ATEX and IECEX Markings for HMT360 Series Intrinsically Safe Humidity and Temperature Transmitters

Gas: (HMT360) — II 1 G (ATEX only) — Ex — ia — IIC — T4 — Ga

Dust: (HMT360) — II 1 D — Ex — ta — IIIC — T500 80 °C — Da

Device Group:
I: Devices to be used in mines
II: Devices to be used in areas having explosive gases, liquids or dust

Surrounding Atmosphere:
G: Gas
D: Dust

Device Category:
M1 – Mines: Required to remain functional in the presence of an explosive atmosphere
M2 – Mines: Must be de-energized in the presence of an explosive atmosphere

1: zone 0 (gas)	zone 20 (dust)
2: zone 1 (gas)	zone 21 (dust)
3: zone 2 (gas)	zone 22 (dust)

Explosion Protected

Protection Concept:

Gas:
d – Flameproof enclosure
e – Increased safety
n – Sparking/ non-sparking
p – Pressurized
o – Oil immersion
q – Powder filled
m – Encapsulated
i – Intrinsic safety

Dust:
m – Encapsulated
t – Protection by enclosure
pD – Pressurization

Equipment Grouping:

Group I – Mines

Group II – Explosive gas other than mines:
IIA = propane
IIB = ethylene or propane
IIC = hydrogen, ethylene, propane

Group III – Explosive dust other than mines:
IIIA – Combustible dust
IIIB – Non-conductive dust (and combustible dust)
IIIC – Conductive dust (and for non-conductive and combustible dust)

Gas:
Temp. class and maximum surfate temperature:
T1 – 450 °C
T2 – 300 °C
T3 – 200 °C
T4 – 135 °C
T5 – 100 °C
T6 – 85 °C

Dust:
Maximum surface temperature with tested dust layer

Equipment Protection Level: (EPL)

Ma – Very high level of protection, even when left energized (mines)
Mb – High level of pretection de-energized (mines)
Ga – Very high level (gas)
Gb – High level (gas)
Gc – Enhanced (gas)

Da – Very high level (dust)
Db – High level (dust)
Dc – Enhanced (dust)