)

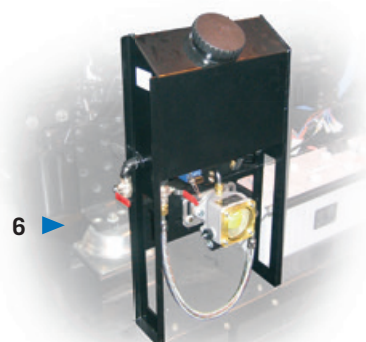
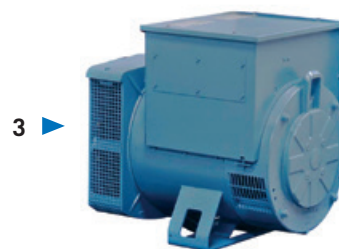
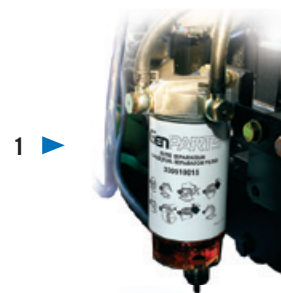
Automatic oil make up system enabling a constant oil level to be maintained in the crankcase during operation. It comprises a new oil reserve, an oil level regulator and a hose and valve assembly mounted on the generating set's base frame.

### 7 Automatic fuel filling kit (FD08)

This kit allows the fuel tank to be automatically filled from an external storage tank. It includes:

- an electric pump with automatic control governed by a gauge with level contacts
- a manual back-up pump

It can be used for extended periods of time without topping up the diesel. It is therefore particularly well-suited to remote locations.





# SDMO OFFERS A VERSATILE RANGE OF SOUNDPROOFED CONTAINERS

You are faced with numerous installation constraints. SDMO containers can be adapted to meet all your needs. Thanks to their standard dimensions, they are easy to transport. Our turnkey containers have an integrated fuel tank which means they are ready to run, with no need to connect up an additional fuel tank. Their coolant system, with an integrated silencer and sound traps, provides a highly economical solution.

	ISO CONTAINERS	CIR CONTAINERS	CPU CONTAINERS
Dimensions	20-foot High Cube	20-foot High Cube and Dry	40-foot High Cube
CSC* certified	•	-	•
Standard sound level at 50 Hz, at 1 m, 3/4 load	84 to 98 dB(A)	80 to 85 dB(A)	- 85 to 90 dB(A) with Silent option - 79 to 82 dB(A) with Super Silent option
Double maintenance door	-	-	•
Target environments	Standard environment	Standard environment	Harsh atmospheres (heat, dust)

\*CSC: the International Convention for Safe Container (C.S.C.) is regulation which ensures that containers used for transporting goods retain the specifications required to "...maintain a high level of safety of human life in the handling, storage and transport of containers" over time.





## ISO CONTAINERS

ISO containers are adapted to emergency applications with no harsh environmental constraints.

- Available in 20-foot High Cube



CSC\* certified



Adapted to standard environments

### > PRODUCT PLUS POINTS

FLEXIBLE INTEGRATION



## CIR CONTAINERS

CIR containers are specially designed with mobile and rental applications in mind.

- Available in 20-foot High Cube and Dry versions



Adapted to standard environments

### > PRODUCT PLUS POINTS

LARGE CAPACITY FUEL TANK  
LOW SOUND LEVEL  
ACCESSIBILITY OF THE CONTROL/COMMAND  
AND POWER SUPPLY DEVICES



## CPU CONTAINERS

CPU type containers are designed to be adapted to the most demanding environments. Robust and modular, they are specially conceived to meet the very stringent constraints of production applications.

- Available in 40-foot High Cube version (Silent and Super Silent).



CSC\* certified



Double maintenance door



Harsh atmospheres (heat, dust),

### > PRODUCT PLUS POINTS

LOW SOUND LEVEL  
NO LOSS OF POWER UP TO 40°C  
SIMPLIFIED MAINTENANCE  
ACCESSIBILITY OF THE CONTROL/COMMAND  
AND POWER SUPPLY DEVICES  
SHORT PRODUCTION LEAD TIMES



\*CSC: the International Convention for Safe Container (C.S.C.) is regulation which ensures that containers used for transporting goods retain the specifications required to "...maintain a high level of safety of human life in the handling, storage and transport of containers" over time.

## BASIC EQUIPMENT AND OPTIONS FOR CONTAINERS

		SILENT		SUPER SILENT	
		ISO20 Si	CPU40 Si	CIR20 SSi	CPU40 SSi
Generating set	Complies with CSC certification	•	•	X	•
	Base member	•	•	•	•
	Starter motor, charging alternator	•	•	•	•
	Batteries filled with electrolyte	S0001	S0001	S0001	S0001
	Standard air filter	•	•	•	•
	Oil drainage pump	•	•	•	•
Filtration	Reinforced fuel filtration	X	CT022	X	CT022
	Air filter for dusty environments	X	CT024	X	CT024
Container specifications	High performance 30 dB(A) silencer	• <sup>(1)</sup>	• <sup>(2)</sup>	• <sup>(1)</sup>	• <sup>(2)</sup>
	Integrated exhaust module	X	CT028	X	CT028
	Floor	Steel sheet	Steel sheet	Steel sheet	Steel sheet
	Number of side doors	2	2 + 2 double	3	2 + 2 double
	Galvanised air outlet rain grille	CT005	X	X	X
	Air outlet protective rain grille	•	•	•	•
	Safety lighting and shut-off valve	CT007	CT007	CT007	CT007
	Exhaust outlet on bracket	CT011	X	CT011	X
	RAL 9010 white painted finish for container	•	•	•	•
	Special colour from list	CT016	X	X	X
	Power cable outlet on lower section	CT015	•	CT015	•
Fuel	Retention container under genset assembly	•	•	•	•
	500 L base frame fuel tank	•	X	X	X
	Tank on container (500 L)	X	•	X	•
	Tank on container (1000 L)	X	CT021	X	CT021
	1500 L base frame fuel tank	CT019	X	X	X
	Tank on container (2000 L)	X	X	CT017	X
	1m³/h 1-pump auto kit	CT008	CT008	CT008	CT008
	1 m³/h 2-pump auto kit	X	CT009	X	CT009
Control units	CE compliance of the control unit	•	•	•	•
	TELYS console	CM40	CM40	CM40	CM40
	APM802 console	A802	A802	A802	A802
	Control unit under console	X	E05	X	E05
	APM802 built-in control unit	X	C600	X	C600
Dimensions	Length (mm)	6058	12192	6058	12192
	Width (mm)	2438	2438	2438	2438
	Height (mm)	2896	2896 <sup>(3)</sup>	2590 (Dry) 2896 (High Cube)	2896 <sup>(3)</sup>

• As standard  
X Not available

EN01 Option code  
(1) inside the container

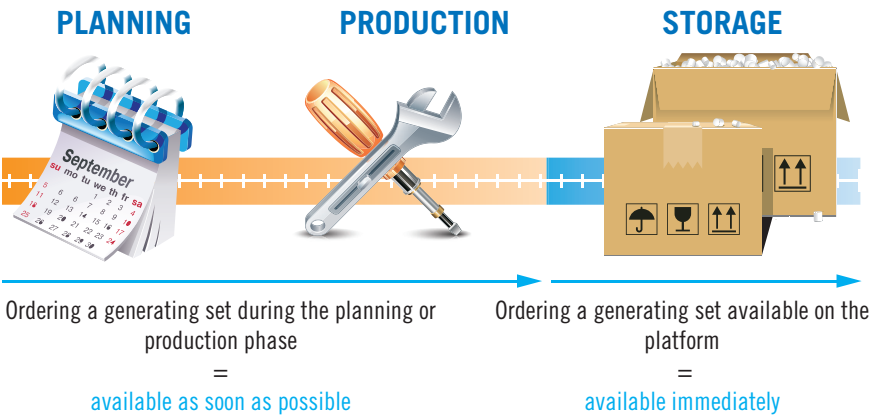
(2) on the container roof  
(3) excluding silencer





STANDARD GENERATING SETS ARE  
HELD IN STOCK

Five 50 Hz references from 715 to 1250 kVA in the Power Products range are stocked worldwide for quick delivery. These generating sets are available in open or enclosed versions. Aftermarket options are available to order (silencers, differential protection, ATS, Service First, etc.)



Order directly by email

You can place your order directly by email using the form attached to the stock list sent each week.  
Cut out the middle man: Your order is registered and shipped in the quickest possible time.

50 HZ CONFIGURATION AVAILABLE

	X715C, X880C, X1000X, X1100C		X1250C
	open version	soundproofed version	open version
4-pole circuit breaker	•	•	•
Control unit	TELYS	TELYS	TELYS
Card for measurement	•	•	•
Battery charger	•	•	•
Engine preheating	•	•	•
Prewiring for auto start-up	•	•	•
CE label	•	•	•
Hose	•	X	•
Multilingual documentation	•	•	•
Silencer	X	•	X

• Included      X Not available





## M80, TELYS, APM802 : EXCLUSIVE TO SDMO

### SDMO offers a unique range of specific control units: M80, TELYS and APM802.

These control units offer a wide range of possibilities, from simplified running to management of the most complex coupling operations, and can be adapted to suit every need. This modularity is made even easier by the fact that each optional peripheral device (air cooler, daily service tank, oil make up, etc.) has its own protection.

For power plants, separate control boxes may be used in place of the control units. Please do not hesitate to contact us.

## COMPARISON OF THE 3 CONTROL UNITS

SPECIFICATIONS	M80	TELYS	APM802
<b>DISPLAY</b>			
Frequency	X	•	•
Phase to neutral voltages	X	•	•
Phase to phase voltages	X	•	•
Currents	X	•	•
Active/reactive/apparent power	X	•	•
Power factor	X	•	•
Battery voltage	X	•	0
Battery current	X	0	0
Start-up delay	X	•	•
Fuel level	X	•	•
Oil pressure	•	•	•
Coolant temperature	•	•	•
Oil temperature	X	0	0
Total working hours counter	•	•	•
Partial working hours counter	X	•	•
Total active/reactive energy meter	X	•	•
Genset speed	•	•	•
<b>FAULT INFORMATION (fault or alarm)</b>			
Min/max alternator voltage	X	•	•
Min/max alternator frequency	X	•	•
Min/max battery voltage	X	•	•
Overload and/or short circuit	X	•	•
Active/reactive power return	X	•	•
Oil pressure	X	•	•
Coolant temperature	X	•	•
Overspeed	X	•	•
Underspeed	X	•	•
Low fuel level	X	•	•
Emergency stop fault	X	•	•
Non-starting fault	X	•	•
Charging alternator fault	X	•	•
Differential relay activation fault	X	•	•
General alarm	X	•	•
General fault	X	•	•
Sound alarm	X	•	•

SPECIFICATIONS	M80	TELYS	APM802
<b>OPERATION</b>			
Power ON	X	•	•
Manual genset starting	X	•	•
Automatic genset starting	X	•	•
Genset shut down	X	•	•
Emergency stop	•	•	•
Menu navigation using colour touch-screen	X	X	•
Menu navigation using wheel	X	•	X
Operating configuration selector	X	•	•
Remote starting control	X	0	X
Speed adjustment	X	0	•
Voltage adjustment	X	0	•
Dual frequency	X	0	0
Delayed start programming	X	•	•
Multilingual using pictograms	X	•	X
Multilingual text	X	•	•
<b>CONNECTIVITY</b>			
Ethernet port (website)	X	•	•
RS485 (JBUS protocol)	X	•	•
Engine CAN Bus (J1939)	X	•	•
USB port (config and software downloading)	X	•	•
<b>COUPLING</b>			
Under load	X	0	•
Stopped	X	X	•
Droop distribution of active and reactive power	X	0	•
Parallel line distribution of active and reactive power	X	X	•
CAN Bus distribution of active/reactive power	X	X	•
Power plant wattmeter control	X	X	•
Temporary coupling of Out/Return grid	X	0	•
Power plant coupling to grid (temporary, permanent, etc.)	X	X	•
<b>GENERAL</b>			
Downloading of a customised configuration via USB port	X	•	•

• Standard  
X Not available  
0 Option



THE M80  
IS A DUAL-FUNCTION CONTROL UNIT

It can be used as a basic terminal block for connecting a control box and as an instrument panel with a direct read facility, with displays giving an overview of your generating set's basic parameters.



ADDITIONAL SPECIFICATIONS

		TERMINAL BLOCK	M80
Measurements	Tachometer (54 mm)	X	•
Engine parameters	Oil pressure gauge	X	•
	Coolant temperature	X	•
	Oil temperature indicator	X	O
Controls	Emergency stop	•	•
Miscellaneous	CE compliant	•	•
	Customer connection terminal block	•	•

• Standard  
X Not available  
O Option

## > PRODUCT PLUS POINTS

### INNOVATION:

TELYS now integrates an optional coupling function:  
- grid temporary coupling (1 generating set + grid)  
- coupling between generating sets



## TELYS, ERGONOMIC AND INTUITIVE

As SDMO's flagship product, the TELYS integrates new options.

More straightforward than ever, its focus is on communication

(USB connections, PC connections, control software and remote operation).



## SCREEN

Screen with contrast which adjusts to all types of light

Viewing and remote control functions with option to send an e-mail, text message or fax in the event of an alarm or a fault (optional)

## FUNCTIONS

Compliance with numerous legal and regulatory requirements (EC)

Integrated diagnostic tool to guide the user when alarms or faults appear

Integrated maintenance monitoring (screen display of planned maintenance procedures)

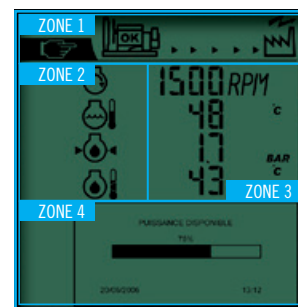
## CONNECTIVITY

2 USB ports under sealed cover

## OPERATION CONDITIONS

Tropicalisation of the electronic board to withstand conditions of extreme humidity

Display screen composed of 4 zones:



ZONE 1: Operation mode (auto/manual/GS output, etc.)

ZONE 2: Display of functions via pictograms

ZONE 3: Display of mechanical and electrical values and the associated measurements

ZONE 4: Operating messages and parameter settings menu



## > PRODUCT PLUS POINTS

### INTUITIVE AND ERGONOMIC TO USE

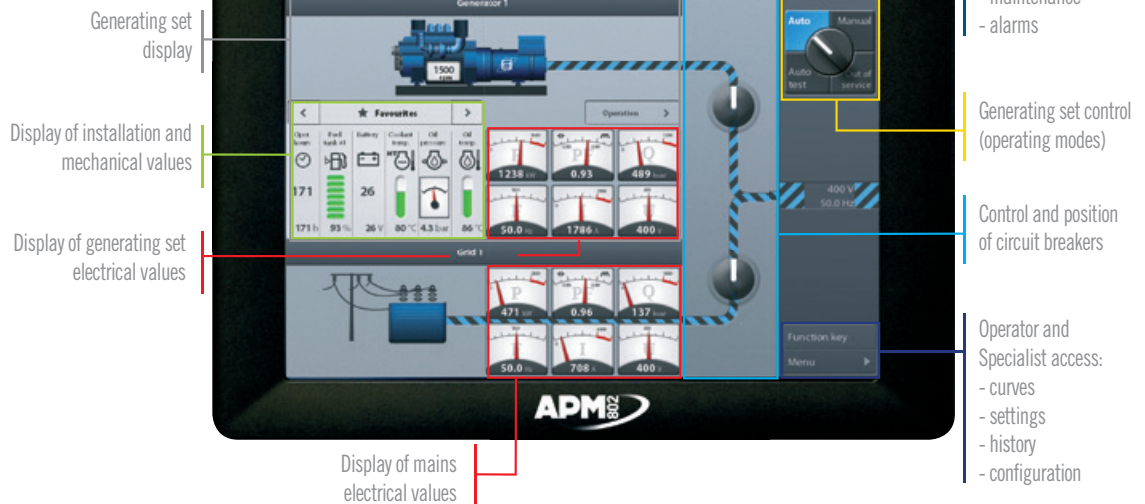
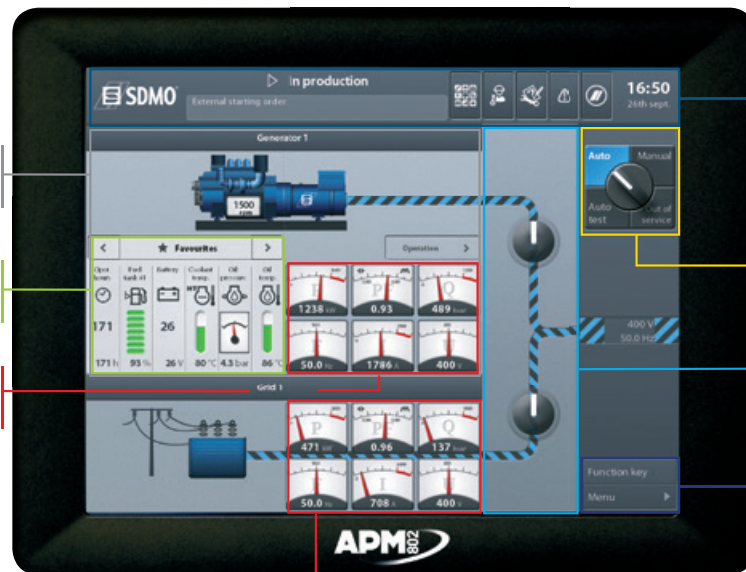
The ergonomics of the APM802 has been carefully designed in conjunction with users to ensure optimum user comfort. The operator is guided through how to operate the product according to their access level, making it easy to get started and reducing the risk of errors.

## APM802\*, DEDICATED TO POWER PLANT MANAGEMENT

Fully developed by SDMO, the new APM802 command/control system is specifically designed for operating and monitoring power plants for markets including hospitals, data centres, banks, the oil and gas sector, industries, IPP, rental, mining, etc.

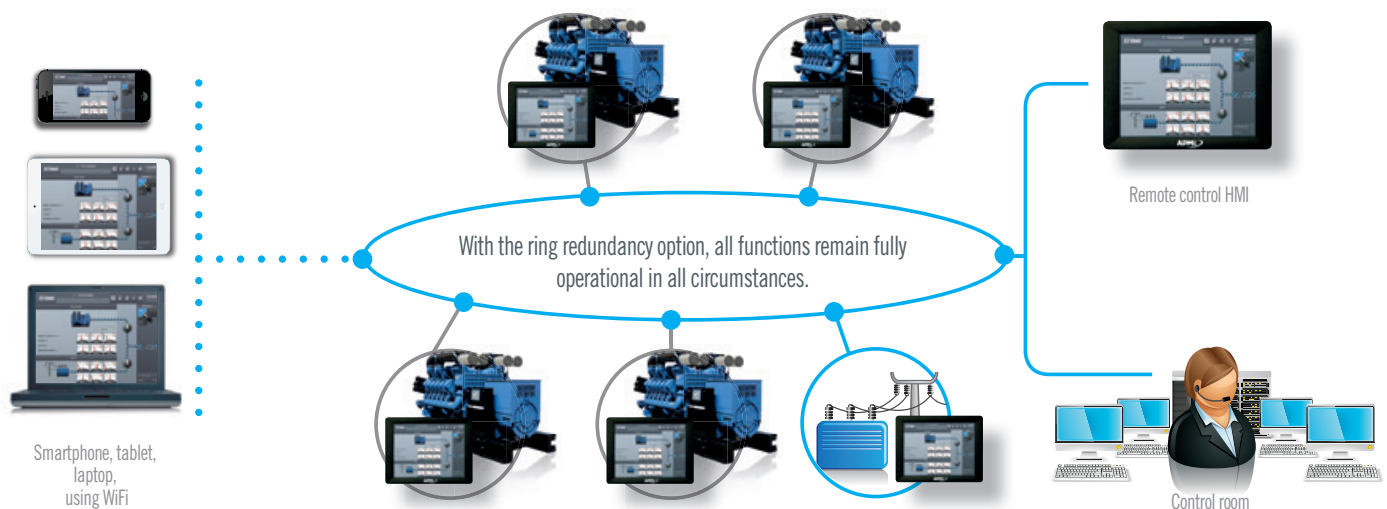
The Human Machine Interface, designed in collaboration with a company specialising in interface design, facilitates operations via its large 100% touch screen.

The pre-configured system for power plant applications features a brand new customisation function which complies with the international standard IEC 61131-3.



### The APM802 for enhanced communications

Communication via the APM802 guarantees a high level of equipment availability and facilitates the remote control of the HMI for enhanced usage. Additionally, various connections can be made via the Ethernet, using fibre optics or combined with copper wire. For full control of risk management, the system communications are separated from the external communications.



The ring is created by several Ethernet segments and groups together regulation and PLC communications.

The APM802 can be integrated into a console, into a built-in control unit, directly on the generating set, or in a separate cabinet, to adapt to all installation constraints. An assurance of innovation, the APM802 is protected by copyrights and two patents.

\*Advanced Power Management



## APM802 BUILT-IN CONTROL UNIT EFFICIENCY FIRST

The integrated control unit is an intermediate solution between fitted consoles and separate control boxes. It offers the key benefits of a console as it is integrated into the generating set's frame, whilst offering greater flexibility in terms of equipments due to its greater volume. An APM802 with HMI is fitted on the front panel.

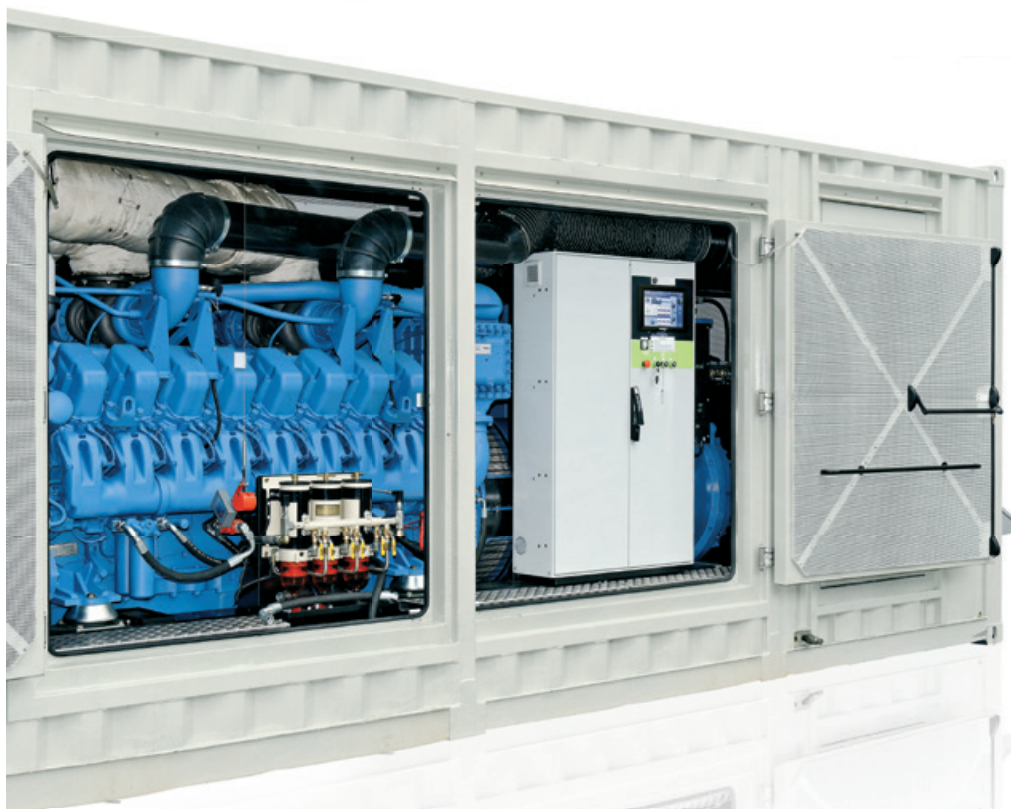
The integrated control unit features all the auxiliaries in one place, with better sealing and controlled ventilation. It improves use and maintenance on-site.



Dimensions: 1600 x 1000 x 300 mm

### Options:

- Dual electric & pneumatic starting
- Management of 2 fuel pumps
- Emergency maintenance (standard with A651 and A661)
- Dead bus paralleling
- Integrated voltage regulator
- Second remote HMI (in CPU40 container)
- Power detection
- Fuel preheating via a boiler
- Air cooler on generating set or separate
- Input & output dampers
- Input or output ventilation



## POWER MODULES

## AIPR

Each generating set may be supplied with a protection unit. This unit is mounted on the chassis with connection cables to the alternator. This AIPR function is also adapted for containers.

AIPR		
With manual control on the front		
	3-pole open circuit breaker	0
	4-pole open circuit breaker	0
Motorised control option <sup>(1)</sup>		
	With 3 or 4-pole open circuit breaker only	0
	Voltage 208-440 V	•
	Auxiliary unit option <sup>(2)</sup>	0
	Large range power connection bus bars	• <sup>(3)</sup>
	Remote control terminal block	•
	Protection index	IP20
Dimensions (without air cooler unit)	height (mm)	1260
	width (mm)	683
	depth (mm)	365
Dimensions (with air cooler unit)	height (mm)	1664
	width (mm)	683
	depth (mm)	365
Dimensions (unit with connection from above)	height (mm)	1883
	width (mm)	683
	depth (mm)	365

(1) The motorised control includes: a closing electromagnet, a shunt trip coil and an AC motor

(2) The auxiliary option unit is mounted above the main unit. It is used for the power connections of generating set auxiliaries, e.g. air cooler/fan output.

(3) Standard at the bottom and optional at the top.  
• Standard  
o Option



## VERSO

In industrial applications, the transfer of the main source to the replacement source is crucial for the running of your installations. The Verso 200 is the perfect solution for this situation **from 800 A to 3200 A**.

VERSO 200			
Ratings (A)	800, 1000, 1250	1600	2000, 2500, 3200
Type	Three phase		
Nominal voltage/frequency	127 / 230 V / 50-60 HZ - 230 / 400 V / 50-60 HZ		
Configuration	Auto-configuration of voltage/frequency min/max and configurable thresholds		
Display and setting	By LCD - Supplied with manually-operated key - Can be padlocked in manual mode		
Voltage drop tolerated	30% of the nominal voltage @ 400 V		
Protects against a change in the phase rotation direction	0		
Lightning arrester	0		
EJP pack (for France only)	•		
Confirmation of mains return	0		
Protection index	IP55		
Inputs/outputs	3 configurable dry contact inputs/2 configurable relay outputs		
Dimensions (h x l x d) in mm	2000 x 800 x 695	2000 x 1000 x 695	2000 x 1000 x 895

• Standard

o Option

X Not available





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