

TF sensors

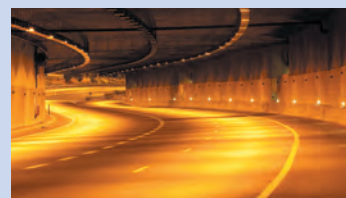
Flexible current sensors

used with DIRIS Digiware, DIRIS A-40 and DIRIS B



The solution for

- > Data centres
- > Healthcare
- > Energy



Strong points

- > Plug & Play
- > Accuracy according to IEC 61557-12
- > Secure locking
- > Installation
- > Simplified installation

Integrated technologies



PreciSense

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Conformity to standards

- > IEC 61557-12



- > ISO 14025



- > UL



Function

TF flexible **current sensors** measure the load currents of an electrical system and send the data to meters and PMDs via an RJ12 plug-and-play output. Thanks to a wide measurement range, TF current sensors cover the full current range of 150 to 6000 A with 7 references. TF flexible current sensors can be used with DIRIS Digiware, DIRIS A-40 DIRIS B, and ISOM Digiware F-60 via a quick RJ12 connection.

Advantages

Plug & Play

- A quick RJ12 connection makes wiring easy and reliable and prevents wiring errors. This also allows automatic detection of the sensor type and rating/transformation ratio.
- The sensors can be installed in both directions.

Accuracy according to IEC 61557-12⁽¹⁾

- Class 0.5 for the overall measurement chain (PMD + TF current sensors) from 2 to 120% of nominal current I_n .
- Accuracy is guaranteed regardless of the position of the conductor in the loop.

Secure locking⁽¹⁾

- The locking system prevents loop opening and guarantees sensor function and accuracy even in harsh environments.

Installation

- The TF flexible current sensor range has been specially designed for existing installations with major integration constraints or high-intensity currents.

Simplified installation

- The TF sensor electronics are built in to the RJ12 cable for quick and easy installation (no need for DIN-rail mounting) inside electrical panels.
- The integrator is self-powered by the PMD via the RJ12 cable and does not need an external power supply

General characteristics

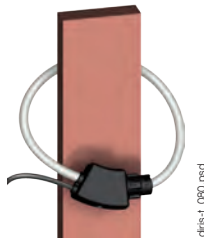
- - Range 150 to 6000 A.
- Used with DIRIS Digiware, DIRIS A-40 and DIRIS B.

Mounting

Cable mounting

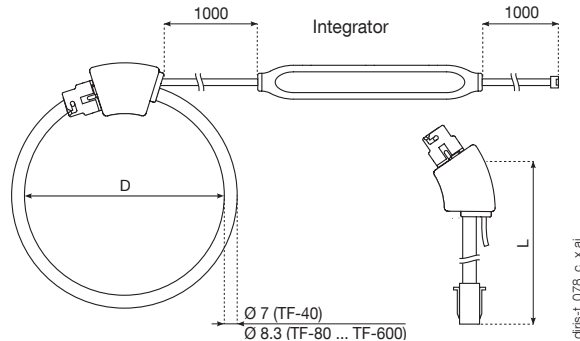


Bar mounting



Dimensions (mm)

TF-40 and TF-80 to TF-600



Model	Nominal current range (A)	Real range covered (A)	D = loop Ø (mm)	L = Loop length (mm)
TF-40	100 ... 400	2 ... 480	40	126
TF-80	150 ... 600	3 ... 720	80	251
TF-120	400 ... 2000	8 ... 2400	120	377
TF-200	600 ... 4000	12 ... 4800	200	628
TF-300	1600 ... 6000	32 ... 7200	300	942
TF-600	1600 ... 6000	32 ... 7200	600	1885

Integrator dimensions: 128 x 19 x 15 mm

Characteristics

Model	TF-40	TF-80	TF-120	TF-200	TF-300	TF-600
Nominal current range I_n (A)	100 ... 400	150 ... 600	500 ... 2000	600 ... 4000	1600 ... 6000	1600 ... 6000
Real range covered (A)	2 ... 480	3 ... 720	8 ... 2400	12 ... 4800	32 ... 7200	32 ... 7200
Weight (g)	114	130	142	164	193	274
Max. voltage	1000 V (Ph/N)					
Rated withstand voltage	3.6 kV					
Accuracy class	0.5 in association with DIRIS Digiware I, DIRIS A-40, DIRIS B based on IEC 61557-12					
Frequency	50 / 60 Hz					
Intermittent overload	10 x I_n for 1 s					
Measurement category	1000 V CAT III / 600 V CAT IV					
Ingress Protection rating	IP30 / IK07					
Operating temperature	-10 ... +70 °C					
Storage temperature	-25 ... +85 °C					
Relative humidity	95% RH condensation-free					
Altitude	< 2000 m					
Connection	Socomec cable or straight RJ12 equivalent cable, twisted pairs, unshielded, 600 V, -10... +70 °C					

References

Model	Nominal current range (A)	Real range covered (A)	D = loop Ø (mm)	L = Loop length (mm)	Reference
TF-40	100 ... 400	2 ... 480	40	126	4829 0573
TF-80	150 ... 600	3 ... 720	80	251	4829 0574
TF-120	400 ... 2000	8 ... 2400	120	377	4829 0575
TF-200	600 ... 4000	12 ... 4800	200	628	4829 0576
TF-300	1600 ... 6000	32 ... 7200	300	942	4829 0577
TF-600	1600 ... 6000	32 ... 7200	600	1885	4829 0578
Accessories					Reference
Female/female RJ12 connector to extend RJ12 connection					4829 0670

RJ12 connection cables	Cable length (m)										
	0.1	0.2	0.3	0.5	1	2	3	5	7	10	50 m reel + 100 connectors
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	4829 0602	-	4829 0603	4829 0601 ⁽¹⁾
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0609	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-	-

(1) Maximum length between sensor and current module = 10m.