



TR/iTR sensors

Split-core AC current sensors

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

Current sensors



TR Split-core current sensors

Function

The range of **TR and iTR split-core current sensors** measures the current of electrical installations. Used with DIRIS Digiware, DIRIS A-40, or DIRIS B Power Monitoring Devices, they can measure currents between 25 and 600 A, with the same guaranteed accuracy. The quick RJ12 connection and the integrated intelligence prevent any configuration errors.

The range of iTR current sensors revolutionizes the world of measurement and provides access to VirtualMonitor (monitoring of protective devices) and AutoCorrect (automatic wiring control) technologies.

Advantages of the TR and iTR ranges

Smart sensors

- Sensors with an extended operational range.
- Automatic rating detection.
- Safe on-load disconnection.
- Quick connection via RJ12 color-coded identification of cable.

Accurate

- Measurement accuracy is guaranteed according to the most demanding standard (IEC 61557-12): class 0.5 (iTR) or class 1 (TR) for the global measuring chain and on the full scale (from **2%** to **120%** of I_n)

Unique advantages of the iTR range

VirtualMonitor technology

The VirtualMonitor technology provides monitoring of protective devices:

- Across the entire electrical installation.
- Remotely and in real-time.
- Without additional hardware or wiring.

AutoCorrect technology

The AutoCorrect technology guarantees that the measurement system is working correctly, with:

- Automatic identification of wiring errors (verification of phase associations and current flow direction).
- Software correction of errors.
- Available even off-load.

The solution for

- Retrofit applications
- Industry
- Building
- Infrastructure
- Data centers



Strong points

- Smart sensors
- PreciSense technology: Global accuracy in accordance with the IEC 61557-12 standard
- Easy installation and configuration

Integrated technologies⁽¹⁾



(1) AutoCorrect and VirtualMonitor are only available with iTR sensors.

Compliance with standards

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



- IEC 61557-12



- ISO 14025



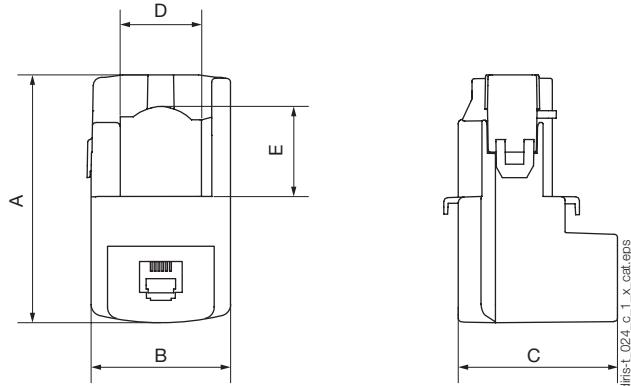
Installation

Cable mounting



Dimensions (in/mm)

TR/iTR-10 / TR/iTR-14 / TR/iTR-21 / TR/iTR-32



Model	Nominal current range (A)	Actual coverage range (A)	A (in/mm)	B (in/mm)	C (in/mm)	D (in/mm)	E (in/mm)	Ø (in/mm)
TR/iTR-10	25 ... 63	0.5 ... 75.6	1.73/44	1.02/26	1.10/28	-	-	0.39/10
TR/iTR-14	40 ... 160	0.8 ... 192	2.64/67	1.14/29	1.10/28	0.55/14	0.59/15	0.55/14
TR/iTR-21	63 ... 250	1.26 ... 300	2.56/65	1.46/37	1.69/43	0.83/21	0.91/23	0.83/21
TR/iTR-32	160 ... 600	3.2 ... 720	3.39/86	2.09/53	1.85/47	1.26/32	1.30/33	1.26/32

Technical characteristics

Model	TR-10	iTR-10	TR-14	iTR-14	TR-21	iTR-21	TR-32	iTR-32
Nominal current range I_n (A)	25 ... 63	40 ... 160	63 ... 250	160 ... 600				
Actual coverage range (A)	0.5 ... 75.6	0.8 ... 192	1.26 ... 300	3.2 ... 720				
Max. current (A)	75.6	192	300	720				
Weight (oz/g)	2.6/74	4.1/117	7.4/211	10.9/311				
Max. voltage (phase/neutral)			300 V					
Rated withstand voltage			3 kV					
Frequency			50/60 Hz					
Intermittent overload			10 $\times I_n$ for 1 s					
Measurement category			CAT III					
Global class used with Diris Digiware I / A-40/B-10/B-30	Class 1	Class 0.5	Class 1	Class 0.5	Class 1	Class 0.5	Class 1	Class 0.5
Protection degree					IP20 / IK07			
Operating temperature range			+14 °F ... +158 °F / -10 ... +70 °C			+14 °F ... +131 °F / -10 ... +70 °C		
Storage temperature range					-13 °F ... +185 °F / -25 to +85 °C			
Relative humidity					95% RH non-condensing			
Altitude					< 6560 feet / 2000 m			
Connection					SOCOMECH RJ12 cable, straight, twisted pair, unshielded, 600 V, +14 °F ... +158 °F / -10 °C ... +70 °C			

References

Model	Nominal current range (A)	Actual coverage range (A)	Ø (in/mm)	Part number	Model	Nominal current range (A)	Actual coverage range (A)	Ø (in/mm)	Part number
TR-10	25 ... 63	0.5 ... 75	0.39/10	4829 0555	iTR-10	25 ... 63	0.5 ... 75	0.39/10	4829 0655
TR-14	40 ... 160	0.8 ... 192	0.55/14	4829 0556	iTR-14	40 ... 160	0.8 ... 192	0.55/14	4829 0656
TR-21	63 ... 250	1.26 ... 300	0.83/21	4829 0557	iTR-21	63 ... 250	1.26 ... 300	0.83/21	4829 0657
TR-32	160 ... 600	3.2 ... 720	1.26/32	4829 0558	iTR-32	160 ... 600	3.2 ... 720	1.26/32	4829 0658

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 + 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	-	-	-	-