



MFC150UL - MFC150UL/F

Capteur Rogowski flexible Ø8mm

Ø8mm flexible Rogowski coil

Capteur Rogowski
Rogowski sensor



MFC150-UL (UL2808 certified/certifié 333mV/kA@50Hz)

MFC150-UL/F (UL2808 certified model with built-in integrator /
UL2808 modèle certifié avec intégrateur incorporé)

Le **MFC150UL** est un capteur de courant flexible basé sur le principe de Rogowski, particulièrement adapté à la mesure en combinaison avec des appareils portables. Les bobines **MFC150UL** sont disponibles en différentes tailles et peuvent être adaptées aux besoins client. Ils peuvent être utilisés dans toutes les applications, où les capteurs traditionnels ne conviennent pas en raison de leur taille et / ou poids. En raison de ses caractéristiques spécifiques, la bobine flexible de Rogowski est une solution extrêmement confortable pour la mesure du courant. La bobine **MFC150UL** est fournie avec un blindage pour contrer l'influence de champs magnétiques externes. De ce fait, cela garantit une mesure stable d'un courant faible à des centaines de kA.

MFC150UL peut aussi être fournie avec un intégrateur incorporé, sans avoir besoin de dispositifs externes pour la compensation de décalage de phase de 90° et l'égalisation de fréquence. C'est un avantage car il n'y a pas de boîtier externe, ce qui facilite son utilisation. Classe de précision 0,5 (ICE 61869-10)

***MFC150UL** is a flexible current transducer based on Rogowski principle, particularly suitable for measurement in combination with portable devices. **MFC150UL** coils are available in different sizes and can be supplied according to customer's design. Therefore, they can be used in all applications, in which traditional transducers are not fitting due to their size and/or weight. Due to its specific features, flexible Rogowski coil is an extremely comfortable solution for current measurement. **MFC150-UL** coil is provided with a shield against the influence of external magnetic fields, therefore it grants a stable measurement from low currents to hundreds of kA. **MFC150-UL** can be also provided with built-in integrator, without needing of external devices for 90° phase shift compensation and frequency equalization. This is an advantage because there is no external box with consequent ease of use. Accuracy class 0,5 (IEC 61869-10)*

Applications

- Appareils de mesure, instruments de laboratoire
- Systèmes de surveillance et de contrôle de l'énergie
- Surveillance des harmoniques et des transitoires
- Mesure d'ondulation CC
- Contrôle de machine à souder
- Mesure de courant très élevé
- *Measuring devices, lab instrumentation*
- *Power monitoring & control systems*
- *Harmonics and transients monitoring*
- *DC ripple measurement*
- *Welding machine control*
- *Very high current measurement*

La solution pour The solution for

- Industrie / Industry
- Tertiaire / Tertiary industry
- Infrastructure
- Collectivité / Community
- Energie Smart Grid
Smart Grid Energy

Les points forts Key strengths

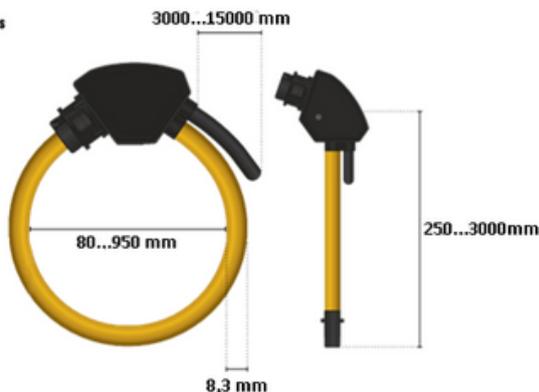
- Universel / Universal
- Uniformité de mesure à n'importe quelle position du conducteur à l'intérieur de la bobine / Measurement uniformity at any position of the conductor inside the coil
- Complètement blindé / Completely shielded
- Fourni déjà calibré / Supplied already calibrated
- Coupe transversal 8mm / Cross-section 8mm
- Classe précision 0.5 (A1) selon norme IEC 61869-10. précision et erreur de position de 0,5 % près du point de jonction / Accuracy class 0.5 (A1) according to IEC 61869-10 standard. Accuracy and position error of 0.5% close to the junction point.

Conformité aux normes Compliance with standards

- UL61010-1
- UL61010-2-032
- IEC 60529 / ICE 60529

Homologation / Approval





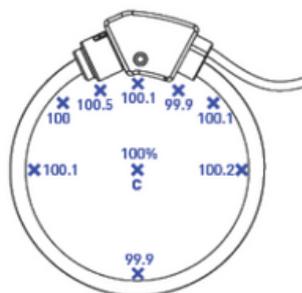
Convient pour une installation dans des endroits avec accès limité, parfaitement adapté au retrofit.

Suitable for installation in places with limited access and for retrofitting, especially if there is no space for split core CTs.

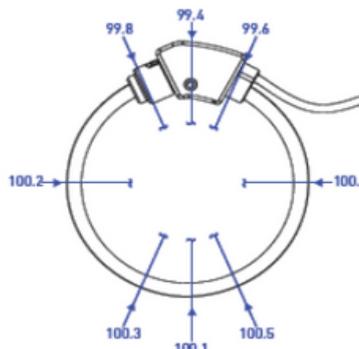
Installation sans coupure de l'alimentation / *Installation without interruption*

Pratique et compact / *Handy & compact*

Installation rapide / *Quick installation*



Avec conducteur axé (position C)
With aligned conductor (C position)



Avec conducteur desaxé
With out of alignment conductor

COIL	
Coil length:	30 ... 300 cm
Sensor internal diameter:	7 ... 94 cm
Cord diameter:	8.3 ±0.2 mm
Jacket material:	Polyphenylene and thermoplastic elastomer
Fastening:	Bayonet holder
Weight:	150 ... 500 g
ELECTRICAL CHARACTERISTICS FOR MODEL WITHOUT INTEGRATOR	
Nominal output rate:	120 mV / kA @ 60 Hz (RMS values) 100 mV / kA @ 50 Hz (RMS values)
Max measurable current:	2 kA @ 50/60 Hz with 30 ... 42 cm coil length 5 kA @ 50/60 Hz with 43 ... 300 cm coil length
Coil resistance:	70 ... 900 Ω
Accuracy:	Class 0,5-A1 according to IEC 61869-10
Frequency:	50/60 Hz
Maximum primary voltage:	600 V CAT IV, Service Entrance
Pollution degree:	2, Controlled Environment for indoor use model 3, Uncontrolled Environment for outdoor use model
Insulation test voltage:	7400 V _{RMS} / 5 s
ELECTRICAL CHARACTERISTICS FOR MODEL WITH INTEGRATOR	
Power voltage:	4 ... 26 VDC
Max consumption:	5 mADC
Nominal output rate:	333 mV / FS (RMS values) FS changes according to the model: 1, 2, 5 kA
Positioning error:	Better than ±1% of reading
Frequency:	50/60 Hz
Maximum primary voltage:	600 V CAT IV, Service Entrance
Pollution degree:	2, Controlled Environment for indoor use model 3, Uncontrolled Environment for outdoor use model
Insulation test voltage:	7400 V _{RMS} / 5 s
CONNECTION CABLE FOR MODEL WITHOUT INTEGRATOR	
Type:	3 x 24 AWG shielded
Length:	3 m. Other lengths on request: 5, 7, 10, 15 m
CONNECTION CABLE FOR MODEL WITH INTEGRATOR	
Type:	5 x 24 AWG shielded
Length:	3 m. Other lengths on request: 5, 7, 10, 15 m
ENVIRONMENTAL CONDITIONS	
Protection degree:	IP65 for indoor use model IP68 for outdoor use model
Altitude:	Up to 2000 m over sea-level
Operating temperature:	-35 ... +75°C up to 2 kA -35 ... +60°C from 2 to 5 kA
Storage temperature:	-40 ... +90°C
Relative humidity:	0 ... 95%
Installation and use:	Controlled Environment for indoor use model Uncontrolled Environment for outdoor use model
STANDARD COMPLIANCE	
IEC, UL standards:	ANSI/CAN/UL 2808, CSA C22.2 NO. 61010-1-12, IEC 61010-2-032, IEC 61010-1 Ed3, IEC 60529

Capteur Rogowski
Rogowski sensor

	COIL DETAIL		CABLE DETAIL	COLOUR	CALIBRATED
	Length [cm]	Internal diameter [cm]	3 m	Yellow	Yes
MFC150-UI (120mV/1kA@60Hz OUTPUT VALUE)					
	30	~7 (7x9)	●	●	●
	35	~9 (9x10)	●	●	●
	60	~17.5	●	●	●
	90	~27	●	●	●
	120	~36	●	●	●
	180	~55	●	●	●

	COIL DETAIL		CABLE DETAIL	COLOUR	CALIBRATED
	Length [cm]	Internal diameter [cm]	3 m	Yellow	Yes
MFC150-UI/F with BUILT-IN INTEGRATOR - (333mV/1kA OUTPUT VALUE)					
	40	~11	●	●	●
MFC150-UI/F with BUILT-IN INTEGRATOR - (333mV/2kA OUTPUT VALUE)					
	60	~17.5	●	●	●
MFC150-UI/F with BUILT-IN INTEGRATOR - (333mV/5kA OUTPUT VALUE)					
	90	~27	●	●	●

	Tous modèles	Seulement modèles avec intégrateur
	ALL MODELS	ONLY MODEL WITHOUT INTEGRATOR
OPTIONS AVAILABLE ONLY ON REQUEST (SUBJECT TO MOQ)		
Other coil length than those listed above, up to 300cm (Autre longueur de bobine, jusqu'à 300cm)	●	
Cable length different from standard (3m): 5, 7, 10, 15 m (Autre longueur de câble: 5, 7, 10, 15m)	●	
Calibrated for customer device (input impedance value of device to be specified) (Calibré)		●
Different coil colour (Autre couleur de bobine)	●	
OUTDOOR use (Utilisation externe)	●	

Pour toute question supplémentaire, n'hésitez pas à nous contacter
For any additional information, do not hesitate to contact us



Z.A de la Turlurette
58160 Sauvigny-les-Bois
France



sales@tct.fr



+33 (0) 3 86 90 77 55



www.tct.fr

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