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SDMO®

MiCS TELYS

ENGLISH

COF-TL-DO-US-01

Global Power Solution™

SDMO®

Mics TELYS

NEW TELYS

Wholly developed by SDMO, the TELYS is fitted as standard, or as an option, to all our generating sets, to ensure efficient operation and surveillance of your installation. Streamlined and modernised, the new generation TELYS offers new functions in addition to those taken from the previous version. In its basic configuration, it is able to cover 80% of standard applications.

Its new design, directly inspired by the NEXYS, has a reduced number of buttons to offer you simplicity when operating your generating set. More than ever, SDMO has placed the emphasis on the user-friendliness of its product, the particular strength being communication (USB connections, PC connections, control software and remote operation).

SIMPLICITY

The straightforward TELYS interface ensures it is easy to use: a START button, STOP button, MENU button, ESCAPE button and 3 LEDs (operation, alarm and fault). The ridged control wheel makes this interface particularly easy to operate, as it allows you to scroll through the menus and make selections at a single touch. Pictograms ensure that all information given can be immediately understood.

USER-FRIENDLINESS

The TELYS has a large, backlit screen, the contrast for which does not need to be adjusted, making your installation a pleasure to use, whether inside or out, both day and night. The drop down menus and descriptions ensure that no further explanation is needed.

MODULARITY

With the same format and design as the NEXYS, the TELYS can be easily fitted in place of the latter. To improve the control of your parameters and increase the potential of your installation, three cards can be connected to the TELYS (Inputs/Outputs, Speed/Voltage trimming. Certain aftermarket options can also be added to update the product and/or to personalise your generating sets.

COMMUNICATION

The generating set can be controlled and operating parameters viewed remotely, without having to install specific software, via a computer network, a landline telephone network or a mobile telephone network. The USB ports ensure that it is easy to recover any events connected to the operation of the generating sets, to change parameters or to update the software. Also, the TELYS is multilingual as standard and can also take some special languages as an option

GENERATION

MICS TELYS

PRESENTATION

The TELYS is fitted as standard, or as an option, to all SDMO generating sets in the POWER PRODUCTS and RENTAL POWER ranges.

Types of control unit	TELYS
POWER PRODUCTS	
PACIFIC range (T7.5 to T44)	o
MONTANA range (J33 to J300)	o
MONTANA range (J400 to J440)	▪
ATLANTIC range (V200 to V220)	o
ATLANTIC range (> V220)	▪
EXEL range	o
PACIFIC range (T1250 to T2100)	o
RENTAL POWER	
From 16 to 275 kVA	o
From 330 to 700 kVA	▪

o Option
▪ Basic

COMPLIANCE WITH STANDARDS

The TELYS has been developed following a process which exacts the highest quality.
It complies with all major European, American and International standards and directives:
- Electromagnetic Compatibility (EMC) general standards: EN 61000-6-2 and EN 61000-6-4 (emission and protection)
- LOW VOLTAGE standards
- Salt spray test performance: In accordance with standard EN68011-2-11
- Protection index of a TELYS mounted to a console: IP31 with the soft USB port protective cover fitted (according to EN 60529)
- UL and CSA standards

In addition, the TELYS does not fall under the remit of directives 2002/95/CE and 2002/96/CE, which relate to Electrical and Electronic Equipment (DEEE).

ATLANTIC generating set
fitted with the TELYS

RENTAL POWER generating set
fitted with the TELYS

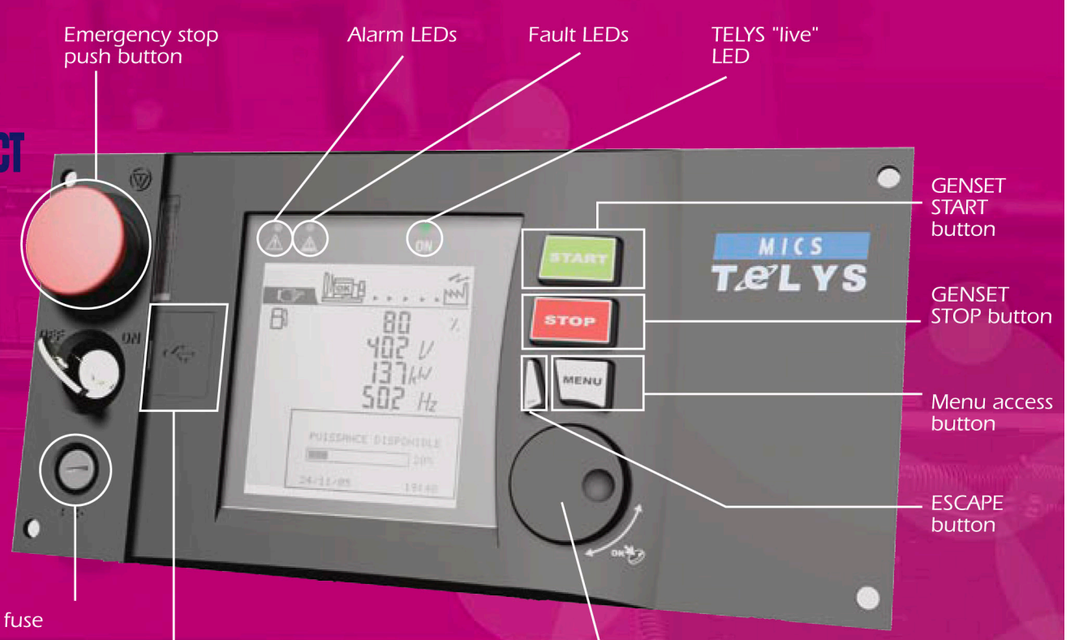
SDMO

Mics TELYS PRESENTATION OF THE MMI

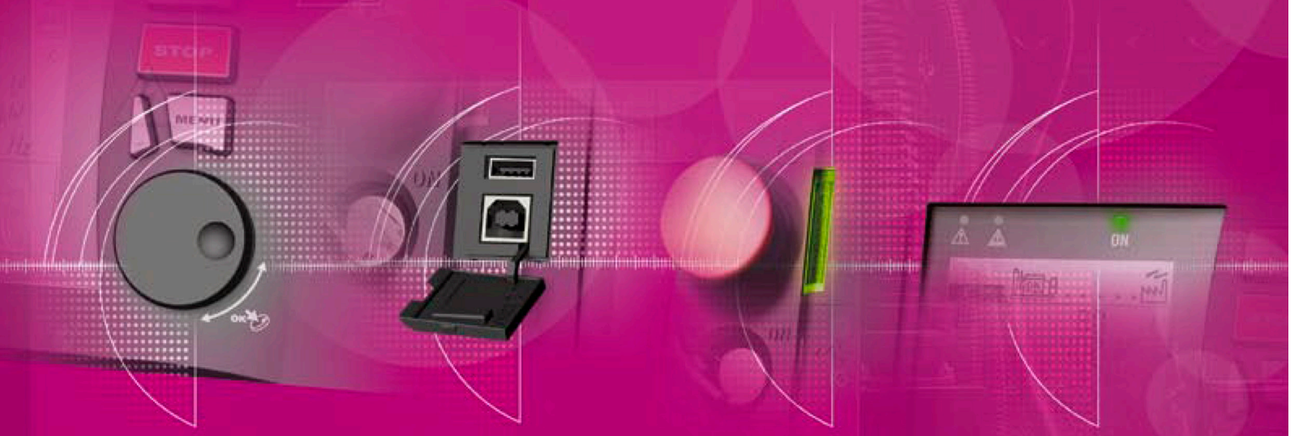
(Man-Machine Interface)

SDMO PRODUCT PLUS

The TELYS screen does not need any contrast adjustment and can be easily read at all levels of ambient light.



ZOOM INTO ...



Ridged control wheel for scrolling through menus or screens, with one-touch validation

2 USB ports for configuration, maintenance or updating the product, for example:

- Transfer of the configuration parameters (TELYS -> USB key)
- Updating the software (USB key -> TELYS)
- Modification of the TELYS configuration (PC -> TELYS)
- Setting up a new language (USB key -> TELYS)

Lighting for the emergency stop button

Operation and alarm and fault warning LEDs:

GREEN (constant): TELYS operating

YELLOW (flashing): Alarms

RED (flashing): Faults

DISPLAY SCREEN

PRESENTATION

The large personalised TELYS screen, makes different information easy to read (pictograms, measurements and messages). Its backlit design gives it a contrast which is adapted to all types of ambient light. The section with graphics is split into four zones.

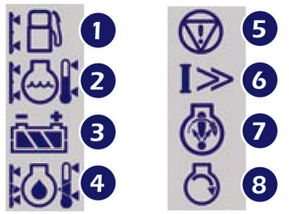
ZONE 1

Zone 1 informs the user of the generating set operating mode

1. Manual or automatic mode
2. Generating set operating - Voltage and frequency stable
3. The generating set is powered by the installation (flashing arrows)

ZONE 2

In zone 2, the function pictograms are displayed: measurements, alarms or faults



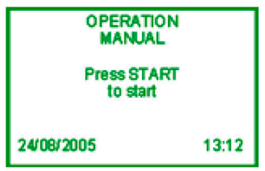
1. Fuel Level
2. Coolant temperature and level
3. Battery voltage and charge
4. Oil pressure, temperature and level
5. Emergency stop
6. Overload
7. Failure to start, underspeed and overspeed
8. Engine speed

ZONE 3

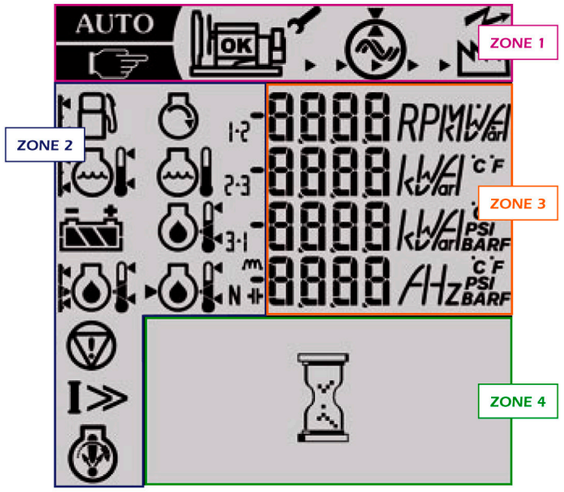
In zone 3, the electrical and mechanical values and the associated units of measurement are shown.

ZONE 4

The menus and messages connected to the operation of the generating set are found in zone 4.



TELYS SCREEN



EXAMPLE OF SCREEN, GENSET STOPPED

- Genset in automatic mode, stopped
- Fuel level indicator
- Coolant temperature indicator (units according to settings menu)
- Battery voltage indicator
- Oil temperature indicator (units according to settings menu)
- Warning message

EXAMPLES OF SCREEN, GENSET RUNNING

- Genset in automatic mode, starting in progress
- Engine Speed indicator
- HT coolant temperature indicator (units according to settings menu)
- Oil pressure indicator (units according to settings menu)
- Oil temperature indicator (units according to settings menu)
- Information message

- Genset in automatic mode, powered by the installation
- Fuel level indicator
- Voltage supplied indicator
- Indicator of active power active drawn from the installation
- Current frequency indicator
- Bar graph of available power

- Genset in manual mode
- Indicator of phase to phase voltage between phases
- Current frequency indicator
- Warning message

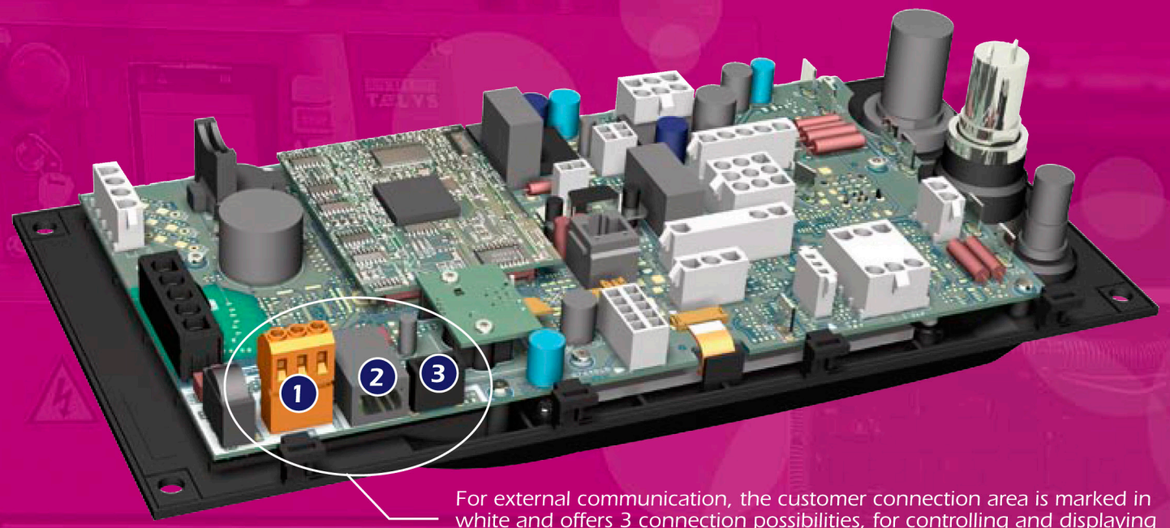
SDMO
Mics TELYS

COMPONENTS

MAIN BOARD

MICS TELYS

The standard version of the TELYS consists of a main board and an MMI. This board is available in two versions, to ensure that all types of engines (electronic, traditional or mixed engines) can be managed



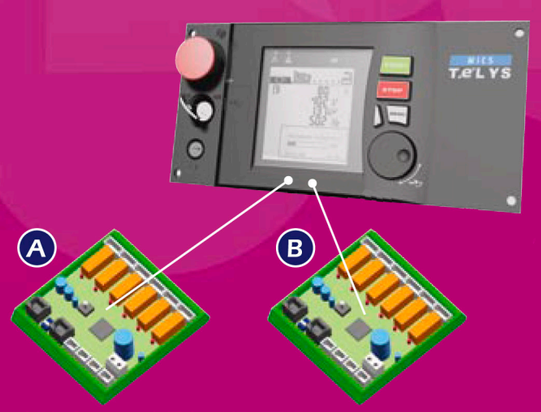
For external communication, the customer connection area is marked in white and offers 3 connection possibilities, for controlling and displaying parameters and remote operation.

1. RS 485 PORT - For specialised communication
2. ETHERNET PORT (1) - For connection to a modem or for working on the intranet
3. USB HOST PORT - For connecting a USB key

OPTIONAL CARDS

MICS TELYS

As an option, the TELYS can be connected to up to 3 types of card:



STANDARD

OPTION

A **1 Input/output card -** The input/output module enables additional logical inputs and outputs to be provided, as a supplement to those already available on the main board. . Inputs can be used for additional alarms or faults and outputs can be used for data transfers or to control options.
The input/output module is composed of 4 inputs and 6 outputs. A green LED is used to check the status of each output.

B **1 card for speed and voltage trimming** (1) - This card enables the engine speed and voltage supplied by the generating set to be adjusted.

C **1 coupling card** (2) **(1 for each generating set)** - The coupling card enables two types of configuration:
- coupling between generating sets (without grid)
- temporary coupling of a generating set to a grid

(1) available from 2007 semester 1
(2) available from 2007 semester 2

FUNCTIONS

STANDARD SPECIFICATIONS

MICS TELYS

ELECTRICAL MEASUREMENTS	ENGINE MEASUREMENTS
Single voltages	Fuel level (%)
Composite voltages	Oil pressure (Bar/Psi)
Frequency	Coolant temperature (°C/°F)
Active/reactive/apparent power	Oil temperature (°C/°F)
Power factor	Battery voltage:
Total and partial counter	Charging alternator current
Total and partial active/reactive energy meter	Engine speed
Currents	

SAFETY FEATURES
Min/Max Alternator voltage
Min/Max Alternator frequency
Min/Max Battery voltage
Overload and/or short circuit
Active/reactive power return
Oil pressure
Coolant temperature
Overspeed
Underspeed

MAIN OPTIONS

MICS TELYS

CM402	Prewiring for auto start-up
CM403	Automatic Pack (Charger (12v)+ Engine preheating 220/240 v (Relay + resistance)
CM404	Automatic Pack (Charger (24v)+ Engine preheating 220/240 v (Relay + resistance)
CM405	Report pack (Genset running, General fault, Low diesel level fault or alarm)
CM406B	Adjustable mains detection in the control unit
CM407	Analog values displayed on screen (PH/TE)
CM408	Remote starter unit
CM409	Battery ammeter
CM410	Voltage trimming
CM411	Speed trimming (If elec regulator is possible and selected)
CM412	Sound alarm fitted in the control unit
CM415	Safety feature for low coolant level
CM416	Low fuel level safety feature for chassis tank (Alarm as standard)
CM418	Differential protection 30 or 300 mA (Non adjustable <= 50 A)
CM419	Differential protection 30 or 300 mA (Non adjustable <= 125 A)
CM420	Adjustable differential protection (time & threshold)
CM603	No preheating
CM604	Charger fault (24 V)
CM605(1)	EJP pack (Detection, warning management, forcing key)
CM607	Central processing unit with neutral (ITAN)
CM608	Central processing unit without neutral (ITSN)
CM610	NFPA110 module level 1
CM611	NFPA Visible transfer unit
CM613(1)	GES pack fitted on the genset
CM615(1)	Genset information transfer and inhibition unit
CM616	Low fuel level safety feature for separate tank
CM617	Low fuel level alarm for separate tank

INFORMATION REPORT	
CE100	Fixed distance report pack (Genset running, General fault, Low fuel level fault or alarm)
CE220	Configurable distance report pack (6 report maximum)
CE221	Genset ON
CE222	Genset in automatic mode
CE223	Genset in non-automatic mode
CE224	Genset in manual mode
CE225	Genset in test mode
CE226	Genset stopped
CE22A	General fault
CE22B	Non-starting fault
CE22C	Oil pressure fault
CE22D	Water temperature fault
CE22E	Low water level fault
CE22F	Overspeed fault
CE22G	Alternator voltage fault
CE22I	Overload fault
CE22J	Emergency stop triggered fault
CE22K	Bulk tank fault (Separate tank)
CE22L	Differential triggered fault
CE22M	Fuel level low for exterior tank fault
CE22S	General alarm
CE22T	Low fuel level alarm
CE22U	Loss of coolant preheating alarm
CE22V	Min battery voltage alarm
CE22W	Battery charger fault alarm
EXTERNAL COMMUNICATION	
CEA12	Remote control via local ETHERNET network or RS485 Mod Bus
CEA52	Remote control via PSTN fixed telephone network
CEA62	Remote control via GSM mobile telephone network

SDMO PRODUCT PLUS

- **5 Basic languages: French, English, German, Spanish, Portuguese**
- **Integrated software accessible via an internet browser, enabling certain parameters to be modified, TELYS data to be displayed, and the genset to be remotely controlled**
- **Integrated maintenance tool displaying future servicing requirements**
- **Integrated fault finding tool aiding the user in the event of any alarms and/or faults**
- **Ability to send e-mail, SMS or fax in the event of any alarms or faults (optional)**
- **Optional tropicalisation of the cards (to provide protection in extremely humid conditions)**
- **Operation at -20°C to +60°C**
- **Humidity: 95% at 45°C, 70% at 50°C, 50% at 60°C**
- **Different levels of access to the configuration parameters**

(1) France only