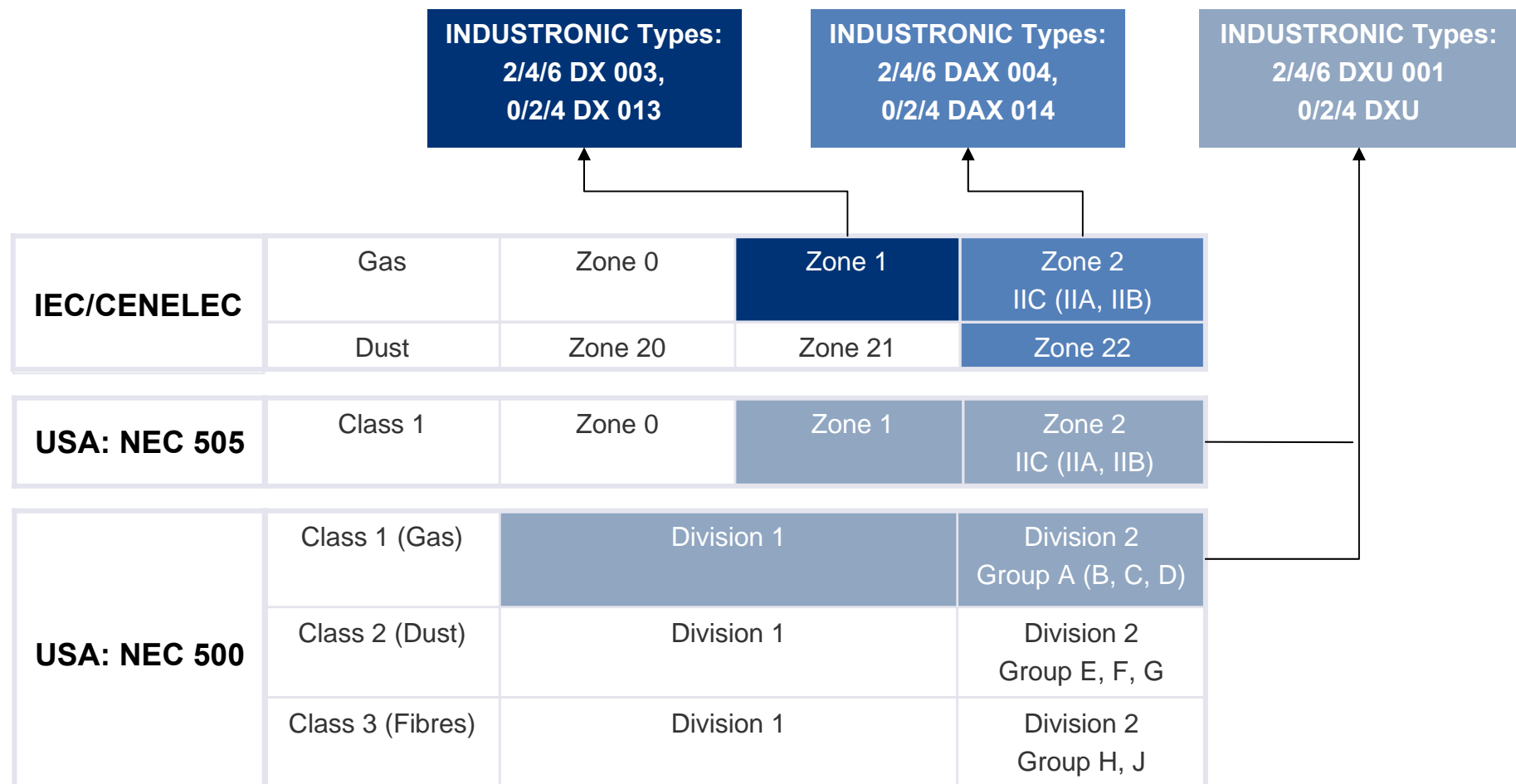




Information about ATEX and INDUSTRIAL Intercom Stations

Overview of Ex-Stations for Different Zones

Overview of Ex-stations for Different Zones

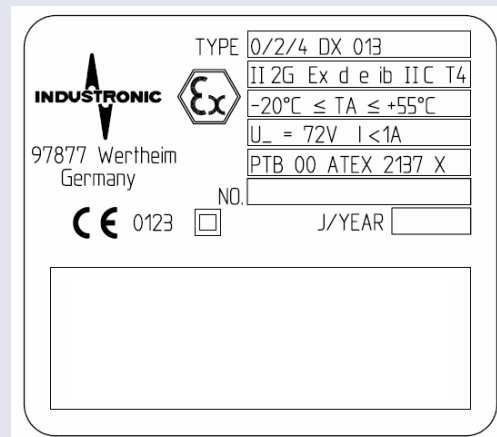


Ex-Station for Zone 1

Area Classification

Zone 1

Zone Classification of Hazardous Areas			
	Flammable Material Present Continuously	Flammable Material Present Likely	Flammable Material Present Abnormally
IEC/CENELEC	Zone 0	Zone 1	Zone 2




Explosion-proof Intercom Station
Type of Protection:


Ex d e ib IIC T4

**Permitted Use according to
 IEC; CENELEC**

Zone 1 (and Zone 2)

ATEX Certification according to EC Directive 94/9/EC Zone 1



INDUSTRONIC  TYPE 0/2/4 DX 013

II 2G Ex d e ib IIC T4

-20°C ≤ TA ≤ +55°C

U_n = 72V I < 1A

PTB 00 ATEX 2137 X

97877 Wertheim Germany

CE 0123 NO. J/YEAR

➔ **Explosion-proof Intercom Station:
ATEX Certification**

II 2G

Areas	Classification of explosion hazard Areas	Required marking for electrical equipment	
		Device Group	Category
Underground	Operation at such Areas	I	M1
Underground	Shutdown at such Areas	I	M2 or M1
Other	Zone 0	II	1G
Other	Zone 1	II	2G or 1G
Other	Zone 2	II	3G or as 2G
Other	Zone 20	II	1D
Other	Zone 21	II	2D or 1D
Other	Zone 22	II	3D or as 2D

Group I = Underground
Group II = Other Areas

Category M = Underground Use
Category G = Gases, Mists or Vapours

Category D = Dust

Type of Protection

Explosion Protected

Ex d e ib IIC

T4

Gas Grouping (IEC; CENELEC; NEC505)	
Group	Typical Gas
I	Methane
II A	Propane
II B	Ethylene
II C	Hydrogen

Group I : for mining
Group II : for surface industrial applications

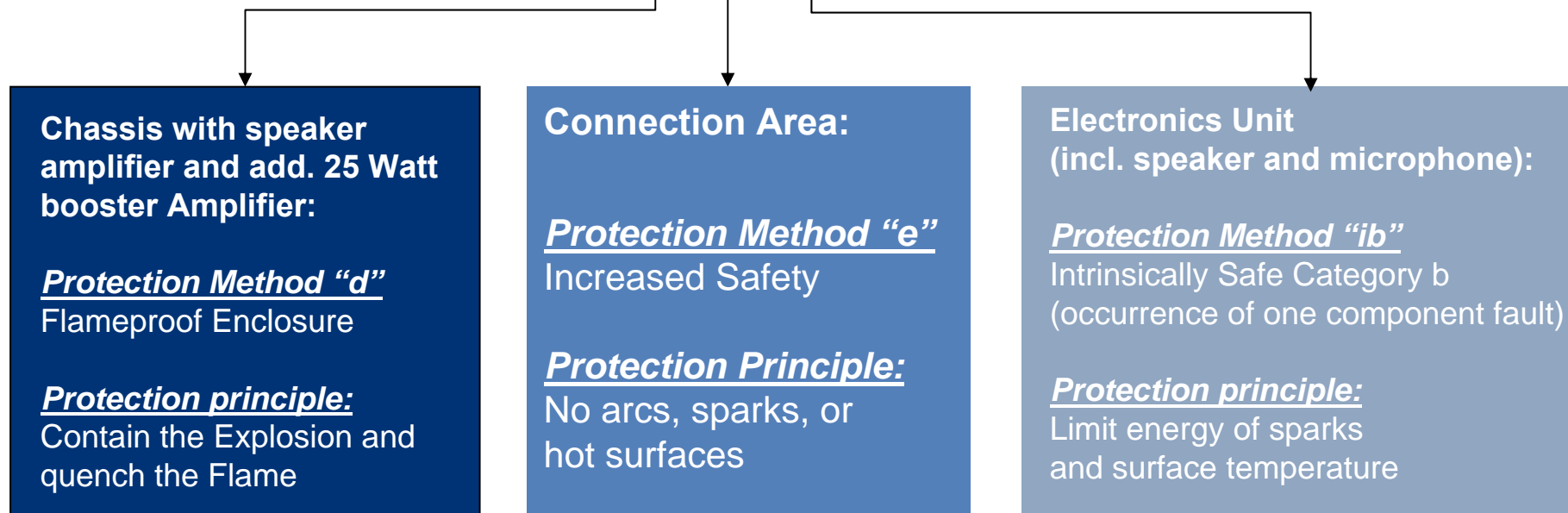
Zone 1

Selection of Apparatus to Zone of Risk					
Protection Concepts Zone 0		Protection Concepts Zone 1		Protection Concepts Zone 2	
Method of Protection	Code	Method of Protection	Code	Method of Protection	Code
Intrinsic Safety (eigensicher) Occurrence of 2 components fault	Ex „ia“	Flameproof Enclosure (druckfeste Kapselung)	Ex „d“	Non sparking	Ex „n“
Special certified for Use in Zone 0	Ex „s“	Increased Safety (erhöhte Sicherheit)	Ex „e“		
		Intrinsic Safety (eigensicher)	Ex „ia“ Ex „ib“		
		Pressurized Apparatus (Überdruckkapselung)	Ex „p“		
		Encapsulation (Vergusskapselung)	Ex „m“		
		Special certified for Use in Zone 1	Ex „s“		
		Oil immersion (Ölkapselung)	Ex „o“		
		Powder Filled (Sandkapselung)	Ex „q“		

Temperatures Class - Ignition Temperature (IEC; CENELEC; NEC505)		
Temperature Code	Max. Surface Temperature	Ignition Temperature
T1	450°C	>450°C
T2	300°C	>300.....450°C
T3	200°C	>200.....300°C
T4	135°C	>135..... 200°C
T5	100°C	>100.....135°C
T6	85°C	>85.....100°C

Protection Methods

Ex **d** **e** **ib** IIC T4

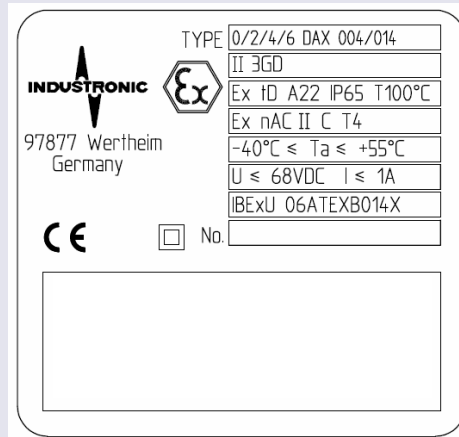


Ex-Station for Zone 2

Area Classification

Zone 2 (Gas)

Zone Classification of Hazardous Areas			
	Flammable Material Present Continuously	Flammable Material Present Likely	Flammable Material Present Abnormally
IEC/CENELEC	Zone 0	Zone 1	Zone 2 IIC (IIA, IIB)




Explosion-proof Intercom Station
Type of Protection:



Ex nAC IIC T4


**Permitted Use according to
 IEC; CENELEC**

Zone 2

ATEX Certification according to EC Directive 94/9/EC Zone 2



		TYPE 0/2/4/6 DAX 004/014
		II 3GD
		Ex tD A22 IP65 T100°C
		Ex nAC II C T4
		-40°C ≤ Ta ≤ +55°C
		U ≤ 68VDC I ≤ 1A
		IBExU 06ATEXB014X
CE		<input type="checkbox"/> No.



**Explosion-proof Intercom Station:
ATEX Certification**

II 3GD

Areas	Classification of explosion hazard areas	Required marking for electrical equipment	
		Device Group	Category
Underground	Operation at such Areas	I	M1
Underground	Shutdown n at such Areas	I	M2 or M1
Other	Zone 0	II	1G
Other	Zone 1	II	2G or 1G
Other	Zone 2	II	3G or as 2G
Other	Zone 20	II	1D
Other	Zone 21	II	2D or 1D
other	Zone 22	II	3D or as 2D

Group I = Underground
Group II = Other areas

Category M = Underground Use
Category G = Gases, Mists or Vapours

Category D = Dust

Type of Protection

Explosion Protected

Ex

nAC

IIC

T4

Gas Grouping (IEC; CENELEC; NEC505)	
Group	Typical Gas
I	Methane
II A	Propane
II B	Ethylene
II C	Hydrogen

Group I : for mining
Group II : for surface industrial applications

Zone 2

Selection of Apparatus to Zone of Risk					
Protection Concepts Zone 0		Protection Concepts Zone 1		Protection Concepts Zone 2	
Method of Protection	Code	Method of Protection	Code	Method of Protection	Code
Intrinsic Safety (eigensicher) Occurrence of 2 components fault	Ex „ia“	Flameproof enclosure (druckfeste Kapselung)	Ex „d“	Non sparking	nAC Ex „n“
Special certified for Use in Zone 0	Ex „s“	Increased Safety (erhöhte Sicherheit)	Ex „e“		
		Intrinsic Safety (eigensicher)	Ex „ia“ Ex „ib“		
		Pressurized Apparatus (Überdruckkapselung)	Ex „p“		
		Encapsulation (Vergusskapselung)	Ex „m“		
		Special Certified for use in Zone 1	Ex „s“		
		Oil immersion (Ölkapselung)	Ex „o“		
		Powder Filled (Sandkapselung)	Ex „q“		

Temperatures Class - Ignition Temperature (IEC; CENELEC; NEC505)		
Temperature Code	Max. Surface Temperature	Ignition Temperature
T1	450°C	>450°C
T2	300°C	>300....450°C
T3	200°C	>200.....300°C
T4	135°C	>135..... 200°C
T5	100°C	>100.....135°C
T6	85°C	>85.....100°C

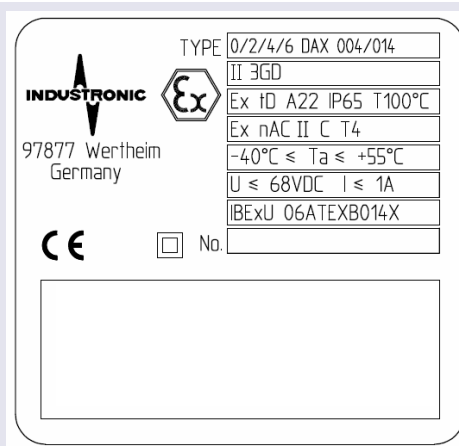
nAC = No arcs or hot surfaces, sparks suitably protected

Ex-Station for Zone 22

Area Classification

Zone 22 (Dust)

Zone Classification of Hazardous Areas			
	Flammable Material Present Continuously	Flammable Material Present Likely	Flammable Material Present Abnormally
IEC/CENELEC (Dust)	Zone 20 - Dust	Zone 21 - Dust	Zone 22 - Dust




Explosion-proof Intercom Station
Type of Protection:

Ex tD A22 IP 65 T100 °C

**Permitted Use according to
 IEC; CENELEC**

Zone 22

ATEX Certification according to EC Directive 94/9/EC **Zone 22**



INDUSTRONIC TYPE 0/2/4/6 DAX 004/014

II 3GD

Ex ID A22 IP65 T100°C

Ex nAC II C T4

-40°C ≤ Ta ≤ +55°C

U ≤ 68VDC I ≤ 1A

IBExU 06ATEXB014X

97877 Wertheim
Germany

CE No. _____

➔

Explosion-proof Intercom Station: ATEX CERTIFICATION

II 3GD

Areas	Classification of explosion hazard areas	Required marking for electrical equipment	
		Device Group	Category
Underground	Operation at such Areas	I	M1
Underground	Shutdown n at such Areas	I	M2 or M1
Other	Zone 0	II	1G
Other	Zone 1	II	2G or 1G
Other	Zone 2	II	3G or as 2G
Other	Zone 20	II	1D
Other	Zone 21	II	2D or 1D
other	Zone 22	II	3D or as 2D

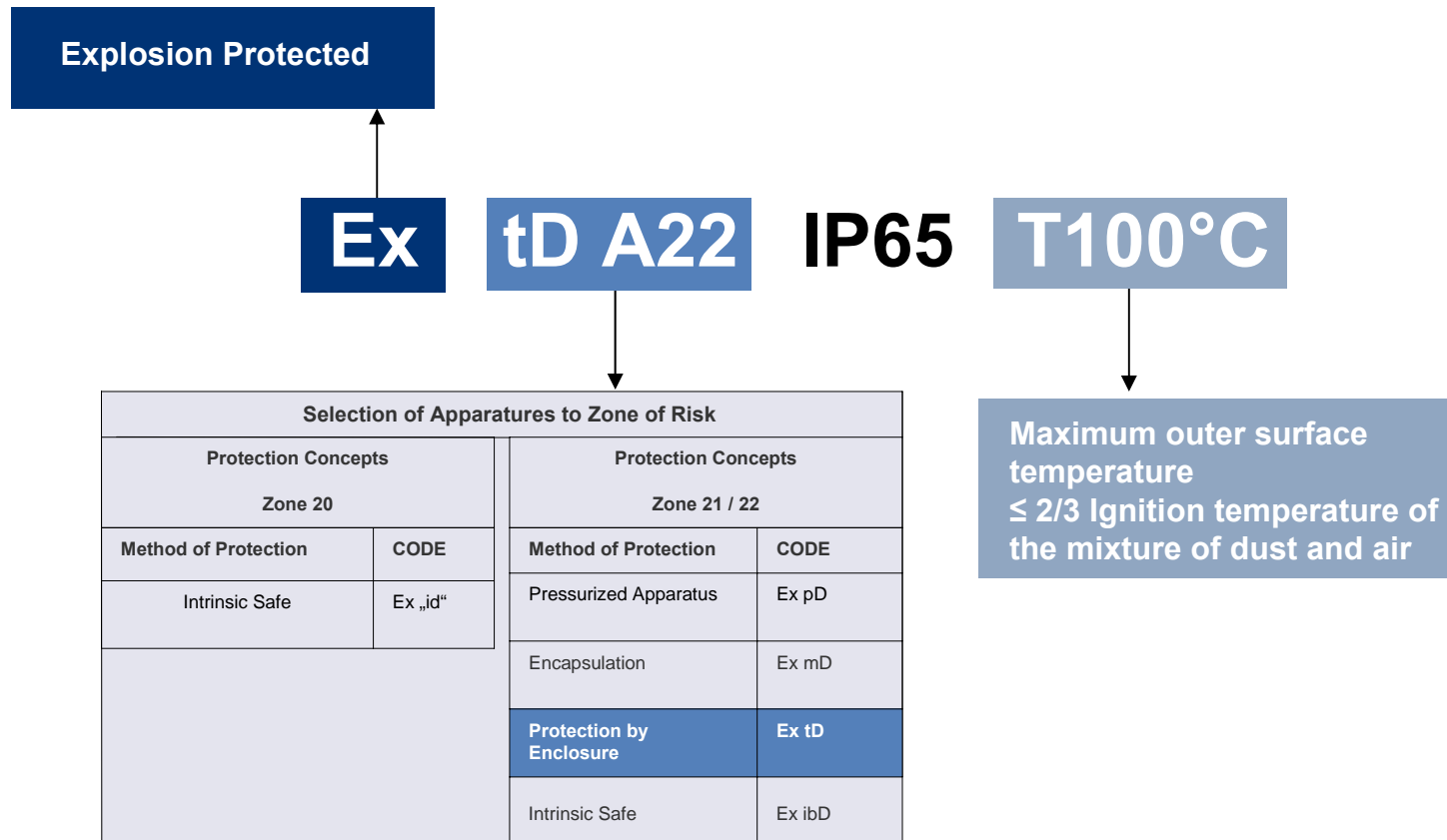
Group I = Underground
Group II = Other Areas

Category M = Underground Use
Category G = Gases, Mists or Vapours

Category D = Dust

Type of Protection


Zone 22



Ex-Station for USA and Canada according to NEC

Area Classification

Zone Classification of Hazardous Areas			
	Flammable Material Present Continuously	Flammable Material Present Likely	Flammable Material Present Abnormally
USA: NEC 505 Class I (gas)	Zone 0	Zone 1	Zone 2
USA: NEC 500 Class I (gas)	Division 1		Division 2



TYPE 0/2/4/6 DXU 001/011

CLASS I Div. 1 GROUPS A,B,C,D T4

Intrinsically safe

Sécurité intrinsèque


CLASS I, Zone 1, Group IIC, T4

48V to 70V DC, 1A Max.

Relay: 70V DC, 0.5A, 30W Max.

-40°C to +55°C -40°F to +131°F

IP65



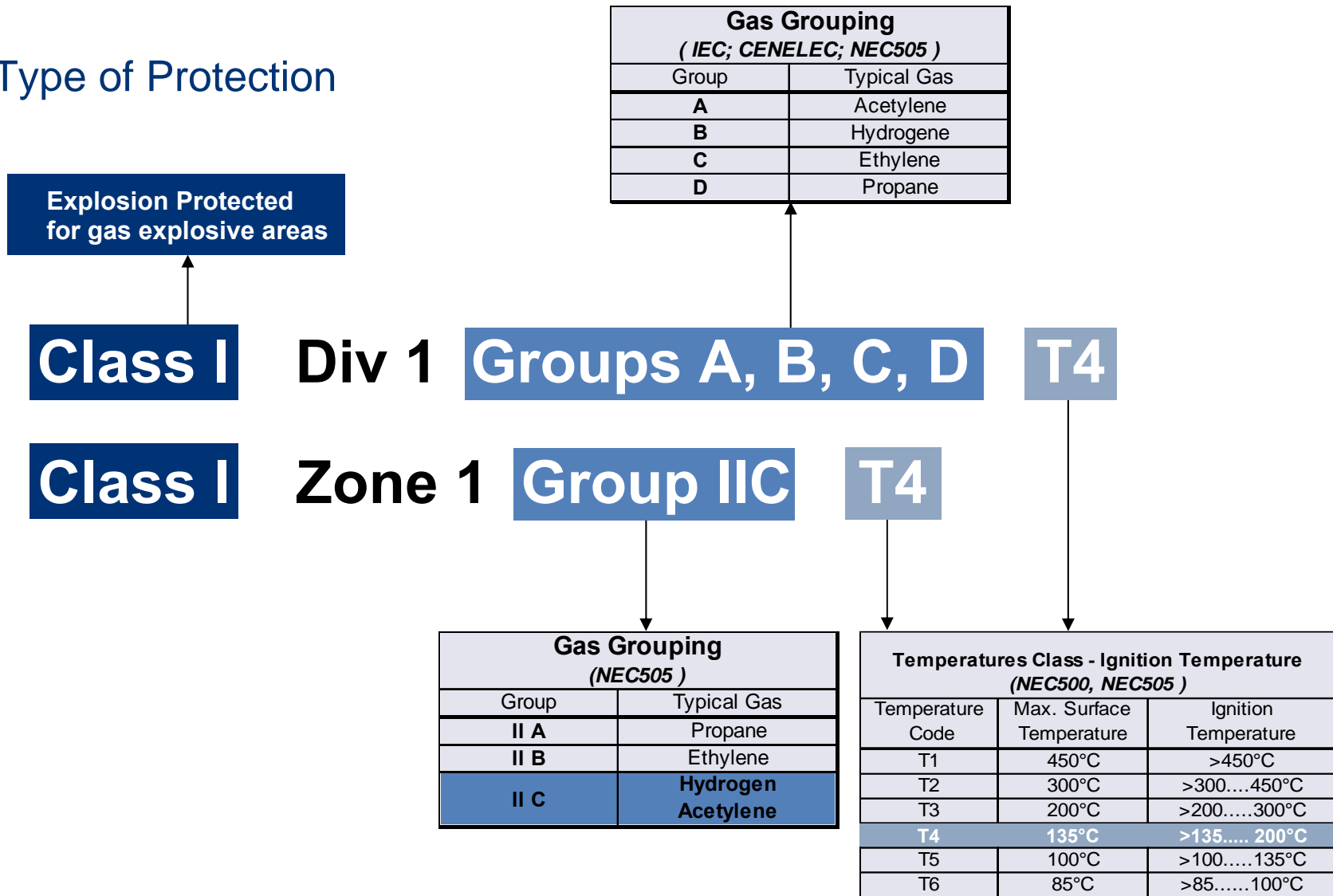
Explosion-proof Intercom Station

Class I, Div 1, Groups A, B, C, D

Permitted Use according to NEC 500 and NEC 505

Division 1 and 2, Zone 1 and Zone 2

Type of Protection



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