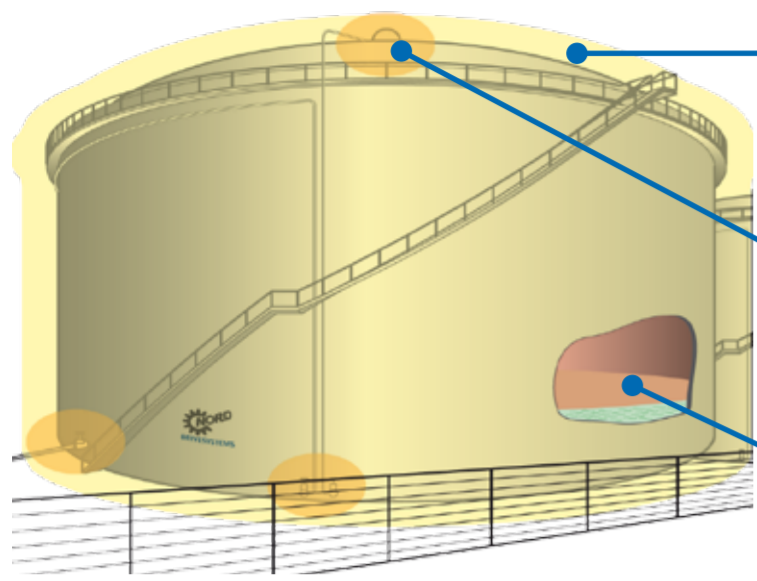


EPL IEC 60067-0	Device category 94/9/EC	Can be used in zones	Avoidance of sources of ignition
Gc	3G	2	In normal operation
Gb	2G	1, 2	Including with normal malfunctions
Ga	1G	0, 1, 2	Even with rare malfunctions



Zone 2:
Rare occurrence of explosive atmospheres

Zone 1:
Occasional occurrence of explosive atmospheres

Zone 0:
Constant or frequent occurrence of explosive atmospheres



ATEX Gas labelling for motors

Labelling and categorisation of explosive environment									
Type of material	Presence of flammable material	Categorisation of explosive environment	Labelling of equipment			EPL - Equipment protection level			
			Equipment group	Device category					
Gas (vapours, mist, etc.)	Continuously or frequently present	Zone 0	II	1G	2G	3G	Ga	Gb	Gc
	Occasionally present	Zone 1	II						
	Rarely present (short periods)	Zone 2	II						

II 2G Exe IIC T3 Gb

Type of ignition protection for electrical devices				
Designation	Type of ignition protection	Identification	Use in zone	Standard
Pressurised encapsulation	Transfer of an explosion to the outside is ruled out	de or d	1 and 2	EN60079-1
Increased safety	Avoidance of high temperatures and sparks	e	1 and 2	EN60079-7
Non Sparking	Non-sparking equipment	n	2	EN60079-15

Explosion groups and temperature classes						
Explosion group Gas		Examples (not complete) for gases, depending on explosion group and temperature class				
IIA	IIB	IIC	Acetone, ethane, benzene, methane, propane	Ethyl alcohol, n-butane	Heating oil, petrol and diesel fuels	Acetaldehyde, ethyl ether
			Town gas (natural gas)	Ethylene	Hydrogen sulphide	
			Hydrogen	Acetylene		
			T1 <450°C			
			T2 <300°C			
			T3 <200°C			
			T4 <135°C			



ATEX Gas labelling for gear units

Labelling and categorisation of explosive environment				
Type of material	Presence of flammable material	Categorisation of explosive environment	Labelling of equipment	
			Equipment group	Device category
Gas (vapours, mist, etc.)	Continuously or frequently present	Zone 0	II	1G
	Occasionally present	Zone 1	II	
	Rarely present (short periods)	Zone 2	II	

II 2G c IIC T4 X

Type of ignition protection for mechanical devices				
Protection principle	Type of ignition protection	Identification	Use in zone	Standard
Constructional safety	The design of the equipment prevents sparks and high temperatures	c	1 and 2	EN13463-5

Explosion groups and temperature classes						
Explosion group Gas		Examples (not complete) for gases, depending on explosion group and temperature class				
IIA	IIB	IIC	Acetone, ethane, benzene, methane, propane	Ethyl alcohol, n-butane	Heating oil, petrol and diesel fuels	Acetaldehyde, ethyl ether
			Town gas (natural gas)	Ethylene	Hydrogen sulphide	
			Hydrogen	Acetylene		
			T1 <450°C			
			T2 <300°C			
			T3 <200°C			
			T4 <135°C			

Additional information	
X	Note any special conditions or restrictions - refer to the documentation

WARNING! Please note the relevant standards and directives.

This poster / manual contains excerpts and information from the European standards and directives for explosion protection. It is specially tailored to NORD DRIVESYSTEMS products and does not claim to be complete. Knowledge of this document does not release the user from the obligation for detailed study of and compliance with all relevant standards and directives.

NORD product range (gas)

Please refer to the relevant catalogue for details of the available range from NORD. At present, NORD does not supply solutions for use in Zone 0.



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