## **RANGE DL** ) **EN** 15154-1 **EN** 15154-2





# **SAFETY SHOWERS, EYE-WASHERS AND FIRST-AID EQUIPMENTS**

### MAIN INFORMATIONS

For security reasons, safety showers and eye-washers are highly recommended in every working area where chemical projections danger exist. Thus, they can be found in:

- · Chemical and pharmaceutical industries,
- · Food-processing and automobile industries,
- Chemical, petrochemical and biochemical laboratories,
- · State workshops, car repair shops, printing houses,
- · Universities and schools,
- Hospitals and clinics,
- Filtering stations and swimming pools...

Considered as first aid equipments, safety showers and eye-washers must be close to risky areas. The access must be easy and well indicated.

**ISO** 3864 **REGULATIONS** 

### ISO 3864:

Labelling regulation: At the European level, it corresponds to 32/58/CEE instruction. All our first aid equipment are provided with labels in conformity with these standards.

### NF X15-221 norm:

This standard applies to body showers, connected to the water system and used on industrial sites and places other than laboratories. The requirements of this standard are similar to those of the European standard EN 15154-1 (see below).

### **EUROPEAN REGULATION EN 15154-1:**

This lation concers body showers, connected to water network. The main requirements are:

- The water distribution of the emergency body shower shall be measured by this procedures: At a distance of 700 mm below the shower head, 50% (± 10%) of the volume of water delivered shall fall in a circle with a diameter of 400mm, and the area reached by Minimum 95% of the water shall be limited to a circle with a diameter of 800mm.
- When no national or local regulations apply, a constant flow rate of minimum 60l/min is suitable.
- The body shower shall be capable of delivering this supply for a minimum of 15 minutes.
- The velocity of the water spray shall be low enough to be noninjurious to the user
- The shower head shall be designed to be installed so that its lower edge is 2200 (± 100) mm above the level on which the user stands.
- The water valve shall not close automatically.
- The manufacturer shall supply information on installation, operation and maintenance as well as the method and frequency of routing
- Showers must be provided with the appropriate label (please read above).

### ATEX II 2/G:

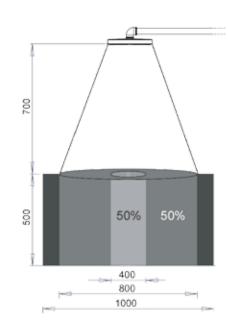
The European Atex standard is associated with products that can be used in **EX**plosive **AT**mospheres.

Hazardous locations are classified as hazardous, depending on the frequency and duration of an explosive atmosphere. These areas are defined as follows:

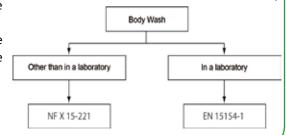
0 permanently or for long periods in normal operation.

- 1 occasionally during normal operation.
- 2 accidentally, in case of malfunction or short duration.

he manufacturer reserves the right to discontinue or change specifications or designs at any time without notice and without incurring



### AREAS COVERED BY THE STANDARDS NF X 15-221 and EN 15154-1:











### **EUROPEAN STANDARD EN 15154-2:**

This regulation concers eye-washers, connected to water network. The main requirements are:

- Plumbed-in-eye-wash units shall be able to deliver a constant flow rate of minimum 6l/min,
- Eye-wash units shall be capable of delivering this supply for minimum of 15 minutes,
- The velocity of the water shall be low enough to be non-injurous to the user,
- The jet of water supplied by the nozzles shall spray at a minimum height of 100 mm and may spray at a maximum height of 300 mm,
- The outlet nozzles shall be installed at a height of 1000 ( $\pm$  200 mm) above the level on which the user stands
- The water valve shall not close automatically,
- The manufacture shall supply information on installation, operation and maintenance as well as the method and frequency of routing testing,
- Eye-washers must be provided with the appropriate label (please read above).

### Water temperature:

EN 15154-1 et EN 15154-2 regulations recommend to use a water between 15°C and 37°C, in order not to worsen lesions of injuried persons and to ensure a better comfort. We advise you to use a thermostatic mixing valve (option as follow).

### CHOOSE THE ADAPTED SOLUTION TO THE INCURED RISKS

Risks		First-aid solutions	Conformity
Projection on body	Stationary	Safety shower connected to water network	EN 15154-1
	Itinerant	Portable showers stations	R.232-1-6
Eyes and face projection	Stationary	Eye-washers connected to water network	EN 15154-2
	Itinerant	Autonomous eye-washers	R.232-1-6
Projection on body, eyes and face combined	Stationary	Safety combination units	EN 15154-1 EN 15154-2
	Itinerant	Portable shower stations and Autonomus eye-washers	R.232-1-6

### **INSTALLATION**

It is recommended to install first aid equipments close to the dangerous areas. They must be easy to access (less than 10 seconds or 30 m) and free from walls or obstructions.

They must be clearly identified by the staff that would use the materials. The staff must be trained to use these products. Finally, the material linked to a water network must be checked at least once a month.

### **OPTIONS**

### THERMOSTATIC MIXING VALVE(MCL-MTD)

• For eye-washers: MCL

• For safety showers and combiantion units: MTD

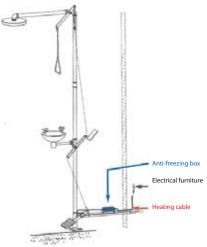


MCL

### **HEATING CABLE KIT (KITCC)**

In order to avoid the risks, we recommend tou to use a heating cable that prevent the risk of frozen water in the tubing untill -1°C. This solution can be used on every safety showers and eyewashers model.

Included: 1 m of heating cable, electrical furniture kit, and anti-freezing box.



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