

**DRIVE SYSTEMS FOR
POTENTIALLY EXPLOSIVE
GAS ATMOSPHERES**



In order to provide a response to the safety concerns of Integrators and Users of drive systems in gas atmospheres, **LEROY-SOMER** has designed three geared motor ranges conforming to the essential Health and Safety Requirements of **ATEX European Directive 94/9/EC**:

- ◆ **helical with axial output: COMPABLOC** range
- ◆ **helical bevel with right-angle output: ORTHOBLOC** range
- ◆ **helical with parallel shaft: MANUBLOC** range

Sites in gas atmospheres are divided into three operating zones:

Zone 0: permanent danger

Zone 1: potential danger

Zone 2: minimal danger

Apart from **zone 0** where all electric motors are prohibited, **LEROY-SOMER** has therefore adapted drive systems to these different environments:

◆ Zone 1 – Potential danger

LEROY-SOMER solutions conform to **ATEX Directive 94/9/EC** and are certified by the French organisation **INERIS** (notified by the European Commission):

- **FLSD** flameproof motor - IP 55, with cast iron frame, from 0.55 to 132 kW, 4 poles
- **LSE** increased safety motor with aluminium frame, from 0.55 to 37 kW, 4 poles
- **FLSE** increased safety motor with cast iron frame, from 0.55 to 7.5 kW

The above motors can be combined with the following gearboxes:

- **COMPABLOC**: Gearbox with helical gears, axial output, cylindrical shaft output, for use in temperature class T1 to T5
- **MANUBLOC**: Gearbox with helical gears, parallel shaft, cylindrical shaft output, cylindrical hollow shaft or hollow shaft and shrink disc, for use in temperature class T1 to T5
- **ORTHOBLOC**: Gearbox with helical gears, perpendicular output, cylindrical shaft output, cylindrical hollow shaft or hollow shaft and shrink disc, for use in temperature class T1 to T5

◆ Zone 2 – Minimal danger

LEROY-SOMER solutions conform to **ATEX Directive 94/9/EC** and are certified by the French organisation **INERIS** (notified by the European Commission):

- **LSN** non-sparking motor with aluminium frame, from 0.55 to 55 kW, 4 poles
- **FLSN** non-sparking motor with cast iron frame, from 0.55 to 400 kW
- and motors offered for zone 1 which can be used in zone 2

The above motors can be combined with **COMPABLOC**, **MANUBLOC** and **ORTHOBLOC** gearboxes in the same conditions as for zone 1.

◆ The advantages
of LEROY-SOMER drive systems
can be summed up as follows:

- The option of **certification** of motors and geared motors **for zones 1 and 2** to ensure maximum safety for the user
- **A complete offer** of **motors and geared motors for zones 1 and 2**
- **A new service concept** with guaranteed short lead times through to delivery to the customer, without prior consultation: this is **LEROY-SOMER's GUARANTEED AVAILABILITY.**