

XP	Explosionproof
IS	Intrinsically Safe Apparatus
AIS	Associated Apparatus with Intrinsically
Safe	Connections
ANI	Associated Nonincendive Field Wiring Circuit
PX, PY, PZ	Pressurized
APX, APY, APZ	Associated Pressurization Systems/ Components
NI	Nonincendive Apparatus and Nonincendive
Field	Wiring Apparatus
DIP	Dust-Ignitionproof
S	Special Protection

Class I : Gases, Vapours, Liquid
 Class II : Dust
 Class III: Fibers, Flyings

NEC 500	ATEX (NEC 505)
Class I/Group A	> Group IIC (Acetylen)
Class I/Group B	> Group IIB + H2 (Hydrogen)
Class I/Group C	> Group IIB (Ethylene)
Class I/Group D	> Group IIA (Propane)
Class II/Group E	> None (Metal Dust)
Class II/Group F	> None (Coal Dust)
Class II/Group G	> None (Grain Dust)
Class III	> None (Fibers)

i.roc 627	I.S.	Class I Div 1		Group A-D	T4	
Zone		0	1			
i.roc 620			II 2 G	EEx ia	IIC	T4

Temperature Class		
	Maximum Surface Temperature	
T1	450°C	T3A 180°C
T2	300°C	T3B 165°C
T2A	280°C	T3C 160°C
T2B	260°C	T4 135°C
T2C	230°C	T4A 120°C
T2D	215°C	T5 100°C
T3	200°C	T6 85°C

Temperature Classes:
 (Max. temperature of a surface that gas can penetrate in the event of device failure. Should not be used in dust-ex-markings.)

T1 = 450°C
T2 = 300°C
T3 = 200°C
T4 = 135°C
T5 = 100°C
T6 = 85°C

Explosion Group
 (Data only for devices used in areas rendered potentially explosive by gas)

I = Methane (mining)
IIA = Propane
IIB = Ethylene
IIC = Most dangerous group (e.g. hydrogen)

Category
 1 = Can be used in Zones 0 or 20
 2 = Can be used in Zones 1 or 21
 3 = Can be used in Zones 2 or 22
M1 = Mining
 (In case of firedamp, continuation of operation is possible)
M2 = Mining
 (Must be switched off in case of firedamp)

ELEPHANT
 LIFTING PRODUCTS™

Atmosphere
G = Gas
D = Dust
 (Mining-no details)

Device Group
I = Mining
II = all other explosive areas

EEx
 Certified to the CENELEC standard

Types of Ignition Protection:

- o = Oil immersion
- p = Pressurisation
- q = Powder filling
- d = Pressure-proof housing
- e = Increased safety
- ia = Intrinsic safety
(required for Zone 0*)
***depends on device category**
- ib = Intrinsic safety
(adequate for Zone I (+2))
- m = Encapsulation
- s = Special protection
- n = Normal operation under normal conditions
(for Zone 2 only)
- nA = Non-sparking
- nC = Protected contacts
- nR = Vapour-proof housing
- nL = Limited energy
- nP = Simplified