

Appendix 5 Hazardous (Classified) Location and Bliss Product Performance

| Hazardous (Classified) Locations Classifications and Definition | | | | Hazardous Area | | Gas and Dust Classification | | | | | |
|--|--|----------------|-----------|--|---|-----------------------------|---------|--------|--|-----------|--|
| NATIONAL ELECTRIC CODE (NEC) - CLASSIFICATION CHART (NEC 500,501,502,503) | | EU IEC | Japan JIS | Area Definition | Suitable BLISS Product | CLASS | USA NEC | EU IEC | Common Materials within Associated Class & Group Ratings | Japan JIS | Classification |
| CLASS | DIVISION | ZONE | ZONE | | | | GROUP | GROUP | | Gas Group | |
| CLASS 1 GAS | 1. HAZARD EXISTS Area where GASES or VAPORS are normally present. | Zone 0 | 0 | Area in which an explosive gas-air mixture is continuously present or present for long periods. | C1D2 C2D1 C2D2 C3D1 C3D2 A2066 R2066 S2066 U2066 B2101 L2101 N2101 C2101 B2141 L2141 N2141 B2161 L2161 N2161 B2182 | CLASS 1 | A | II C | Acetylene | 3 | 3a: Hydrogen 3b: Carbon disulphide 3c: Acetylene 3n: All vapors above |
| | | Zone 1 | 1 | Combustible or conductive dusts are present. Area in which an explosive gas-air mixture is likely to occur for short periods in normal operation. | | | B | | Hydrogen | | |
| | 2. POTENTIAL HAZARD Area where GASES or VAPORS are handled or stored, but are not normally confined or in closed container systems. | Zone 2 | 2 | Area in which an explosive gas-air mixture is not likely to occur, and if it occurs it will only exist for a very short time due to an abnormal condition. | | | C | II B | Ethylene | | |
| CLASS 2 DUSTS | 1. HAZARD EXISTS Area where combustible DUST is always present. | Zone 20 | | | | CLASS 2 | E | III C | Metal Dust, Aluminum, Magnesium, etc. | | |
| | | Zone 21 | | | | | F | III B | Carbon Black, Coal Dust Coke, Dust. | | |
| | 2. POTENTIAL HAZARD Area where combustible DUST is present in atmosphere. | Zone 22 | | | | | G | | Flour, Grain. | | |
| CLASS 3 FIBERS | 1. PRODUCTION AREAS. 2. HANDLING OR STORAGE AREAS. | Not classified | | | | CLASS 3 | | III A | Atmospheres with Textile, Wood or Synthetic Fibers. | | |

| Classification | Code | Classification | Code | Classification | Code | | |
|-------------------------|------------------|----------------|---------|---------------------------|------------------|------------------|----|
| Type of Explosion-proof | Flameproof | d | Class 1 | Auto-ignition Temperature | Auto-ignition G1 | G1 | |
| | Oil Immersion | o | | | Class 2 | Auto-ignition G2 | G2 |
| | Pressurized | p | Class 3 | | Auto-ignition G3 | G3 | |
| | Intrinsic safety | i | | | 3a | Auto-ignition G4 | G4 |
| | Special | s | | | 3b | Auto-ignition G5 | G5 |
| | | | | | 3c | Auto-ignition G6 | G6 |
| | | 3n | | | | | |

Temperature Classification

| JIS | NEC/ IEC | Ignition Temperature |
|-----|----------|----------------------|
| G1 | T1 | Over 450°C |
| G2 | T2 | Over 300°C to 450°C |
| G3 | T3 | Over 200°C to 300°C |
| G4 | T4 | Over 135°C to 200°C |
| G5 | T5 | Over 100°C to 135°C |
| G6 | T6 | Over 85°C to 100°C |