



Trasformatore di corrente per reti bassa tensione Misura

Trasformatore monofase di corrente
Primario a cavo/sbarra passante
Corrente primaria 40...300A
Corrente secondaria 1 - 5A
Classi di precisione: cl.0,5 - 1 - 3
Prestazione nominale 1...7,5VA

Current transformers for low-voltage network Measure

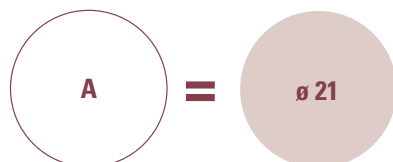
Single-phase current transformer
Passing cable/ bus bar primary
Primary current 40...300A
Secondary current 1 - 5A
Accuracy class: cl.0,5 - 1 - 3
Rated burden 1...7,5VA



TAIBB



FINESTRA WINDOW



Sbarra / Bus bar 16 x 12,5 mm

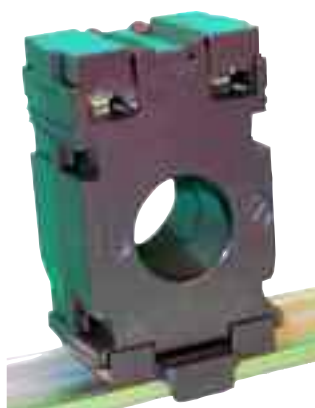
Coprimorsetto
Terminal cover



Coprimorsetto sigillabile
Sealable terminal cover
(Opzione Option)



Fissaggio a vite
Screw type mounting



Fissaggio binario DIN
DIN rail mounting

CODICE ORDINAZIONE <i>ORDER CODE</i>		Corrente primaria <i>Primary current</i>	CL. 0,5	CL. 1	CL. 3
Secondario / <i>Secondary</i>					
5A	1A	A	VA	VA	VA
TABB50B400	TABB10B400	40	-	-	1
TABB50B500	TABB10B500	50	-	1	1,5
TABB50B600	TABB10B600	60	-	1	2
TABB50B700	TABB10B700	70	-	1,5	2,5
TABB50B750	TABB10B750	75	-	1,5	2,5
TABB50B800	TABB10B800	80	-	1,5	2,5
TABB50C100	TABB10C100	100	1,5	2,5	-
TABB50C120	TABB10C120	120	2	3,5	-
TABB50C125	TABB10C125	125	2	3,5	-
TABB50C150	TABB10C150	150	3	4	-
TABB50C160	TABB10C160	160	3	4	-
TABB50C200	TABB10C200	200	4	5,5	-
TABB50C250	-	250	5	6	-
TABB50C300	-	300	6	7,5	-
ATACOP12	Accessorio coprimorsetto sigillabile / <i>Accessory sealable terminal cover</i>				

NORME DI RIFERIMENTO

EN/IEC 61869-1, 61869-2

CARATTERISTICHE TECNICHE

Corrente nominale primaria I_{pr} : 40...300A (con secondario 5A vedere tabella)
40...200A (con secondario 1A vedere tabella)

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} : $< 60I_{pr}$

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

Fattore di sicurezza (FS): ≤ 5

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

I_{sr} 1A non realizzabile con I_{pr} 250 e 300A

Prestazione nominale: 1...7,5VA (vedere tabella)

Classe di precisione: 0,5 – 1 – 3 (vedere tabella)

Massima potenza dissipata 1 : $\leq 3W$

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} : 40...300A (with secondary 5A, see table)
40...200A (with secondary 1A, see table)

Rated frequency: 50Hz

Working frequency: 47...63Hz

Option: rated frequency 400Hz (burdens to the advised)

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

Rated short-time thermal current I_{th} : $< 60I_{pr}$

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

Instrument security factor (FS): ≤ 5

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

I_{sr} 1A not available with I_{pr} 250 and 300A

Rated burden: 1...7,5VA (see table)

Accuracy class: 0,5 – 1 – 3 (see table)

Max. power dissipation 1 : $\leq 3W$

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 magazzino: -40...85°C

Umidità relativa: ≤ 85%

Adatto all'utilizzo in clima tropicale

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

(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				
	5	20	50	100	120
	0,5	1,5	0,75	0,5	0,5
1	3,0	1,5		1,0	1,0
3			3		3

Per le classi 0,5 - 1 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.

Per la classe 3 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 50% e il 100% della prestazione nominale.

CUSTODIA

Materiale custodia: policarbonato autoestinguente

Grado di protezione (EN60529): IP40 custodia - IP20 morsetti

Opzione: coprिमorsetto sigillabile

Montaggio: a incastro su profilato 35mm, a vite per parete

Tipo profilato: a cappello TH35-15 (EN60715)

Peso: 180 grammi (Max.)

CONNESSIONI

PRIMARIO

Cavo o sbarra passante

SECONDARIO

Secondario: morsetti a vite, max 2 fili separati 2,5mm² o 1 filo con capocorda da 6mm²)

Coppia serraggio consigliata: 0,5Nm

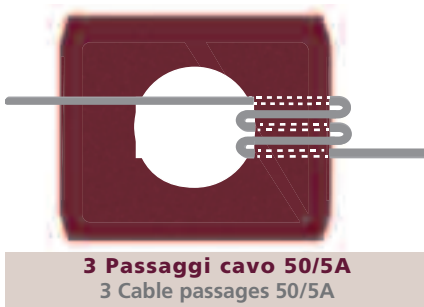
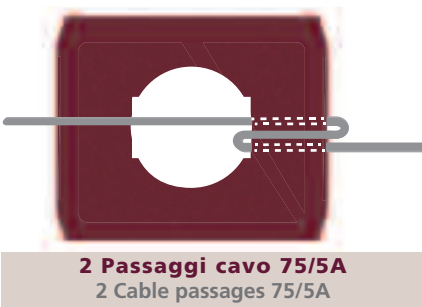
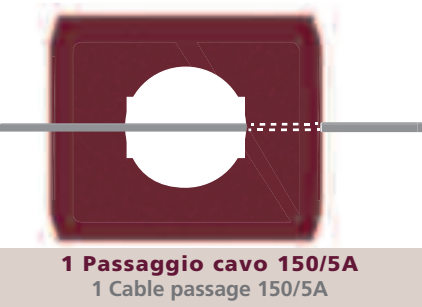
Coppia serraggio max.: 0,8Nm

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

Effettuando più passaggi (spire) del cavo all'interno del trasformatore, è possibile ridurre il valore della corrente primaria, mantenendo inalterati valori di corrente secondaria, prestazioni, classe di precisione.

Corrente primaria effettiva = Corrente primaria nominale: Nm spire

Es.: trasformatore con rapporto = 150/5A



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

LIMITS OF CURRENTS ERROR AND PHASE DISPLACEMENT

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

Errore d'angolo(±) alla percentuale della corrente nominale sottoindicata ± Phase displacement at percentage of rated current shown below									
Minuti Minutes					Centiradiani Centiradians				
5	20	50	100	120	5	20	50	100	120
90	45		30	30	2,7	1,35		0,9	0,9
180	90		60	60	5,4	2,7		1,8	1,8

For classes 0,5 - 1 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.

For class 3 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 50% to 100% of the rated burden.

HOUSING

Housing material: self extinguishing polycarbonate

Protection degree (EN60529): IP40 housing - IP20 terminals

Option: sealable terminal cover

Mounting: snap-on 35mm rail, screw type for wall mounting

Rail type: top hat TH35-15 (EN60715)

Weight: 180 grams (Max.)

CONNECTIONS

PRIMARY

Passing cable/bus bar primary

SECONDARY

Secondary winding: screw terminals, max 2 separated wires 2,5mm² or 1 wire with lag of 6mm²)

Suggested tightening torque: 0,5Nm

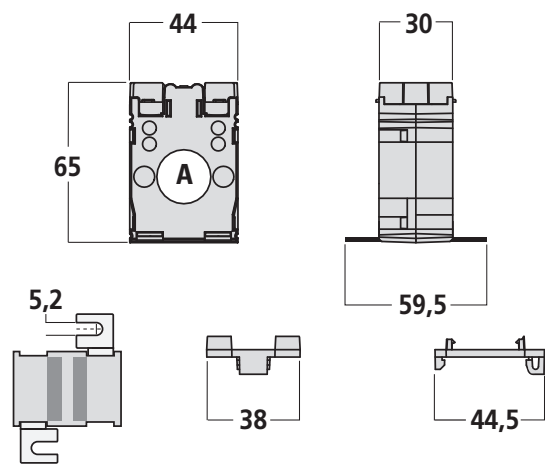
Suggested tightening max.: 0,8Nm

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

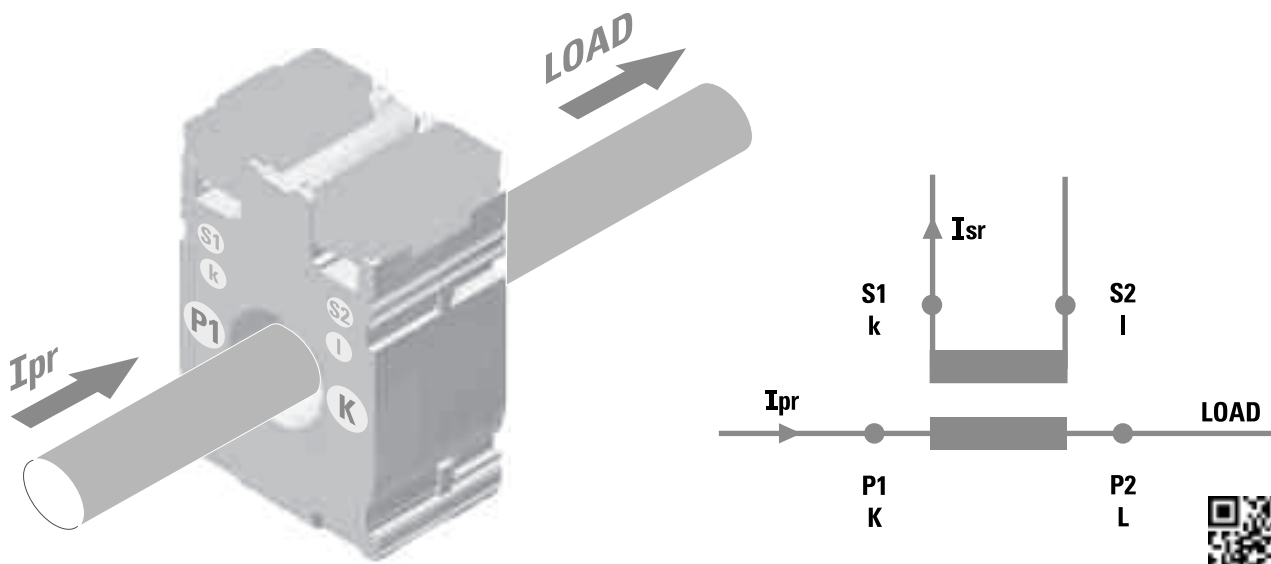
Making more cable passages (windings) inside the transformer, it is possible to reduce the primary current value, keeping unchanged the secondary current values, burden and accuracy class.

Actual primary current = rated primary current : Nm windings

Ex.: transformer with ratio = 150/5A



SCHEMA D'INSERZIONE WIRING DIAGRAM



**Transformateurs
de mesure
pour réseau
basse tension
Mesure**

**Measuring transformers
for low-voltage
network
Measure**

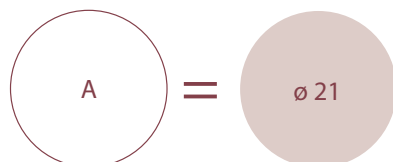
TAIBB

Transformateur de courant monophasé
Primaire à câble passant
Courant primaire 40...300A
Courant secondaire 1 - 5A
Classe de précision : cl.0,5 - 1 - 3
Prestation nominale 1...7,5VA

Single-phase current transformer
Passing cable/ bus bar primary
Primary current 40...300A
Secondary current 1 - 5A
Accuracy class : cl.0,5 - 1 - 3
Rated burden 1...7,5VA



OUVERTURE WINDOW

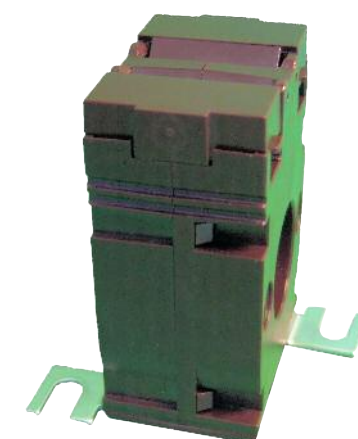


Barre / Bus bar 16 x 12,5 mm

Cache bornes plombable
Sealable terminal cover
(Option Option)



Cache bornes
Terminal cover



Fixation à vis
Screw type mounting



Montage rail DIN
DIN rail mounting

RÉFÉRENCE ORDER CODE		Courant primaire Primary current	CL. 0,5	CL. 1	CL. 3
Secondaire / Secondary					
5A	1A	A	VA	VA	VA
3020 1904	3020 1940	40	-	-	1
3020 1905	3020 1941	50	-	-	1,5
3020 1906	3020 1942	60	-	1	2
3020 1907	3020 1943	70	-	1,5	2,5
3020 1908	3020 1944	75	-	1,5	2,5
3020 1909	3020 1945	80	-	1,5	2,5
3020 1910	3020 1946	100	1,5	2,5	
3020 1912	3020 1947	120	2	3,5	
3020 1913	3020 1948	125	2	3,5	
3020 1915	3020 1949	150	3	4	
☒	3020 1950	160	3	4	
3020 1920	3020 1951	200	4	5,5	
3020 1925	-	250	5	6	
3020 1930	-	300	6	7,5	
☒	Accessoire cache bornes plombable / Accessory sealable terminal cover				

NORME DE REFERENCE

EN/IEC 61869-1, 61869-2

CARACTERISTIQUES TECHNIQUES

Courant nominal primaire I_{pr} : 40...300A (avec secondaire 5A voir tableau)
40...200A (avec secondaire 1A voir tableau)

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} : < 60 I_{pr}

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

Facteur de sécurité (FS): ≤ 5

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

I_{sr} 1A non disponible avec I_{pn} 250 et 300A

Prestation nominale: 1...7,5VA (voir tableau)

Classe de précision: 0,5 – 1 – 3 (voir tableau)

Puissance maximum dissipée ²: ≤ 3W

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).

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 d'isolement (EN/IEC 61869-1, 61869-2): B

REFERENCE STANDARDS

EN/IEC 61869-1, 61869-2

SPECIFICATIONS

Rated primary current I_{pr} : 40...300A (with secondary 5A, see table)
40...200A (with secondary 1A, see table)

Rated frequency: 50Hz

Working frequency: 47...63Hz

Option: rated frequency 400Hz (burdens to the advised)

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

Rated short-time thermal current I_{th} : < 60 I_{pr}

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

Instrument security factor (FS): ≤ 5

Rated secondary current I_{sn} : 5 - 1A

I_{sr} 1A not available with I_{pr} 250 and 300A

Rated burden: 1...7,5VA (see table)

Accuracy class: 0,5 – 1 – 3 (see table)

Max. power dissipation ²: ≤ 3W

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).

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

LIMITE DES ERREURS DE COURANT ET DEPLACEMENT DE PHASE
(EN/IEC 61869-1, 61869-2)

Classe de précision Accuracy class	% d'erreur de courant (rapport) (±) en pourcentage du courant nominal indiqué ci-après ± Percentage current (ratio) error at percentage of rated current shown below				
	5	20	50	100	120
	0,5	1,5	0,75	0,5	0,5
1	3,0	1,5		1,0	1,0
3			3		3

Pour la **classe 0,5 - 1** 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**.

Pour la **classe 3** - 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 **50% à 100% de la prestation nominale**.

BOITIER

Matériau du boîtier: polycarbonate autoextinguible
Indice de protection (EN60529): IP40 boîtier - IP20 bornes
Option: cache borne plombable
Montage: rail 35mm
Type de profil: TH35-15 (EN60715)
Poids: 180 grammes (Max.)

RACCORDEMENT

PRIMAIRE
Primaire barre/câble passant
SECONDAIRE
Enroulement secondaire : bornier à vis, max 2 fils séparés 2,5mm² ou 1 fil avec embout de 6mm²
Couple de serrage conseillé : 0,5Nm
Couple de serrage max. conseillé. : 0,8Nm
Repérage : enroulement primaire P1(K) – P2(L) enroulement secondaire s1(k) – s2(l)
En effectuant plus de passage de câble (enroulements) à l'intérieur du transformateur, il est possible de réduire la valeur du courant primaire , tout en conservant les valeurs secondaires du courant, la prestation et la classe de précision.
Courant primaire effectif = courant primaire nominal: Nm enroulements
Ex. : transformateur avec rapport = 150/5A

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

LIMITS OF CURRENTS ERROR AND PHASE DISPLACEMENT
(EN/IEC 61869-1, 61869-2)

Déplacement de phase (±) en pourcentage du courant nominal indiqué ci-après ± Phase displacement at percentage of rated current shown below									
Minutes Minutes					Centiradians Centiradians				
5	20	50	100	120	5	20	50	100	120
90	45		30	30	2,7	1,35		0,9	0,9
180	90		60	60	5,4	2,7		1,8	1,8

For **classes 0,5 - 1** 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**.

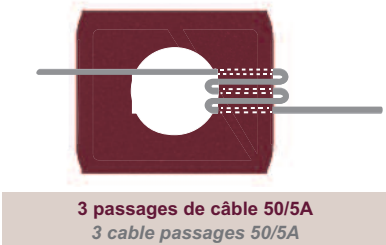
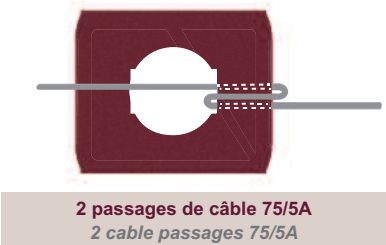
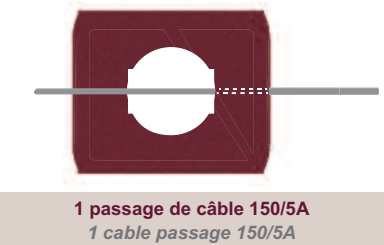
For **class 3** the current error and phase displacement at rated frequency shall not exceed the values given in table when the secondary burden is any value from **50% to 100% of the rated burden**.

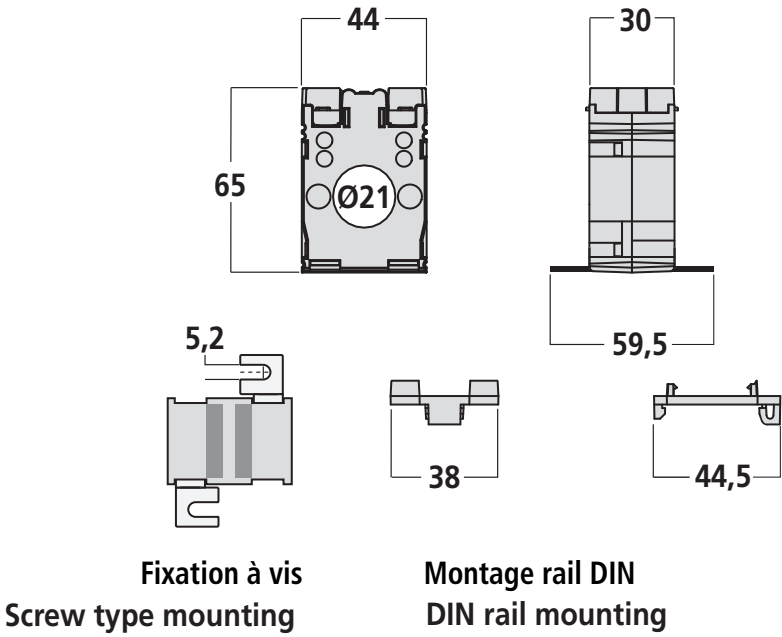
HOUSING

Housing material: self extinguishing polycarbonate
Protection degree (EN60529): IP40 housing - IP20 terminals
Option: sealable terminal cover
Mounting: snap-on 35mm rail, screw type for wall mounting
Rail type: top hat TH35-15 (EN60715)
Weight: 180 grams (Max.)

CONNECTIONS

PRIMARY
Passing cable/bus bar primary
SECONDARY
Secondary winding : screw terminals, max 2 separated wires 2,5mm² or wire with lag of 6mm²
Suggested tightening torque : 0,5Nm
Suggested tightening max. : 0,8Nm
Connections label: primary winding P1(K) – P2(L) secondary winding s1(k) – s2(l)
Making more cable passages (windings) inside the transformer, it is possible to reduce the primary current value, keeping unchanged the secondary current values, burden and accuracy class.
Actual primary current = rated primary current : Nm windings
Ex. : transformer with ratio = 150/5A





SCHEMA DE RACCORDEMENT WIRING DIAGRAM

