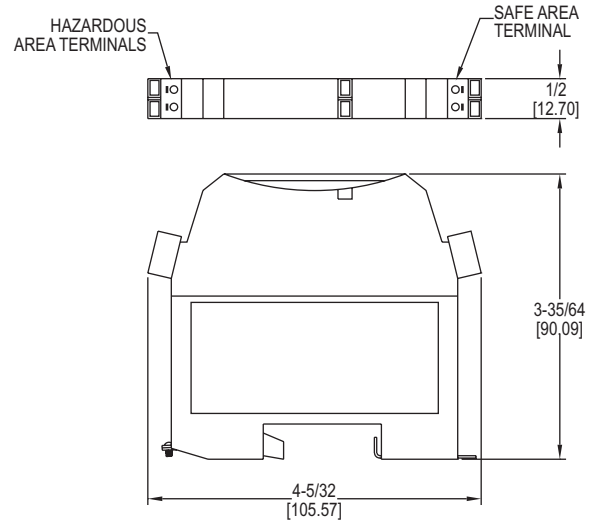


ZENER BARRIER

Intrinsically Safe Barriers for Hazardous Locations



MTL7787



The **SERIES MTL7706/7787** Zener Barrier is 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.

FEATURES/BENEFITS

- Approved for use in hazardous areas

APPLICATIONS

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

| 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 | FM | | | BASEEFA (ATEX) | | |
| | 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/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 | |
|-----------------------------|---|
| 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 to 20 mA. |
| Load Resistance: | 0 to 500 Ω. |
| Power Requirement: | 20 to 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. |

| MODEL CHART | |
|-------------|---------------|
| Model | Description |
| MTL7706 | Zener barrier |
| MTL7787 | Zener barrier |

| ACCESSORIES | |
|-------------|-----------------------|
| Model | Description |
| A-360 | Aluminum DIN rail 1 m |