

Operation manual

Action shower „Niagara Rain“

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**Niagara Rain
standard with 1 warm- and 1
cold water cycle**

Overview

Obey all safety notes and warnings present on the unit.

In case of a malfunction, switch off the unit immediately and prevent a restart. Repair malfunctions promptly.

After any repair work, have qualified personnel check the safe operation of the unit.

Use original spare parts only.

Additional national safety regulations also fully apply to the operation of this unit.

Accident Prevention Regulations



Comply with the accident prevention regulation Accident Prevention Regulation Electrical Systems and Equipment to prevent injury to yourself and others.

Operation of the Unit

Do not perform any work which compromises the safety of the unit.

Regularly check that all safety and monitoring devices are functioning normally.

Do not remove or disable safety devices.

Installation, Dismantling, Maintenance and Repair of the Unit

Disconnect unit components from power supply prior to maintenance or repair work.

Attaching or installing **additional components** is permitted only with the **written consent** of the manufacturer.

Electrical



Work on the electrical system must be performed by qualified personnel.

Disconnect unit components from power supply prior to work

In case of a malfunction in the electrical power supply, switch off the unit immediately.

Use only original fuses with the appropriate amperage rating.

Regularly check the unit's electrical equipment. Promptly repair any damage, such as loose connections or burned wiring. After proper electrical installation or repair, test all safety mechanisms (such as grounding resistance).

2.3 Disposal after Dismantling



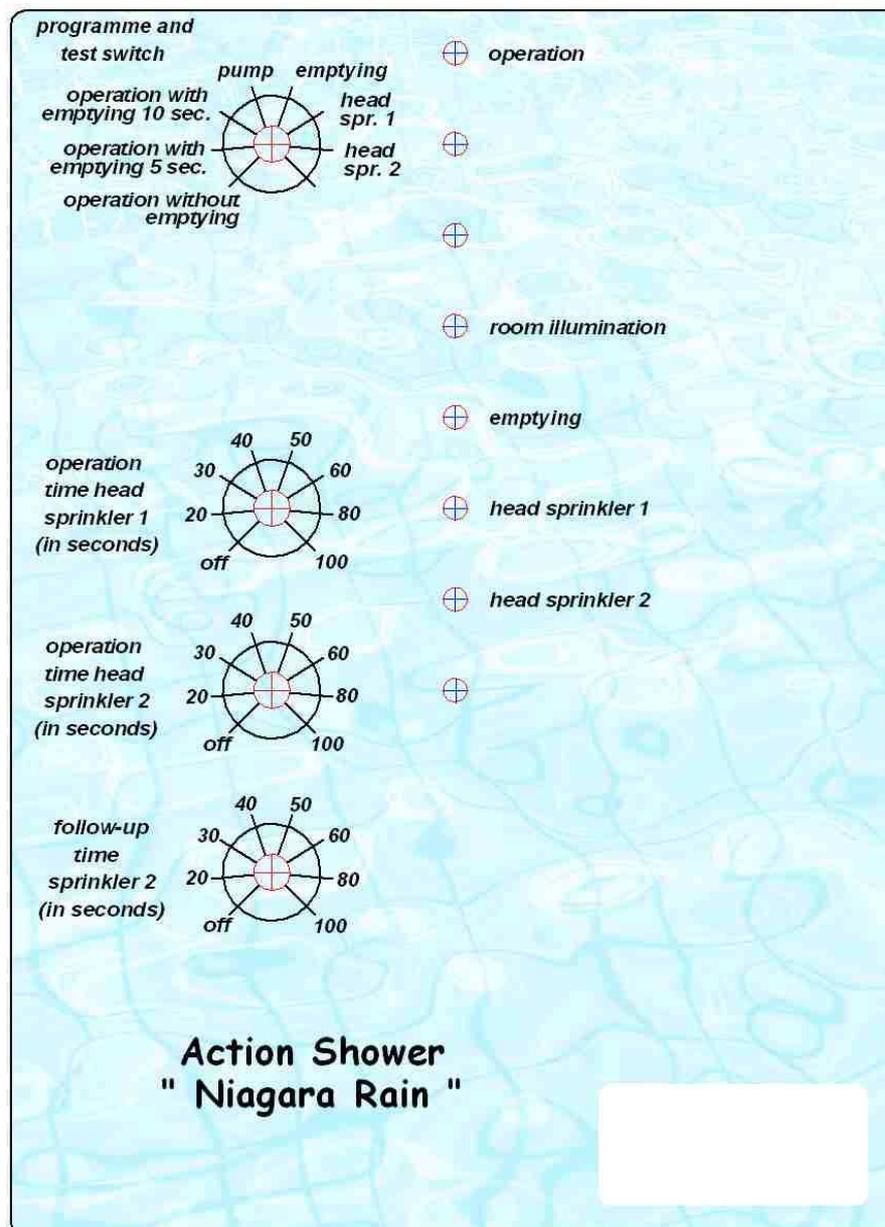
Note: The operator is responsible for the disposal of unit components as required by law.

1. Function – programmes

The Action shower „Niagara Rain“ is a control unit for 2 shower cycles. The programmes can be started by a 3-fold push-button from the shower cabinet.

Head sprinkler 1: warm Tropical Rain
 Head sprinkler 2: cold Fog Rain

The single adjustments are handled by rotary knobs at the control housing:



programme and test switch

This rotary knob is to test every function of the action shower. Each function is indicated by a burning of the yellow LED on the right side of the control housing. The fragrance pump can only be operated if the fragrance canister is filled or if the pressure switch below the pump is bridged (not important for "Niagara Rain").

Before the test of the functions the unit has to be switched on by the *main switch* at the right side of the housing!!

After the test of the functions the operation mode has to be chosen by the switch position: **operation without emptying**

Dosing performance in ml per minute:

No function as there is no fragrance dosing at the Niagara Rain

operation time head sprinkler 1 in seconds:

Adjustment of the operation time for the warm shower from 20 – 100 seconds.

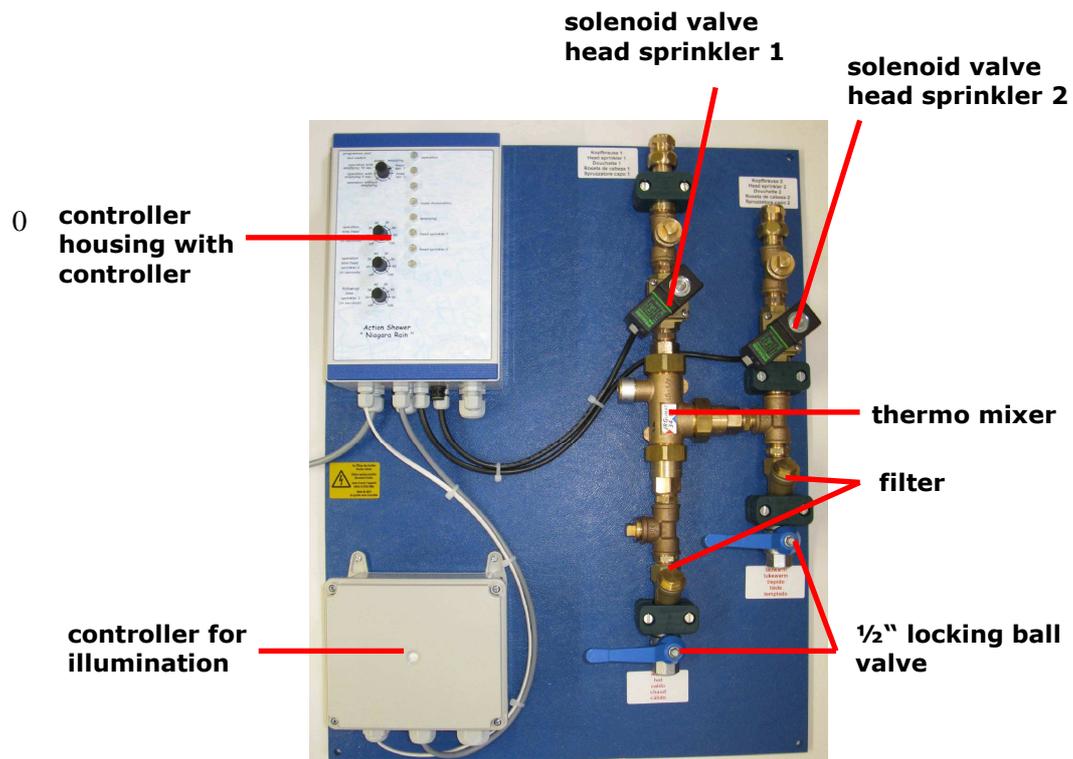
operation time head sprinkler 2 in seconds:

Adjustment of the operation time for the cold shower from 20 – 100 seconds.

2. Technical description

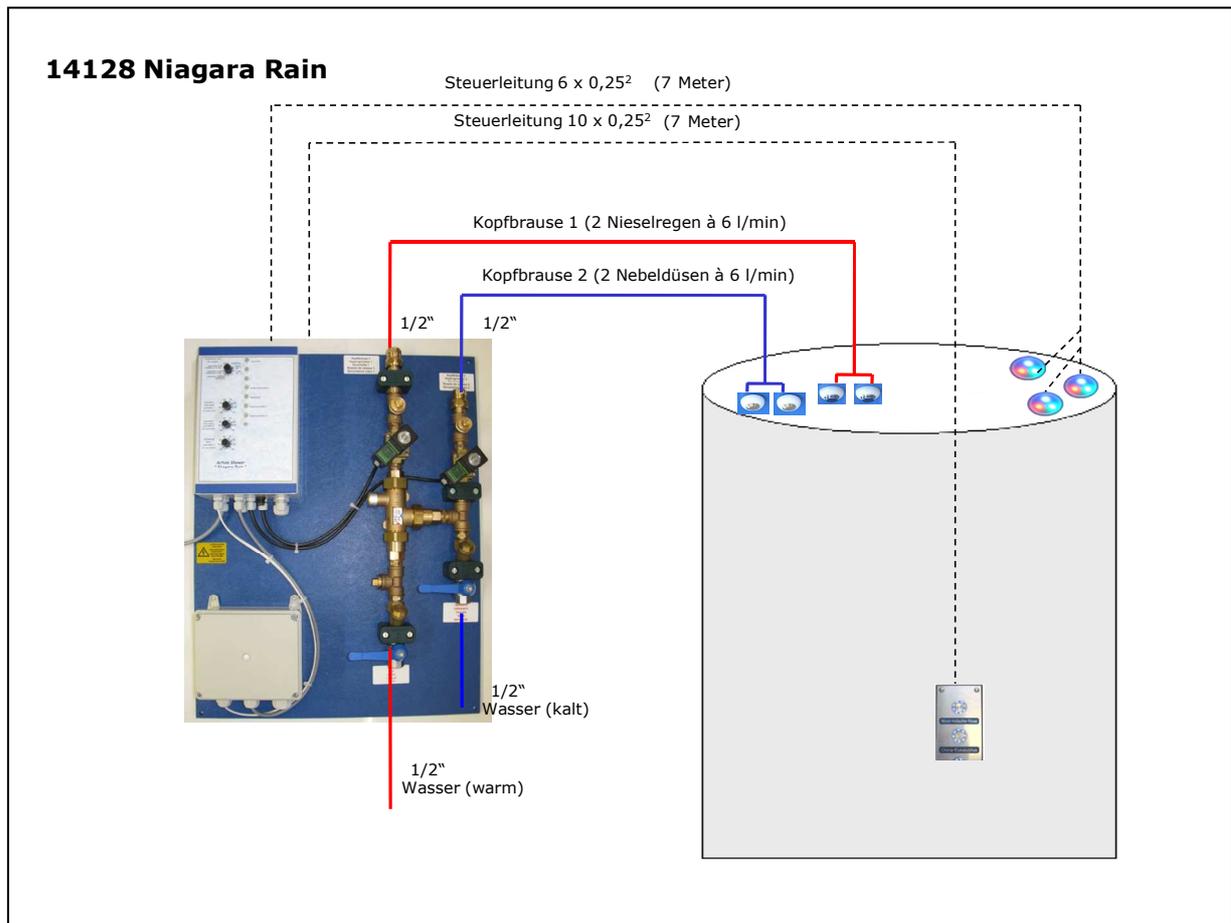
measures: width 50cm, height 65cm, depth 15cm
 weight: app. 12 kg
 power supply: power plug 230V
 water supply pressure: min. 3 bar at a flow through of 3m³/h

The action shower „Niagara Rain“ consists of the following components:



3. Installation

The control unit „**Niagara Rain**“ has to be installed at a capable place next to the shower. The water tubing has to be installed according to the following schema. Electrical supply with power plug 230V/AC. Ensure that the nozzles are not blocked by residues that have been in the tubing if you take the unit into operation for the first time!



- Installation only by authorised staff!!!
- Before taking the unit into operation we recommend to flush all the tubings without nozzles to guarantee that no residues will block the nozzles.
- We recommend to install a fine in-line strainer before the shower techniques!
- We recommend to use (softened) water with a low hardness to prevent residues of calcium!

4. Taking the unit into operation

If the whole tubings and the electrical supply are connected the unit is ready for taking it into operation.

Put the „Selector switch 1“ on „**0**“ and switch-on the unit by the main switch on the left side of the controller housing. The main switch shines red and the operation-LED green. Afterwards all functions can be tested like described above (see page 3). Now the single programme functions can be adjusted according the demanded needs.

5. Programme flow

The characteristics of the programmes are describes on page 3. The **3 functions** „*Tropical Rain*“, „*Polar Fog*“ and „*Side Nozzles*“ are started by the user by a push button from the cabinet. If one programme runs the others are locked.

Example:

The operator of the unit sets the time for the Tropical Rain on 30 seconds. If the user in the cabinet presses the according push-button a smooth and warm rain patters down on him for 30 seconds. The hardness of this rain can be regulatet by the pressure gauge.

6. Maintenance

If the unit will be out of operation for a longer period of time we recommend to empty the whole tubing and to switch the unit off by the main switch. If the pressure should fall down immediately the filter inserts in the supply have to be cleaned.

7. Spare part list

10424	ball valve G 3/4" i-a, PN25
12887	filter Ms 3/4"
15955	thermo mixer 3/4"JRG
14761	solenoid valve Ms 3/4"
14680	solenoid valve Ms 1/2" M24K
13082	plug for solenoid valve 230VAC LED 1,5m
15995	controller ED-SeD complete
10959	hosuing 240/160/90
14833	control board ED-V2-11x230V
12985	rotary knob 6mm

8. Wiring diagramme

SL-1 clamp number

- 1- L1 fragrance empty (for remote control)
- 2- N fragrance empty (for remote control)
- 3- PE fragrance empty (for remote control)
- 4- PE fragrance pump
- 5- N fragrance pump
- 6- L1 fragrance pump

SL-2 clamp number

- 1- L1 room illumination
- 2- N room illumination
- 3- PE room illumination
- 4- PE emptying
- 5- N emptying
- 6- L1 emptying

SL-3 clamp number

- 1- L1 head sprinkler 1
- 2- N head sprinkler 1
- 3- PE head sprinkler 1
- 4- PE head sprinkler 2
- 5- N head sprinkler 2
- 6- L1 head sprinkler 2

SL-4 clamp number

- 1- L1 side nozzles
- 2- N side nozzles
- 3- PE side nozzles
- 4- PE sound head sprinkler 1
- 5- N sound head sprinkler 1
- 6- L1 sound head sprinkler 1

SL-5 clamp number

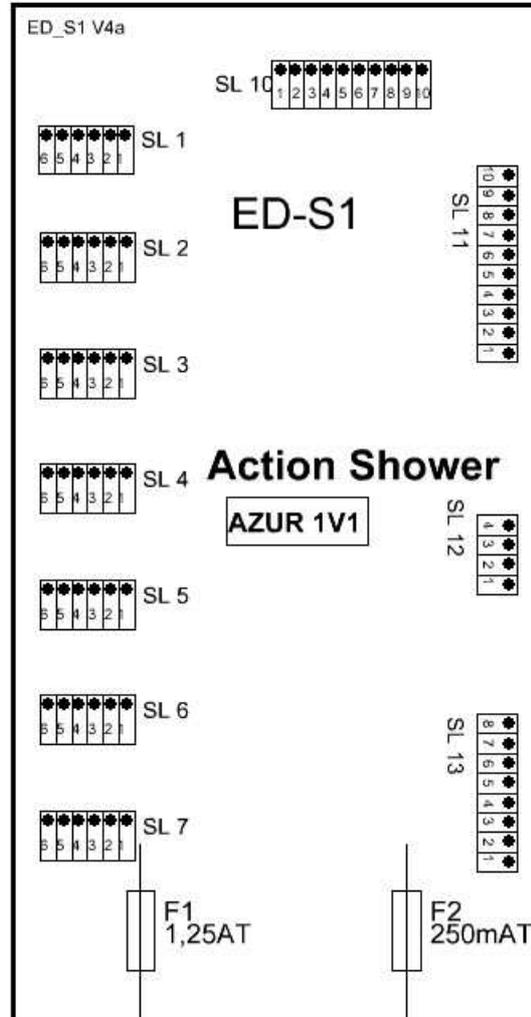
- 1- L1 sound head sprinkler 2
- 2- N sound head sprinkler 2
- 3- PE sound head sprinkler 2
- 4- PE sound side nozzles
- 5- N sound side nozzles
- 6- L1 sound side nozzles

SL-6 clamp number

- 1- L1 illumination head sprinkler 1
- 2- N illumination head sprinkler 1
- 3- PE illumination head sprinkler 1
- 4- PE illumination head sprinkler 2
- 5- N illumination head sprinkler 2
- 6- L1 illumination head sprinkler 2

SL-7 clamp number

- 1- L1 illumination side nozzles
- 2- N illumination side nozzles
- 3- PE illumination side nozzles
- 4- PE supply AC230V
- 5- N supply AC230V
- 6- L1 supply AC230V



SL-10 clamp number

- 1- push button illumination head sprinkler1
- 2- push button illumination head sprinkler1
- 3- push button illumination head sprinkler2
- 4- push button illumination head sprinkler2
- 5- push button illumination side nozzles
- 6- push button illumination side nozzles
- 7- push button illumination total programm
- 8- push button illumination total programm
- 9- locking output 2
- 10- locking output 2

SL-11 clamp number

- 1- push button head sprinkler 1
- 2- push button head sprinkler 1
- 3- push button head sprinkler 2
- 4- push button head sprinkler 2
- 5- push buttonside nozzles
- 6- push button side nozzles
- 7- empty switch - pressure switch
- 8- empty switch - pressure switch
- 9- push button total programm
- 10- push button total programm

SL-12 clamp number

- 1- power output 12 VDC +
- 2- power output 12 VDC -
- 3- power output 12 VDC +
- 4- power output 12 VDC -

SL-13 clamp number

- 5- locking input
- 6- locking input
- 7- locking input
- 8- locking input