Trasformatore di corrente per reti bassa tensione Misura

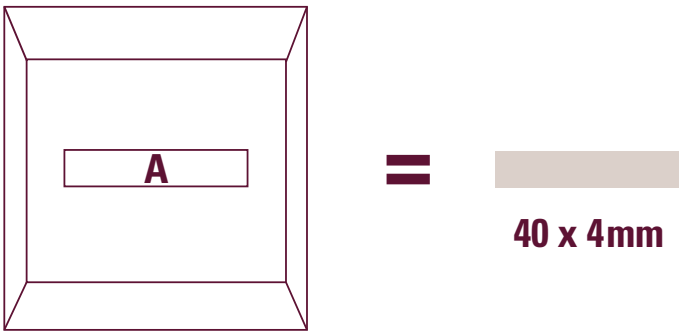
Current transformers for low-voltage network Measure

TAQ20

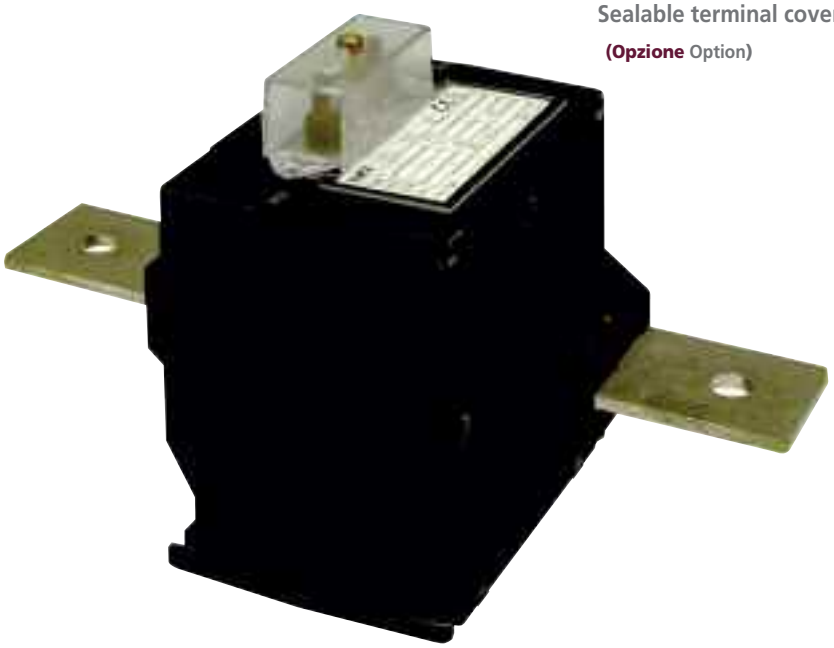
Trasformatore monofase di corrente
Primario avvolto con sbarra centrale incorporata 40x4mm
Corrente primaria 5...600A
Corrente secondaria 1 - 5A
Classi di precisione: cl.0,5 - 1
Prestazione nominale:
20VA (cl.0,5)
40VA (cl.1)

Single-phase current transformer
Wound primary with built-in central bar 40x4mm
Primary current 5...600A
Secondary current 1 - 5A
Accuracy class: cl.0,5 - 1
Rated burden:
20VA (cl.0,5)
40VA (cl.1)

SBARRA *BAR*



Coprimorsetto sigillabile
Sealable terminal cover
(Opzione Option)



CODICE ORDINAZIONE / *ORDER CODE*		Corrente primaria *Primary current*	CL. 0,5	CL. 1
Secondario / *Secondary*				
5A	1A	A	VA	VA
TAQD50A500	TAQD10A500	5	20	40
TAQD50B100	TAQD10B100	10	20	40
TAQD50B150	TAQD10B150	15	20	40
TAQD50B200	TAQD10B200	20	20	40
TAQD50B250	TAQD10B250	25	20	40
TAQD50B300	TAQD10B300	30	20	40
TAQD50B400	TAQD10B400	40	20	40
TAQD50B500	TAQD10B500	50	20	40
TAQD50B600	TAQD10B600	60	20	40
TAQD50B700	TAQD10B700	70	20	40
TAQD50B750	TAQD10B750	75	20	40
TAQD50B800	TAQD10B800	80	20	40
TAQD50C100	TAQD10C100	100	20	40
TAQD50C120	TAQD10C120	120	20	40
TAQD50C150	TAQD10C150	150	20	40
TAQD50C200	TAQD10C200	200	20	40
TAQD50C250	TAQD10C250	250	20	40
TAQD50C300	TAQD10C300	300	20	40
TAQD50C400	TAQD10C400	400	20	40
TAQD50C500	TAQD10C500	500	20	40
TAQD50C600	TAQD10C600	600	20	40
ATACOP07	Accessorio coprimorsetto sigillabile / *Accessory sealable terminal cover*			

NORME DI RIFERIMENTO

EN/IEC 61869-1, 61869-2

CARATTERISTICHE TECNICHE

Corrente nominale primaria I_{pr}: 5…600A

Frequenza nominale: 50Hz

Frequenza di funzionamento: 47…63Hz

Opzione: frequenza nominale 400Hz (prestazioni da definire)

Corrente termica nominale permanente I_{cth}: 100% I_{pr}

Corrente termica nominale di cortocircuito I_{th}: < 30I_{pr}

Corrente nominale dinamica I_{dyn}: 2,5I_{th}

Fattore di sicurezza (FS): ≤ 5

Corrente nominale secondaria I_{sr}: 5-1A

Prestazione nominale: 20VA (cl.0,5) - 40VA (cl.1)

Classe di precisione: cl.0,5 - 1

Massima potenza dissipata [1]: ≤ 2,5W

[1] Per il dimensionamento termico dei quadri

Temperatura max ammissibile su cavo a barra primario: 125°C

Funzionamento garantito a secondario aperto per 1 minuto

I trasformatori di corrente non dovrebbero funzionare con l' avvolgimento secondario aperto a causa delle sovratensioni potenzialmente pericolose e dei surriscaldamenti che possono verificarsi.

Per ovviare a questo problema è possibile utilizzare l'accessorio ATAP015 (NT710) da collegare direttamente al secondario del trasformatore, in grado di rilevare costantemente la tensione ai morsetti e qualora questa raggiunga il valore di soglia (18V) a causa di una interruzione dei collegamenti o alla rimozione delle apparecchiature, provvede automaticamente alla richiusura del circuito.
Al ripristino delle condizioni normali di funzionamento si esclude automaticamente.
Collegato permanentemente al secondario del trasformatore da proteggere, non influisce minimamente sulle caratteristiche e prestazioni del TA; non necessita di alcuna alimentazione esterna (autoalimentato).

PRESCRIZIONI RELATIVE ALL'ISOLAMENTO

Trasformatore a secco, isolamento in aria

Tensione massima di riferimento per l'isolamento U_m: 0,72kV valore efficace

Livello di isolamento nominale: 3kV valore efficace 50Hz/1min

Classe di isolamento (EN/IEC 61869-1, 61869-2): B

REFERENCE STANDARDS

EN/IEC 61869-1, 61869-2

SPECIFICATIONS

Rated primary current I_{pr} : *5…600A*

Rated frequency: *50Hz*

Working frequency: *47…63Hz*

Option: *rated requency 400Hz (burdens to the advised)*

Rated continuous thermal current I_{cth}: *100% I_{pr}*

Rated short-time thermal current I_{th}: *< 30I_{pr}*

Rated dynamic current I_{dyn} : *2,5I_{th}*

Instrument security factor (FS): *≤ 5*

Rated secondary current I_{sr} : *5 - 1A*

Rated burden: *20VA (cl.0,5) - 40VA (cl.1)*

Accuracy class: *cl.0,5 - 1*

Max. power dissipation [1]: *≤ 2,5W*

[1]For switchboard thermal calculation

The allowed max cable or busbar temp is: *125°C*

Working time guaranteed with secondary winding open for 1 minute
Current transformers should not be operated with the secondary winding open-circuited because of the potentially dangerous over-voltages and overheating which can occur.

To obviate this problem, it is possible to use ATAP015 (NT710) accessory to be directly connected with the transformer secondary winding, which is able to continuously detect the terminal voltage and, if the voltage reaches the threshold value (18V) owing to a connection breakdown or disconnection of the devices, automatically closes again the circuit.
When the normal working conditions are restored, it automatically disconnects. Continuously connected with the secondary winding of the transformer to protect, it doesn't affect at all the current transformer features or performances. It doesn't need any external supply (self-supplied).

INSULATION REQUIREMENTS

Dry transformer, air insulation

Highest voltage for equipment U_m: *0,72kV r.m.s.*

Rated insulation level: *3kV r.m.s. 50Hz/1min*

Class of insulation(EN/IEC 61869-1, 61869-2): *B*

CONDIZIONI AMBIENTALI

Installazione in situazione non esposta (EN/IEC 61869-1, 61869-2)

Temperatura di riferimento: 23°C ± 1°C

Temperatura di impiego: -25…50°C

Temperatura media giornaliera: ≤ 30°C

Temperatura di magazzinaggio: -40…85°C

Umidità relativa: ≤ 85%

Adatto all'utilizzo in clima tropicale

ENVIRONMENTAL CONDITIONS

Non-exposed installation (EN/IEC 61869-1, 61869-2)

Reference temperature: *23°C ± 1°C*

Nominal temperature range: *-25…50°C*

Daily mean temperature: *≤ 30°C*

Limit temperature range for storage: *-40…85°C*

Relative humidity: *≤ 85%*

Suitable for tropical climates

LIMITI DELL'ERRORE DI CORRENTE E DELL'ERRORE D'ANGOLO

(EN/IEC 61869-1, 61869-2)

LIMITS OF CURRENTS ERROR AND PHASE DISPLACEMENT

(EN/IEC 61869-1, 61869-2)

Classe di precisione *Accuracy class*	Errore di corrente (rapporto) in percento (±) alla percentuale della corrente nominale sottoindicata *± Percentage current (ratio) error at percentage of rated current shown below*					Errore d'angolo(±) alla percentuale della corrente nominale sottoindicata *± Phase displacement at percentage of rated current shown below*									
						Minuti *Minutes*					Centiradianti *Centiradians*				
	5	20	50	100	120	5	20	50	100	120	5	20	50	100	120
0,5	1,5	0,75		0,5	0,5	90	45		30	30	2,7	1,35		0,9	0,9
1	3,0	1,5		1,0	1,0	180	90		60	60	5,4	2,7		1,8	1,8

L'errore di corrente e l'errore d'angolo a frequenza nominale non devono superare i valori indicati in tabella, quando la prestazione è uguale a un qualsiasi valore compreso **tra il 25% e il 100% della prestazione nominale**.

The current error and phase displacement at rated frequency shall not exceed the values given in table when the secondary burden is any value ***from 25% to 100% of the rated burden.***

CUSTODIA

Materiale custodia: policarbonato autoestinguente

Grado di protezione (EN60529): IP20 custodia, IP00 morsetti (IP20 morsetti secondari con coprimorsetto sigillabile)

Opzione: coprimorsetto sigillabile

Peso: 2000 grammi (Max.)

HOUSING

Housing material: *self extinguishing polycarbonate*

Protection degree (EN60529): *IP20 housing, IP00 terminals (IP20 secondary terminals with sealable terminal cover)*

Option*: sealable terminal cover*

Weight: *2000 grams (Max.)*

CONNESSIONI

Primario: sbarra centrale incorporata

Dimensione sbarra: 40x4mm

Fori fissaggio su sbarra: ø 11mm

Secondario: doppie viti M4

Siglatura connessioni: primario P1(K) – P2(L)
secondario s1(k) – s2(l)

CONNECTIONS

Primary winding: *built-in central bar*

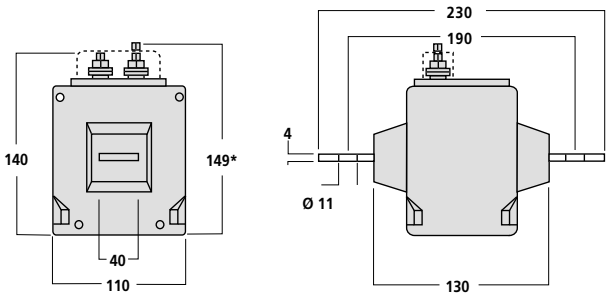
Bar dimension: *40x4mm*

Fixing holes on bar: *ø 11mm*

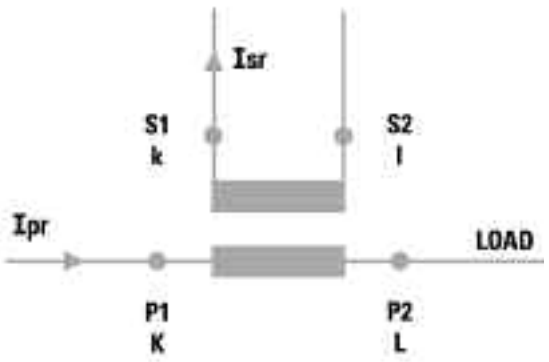
Secondary winding: *double screw M4*

Connections label: *primary winding P1(K) – P2(L)*
secondary winding s1(k) – s2(l)

DIMENSIONI *DIMENSIONS*



SCHEMA D'INSERZIONE *WIRING DIAGRAM*



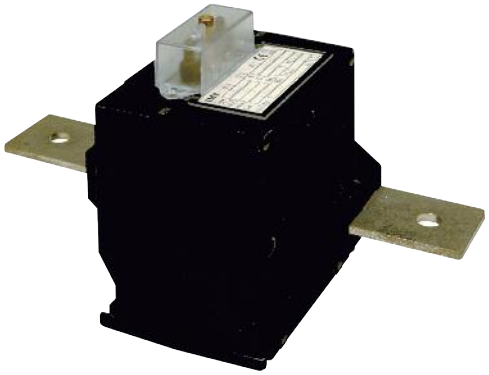
Transformateurs de courant pour réseau basse tension Mesure

Current transformers for low-voltage network Measure

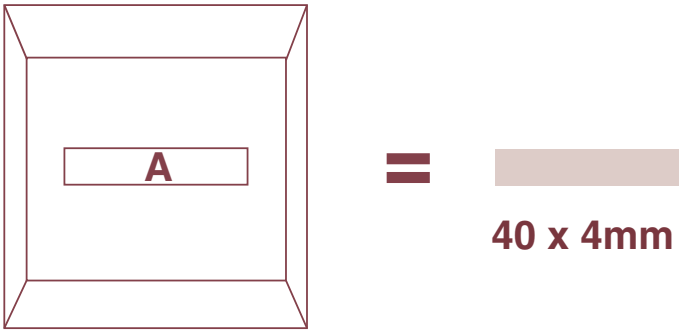
TAQ20

Transformateur de courant monophasé
Primaire bobiné avec barre centrale 40x4mm intégrée
Courant primaire 5…600A
Courant secondaire 1 - 5A
Classe de précision : cl.0,5 - 1
Prestation nominale :
20VA (cl.0,5)
40VA (cl.1)

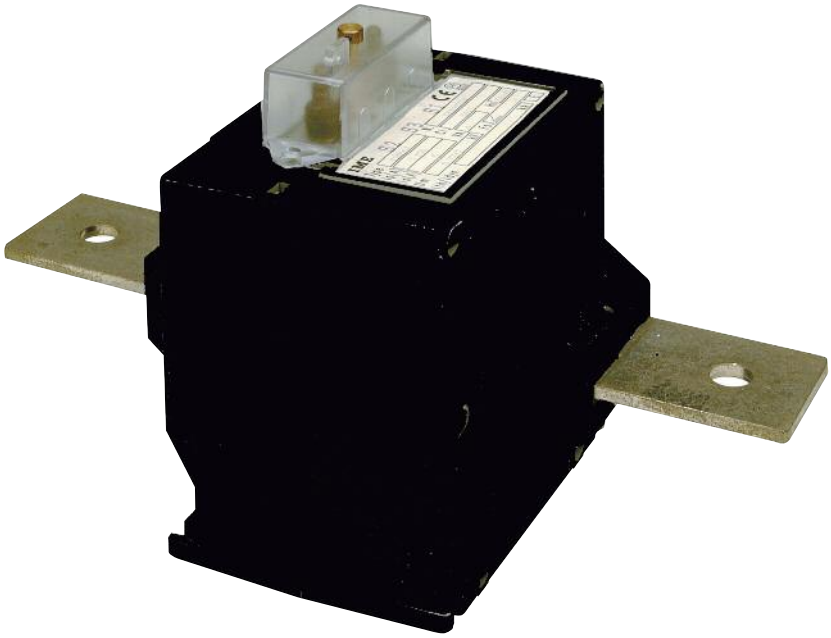
Single-phase current transformer
Winding primary with built-in central bar 40x4mm
Primary current 5...600A
Secondary current 1 - 5A
Accuracy class: cl.0,5 - 1
Rated burden :
20VA (cl.0,5)
40VA (cl.1)



BARRE *BAR*



Cache bornes plombable
Sealable terminal cover
(Option)



REFERENCE / *ORDER CODE* Secondaire / Secondary		Courant primaire *Primary current*	CL. 0,5	CL. 1
5A	1A	A	VA	VA
3020 0600	3020 0950	5	20	40
3020 0601	3020 0951	10	20	40
3020 0602	3020 0952	15	20	40
3020 0666	3020 0953	20	20	40
3020 0603	3020 0954	25	20	40
3020 0665	3020 0955	30	20	40
3020 0604	3020 0945	40	20	40
3020 0605	3020 0957	50	20	40
3020 0606	3020 0958	60	20	40
3020 0607	3020 0959	70	20	40
3020 0608	3020 0960	75	20	40
3020 0609	3020 0961	80	20	40
3020 0610	3020 0962	100	20	40
3020 0612	3020 0963	120	20	40
3020 0615	3020 0964	150	20	40
3020 0620	3020 0965	200	20	40
3020 0625	3020 0966	250	20	40
3020 0630	3020 0967	300	20	40
3020 0640	3020 0968	400	20	40
3020 0650	3020 0969	500	20	40
3020 0660	3020 0970	600	20	40
3020 0010	Accessoire cache bornes plombable / *Accessory sealable terminal cover*			

NORME DE REFERENCE

EN/IEC 61869-1, 61869-2

REFERENCE STANDARDS

EN/IEC 61869-1, 61869-2

CARACTERISTIQUES TECHNIQUES

Courant nominal primaire I_{pr}: 5…600A

Fréquence nominale: 50Hz

Fréquence de fonctionnement: 47…63Hz

Option: fréquence nominale 400Hz (prestation à préciser)

Courant thermique nominal continu I_{cth}: < 100% I_{pr}

Courant thermique nominal de court-circuit I_{th}: < 30I_{pr}

Courant nominal dynamique I_{dyn}: 2,5I_{th}

Facteur de sécurité (FS): ≤ 5

Courant nominal secondaire I_{sr}: 5-1A

Prestation nominale: 20VA (cl.0,5) - 40VA (cl.1)

Classe de précision: 0,5 – 1

Puissance maximum dissipée [2]: ≤ 2,5W

[2] Pour le dimensionnement thermique du coffret

La température max.. admissible sur câble à barre primaire est : 125°C

Fonctionnement avec secondaire ouvert 1 minute

Les transformateurs de courant ne doivent pas fonctionner avec l'enroulement secondaire en circuit ouvert en raison du danger potentiel de surtension et la surchauffe qui peut se produire.

Pour remédier à ce problème, il est possible d'utiliser l'accessoire ATAP015 (NT710) pour être directement raccordé à l'enroulement secondaire du transformateur. Cet accessoire est en mesure de détecter en continu la tension aux bornes et, si la tension atteint la valeur seuil (18V) à cause d'une rupture de raccordement ou de déconnexion des dispositifs, l'accessoire referme automatiquement le circuit. Lorsque les conditions de travail normales sont rétablies, il se déconnecte automatiquement. Connecté en permanence avec l'enroulement secondaire du transformateur à protéger, il ne porte pas atteinte aux fonctionnalités ni aux performances du transformateur de courant. Il ne nécessite aucune alimentation externe (auto-alimenté).

SPECIFICATIONS

Rated primary current I_{pr} : *5…600A*

Rated frequency: *50Hz*

Working frequency: *47…63Hz*

Option: *rated requency 400Hz (burdens to the advised)*

Rated continuous thermal current I_{cth}: *< 100% I_{pr}*

Rated short-time thermal current I_{th}: *< 30I_{pr}*

Rated dynamic current I_{dyn} : *2,5I_{th}*

Instrument security factor (FS): *≤ 5*

Rated secondary current I_{sr}: *5 - 1A*

Rated burden: *20VA (cl.0,5) - 40VA (cl.1)*

Accuracy class: *0,5 - 1*

Max. power dissipation [2]: *≤ 2,5W*

[2]For switchboard thermal calculation

The allowed max. cable for busbar temp is : *125°C*

Working time guaranteed with secondary winding open for 1 minute

Current transformers should not be operated with the secondary winding open-circuited because of the potentially dangerous over-voltages and overheating which can occur.

To obviate this problem, it is possible to use ATAP015 (NT710) accessory to be directly connected with the transformer secondary winding, which is able to continuously detect the terminal voltage and, if the voltage reaches the threshold value (18V) owing to a connection breakdown or disconnection of the devices, automatically closes again the circuit.

When the normal working conditions are restored, it automatically disconnects. Continuously connected with the secondary winding of the transformer to protect, it doesn't affect at all the current transformer features or performances. It doesn't need any external supply (self-supplied).

CARACTERISTIQUES D'ISOLEMENT

Transformateur sec, isolé dans l'air

Tension maximum pour l'isolement U_m: 0,72kV valeur efficace

Niveau de tension nominale pour l'isolement: 3kV valeur efficace 50Hz/1min

Classe de l'isolement (EN/IEC 61869-1, 61869-2): B

INSULATION REQUIREMENTS

Dry transformer, air insulation

Highest voltage for equipment U_m: *0,72kV r.m.s.*

Rated insulation level: *3kV r.m.s. 50Hz/1min*

Class of insulation (EN/IEC 61869-1, 61869-2): *B*

CONDITIONS D'UTILISATION

Installation non exposée (EN/IEC 61869-1, 61869-2)

Température de référence: 23°C ± 1°C

Température d'utilisation: -25…50°C

Température moyenne journalière: ≤ 30°C

Température de stockage: -40…85°C

Humidité relative: ≤ 85%

Adapté pour l'utilisation en climat tropical

ENVIRONMENTAL CONDITIONS

Non-exposed installation (EN/IEC 61869-1, 61869-2)

Reference temperature: *23°C ± 1°C*

Nominal temperature range: *-25…50°C*

Daily mean temperature: *≤ 30°C*

Limit temperature range for storage: *-40…85°C*

Relative humidity: *≤ 85%*

Suitable for tropical climates

LIMITE DES ERREURS DE COURANT ET DEPLACEMENT DE PHASE

(EN/IEC 61869-1, 61869-2)

LIMITS OF CURRENTS ERROR AND PHASE DISPLACEMENT

(EN/IEC 61869-1, 61869-2)

Classe de précision *Accuracy class*	% d'erreur de courant (rapport) (±) en pourcentage du courant nominal indiqué ci-dessous *± Percentage current (ratio) error at percentage of rated current shown below*					Déplacement de phase (±) en pourcentage du courant nominal indiqué ci-dessous *± Phase displacement at percentage of rated current shown below*									
						Minutes *Minutes*					Centiradiants *Centiradians*				
	5	20	50	100	120	5	20	50	100	120	5	20	50	100	120
0,5	1,5	0,75		0,5	0,5	90	45		30	30	2,7	1,35		0,9	0,9
1	3,0	1,5		1,0	1,0	180	90		60	60	5,4	2,7		1,8	1,8

L'erreur du courant et le déplacement de phase à la fréquence nominale ne doit pas excéder la valeur indiquée dans le tableau lorsque l'enroulement du secondaire représente une valeur de **25% à 100% de la prestation nominale**.

The current error and phase displacement at rated frequency shall not exceed the values given in table when the secondary burden is any value ***from 25% to 100% of the rated burden.***

BOITIER

Matériau du boîtier: polycarbonate autoextinguible

Indice de protection (EN / IEC 60529): IP20 boîtier, IP00 bornes (IP20 bornier secondaire avec cache borne plombable),

Option: cache borne plombable

Poids: 2000 grammes (Max.)

HOUSING

Housing material: *self extinguishing polycarbonate*

Protection degree (EN60529): *IP20 housing, IP00 terminals (IP20 secondary terminals with sealable terminal cover)*

Option*: sealable terminal cover*

Weight: *2000 grams (Max.)*

RACCORDEMENT

Primaire: barre centrale intégrée

Dimensions barre: 40x4mm

Trous de fixation sur barre: ø 11mm

Secondaire: double bis M4

Repérage: primaire P1(K) – P2(L)
secondaire s1(k) – s2(l)

CONNECTIONS

Primary winding: *built-in central bar*

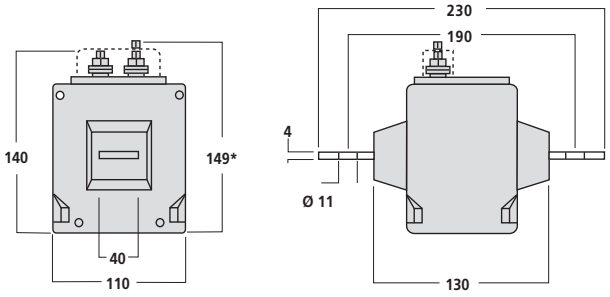
Bar dimension: *40x4mm*

Fixing holes on bar: *ø 11mm*

Secondary winding: *double screw M4*

Connections label: *primary winding P1(K) – P2(L)*
secondary winding s1(k) – s2(l)

DIMENSIONS *DIMENSIONS*



SCHEMA DE RACCORDEMENT *WIRING DIAGRAM*