# The ATEX standards and markings are changing



## **New Ex standards**

The European EN standards and international IEC standards are being harmonized and will become identical.

- The old EN standards for ATEX were numbered EN 50xxx and the related marking was: EEx (d, de, p, e, nA)
- The new EN standards for ATEX are now numbered EN 60079-xx and the related marking is:
  - Ex (d, de, p, e, nA)
- 'DIP' has now changed to Ex tD. Ex tD A22 is for zone 22, Ex tD A21 for zone 21
- New certificates or amendments to existing certificates have to be applied for. The Ex markings on motor rating plates will therefore change. Motors which are not yet certified according to the newest standards, will probably wait for the release of the newest editions which will be:

IEC/EN 60079-0 (edition 5), publishing date end of 2007

IEC/EN 60079-1 (edition 6), publishing date first half of 2008

## EC Declaration of Conformity under new standards

The use of the new markings is linked to recertification of motors. Nevertheless, during the transition period, the markings shown in documents and on the motor rating plate may differ.

These changes have no implications for installability and usability. ATEX motors, with either the old or new markings, can be installed and used (for their intended use) as before.

The requirements of the new standards do not affect the Essential Health and Safety Requirements (EHSR) of ATEX Directive 94/9/EC. As a result the manufacturer, on the basis of its own risk analysis, can issue the relevant EC Declaration of Conformity, even in cases where the standards referred to are different from those listed in the EC Type Certificate.

The ATEX certificate may show standards EN 50014 and EN 50018, for example, while the Declaration of Conformity shows EN 60079-0 and -1. The motor in question is nevertheless fully certified according to the ATEX Directive.

### Marking of equipment Complementary marking for Ex: **CE Conformity marking** € 0081 © II 2 G Ex d IIB T4 CE marking Identification Protection type Ex d of the notified body = flameproof responsible for the Motor grouping II B approval, 0081 is the = II for surface industry identification number = B for gas of LCIE Temperature class T4 = max. permitted 135°C The European Commission mark for Ex products Complementary marking for Ex tD: Motor grouping: II for surface industry (I for mines) Ex tD A21 T125°C IP65 Equipment category: 2 allowed for Protection Zone 1 or Zone 21 (1 for Zone 0 or 20, 3 for Zone 2 or 22) by enclosure Installation in zone 21 Atmosphere surrounding the motor: G for Temperature class explosive gas (D for dust) IP protection





## **Standards**

Old standard	New standard	Type of protection and symbol
EN 50014	EN 60079-0	General requirements for gas
	EN 61241-0	General requirements for dust
EN 50018	EN 60079-1	d - protection
EN 50019	EN 60079-7	e - protection
EN 50016	EN 60079-2	p - protection
EN 50021	EN 60079-15	n - protection
EN 50281-1-1	EN 61241-1	tD - tight Dust protection

## Motor certification according to new ATEX standards

Motor type Certificate number			
Non-sparking motors:			
LV - M3AAN 90-280 / M2AAN 160-250	LOM 06 ATEX 4005		
LV - M2AA/M3AA 112-280	Will be certified or existing certificates amended during 2008		
LV - M3GP 80-400	LCIE 06 ATEX 6089		
LV - M3GP 450	LCIE 06 ATEX 6088		
HV - M3GM 315-450	VTT 06 ATEX 084X		
Increased safety motors			
LV - M3AAL 90-280	LOM 99 ATEX 2011-2012-2014 / LOM 02 ATEX 2039		
LV - M3HP 80-400	New certification completed and amendments to existing certificates are available for all shaft heights.		
Flameproof motors			
LV - M3JP/KP 80 - 400	Existing certificates will be amended during 2007/2008		
HV - AMD 355 L.RgM	LCIE 03 ATEX 6056		
HV - AMD 400 L.RgM	LCIE 05 ATEX 6161		
Dust ignition proof motors			
LV - M3AAD 90-280 (Ex tD A21)	LOM 99 ATEX 2025 / LOM 02 ATEX 2042		
LV - M3AAD 90-280 / M2AAD 160-250	LOM 06 ATEX 4006		
LV - M2AA/M3AA 112-280	Will be certified or existing certificates amended during 2008		
LV - M3GP 80-400	LCIE 06 ATEX 6089		
HV - M3GM 315-450	VTT 06 ATEX 085X, VTT 06 ATEX 084X		
Other high voltage motors	New certificates will be in accordance with new ATEX standards.		

## Other new changes concerning low voltage motors for hazardous areas:

- The Low Voltage Directive (73/23/EEC) is not applicable to ATEX products since they are covered by the ATEX Directive 94/9/EC.
- The EMC Directive 2004/108/EC of 15.12.2004 is not applicable: induction motors are considered as exempt based on criteria incorporated into the EMC standards.
- The Machinery Directive 2006/42/EC is not applicable, because low voltage induction motors no longer fall within its scope according to Article 1 Scope §2 (k).

EC Declarations of Conformity for low voltage ATEX motors therefore no longer refer to these Directives.

