

EX Certification of Enclosures

Fibox EX enclosures are made for use in hazardous areas. They are designed, tested and manufactured to international standards. The certificates are issued by the manufacturer under licence from a test authority. All certified products are labelled clearly in compliance with the certification.

An enclosure with Component Certification will achieve the specified degree of safety in use when selected, assembled and installed correctly. The Component Certification establishes the acceptability of the empty enclosure for use as a component part of equipment which is certified by a Certificate of Conformity. Only equipment with a Certificate of Conformity should be installed in hazardous areas.

Hazardous areas are referred to as they are classified under CENELEC European Norms:

Zone 0 =	Zone in which an explosive gas/air mixture is continuously present or present for long periods.
Zone 1 =	Zone in which an explosive gas/air mixture is likely to occur in normal operation.
Zone 2 =	Zone in which an explosive gas/air mixture is not likely to occur in normal operation and if does, will only last for a short period

EXPLANATION OF CERTIFICATE SYMBOLS

The following tables can be used as practical quick guides. For more detailed information please contact www.evatron.com.

The different EX protection types specified are:

PROTECTION TYPE	SYMBOL	TEST STANDARD
Increased safety	e	EN 50019
Non-sparking	n	-
Flameproof	d	EN 50018
Intrinsically safe	i	EN 50020
Special protection	s	-
Encapsulation	m	EN 50028
Oil immersion	o	EN 50015
Pneumatisation	p	EN 50016
Sand or powder filled	q	EN 50017

Classification of gas groups to IEC standards:

GAS GROUP	REPRESENTATIVE GAS
I	Methane
II A	Prophane
II B	Ethylene
II C	Acetylene and Hydrogen

Temperature classification to EN standards of the maximum surface temperature allowed for any part of an apparatus:

TEMPERATURE CLASS	MAX SURFACE TEMPERATURE
T1	450 LC
T2	300 LC
T3	200 LC
T4	135 LC
T5	100 LC
T6	85 LC

These temperature classifications are applicable only to mounted enclosures which have a Certificate of Conformity.