



国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation

Explosion Protection

Type of Protection
Gas Group
Temperature Class

IECEx Certificate No. (XXX:Certification Body)
Equipment Protection Levels
Ingress Protection

NEPSI Certificate Number
Maximun Surface Temperature
Ambient Range -20℃ to 40℃ unless stated on label

Electrical Parameters
Manufacturer Name and Address
ATEX Notified Body Identification No.
ATEX Certificate No. (XXX: Notified Body)

IECEx XXX 17.0001X
Ex d e. IIC T4 Gb
Ex tD A21 IP65 T85℃
Tamb -30℃ to + 50℃
ABC Co.,Ltd
Address
Type XYZ Transmitter
2017 s/n 1234
Serial No. and Year of Manufacture
Product Identification

GYJ17.0001X
24V dc
4-20mA
XXII 2GD
XXX17ATEX0001X
ATEX Coding
Type A Equipment and Zone Definition

CE
xxxx

组 别 Group	爆炸性气体温度组别 Temperature Class					
	T1	T2	T3	T4	T5	T6
I	甲烷 (methane)	/	/	/	/	/
IIA	乙烷 (ethane) 丙烷 (propane) 丙酮 (acetone) 苯乙烯 (styrene) 氯苯 (chlorobenzene) 甲苯 (toluene) 苯 (benzene) 氨 (ammonia) 一氧化碳 (carbon monoxide) 甲醛 (methanal)	丁烷 (butane) 甲醇 (methanol) 乙醇 (ethanol) 丙烯 (propylene) 氯乙烯 (vinyl chloride) 醋酸丁酯 (butyl acetate) 乙酸戊酯 (amyl acetate)	戊烷 (pentane) 己烷 (hexane) 庚烷 (heptane) 癸烷 (decane) 辛烷 (octane) 汽油 (gasoline) 氯丁烷 (butyl chloride)	乙醚 (aether) 三甲胺 (trimethylamine)		亚硝酸乙酯 (ethyl nitrite)
IIB	焦炉煤气 (coke oven gas) 环丙烷 (cyclopropane) 丙烯腈 (acrylonitrile)	环氧乙烷 (ethylene oxide) 2-环氧丙烷 (2- propylene oxide) 乙烯 (ethylene) 1,3-丁二烯 (1,3- butadiene)	二甲醚 (dimethyl ether) 硫化氢 (hydrogen sulfide) 四氢呋喃 (tetrahydrofuran) 丙烯醛 (acrolein)	四氟乙烯 (tetrafluoroethylene) 二乙醚 (diethylether)		
IIC	水煤气 (water gas) 氢气 (hydrogen)	乙炔 (acetylene)	/	/	二硫化碳 (carbon disulfide)	硝酸乙酯 (ethyl nitrate)
注：本表格为各组别常见介质，更多信息请参考GB 50058-2014标准附录D。 Note: Materials listed in this form are only common ones. Please refer to Annex D of GB50058-2014 for more information.						

危险区域定义 Definition of hazardous areas	中国、IEC、EN标准 (Zone)			
	气体 Gas	设备保护级别 (EPL)	粉尘 Dust	设备保护级别 (EPL)
正常情况连续出现 Continuously or long periods or frequently	0 区 Zone 0	Ga	20 区 Zone 20	Da
正常情况间断出现 Occasionally	1 区 Zone 1	Gb	21 区 Zone 21	Db
仅在异常时出现 Short period only	2 区 Zone 2	Gc	22 区 Zone 22	Dc

防爆型式 Type of protection	中国标准 Chinese standard	IEC标准 IEC standard	欧洲标准 (ATEX) EN standard	防爆型式符号 Ex marking	
				中国 China /欧洲 (ATEX)	IEC
爆炸性气体环境用电气设备 Explosive gas atmosphere Non-electrical equipment for explosive atmospheres	基本方法和要求 Basic method and requirements	GB25286.1	ISO/IEC 80079-36	EN 13463-1	/
	限流外壳型 Flow restricting enclosure	GB25286.2	/	EN 13463-2	fr
	隔爆外壳型 Flameproof enclosure	GB25286.3	/	EN 13463-3	d
	结构安全型 Constructional safety	GB25286.5	/	EN 13463-5	c
	控制点燃源型 Control of ignition source	GB25286.6	ISO/IEC 80079-37	EN 13463-6	b
	液浸型 Liquid immersion	GB25286.8	/	EN 13463-8	k

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				中国 China	IEC/欧洲 (ATEX)
可燃性粉尘环境 Combustible dust atmosphere	通用要求 General requirements	GB12476.1	IEC 60079-0	EN 60079-0	/
	本质安全型 Intrinsic safety	GB12476.4	IEC 60079-11	EN 60079-11	iaD, ibD [iaD], [ibD]
	外壳保护型 Protection by enclosures	GB12476.5	IEC 60079-31	EN 60079-31	tD
	浇封型 Protection "m"	GB12476.6	IEC 60079-18	EN 60079-18	maD, mbD
	正压型 Pressurized	GB12476.7	IEC 60079-2	EN 60079-2	pD

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				传统方式 Traditional	现有方式 Currently
爆炸性气体环境 Explosive gas atmosphere	通用要求 General requirements	GB3836.1	IEC 60079-0	EN 60079-0	/
	隔爆型 Flame-proof	GB3836.2	IEC 60079-1	EN 60079-1	d
	增安型 Increased safety	GB3836.3	IEC 60079-7	EN 60079-7	e
	本质安全型 Intrinsic safety	GB3836.4 GB3836.18 GB3836.19	IEC 60079-11 (设备) IEC 60079-25 (系统) IEC 60079-27 (FISCO)	EN 60079-11 (设备) EN 60079-25 (系统) EN 60079-27 (FISCO)	ia, ib, ic [ia],[ib],[ic]
	正压型 Pressurized	GB3836.5	IEC 60079-2	EN 60079-2	px, py, pz
	充油型 Oil-immersion	GB3836.6	IEC 60079-6	EN 60079-6	o
	充砂型 Powder filling	GB3836.7	IEC 60079-5	EN 60079-5	q
	n 型 Protection "n"	GB3836.8	IEC 60079-15	EN 60079-15	nA, nC, nR
	浇封型 Protection "m"	GB3836.9	IEC 60079-18	EN 60079-18	ma, mb, mc
	特殊保护型 Special protection "s"	/	IEC 60079-33	EN 60079-33	/
爆炸性粉尘环境 Explosive dust atmosphere	光辐射 Optical radiation	/	IEC 60079-28	EN 60079-28	/

设备保护级别 (EPL) (矿用设备) Equipment Protection Level (EPL) Mining	定义 Definition
Ma	正常运行、预期故障、罕见故障、气体突然出现且设备电均不会成为点燃源 No ignition: Normal operation, expected malfunctions, rare malfunctions, energized in the presence of an outbreak of gas
Mb	在气体突然出现至设备断电期间，正常运行、预期故障条件下均不会成为点燃源 No ignition: between an outbreak of gas and de-energized

温度组别 Temperature Class	气体引燃温度 Ignition Temperature t(℃)
T1	> 450
T2	300 < t ≤ 450
T3	200 < t ≤ 300
T4	135 < t ≤ 200
T5	100 < t ≤ 135
T6	85 < t ≤ 100

外壳防护等级 (IP代码) Ingress Protection (IP Code)		
防尘性能 Dust	IP1X	≥Φ50mm
	IP2X	≥Φ12.5mm
	IP3X	≥Φ2.5mm
	IP4X	≥Φ1.0mm
	IP5X	防尘型 Dust protected
	IP6X	尘密型 Dust tight
防水性能 Water	IPX1	垂直滴水 Vertically dripping water
	IPX2	15°滴水 Dripping water (15° tilted)
	IPX3	淋水 Spraying water
	IPX4	溅水 Splashing water
	IPX5	喷水 Water jets
	IPX6	猛烈喷水 Powered water jets
	IPX7	短时间浸水 Temporary immersion
	IPX8	连续浸水 Continuous immersion

