



Explosion safe equipment for gases and vapors to Directive 2014/34/EU



Ignition protection categories	Safety principle	Schematic description	Application	Use in zone	Marking / Norm
General requirements	-	-	All applications	-	EN 60079-0 IEC 60079-0
Pressurized encapsulation d	Transmission of explosion to outside is impossible		DC-motors Terminal boxes	1 or 2	II 2G Ex d IIC T3...T6 Gb EN 60079-1 IEC 60079-1
Increased safety e	Avoidance of sparks and inadmissible temperatures		Terminal boxes	1 or 2	Ex e II Gb EN 60079-7 IEC 60079-7

0044 **II** **2G** **Ex d (e)** **IIC** **T4** **Gb** **BVS** **13 ATEX ...** **X**

Code number of the notified body for certification of the QM-system

Notified body for certification of the EC type examination certificate

Conditions in potentially explosive areas				
Combustible substances	Occurrence of the combustible substance in the Ex-area	Classification of potentially explosive area	Required marking of the usable equipment	
			Equipment group	Equipment category
Gases and vapors	Occasional occurrence	Zone 1	II	2G or 1G
	Likely not to happen, if though only seldom or short term	Zone 2	II	2G or 3G

Classification of the gases and vapors						
Explosion group	Gases and vapors (Examples)					
	IIA	Acetone Ammonia Methane Ethane Propane	Ethyl alcohol Cyclohexan n-Butane	Gasoline Kerosene Heating oils n-Hexane	Acetaldehyde	
IIB	City gas Acryl nitrile	Ethylene Ethylene oxide	Ethylene glycol Hydrogen sulfide	Ethyl ether		
IIC	Hydrogen	Acetylen				Carbon disulfide
	T1 ≤ 450 °C	T2 ≤ 300 °C	T3 ≤ 200 °C	T4 ≤ 135 °C	T5 ≤ 100 °C	T6 ≤ 85 °C

Use of the equipment	
Conditions	Marking
Equipment may be used without restrictions	-
Special conditions for use must be followed	X
Ex-equipment part with part certificate not usable standalone; CE-conformity is certified when integrated in complete equipment	U

Explosion group IIB includes explosion group IIA
 Explosion group IIC includes explosion group IIB and IIA.

ATTENTION!

Motors of equipment category **3G** are manufactured according to guide line 2014/34/EU on the manufacturer's own responsibility. There is **no** certification issued for these motors by a notified body. The compliance with guide line 2014/34/EU is confirmed by the manufacturer's declaration of conformity.

The information is an excerpt from the valid technical standards and regulations as of today.

Stand 15.04.2016

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