

## Interfaccia I/O Ingressi digitali e allarmi

**2 Ingressi digitali,  
livello tensione 0-12/24Vcc  
2 registri conteggio impulsi,  
indipendenti e azzerabili  
2 Allarmi indipendenti  
e isolati**

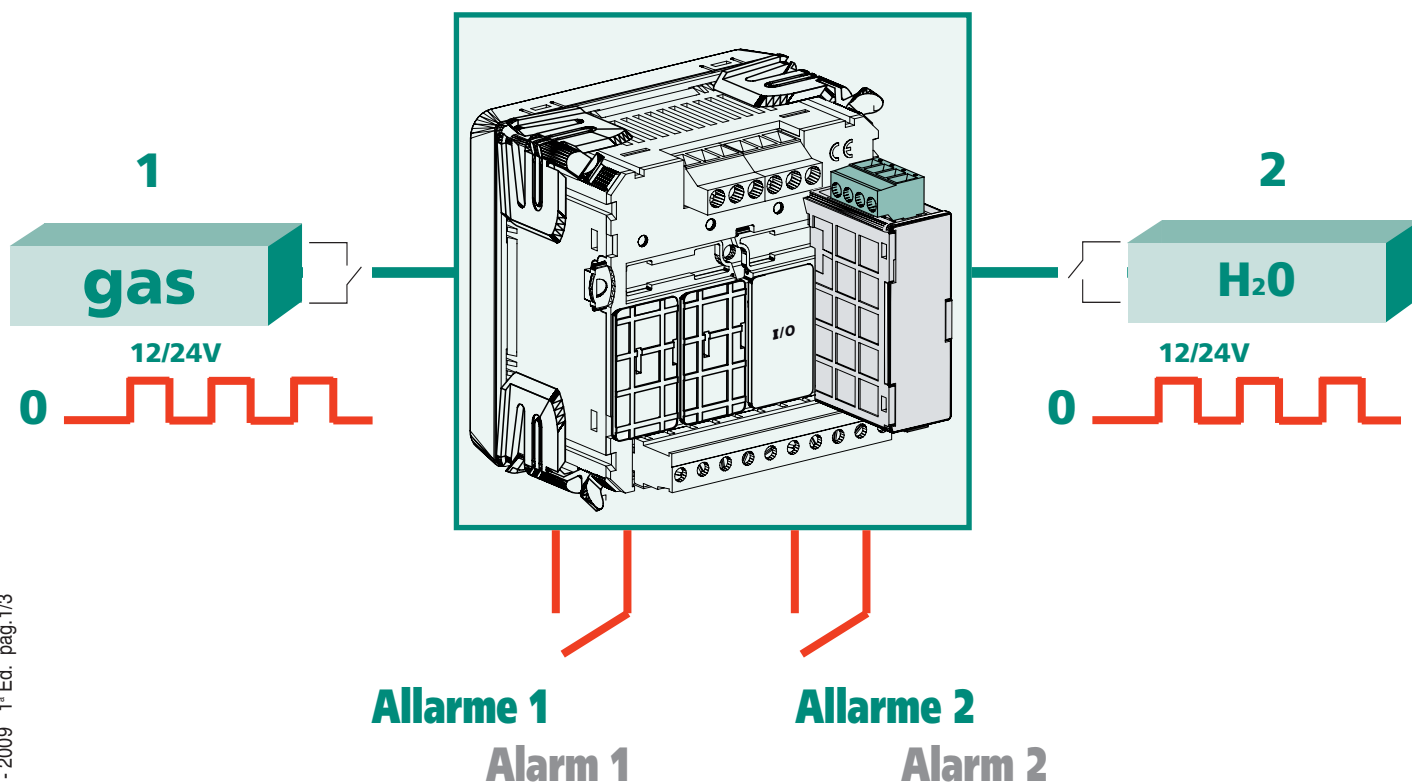
Il modulo IF96011 abbinato a strumenti della serie **Nemo 96HD/HD+** consente la sorveglianza di grandezze elettriche tramite due allarmi. Consente inoltre la visualizzazione dello stato (0-12/24Vcc) e il conteggio impulsi, di 2 ingressi digitali (tensione).

## Interface I/O Digital and Alarms inputs

**2 digital inputs, voltage level  
0-12/24V dc  
2 independent and resettable  
registers for pulse counting  
2 independent and insulated  
alarms**

IF96011 module used with meters of **Nemo 96HD/HD+** series, allows the monitoring of electrical quantities through 2 alarms. Besides, it allows to display state (0-12/24Vdc) as well as pulse counting 2 digital inputs (voltage).

# Nemo MD



| CODICI DI ORDINAZIONE<br>ORDERING CODE |                                                               |
|----------------------------------------|---------------------------------------------------------------|
| IF96011                                | 2 Ingressi 12/24Vcc + 2 Allarmi / 2 Inpus 12/24Vdc + 2 alarms |

**PARAMETRI PROGRAMMABILI** per ogni singolo allarme

**Grandezza associata:** vedi tabella in accordo con il tipo di inserzione programmato sullo strumento

**PROGRAMMABLE PARAMETERS** for each alarm

**Associated energy:** see table according to the connection programmed on the meter

| MEAS |      |      |      |
|------|------|------|------|
| 3n3E | 3-3E | 3-2E | 1n1E |
| U1   |      |      | U1   |
| U2   |      |      |      |
| U3   |      |      |      |
| U12  | U12  | U12  |      |
| U23  | U23  | U23  |      |
| U31  | U31  | U31  |      |
| A1   | A1   | A1   | A1   |
| A2   | A2   | A2   |      |
| A3   | A3   | A3   |      |
| P1   |      |      |      |
| P2   |      |      |      |
| P3   |      |      |      |
| VAr1 |      |      |      |
| VAr2 |      |      |      |
| VAr3 |      |      |      |
| P    | P    | P    | P    |
| VAr  | VAr  | VAr  | VAr  |
| PF   | PF   | PF   | PF   |
| FrEq | FrEq | FrEq | FrEq |

|                |                                                         |
|----------------|---------------------------------------------------------|
| 3n3E           | Linea trifase 4 fili, 3 sistemi                         |
| 3-3E           | Linea trifase 3 fili, 3 sistemi                         |
| 3-2E           | Linea trifase 3 fili, 2 sistemi Aron                    |
| 1n1E           | Linea monofase                                          |
| U1-U2-U3       | Tensione di fase                                        |
| U12-U23-U31    | Tensione concatenata                                    |
| A1-A2-A3       | Corrente di fase                                        |
| P1-P2-P3       | Potenza attiva di fase                                  |
| P              | Potenza attiva trifase (monofase per inserzione 1n1E)   |
| VAr1-VAr2-VAr3 | Potenza reattiva di fase                                |
| VAr            | Potenza reattiva trifase (monofase per inserzione 1n1E) |
| PF             | Fattore di potenza                                      |
| FrEq           | Frequenza                                               |

|                     |                                    |
|---------------------|------------------------------------|
| Soglia intervento:  | punto intervento                   |
| Tipo allarme        | minimo o massimo                   |
| Stato relè:         | normalmente eccitato o diseccitato |
| Isteresi:           | 0...20%                            |
| Ritardo intervento: | 0...99s                            |
| Ritardo ripristino: | 0...99s                            |

**USCITA**

|                                                                         |
|-------------------------------------------------------------------------|
| 2 relè con contatto SPST-NO libero da potenziale                        |
| Portata contatti: 5A 250V ac cosφ 1 – 3A 250V ac - cosφ 0,4 – 5A 30V dc |

**INGRESSI DIGITALI (isolati)**

|                                                               |
|---------------------------------------------------------------|
| Numero ingressi: 2                                            |
| Tipo ingresso: livello tensione 0 - 12/24Vcc                  |
| Visualizzazione stato ingresso: 0V (aperto) - 12/24V (chiuso) |
| 2 registri conteggio numero impulsi (azzerabili)              |
| Registri conteggio: 8 cifre                                   |

|                |                                                           |
|----------------|-----------------------------------------------------------|
| 3n3E           | 3-phase 4-wire line, 3 systems                            |
| 3-3E           | 3-phase 3-wire line, 3 systems                            |
| 3-2E           | 3-phase 3-wire line, 2 Aron systems                       |
| 1n1E           | single-phase line                                         |
| U1-U2-U3       | Phase voltage                                             |
| U12-U23-U31    | Linked voltage                                            |
| A1-A2-A3       | Phase current                                             |
| P1-P2-P3       | Phase active power                                        |
| P              | 3-phase active power (single-phase for 1n1E connection)   |
| VAr1-VAr2-VAr3 | phase reactive power                                      |
| VAr            | 3-phase reactive power (single-phase for 1n1E connection) |
| PF             | power factor                                              |
| FrEq           | frequency                                                 |

|                         |                                    |
|-------------------------|------------------------------------|
| Intervention threshold: | intervention point                 |
| Type of alarm:          | min. and max.                      |
| State of relay:         | normally energised or de-energised |
| Hysteresis:             | 0...20%                            |
| Intervention delay:     | 0...99s                            |
| Reset delay:            | 0...99s                            |

**OUTPUT**

|                                                                      |
|----------------------------------------------------------------------|
| 2 potential-free SPST contact relays                                 |
| Contact range: 5A 250V ac cosφ 1 – 3A 250V ac - cosφ 0,4 – 5A 30V dc |

**DIGITAL INPUTS (isolated)**

|                                                            |
|------------------------------------------------------------|
| <b>Number of inputs:</b> 2                                 |
| <b>Input type:</b> voltage level 0-12/24V dc               |
| <b>State of input display:</b> 0V (open) - 12/24V (closed) |
| <b>2 registers to count pulse number (resettable)</b>      |
| <b>Counting registers:</b> 8 digits                        |

ALIMENTAZIONE AUSILIARIA

Valori riferiti all'abbinamento strumento multifunzione Nemo 96HD/HD+ interfaccia IF96011

**Autoconsumo IF96011:** ≤ 1VA

**Autoconsumo Nemo 96HD/HD+ e interfaccia IF96011:** ≤ 5VA

**Autoconsumo Nemo 96HD/HD+ 2 interfacce IF96011:** ≤ 6VA

ISOLAMENTO (EN61010)

Valori riferiti all'abbinamento strumento multifunzione Nemo 96HD/HD+ e interfaccia IF96011

**Prova a tensione alternata 2 kV valore efficace 50Hz/1min**

**Circuiti considerati:** ingresso misura, alim. ausiliaria, uscita 1e 2, ingresso digitale 1, ingresso digitale2

CUSTODIA

**Custodia:** modulo con connettore per inserimento strumento Nemo 96HD/HD+

**Profondità massima:** 81mm (Nemo 96HD/HD+ e modulo)

**Conessioni:** morsetti fissaggio a vite

**Portata morsetti:** cavo rigido max. 4,5mm²  
cavo flessibile max. 2,4mm²

**Materiale custodia:** policarbonato autoestinguente

**Peso:** 40 grammi

AUXILIARY SUPPLY

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96011 interface

**Rated burden IF96011:** ≤ 1VA

**Rated burden Nemo 96HD/HD+ multifunction meters + IF96011 interface:** ≤ 5VA

**Rated burden Nemo 96HD/HD+ multifunction meters + 2 IF96011 interface:** ≤ 6VA

INSULATION (EN61010)

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96011 interface

**A.C. voltage test 2 kV r.m.s. value 50Hz/1min**

**Considered circuits:** measure, aux. supply, output 1 and output 2, digital input 1, and digital input 2

HOUSING

**Housing:** module with connector for connection Nemo 96HD/HD+ meter

**Max. depth:** 81mm (Nemo 96HD/HD+ and module)

**Connections:** screw terminals

**Terminals range:** rigid cable max. 4,5mm²  
flexible cable max. 2,4mm²

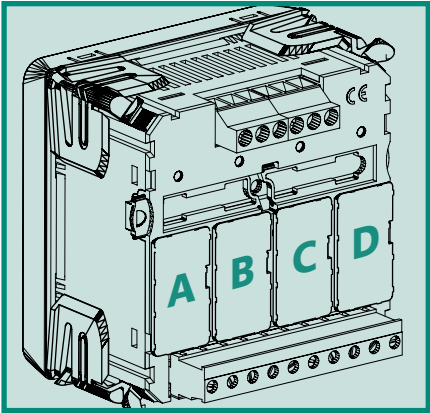
**Housing material:** self-extinguishing polycarbonate

**Weight:** 40 grams

| CODICE<br>CODE | DESCRIZIONE<br>DESCRIPTION                                      | N. MASSIMO<br>N. MAX. | POSIZIONE POSITION |   |   |   | VERSIONE'<br>FIRMWARE' |
|----------------|-----------------------------------------------------------------|-----------------------|--------------------|---|---|---|------------------------|
|                |                                                                 |                       | A                  | B | C | D |                        |
| IF96011        | 2 ingressi 12/24Vcc + 2 allarmi<br>2 inputs 12/24Vcc + 2 alarms | 2                     |                    |   | • | • | V 2.06<br>da / from    |

**1 VERSIONE FIRMWARE:** in tabella viene indicata la versione dello strumento necessaria a supportare la funzione del modulo aggiuntivo.

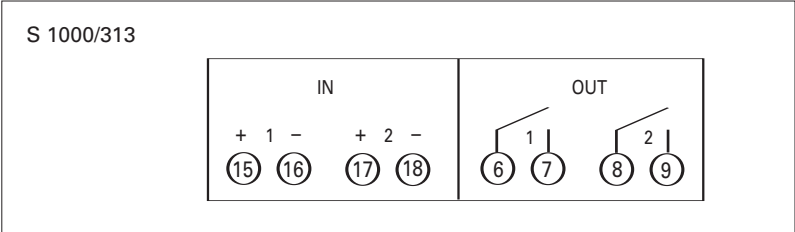
Utilizzando un modulo comunicazione IF96001 (RS485) o IF96002 (RS232) è possibile aggiornare la versione firmware direttamente in campo, con l'ausilio di un PC e del software necessario.



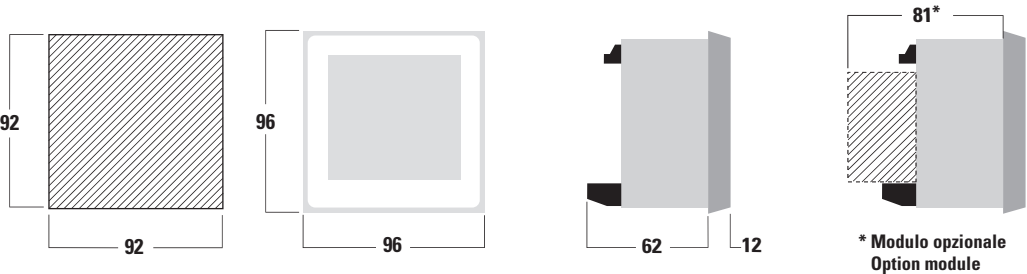
**1 FIRMWARE VERSION:** on the table it is shown the firmware version of the meter which is necessary to support the function of the extra module.

By using an IF96001 (RS485) or IF96002 (RS232) communication module it is possible to update the firmware version directly on field, with the help of a PC and the necessary software.

SCHEMA D'INSERZIONE WIRING DIAGRAM



DIMENSIONI DIMENSIONS



\* Modulo opzionale  
Option module

## Interface

**I/O Entrées numériques et alarmes**

**2 entrées numériques, niveau tension 0-12/24Vcc  
2 registres de comptage d'impulsions, indépendants et réinitialisables  
2 alarmes indépendantes et isolées**

Le module **IF96011** raccordé aux centrales de mesure type **Nemo 96HD/HD+** permet la surveillance de grandeurs électriques à travers 2 alarmes. En outre, il permet d'afficher l'état (0-12/24Vdc) ainsi que le comptage des impulsions de deux entrées numériques (tension)

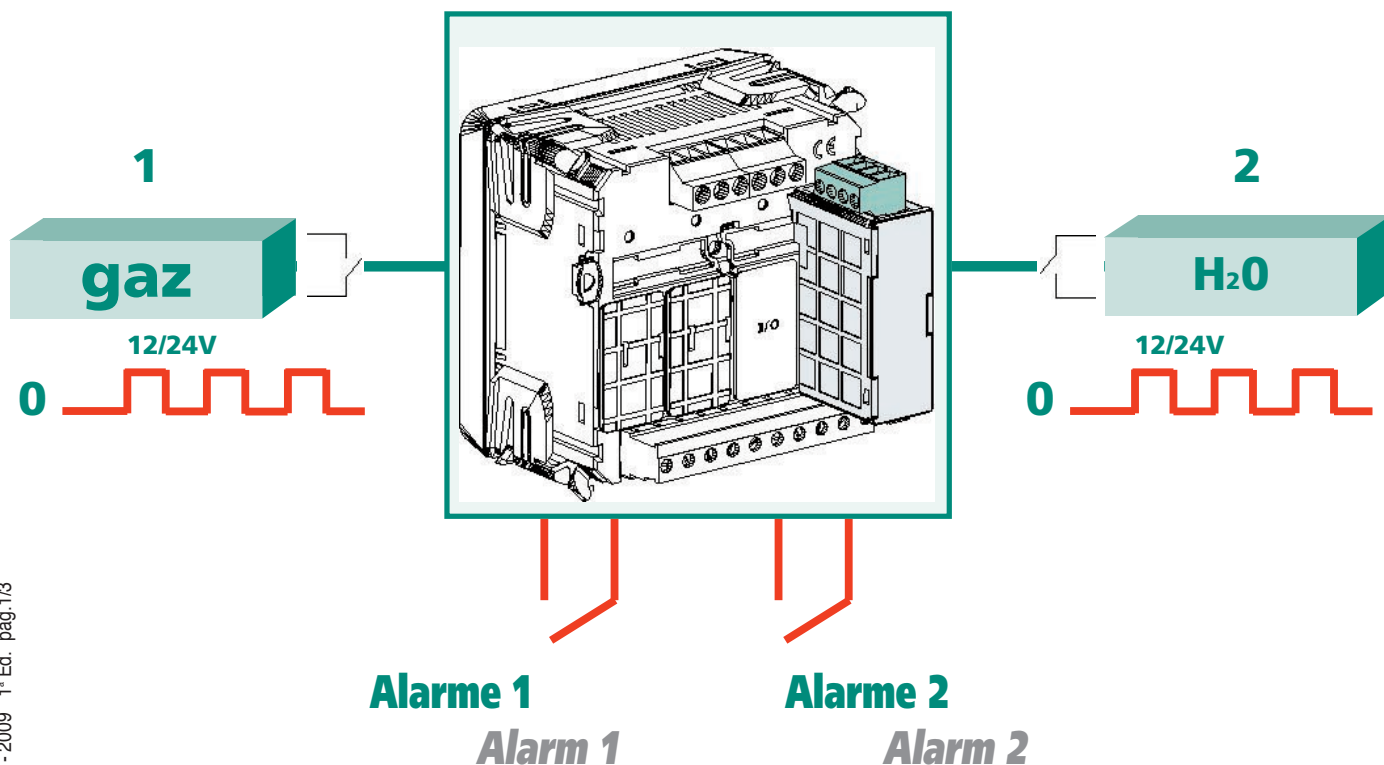
## Interface

**I/O Digital and Alarms inputs**

**2 digital inputs, voltage level 0-12/24V dc  
2 independent and resettable registers for pulse counting  
2 independent and insulated alarms**

**IF96011** module used with meters of **Nemo 96HD/HD+** series, allows the monitoring of electrical quantities through 2 alarms. Besides, it allows to display state (0-12/24Vdc) as well as pulse counting 2 digital inputs (voltage).

# Nemo MD



| REFERENCE<br>ORDERING CODE |                                                               |
|----------------------------|---------------------------------------------------------------|
| 9017 6037                  | 2 entrées 12/24Vcc + 2 Alarmes / 2 Inputs 12/24Vdc + 2 alarms |

**PARAMETRES PROGRAMMABLES** pour chaque alarme

**Grandeur associée:** voir tableau selon le type de raccordement programmé sur l'appareil

**PROGRAMMABLE PARAMETERS** for each alarm

**Associated energy:** see table according to the connection programmed on the meter

| MEAS |      |      |      |
|------|------|------|------|
| 3n3E | 3-3E | 3-2E | 1n1E |
| U1   |      |      | U1   |
| U2   |      |      |      |
| U3   |      |      |      |
| U12  | U12  | U12  |      |
| U23  | U23  | U23  |      |
| U31  | U31  | U31  |      |
| A1   | A1   | A1   | A1   |
| A2   | A2   | A2   |      |
| A3   | A3   | A3   |      |
| P1   |      |      |      |
| P2   |      |      |      |
| P3   |      |      |      |
| VAr1 |      |      |      |
| VAr2 |      |      |      |
| VAr3 |      |      |      |
| P    | P    | P    | P    |
| VAr  | VAr  | VAr  | VAr  |
| PF   | PF   | PF   | PF   |
| FrEq | FrEq | FrEq | FrEq |

|                |                                                         |
|----------------|---------------------------------------------------------|
| 3n3E           | Réseau triphasé, 4 fils, 3 systèmes                     |
| 3-3E           | Réseau triphasé, 3 fils, 3 systèmes                     |
| 3-2E           | Réseau triphasé, 3 fils, 2 systèmes Aron                |
| 1n1E           | Réseau monophasé                                        |
| U1-U2-U3       | Tension simple                                          |
| U12-U23-U31    | Tension composée                                        |
| A1-A2-A3       | Courant par phase                                       |
| P1-P2-P3       | Puissance active par phase                              |
| P              | Puissance active triphasée (mono. pour raccord. 1n1E)   |
| VAr1-VAr2-VAr3 | Puissance réactive par phase                            |
| VAr            | Puissance réactive triphasée (mono. pour raccord. 1n1E) |
| PF             | Facteur de puissance                                    |
| FrEq           | Fréquence                                               |

|                            |                                 |
|----------------------------|---------------------------------|
| Seuil d'intervention:      | point d'intervention            |
| Type d'alarme:             | minimum ou maximum              |
| Etat du relais:            | normalement excité ou désexcité |
| Hystérésis:                | 0...20%                         |
| Délai d'intervention:      | 0...99s                         |
| Délai de réinitialisation: | 0...99s                         |

**SORTIE**

|                                                                           |
|---------------------------------------------------------------------------|
| 2 relais contact SPST-NO libre de potentiel                               |
| Pouvoir de coupure: 5A 250V ac cosφ 1 – 3A 250V ac - cosφ 0,4 – 5A 30V dc |

**ENTREES NUMERIQUES (isolées)**

|                                                                  |
|------------------------------------------------------------------|
| Nombre d'entrées: 2                                              |
| Type d'entrée: niveau tension 0 - 12/24Vcc                       |
| Affichage état entrée: 0V (ouvert) - 12/24V (fermé)              |
| 2 registres de comptage du nombre d'impulsions (réinitialisable) |
| Registre de comptage: 8 chiffres                                 |

|                |                                                           |
|----------------|-----------------------------------------------------------|
| 3n3E           | 3-phase 4-wire line, 3 systems                            |
| 3-3E           | 3-phase 3-wire line, 3 systems                            |
| 3-2E           | 3-phase 3-wire line, 2 Aron systems                       |
| 1n1E           | single-phase line                                         |
| U1-U2-U3       | Phase voltage                                             |
| U12-U23-U31    | Linked voltage                                            |
| A1-A2-A3       | Phase current                                             |
| P1-P2-P3       | Phase active power                                        |
| P              | 3-phase active power (single-phase for 1n1E connection)   |
| VAr1-VAr2-VAr3 | phase reactive power                                      |
| VAr            | 3-phase reactive power (single-phase for 1n1E connection) |
| PF             | power factor                                              |
| FrEq           | frequency                                                 |

|                         |                                    |
|-------------------------|------------------------------------|
| Intervention threshold: | intervention point                 |
| Type of alarm:          | min. and max.                      |
| State of relay:         | normally energised or de-energised |
| Hysteresis:             | 0...20%                            |
| Intervention delay:     | 0...99s                            |
| Reset delay:            | 0...99s                            |

**OUTPUT**

|                                                                      |
|----------------------------------------------------------------------|
| 2 potential-free SPST contact relays                                 |
| Contact range: 5A 250V ac cosφ 1 – 3A 250V ac - cosφ 0,4 – 5A 30V dc |

**DIGITAL INPUTS (isolated)**

|                                                     |
|-----------------------------------------------------|
| Number of inputs: 2                                 |
| Input type: voltage level 0-12/24V dc               |
| State of input display: 0V (open) - 12/24V (closed) |
| 2 registers to count pulse number (resettable)      |
| Counting registers: 8 digits                        |

IMESYS se réserve à chaque moment de modifier les caractéristiques sans préavis écrit / IMESYS reserves the right to modify the technical characteristics without notice.

## ALIMENTATION AUXILIAIRE

Valeur référée à la combinaison du Nemo 96HD/HD+ et interface IF96011

**Autoconsommation IF96011:**  $\leq 1\text{VA}$

**Autoconsommation Nemo 96HD/HD+ et interface IF96011:**  $\leq 5\text{VA}$

**Autoconsommation Nemo 96HD/HD+ et 5 interfaces IF96011:**  $\leq 6\text{VA}$

## AUXILIARY SUPPLY

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96011 interface

**Rated burden IF96011:**  $\leq 1\text{VA}$

**Rated burden Nemo 96HD/HD+ multifunction meters + IF96011 interface:**  $\leq 5\text{VA}$

**Rated burden Nemo 96HD/HD+ multifunction meters + 2 IF96011 interface:**  $\leq 6\text{VA}$

## ISOLEMENT

(EN61010)

Valeur référée à la combinaison du Nemo 96HD/HD+ et interface IF96011

**Tension d'essai 2 kV valeur efficace 50Hz/1min**

**Circuits considérés:** entrée mesure, alim. aux., sortie 1 et sortie 2, entrée numérique 1 et entrée numérique 2

## INSULATION

(EN61010)

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96011 interface

**A.C. voltage test 2 kV r.m.s. value 50Hz/1min**

**Considered circuits:** measure, aux. supply, output 1 and output 2, digital input 1, and digital input 2

## BOITIER

**Boîtier:** module avec connecteur pour raccordement sur le Nemo 96HD/HD+

**Profondeur maximum:** 81mm (Nemo 96HD/HD+ et module)

**Raccordement:** bornier à vis

**Capacité des bornes:** fil rigide max. 4,5mm<sup>2</sup>  
fil souple max. 2,4mm<sup>2</sup>

**Matériau du boîtier:** polycarbonate autoextinguible

**Poids:** 40 grammes

## HOUSING

**Housing:** module with connector for connection Nemo 96HD/HD+ meter

**Max. depth:** 81mm (Nemo 96HD/HD+ and module)

**Connections:** screw terminals

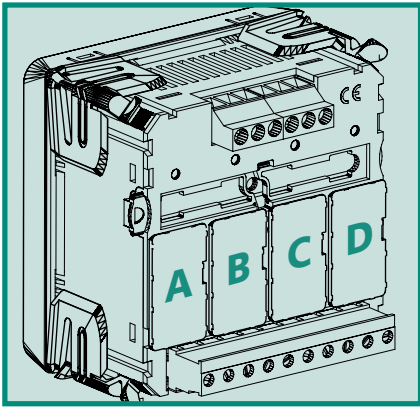
**Terminals range:** rigid cable max. 4,5mm<sup>2</sup>  
flexible cable max. 2,4mm<sup>2</sup>

**Housing material:** self-extinguishing polycarbonate

**Weight:** 40 grams

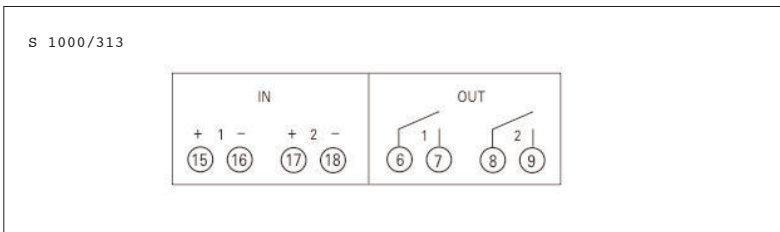
| TYPE<br>CODE | DESCRIPTION<br>DESCRIPTION                                      | N. MAXIMUM<br>N. MAX. | POSITION POSITION |   |   |   | VERSION '1<br>FIRMWARE' |
|--------------|-----------------------------------------------------------------|-----------------------|-------------------|---|---|---|-------------------------|
|              |                                                                 |                       | A                 | B | C | D |                         |
| IF96011      | 2 ingressi 12/24Vcc + 2 allarmi<br>2 inputs 12/24Vcc + 2 alarms | 2                     |                   |   | • | • | V 2.06<br>de / from     |

**'1 VERSION FIRMWARE:** sur le tableau figure la version firmware de la centrale nécessaire pour supporter la fonction du module supplémentaire. En utilisant un module de communication IF96001 (RS485) ou IF96002 (RS232) il est possible de mettre à jour la version firmware directement en façade, à l'aide d'un PC et du logiciel approprié.

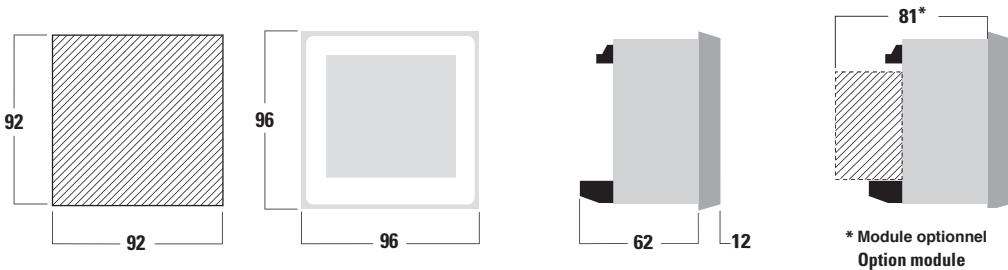


**'FIRMWARE VERSION:** on the table it is shown the firmware version of the meter which is necessary to support the function of the extra module. By using an IF96001 (RS485) or IF96002 (RS232) communication module it is possible to update the firmware version directly on field, with the help of a PC and the necessary software.

## SCHEMA DE RACCORDEMENT WIRING DIAGRAM



## DIMENSIONS DIMENSIONS



\* Module optionnel  
Option module