

MFC150 - MFC150F Capteur Rogowski flexible Ø8mm

Ø8mm flexible Rogowski coil



MFC150 (standard model, 100mV/kA @50Hz)

MFC150/F (model with built-in integrator / modèle avec intégrateur incorporé, 333mV/kA@50Hz)

Le **MFC150** 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 **MFC150** 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 **MFC150** est conçue pour limiter l'influence des champs magnétiques externes, elle garantit donc une stabilité de mesure de faibles courants à des centaines de kA.

MFC150 is a flexible current transducer based on Rogowski principle, particularly suitable for measurement in combination with portable devices. **MFC150** 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 and can be used in a number of cases where traditional current transducer is not the adequate solution.

MFC150 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.

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
- Installation sans coupure de l'alimentation / Installation without interruption
- Pratique et compact / Handy & compact
- Installation rapide / Quick installation

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

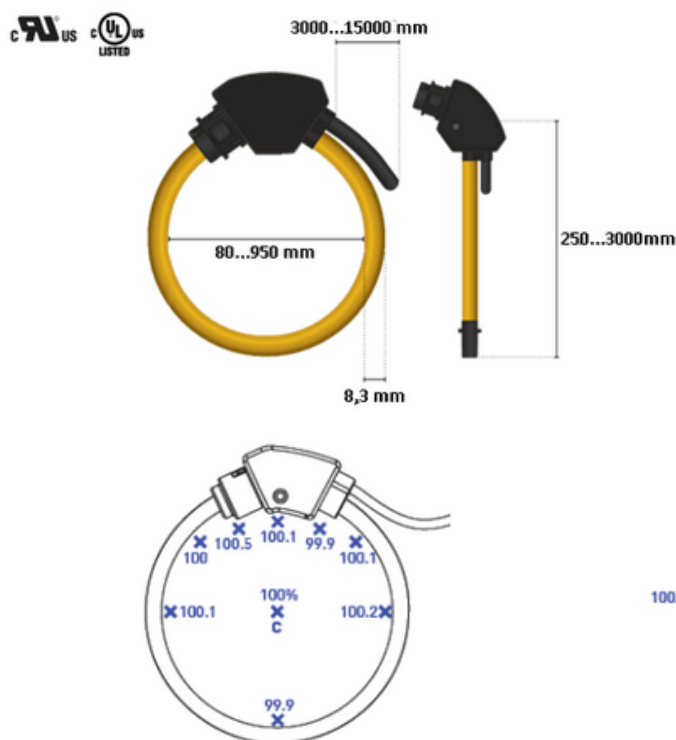
- Universel / Universal
- Uniformité de mesure à n'importe quelle position du conducteur à l'intérieur de la bobine / Measurement uniformity at any position of the conductor inside the coil
- Complètement blindé / Completely shielded
- Fourni déjà calibré / Supplied already calibrated
- Coupe transversal 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

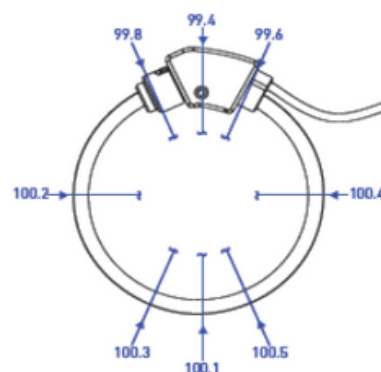
- UL61010-1
- UL61010-2-032
- IEC 60529 / ICE 60529

Homologation / Approval





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



Avec conducteur desaxé
With out of alignment conductor

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.

COIL	
Coil length:	25 ... 300 cm
Sensor internal diameter:	5 ... 94 cm
Cord diameter:	8.3 ±0.2 mm
Jacket material:	Thermoplastic polyurethane UL94-V0
Fastening:	Bayonet holder
Weight:	150 ... 500 g
ELECTRICAL CHARACTERISTICS FOR MODEL WITHOUT INTEGRATOR	
Nominal output rate:	100 mV / kA @ 50 Hz (RMS values)
Max measurable current:	100 kA
Coil resistance:	70 ... 900 Ω
Accuracy:	Class 0,5-A1 according to IEC 61869-10
Frequency:	50/60 Hz
Overvoltage category:	1000 V CAT III, 600 V CAT IV
Pollution degree:	2
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
Overvoltage category:	1000 V CAT III, 600 V CAT IV
Pollution degree:	2
Insulation test voltage:	7400 V _{RMS} / 5 s
CONNECTION CABLE FOR MODEL WITHOUT INTEGRATOR	
Type:	3 x 22 AWG shielded
Length:	3 m. Other lengths on request: 5, 7, 10, 15 m
CONNECTION CABLE FOR MODEL WITH INTEGRATOR	
Type:	5 x 22 AWG shielded
Length:	3 m. Other lengths on request: 5, 7, 10, 15 m
ENVIRONMENTAL CONDITIONS	
Protection degree:	IP67 or IP68 according to the model (not evaluated by UL)
Altitude:	Up to 2000 m over sea-level
Operating temperature:	-30 ... +80°C
Storage temperature:	-40 ... +80°C
Relative humidity:	0 ... 95%
Installation and use:	Indoor
STANDARD COMPLIANCE	
IEC, UL standards:	UL 61010-1 Ed3, UL 61010-2-032, CAN/CSA-C22.2 No. 61010-1, IEC 60529

	COIL DETAIL		CABLE DETAIL		COLOUR	CALIBRATED
	Length [cm]	Internal diameter [cm]	3 m	Edges	Yellow	For Algodue device

MFC150 FOR RPS51/RPS50/FCA3000 (not included)



25	~5 (5x7.5)	●	●	●	●
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	Edges	Yellow	Yes

MFC150 (100mV/1kA@50Hz OUTPUT VALUE)



25	~5 (5x7.5)	●		●	●
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	Edges	Yellow	Yes

MFC150/F with BUILT-IN INTEGRATOR - (333mV/1kA OUTPUT VALUE)

40	~11	●		●	●
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MFC150/F with BUILT-IN INTEGRATOR - (333mV/2kA OUTPUT VALUE)

60	~17.5	●		●	●
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MFC150/F with BUILT-IN INTEGRATOR - (333mV/5kA OUTPUT VALUE)

90	~27	●		●	●
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Tous modèles

Seulement modèles
avec intégrateur

ALL
MODELS

ONLY MODEL
WITHOUT INTEGRATOR

OPTIONS AVAILABLE ONLY ON REQUEST (SUBJECT TO MOQ)

UL Recognized Component Mark UL 61010-1 (Marque de composant reconnu UL UL 61010-1)	●	
Different output value: 40mV/1kA@50Hz or 85mV/1kA@50Hz (Valeur de sortie différente)		●
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)		●
FRB connector (Connecteur FRB)	●	
Different coil colour (Autre couleur de bobine)	●	
IP68 protection degree (Degré de protection IP68)	●	

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



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