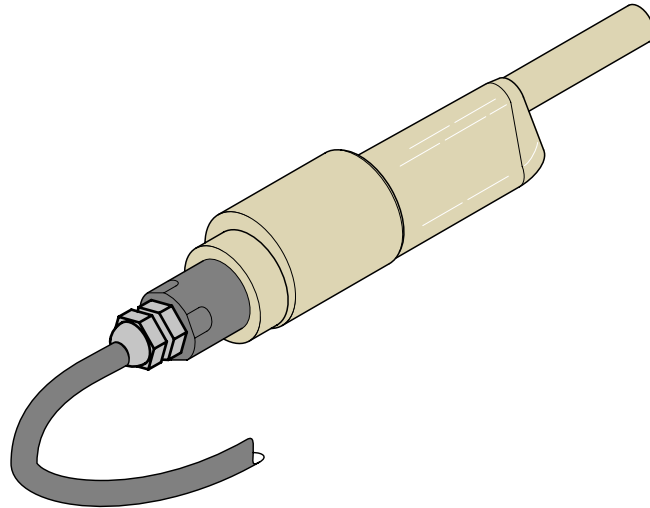




From February 1st, 2017 SAMES Technologies SAS becomes SAMES KREMLIN SAS  
A partir du 1/02/17, SAMES Technologies SAS devient SAMES KREMLIN SAS



DES00774

# User manual

## UHT 155 EEx em High Voltage Unit

FRANCE

**SAMES Technologies.** 13 Chemin de Malacher 38243 Meylan Cedex  
Tel. 33 (0)4 76 41 60 60 - Fax. 33 (0)4 76 41 60 90 - Email : [info@sames.com](mailto:info@sames.com) ([www.sames.com](http://www.sames.com))

USA

**SAMES Technologies Inc.** 11998 Merriman Road, Livonia, Michigan, 48 150  
Tel. (734) 261.5970 - Fax. (734) 261.5971 - Email : [info@sames.com](mailto:info@sames.com) ([www.sames.com](http://www.sames.com))

Any communication or copying of this document, in any form whatsoever, and any use or divulging of its contents is forbidden without express written permission from SAMES Technologies.

The descriptions and characteristics contained in this document may be changed without prior warning and are in no way binding on SAMES Technologies.

© SAMES Technologies 2001



**WARNING :** Sames Technologies is registered as a "Training Center" approved by the "Ministry of Employment".

Trainings with the aim of getting the necessary know-how to use and for the maintenance of your equipment can be organised all along the year.

A catalog is available upon request. Among the different training programmes proposed, you will be able to find the training which corresponds the best to your needs and production purposes. These trainings can be organised in your premises or in our training center based in our headquarters in Meylan.

Training Department :

Tel.: 33 (0)4 76 41 60 04

E-mail : [formation-client@sames.com](mailto:formation-client@sames.com)

# UHT 155 EEx em High Voltage Unit

1. Warnings - - - - -	4
1.1. <i>The high voltage unit UHT 155 EEx em marking</i> . . . . .	4
2. Introduction - - - - -	4
3. Description - - - - -	4
4. Characteristics - - - - -	5
4.1. <i>Electrical characteristics</i> . . . . .	5
4.2. <i>Mechanical characteristics</i> . . . . .	5
5. Safety précautions - - - - -	5
6. Maintenance- - - - -	6
6.1. <i>Electrical connexions</i> . . . . .	6
6.2. <i>Cable replacement</i> . . . . .	6
7. Spare parts- - - - -	7
7.1. <i>High Voltage Unit UHT 155 EEx em</i> . . . . .	7
7.2. <i>Cables</i> . . . . .	8

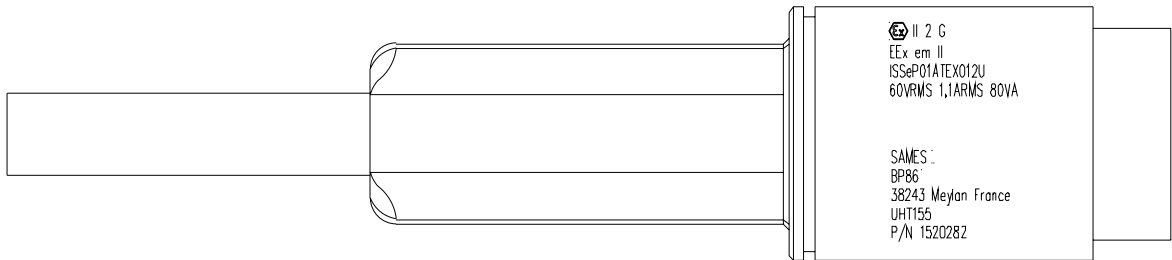
## 1. Warnings



**WARNING** : This equipment may become a safety hazard if it is not operated, disassembled and reassembled in accordance with the instructions given in this manual.

See the equipment manual.

### 1.1. The high voltage unit UHT 155 EEx em marking



DIES03297

## 2. Introduction

The high voltage unit UHT 155 permits to feed a paint applicator with high voltage without high voltage cable. This unit is mainly used for the PPH 607 and PPH 308 atomisers.

## 3. Description

The High Voltage Unit UHT 155EEx em comprises:

- A moulded part with:
  - High voltage elements (transformer, cascade, measuring resistance and priming resistance),
  - Low voltage elements (recognition element and protection elements)
  - High voltage outlet adapted for use atomisers.

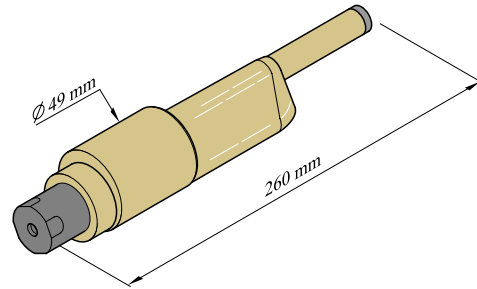
## 4. Characteristics

### 4.1. Electrical characteristics

Max input voltage	36 V RMS – 25 kHz roughly
Outlet voltage	90 kV, negative polarity.
Outlet current	100 $\mu$ A
Outlet power	10 W max

### 4.2. Mechanical characteristics

Weight: 0,48 Kg - 1.06 Lbs



DES00776

## 5. Safety précautions

- Clean and grease the high voltage stop with dielectric grease before fitting.
- Never assemble or disassemble with voltage on.
- Do not put the low voltage cable into contact with solvent.
- Cable length between high voltage unit and generator GNM 200 -A is 20 m, 65.6 feet.



**WARNING :** the GNM 200-A must be placed in a anti-fire zone at least 1,5 m ( 4,9 feet) from the opening of the nearest booth.

## 6. Maintenance

### 6.1. Electrical connexions

Cable diameter: = CEE 0,5 mm<sup>2</sup> or 0,34 mm<sup>2</sup>

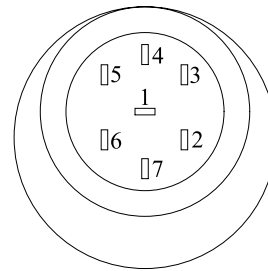
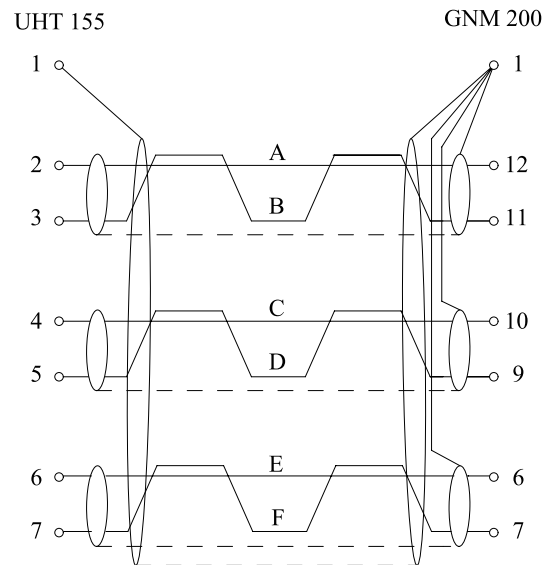
Cable diameter: US = Gauge AWG 20 or AWG 22

A	Yellow	AWG 22
B	Green	AWG 22
C	White	AWG 20
D	Braun	AWG 20
E	Pink	AWG 22
F	Grey	AWG 22

The cable used for the connections must respect:

- wire diameter comprised between 0,3 mm<sup>2</sup> and 0,8 mm<sup>2</sup>
- diameter: 4 mm mini and 8 mm maxi.
- a complete shielding and a second shielding for each pair of wire

**Nota :** Should some wires are not used, they should be connected to the ground

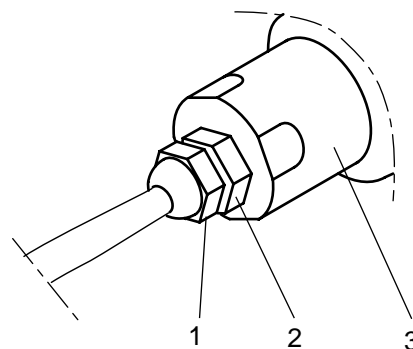


DES00775

### 6.2. Cable replacement

1	stuffing box nut
2	stuffing box body
3	stuffing box union

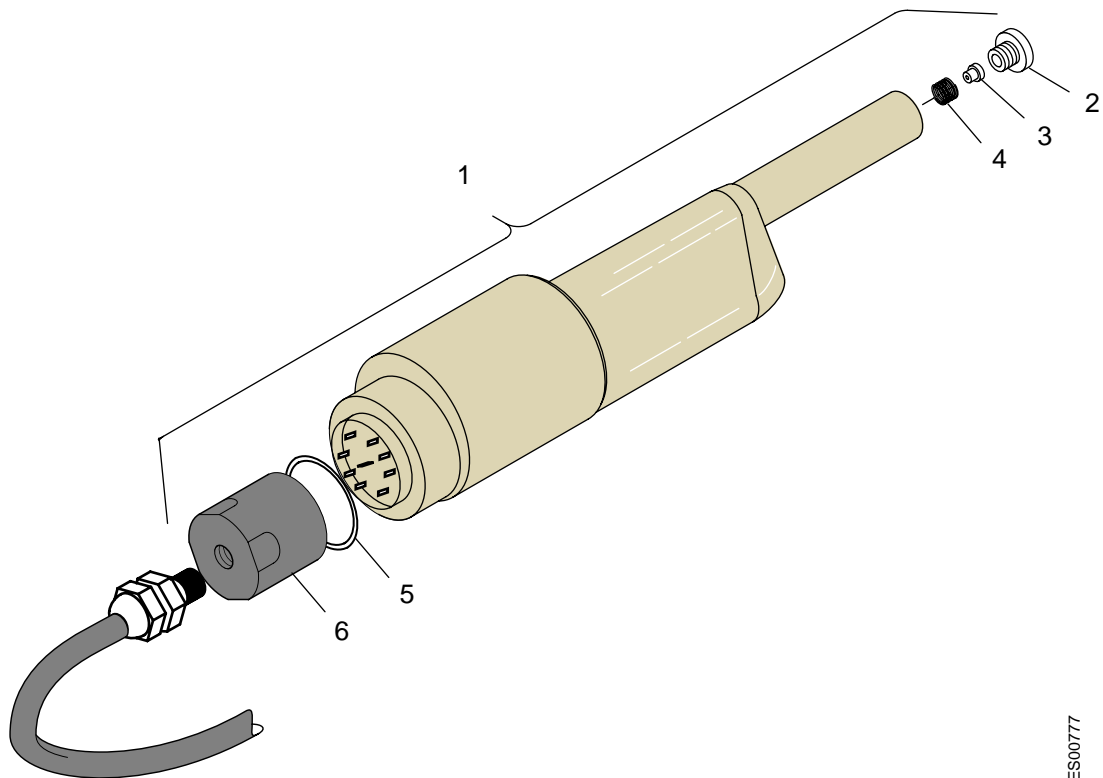
- 1 Maintaining the body, loosen the nut in order to unblock the cable
- 2 Unscrew the union in order to access to the connections
- 3 Unplug each electrical wire
- 4 Unscrew the body and keep the union
- 5 Replace the cable
- 6 Replace the seal washer if needed



DES01555

## 7. Spare parts

### 7.1. High Voltage Unit UHT 155 EEx em

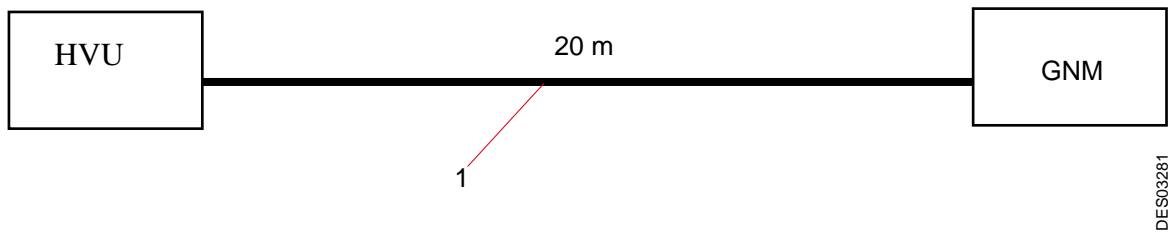


DES00777

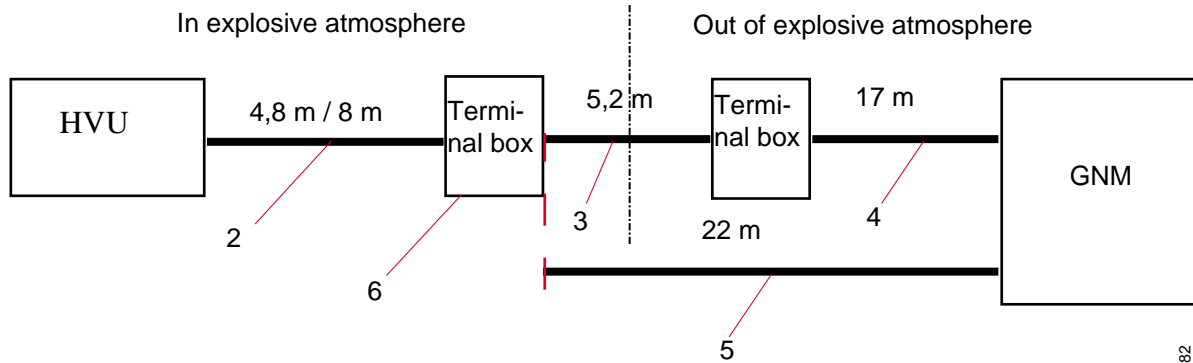
Item	Part number	Description	Qty	Sale unit
1	1520282	High Voltage Unit UHT155 EEx em	1	1
2	548304	High voltage stop	1	1
3	548303	HV connector stop	1	1
4	Q2HRDC095	HV spring	1	1
5	1408523	Sealing washer	1	1
6	1310068	Stuffing box union	1	1

## 7.2. Cables

**Note:** Each cable has a defined length; for other lengths, please, contact SAMES Technologies.



DES03281



DES03282

Item	Part number	Description	Qty	Sale unit
1	1514591	Equipped low voltage cable, Length: 20 m	1	1
2	1527252	Low voltage cable, Length: 4,8 m (HVU to terminal box)	1	1
	910001236	Low voltage cable, Length: 8 m (HVU to terminal box)	option	1
3	910000086	Connection cable, Length: 5,2 m	1	1
4	910000070	Low voltage cable, Length: 17 m (Connection terminal box to GNM)	1	1
5	1520516	Low voltage cable, Lg: 22 m (Connection terminal box to GNM)	1	1
6	1303899AT	Terminal box	1	1



**WARNING :** Cable length between the High Voltage Unit and the Control Modul GNM (unit cable + any extension) should not exceed 30 m.