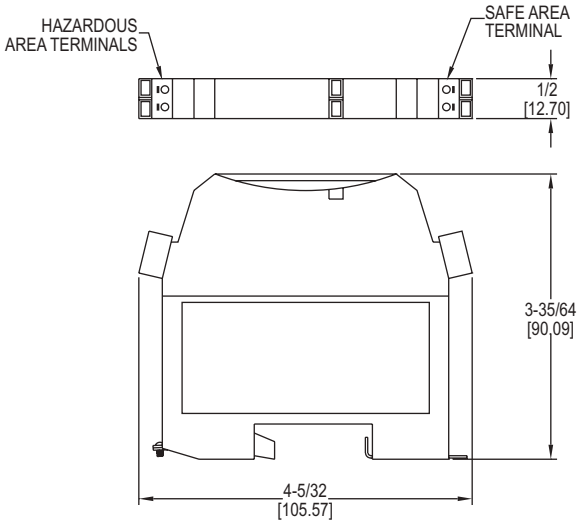
Dwyer

SERIES MTL7706/7787

ZENER BARRIERS

Intrinsically Safe Barriers for Hazardous Locations

MTL7787



The **Series MTL7706/7787 Zener Barriers** are an intrinsically safe shunt-diode barrier that can be used to communicate with and provide isolations for certain Dwyer® transmitters approved for use in hazardous areas. These barriers limit the amount of energy allowed to pass into the hazardous area, which inhibit ignition in flammable atmospheres.

BENEFITS/FEATURES

- Approved for use in hazardous areas

APPLICATIONS

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

SPECIFICATIONS

Transmitter Voltage: 16.2 V at 20 mA with 250 Ω load (negative w.r.t. earth); 11.0 V at 20 mA with 500 Ω load (negative w.r.t. earth).
Safe Area Output: 4-20 mA.
Load Resistance: 0 to 500 Ω.
Power Requirement: 20-35 VDC w.r.t. earth.
Accuracy: ±2 µA under all conditions.
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).
Humidity: 5 to 95% RH.
Terminals: Accommodate up to 2.5 mm² stranded or single-core.
Safety Description: 28 µV, 300 Ω, 93 mA.
Weight: 4.9 oz (140 g).
Agency Approvals: See table.

COMPATIBLE MODELS: 637, 608, SBLTX, PBLTX, IS626

Model	Approval	Dwyer Series
MTL7706	UL for class I; div. 1 groups A, B, C, D CL II; div. 1 groups E, F, G; CL III div. 1	IS626, SBLTX, PBLTX
MTL7706	FM for class I, II, III; div. 1 groups B, C, D, E, F, G	637
MTL7706	FM for class I, II, III; div. 1 groups A, B, C, D, E, F, G	608

Note: Compatible models: 637, 608, SBLTX, PBLTX, IS626.

MODEL CHART

Model	Description
MTL7706	Zener barrier
MTL7787	Zener barrier

ACCESSORIES

Model	Description
A-360	Aluminum DIN rail 1 m

MODEL CHART

	FM			BASEEFA (ATEX)		
Model	Group	µF	mH	Group	µF	mH
MTL7706	A & B	0.083	4.2	IIC	0.083	4.2
MTL7787	A & B	0.083	3.05	IIC	0.083	3.05

Region (Authority)	Standard	Approved For	Certificate/File no.
USA (FM) (UL)	3600, 3610 entity 3611, 3810 UL698, UL913 UL1604	AIS/I,II,III/1/Entity ABCDEFG-SCI-942; NI/I/@/ABCD/T4 [I/0] 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