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A partir du 1/02/17, SAMES Technologies SAS devient SAMES KREMLIN SAS

SAMES  **KREMLIN**



User manual

UHT 157 High Voltage Unit

SAS SAMES Technologies. 13 Chemin de Malacher -
Inovallée - B.P.86 - 38243 Meylan Cedex France
Tel. 33 (0)4 76 41 60 60 - Fax. 33 (0)4 76 41 60 90 - www.sames.com

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Throughout the year, our company offers training courses in the operation and maintenance of your equipment.

A catalogue is available on request. Choose from a wide range of courses to acquire the skills or knowledge that is required to match your production requirements and objectives.

Our training courses can be delivered at your site or in the training centre at our Meylan head office.

Training department:

Tel. 33 (0)4 76 41 60 04

E-mail: formation-client@sames.com

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The French version is deemed the official text and Sames will not be liable for the translations into other languages.

UHT 157

High Voltage Unit

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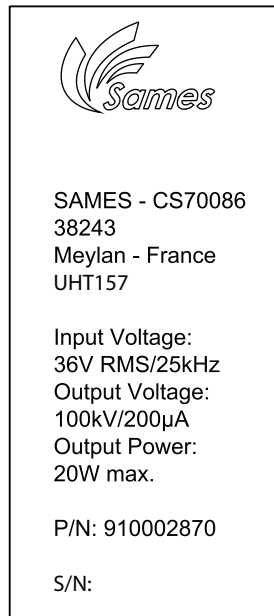
1. Warnings



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

See the equipment manual.

1.1. Marking



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2. Introduction

The high voltage unit **UHT 157** permits to supply a paint applicator with high voltage without high voltage cable.

This high voltage unit is mainly used for the PPH 707 atomisers.

3. Description

- The UHT 157 comprises a molded part with:
 - High Voltage elements (transformer, cascade, measuring resistance and priming resistance).
 - Low voltage elements (recognition elements, temperature and protection elements).
 - High voltage outlet adapted for use atomiser.

4. Characteristics

4.1. Electrical characteristics

The characteristics below are given for the UHT 157 alone.

	UHT 157
Max input voltage	36 Vrms – 25kHz
Outlet voltage	100 kV, negative polarity
Outlet current	200 μ A
Outlet power	20 W max.
UHT 157 capacity	160 pF max.

4.2. Mechanical characteristics

The high voltage unit **UHT 157** is delivered without low voltage cable.

	UHT 157
Overall dimensions	L: 268 mm, \varnothing : 49.92 mm
Weight	0.9 kg

5. Safety precautions

- Never assemble or disassemble with voltage on.
- Do not put the low voltage into contact with solvent.
- The length of the low voltage cable between the control module GNM 200A (recognition and automatic parameter setting of the UHT with an integrated chip) and the high voltage unit UHT 157 is 30 m max.
- Connection between the UHT 157 and the control module GNM 200 can be realized either directly, either by a terminal box .
Respect the electric diagrams given by Sames Technologies.

5.1. Installation rules

The high voltage unit UHT 157 will be installed in the atomizer. Coat the HV well with dielectric grease before assembly.



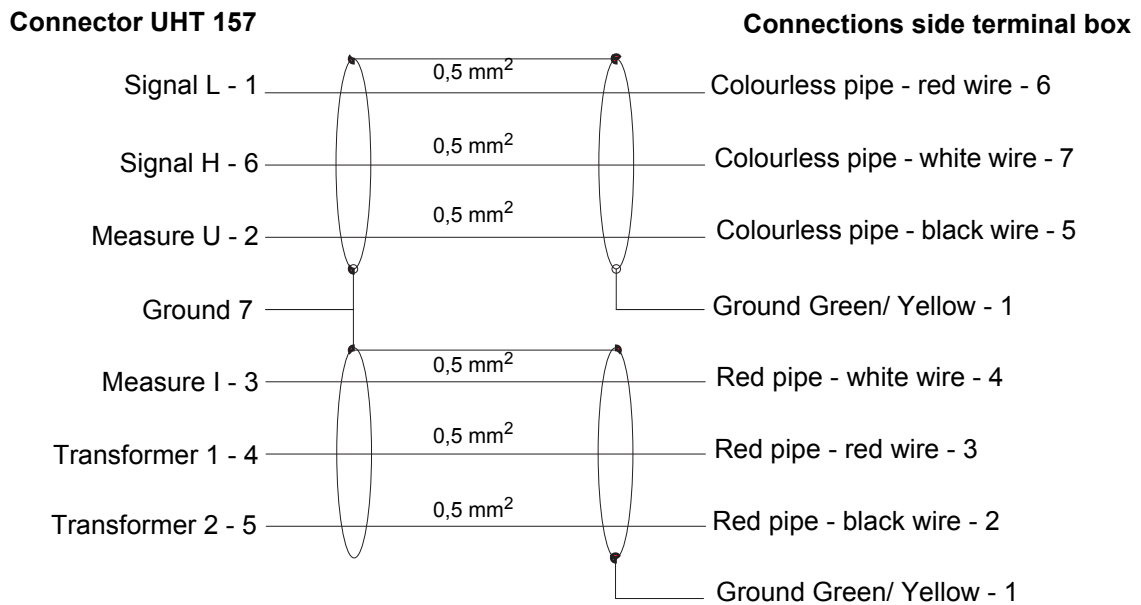
WARNING : The high voltage supply must be turned off before rinsing cycles.



WARNING : The low voltage connector, as well as all the metal parts near the UHT 157 (except those connected to the high voltage by direct connection with the outlet of the UHT) must be connected in a reliable way to an electric ground which guarantees a null potential.

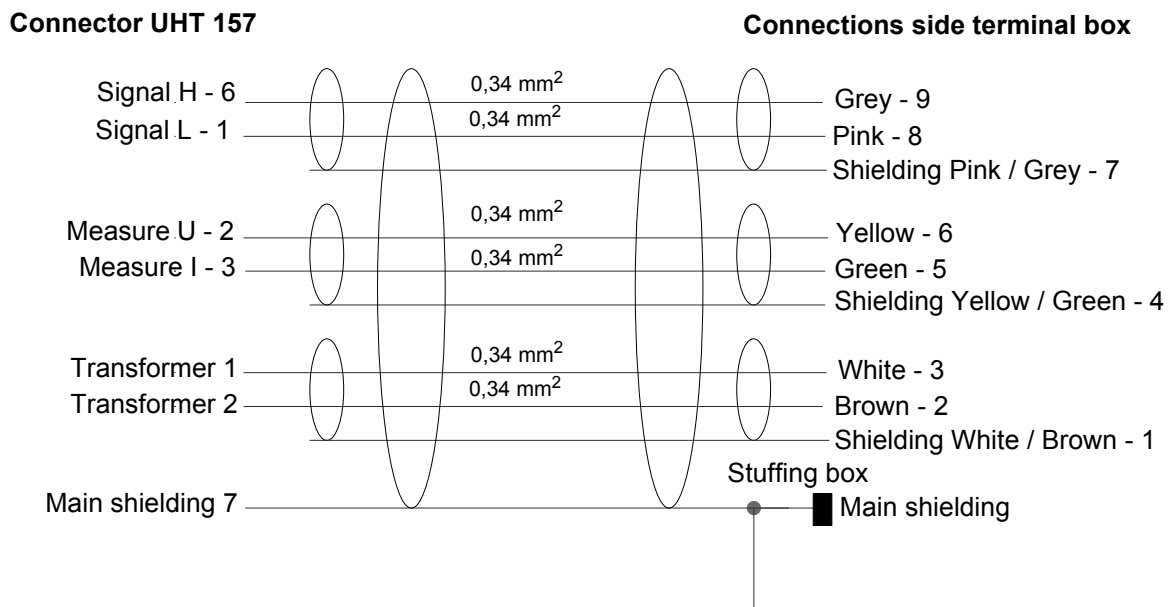
6. Electrical connections

6.1. UHT 157 to the terminal box with low voltage connection (P/N: 910004015)



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6.2. UHT 157 to the terminal box with low voltage connection (P/N: 910012289)



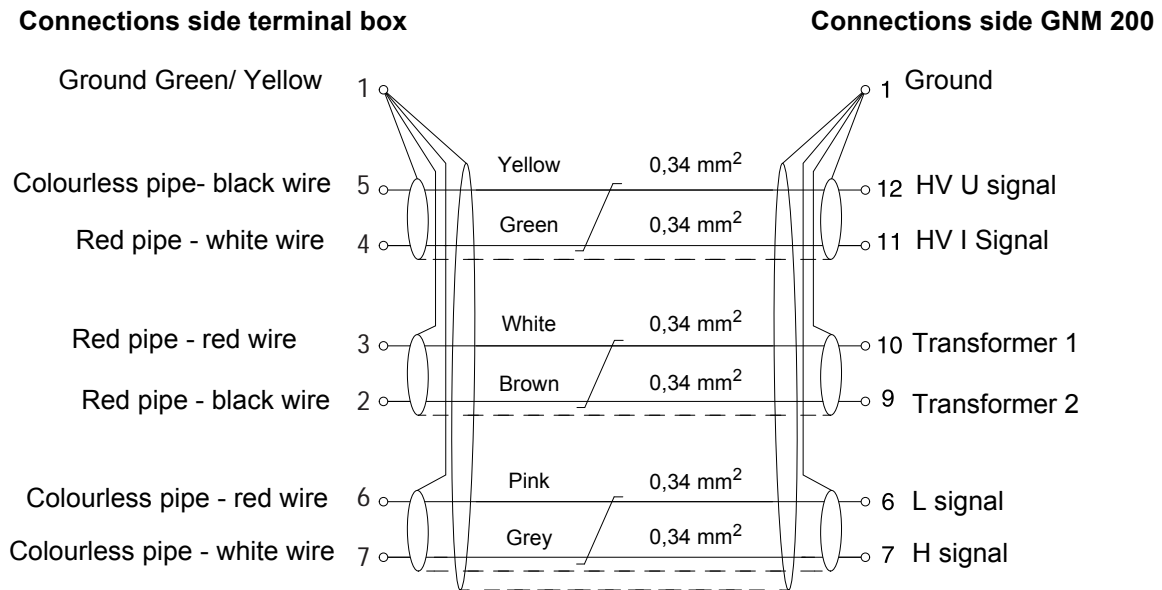
DES05324

6.3. Terminal box to the control modul GNM 200

CEE Cable diameter: 0,5 mm² or 0,34 mm²

US Cable diameter: gauge AWG 20 or AWG 22.

Configuration with terminal box P/N: 900003576AT



DES03970

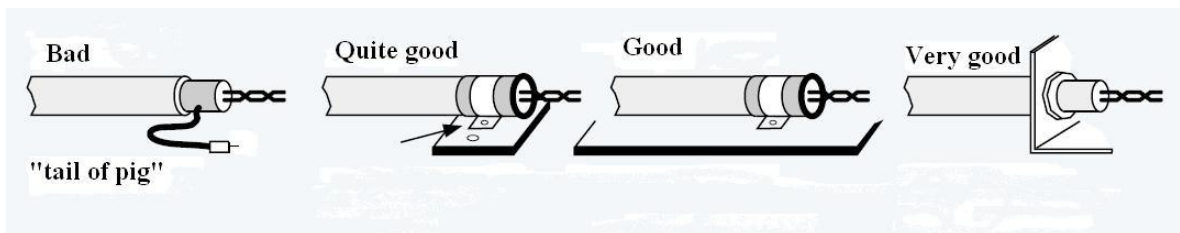
The cable used for the connections must respect:

- wire diameter comprised between 0.3 mm² and 0.8 mm²
- diameter: 4mm mini. and 8 mm maxi.
- a complete shielding and a second shielding for each pair of wires.



WARNING : Should some wires are not used, they should be connected to the ground.

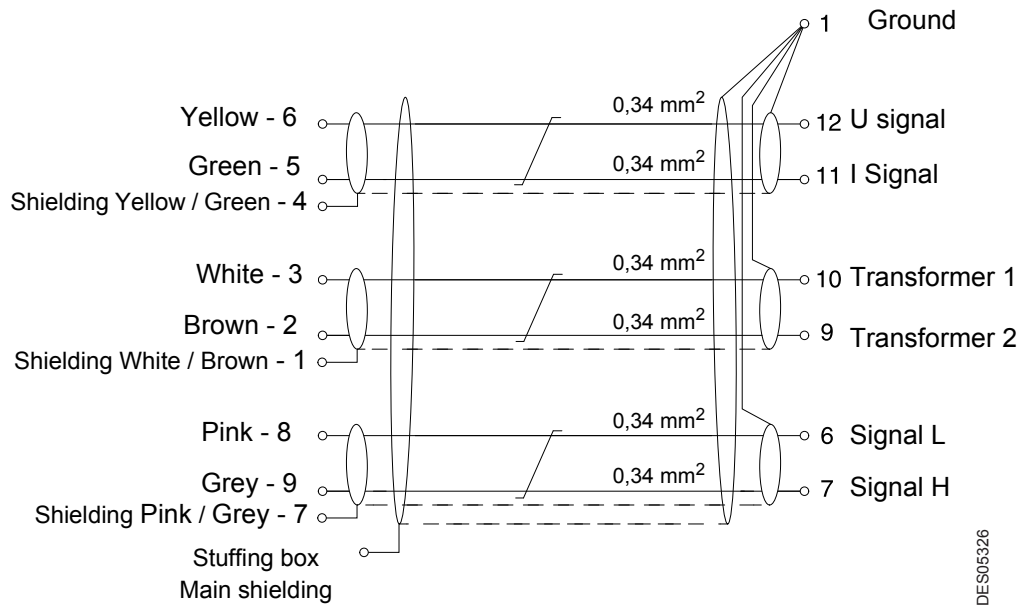
Avoid to a maximum the shielding connections type "tail of pig", prefer a shielding connection to 360°.



Configuration with terminal box P/N:1303899AT

Connections side terminal box

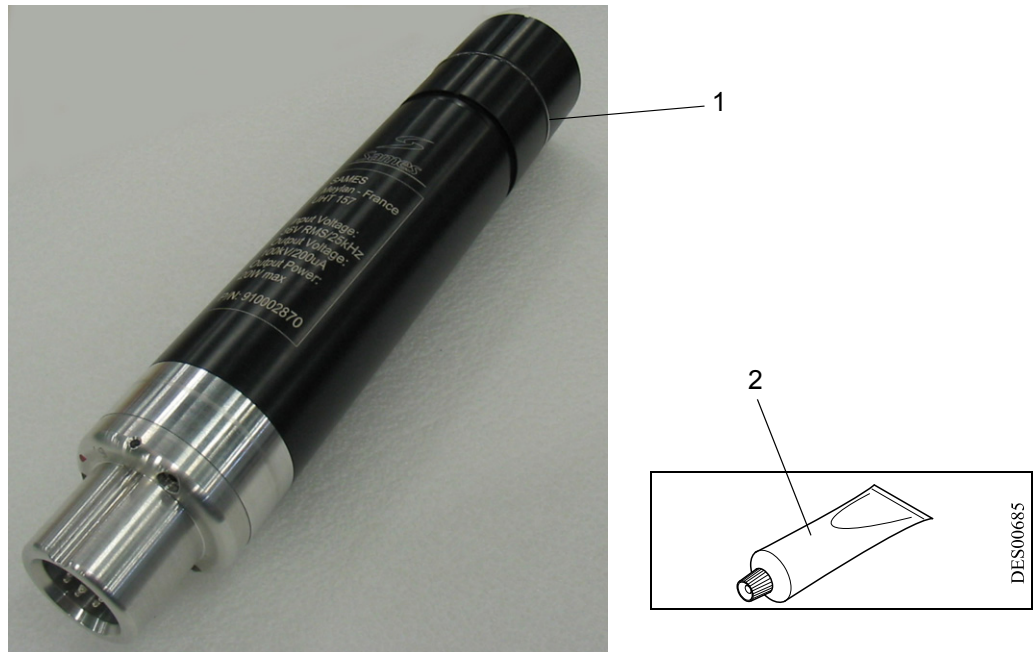
Connections side GNM 200



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7. Spare parts

7.1. High Voltage Unit UHT 157



Item	Part Number	Description	Qty	Sale unit	Maintenance Level for Spare Part (*)
	910002870	High voltage unit UHT 157	1	1	3
1	J2FENV445	O-ring FEP	1	1	1
2	H1GSYN037	Dielectric grease	1	1	1

Level 1: Standard preventive maintenance

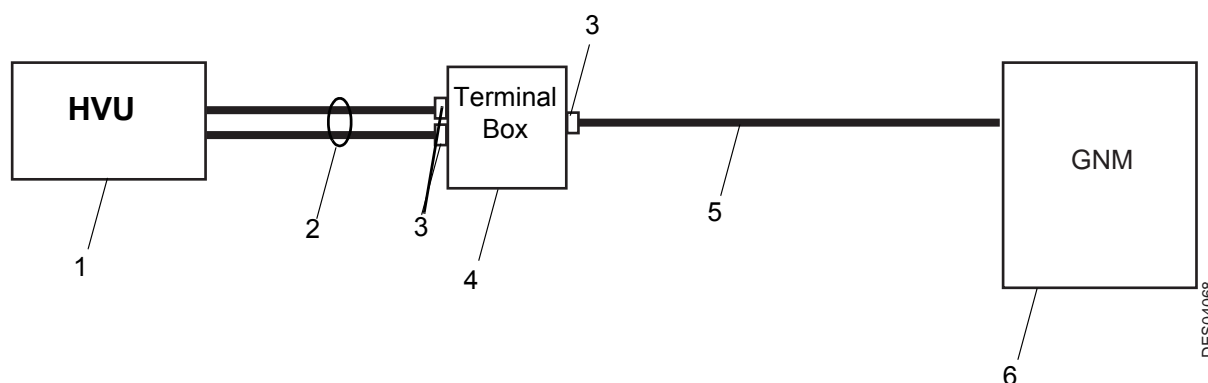
Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.2. Cables

Each cable has a defined length, for other lengths, please, contact Sames Technologies.

7.2.1. Configurations with cable 2 conductors



Item	Part Number	Description	Qty	Sale Unit	Maintenance Level for Spare Part (*)
1	910002870	High voltage unit UHT 157	1	1	3
2	910004015-XXX	Low voltage connection with cable (for PPH 707 atomizer)**	1	1	1
	910005681	Low voltage connection with cable length: 8 m (for Acculook 707 atomizer)	1	1	1
3	E3RPLS097AT	Stuffing box	3	1	3
4	900003576AT	Terminal box	1	1	3
5	910000070	Low voltage cable Length: 17 m (Connection terminal box to GNM)	1	1	2
	1520516	Low voltage cable Length: 22 m (Connection terminal box to GNM)	1	1	2
	910007913	Low voltage cable Length: 7 m (Connection terminal box to GNM)	1	1	2
6	1517071	Control module GNM 200	1	1	3

**	910004015-015	Low voltage connection with cable Length: 1.5 m
	910004015-030	Low voltage connection with cable Length: 3 m
	910004015-080	Low voltage connection with cable Length: 8 m
	910004015-100	Low voltage connection with cable Length: 10 m
	910004015-150	Low voltage connection with cable Length: 15 m

(*)

Level 1: Standard preventive maintenance

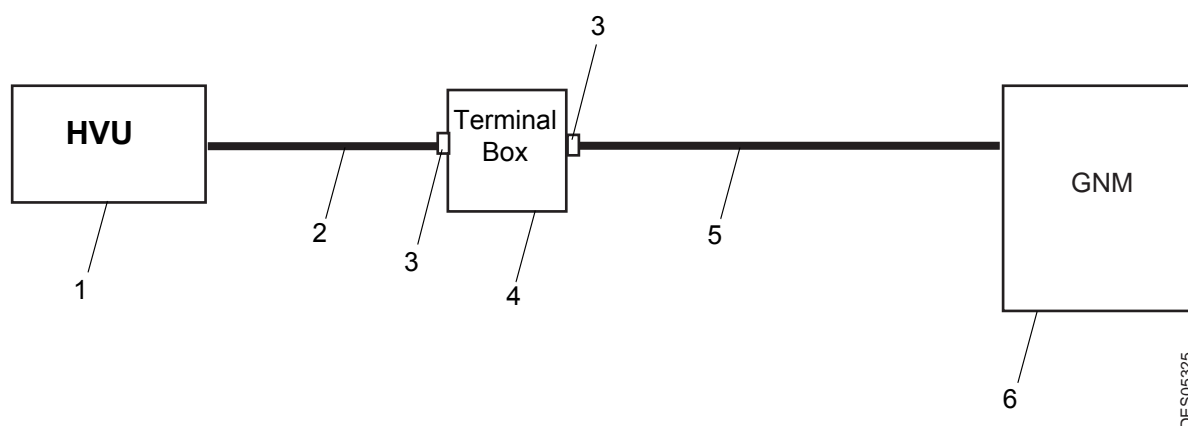
Level 2: Corrective maintenance

Level 3: Exceptional maintenance



WARNING : Cable length between the high voltage unit and the control module GNM 200 (unit cable + any extension) should not exceed 30 m.

7.2.2. Configurations with cable one conductor



Item	Part Number	Description	Qty	Sale Unit	Maintenance Level for Spare Part (*)
1	910002870	Unité Haute Tension UHT 157	1	1	3
2	910012289	Low voltage connection with black cable length: 8 m	1	1	1
	910012289-XXX	Low voltage connection with black cable **	1	1	1
3	110001537AT	Stuffing box	2	1	3
4	1303899AT	Terminal box	1	1	3
5	910000070	Low voltage cable Length: 17 m (Connection terminal box to GNM)	1	1	2
	1520516	Low voltage cable Length: 22 m (Connection terminal box to GNM)	1	1	2
	910007913	Low voltage cable Length: 7 m (Connection terminal box to GNM)	1	1	2
6	1517071	Control module GNM 200	1	1	3

**	910012289-015	Low voltage connection Length: 1.5 m
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(*)

Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance



WARNING : Cable length between the high voltage unit and the control module GNM 200 (unit cable + any extension) should not exceed 30 m.