TF sensors

Flexible TF current sensors

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

TF *Flexible current sensors*

The solution for

- Data centre
- Healthcare
- Energy

Strong points

- Plug & Play
- Accuracy as per standard IEC 61557-12
- Safe locking mechanism
- Installation
- Simplified installation

Integrated technologies

PreciSense

For more information see our website www.socomec.com

Compliance with standards

- IEC 61557-12
- ISO 14025
- UL

Create your project

- Find the best DIRIS Digiware configuration: **www.meter-selector.com**

METER SELECTOR DIGITAL TOOL AVAILABLE

Function

TF flexible **current sensors** measure the load currents of an electrical circuit and send the data to meters and Power Monitoring Devices or current modules via an RJ12 plug-and-play connection. Thanks to a wide measurement range, TF current sensors cover a wide current range from 100 to 6000 A, with only 7 references. TF flexible current sensors can be used with DIRIS Digiware I modules, DIRIS A-40 and DIRIS B.

Advantages

Plug & Play

- A rapid 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 as per standard IEC 61557-12

- Class 0.5 for the global monitoring chain (monitoring hub + TF current sensors) from 2% to 120% of the nominal current In.
- Accuracy is guaranteed regardless of the position of the conductor in the loop.

Safe locking mechanism

The locking system prevents the loop from opening, guaranteeing continuous functioning and accuracy even under harsh conditions.

Installation

The TF flexible sensor range is specially designed for existing installations restricted by strict integration constraints or with highintensity currents.

Simplified installation

- The TF sensor electronics are integrated into the RJ12 cable itself for a quick and compact setup (no DIN rail assembly required) inside electrical panels.
- The integrator is self supplied by the PMD through the RJ12 cable and does not need an external power supply.

General characteristics

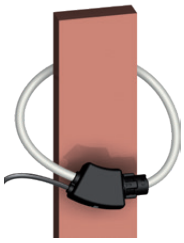
- Range from 150 to 6000A.
- Used with DIRIS Digiware, DIRIS A-40 and DIRIS B.

socomec Innovative Power Solutions

Installation

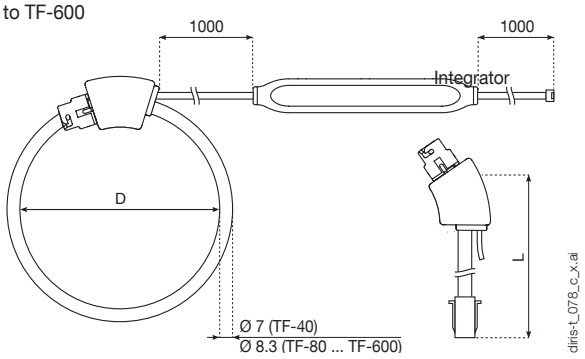
Cable mounting

Bar mounting



Dimensions (mm)

TF-40 and TF-80 to TF-600



Model	Nominal current range (A)	Real range covered (A)	D = Ø loop (mm)	L = Loop length (mm)
TF-40	100 ... 400	2 ... 480	40	126
TF-80	150 ... 600	3 ... 720	80	251
TF-120	500 ... 2000	10 ... 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				

Technical 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	10 ... 2400	12 ... 4800	32 ... 7200	32 ... 7200
Weight (g)	114	130	142	164	193	274
Max. voltage	600V (Ph/N) / 1000V (Ph/Ph)					
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 In for 1 s					
Measurement category	1000V CAT III / 600V CAT IV					
Protection degree	IP30 / IK07					
Operating temperature	-10 to +70°C					
Storage temperature	-25 to +85°C					
Relative humidity	95% RH non-condensing					
Altitude	< 2000 m					
Connection	Socomec cable or equivalent RJ12 straight, twisted pair, unshielded, 600 V, -10 ... +70 °C					

References

Model	Nominal current range (A)	Real range covered (A)	D = Ø loop (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	500 ... 2000	10 ... 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 connector for extension of the RJ12 connection between PMD and TF sensor	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) The maximal length between the sensor and the current module = 10m.