# POWER UNITS RELAY DEVICES VARIOUS DEVICES 



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 INTRODUCTION POWER UNITS FOR DIN BAR ASSEMBLY

INTRODUCTION POWER UNITS FOR DIN BAR ASSEMBLY


Urmet Domus power units are designed and constructed in compliance with CEI EN 60065:1994 (EN 60065: 1993) standards and with the essential requirements of the Low Voltage Directive 73/23/CEE, 93/68/ CEE and Electromagnetic Compatibility Directive 89/336, for electronic devices connected to a network for domestic and general use.
Dual class 2 isolation protection is employed. The device all carry IMQ marking.
These power supplies have been constructed according to market requirements that tend towards centralization of electrical equipment in specific cabinets.

The power units can be used to power door phone and video door phone systems with traditional door phones, i.e. with call to buzzer, and electronic call door phones.
The protections against overloads and short circuits are not made with traditional filament fuses but with self-reset electronic fuses (PTC).

NOTE: in case of short circuits or overloads, the protection circuit (PTC) is activated and the power supply is protected also during pemanent short circuits.
To reset the power supply, resolve the reason of the short circuit and disconnect the feeding from the mains for at least one minute.

The power units are designed and constructed to work in the following environmental conditions:
Working ambient temperature range: $\quad-5^{\circ} \mathrm{C}+45^{\circ} \mathrm{C}$ Maximum humidity:
$90 \%$ RH at $30^{\circ} \mathrm{C}$
Electrical connections are made using screw-on terminal board.
The maximum cross-section area of the wires to be connected to the terminal boards is $1.5 \mathrm{~mm}^{2}$.

## INSTALLATION

Urmet Domus power units, relays and transformers listed in the table below must be fitted on DIN 46277 compliant bars of the following dimensions (in mm):


Products for DIN bar assembly are measured in terms of "modules"; one module corresponds to 18 mm in accordance with DIN 43880 standards.

DEVICE $\quad$ Ref. | Nr. DIN |
| ---: |
| modules |

Door phone system power units
28VA power unit
with call to 4 speakers (230Vac)................................ 786/11.............. 3
28VA power unit
with call to 4 speakers (110Vac).............................. $786 / 12 \ldots . . . . . . . . . . . ~$
3
Power unit with double call tone generator and timed relay. 786/13.............. 6
Power unit with 2 note generator and relay .............. 786/15.............. 6
Power unit for 1-wire switchboard ........................... 786/3A ............. 7
28VA door phone power unit with
boosted note generator ........................................... 786/4................. 7
Video door phone system power units
38VA video power unit.............................................. 789/5B ............ 10
38VA 110-230Vca video power unit ......................... 789/6B ........... 10
Video power unit for 1 additional monitor ................. 789/2................ 7
Video power unit for 3 additional monitors ............... 789/3................ 7
110-230Vca video power unit for
3 additional monitors .
789/4
... 7
50VA video power unit.............................................. 789/1A ... $10+10$
Video distributor power unit 1090/850. .4

Transformers
230V safety transformer ........................................... 9000/230.......... 3
110V safety transformer ............................................ 9000/110........... 3

## Tone generator

Tone generator for door phones
in 4+n wire systems................................................. 787/1.
.4
Tone generator for door phones in $1+1$ wire systems. 787/2 .4

## Relay devices

Monostable relay box with 2 commutation ............... 788/52.............. 3
Switching relay device ............................................... 788/30.............. 4
Device for automatic switching
on 2 push button panels ........................................... 788/51.............. 6
Device for automatic switching
on 4 video door unit
788/54 12

Device for automatic switching on 4 door unit. 788/58

## Miscellaneous

Device with impedance for intercom systems .......... 789/51.............. 2
Electrical lock timer.................................................... 1032/81............. 4
Secondary camera voltage adapter.......................... 1840/44............ 2
Power line protection device..................................... 1332/85............ 2
Power line filter ........................................................ 1332/86............. 2
Power line protection device...................................... 1332/80............. 2
Note that the devices can be wall-mounted using two bolts (not provided).
Side protections of the terminal board may be used for wall-mounted assembly; they can be eliminated for bar-mounted installations (in distribution panels).

## Ref. 786/11-786/12 DOOR PHONE POWER UNIT WITH CALL TO FOUR SPEAKERS ( $\square$ (11) 金 ( $\epsilon$



The 786/11 and 786/12 power units are used to power door phone systems with door unit and/or intercom systems.
The "PS" output of this power unit is used to control up to 4 speakers in parallel and is protected from overloads.
The voltage output by terminals $\sim 0$ and $\sim 12$, in addition to energising the electrical lock, can power the name tag circuits.

## TECHNICAL FEATURES

Power supply:
230Vac $50-60 \mathrm{~Hz}$ for Ref. 786/11 110Vac 50-60Hz for Ref. 786/12
Power:
Intake:
Output tone generator:
Call tone (PS):
28VA max $\max 150 \mathrm{~mA}$ 8.0Vpp min (max four $45 \Omega$ speakers in parallel) two-tone F1: $\quad 960 \div 1440 \mathrm{~Hz}$ F2: $\quad 600 \div 900 \mathrm{~Hz}$ Sweep: $\quad 9,6 \div 14,4 \mathrm{~Hz}$ 0,12A @ 6Vdc
Audio circuit power (+6, -6): $0,12 \mathrm{~A} @ 6 \mathrm{Vdc}$
Intercom connection power (+6, -J): $0,12 \mathrm{~A} @ 3,5 \div 6,5 \mathrm{Vdc}$
Name tag light power
(~0, ~12):
(up to ten Sinthesi 4 buttons modules, up to two K-Steel 4 buttons modules,
up to two 3W bulbs)
Electrical lock power $(\sim 0, \sim 12)$ : 2,0A @ 12Vac intermittent
Protection:
Dissipated power after 1 working hour:
$\qquad$
4,2W (15 kJ)

## INSTALLATION

This power unit can be fitted on DIN bar or wall-mounted with screws and bolts with the specific 786/50 kit.


DESCRIPTION OF TERMINALS
Power supply input
~230 Power supply input (230Vac) 786/11 only
~110 Power supply input (110Vac) 786/12 only
$\left.\begin{array}{|l|l|}\hline \theta & \text { PS } \\ \hline \theta & \sim 12 \\ \theta & \sim 0 \\ \hline \theta & -J \\ \hline \theta & +6 \\ \hline \theta & -6\end{array}\right\}$

Output call tone generator
Name tag light and electrical power output
Output with impedance for intercom connection
Audio circuit power
Audio circuit reference earth

## DOOR PHONE POWER SUPPLY WITH DOUBLE CALL TONE GENERATOR

 AND TIMED RELAY FOR DOOR OPENINGTECNICAL FEATURES - INSTALLATION

DOOR PHONE POWER SUPPLY WITH DOUBLE CALL TONE GENERATOR AND TIMED RELAY FOR DOOR OPENING Ref. 786/13 回 (H) ( $\epsilon$


The Ref. 786/13 power unit, characterised by slim mechanics and compact size, can be used to power 4+n wire door phone systems.
This power unit provides the following performance:

- Differentiated call tones from different panels thanks to a double tone generator with different call tone.
- Operation of electrical lock or other electrical loads in times or pulse mode.
- Electrical lock power.
- Panel name tag light circuit power.


## TECNICAL FEATURES



## INSTALLATION

The power unit must be installed inside a closed electrical panel and can be fastened to DIN bar (six 18 mm modules).

Set the jumper to the "ON" position to enable the electrical lock timer function.


Adjust the timer by means of the trimmer (Timer AP): minimum 2 sec. maximum 25 sec.
The timer will be off when the jumper is in the off position and the electrical lock will be operated by the "AP" command as long as the respective door opener button is pressed.

## DESCRIPTION OF TERMINALS

| $\theta$ | $\left\|\begin{array}{l} 0 \\ \sim \end{array}\right\|$ | Primary power 230Vac |
| :---: | :---: | :---: |
| $\theta$ | PS | Call tone generator output (standard) |
| $Q$ | PS2 | Call tone generator output (medium-deep) |
| $\bigcirc$ | $\sim 0$ | Name tag light and electrical power output |
| Q | ~12 | Timed relay NC contact |
| Q | SE1 | Timed relay NA contact |
| Q | SE2 | Timed relay common |
| Q | AP | Door opener command |
| Q | -J | Output with impedance for intercom connection |
| Q | +6 | Audio circuit power |
| Q | -6 | Audio circuit reference earth |

NOTE: the indications NO and NC refer to the device not powered.

## DOOR PHONE POWER UNIT WITH 2 NOTE

 GENERATOR AND RELAY Ref. 786/15 (1) (Є

The Ref. 786/15 power unit can be used to make automatic switching systems according to the call source:

- Intercom with door unit.
- Intercom with video door unit.
- Two door units on door phone column.

Furthermore, this power unit provides the following performance:

- Differentiated call tones from different panels thanks to a double tone generator with different call tone.
- Panel name tag light circuit power.
- Electrical lock power.


## TECNICAL FEATURES



## INSTALLATION

The power unit must be installed inside a closed electrical panel and can be fastened to DIN bar (six 18 mm modules).

## DESCRIPTION OF TERMINALS

$\left.\begin{array}{l}0 \\ \sim 230\end{array}\right\}$ Primary power 230Vac$\left.\begin{array}{|l|l}\left.\begin{array}{|l|l}\hline \theta & \sim 0 \\ \theta & \sim 12 \\ \hline \theta & \text { PS } \\ \hline \theta & \text { PS2 } \\ \hline \theta & \text { C2 } \\ \hline \theta & \text { SN2 } 2 \\ \hline \theta & \text { C1 } \\ \hline \theta & \text { SN1 }\end{array}\right\}\end{array}\right\}$

Name tag light and electrical power output
Call tone generator output (standard)
Call tone generator output (medium-deep)
Timed relay NC contact
Timed relay NA contact

| $\theta$ | + |
| :--- | :--- |
| $\theta$ | - |
| $\theta$ | - |

Audio circuit power
Audio circuit reference earth
Output with impedance for intercom connection
NOTE: the position of the contacts corresponds to non-energised relay state or energised state via sensor C2-SN2.



POWER UNIT FOR 1-WIRE SWITCHBOARD
Ref. 786/3A (1) (


The Ref. 786/3A power supply unit is used only to power installations with electromechanical door phone switchboard of the Mod. 604-605-606 series. It does not have the tone generator output as, in these installations, only Mod. 1130 house phones of the System with conventional call with buzzer are used.

## ELECTRICAL CHARACTERISTICS

| Power supply: | 230 Vac <br> $50 / 60 \mathrm{~Hz}$ <br> 28 VA |
| :--- | ---: |
| Power: | $15 \mathrm{Vdc}=\mathbf{0 , 2 \mathrm { A }}$ |
| Secondaries: | $12 \mathrm{Vca}=1,3 \mathrm{AA}$ |
|  | With PTC (*) |
| Protection: |  |
| Dissipated power after 1 average working hour: |  |
|  |  |
| (*) If the PTC protection is tripped due to overload, cut off mains |  |
| voltage for at least 60 " to reset. |  |

## DIMENSIONS

| Lenght: | 126 mm (7 DIN 18mm modules) |
| :--- | :--- |
| Width: | 96 mm |
| Height: | 75 mm |

POWER UNIT WITH BOOSTED NOTE
GENERATOR Ref. 786/4 $\square$ (A) (


This power unit replaces the integrated additional call device Ref. 787/4.
The device, powered directly from the mains and bearing the EC and IMQ marks has been designed to perform the following functions in door phone and video house phones systems.

- PS output: generation of the call tone for a maximum of 4 house phones (4+n type) with electronic short-circuit protection.
- PS1 output: generation of the call tone for a maximum of 4 house phones ( $1+1$ type) with electronic short-circuit protection.
- SN output: activates any video power supply unit following a call on outputs PS or PS1.
- 12Vac output for alternative calls (without activation on SN) with short-circuit protection.
- 6 Vdc output for separate powering of any loudspeaking unit with electronic short-circuit protection.
- -J output for intercom systems (referred to the 6Vdc output) with electronic short-circuit protection.
- Max. 2A capacity relay output with NO contacts closed during a call on PS or PS1 but not on 12Vac call.

Note: the emission level of the call tone applied to each individual door phone is constant as the house phones in parallel vary and corresponds to the level currently applied on single house phones.

## ELECTRICAL CHARACTERISTICS

| Power supply: | $\begin{array}{r} 110 / 230 \mathrm{Vac} \\ 50 / 60 \mathrm{~Hz} \end{array}$ |
| :---: | :---: |
| Power: | 28VA max |
|  | Output +6/-6: $6 \mathrm{Vdc}=0,11 \mathrm{~A}$ |
|  | Output PS: F1: $1230 \mathrm{~Hz} \pm 20 \%$ |
|  | F2: $760 \mathrm{~Hz} \pm 20 \%$ |
|  | Sweep: $12 \mathrm{~Hz} \pm 10 \%$ |
|  | exit: +10Vpp $\pm 10 \% 45 \Omega$ Short-circuit protection |
|  | $45 \Omega \times 4$ parallel Short-circuit protection |
| Output PS1: | $F 1: 1230 \mathrm{~Hz} \pm 20 \%$ |
|  | F2: $760 \mathrm{~Hz} \pm 20 \%$ |
|  | Sweep: $12 \mathrm{~Hz} \pm 10 \%$ |
|  | exit: $-10 \mathrm{Vpp} \pm 10 \% 45 \Omega$ Short-circuit protection |
|  | $45 \Omega \times 4$ parallel Short-circuit protection |
| Output $\sim 12 / \sim 0$ : | $12 \mathrm{Vac} \pm 10 \% 800 \mathrm{~mA}$ max |
| NO/C/NC output relay: |  |
| Maximum switching voltage: | ing voltage: 30V |
| Maximum switching current: | ing current: 2A |
| Peak switching load: | ad: 18VA |
| Protection: | With PTC (*) |
| (*) If the PTC protection is tripped due to overload, cut off mains voltage for at least 60" to reset. |  |
| Note: the loads indicated for different types of generated calls (PS, |  |
| PS1, ~12) are reciprocally alternative can calculated on a |  |
|  |  |
| The performance of the power unit for door unit or for intercom systems (terminals $+6,-6,-J$ ) is alternative. |  |

VIDEO POWER SUPPLY Ref. 789/5B 回 (117) 岀 $(\epsilon$


The power supply Ref. 789/5B can only be used in video systems with electronic call.
It can be used in 5 wire systems without coax cable, too.
The video door phone power unit Ref. 789/5B was designed in compliance with safety standards CEI 12/13 and 64/8; it carries IMQ marking.
The power supply is supplied with the timer which is adjusted on 50 "; if you wish to change this time, please use the special control for changing from 45 " to 180 ".

The "PS" call output can be used to control up to four speakers (video door phones or door phones in a coax system) in parallel.
The power unit Ref. 789/5B can power up only one Artico video door phone or two Utopia, Atlantico or Scaitel video door phones. Use supplementary power units Ref. 789/2 or Ref. 789/3 according to the following table to obtain the same performance with Artico monitors or to connect more than one monitor in parallel:

| Video door phone model | Power unit |  |
| :--- | :---: | :---: |
|  | $\mathbf{7 8 9 / 2}$ | $\mathbf{7 8 9 / 3}$ |
| Utopia, Atlantico or Scaitel <br> (after the second video door phone) | Max 1 monitor | Max 3 monitors |
| Sentry+ or Artico <br> (after the first video door phone) | Max 1 monitor | Max 2 monitors |



## TECHNICAL FEATURES

Power supply:
230Vac 50/60Hz
Power:
38VA
Max. intake:
Output tone generator:
Call tone (PS):

Audio circuit power (+, -):
Name tag light power
(~0, ~12):

Electrical lock power ( $\sim 0, \sim 12$ ):
Not timed output (+R):
Timed outputs (R2):
(+TC)
Timer:
Max. relay contact power (SE1, SE2, SE3):
Protection:
Dissipated power after 1 working hour:

## INSTALLATION

The housing may be used both in DIN bar mounting and wall mounting by means of screws and spacers; please take care of mounting it in dry and repaired environments.

## DESCRIPTION OF TERMINALS

| Q | $\left\|\begin{array}{l} 0 \\ \sim \end{array}\right\|$ | Power supply input |
| :---: | :---: | :---: |
| $\theta$ | +6 |  |
| $\theta$ | -6 | Audio circuit power |
| Q | $\sim 0$ | Name tag light and electrical power output |
| Q | ~12 | Electrical lock activation relay normally closed contact |
| Q | 1/~ | Reference earth (5-wire systems) |
| Q | SE1 | Electrical lock activation relay normally open contact |
| $\otimes$ | SE2 | Electrical lock activation relay contact common |
| $\theta$ | AP | Electrical lock activation command |
| $\theta$ | R2 | Video door phone timed power |
| $\theta$ | R1 | Reference earth |
| $\theta$ | +R | Non-timed power (max. 0.11A) |
| $\theta$ | +TC | Camera timed power |
| $\theta$ | PS | Call tone generator Output |

VIDEO POWER SUPPLY 110/230Vac Ref. 789/6B ©


Power supply Ref. 789/6B can only be used in video phone devices with an electronic call system, that is to say with Utopia, Artico, Sentry+, Atlantico and Scaitel monitors.
It can also be used in 5 wires systems without coax cable.
The power supply is supplied with a timer fixed at 50 "; if needed, it can be changed by means of a control which allow a change from 45 " to 180".
The "PS" call output can be used to control up to four speakers (video door phones or door phones in a coax system) in parallel.

Power supply 789/6B can feed one video phone only; in case of 2 or more monitors working together, a supplementary power supply is needed for each additional monitor.


## TECHNICAL FEATURES

Power supply:
$110 / 230$ Vac $50 / 60 \mathrm{~Hz}$
Power: 38VA
Max. intake:
Output tone generator:
Call tone (PS):

Audio circuit power (+, -) Name tag light power (~0, ~12):

Max. relay contact power (SE1, SE2, SE3) adjustable from 45 " to 180 "

Protection:
Dissipated power after 1 working hour:
5,7W

## INSTALLATION

The container is suitable for both DIN rail mounting and wall mounting with screws and dowels and it must be installed in dry and protected environments.
The device is foreseen for 110 Vac mains feeding.
If used with 230 Vac mains feeding, connecting boards links must be respected as per Scheme A.


## DESCRIPTION OF TERMINALS

| Q | P1 | Power supply input (apply to scheme A) |
| :---: | :---: | :---: |
| $\theta$ | P2 |  |
| Q | P3 |  |
| $\theta$ | P4 |  |
| Q | +6 |  |
| $\theta$ | -6 | Audio circuit power |
| $\theta$ | $\sim 0$ | Name tag light and electrical power outp |
| Q | $\sim 12$ | Name tag light and electrical power output |
| Q | SE3 | Electrical lock activation relay normally closed contact |
| Q | 1/~ | Reference earth (5-wire systems) |
| Q | SE1 | Electrical lock activation relay normally open contact |
| Q | SE2 | Electrical lock activation relay contact common |
| $\theta$ | AP | Electrical lock activation command |
| $\theta$ | R2 | Video door phone timed power |
| Q | R1 | Reference earth |
| Q | +R | Non-timed power (max. 0.11A) |
| Q | +TC | Camera timed power |
| $\theta$ | PS | Call tone generator Output |

DEVICE WITH IMPEDANCEFOR INTERCOM Ref. 789/51 $\subset$


In systems with a video power supply Ref. 789/5B or Ref. 789/6B, the device Ref. 789/51 permits to have the intercom service with automatic switching with the video outdoor station.

## TECHNICAL FEATURES

Power supply
6Vdc
Max. intake: 50 mA

## INSTALLATION

The connections are made using screw type terminal strips.
The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.
The casing is made of self-extinguishing ABS plastic.
The device can be wall mounted, by means of the bracket supplied with, or installed on a DIN bar. To reach the connection terminals, lever as shown in the picture.


DESCRIPTION OF TERMINALS


VIDEO POWER SUPPLY FOR ADDITIONAL MONITOR Ref. 789/2


The video power supply Ref. 789/2 is used to power an additional monitor in parallel to the main monitor.
It may be used in installations with coax cable systems as well as in installations with 5 wires (without coax cable).

## TECHNICAL FEATURES

| Power supply: | $230 \mathrm{Vac} \pm 10 \% 50 / 60 \mathrm{~Hz}$ |
| :--- | ---: |
| Max. intake: | 50 mA |
| Power: | 28 VA |
| Outputs: | (R2 out) $0,65 \mathrm{~A} \mathrm{int} .\mathrm{@} \mathrm{18Vdc}$ |
|  | (RL) 0,02 A @ 18Vdc |
|  | (V2) 0,02 A @ 18Vdc |
| Protection: | PTC |
| Dissipated power after 1 average working hour: | $4,2 \mathrm{~W}$ |

## INSTALLATION

The power unit may be fitted on DIN bar or on wall with two bolts.
Connections are made using screw terminal board.
The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.

## DESCRIPTION OF TERMINALS

$\left.\begin{array}{l}0 \\ \sim 230\end{array}\right\}$ Mains power input| $\theta$ | V2 |
| :--- | :--- |
| $\theta$ | R2in |
| $\theta$ | R1 |
| $\theta$ | $R L$ |
| $\theta$ | $R 2$ |

Video door phone sub-power output
Power activation input
Reference earth
Non-stabilised output
Video power output

VIDEO POWER SUPPLY FOR 3 ADDITIONAL MONITORS Ref. 789/3 ( (1) C


The video power supply Ref. 789/3 is used to power either 2 additional Mod. Artico or Sentry+ monitors or 3 additional Mod. Utopia, Atlantico or Scaitel monitors in parallel to the main monitor.

## TECHNICAL FEATURES



The power unit may be fitted on DIN bar or on wall with two bolts.
Connections are made using screw terminal board.
The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.

## DESCRIPTION OF TERMINALS

| $\theta$ | 0 |  |  |
| :--- | :--- | :--- | :--- |
| $\theta$ | $\sim 230$ | Mains power input |  |
| $\theta$ V2 Video door phone sub-power output <br> $\theta$ R2in Power activation input <br> $\theta$ R1 Reference earth <br> $\theta$ RL Non-stabilised output <br> $\theta$ R2out Video power output |  |  |  |$.$|  |  |
| :--- | :--- |

VIDEO POWER SUPPLY FOR 3 ADDITIONAL MONITORS Ref. 789/4


The video power supply Ref. 789/4 is used to power either 2 additional Mod. Artico or Sentry+ monitors or 3 additional Mod. Utopia, Atlantico or Scaitel monitors in parallel to the main monitor.
It may be used in installations with coax cable systems as well as in installations with 5 wires (without coax cable).

## TECHNICAL FEATURES

| Power supply: | $110 / 230 \mathrm{Vac} \pm 10 \% 50 / 60 \mathrm{~Hz}$ |
| :--- | ---: |
| Power: | 38 VA |
| Outputs: | (R2 out) $1,35 \mathrm{~A}$ int. @ 18Vdc |
|  | (RL) $0,02 \mathrm{~A} @ 18 \mathrm{Vdc}$ |
|  | (V2) $0,02 \mathrm{~A} @ 18 \mathrm{Vdc}$ |
| Protection: | PTC |
| Dissipated power after 1 average working hour: | $5,7 \mathrm{~W}$ |

## INSTALLATION

The power unit may be fitted on DIN bar or on wall with two bolts. Connections are made using screw terminal board.
The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.
The device is foreseen for 110 Vac mains feeding.
If used with 230 Vac mains feeding, connecting boards links must be respected as per Scheme A.


## DESCRIPTION OF TERMINALS



## VIDEO POWER SUPPLY 50VA Ref. 789/1 (1) (A)



Power unit Ref. 789/1 may be used in electronic call systems and traditional call systems.
These power units comply with CEI 12/13 5th edition - Dec. 1988 safety standing implementing European CENELEC HD 195 S6 standards.
The video power unit Ref. 789/1 (110/230 V) consists of two units which may be connected using the specific wire and plugs:

- The power unit.
- The electronic unit.


## TECHNICAL FEATURES

Power supply:
Power:
Intake:
Output note generator:
Call tone (PS):


Max. relay contact power (SE1, SE2):
Protection:
Dissipated power after 1 working hour:
PTC
7,5W

## INSTALLATION

Both units can be fitted on a DIN bar (10 modules per unit) or on a wall by means of screws.
The power unit must be fitted in a dry, sheltered place preferably inside an electrical panel.

Connect both transformers to the network voltage with the two-voltage power unit Ref. 789/1A.


DIMENSIONS (SINGLE DEVICES)


## DESCRIPTION OF TERMINALS

| $\theta$ | 0 | Mains power input |
| :---: | :---: | :---: |
| $\theta$ | 110 | Mains power input 110Vca |
| $\theta$ | 230 | Mains power input 230Vca |
| Q | +6 |  |
| $\theta$ | -6 | Audio circuit power |
| $\theta$ | $\sim 0$ | Current sensor power input |
| $\theta$ | $\sim 12$ | Current sensor power input |
| $\theta$ | 1/~ | Reference earth (5-wire systems) |
| $\theta$ | PS | Call tone generator output |
| $\theta$ | SN | Traditional call 12 Vac output |
| $\theta$ | SE1 | Electrical lock activation relay normally open contact |
| $\theta$ | SE2 | Electrical lock activation relay contact common |
| $\theta$ | $\sim \sim$ | Electrical lock relay power output |
| $\theta$ | $\sim \mathrm{B}$ |  |
| Q | R2 | Video door phone timed power |
| Q | R1 | Reference earth |
| Q | AP | Electrical lock activation command |
| Q | -6 | Electrical lock activation earth |
| $\theta$ | +TC | Camera timed power |
| Q | -J | Output with impedance for intercom connection |
| $\theta$ | +6J | Output with impedance for intercom connection |

DISTRIBUTOR POWER UNIT Ref. 1090/850
SAFETY TRANSFORMER Ref. 9000/230 - Ref. 9000/110
TECHNICAL FEATURES
DISTRIBUTOR POWER UNIT Ref. 1090/850 (1) ( $C$


Ref. 1090/850 power units are used to power up to 4 video distributors Ref. 1794/4A at 15Vdc.
Remove the jumper between terminals P1 and P2 to obtain 15Vdc voltage output. The output voltage will be 12 Vdc if the jumper is not removed.

## TECHNICAL FEATURES

Power supply:
Power:
$230 \mathrm{Vac} \pm 10 \%, 50 / 60 \mathrm{~Hz}$
5VA
Outputs: $\quad$ Vout=12Vdc, 0,18A (with jumper P1-P2) default Vout= 15Vdc, 0,18A (without jumper P1-P2)
Protection:
Weight:
Temperature:
Dissipated power after 1 working hour:
$-10^{\circ} \mathrm{C} \div+40^{\circ} \mathrm{C}$
0,75W

## INSTALLATION

The connections are made using screw type terminal strips. The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.
The casing is made of self-extinguishing ABS plastic.
The power unit and circuit breaker may be fitted on DIN bar or on wall with two bolts.


DESCRIPTION OF TERMINALS

[^0]
## SAFETY (A) (8) $C \in$



The Ref. 9000/230 URMET DOMUS transformer is suitable for DIN bar fitting, the device was designed and made in compliance with the laws in force concerning isolation and safety transformers being protected from direct and indirect contact as required by the electrical system standards in force. It carries IMQ marking and respective certifications.

TECHNICAL FEATURES
Power supply
Power:
$230 \mathrm{Vac} 50 / 60 \mathrm{~Hz}$
Power: 18 VA
Intake: $\quad \max 100 \mathrm{~mA}$
Outputs ( $0, \sim 12$ ):
1,1A@12Vdc up to 20 Sinthesi 4 buttons modules, up to 5 K-Steel 4 buttons modules, up to five 3W bulbs
Protection:
PTC
Dissipated power after 1 average working hour:
1,8W

## SAFETY TRANSFORMER Ref. 9000/110

The Ref. 9000/110 safety transformers have the same characteristics as the Ref. 9000/230 model; the only difference concerns the power voltage (110Vac instead of 230 Vac )
"4+N" DOOR PHONE TONE GENERATOR Ref. 787/1
TECHNICAL FEATURES
"4+N" DOOR PHONE TONE GENERATOR
Ref. 787/1 ( $\epsilon$

The tone generator Ref. 787/1 is used as a auxiliary call device in electronic call 4+n wire door phone and coax video door phone systems.
The device acts as a primary call generator when used with 786 door phone system power units or 789 video door phone system power units.

## TECHNICAL FEATURES

## Power voltage:

1 loudspeaker calling intake:
Stand-by intake:
Call tone:

|  | $12 \mathrm{Vac} \pm 20 \%$ |
| :--- | ---: |
|  | $250 \mathrm{~mA} @ 12 \mathrm{Vac}$ |
|  | $20 \mathrm{~mA} @ 12 \mathrm{ac}$ |
|  | Two tone |
| F1: | 500 Hz |
| F2: | $800 \mathrm{~Hz} \pm 20 \%$ |
| Sweep: | $10 \div 12 \mathrm{~Hz}$ |

DESCRIPTION OF TERMINALS

| $\theta$ | $\sim 0$ |
| :--- | :--- | :--- |
| $\theta$ | $\sim 12$ |
| $\theta$ | PS |
| $\theta$ | SN |

\} Power supply input
Call tone generator Output
Call tone Input
"1+1" DOOR PHONE TONE GENERATOR Ref. 787/2 $\subset \epsilon$


The Ref. 787/2 tone generator is used in 5-wire video door phone systems and $1+1$ wire door phone systems as additional floor call device. Floor calls are not possible with the handset off-hook.

## TECHNICAL FEATURES

Power voltage:
$12 \mathrm{Vac} \pm 20 \%$
1 loudspeaker calling intake: 250mA @ 12Vac
Stand-by intake:
Call tone:
$10 \div 12 \mathrm{~Hz}$

## DESCRIPTION OF TERMINALS

| $\theta$ |
| :--- |
| $\theta$ |
| $\theta$ |
| $\theta$ | 1/~

PS1
1/~

Power supply input
Call tone generator Output
Reference earth

MONOSTABLE RELAY BOX WITH 2 COMMUTATION Ref. 788/52 ( $\epsilon$


This device can be used as a call repeater and for operating electrical loads such as, for example, supplementary lights for using cameras independently from the door panels.

## TECHNICAL FEATURES

Power supply:
Intake:
Max relay contact power:

## 12 Vac nominal 12 Vdc ; 18Vac; 18Vdc

 100mAeff nominal @ 12Vac 5A @ 100VTerminal $C$ must be used to energise the relay in $1+1$ wire door phone systems, 5 -wire video door phone system and traditional call systems.

The CA terminal must be used to control the relay in 4+n door phone and coax wire video door phone systems.
To operate additional lamps following the switching on of a video camera, terminals 14 and 15 need to be connected.

The relay is equipped with two exchange contacts able to drive circuits with voltages not exceeding 100 V and maximum currents of 5 A .


## AUTOMATIC SWITCHING DEVICE ON 4 VIDEO OUTDOOR SETS Ref. 788/54 C



This relay box can be installed in 5 -wire video systems as well as video systems with coax cable; it allows a single column to be connected up to 4 video stations, each one with its own push button panel.
By adding a further relay box it is also possible to increase the connections up to 7 entries.
During the call from any outdoor station, the called tenant will be connected to the calling push button panel, temporarily excluding the other outdoor stations from the service.
Only the corresponding lock will be released by pressing the proper key.
The device must always be powered at 12 Vac .

## TECHNICAL SPECIFICATIONS

Power voltage: 12Vac Intake: 100mA @ 12Vac

## INSTALLATION

The device can be DIN bar fitted or wall fitted using screws and bolts.
The connections are made using screw type terminal strips.
The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.

## TERMINAL BOARD DESCRIPTION

## - Power

$\left.\begin{array}{rll}\hline \theta & \sim 12 \\ \hline \theta & \sim 0 \\ \hline \theta & \sim 0 \\ \hline \theta & -6\end{array}\right\}$ 12Vac input

| $\theta$ | $6 i$ | Massa per circuiti intercomunicanti |
| :--- | :--- | :--- |
| $\theta$ | AP | Electrical lock activation command | Output for intercom connection

Electrical lock activation common
Q GND Reference earth reset
Q INH Input reset on input A
$\left.\begin{array}{l|l|l}\theta & \sim B \\ \hline \theta & \sim A\end{array}\right\}$ 12Vac power input
$\theta$ +TC Camera timer power input
Q R2 Video door phone timed power input
Q R1 Video camera timed reference earth input
$\left.\begin{array}{lll}\theta & \text { C1 } \\ \hline \theta & \text { SN1 }\end{array}\right\}$ Activation current sensor input A
$\theta$ C2

- C2 2 2ctivation current sensor input B
$\left.\begin{array}{|l|l}\hline \theta & \text { C3 } \\ \hline \theta & \text { SN3 }\end{array}\right\}$ Activation current sensor input C
$\left.\begin{array}{|l|l}\hline Q & \text { C4 } \\ \hline \theta & \text { SN4 }\end{array}\right\}$ Activation current sensor input D
- Inputs

Each of the 4 inputs has the following terminals:

| $\theta$ | $\sim 12$ |
| :--- | :--- |
| $\theta$ | $\sim 0$ |
| $\theta$ | SE |
| $\theta$ | 1 |
| $\theta$ | 2 |
| $\theta$ | VE |
| $\theta$ | V5 |
| $\theta$ | R1 |
| $\theta$ | +TC |
| $\theta$ | R |
| $\theta$ | -6 |

12Vac output
Electrical lock operation
Audio input (from door unit speaker)
Audio output (from door unit microphone)
Video signal
Video signal earth
Reference earth telecamera
Camera timed power
Outdoor station sound circuit power supply

## - Column

| $\theta$ | 9 |
| :--- | :--- |
| $\theta$ | 6 |
| $\theta$ | R2 |
| $\theta$ | R1 1 |
| $\theta$ | V5 |
| $\theta$ | V3 3 |
| $\theta$ | 2 |
| $\theta$ | 1 |

Electrical lock operation command from apartment station Apartment station audio reference earth
Video door phone timer power output
Video door phone timed power reference earth
Video signal earth
Video signal
Audio input (from door phone microphone)
Audio output (from door phone speaker)

DEVICE FOR AUTOM. SWITCHING ON 2 PUSH BUTTON PANELS Ref. 788/51 TECHNICAL SPECIFICATIONS - INSTALLATION

D о m u s DEVICE FOR AUTOM. SWITCHING ON 4 PUSH BUTTON PANELS Ref. 788/58 TECHNICAL SPECIFICATIONS - INSTALLATION

DEVICE FOR AUTOMATIC SWITCHING ON 2 PUSH BUTTON PANELS Ref. 788/51 ( $૯$


The above mentioned device permits to connect a house phone column to two push button panels.
Therefore, the most common application is in a building with two entrances each one equipped with a push button panel.
Making a call from one of the two entrances, the user called will be connected to the calling panel, temporarily blocking out the other from the service.
By then pressing the relevant button, you can control the opening of the single corresponding lock.
The device must alwais be powered at 12Vac.

## TECHNICAL FEATURES

Power voltage:
$12 \mathrm{Vac} \pm 10 \%$ Intake: 100mA @ 12Vac

Contacts can switch the currents shown in the following table:
Contacts between terminals Max. current

| $1-2-3$ | 2 A |
| :--- | :--- |
| $4-5-6$ | 1 A |
| $7-8-9$ | 5 A |
| $10-11-12$ | 1 A |
| $13-14-15$ | 2 A |

The relay can be energised by powering terminals C1/SN1 or C2/SN2. The position of the contacts shown in the following figure corresponds to non-energised relay state or energised state via sensor C2/SN2.


## INSTALLATION

The casing is made of soft extinguishing ABS plastic.
Ref. 788/51 relay device can be fitted on DIN bar or on wall with two bolts.

The connections are made using screw type terminal strips. The maximum cross section of the wires accepted by the terminal strips is $1,5 \mathrm{~mm}^{2}$.

DEVICE FOR AUTOMATIC SWITCHING ON 4 PUSH BUTTON PANELS Ref. 788/58 C $\in$


Ref. 788/58 relay device is used to connect one or more door phone groups to up to 4 electronic call or traditional call 4+n wire door units. Therefore, the most common application is in a building with more than 2 entrances each one equipped with a push button panel.
During the call from any outdoor station, the called tenant will be connected to the calling push button panel, temporarily excluding the other outdoor stations from the service.
Only the corresponding lock will be released by pressing the proper key.
The device must always be powered at 12Vac.

## TECHNICAL SPECIFICATIONS

Power supply:
$12 \mathrm{Vac} \pm 10 \%$ Intake 100mA @ 12Vac

## INSTALLATION

It can be mounted on DIN bars or to the wall by means of two screws and nogs.

## DESCRIPTION OF TERMINALS

- Power

| $\theta$ | $\sim 0$ |
| :--- | :--- |
| $\theta$ | $\sim 12$ |
| $\theta$ | C2 |
| $\theta$ | SN4 |
| $\theta$ | C1 |
| $\theta$ | SN1 |
| $\theta$ | SN2 |
| $\theta$ | SN3 |

12Vac power input
Activation current sensor output IV
Activation current sensor common outputs I, II and III
Activation current sensor output I
Activation current sensor output II
Activation current sensor output III

- Inputs

Each of the 4 inputs has the following terminals:

| $\theta$ | 2 | Audio output (from door unit microphone) |
| :--- | :--- | :--- |
| $\theta$ | 1 | Audio input (from door unit speaker) <br> $\theta$ |
| AP | Electrical lock operation |  |

- Column

| $\theta$ | 2 |
| :--- | :--- |
| $\theta$ | 1 |
| $\theta$ | AP |

Audio input (from door phone microphone)
Audio output (from door phone speaker)
Electrical lock operation command from apartment station

SWITCHING RELAY DEVICE Ref. 788/30 ©


The Ref. 788/30 relay device replaces the Ref. 9330 relay and consists of a 12 Vac relay equipped with 4 exchange contacts.

## TECHNICAL FEATURES

Intake max:
Max. relay contact power:
Command:
Sensitivity:
400mA @ 12Vac 5A @ 30Vdc impulsivo max 2" (min 10,5Vcc/Vca max 20Vcc/Vca) 250mA min

## INSTALLATION

It can be installed on a DIN bar or wall surface mounted using 2 screws and nogs.

The connections are made using screw type terminal strips.
The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.


MINIATURE CALL REPEATER AUXILIARY RELAY Ref. 788/22 $\epsilon \epsilon$


Device Ref.788/22 can be used for the call repeat function in the following types of systems:

- 4+n door phone system with electronic call
- 4+n door phone system with traditional call
- $1+1$ door phone system with electronic call
- $1+1$ door phone system with traditional call
- Coax video door phone system with electronic call
- Coax video door phone system with traditional call
- 5 wire video door phone system with electronic call
- 5 wire video door phone system with traditional call


## INSTALLATION

In all other types of systems, simply connect the call signal. In this case, the device will close the relay contact, repeating the call pattern in time. In all cases, the device can be connected separately (i.e.not in parallel to the house phones/video house phones).

The device can be fastened to the wall or to other devices by means of the two holes on the casing tables (screws not provided).


DOOR PHONE UTOPIA



## WIRING DIAGRAMS

4+n door phone system with electronic call
4+n door phone system with traditional call
Coax video door phone system with electronic call
Coax video door phone system with traditional call

$1+1$ door phone system with electronic call
$1+1$ door phone system with traditional call
5 wire video door phone system with electronic call
5 wire video door phone system with traditional call


## TECHNICAL FEATURES

## Power voltage:

Intake max:
Max relay conctact power:
$12 \div 20 \mathrm{Vdc}$ 50mA @ 12Vac 1A @ 24dc

VIDEO SWITCH 4 IN -1 OUT Ref. 1038/69 ( $\epsilon$


The Ref. 1038/69 video switch is used to switch up to 4 coax video inputs on a single cyclic output.
The user can cyclically switch the signal received from the monitor to a camera connected to the device (up to 4) by pressing a button.

## TECHNICAL FEATURES

Power voltage (+V, OV ):
Intake in terms of unitary loads:
Maximum distance between button
contacts and terminals (T, RES, OV):
Working temperature range:
$-5 \div+50^{\circ} \mathrm{C}$
Humidity: $90 \%$ UR a $30^{\circ} \mathrm{C}$

## INSTALLATION

The device can be wall-mounted using the screws provided.


Set the jumper on the device to the position shown in the table according to the number of cameras used:

| Nr. <br> of cameras | JP1 | JP2 | JP3 | FUNCTION |
| :--- | :---: | :---: | :---: | :--- |
| 2 | ON | -- | -- | Video signal switch $\mathrm{I} 1 \div \mathrm{I} 2$ |
| 3 | -- | ON | -- | Video signal switch $11 \div \mathrm{I} 2 \div \mathrm{I} 3$ |
| 4 | -- | -- | ON $(*)$ | Video signal switch $\mathrm{I} 1 \div \mathrm{I} 2 \div$ <br> $\mathrm{I} 3 \div 14$ |

(*) Factory presetting.


VIDEO DISTRIBUTOR Ref. 1794/4A


The Ref. 1794/4A is used to distribute the video signal according to the various installation needs:

- On several riser columns.
- Across floors.

This distributor, is used in coax systems.

## TECNICAL FEATURES

Power supply:
$15 \div 20 \mathrm{Vdc}$
Intake without load: with 4 loads

25 mA 40 mA $75 \Omega$
Input impedance: $75 \Omega$
$75 \Omega$
Output impedance:

NOTE: the unused video distributor outputs must not be closed by a $75 \Omega$ resistor.

## INSTALLATION

The video distributor can be wall-mounted by fastening the base with the bolts provided.
The connections are made using screw-on terminal boards with clamps. Pre-cut slots in the cover walls are provided for passing wires.

## SETTING AND REGULATION

For video distributors using output U5, remove the 750hm jumper JP1.

DESCRIPTION OF TERMINALS

| $\theta$ | U1 | Video signal output 1 <br> $\theta$ |
| :--- | :--- | :--- |
| $\theta$ | U2 | Video signal output 2 <br> Video signal input |
| $\theta$ | U5 | Video signal output 5 <br> (only for other distributors) |
| $\theta$ | U3 | Video signal output 3 <br> $\theta$ |
| Uideo signal output 4 |  |  |

## WIRING DIAGRAM



LOCK RELEASE TIMER Ref. 1032/81 $€$


The Ref. 1032/81 devices are used to time the powering of an electrical lock as follows:
a) With jumper AR to "NO" position: the timer will operate the relay output when external command "SE2" is received only for the time set on the potentiometer (TIME), regardless of whether the input signal continues or not.
b) With jumper AR in "YES" position: timer will operate the relay output for the minimum programmed time: the output will remain active if the input signal "SE2" lasts longer than the programmed time.

Electrical locks can be:

- Directly activated by capacitance discharge.
- Activated by capacitance discharge and 150mA hold current.
- Safety electrical locks.


## TECHNICAL FEATURES

Voltage on +24 :
Voltage on $+12 / \sim$ :
Continuous current from AP:
Timing range:
Functioning temperature:
Max. resistive commutable charge:
Max. voltage for switching:
Max. resistive commutable power:
Min. charge to apply:
Maximum load at 12 Vdc : with 120 Vac 240Vac/110Vdc 1400 VA with $240 \mathrm{Vca} / 300 \mathrm{~W}$ with 110Vdc
10 mA with 5 Vdc 200 mA

## DESCRIPTION OF TERMINALS

| $\theta$ | +24 | Voltage input $22-27 \mathrm{Vdc}$ |
| :---: | :---: | :---: |
| Q | +12/~ | Voltage input 10-15Vdc o 10-15Vac |
| $\theta$ | -/~ | Common wire |
| $\theta$ | -/~ | Common wire |
| $\theta$ | SE2 | Timer adjust input; its activation is possible by connecting it to the voltage common wire |
| Q | AP | Door release output |
| Q | NO | Contact normally open |
| $\theta$ | NC | Contact normally closed |
| $\theta$ | C | This one is common for NC/NO, it is normally connected to the voltage common wire with jumper AMCR |

## DISPLAY

LED LI (on): input SE2 is active
LED LO (on): the relay output is active

## JUMPERS AND ARRANGEMENTS

AR: possibility of recycle.
AMCR: possibility of connecting the common wire of the relay.
TIME: potentiometer for programming the delay of the activation of the output relay; the max. delay may be obtained by turning the potentiometer clockwise.

## WIRING DIAGRAMS

CONNECTION SCHEME FOR ACTIVATION OF ELECTRIC LOCK WITH TIMER
Use an additional power unit to power the lock when uptake of 200 mA from the system is not possible.

## LEGENDA

A Video Power supply Ref. 798/5B
B Timer Ref. 1032/81
C Electric lock
D Door release key
E Auxiliary power supply Ref. 9000/230


## CONNECTION SCHEME FOR ACTIVATION OF SECURITY

 ELECTRIC LOCKVoltage with separated security power supply.

## LEGENDA

A Video Power supply Ref. 798/5B
B Timer Ref. 1032/81
C Electric lock
D Door release key
E Security power supply $12 \mathrm{Vdc} / \mathrm{ac}$ or 24 Vdc


12Vdc VOLTAGE ADAPTER FOR SECONDARY CAMERA Ref. 1840/44 C $\epsilon$


The adapter is used to reduce camera power voltage ( 18 Vcc ) supplied with power unit 789/5B or 789/6B at a voltage of 12 Vdc . This device can be used to power the additional camera.

## TECHNICAL FEATURES

Power supply:
Output:

Power:
$18 \div 21 \mathrm{Vdc}$
$12 \mathrm{Vdc} \pm 1 \%$
$0,25 \mathrm{~A}$ continuous
0,3 A intermittent
3W max

## INSTALLATION

The device can be installed on the wall with the racket supplied or on a DIN bar.
Lever as shown in the figure to access the connection clips.


The connections are made using screw type terminal strips. The maximum cross-section of the wires accepted by the terminal strips is $1.5 \mathrm{~mm}^{2}$.
The casing is made of self-extinguishing ABS plastic.

WIRING DIAGRAM


POWER LINE PROTECTION DEVICE 230Vac 4000VA Ref. 1332/85 (€


This is a voltage surge varistor power line protection device. The device immediately trips to limit amplitude and preserve the devices installed downstream to the device in the presence of voltage surges generated by atmospheric events.Install a power line filter 230V 4000VA Ref. 1332/86 downstream to the power protection device to ensure better system operation.
Level of protection:
as per standard IEC 61643-1 and A1: class III with Uoc 6 kV.

## SPECIFICATIONS

Power protection with tripping tension $\geq 300$ Veff.
On two self-extinguishing DIN modules.
Nominal voltage:
230Vac
Maximum voltage:
255Vac
Maximum current:
20A
Working frequency: 50 Hz
Power:
4000VA
Temperature range:
$-25^{\circ} \mathrm{C}+40^{\circ} \mathrm{C}$

## INSTALLATION

The device must be fastened on a DIN bar in a closed electrical panel.
Check electrical connections before powering the circuit.
Locate the phase wire with a power phase finder connected to terminal " 1 ", IN side.

## IMPORTANT

The device must be protected by fitting appropriate restricted earthfault protection with current flow equal to 18 A and differential switch with opening current equal to 30 mA . The protection device must be connected to earth. Device efficacy will be better at lower earth system resistance.For this reason,the system must comply with standards CEI 64-8/1 V1 edition 01/2001 booklet 5902.Implement specifications in CEI 64-8/4 edition 01/1998 booklet 4134 on safety.

## WIRING DIAGRAM



## POWER LINE FILTER 230Vac 4000VA

 Ref. 1332/86 $\subset \epsilon$

This is a two-cell,high-attenuation,one-phase filter for frequencies $>0.1$ MHz active on common and differential mode interference. The device is intended to prevent the propagation of external radiofrequency interference on the power mains which could cause faults in the electrical and electronic devices connected to the mains.Install a power line protection device 230V 4000VA Ref.1332/85 upstream to the power filter to ensure better system operation.

## SPECIFICATIONS

One-phase, two-cell, high-attenuation filter for
common and differential interference $\mathrm{f}>0.1 \mathrm{Mhz}$.
On two self-extinguishing DIN modules.
Nominal voltage:
230Vac
Maximum voltage:
255 Vac
Working frequency:
Attenuation: 60 dB frequency 2 MHz
Maximum current:
20A
Power:
4000VA
Temperature range:
$-25^{\circ} \mathrm{C}+40^{\circ} \mathrm{C}$

## INSTALLATION

The device must be fastened on a DIN bar in a closed electrical panel.
Check electrical connections before powering the circuit.
Locate the phase wire with a power phase finder connected to terminal " 1 ", IN side.

## IMPORTANT

The device must be protected by fitting appropriate restricted earthfault protection with current flow equal to 18 A and differential switch with opening current equal to 30 mA . The power filter device must be connected to earth.Filter efficacy will be better at lower earth system resistance.For this reason,the system must comply with standards CEI 64-8/1 V1 edition 01/2001 booklet 5902.Implement specifications in CEI 64-8/4 edition 01/1998 booklet 4134 on safety.

Note: see power line protection wiring diagram Ref. 1332/85.

POWER LINE PROTECTION DEVICE Ref. 1332/80 $\subset$


The power line protection device protects electronic devices in general - and telephone devices in particular - from power surges and interference on the 230 V power line.
The Urmet Domus protection device Ref. 1332/80 is equipped with a re-arming thermal switch.
The presence of output voltage is indicated by a red warning light.
The thermal switch trips and cuts off power to utilities in the presence of output current in excess of 2A (eff). The power warning light goes out and the re-arm button springs out from the casing. To re-arm the device, press the re-arm button until it clicks. Re-arming will not be possible in the presence of short-circuit or excessive output load.
The device is built according to the following standards:
CEI 103-1/12: Protection of indoor telephone systems.
CEI 70-1: Degree of protection classification for casings.
The device is CE marked.

## TECHNICAL FEATURES

Power voltage:
$230 \mathrm{Vac} \pm 10 \% 50 / 60 \mathrm{~Hz}$
Max Power:
Temperature:
Casing material:
Humidity:
self-extinguishing plastic
95\% UR max

## INSTALLATION

The device may be fastened to the wall by means of the bracket provided or fitted on a DIN bar.
Lever as shown in the figure to access the connection terminals.
The connections are made using screw type terminal strips. The maximum cross-section area of the wires to be connected to the terminal boards is $1.5 \mathrm{~mm}^{2}$.
Check electrical connections before powering the circuit.
Locate the live wire with a power phase finder and connected to terminal "L".
The device is equipped with a re-arming fuse which cuts off the circuit in the presence of overload or short-circuit in the utility circuit.
Press the button on the top of the casing to re-arm the circuit.
The red warning light will indicate the presence of network voltage.


IMPORTANT
The ground terminal of the power line protection device must be connected to the electrical system ground.
Device efficacy will be better at lower ground system resistance. The system must comply with CEI 64-8/5, 10/1992, booklet 1920 standards.
Install in accordance with CEI 64-8/4 10/1992 booklet 1919 standards concerning safety matters.
Be careful to connect the live and neutral wires correct to the respective terminals.

WIRING DIAGRAM


## MULTICORE CABLES



Both cables are subjected to dielectric rigidity test at approx. 2000 Vac voltage for 5 minutes among wires and wires and sheath. As regards fire reaction, they are classified as not flame propagating according to the Rules 20-35 (IEC 332-1).

## 8 WIRE PLUS COAX MULTICORE CABLE Ref. 7057/235

Used for connections between the power supply and riser, and for distribution to the floors.
Composed of:

- Coax cable.
- Blue and red wires $1 \mathrm{~mm}^{2}$ (terminals R1 and R2).
- Brown and white wires $0.8 \mathrm{~mm}^{2}$ (terminals $9, \ldots$ ).
- Light blue wire $0.5 \mathrm{~mm}^{2}$ (terminal 6 ).
- White/green, grey and black wires $0.35 \mathrm{~mm}^{2}$ (term. CA, 2, 1).

In any case, the section of the wires is in proportion to the system with a maximum distance of 100 m between the power unit and the last monitor. The outside diameter of the cable is 15 mm . It is supplied in reels of about 100 m .

## 14 WIRE PLUS COAX MULTICORE CABLE Ref. 7057/234

Used for connections between the power supply and the video outdoor station. The number of wires are suffi cient for one-family systems (1 monitor only). For system of a higher capacity, further relative single call wires are required.
Composed of:

- Coax cable.
- Brown and green wires $0.8 \mathrm{~mm}^{2}$
- Pink, blue, orange, violet, red, yellow wires $0.5 \mathrm{~mm}^{2}$.
- Light blue, grey, black, white, white/green, white/blue wires $0.35 \mathrm{~mm}^{2}$.

In any case, the wire section is in proportion to the systems with a max. distance of 100 m between the video outdoor station and the power unit. The outside diameter of the cable is 17 mm . It is supplied in reels of about 100m.


[^0]:    $\left.\begin{array}{|l|l}\hline \theta & \sim 0 \\ \hline \theta & \sim 230\end{array}\right\}$ Mains 230Vac
    $\left.\begin{array}{ll}\hline \theta & \text { Vout } \\ \theta & \text { Gnd }\end{array}\right\} 12 \mathrm{Vdc}$ or 15 Vdc power output
    $\left.\begin{array}{ll}\theta & \text { P1 } \\ \theta & \text { P2 }\end{array}\right\}$ Jumper connection to change output voltage

