

Interfaccia

**I/O Ingressi digitali
e allarmi**

**2 Ingressi a contatto,
liberi da potenziale**

**2 registri conteggio impulsi,
indipendenti e azzerabili**

**2 Allarmi indipendenti
e isolati**

Il modulo IF96010 abbinato a strumenti della serie **Nemo 96HD/HD+** consente la sorveglianza di grandezze elettriche tramite due allarmi.

Consente inoltre la visualizzazione dello stato (chiuso/aperto) e il conteggio impulsi, di 2 ingressi a contatto.

Interface

**I/O Digital and
Alarms inputs**

**2 potential-free
contact inputs**

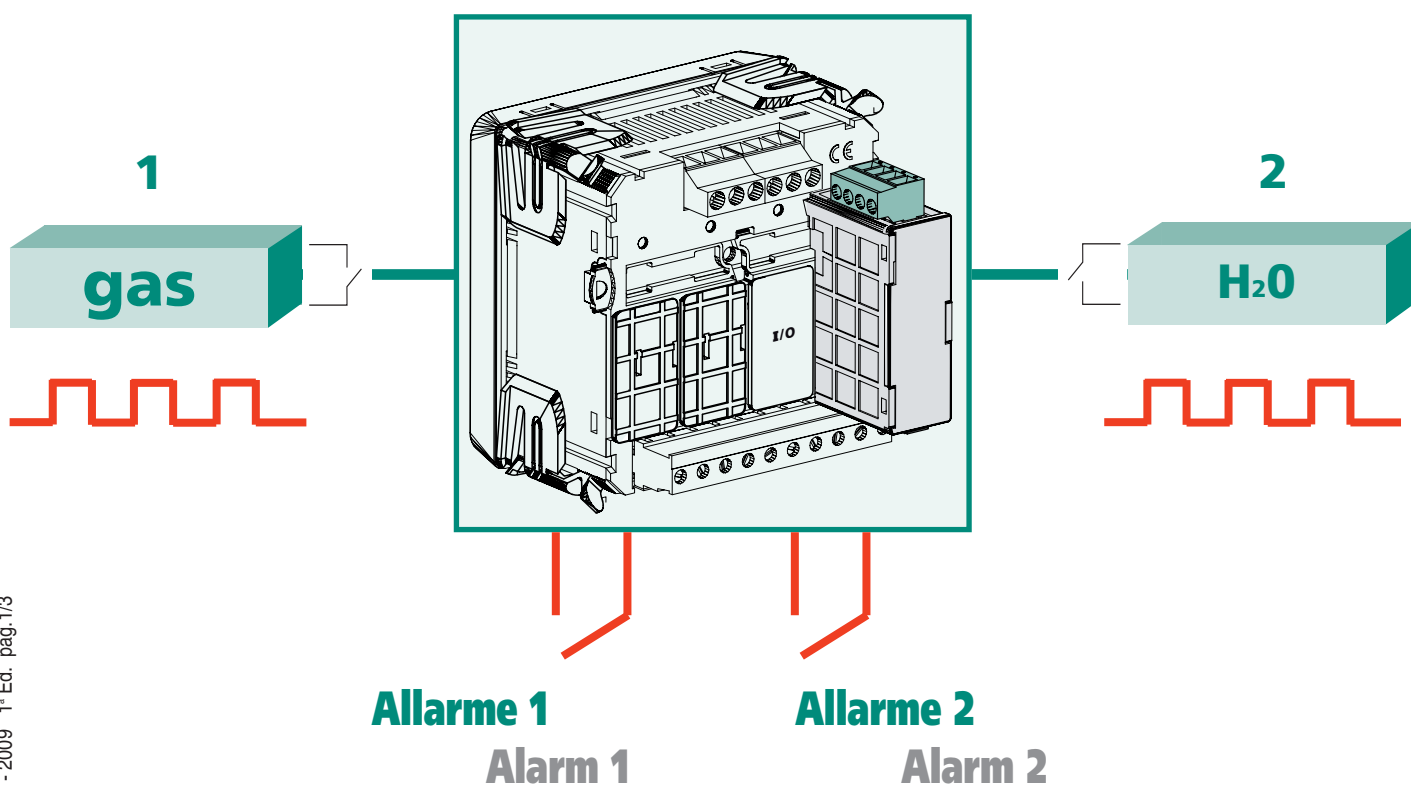
**2 independent and resettable
registers for pulse counting**

**2 independent and insulated
alarms**

IF96010 module used with meters of **Nemo 96HD/HD+** series, allows the monitoring of electrical quantities through 2 alarms.

Besides, it allows to display state (closed/open) as well as pulse counting of two contact inputs.

Nemo MD



CODICI DI ORDINAZIONE ORDERING CODE	
IF96010	2 Ingressi SPST + 2 Allarmi / 2 SPST Inpus + 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 (non isolati)

Numero ingressi: 2

Tipo ingresso: contatto SPST-NO libero da potenziale

Visualizzazione stato ingresso: aperto - 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 (not isolated)

Number of inputs: 2

Input type: potential-free SPST-NO contact

State of input display: open-closed

2 registers to count pulse number (resettable)

Counting registers: 8 digits

ALIMENTAZIONE AUSILIARIA

Valori riferiti all'abbinamento strumento multifunzione Nemo 96HD/HD+ interfaccia IF96010

Autoconsumo IF96010: ≤ 1VA

Autoconsumo Nemo 96HD/HD+ e interfaccia IF96010: ≤ 5VA

Autoconsumo Nemo 96HD/HD+ 2 interfacce IF96010: ≤ 6VA

ISOLAMENTO (EN61010)

Valori riferiti all'abbinamento strumento multifunzione Nemo 96HD/HD+ interfaccia IF96010

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

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

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 + IF96010 interface

Rated burden IF96010: ≤ 1VA

Rated burden Nemo 96HD/HD+ multifunction meters + IF96010 interface: ≤ 5VA

Rated burden Nemo 96HD/HD+ multifunction meters + 2 IF96010 interface: ≤ 6VA

INSULATION (EN61010)

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96010 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 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

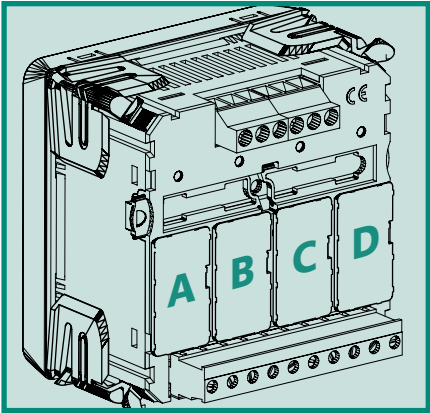
Housing material: self-extinguishing polycarbonate

Weight: 40 grams

CODICE CODE	DESCRIZIONE DESCRIPTION	N. MASSIMO N. MAX.	POSIZIONE POSITION				VERSIONE' FIRMWARE'
			A	B	C	D	
IF96010	2 ingressi SPST + 2 allarmi 2 SPST inputs + 2 alarms	2			•	•	V 2.06 da / from

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

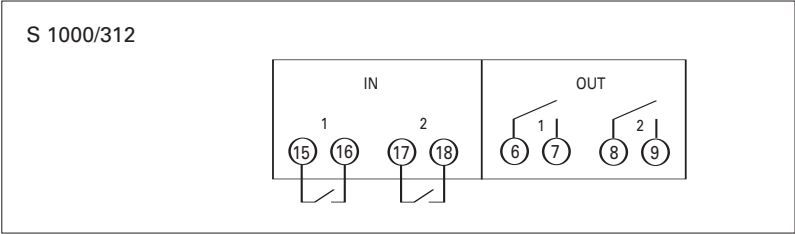
Utilizzando un modulo comunicazione IF96001 (RS485) o IF96002 (RS232) è possibile aggiornare la versione firmware direttamente in campo, con l'ausilio di un PC e del software necessario.



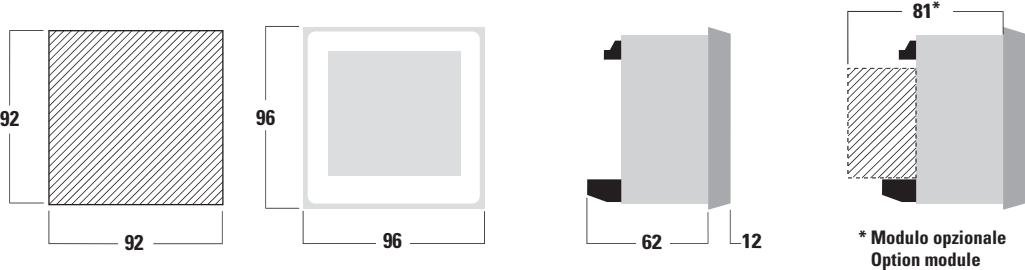
1 FIRMWARE VERSION: on the table it is shown the firmware version of the meter which is necessary to support the function of the extra module.

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



Interface

I/O Entrées numériques et alarmes
2 entrées contact, libre de potentiel
2 registres de comptage d'impulsions, indépendants et réinitialisables
2 alarmes indépendantes et isolées

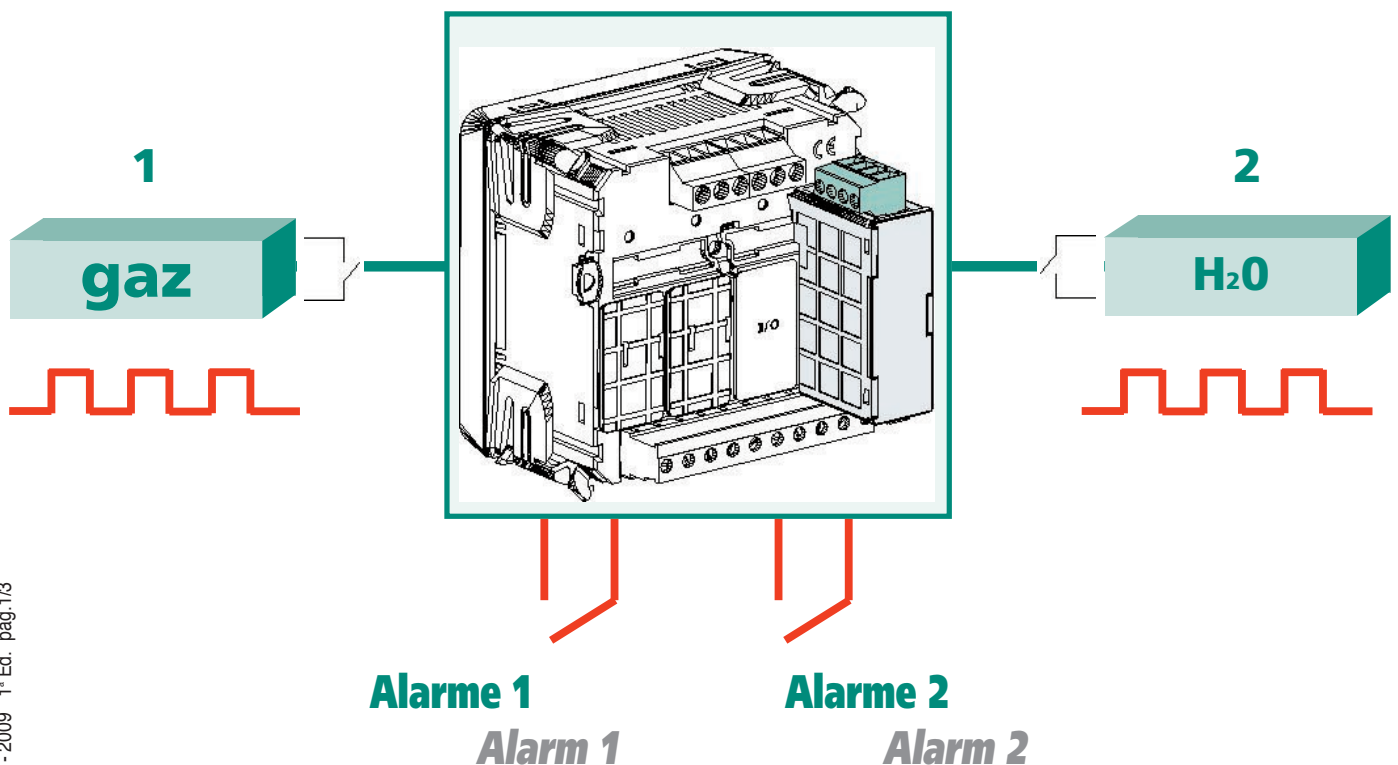
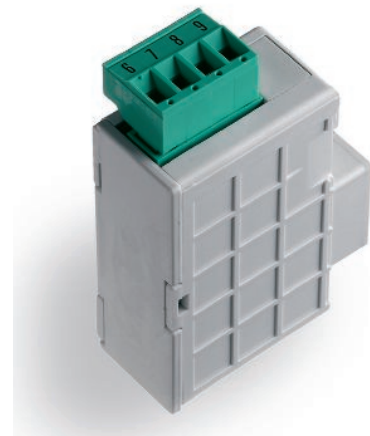
Le module **IF96010**, raccordé aux centrales de mesure type **Nemo 96HD/HD+** permet la surveillance de grandeurs électriques à travers 2 alarmes.
En outre, il permet d'afficher l'état (fermé/ouvert) ainsi que le comptage des impulsions de deux entrées contact

Interface

I/O Digital and Alarms inputs
2 potential-free contact inputs
2 independent and resettable registers for pulse counting
2 independent and insulated alarms

IF96010 module used with meters of **Nemo 96HD/HD+** series, allows the monitoring of electrical quantities through 2 alarms.
Besides, it allows to display state (closed/open) as well as pulse counting of two contact inputs.

Nemo MD



REFERENCE ORDERING CODE	
9017 6036	2 entrées SPST + 2 alarmes / 2 SPST Inputs + 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 (non isolées)

Nombre d'entrées: 2
Type d'entrée: contact SPST-NO libre de potentiel
Affichage état entrée: ouvert - 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 (not isolated)

Number of inputs: 2
Input type: potential-free SPST-NO contact
State of input display: open-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 IF96010

Autoconsommation IF96010: $\leq 1\text{VA}$

Autoconsommation Nemo 96HD/HD+ et interface IF96010: $\leq 5\text{VA}$

Autoconsommation Nemo 96HD/HD+ et 2 interfaces IF96010: $\leq 6\text{VA}$

ISOLEMENT

(EN61010)

Valeur référée à la combinaison du Nemo 96HD/HD+ et interface IF96010

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

Circuits considérés: entrée mesure, alim. aux., sortie 1 et sortie 2, entrée numérique 1 et 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. 4,5mm²
fil souple max. 2,4mm²

Matériau du boîtier: polycarbonate autoextinguible

Poids: 40 grammes

AUXILIARY SUPPLY

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96010 interface

Rated burden IF96010: $\leq 1\text{VA}$

Rated burden Nemo 96HD/HD+ multifunction meters + IF96010 interface: $\leq 5\text{VA}$

Rated burden Nemo 96HD/HD+ multifunction meters + 2 IF96010 interface: $\leq 6\text{VA}$

INSULATION

(EN61010)

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96010 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 2

HOUSING

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

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

Connections: screw terminals

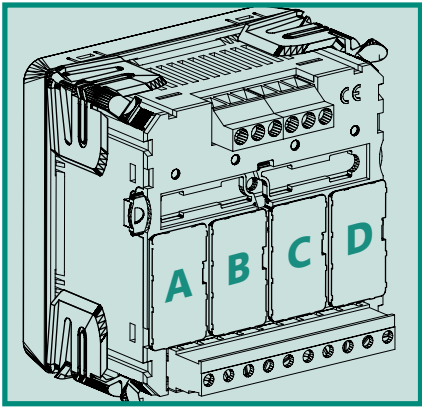
Terminals range: rigid cable max. 4,5mm²
flexible cable max. 2,4mm²

Housing material: self-extinguishing polycarbonate

Weight: 40 grams

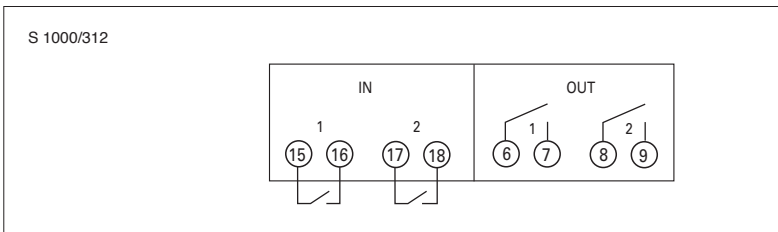
TYPE CODE	DESCRIPTION DESCRIPTION	N. MAXIMUM N. MAX.	POSITION POSITION				VERSION' FIRMWARE'
			A	B	C	D	
IF96010	2 entrées SPST + 2 alarmes 2 SPST inputs + 2 alarms	2			•	•	V 2.06 de / from

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.



¹FIRMWARE 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

