



TECNO ELETTRA

# AR-AT3809A

AMF (Auto Mains Failure) + RT (Remote Transfer Switch)

Code: AR-AT3809A (only command)



## AR-AT3809A

AT309A panel can be mounted on the top of the alternator or attached to the wall.

This panel is used to control one generator and mains and to command a remote transfer switch. This series of panels offer the complete manual and automatic management for generator and electricity network.

All electricity network's parameters are registered and, in case of anomaly, 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 monitoring. Any anomaly is showed on the display and, shut down the engine. At the return of steady electricity network the controller will open the genset contactor and transfer the load to the network side. The generator will be stopped after the cooling time (programmable).



## Benefits

**Perfect:** Price / Performance ratio

**Perfect:** Powerful + Technology & Italian Design

**Perfect:** Easy to use

**Perfect:** Warranty: 24 months from real installation date

- Back-lit LCD graphic display 64x128pixel with multipages information
- Configurable Display with customer logo
- User friendly: each command with own button, own led indicator and intuitive fluorescent keyboard
- Help button for on-board instructions
- Easy navigation system by drive with 5 buttons
- Different password access
- Configurable alarms and protections (57)
- High accuracy TRMS measurement
- Date and time (Real Time Clock with battery)
- 4- languages available on board (others languages available on CD rom or website)
- Engine history Events log (250) and **data- logger**
- System statistics: Engine, Alternator and mains
- Genset statistics page with detection and storage of electrical peaks and engine's most frequent anomalies
- 1 RS232 port Modbus RTU protocol
- 1 RS485 port
- 1 USB port
- 1 Can Bus J1939 port
- Modem communication via GSM – GPRS – Ethernet
- Fast and Easy, of alternative configurations
- Fully programmable by keyboard
- Licence free, Remote control software and monitoring “**TE monitor**” via PC, included the “**TE designer**” for PLC logic/display functions
- Intelligent Fast setup menù
- **OpEx** for the control of management costs
- Connection with the multi expansion boards TE6010: programmable I/O (both analog and digital) and relay outputs

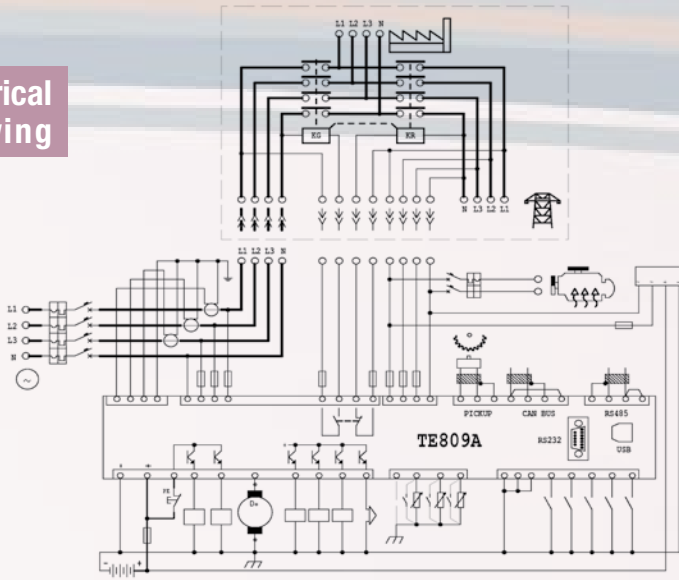
## Standard Composition

- 1- metal case 15/10 thick painted by epoxy powder
- 1-Plastic cover
- 1-Alarm Buzzer
- 10- protection fuses fox auxiliary
- 1-Terminal board for special function auxiliary connection, auxiliary engine and command to remote transfer switch
- 1-Switch 1P+N pre-heat engine 230Vac/10A
- 1-Emergency button
- 1-On/off key
- 3-Ampmetric transformer (only in the version with circuit breaker “generator protection”)
- 1-**TE809A controller**

## Technical data

- Work temperature range: -30°C + 70°C
- Ambient protection IP20
- Range Vdc: 8-35
- Range Vac: 50-500
- Measurement precision: 0,2% ±1digit
- Voltage and current measurements in True RMS
- Graphical display: 64x128pixel
- Static output (4) 2 Ampere
- Static output (2) 6 Ampere
- Built in conformity to EN60439-1
- Dimensions: 280 x 400 x 150

## Electrical drawing



### Optional pag. 60

- > GSM modem (1571806B)
- > GPS modem (1571806H)
- > Serial to Ethernet converter (1571806G)
- > 1570401M: battery charger 12Vdc 5A
- > 1570402M: battery charger 24Vdc 2,5A

### TE809A controller description

- > Three -phases mains control
- > Three-phases generator control
- > 10-function keys
- > 1- Navigation drive
- > 10-indication LEDs
- > Generator measures: Vac, kVA, kW, kVAR, kWh, cos.fi, Hz
- > Engine instruments: Oil pressure, Engine temperature, Fuel level, Autonomy hours, Work hours, Hours left to service, Daily work hours, Vdc
- > Load measures: Ampere L1-L2-L3
- > Mains Measures : Vac, kVA, kW, kVAR, kWh, cos.fi, Hz
- > 57-Alarms and protections (Configurable)

### Technical data

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### OpEx for the control of management costs

- > Liters of last leakage
- > Total liters lost for leakages
- > Total cost of leakages
- > Liters of last abnormal consumptions
- > Total liters lost for abnormal consumptions
- > Total cost of abnormal consumptions
- > Liters lost for last refilling not completed
- > Total liters lost for refillings not completed
- > Total cost of refillings not completed
- > Total cost of fuel wastages
- > Efficiency based on consumption and produced kWh
- > Costs of services
- > Total operating cost

### Special functions on board

- > Remote start and stop
- > Timer start/stop for programmable daily or weekly starts and stops
- > SCR/EJP: remote start with group contactor closure even if the mains is present
- > Start/Stop of the genset by kW threshold
- > Dummy load command
- > Automatic buttons block
- > Fast switch by the display or with an external input :50/60Hz -3Ph/1Ph
- > Refilling fuel pump
- > programmable analog/digital inputs(3) (included PT100/PT1000)
- > programmable digital inputs (5) (each with 21 preset functions)
- > programmable static outputs (6)(each with 21 preset functions)
- > Pick-up input

### Standard composition + MCB (circuit breaker)

A	400vAC 3ph kVA	230Vac-3ph kVA	Vdc	Dimensions H x W x D	Code
16	11	6	12	310X405X165	ARM-AT3809A4011
20	14	8	12	310X405X165	ARM-AT3809A4014
25	17	10	12	310X405X165	ARM-AT3809A4017
32	22	13	12	310X405X165	ARM-AT3809A4022
40	28	16	12	310X405X165	ARM-AT3809A4028
50	35	20	12	310X405X165	ARM-AT3809A4035
63	44	25	12	310X405X165	ARM-AT3809A4044
80	55	32	12	310X405X165	ARM-AT3809A4055
100	70	40	12	310X405X165	ARM-AT3809A4040
125	87	50	12	310X405X165	ARM-AT3809A4087

#### ARM=

- AMF (Auto Mains Failure),
- RT (Remote Transfer Switch),
- MCB (Circuit Breaker)

The images in the catalogs are purely indicative and Tecnoelettra reserves the right to apply, in any moment and without notice, changes even structural to the product.