

DTI

MECO DC Isolation Transducer takes various DC Voltage or DC Current signal inputs and provides a Stable, Ripple-Free and Optically Isolated DC load independent output in the form of current or voltage. The output can be connected to Controllers, Data-Loggers, PLC's, Analog / Digital Indicators, Recorders for display, analysis or control. They are ideal for SCADA, Energy Management, Telemetry for Remote, Local as well as Central Monitoring Systems.

Model : DTI (DIN Series)				Accuracy : $\pm 0.5\%$ of Span			
DC Input			DC Output				Auxiliary Power Supply
Input Ranges	0-100 mV	4-20 mA	Current		Voltage		Tolerance
	0-1 V	2-10 mA	Output	Load	Output	Load	Burden
	0-5 V	1-5 mA					
	1-5 V	0-1 mA	0-1 mA	0-10 K Ω	0-1 V	> 1 k Ω	
	0-10 V	0-10 mA	0-5 mA	0-2 K Ω	0-5 V	> 5 k Ω	
	2-10 V	0-16 mA	0-10 mA	0-1 K Ω	1-5 V	> 10 k Ω	
Measuring Range	0-1.2 I _n , 0-1.2 U _n		2-10 mA	*0-500 Ω	0-10 V	> 10 k Ω	< 2.5 VA
Overload (continuous)	1.2 x U _n , 2 x I _n		0-20 mA		2-10 V		
Burden	10 k Ω m/V for Voltage 100 mV for Current		4-20 mA		2-10 V		
Bi-directional Inputs	-50/0/50 mV DC to -300/0/300 V DC		4-12-20 mA	*0-500 Ω	0-5-10 V	> 10 k Ω	AC Linear Power Supply
							110 V $\pm$ 20 %
							230 V $\pm$ 20 %
							< 4 VA

Optional

- Bi-directional Inputs available
- Other input ranges available subject to technical feasibility

Optional

- Dual Non-Isolated Outputs
- Dual Symmetrical & Asymmetrical Outputs
- Bi-directional Outputs
- Other output ranges available subject to technical feasibility
- *0-600 Ω / 0-750 Ω on Request

Optional

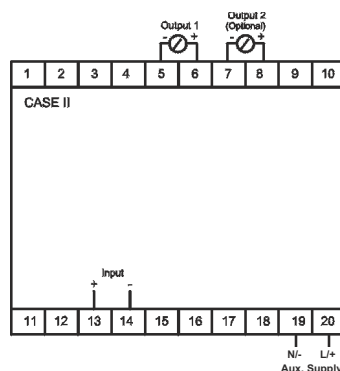
- Other Auxiliary Power Supplies available subject to technical feasibility

Dimension

DIN Series : ■ Case Size II

Note : ■ For Details refer General & Technical Specifications Page

Connection Diagram



DTI

Specifications

Accuracy	± 0.5% of Span (standard) Others on request (optional)	Warm Up Time	20 min. (approx.)
Accuracy Range	0 to 120%	Dielectric Strength	2.5kV at 50 Hz for 1 min.(Standard) 4kV (Optional), across Casing - Input/Output/Auxiliary Input - Output Input - Auxiliary Output - Auxiliary
Zero Adjustment	± 2% of Span (min.)	Impulse Test	5kV, 1.2 / 50µS
Span Adjustment	± 10% of Span (min.)	Casing	DIN Series Flame Retardant, Polycarbonate (UL 94V-0) Self Extinguishing, Non Drip, DIN Rail cum Wall Mounting Casing
Response Time	< 250 ms for 0 to 90% of Output < 1 s for 0 to 90% of Output for PF	Applicable Standards	IEC 688 / EN 60688 Electrical Measuring Transducers for converting AC Electrical Quantities to Analog or Digital Signals EN 61010-1 Safety requirements for Electrical Equipment for Measurement Control & Laboratory use EN 61326-1 Electrical Equipment for Measurement Control & Laboratory use - EMC requirements IS12784 (Part-1)1989 Electrical Measuring Transducers for converting AC Electrical Quantities into DC Electrical Quantities : General Purpose Transducer
Output Ripple	< 0.5% of Full Scale		
Compliance Voltage	12VDC (max.)		
Overload -Continuous	Voltage : 1.2 x Un Current : 2 x In		
Overload -Short Duration (1 sec.)	Voltage : 2 x Un Current : 20 x In (one time)		
Max. Open Circuit Voltage	< 30VDC		
Stability	± 0.25% Per Annum, Non Cumulative		
Environmental Conditions	As per IEC 688 User Group II		
Operating Temperature	0 to 55°C, RH < 95% (non condensing)		
Storage Temperature	-20 to 70°C, RH < 95% (non condensing)		
Calibrated At	27°C ± 5°C		
Temperature Coefficient	0.02% / °C		
Isolation	Complete (Input/Output/Auxiliary/ Case)		
Insulation Resistance	>100MΩ at 500VDC		
Self Powered (optional)	Max.Variation of ± 20% in input voltage		

Ordering Information

Model, Input Range, Input Voltage, Input Current, PTR, CTR, Frequency, Auxiliary Supply, Output 1, Output 2 & Optionals

Dimensions (in mm)

