DCbox HALL CURRENT SENSOR DTM-021

- Efficient, beneficial, and low cost.
- Measurement frequency range: DC~20KHz, low power consumption 10mA.
- Measurement input without loss; Strong anti-interference ability.
- Lightweight structure for easy installation. Opening size φ21mm.
- No low-temperature drift, strong current overload capacity.
- DTM-O21 is a current comparator made using the Hall effect principle, suitable for measuring direct current.
- Open structure design, convenient for continuous electrical installation, with screw fixation design at the opening and closing parts, safe and firm to prevent detachment.

SPECIFICATION

- ♦ Output signal: At DC, V outputs 0-4Vdc; Output A: 4-20mAdc Corresponding input current range In
- ♦ Precision: <±1.0% F.S. (@ 25℃)
- ♦ Working power supply: V output: DC12V(±5%); A output: DC24V(±5%)
- ♦ Measurement frequency range: DC~20KHz
- ♦ Insulation and withstand voltage: 2.5KV effective value/ 60Hz/ 1 min (between input and output circuits)
- ♦ Zero offset voltage: <±10mV
- ♦ Temperature drift: ±1mV/ ℃
- ♦ Linearity: <±1% F.S
- ♦ Reaction time: < 5μSec
- ♦ Working temperature: -10℃~+85℃
- ♦ Storage temperature: -25℃~+85℃
- ♦ Current consumption: <25mA
- ♦ Load resistance: >10KΩ
- ♦ Weight: 75g(round)
- ♦ Shell material: Flame retardant PBT material, grade: UL94-V0

Model	Primary side rated current	Maximum measuring range	Opening size
DTM-O21-050	50A	75A	Φ 21
DTM-O21-100	100A	150A	Φ 21
DTM-O21-200	200A	300A	Φ 21
DTM-O21-300	300A	450A	Φ 21
DTM-O21-400	400A	600A	Φ 21
DTM-O21-500	500A	750A	Φ 21

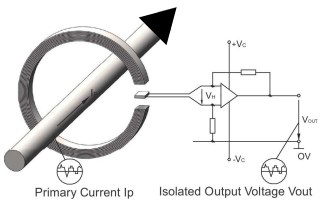
Unit: mm

ORDER INFORMATION

DTM- Code1 21 - Code2 - Code3

Code1	Type	Code2	Measure Range	Code2	Measure Range	Code3	Output Signal
O	Round	50	DC0~50A	300	DC0~300A	V	0~4Vdc (Working Power: 12Vdc)
		100	DC0~100A	400	DC0~400A	A	4~20mAdc (Working Power: 24Vdc)
		200	DC0~200A	500	DC0~500A		

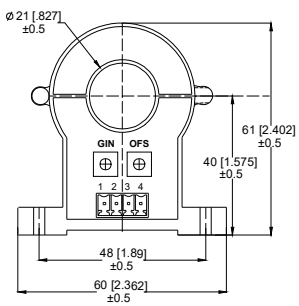
WORKING PRINCIPLE

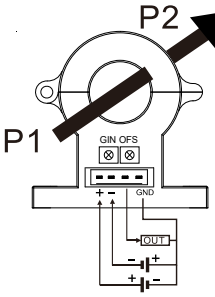


Primary Current Ip Isolated Output Voltage Vout

The magnetic flux generated by the primary current IP is concentrated in the magnetic flux, detection at the air gap using a Hall comparator.
The output of the Hall device is processed at the sensor output end can accurately reflect the current changes on the primary side.

DIMENSION





Current direction: P1 → P2
OFS: Zero point adjustment
GIN: Full scale adjustment
+: Positive power input terminal
-: Negative power input terminal
Output: Signal output terminal
GND: power ground