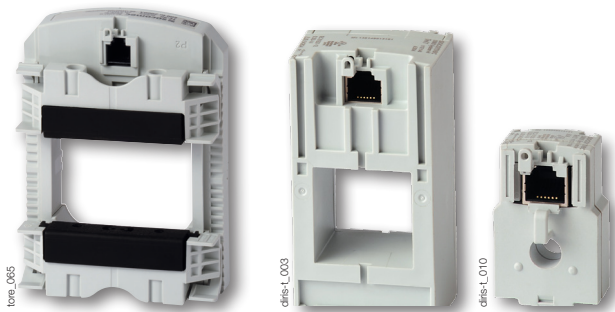


TE sensors

Solid-core AC current sensors

For DIRIS Digiware, DIRIS A and DIRIS B



TE solid-core sensors

Function

TE solid-core sensors are used with DIRIS Digiware I, DIRIS A, or DIRIS B Power Monitoring Devices to measure currents from 5 to 2000 A with only 7 part numbers and with the same guaranteed accuracy. The quick RJ12 connection, and the integrated intelligence prevent any connection or configuration errors. Numerous accessories are available to mount the sensors in any type of electrical panel.

Advantages

Plug & Play

- RJ12 concept for a quick and reliable connection to the power meter.
- Color-coded RJ12 cables provides easy phase identification to prevent phase inversions.
- Automatic detection of current sensor type and rating.
- Low-voltage mV output - No shorting blocks are needed, TE sensors can be disconnected safely under load.

Accurate

- Unique PreciSense technology guaranteeing system accuracy according to IEC 61557-12 standard.
- Class 0.5 system accuracy (Power Meter + TE current sensor) from 2% to 120% of rated current.

Smart

- Any wiring mishap, whether it's a phase inversion, a wrong orientation or a configuration error can be corrected via software. Save time, effort and resources, avoiding the hassle of reworking physical wiring on current sensors.

The solution for

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



Strong points

- > Plug & Play
- > Accurate
- > Smart

Conformity to standards

- > UL 61010-1, CSA-C22.2 61010-1, Guide PICQ, File E257746



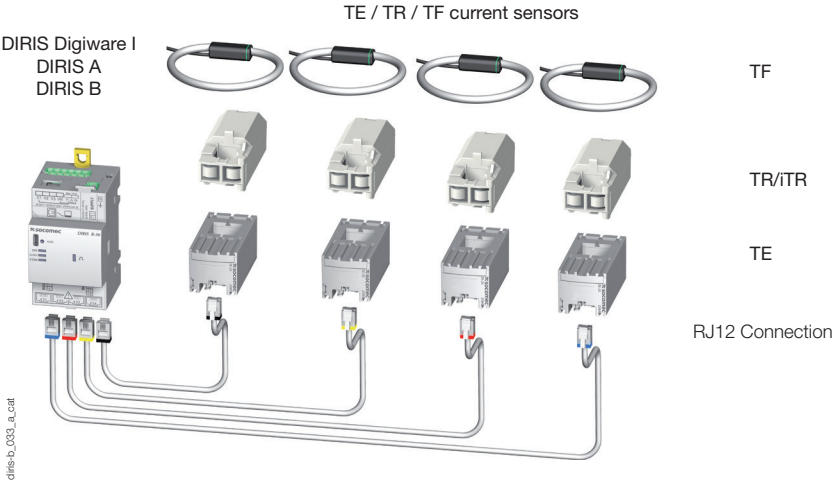
- > IEC 61557-12



- > ISO 14025



Connection to power meter

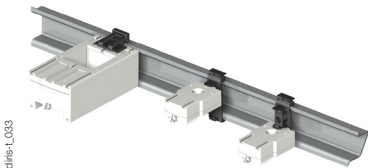


Mounting

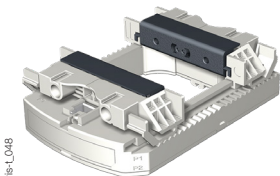
Linear assembly with the protective devices
 TE-25 / TE-35 / TE-45 / TE-55 / TE-90



DIN rail mounted



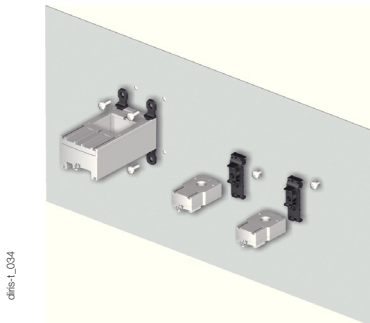
TE-90 clamps



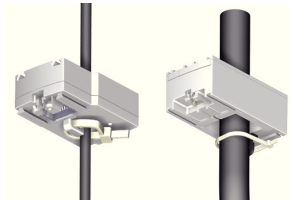
Staggered assembly
 TE-18 / TE-35 / TE-45 / TE-55



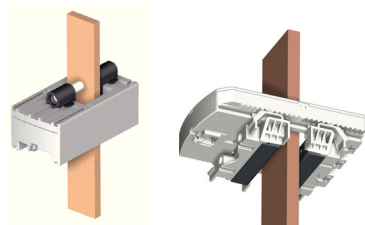
Back-plate mounting



Cable mounting






Busbar mounting



Mounting accessories

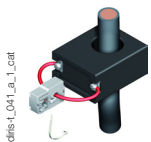
Mounting accessories delivered with TE sensors:

Switch mounting	TE-18	TE-25	TE-35 TE-45 TE-55	TE-90
 DIN rail and back-plate	1 pc			2 pcs
 DIN rail		2 pcs	2 pcs	
 Back-plate		4 pcs	4 pcs	6 pcs
Busbar			2 pcs	

Additional accessories

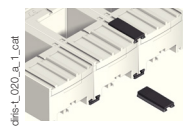
Adapter for 1A/5A secondary CT

Allows to use any existing 1A or 5A secondary current transformers and connect them via an RJ12 cable to DIRIS Digiware I, DIRIS A, and DIRIS B power meters. The adaptor has the dimensions as the TE-18 current sensor.



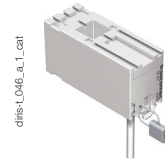
Coupling link

Associated with the TE range, this accessory is for inter-connecting the sensors when linear or staggered mounted.



Sealable cover

The sealable cover prevents tampering and ensures integrity of measurements.



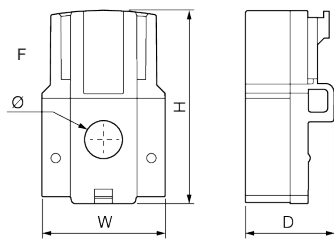
Dimensions (in/mm)

TE - Solid current sensors

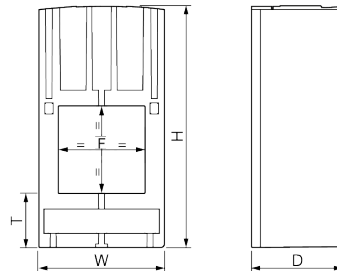
TE-18

TE-25 / TE-35 / TE-45 / TE-55

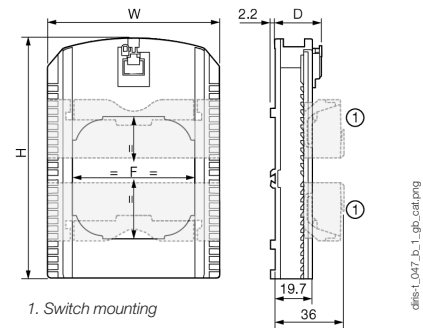
TE-90



diris-L022_c_1_gp_cat.png



diris-L023_c_1_gp_cat.png



diris-L047_b_1_gp_cat.png

Model	Nominal current range (A)	Actual coverage range (A)	Pitch (in/mm)	H x W x D (in/mm)	Window (in/mm)	T (in/mm)
TE-18	5 ... 20/25 ... 63	0.1 ... 24/0.5 ... 75	0.7/18	1.77 x 1.10 x 0.79/45 x 28 x 20	Ø 0.33/8.6	-
TE-25	40 ... 160	0.8 ... 192	0.98/25	2.56 x 0.98 x 1.28/65 x 25 x 32.5	0.53 x 0.53/13.5 x 13.5	0.69/17.5
TE-35	63 ... 250	1.26 ... 300	1.37/35	2.79 x 1.37 x 1.28/71 x 35 x 32.5	0.82 x 0.82 / 21 x 21	0.69/17.5
TE-45	160 ... 630	3.2 ... 756	1.77/45	3.38 x 1.77 x 1.28/86 x 45 x 32.5	1.22 x 1.22 / 31 x 31	0.77/19.5
TE-55	400 ... 1000	8 ... 1200	2.16/55	3.93 x 2.16 x 1.28/100 x 55 x 32.5	1.61 x 1.61 / 41 x 41	0.85/21.5
TE-90	600 ... 2000	12 ... 2400	3.54/90	4.96 x 3.54 x 0.97/126 x 90 x 24.6	2.52 x 2.52 / 64 x 64	-

Characteristics

TE - Solid current sensors							
Model	TE-18	TE-18	TE-25	TE-35	TE-45	TE-55	TE-90
Nominal current range I_n (A)	5 ... 20	25 ... 63	40 ... 160	63 ... 250	160 ... 630	400 ... 1000	600 ... 2000
Actual coverage range (A)	0.1 ... 24	0.5 ... 75	0.8 ... 192	1.26 ... 300	3.2 ... 756	8 ... 1200	12 ... 2400
Max. current (A)	24	75.6	192	300	756	1200	2400
Weight (oz/g)	0.84/24	0.84/24	2.4/69	3.1/89	4.9/140	6.6/187	5.75/163
Max. voltage (phase/neutral)	600 VAC L-N						
Rated withstand voltage	3 kV						
Frequency	50/60 Hz						
Intermittent overload	10 x I_n over 1 sec						
Measurement category	CAT III						
Protection degree	IP30 / IK06						
Operating temperature	+14 °F ... +158 °F / -10 ... +70 °C						
Storage temperature	-13 °F ... +185 °F / -25 ... +85 °C						
Relative humidity	95 % non-condensing						
Operating altitude	≤ 6560 ft feet / 2000 m						
Connection	Specific Socomec RJ12 cables -40 °F ... +185 °F / -40 °C ... +85 °C						

References

Model	Nominal current range (A)	Actual coverage range (A)	Pitch (in/mm)	Reference
TE-18	5 ... 20	0.1 ... 24	0.7/18	4829 0500
TE-18	25 ... 63	0.5 ... 75	0.7/18	4829 0501
TE-25	40 ... 160	0.8 ... 192	0.98/25	4829 0502
TE-35	63 ... 250	1.26 ... 300	1.37/35	4829 0503
TE-45	160 ... 630	3.2 ... 756	1.77/45	4829 0504
TE-55	400 ... 1000	8 ... 1200	2.16/55	4829 0505
TE-90	600 ... 2000	12 ... 2400	3.54/90	4829 0506

Accessories	Reference
Coupling link (20 linear assembly parts and 10 for staggered assembly)	4829 0598
1A/5A secondary CT adapter with RJ12 output for DIRIS Digiware, DIRIS A and DIRIS B	4829 0599
Sealable covers (20 pieces)	4829 0600

RJ12 sensor lead 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	23/7	32.8/10	164/50 + 100 connectors
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	-	-	-	4829 0601
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0603	4829 0609
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-	-