



TF sensors

Flexible TF current sensors

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

Current sensors



TF Flexible current sensors

diris-L077.eps

Function

TF flexible **current sensors** measure the load currents of an electrical circuit and send the data to the meters and Power Monitoring Devices or current modules via an RJ12 plug-and-play connection. With a wide measurement range, TF current sensors cover a broad current range from 150 to 6000 A, with only 5 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.
- The sensors can be installed in both directions.

Accuracy according to IEC 61557-12

- Class 0.5 for the global measuring chain (PMD + TF current sensors) from 2 to 120% of the nominal current I_n .
- 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.

Ideal solution for retrofit applications

- The TF flexible sensor range is specially designed for existing installations with strict integration constraints or with high-intensity currents.

Simplified installation

- The Rogowski integrator is built into the RJ12 cable enabling a quick and compact integration (no DIN rail assembly required) inside electrical panels.
- The integrator is self supplied by the PMD through the RJ12 cable and does not need any external power supply.

The solution for

- > Industry
- > Building
- > Infrastructure
- > Data centers



Strong points

- > Plug & Play
- > Accuracy according to IEC 61557-12
- > Ideal solution for retrofit applications
- > Simplified installation

Integrated technologies



PreciSense

For more information see our website www.socomec.us

Compliance with standards

- > UL 61010-1, CSA-C22.2 No 61010-1, Guide PICQ, IEC 61557-12



- > IEC 61557-12



- > ISO 14025



Create your project

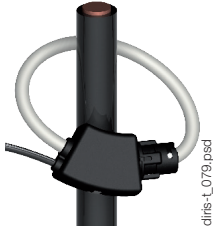
- > Find the best DIRIS Digiware configuration: www.meter-selector.com



DIGITAL TOOL AVAILABLE

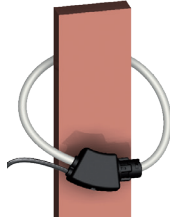
Installation

Cable mounting



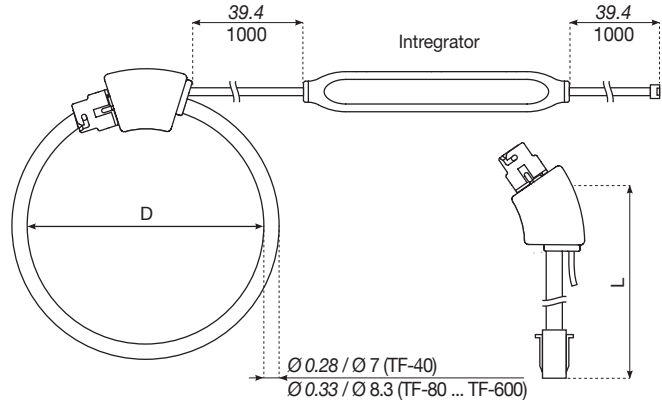
diris-t_079.psd

Bar mounting



diris-t_080.psd

Dimensions (in / mm)



diris-t_078_c_us.ai

Model	Nominal current range (A)	Real range covered (A)	D = Ø loop (in/mm)	L = Loop length (in/mm)
TF-55	150 ... 600	3 ... 720	2.16 / 55	6.81 / 173
TF-80	150 ... 600	3 ... 720	3.15 / 80	2.88 / 251
TF-120	400 ... 2000	8 ... 2400	4.72 / 120	14.84 / 377
TF-200	600 ... 4000	12 ... 4800	7.87 / 200	24.72 / 628
TF-300	1600 ... 6000	32 ... 7200	11.81 / 300	37.09 / 942
TF-600	1600 ... 6000	32 ... 7200	23.62 / 600	74.21 / 1885

Integrator dimensions (in / mm): 5.04 x 0.75 x 0.59 / 128 x 19 x 15

Technical characteristics

Model	TF-55	TF-80	TF-120	TF-200	TF-300	TF-600
Nominal current range I _n (A)	150 ... 600	150 ... 600	400 ... 2000	600 ... 4000	1600 ... 6000	1600 ... 6000
Actual range covered (A)	3 ... 720	3 ... 720	8 ... 2400	12 ... 4800	32 ... 7200	32 ... 7200
Weight (oz/g)	4/114	4.85/130	5/142	5.78/164	6.81/193	9.67/274
Max. voltage (phase/neutral)	600 V					
Rated withstand voltage	3.6 kV					
Accuracy class	Class 0.5 in association with DIRIS Digiware I, DIRIS A-40, DIRIS B					
Frequency	50 / 60 Hz					
Intermittent overload	10 x I _n for 1 s					
Measurement category	CAT III					
Protection degree	IP30 / IK07					
Operating temperature	+ 14°F ... + 158°F / -10°C to +70°C					
Storage temperature	- 13°F ... +185°F / -25°C to +85°C					
Relative humidity	95% RH non-condensing					
Altitude	< 2000 m					
Connection	SOCOMEK RJ12 cable, straight, twisted pair, unshielded, 600 V, + 14°F ... + 158°F / - 10°C ... + 70°C					

References

Model	Nominal current range (A)	Real range covered (A)	D = Ø loop (mm)	L = Loop length (mm)	Reference
TF-55	150 ... 600	3 ... 720	55	173	4829 0570
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 connector for extension of the RJ12 connection between PMD and TF sensor.					4829 0670

RJ12 connection cables	Cable length (ft/m)									
	0.32/0.1	0.64/0.2	0.96/0.3	1.64/0.5	3.3/1	6.5/2	9.84/3	16.4/5	32.8/10	164 / 50 reel + 100 connectors
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	4829 0602	4829 0603	4829 0601
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	-	-	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-