

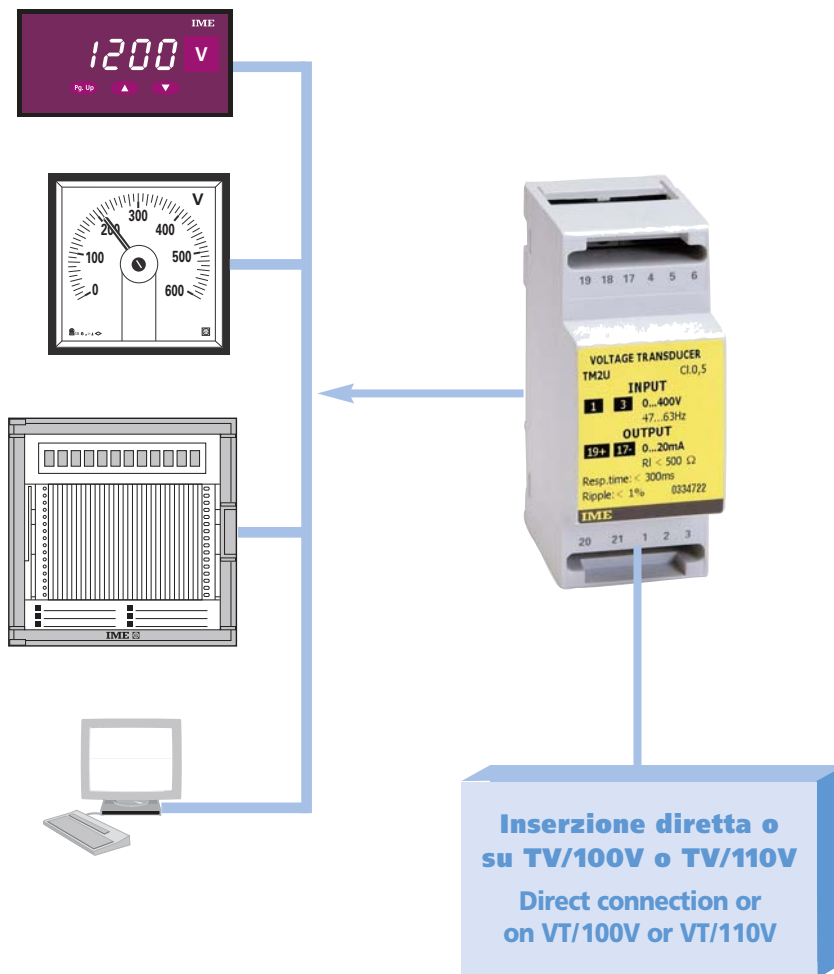
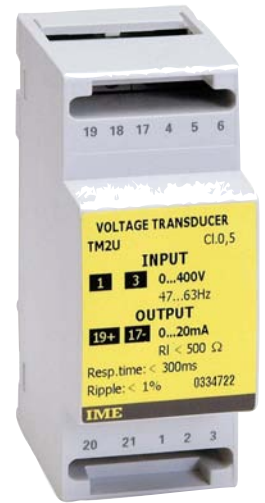
**Trasduttore
di tensione alternata
2 Moduli**

Misura del valor medio,
taratura rapportata al valore efficace
Ingresso diretto fino a 440V
Alimentazione derivata dalla misura
(autoalimentato)

**Alternating voltage
transducer
2 Module**

To measure average value,
calibration according RMS value
Direct input up to 440V
Supply taken from measurement
(selfsupplied)

Tema U



CODICI DI ORDINAZIONE ORDERING CODE	INGRESSO INPUT	USCITA OUTPUT
TM2UA12	100V	0 - 5mA
TM2UA13	100V	0 - 10mA
TM2UA14	100V	0 - 20mA
TM2UA16	100V	0 - 5V
TM2UA18	100V	0 - 10V
TM2UA22	110V	0 - 5mA
TM2UA23	110V	0 - 10mA
TM2UA24	110V	0 - 20mA
TM2UA26	110V	0 - 5V
TM2UA28	110V	0 - 10V
TM2UA32	120V	0 - 5mA
TM2UA33	120V	0 - 10mA
TM2UA34	120V	0 - 20mA
TM2UA36	120V	0 - 5V
TM2UA38	120V	0 - 10V
TM2UA72	250V	0 - 5mA
TM2UA73	250V	0 - 10mA
TM2UA74	250V	0 - 20mA
TM2UA76	250V	0 - 5V
TM2UA78	250V	0 - 10V
TM2UA92	400V	0 - 5mA
TM2UA93	400V	0 - 10mA
TM2UA94	400V	0 - 20mA
TM2UA96	400V	0 - 5V
TM2UA98	400V	0 - 10V
TM2UAA2	440V	0 - 5mA
TM2UAA3	440V	0 - 10mA
TM2UAA4	440V	0 - 20mA
TM2UAA6	440V	0 - 5V
TM2UAA8	440V	0 - 10V

INGRESSO

Tensione nominale Un: 100 - 110 - 120 - 250 - 400 - 440V

Altri valori a richiesta

Frequenza nominale fn: 50Hz

Eccedenza di breve durata (EN 60688): 2Un/1s (max 450V)

Autoconsumo: $\leq 2,5VA$

CAMPI NOMINALI DI UTILIZZO

(EN 60688)

Frequenza: 47...63Hz (fn 50Hz)

Forma d'onda: sinusoidale, fattore di forma 1,11

INTERVALLO DI MISURA

Campo nominale d'utilizzo: 20...120%Un (precisione cl. 0.5)

Campo limite di utilizzo: 10...120%Un (con precisione cl.1)

USCITA

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

Precisione (EN 60688): classe 0,5

Ondulazione (EN 60688): $\leq 1\%$

Tempo di risposta (EN 60688): $\leq 300ms$

Valori nominali di corrente: 0...5 - 0...10 - 0...20mA

Tensione disponibile: 10V

Carico di uscita: $\leq 500 \Omega$ (20 mA) $\leq 1 k\Omega$ (10mA) $\leq 2 k\Omega$ (5mA)

INPUT

Voltage rating Un: 100 - 110 - 120 - 250 - 400 - 440V

Other values on request

Frequency rating fn: 50Hz

Excessive input of short duration (EN 60688): 2Un/1s (max 450V)

Rated burden: $\leq 2,5VA$

NOMINAL RANGE OF USE

(EN 60688)

Frequency: 47...63Hz (fn 50Hz)

Waveform: sinusoidal, form factor 1,11

MEASURING RANGE

Nominal range of use: 20...120%Un (accuracy cl.0,5)

Limit range of use: 10...120% Un (with accuracy cl.1)

OUTPUT

Type: unidirectional, real zero for variable output load

Accuracy (EN 60688): class 0,5

Ripple content (EN 60688): $\leq 1\%$

Response time (EN 60688): $\leq 300ms$

Current rated values: 0...5 - 0...10 - 0...20mA

Compliance voltage: 10V

Output load: $\leq 500 \Omega$ (20 mA) $\leq 1 k\Omega$ (10mA) $\leq 2 k\Omega$ (5mA)

Valori nominali di tensione: 0...5 - 0...10V
 Carico di uscita: $\geq 100 \text{ k}\Omega$ (5V) - $\geq 200 \text{ k}\Omega$ (10V)

ALIMENTAZIONE AUSILIARIA

Derivata dalla misura (autoalimentato)

ISOLAMENTO (EN 60439-1, EN61010-1)

Categoria di installazione: III
 Grado di inquinamento: 2
 Tensione di riferimento per l'isolamento: 450V
 Prova di tensione a impulso 5kV 1,2/50 μ s 0,5J
 Circuiti considerati: ingresso, uscita
 Prova a tensione alternata 2,5kV valore efficace 50Hz/1min
 Circuiti considerati: ingresso, uscita
 Prova a tensione alternata 4kV valore efficace 50Hz/1min
 Circuiti considerati: tutti i circuiti e massa

COMPATIBILITA' ELETTROMAGNETICA

Prove di emissione in accordo con EN 50081-1, EN 55011
 Prove di immunità in accordo con EN 50082-2
 Prova di disturbo ad alta frequenza, onda oscillatoria smorzata 1MHz (IEC255-4)
 Tensione di prova: 2,5kV modo comune, 1kV modo serie

CONDIZIONI AMBIENTALI (EN 60688)

Gruppo di utilizzo: II
 Temperatura di riferimento: 15...30°C
 Temperatura di impiego: 0...45°C
 Condizione limite di temperatura: -10...55°C
 Temperatura di magazzinaggio: -25...70°C
 Umidità relativa: fino a 75%
 Adatto all'utilizzo in clima tropicale
 Massima potenza dissipata¹: $\leq 2\text{W}$
¹ Per il dimensionamento termico dei quadri

CUSTODIA

Dimensioni: 2 moduli DIN 43880
 Connessioni: morsetti fissaggio a vite per conduttore fino a 4 mm²
 Montaggio: a incastro su profilato 35mm
 Tipo profilato: a cappello TH35-15 (EN60715)
 Materiale custodia: makrolon autoestinguente
 Grado di protezione (EN 60529): IP50 (frontale), IP20 (morsetti)
 Peso: 200 grammi

Voltage rated values: 0...5 - 0...10V
 Output load: $\geq 100 \text{ k}\Omega$ (5V) - $\geq 200 \text{ k}\Omega$ (10V)

AUXILIARY SUPPLY

Taken from measurement (selfsupplied)

INSULATION (EN 60439-1, EN61010-1)

Installation category: III
 Pollution degree: 2
 Insulation reference voltage: 450V
 Impulse voltage test 5kV 1,2/50 μ s 0,5J
 Considered circuits: input, output
 A.C. voltage test 2,5kV r.m.s. 50Hz/1min
 Considered circuits: input, output
 A.C. voltage test 4kV r.m.s. 50Hz/1min
 Considered circuits: all circuits and earth

ELECTROMAGNETIC COMPATIBILITY

Emission tests according to EN 50081-1, EN 55011
 Immunity tests according to EN 50082-2
 High frequency disturbance test, 1MHz damped oscillatory wave (IEC255-4)
 Test voltage: 2,5kV common mode, 1kV series mode

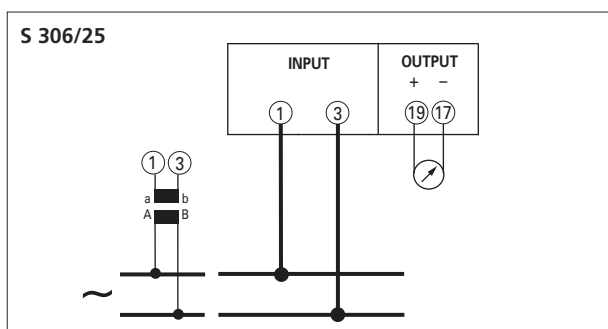
ENVIRONMENTAL CONDITIONS (EN 60688)

Usage group: II
 Reference temperature: 15...30°C
 Nominal temperature range: 0...45°C
 Limit temperature range: -10...55°C
 Limit temperature range for storage: -25...70°C
 Relative humidity: up to 75%
 Suitable for tropical climates
 Max. power dissipation¹: $\leq 2\text{W}$
¹ For switchboard thermal calculation

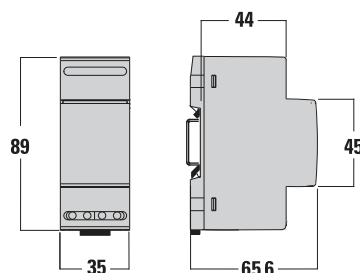
HOUSING

Dimensions: 2 module DIN 43880
 Connections: screw terminals for cable up to 4 mm²
 Mounting: snap-on 35mm rail
 Rail type: top hat TH35-15 (EN60715)
 Housing material: makrolon self-extinguishing
 Protection degree (EN 60529): IP50 (front frame), IP20 (terminals)
 Weight: 200 grams

SCHEMA D'INSERIZIONE WIRING DIAGRAM



DIMENSIONI DIMENSIONS





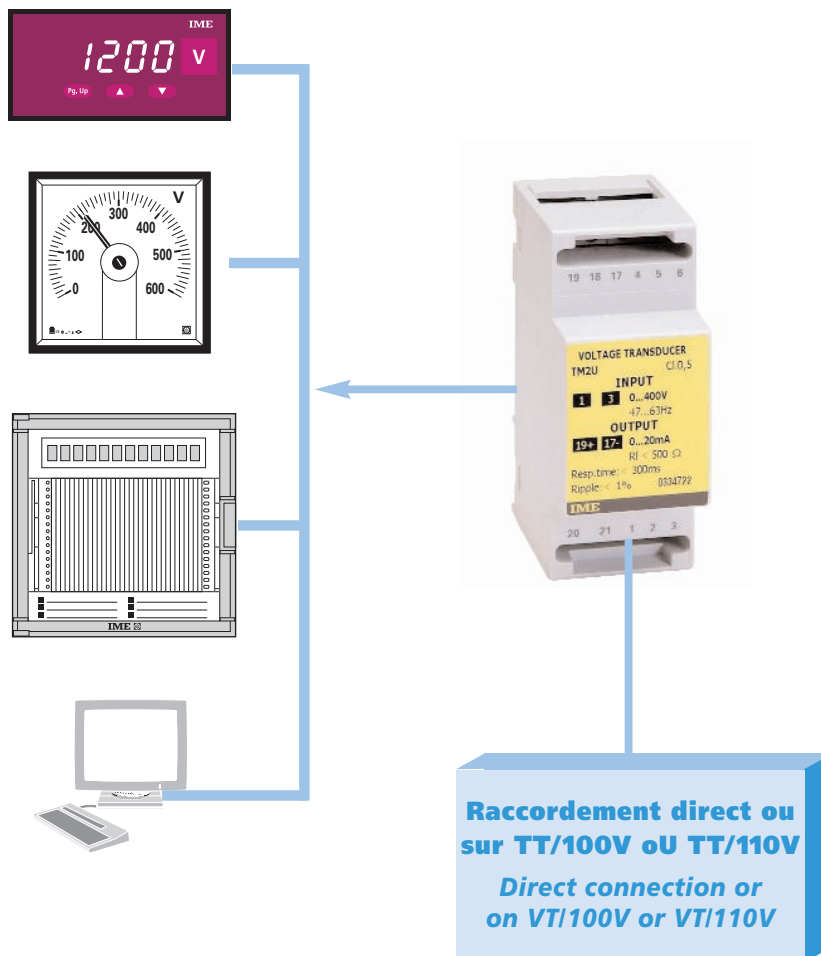
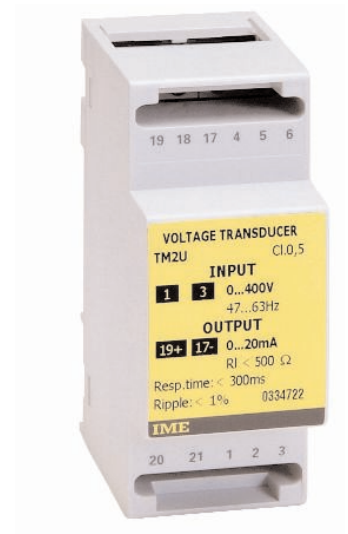
**Tranducteur
de tension alternative
2 Modules**

Mesure de la valeur moyenne,
étalonnée par rapport à la valeur efficace
Entrée jusqu'à 440V
Alimentation dérivée de la mesure
(autoalimenté)

**Alternating voltage
transducer
2 Module**

To measure average value,
calibration according RMS value
Direct input up to 440V
Supply taken from measurement
(selfsupplied)

Tema TM2U



REFERENCE ORDERING CODE	ENTREE INPUT	SORTIE OUTPUT
5025 5269	100V	0 - 5mA
5025 5369	100V	0 - 10mA
5025 5069	100V	0 - 20mA
5025 5469	100V	0 - 5V
5025 5769	100V	0 - 10V
5025 5267	110V	0 - 5mA
5025 5367	110V	0 - 10mA
5025 5080	110V	0 - 20mA
5025 5467	110V	0 - 5V
5025 5767	110V	0 - 10V
5025 5268	120V	0 - 5mA
5025 5368	120V	0 - 10mA
5025 5068	120V	0 - 20mA
5025 5468	120V	0 - 5V
5025 5768	120V	0 - 10V
5025 5270	250V	0 - 5mA
5025 5370	250V	0 - 10mA
5025 5070	250V	0 - 20mA
5025 5470	250V	0 - 5V
5025 5770	250V	0 - 10V
5025 5271	400V	0 - 5mA
5025 5371	400V	0 - 10mA
5025 5071	400V	0 - 20mA
5025 5471	400V	0 - 5V
5025 5771	400V	0 - 10V
5025 5264	440V	0 - 5mA
5025 5364	440V	0 - 10mA
5025 5081	440V	0 - 20mA
5025 5464	440V	0 - 5V
5025 5764	440V	0 - 10V

ENTREE

Tension nominale Un: 100 - 110 - 120 - 250 - 400 - 440V

Autres valeurs sur demande

Fréquence nominale fn: 50Hz

Surcharge de brève durée (EN 60688): 1,5Un/10s (max 450V)

Autoconsommation: $\leq 2,5VA$

DOMAINES D'UTILISATIONS

(EN 60688)

Fréquence: 47...63Hz (fn 50Hz)

Forme du signal d'entrée: sinusoïdale, facteur de forme 1,11

ETENDUE DE MESURE

Etendue nominale d'utilisation: 20...120%Un (précision cl. 0.5)

Etendue limite d'utilisation: 10...120%Un (avec précision cl.1)

SORTIE

Type: unidirectionnelle à zéro normal, pour charge de sortie variable

Précision (EN 60688): classe 0,5

Ondulation (EN 60688): $\leq 1\%$

Temps de réponse (EN 60688): $\leq 300ms$

Valeur nominale du courant: 0...5 - 0...10 - 0...20mA

Tension disponible: 10V

Charge de sortie: $\leq 500 \Omega$ (20 mA) $\leq 1 k\Omega$ (10mA) $\leq 2 k\Omega$ (5mA)

INPUT

Voltage rating Un: 100 - 110 - 120 - 250 - 400 - 440V

Other values on request

Frequency rating fn: 50Hz

Excessive input of short duration (EN 60688): 1,5Un/10s (max 450V)

Rated burden: $\leq 2,5VA$

NOMINAL RANGE OF USE

(EN 60688)

Frequency: 47...63Hz (fn 50Hz)

Waveform: sinusoidal, form factor 1,11

MEASURING RANGE

Nominal range of use: 20...120%Un (accuracy cl.0,5)

Limit range of use: 10...120% Un (with accuracy cl.1)

OUTPUT

Type: unidirectional, real zero for variable output load

Accuracy (EN 60688): class 0,5

Ripple content (EN 60688): $\leq 1\%$

Response time (EN 60688): $\leq 300ms$

Current rated values: 0...5 - 0...10 - 0...20mA

Compliance voltage: 10V

Output load: $\leq 500 \Omega$ (20 mA) $\leq 1 k\Omega$ (10mA) $\leq 2 k\Omega$ (5mA)

Valeur nominale de la tension: 0...5 - 0...10V
 Charge de sortie: $\geq 100 \text{ k}\Omega$ (5V) - $\geq 200 \text{ k}\Omega$ (10V)

Voltage rated values: 0...5 - 0...10V
 Output load: $\geq 100 \text{ k}\Omega$ (5V) - $\geq 200 \text{ k}\Omega$ (10V)

ALIMENTATION AUXILIAIRE

Dérivée de la mesure (autoalimentée)

AUXILIARY SUPPLY

Taken from measurement (selfsupplied)

ISOLEMENT

(EN 60439-1, EN61010-1)

Catégorie de l'installation: III
 Degré de pollution: 2
 Tension de référence pour l'isolement : 450V
 Tension d'essai 5kV impulsion normalisé 1,2/50 μ s 0,5J
 Circuits considérés: entrée, sortie
 Tension d'essai 2,5kV valeur efficace 50Hz/1 min
 Circuits considérés: entrée, sortie
 Tension d'essai 4kV valeur efficace 50Hz/1 min
 Circuits considérés: tous les circuits et la masse

INSULATION

(EN 60439-1, EN61010-1)

Installation category: III
 Pollution degree: 2
 Insulation reference voltage: 450V
 Impulse voltage test 5kV 1,2/50 μ s 0,5J
 Considered circuits: input, output
 A.C. voltage test 2,5kV r.m.s. 50Hz/1min
 Considered circuits: input, output
 A.C. voltage test 4kV r.m.s. 50Hz/1min
 Considered circuits: all circuits and earth

COMPATIBILITE ELECTROMAGNETIQUE

Essai d'émission selon EN 50081-1, EN 55011
 Essai d'immunité selon EN 50082-2
 Test de distorsion à haute fréquence 1MHz onde sinusoïdale (IEC255-4)
 Tension d'essai: 2,5kV mode commun, 1kV mode série

ELECTROMAGNETIC COMPATIBILITY

Emission tests according to EN 50081-1, EN 55011
 Immunity tests according to EN 50082-2
 High frequency disturbance test, 1MHz damped oscillatory wave (IEC255-4)
 Test voltage: 2,5kV common mode, 1kV series mode

CONDITION D'UTILISATION

(EN 60688)

Groupe d'utilisation: II
 Température de référence: 15...30°C
 Température limite d'utilisation: 0...45°C
 Température limite de fonctionnement: -10...55°C
 Température de stockage: -25...70°C
 Humidité relative: jusqu'à 75%
 Adapté pour l'utilisation en climat tropical
 Puissance maximum dissipée¹: $\approx 2W$
¹ Pour le dimensionnement thermique du coffret

ENVIRONMENTAL CONDITIONS

(EN 60688)

Usage group: II
 Reference temperature: 15...30°C
 Nominal temperature range: 0...45°C
 Limit temperature range: -10...55°C
 Limit temperature range for storage: -25...70°C
 Relative humidity: up to 75%
 Suitable for tropical climates
 Max. power dissipation¹: $\leq 2W$
¹ For switchboard thermal calculation

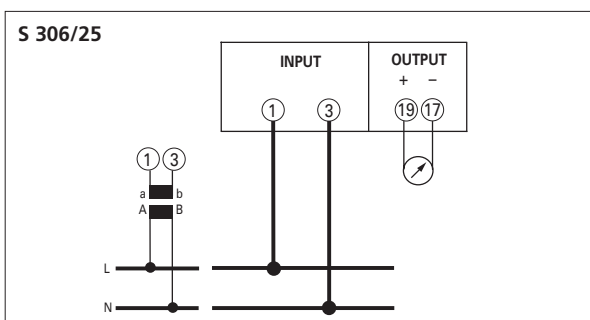
BOITIER

Dimensions: 2 modules DIN 43880
 Raccordement: par vis capacité maxi. fil rigide 4mm²
 Montage: sur rail 35mm
 Type de profil: TH35-15 (EN60715)
 Matériau: makrolon autoéteignant
 Degré de protection:(EN 60529): IP50 (face avant), IP20 (bornes)
 Poids: 200 grammes

HOUSING

Dimensions: 2 module DIN 43880
 Connections: screw terminals for cable up to 4 mm²
 Mounting: snap-on 35mm rail
 Rail type: top hat TH35-15 (EN60715)
 Housing material: makrolon self-extinguishing
 Protection degree (EN 60529): IP50 (front frame), IP20 (terminals)
 Weight: 200 grams

SCHEMA DE RACCORDEMENT WIRING DIAGRAM



DIMENSIONS DIMENSIONS

