

NEWS

From 80A to 160A

**Voltmetric three-phase control
for Mains and Generator**

**AMF panel including contactors
and circuit breaker**

**Available for gensets
from 13kVA up to 110kVA**

From 25A to 63A

DST2600

A.M.F. Genset control panel

The new version of the Automatic Mains Failure control panel DST2600 is a compact and rugged system for the management of automatic gensets with a power up to 110kVA max.

Compared to the previous version, now it's available a more powerful power circuit, offering a complete control system for stand-by gensets.

The NEW DST2600 is the perfect solution for the automatic management of an AMF stand-by genset. The same AMF panel can be used for manual gensets as well.

The control panel includes the main engine, alternator and grid protections in a compact and rugged carpentry.

A remote control is available too via GSM/GPRS, RS485 Modbus RTU, Ethernet Modbus TCP/IP.

- **Good price level**

- **Plug&Play solution**

- **Rugged and Reliable**

- **High-quality materials**

- **Integrated calendar and clock for daily or weekly start/stop**

- **Advice for the periodical maintenance activity**

- **Serial communication by RS232 MODBUS RTU**



General info

In case of Mains failure, the AMF panel DST2600 detects the voltage drop and it automatically starts the stand-by genset. The control panel controls the switch Mains/Genset connecting the load to the genset.

During the genset operation, both the engine and the alternator are monitored by the microprocessor controller, displaying any alarms with text message and stopping the genset, if needed.

When the Mains is restored, the DST2600 checks once again the voltage is between the normal limit and controls the switch, connecting the load to the Mains.

Thus, the DST2600 stops the genset after the adjustable cooling timing.

The DST2600 is the perfect solution for stand-by gensets up to 110kVA.

If needed, the DST2600 can manually start/stop the genset using the push buttons in front of the panel.

Thanks to the new XL version, DST2600 is available with an extended power circuit up to 160A (with motorized changeover only) and up to 125A (with couple of interlocked contactors for the switch Mains/Genset + Automatic circuit breaker for the alternator protection).

Operation sequence

By means push buttons on the front of DST2600, it's possible to select different operation modes:

OFF / RESET: engine start inhibition, with forced control of load supply from the Mains. When the engine is running and the selector switch is turned to the 'OFF' position, the engine shut-down sequence is activated.
Reset of all alarms which cause engine shut-down.

PROGRAM: access to all programmable parameters listed in the "LIST OF SETTING PARAMETERS".

MANUAL: engine manual start and stop controls are enabled. The Genset protection devices are activated. The starting control is automatically disabled when the engine is running.

AUTOMATIC: Automatic start upon Mains failure. The engine starts through a cycle of starting attempts, each followed by breaks. In case of starting failure, the controller gives an optical signal and forces the Genset to shut-down, thus avoiding battery discharge. Upon engine starting, the starter motor is automatically disconnected by the electronic control board. Once the rated conditions are reached, the Genset is connected to the load. The Genset is automatically controlled by the proper protection devices. When the Mains is restored within the normal limits, the Genset is automatically disconnected from the load.
The load is then supplied by the Mains and the engine is stopped after an adjustable cooling time.

TEST: Automatic start for periodical testing operations with safety protections enabled.
Mains/Genset changeover is disabled. Upon Mains failure, the load is immediately supplied by the Genset.

Measures

Mains voltages:

L1-L2, L2-L3, L3-L1

Lx-N max. voltage < 300Vac cat. IV

Generator voltages:

L1-L2, L2-L3, L3-L1, True RMS measure.

Lx-N max. voltage < 300Vac cat. IV

Generator currents:

L1, L2, L3, True RMS measure.

Nominal max. current: 60Aac

Overload measurable current : 4 x 5Aac (sinusoidal)

Generator and Mains frequency meter:

Resolution = 0.1 Hz

Battery voltmeter:

Resolution = 0.1V

Oil pressure gauge:

VDO 0-10 Bar, VDO 0-5 Bar, Veglia 0-8 Bar

Water thermometer:

VDO, Veglia, BERU

Fuel level:

VDO, Veglia

D+ Input for the measurement alternator battery charger

Computed measures

Active, Reactive and Apparent power meter

Power factor: total and phase by phase

Active and reactive energy counter

Hour counter

Hour counter for maint./rental, start counter

Engine protections

Overspeed

Coolant temperature

Oil pressure

Fuel level

Battery voltage

Belt break

Maximum deliverable power

Overcrank and stop failure

Generator protections

Underfrequency (81U)

Overfrequency (81O)

Undervoltage (27)

Overvoltage (59)

Time dependent overcurrent (51)

Instantaneous overcurrent (50)

Current unbalance (46)

Rated conditions failure (47)

Input / Output

- N.6 Programmable digital inputs
- N.1 Relays (3A) configurable output
- N.2 Relays (40A) fuel valve and start
- N.2 Additional Relays (5A) configurable output (*option*)

Standard equipment

- Microprocessor control with display LCD, signalling LEDs, command push buttons, serial port RS232 MODBUS RTU, ATS and AMF operations
- Couple of mechanical and electrical interlocked contactors (from 45A up to 125A) or motorized changeover switch (160A)
- Automatic circuit breaker properly sized for the alternator protection
- CTs (current transformers) for the measurement of the generator currents
- Supply 230V for the preheating water engine
- Battery charger maintainer
- Series of fuses
- Emergency stop
- Embedded alarm horn
- Aluminium carpentry

As option

- CANBUS J1939 Interface for electronic engines. However, the same version can be used for MPU engines as well (DST2600XL only)
- N.2 Additional and programmable output relays (dry contacts) 5A
- N.1 Circuit breaker 40A - 1P for the disconnection of the genset battery
- Rewind - Interfacing module GPRS/GSM/GPS
- Dance - Ethernet interface Modbus TCP/IP
- GSM Modem
- RS482/RS232/USB Converter
- Double insulating cables

Additional features

- Engine diagnostic code
- Periodical test
- Real Time Clock
- Possibility to inhibit the start of the genset based on a scheduled daily timing
- Remote start and stop
- OVERRIDE function (DST2600XL):

Enabling this function by parameter, it's possible to disable those engine and alternator protections which usually shut down the genset. In this case an alarm is activated except for:

- ◇ Emergency stop
 - ◇ Manual command of automatic stop
 - ◇ Overspeed
 - ◇ Overload
 - ◇ Short circuit
- Maintenance activity warning
 - Embedded alarm horn
 - Password protected access for adjust the operating parameters
 - LCD: transfective with LED backlight
 - Multilanguage device: IT, EN, FR

Additional technical data

Nominal Voltage: 400 Vac 50±60Hz

Auxiliary supply voltage: 7,5...15 Vdc

LCD: transfective with LED backlight

Operating temperature: -20 °C to 40 °C

Overall dimension: 430x310x135 mm (HxLxD) up to 63A

Overall dimension: 600x460x210 mm (HxLxD) from 80A up to 160A

Protection grade: IP40

Built in conformity to EN60439-1

TYPE	kVA 400V 3ph+N	kVA 230V 3ph+N	kVA 230V 1ph	A SWITCH MAINS/GENSET	A CIRCUIT BREAKER	Vcc	DIMENSIONS HxWxD mm	ARTICLE CODE
DST2600	17	10	5	45A - 4 Poles	25A - 4 Poles	12	460x345x140	E610208410601
DST2600	27	16	9	70A - 4 Poles	40A - 4 Poles	12	460x345x140	E610208410401
DST2600	34	19	11	70A - 4 Poles	50A - 4 Poles	12	460x345x140	E610208410701
DST2600	43	25	14	70A - 4 Poles	63A - 4 Poles	12	460x345x140	E610208410001
DST2600XL	55	31	On demand	100A - 4 Poles	80A - 4 Poles	12	600x460x210	E610208480000
DST2600XL	69	39	On demand	100A - 4 Poles	100A - 4 Poles	12	600x460x210	E610208470000
DST2600XL	86	49	On demand	125A - 4 Poles	125A - 3 Poles	12	600x460x210	E610208450000
DST2600XL	110	63	On demand	160A - 4 Poles	X	12	600x460x210	E610208460000



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