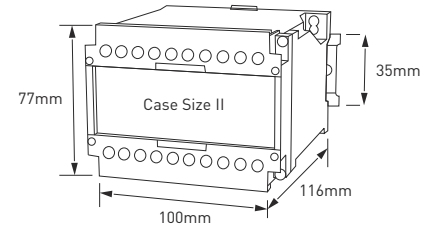




DTI



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 - RRL has LED indication at Power ON condition.

Model : DTI (DIN Series)		Accuracy : ±0.5% of Span																																																		
DC Input		DC Output		Auxiliary Power Supply																																																
Input Ranges	0-100 mV 0-1 V 0-5 V 1-5 V 0-10 V 2-10 V 0-1000 V	4-20 mA 2-10 mA 1-5 mA 0-1 mA 0-10 mA 0-16 mA 0-20 mA	<table border="1"> <thead> <tr> <th colspan="2">Current</th> <th colspan="2">Voltage</th> </tr> <tr> <th>Output</th> <th>Load</th> <th>Output</th> <th>Load</th> </tr> </thead> <tbody> <tr> <td>0-1 mA</td> <td>0-10 KΩ</td> <td>0-1 V</td> <td>> 1 kΩ</td> </tr> <tr> <td>0-5 mA</td> <td>0-2 KΩ</td> <td>0-5 V</td> <td>> 5 kΩ</td> </tr> <tr> <td>0-10 mA</td> <td rowspan="2">0-1 KΩ</td> <td>1-5 V</td> <td rowspan="2">> 10 kΩ</td> </tr> <tr> <td>2-10 mA</td> <td>0-10 V</td> </tr> <tr> <td>0-20 mA</td> <td rowspan="2">*0-500 Ω</td> <td>2-10 V</td> <td rowspan="2">> 10 kΩ</td> </tr> <tr> <td>4-20 mA</td> <td></td> </tr> <tr> <td>4-12-20 mA</td> <td>*0-500 Ω</td> <td>0-5-10 V</td> <td>> 10 kΩ</td> <td></td> <td></td> </tr> </tbody> </table>		Current		Voltage		Output	Load	Output	Load	0-1 mA	0-10 KΩ	0-1 V	> 1 kΩ	0-5 mA	0-2 KΩ	0-5 V	> 5 kΩ	0-10 mA	0-1 KΩ	1-5 V	> 10 kΩ	2-10 mA	0-10 V	0-20 mA	*0-500 Ω	2-10 V	> 10 kΩ	4-20 mA		4-12-20 mA	*0-500 Ω	0-5-10 V	> 10 kΩ			<table border="1"> <thead> <tr> <th colspan="2">Tolerance</th> <th>Burden</th> </tr> </thead> <tbody> <tr> <td>SMPS - HV</td> <td>85 - 265V AC / DC</td> <td rowspan="2">< 2.5 VA</td> </tr> <tr> <td>SMPS - LV</td> <td>19 - 90V AC / DC</td> </tr> <tr> <td rowspan="2">AC Linear Power Supply</td> <td>110 V ± 20 %</td> <td rowspan="2">< 4 VA</td> </tr> <tr> <td>230 V ± 20 %</td> </tr> </tbody> </table>		Tolerance		Burden	SMPS - HV	85 - 265V AC / DC	< 2.5 VA	SMPS - LV	19 - 90V AC / DC	AC Linear Power Supply	110 V ± 20 %	< 4 VA	230 V ± 20 %
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Measuring Range	0-1.2 In, 0-1.2 Un																																																			
Overload (continuous)	1.2 x Un, 2 x In																																																			
Burden	10 kΩ/mV for Voltage 100 mV for Current																																																			
Bi-directional Inputs	-50/0/50 mV DC to -300/0/300 V DC																																																			

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

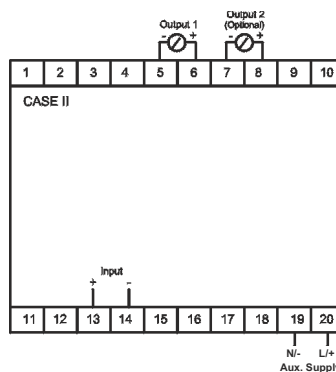
- Other Auxiliary Power Supplies available subject to technical feasibility

Dimension

DIN Series : ● Case Size II

Note : ● For Details refer General & Technical Specifications Page

Connection Diagram



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.)		
Span Adjustment	± 10% of Span (min.)		
Response Time	< 250 ms for 0 to 90% of Output < 1 s for 0 to 90% of Output for PF		
Output Ripple	< 0.5% of Full Scale	Impulse Test	5kV, 1.2 / 50 μS
Compliance Voltage	12VDC (max.)	Casing	DIN Series Flame Retardant, Polycarbonate (UL 94V-0) Self Extinguishing, Non Drip, DIN Rail cum Wall Mounting Casing
Overload - Continuous	Voltage : 1.2 x Un Current : 2 x In		
Overload - Short Duration (1 sec.)	Voltage : 2 x Un Current : 20 x In	Applicable Standards	IEC 688 / EN 60688 EN 61010-1 EN 61326-1 IS12784 (Part-1)1989 Electrical Measuring Transducers for converting AC Electrical Quantities to Analog or Digital Signals Safety requirements for Electrical Equipment for Measurement Control & Laboratory use Electrical Equipment for Measurement Control & Laboratory use - EMC requirements Electrical Measuring Transducers for converting AC Electrical Quantities into DC Electrical Quantities : General Purpose Transducer
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)

