



# TF sensors

## Flexible current sensors

used with DIRIS Digiware and DIRIS B-30

Current sensors



TF Flexible current sensors

diris-t\_016\_a\_1\_cat

### The solution for

- > Industry
- > Building
- > Infrastructure
- > Data center



### Strong points

- > Plug & Play
- > Accuracy as per standard IEC 61557-12
- > Installation

### Conformity to standards

- > IEC 61557-12



- > ISO 14025



- > UL



### Function

TF smart **current sensors** measure the load currents of an electrical system and send the data to meters and measurement hubs 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 3 references. TF flexible current sensors can be connected to DIRIS Digiware and DIRIS B-30 via a rapid RJ12 connection.

### 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 size/transformation ratio.
- The sensors can be installed in both directions.

#### Installation

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

#### Accuracy as per standard IEC 61557-12

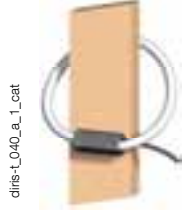
- Class 0.5 for the global measuring chain (measurement hub + TF current sensors) from 2 to 120% of the nominal current  $I_n$ .

## Mounting

Cable mounting



Bar mounting



## Accessories

Sealable cover

- Using a sealable cover guarantees the immunity of the sensor connection on TE/TR/TF current sensors.



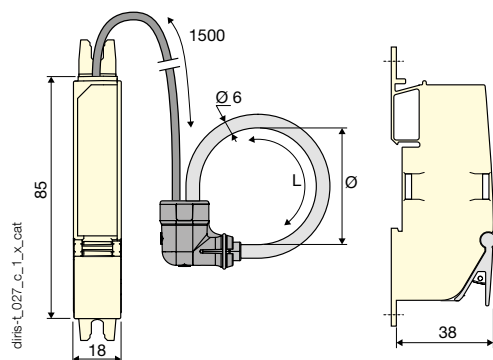
## Connections

TE / TR / TF current sensors

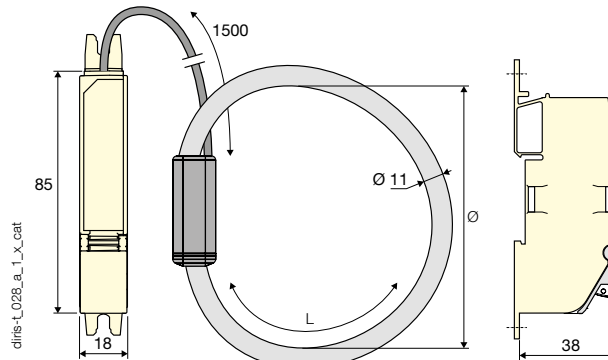


## Dimensions

TF-55



TF-120 / TF-300



Model	Nominal current range (A)	Actual coverage range (A)	Ø loop (mm)	L = Loop length (mm)
TF-55	150 ... 600	3 ... 720	55	182
TF-120	500 ... 2000	10 ... 2400	120	376
TF-300	1600 ... 6000	32 ... 7200	300	942

## Specifications

Model	TF-55	TF-120	TF-300
Nominal current range $I_n$ (A)	150 ... 600	500 ... 2000	1600 ... 6000
Actual coverage range (A)	3 ... 720	10 ... 2400	32 ... 7200
Weight (g)	114	142	220
Max. voltage (phase/neutral)	600 V		
Rated withstand voltage	3.6 kV		
Frequency	50 / 60 Hz		
Intermittent overload	10 x $I_n$ for 1 s		
Measurement category	CAT III		
Protection degree	IP30 / IK07		
Operating temperature	-10 ... +70°C		
Storage temperature	-25 ... +75°C		
Relative humidity	95% RH non-condensing		
Altitude	< 2000 m		
Connection	Socomec cable or equivalent RJ12 straight, twisted pair, unshielded 300 V cat. III cable. -40 / +85 °C		

## References

Model	Nominal current range (A)	Actual coverage range (A)	Ø loop (mm)	Reference
TF-55	150 ... 600	3 ... 720	55	4829 0570
TF-120	500 ... 2000	10 ... 2400	120	4829 0571
TF-300	1600 ... 6000	32 ... 7200	300	4829 0572

Accessories	Reference
Sealable caps (20 pieces)	4829 0600

RJ12 connection cables	Cable length (m)								
	0.1	0.2	0.3	0.5	1	2	5	10	50 m reel + 100 connectors
Number of cables	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	-	-	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-