

### GEWISS ACTIVO - ELECTRONIC CONTROL UNIT

#### CONTROL UNIT AND TECHNICAL CHARACTERISTICS

	IEC 60670-24; CEI 23-48; CEI 23-49
Protection rating	IP 40
Protection against indirect contacts	Double insulation
Installation temperature	max. +60°C; Min. -15°C
Material	GW PLAST
Impact resistance	IK 08
Resistance to abnormal heat and fire	thermo-pressure with ball 70°C; Glow wire test 650°C

#### CONTROL UNIT TECHNICAL CHARACTERISTICS

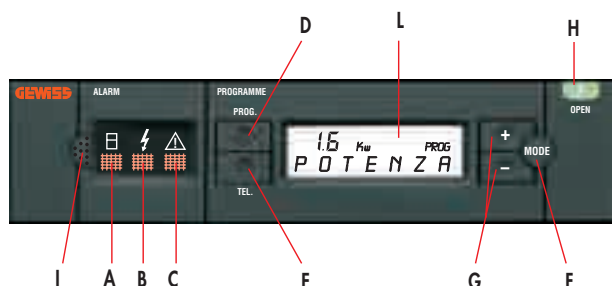
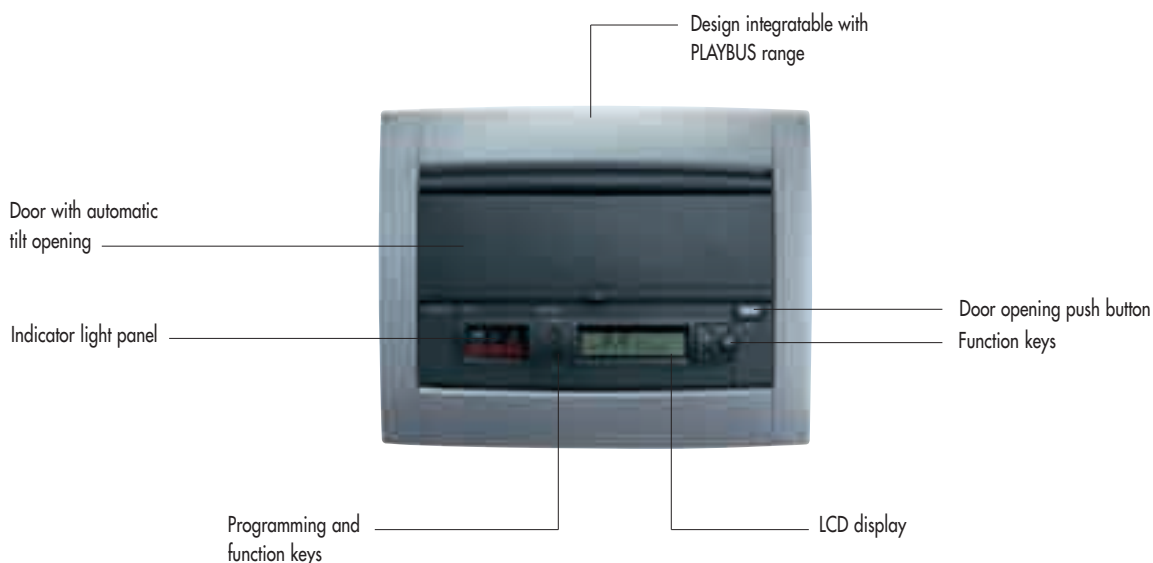
Power supply	230V-50/60Hz (neutral phase)
Absorption	max 100mA
Electrical protection	PTC
Rechargeable backup battery	Yes
Battery life without mains	6h
Programmable relay output	1 switching NO/NC+1 NO-1A(AC1)-250V (configurable)
No. circuits monitored	8 (vers. 24 mod.) or 2 (vers 12 mod.)

#### FUNCTIONALITY TABLE

Instantaneous power monitoring	0÷7kW ±0.1kW
Residual current monitoring	4-35mA ±1mA
Mains voltage monitoring	with tolerance settable between ±2% e ±20%
Management of	3 daily events with 1 min. resolution
Monitoring status of automatic switches installed	by connection downstream of switch to terminal board
Acoustic alarm by means	of buzzer
Visual alarm	by means of display and LEDs on front panel
Management of releaser for non-priority loads	by means of NO relay
Telephone dialler management by means of	NO/NC relay
AUTOTEST differential recognition	automatic
LCD display languages	Italian/English

### FLUSH MOUNTING CONTROL UNITS

#### PRODUCT DESCRIPTION



- A Signals non-distribution of power by the electricity company.
- B Signals exceeding of dissipation to earth threshold
- C General alarm signalling, main switch tripping, divisional switch tripping, voltage anomalies, AUTOTEST (if present) signalling
- D Key **PROG**. Allows programming of control unit intervention parameters
- E Key **TEL**. Enables the contact for an external telephone dialler.
- F Key **MODE**. Allows the various control unit parameters to be displayed
- G **+** Key **-**. These keys allow modification of control unit intervention parameters in programming phase
- H Key **OPEN**. The button allows door opening. It lights in case of power failure and in case of modular protection device intervention.
- I Buzzer. Acoustically signals several system anomalies.
- L Horizontal scroll LCD Display

#### CONTROL UNIT FUNCTIONS

##### Active intervention

The two NO output contacts and the NO/NC switching contacts are completely configurable.

- *Anti-power failure utility protection*  
By means of an optional release coil (ex.: GW 96 012) the control unit enables the switching on of a load set as "non-priority" avoiding tripping of the main switch.
- *Daily programmer*  
A user load can be activated for a maximum of 3 daily cycles (e.g.: simulation presence/activation garden lights/ irrigation).
- *Remote alarms*  
The relays can be used for remote anomaly signalling by means of buzzers, indicator lights, telephone dialler or other device.

##### Complete integration with RESTART/AUTOTEST

The ACTIVO control unit automatically recognizes the possible presence of a differential AUTOTEST and signals operation status and any anomalies directly on the front panel, without having to open the door.

- *Device disabled signalling*
- *Visual signalling of "test in progress".*
- *Visual and sound signalling of "System fault".*
- *Visual and sound signalling of "Device fault".*

##### Complete system monitoring.

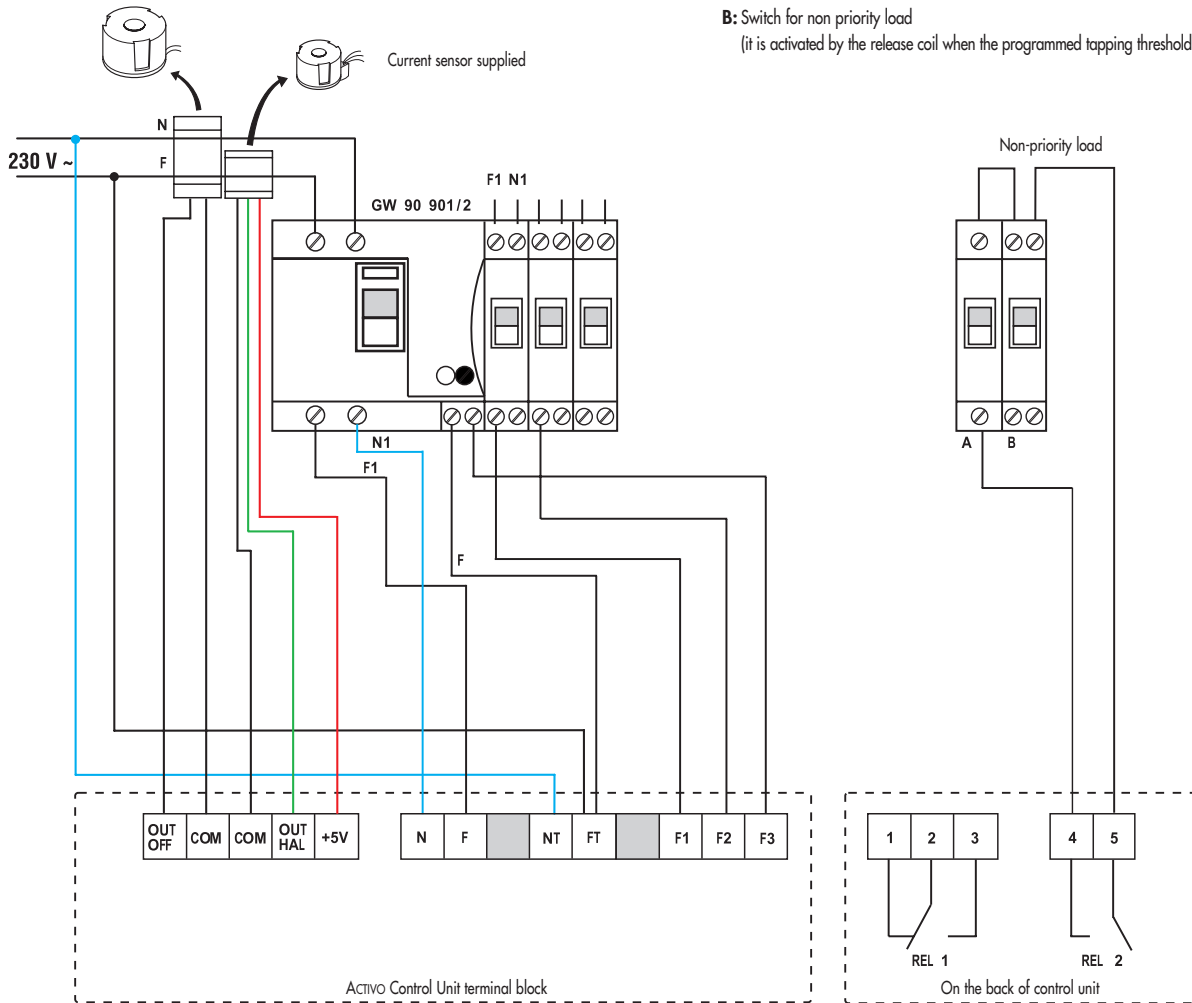
The ACTIVO control unit monitors the system's fundamental electrical magnitudes in order to guarantee efficiency and maximum continuity of service.

- *Display of main parameters:*
  - Instantaneous power
  - Average power
  - Earth leakage current (4÷35mA)
  - Output status
  - Clock
  - Power failure duration
- *Alarm activation in case of:*
  - Intervention of "non priority" load release coil (optional)
  - Exceeding of contractual power threshold (Settable between 0.5kW and 6.5kW)
  - Exceeding of earth leakage current threshold (Settable from 4mA to 35mA)
  - Exceeding of mains voltage tolerance limits (settable between ±2% and ±20%)
  - Power failure
  - Tripping of protection devices installed in the control unit with indication of specific circuit-breaker tripped.
- *Monthly signalling of need to carry out a manual differential test.*  
(Functionality is deactivated in case of wiring with differential AUTOTEST).

## TECHNICAL CHARACTERISTICS

### WIRING DIAGRAM WITH DIFFERENTIAL AUTOTEST MODULE

Differential current sensor supplied



**KEY:**

**A:** Release coil - ex. code GW 96 012

**B:** Switch for non priority load

(it is activated by the release coil when the programmed tapping threshold is exceeded).

### ACTIVE CONTROL UNIT TERMINAL BLOCK

N	Monitoring unit power supply	F1	Monitoring of the single output circuits (downstream of the divisional switches)
F		F2	
NT		F3*	
FT	Monitoring voltage	1	
OUT HALL		2	<b>RELAY no. 1</b>
COM	Monitoring current.	3	Switching output contact
5		4	<b>RELAY no. 2</b>
COM		5	Normally open output contact.
OUT DIFF	Monitoring differential current		

\* If the differential AUTOTEST is used connect the terminal F3 as shown in the wiring diagram.

### INSTRUCTIONS FOR USE OF THE CONTROL UNIT

1. The active control unit is system monitoring and intervention device. The safety of the system is guaranteed exclusively by the automatic circuit breakers / differentials installed in it.
2. The active control unit is not a certified measuring instrument and is therefore not suitable for professional measurements of electrical magnitudes.
3. Refer to the manual supplied with the control unit for correct installation, programming and use.

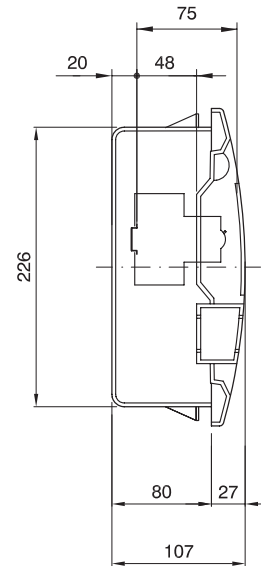
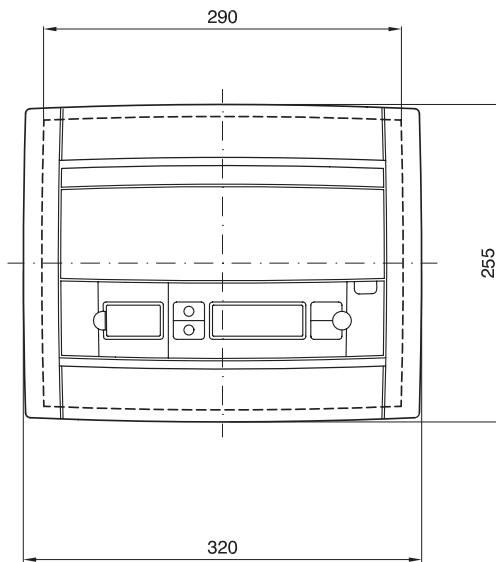
### APPLICATION EXAMPLES OF THE OUTPUT RELAYS

	Combination 1	Combination 2	Combination 3	Combination 4
<b>RELAY no. 1 (NO + NC)</b>	Daily programming	Daily programmer	Daily programmer	Telephone dialler
<b>RELAY no. 2 (NO)</b>	Daily programmer	Threshold exceeded	Telephone dialler	Threshold exceeded

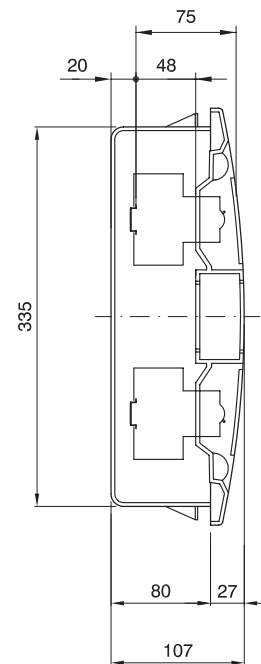
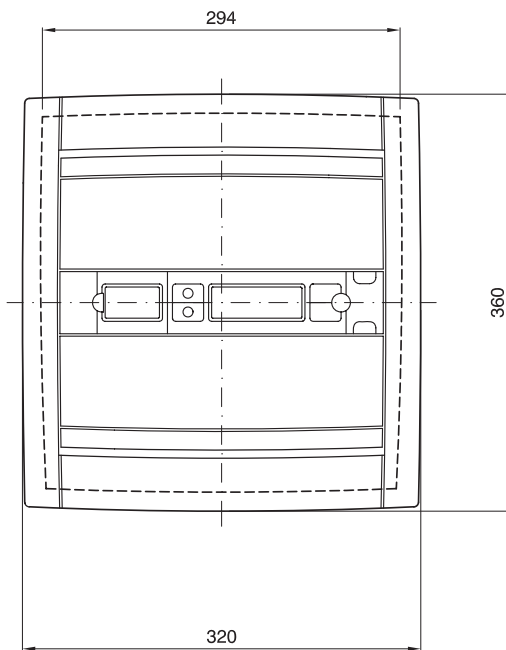
Application examples that do not restrict use of the relay outputs for other applications are given in the table.

### DIMENSION TABLES

#### INTELLIGENT CONSUMER UNITS AND SYMBOL ENCLOSURES



12 MODULES  
GW 40 251 ÷ GW 40 271  
GW 40 701 ÷ GW 40 718



24 MODULES  
GW 40 256 ÷ GW 40 276  
GW 40 721 ÷ GW 40 738