



TCGEN2.0

Automatic & manual mains failure

- Remote start and stop
- Manual start and stop
- Graphic remote display
- Programmable inputs/outputs
- Generator & mains protections
- Front panel protection: IP65

PART NUMBER

A6320

ASSOCIATED PRODUCTS

ICGEN2.0

ACGEN2.0

CRE Monitor (Configuration software)

The TCGEN 2.0 is a comprehensive AMF unit for a single generating set operating in standby mode. It offers a complete manual and automatic management for generator and mains. TCGEN 2.0 also features remote monitoring and control.

The unit is completely programmable by a software that allows one or more setting configurations to be saved on PC. The TCGEN 2.0 is controlled by front panel pushbuttons.



A BASIC UNIT WITH ADVANCED FEATURES

The TCGEN 2.0 monitors mains phase voltages and controls the automatic starting, stopping and load transfer of the generating set in case of a mains failure. All mains parameters are monitored and, in case of failure, the controller will immediately start the generator. When the voltage is within the programmed limits, genset contactor is immediately closed on load.

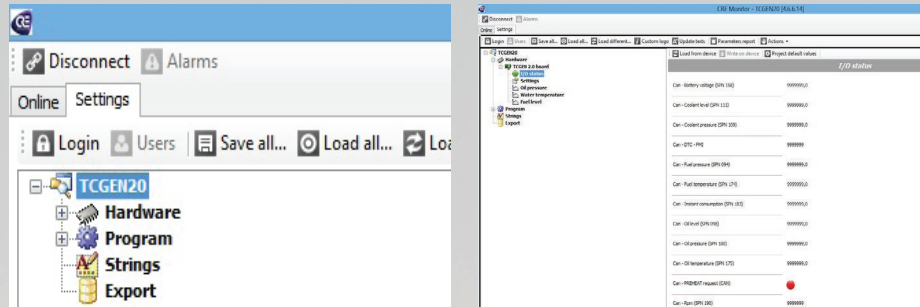
During the running period, the engine and the alternator are monitored. Any failure is shown on the display and will shut down the engine. When mains reappears the controller will open the genset contactor and transfer the load to the mains. The generator will be stopped after the cooling down time.

FEATURES	
<ul style="list-style-type: none"> • Engine speed measurement with magnetic pick-up / Alternator voltage • Back-lit LCD graphic display with multipage information • User friendly: a button per command & per LED indicator and intuitive fluorescent keyboard • Help button for on-board instructions • Different password access • 57 configurable alarms and protections • High accuracy TRMS measurement • Date and time (real time clock with battery) 	<ul style="list-style-type: none"> • 4 languages available on board (English, French, Italian, Spanish) • Engine history events log (250) and data-logger • System statistics: engine, alternator & mains • Modem communication via GSM – GPRS • Fast & easy setup • Fully programmable by keyboard • Modbus communication • Start engine depending of the mains load
MEASUREMENTS	
<ul style="list-style-type: none"> • V_{AC}: (L1/L2) - (L2/L3) - (L3/L1) / V_{AC}:L1N-L2N-L3N • kVA: L1-L2-L3-Total / kW: L1-L2-L3-Total / kVAR: L1-L2-L3-Total • kWh • cos (φ): L1-L2-L3 • Frequency Hz, fuel level & oil pressure, engine temperature, autonomy hours, hours left to service & run hours <p>Load measurements</p> <ul style="list-style-type: none"> • Currents: L1-L2-L3 	<p>Mains measurements</p> <ul style="list-style-type: none"> • V_{AC}: L1/L2-L2/L3-L3/L1 / V_{AC}: L1N-L2N-L3N • kVA, kW & kVAR: L1-L2-L3-Total • kWh • Cos (φ): L1-L2-L3 • Frequency Hz <p>Alarms and events</p> <ul style="list-style-type: none"> • Date and time, Information page, Events log, Active alarms page



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PROTECTIONS <ul style="list-style-type: none"> • Low oil level & Low coolant level • Ground protection alarm • High fuel consumption • Start & stop phase • Battery maintenance, stop failure • Fuel low & fuel high leakage • Unexpected consumption • Service • Refueling timeout, remote start & stop • Warranty expired, charger alternator failure • Faulty mains, test failed • High temperature alarm (digital), Low fuel/oil alarm (digital) • Battery charger alarm & Emergency button 		<ul style="list-style-type: none"> • Feedback generator breaker & mains breaker • System locked • User alarm (1, 2 & 3), faulty start, mechanical fault • Low & High frequency generator • Wrong phase sequence generator • Current overload & short-circuit • Low & high frequency/voltage mains • Wrong phase sequence mains • High temperature prealarm & alarm (analog) • Low fuel prealarm/ alarm (analog) • Low oil pressure prealarm/ alarm (analog) • High & low battery voltage/RPM value • Low autonomy 	
CHARACTERISTICS <ul style="list-style-type: none"> • DC range: 8 to 32 V_{DC} power supply • AC range: 50 to 500 V_{AC} • Typical standby current: 100 mA_{DC} • Maximum operating current: 350 mA_{DC} • Voltage dropouts immunity on the power supply : 0V for 200ms 		<ul style="list-style-type: none"> • Generator breaker relay output: 8 A / 250V • Mains breaker relay output: 8 A / 250V • DC relay outputs: 10 A / 28V • Charge excitation current: 54mA @ 12V_{DC} 	
Ports <ul style="list-style-type: none"> • 1 RS232 port for modbus RTU protocol / 1 RS485 port for modbus RTU communication • 1 CAN bus J1939 for engine communication (Scania EMS, Volvo EMS, Volvo EDC, Perkins, John Deere, Deutz, Iveco, Cummins, MTU) 			
Environment <ul style="list-style-type: none"> • Operating temp.: -30°C + 70°C • Maximum humidity: 95% non-condensing 			
Dimensions & weight <ul style="list-style-type: none"> • Dimensions: 245x182x40mm / Panel cut-out dimensions: 220x160 mm minimum / Weight: 750 g 			
Homologation <ul style="list-style-type: none"> • EN61000-6-(2), (4) - EN60086-2-2 / IEC61000-4-(2), (3), (4), (5), (6) / IEC60086-2- (1), (2), (6) + IEC60086-2-30 - CISPR 16-1 			

TCGEN 2.0 Installation in Brazil

