

## 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	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	2	
							D	II A	Propane	1	
CLASS 2  DUSTS	1. HAZARD EXISTS Area where combustible DUST is always present.	Zone 20			A2066 R2066 S2066 U2066 B2101 L2101 N2101 C2101 B2141 L2141 N2141 B2161 L2161 N2161 B2182	CLASS 2	E	IIIC	Metal Dust, Aluminum, Magnesium, etc.		
		Zone 21					F	IIIB	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.	Not classified				CLASS 3		IIIA	Atmospheres with Textile, Wood or Synthetic Fibers.		
	2. HANDLING OR STORAGE AREAS.										

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

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