





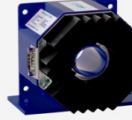
TPS & IT Current Transducer HIGH PRECISION SINGLE CHANNEL CURRENT TRANSDUCER SYSTEM

- for IT Transducers 60 A_{rms} to 1000 A_{rms}
- High Linearity
- Low Offset
- Wide Bandwidth
- Low Phase Error



Specifications

Transducer Specifications

Transducer	IT 60-S	IT 200-S	IT 400-S	IT 700-S	IT 1000-S/SP1
					
Primary Current Range <i>I_p</i> DC, RMS Sinus	60 A	200 A	400 A	700 A	1000 A
Overload Ability Short Time (100 mS)	300 A _{pk}	1000 A _{pk}	2000 A _{pk}	3500 A _{pk}	4000 A _{pk}
Max. burden resistor (100 % of <i>I_p</i>)	10 Ω	10 Ω	2.5 Ω	2.5 Ω	2.5 Ω
<i>di/dt</i> (accurately followed)	> 25 A/μs	> 100 A/μs	> 100 A/μs	> 100 A/μs	> 100 A/μs
Temperature Influence	< 2.5 ppm/K	< 2 ppm/K	< 1 ppm/K	< 1 ppm/K	< 1 ppm/K
Output Ratio	100 mA at 60 A	200 mA at 200 A	200 mA at 400 A	400 mA at 700 A	1 A at 1000 A
Bandwidth (0.5 % of <i>I_p</i>)	DC ... > 800 KHz	DC ... > 500 kHz	DC ... > 500 kHz	DC ... > 250 kHz	DC ... > 500 kHz
Linearity	< 0.002 %	< 0.001 %	< 0.001 %	< 0.001 %	< 0.001 %
Offset	< 0.025 %	< 0.008 %	< 0.004 %	< 0.005 %	< 0.005 %
Frequency Influence	< 0.04 %/kHz	< 0.06 %/kHz	< 0.06 %/kHz	< 0.12 %/kHz	< 0.06 %/kHz
Angular Accuracy	< 0.025 ° + 0.06 °/kHz	< 0.025 ° + 0.05 °/kHz	< 0.025 ° + 0.09 °/kHz	< 0.025 ° + 0.18 °/kHz	< 0.025 ° + 0.09 °/kHz
Rated isolation voltage rms, single isolation CAT III, Pollution deg. 2 IEC 61010-1 standards EN 50178 standards	2000 V 1000 V	2000 V 1000 V	2000 V 1000 V	1600 V 1000 V	300 V 300 V
Test voltage 50/60 Hz, 1 min	5.4 kV	5.4 kV	5.4 kV	4.6 kV	3.1 kV
Inner diameter	26 mm	26 mm	26 mm	30 mm	30 mm

Dimensions

TPS Transducer Power Supply

Cabinet Width: 134 mm
Cabinet Height: 145 mm
Cabinet Depth: 230 mm
Cabinet Weight: 1.6 kG

Transducers:

See Transducer Datasheets
IT 60-S ... IT 1000-S/SP1



Front Panel



Rear Panel


General Data

TPS Input Voltage: 100 ... 240 V / 650 mA AC, 47 ... 63 Hz
Operation temperature: 10 ... 50°C
Operation humidity: 20 ... 80%
Warranty period: 36 months

Transducer Status Readout

9-pole D-SUB connector for transducer status NORMAL OPERATION and OVERLOAD (relay output, 50 V / 2 A).

Optional Voltage Output (Plug-On Shunts)

MCTS/BR1: 1A/10/1W Shunt (for IT 1000) Amplitude Accuracy: 0.1% Angular Accuracy: 1° at 100 kHz Frequency Range: 300 kHz / 0.5 dB	MCTS/BR10: 100mA/10Ω/0.1W Shunt (for IT 60) Amplitude Accuracy: 0.05% Angular Accuracy: 1° at 100 kHz Frequency Range: 300 kHz / 0.5 dB	 <p>4 mm Input – BNC Output</p>
MCTS/BR2.5: 400mA/2.5Ω/0.4W Shunt (for IT 400, IT 700) Amplitude Accuracy: 0.05% Angular Accuracy: 1° at 100 kHz Frequency Range: 300 kHz / 0.5 dB	Resulting Ratio: IT 60 with MCTS/BR10: 16.667 mV/A IT 200 with MCTS/BR5: 5.0000 mV/A IT 400 with MCTS/BR2.5: 1.2500 mV/A IT 700 with MCTS/BR2.5: 1.4286 mV/A IT 1000 with MCTS/BR1: 1.0000 mV/A	
MCTS/BR5: 200mA/5Ω/0.2W Shunt (for IT 200) Amplitude Accuracy: 0.05% Angular Accuracy: 1° at 100 kHz Frequency Range: 300 kHz / 0.5 dB		

Order Numbers

Nominal Current Range	TPS Power Supply	DANFYSIK Current Transducer	Optional Shunt
60 A	TPS consisting of: - 1 TPS Electronics Unit - 1 Connection Cable 2.5m - 1 Power Cord - 1 Manual	IT 60-S	MCTS/BR10
200 A		IT 200-S	MCTS/BR5
400 A		IT 400-S	MCTS/BR2.5
700 A		IT 700-S	MCTS/BR2.5
1000 A		IT 1000-S/SP1	MCTS/BR1