

**Interfaccia
Uscita Analogica
2 Uscite indipendenti
e isolate**

**Programmazione di:
grandezza associata
Inizio scala
Fondo scala
Uscita 0...20 - 4...20mA**

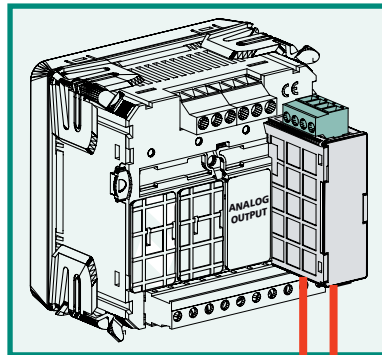
Il modulo **IF96004** abbinato a strumenti della serie **Nemo 96HD/HD+** consente la ripetizione tramite segnale analogico 0...20 e/o 4...20mA di due grandezze elettriche. In ogni strumento (**Nemo 96HD/HD+**) è possibile inserire un massimo di due moduli **IF96004** ottenendo così quattro uscite analogiche.

**Interface
Analog Output
2 independent and
insulated outputs**

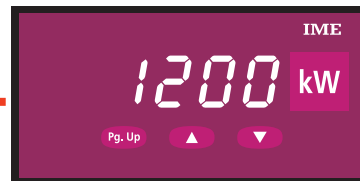
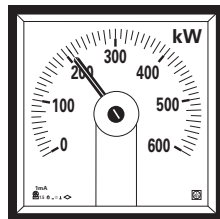
**Programming of:
Associated quantity
Beginning of scale
Full scale
Output 0...20 - 4...20mA**

IF96004 module used with meters of **Nemo 96HD/HD+** series, it allows the remote repetition of two electrical quantities by a 0...20 and/or 4...20mA analogue signal. For every meter (**Nemo 96DH/HD+**) it is possible to connect max. 2 **IF96004** modules, obtaining in this way 4 analog outputs.

Nemo MD



0/4...20mA



**CODICI DI ORDINAZIONE
ORDERING CODE**

IF96004

2 uscite analogiche 2 analog output

PARAMETRI PROGRAMMABILI per ogni singola uscita

Valore nominale: 0...20mA - 4...20mA

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

PROGRAMMABLE PARAMETERS for each output

Rated value: 0...20mA - 4...20mA

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
PM	PM	PM	PM
VARM	VARM	VARM	VARM
CurM	CurM	CurM	CurM

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
PM	Potenza attiva media
VARM	Potenza reattiva media
CurM	Corrente media

Inizio scala: valore della grandezza associata corrispondente a 0mA (per uscita 0...20mA) oppure 4mA (per uscita 4...20mA)

Fondo scala: valore della grandezza associata corrispondente a 20mA

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
PM	Active power demand
VARM	Reactive power demand
CurM	Current demand

Beginning of scale: value of associated quantity corresponding to 0mA (for output 0...20mA) or 4mA (for output 4...20mA)

Full scale: value of associated quantity corresponding to 20mA

USCITA

Tipo: unidirezionale a zero reale o traslato, per carico d'uscita variabile

Precisione: cl.0,5

Tempo di risposta: ≤ 600ms

Valori nominali: 0...20 e 4...20mA

Carico di uscita: ≤ 750 Ω

OUTPUT

Type: unidirectional at real or figurative zero for changing output load

Accuracy: cl.0,5

Response time: ≤ 600ms

Rated values: 0...20 and 4...20mA

Output load: ≤ 750 Ω

ALIMENTAZIONE AUSILIARIA

Valori riferiti all'abbinamento strumento multifunzione Nemo 96HD/HD + e interfaccia IF96004

Autoconsumo IF96004: ≤ 2VA

Autoconsumo Nemo 96HD/HD + e interfaccia IF96004: ≤ 6VA

Autoconsumo Nemo 96HD/HD + e 2 interfacce IF96004: ≤ 8VA

AUXILIARY SUPPLY

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96004 interface

Rated burden IF96004: ≤ 2VA

Rated burden Nemo 96HD/HD+ and IF96004 interface: ≤ 6VA

Rated burden Nemo 96HD/HD+ and 2 IF96004 interface: ≤ 8VA

La I.M.E. S.p.A. si riserva in qualsiasi momento, di modificare le caratteristiche tecniche senza darne preavviso. / I.M.E. S.p.A. reserves the right, to modify the technical characteristics without notice.

ISOLAMENTO

(EN61010)

Valori riferiti all'abbinamento strumento multifunzione Nemo 96HD/HD + e interfaccia IF96004

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

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

CUSTODIA

Custodia: modulo con connettore per inserimento strumento Nemo 96HD

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

Connessioni: morsetti fissaggio a vite

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

Materiale custodia: policarbonato autoestinguente

Peso: 40 grammi

INSULATION

(EN61010)

Value referred to combination Nemo 96HD/HD+ multifunction meters + IF96004 interface

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

Considered circuits: measure, aux. supply, output 1 - output 2

HOUSING

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

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

Connections: screw terminals

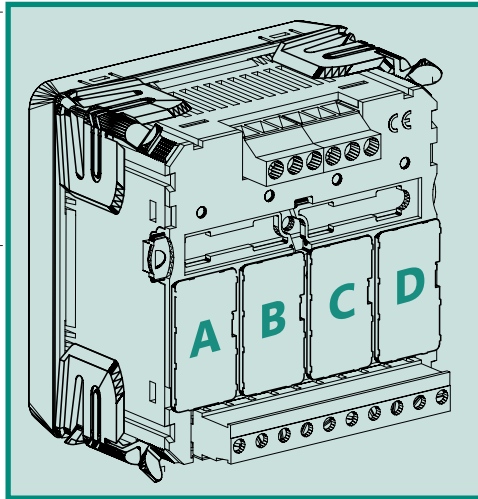
Terminals range: rigid cable max. 4,5mm²
flexible cable max. 2,4mm²

Housing material: self-extinguishing polycarbonate

Weight: 40 grams

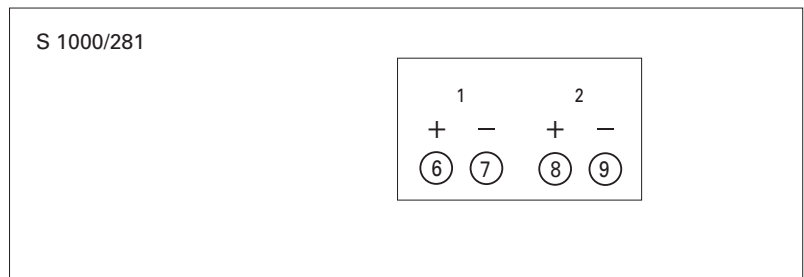
CODICE CODE	DESCRIZIONE DESCRIPTION	N. MASSIMO N. MAX.	POSIZIONE POSITION				VERSIONE ¹ FIRMWARE ¹
			A	B	C	D	
IF96004	2 uscite analogiche 0/4...20mA 2 analogue outputs 0/4...20mA	2			•	•	V 2.17 da / from

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.

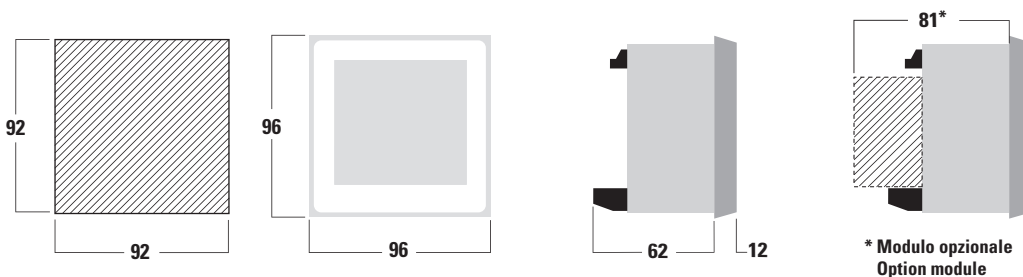


¹ **FIRMWARE VERSION:** on the table it is shown the firmware version of the meter which is necessary to support the function of the extra module. By using an IF96001 (RS485) or IF96002 (RS232) communication module it is possible to update the firmware version directly on field, with the help of a PC and the necessary software.

SCHEMA D'INSERIZIONE WIRING DIAGRAM



DIMENSIONI DIMENSIONS



**Interface
Sortie Analogique
2 Sorties
indépendantes et isolées**

**Programmation de:
grandeurs associées
Début d'échelle
Fin d'échelle
Sortie 0...20 - 4...20mA**

Le module **IF96004** raccordé aux centrales de mesure type **Nemo 96HD/HD+** permet le report à distance de deux grandeurs électriques par un signal analogique 0...20 et/ou 4...20mA.

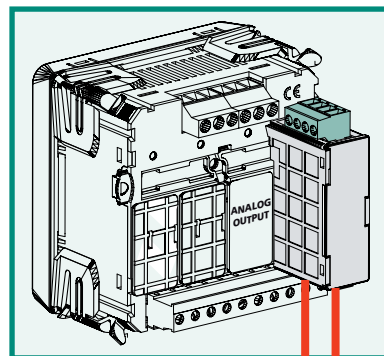
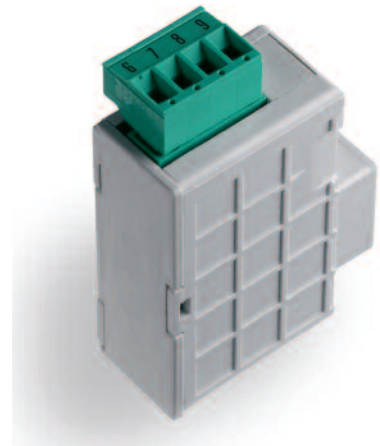
Pour chaque centrale (**Nemo 96HD/HD+**), il est possible de raccorder aux max. 2 modules **IF96004** et obtenir ainsi 4 sorties analogiques.

**Interface
Analog Output
2 independent and
insulated outputs**

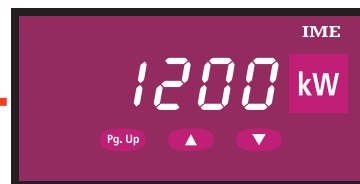
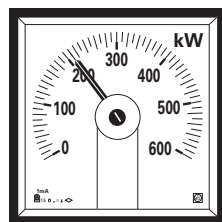
**Programming of:
Associated quantity
Beginning of scale
Full scale
Output 0...20 - 4...20mA**

IF96004 module used with meters of **Nemo 96HD/HD+** series, it allows the remote repetition of two electrical quantities by a 0...20 and/or 4...20mA analogue signal. For every meter (**Nemo 96DH/HD+**) it is possible to connect max. 2 **IF96004** modules, obtaining in this way 4 analog outputs.

Nemo MD



0/4...20mA



REFERENCE ORDERING CODE	
9017 6044	2 sorties analogiques / 2 analog output

PARAMETRES PROGRAMMABLES pour chaque sortie

Valeur nominale: 0...20mA - 4...20mA

Grandeurs associées: voir tableau selon le type de raccordement de la centrale

PROGRAMMABLE PARAMETERS for each output

Rated value: 0...20mA - 4...20mA

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
PM	PM	PM	PM
VARM	VARM	VARM	VARM
CURM	CURM	CURM	CURM

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 (monophasée pour raccord. 1n1E)
VAR1-VAR2-VAR3	Puissance réactive par phase
VAR	Puissance réactive tri. (monophasée pour raccord. 1n1E)
PF	Facteur de puissance
FrEq	Fréquence
PM	Puissance moyenne active
VARM	Puissance moyenne réactive
CurM	Courant moyen

Début d'échelle: valeur de la grandeur associée correspondant à 0mA (pour sortie 0...20mA) ou 4mA (pour sortie 4...20mA)

Fin d'échelle: valeur de la grandeur associée à 20mA

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
PM	Active power demand
VARM	Reactive power demand
CurM	Current demand

Beginning of scale: value of associated quantity corresponding to 0mA (for output 0...20mA) or 4mA (for output 4...20mA)

Full scale: value of associated quantity corresponding to 20mA

SORTIE

Type: unidirectionnelle à zéro réel ou décalé, pour charge de sortie variable

Précision: cl.0,5

Temps de réponse: ≤ 600ms

Valeur nominale: 0...20 et 4...20mA

Charge de sortie: ≤ 750 Ω

OUTPUT

Type: unidirectional at real or figurative zero for changing output load

Accuracy: cl.0,5

Response time: ≤ 600ms

Rated values: 0...20 and 4...20mA

Output load: ≤ 750 Ω

ALIMENTATION AUXILIAIRE

Valeur référée à la combinaison NEMO 96HD/HD+ et interface IF96004

Autoconsommation IF96004: ≤ 2VA

Autoconsommation NEMO 96HD + interface IF96004: ≤ 6VA

Autoconsommation NEMO 96HD + 2 interfaces IF96004:: ≤ 8VA

AUXILIARY SUPPLY

Value referred to combination Nemo 96HD/HD+ multifunction meters .. + IF96004 interface

Rated burden IF96004: ≤ 2VA

Rated burden MF96 multifunction meters .. + IF96004 interface: ≤ 6VA

Rated burden MF96 multifunction meters .. + 2 IF96004 interface: ≤ 8VA

ISOLEMENT**(EN61010)**

Valeur référée à la combinaison NEMO 96HD/HD+ et interface IF96004

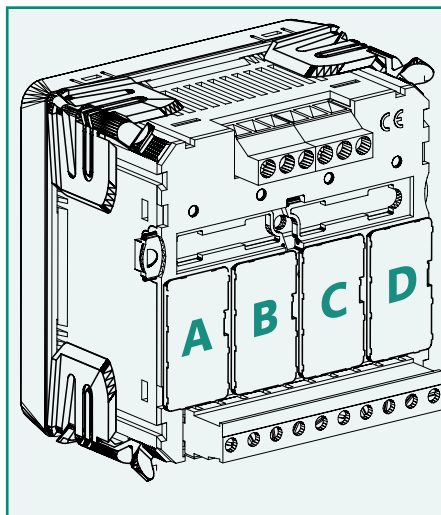
Tension d'essai 2 kV valeur efficace 50Hz/1min**Circuits considérés:** entrée mesure, alim. aux, sortie 1 - sortie 2**INSULATION****(EN61010)**

Value referred to combination Nemo 96HD/HD+ multifunction meters . + IF96004 interface

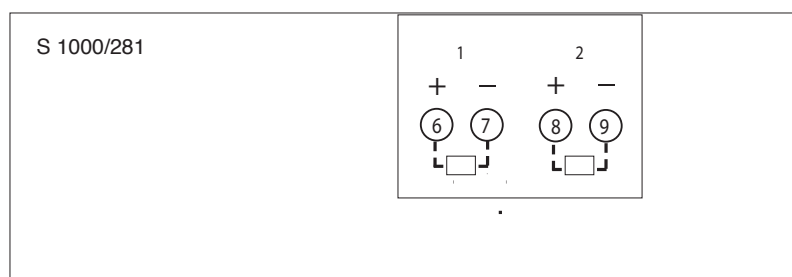
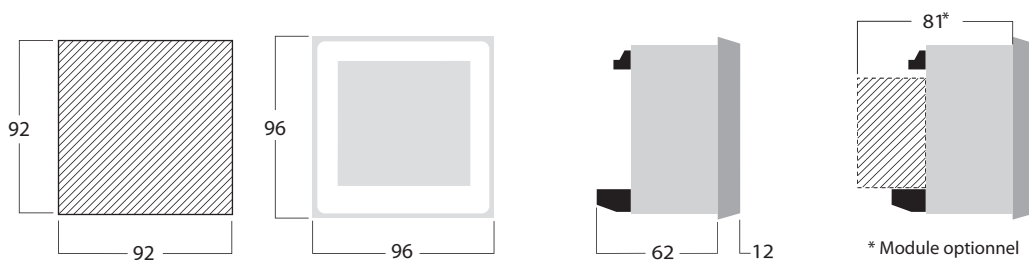
A.C. voltage test 2 kV r.m.s. value 50Hz/1min**Considered circuits:** measure, aux. supply, output 1 - output 2**BOITIER****Boîtier:** Module avec connecteur pour le raccordement sur le Nemo 96HD/HD+**Profondeur maximum:** 81mm (Nemo 96HD/HD+ et module)**Raccordement:** bornier à vis**Capacité des bornes:** fil rigide max. 4,5mm²fil souple max. 2,4mm²**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. 4,5mm²flexible cable max. 2,4mm²**Housing material:** self-extinguishing polycarbonate**Weight:** 40 grams

CODE	DESCRIPTION	N.MAX	POSITION				VERSION ¹ FIRMWARE ¹
			A	B	C	D	
9017 6044	2 sorties analogiques 0/4...20mA 2 analogue outputs 0/4...20mA	2			•	•	V 2.17 du / from

1VERSION 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 of field, with the help of a PC and the necessary software.

SCHEMA DE RACCORDEMENT WIRING DIAGRAM**DIMENSIONS DIMENSIONS**

* Module optionnel