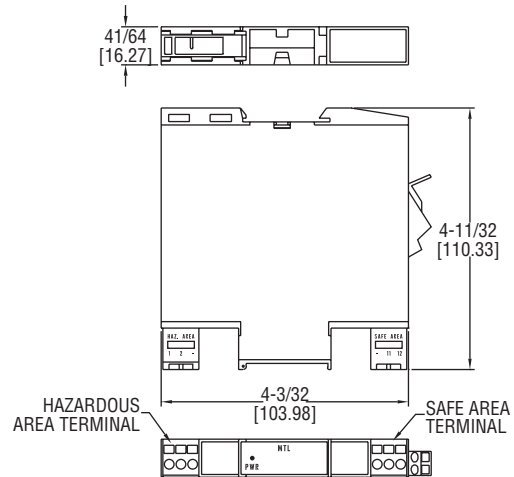


GALVANIC BARRIER

Intrinsically Safe Isolators for Hazardous Locations



MTL5041



The **SERIES MTL5041/5045** Galvanic Barrier provides intrinsically safe isolation for communication with Dwyer® transmitters approved for use in hazardous areas. This galvanic barrier eliminates the need for a high integrity earth ground required when using shunt type diode type safety barriers. DIN rail mounting and plug-in signal and power connectors simplify installation and maintenance.

FEATURES/BENEFITS

- Designed to mount on most standard DIN rails
- Approved for use in hazardous areas

APPLICATIONS

- Electrically isolates pressure and level transmitters from unregulated circuits for intrinsically safe applications

COMPATIBLE MODELS: 637, 638, 608, 2700, 2800, 2900, SBLTX, PBLTX, IS626

Model	Approval	Dwyer Series
MTL5041	FM for class I, II, III; div. 1 groups C, D, F, G	638
MTL5041	UL for class I; div. 1 groups A, B, C, D class II div. 1 groups E, F, G class III div 1	IS626, SBLTX, PBLTX
MTL5041	FM for class I, II, III; div. 1 groups B, C, D, E, F, G	637
MTL5041	FM for class I, II, III; div. 1 groups A, B, C, D, E, F, G	608
MTL5045	FM for class I, II, III; div. 1 groups C, D, E, F, G	2900
MTL5045	FM for class I, II, III; div. 1 groups C, D, E, F, G	2700/2800

MODEL CHART

Model	FM			BASEEFA (ATEX)			
	Group	µF	mH	Group	µF	mH	µH/Ω
MTL5041/5045	A & B	0.13	4.2	IIC	0.083	3.05	55
	C	0.30	12.6	IIB	0.85	9.15	210
	D	1.04	33.6	IIA	2.15	244	444

Region (Authority)	Standard	Approved For	Certificate/ File no.
USA (FM) (UL)	3600, 3610 entity 3611, 3810 UL913 UL1604	AIS/II,III/1/Entity ABCDEFG-SCI-942; NI/II/@/ABCD/T4 [I/O] AEx[ia]IIC-SCI-942 Entity; NI/1/2/IIC/T4; Ta=140°F (60°C)	3010737
Canada (CSA)	CAN/CSA E60070, IEC60079, C22.2	Class I, Div.2, Gps A, B, C, D; Ex nA [ia] IIC T4 Class I, Xone 2, Aex nA IIC T4	1345550
UK (BASEEFA)	EN 50014, EN 50020	EEx ia IIC	BAS01ATEX7217
UK (BASEEFA) Systems	EN 50039	EEx ia IIC	Ex01E2219

SPECIFICATIONS

Hazardous Area Input: Signal range: 0 to 24 mA (including over-range); Transmitter voltage: 16.5 V at 20 mA.
Safe Area Output: Signal range: 4 to 20 mA; Safe-area load resistance: 0 to 1 kΩ; Safe-area output resistance: > 2 MΩ.
Power Requirement: 20 to 35 VDC.
Response Time: Settles to within 10% of final value within 250 µs.
Current Consumption (20 mA signal): 70 mA at 24 VDC; 85 mA at 20 VDC; 55 mA at 35 VDC.
Maximum Power Dissipation (20 mA signal): 1.2 W at 24 VDC.
Isolation: 250 V RMS between input, output and power supply terminals.
Transfer Accuracy at 68°F (20°C): Better than 20 µA (typically 5 µA).
LED Indicator: Green: Power indication.
Temperature Limits: Operating: -4 to 140°F (-20 to 60°C); Storage: -40 to 176°F (-40 to 80°C).
Temperature Drift: <1 µA/°C.
Humidity: 5 to 95% RH.
Mounting: 1.4" (35 mm) top hat rail to: EN 50022-35 x 7.5; BS 5584; 35 x 27 x 7.3 DIN 46277.
Terminals: Accommodate up to 2.5 mm2 stranded or single-core.
Safety Description: 28 V, 300 Ω, 93 mA; Um=250 RMS or DC.
Weight: 3.9 oz (110 g).
Agency Approvals: See table.

MODEL CHART

Model	Description
MTL5041	Galvanic barrier
MTL5045	Galvanic barrier

ACCESSORY

Model	Description
A-360	Aluminum DIN rail 1 m