

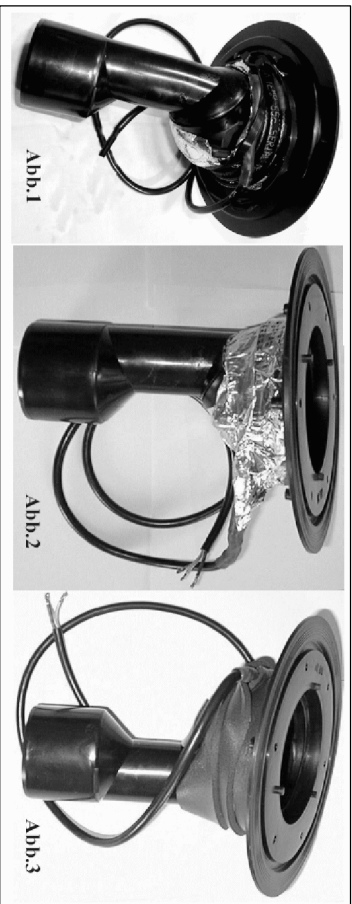
## MANUAL FOR HEATING KIT HL82, FITTING TO HL80-SERIES

DELIVERY INCLUDES:

- 1) HEATING TAPE
- 2) THERMAL INSULATION TAPE
- 3) CABLE CLIP
- 4) PARALLEL HEATING TAPE

MANUAL:

- 1) CLEAN CAREFULLY BODY IN THE RANGE OF THE BALL JOINT.
- 2) START WRAPPING A PART OF THE HEATING TAPE (50 mm x 10 m) AROUND THE BODY.
- 3) AFTERWARDS WRAP THE PARALLEL HEATING TAPE (18W/M, 230V) AROUND THE BODY.
- 4) FIX THE HEATING TAPE WITH THE CABLE CLIP ON THE BODY (SEE PICTURE 1).
- 5) WRAP THE REST OF THE HEATING TAPE (50 MM X 10 M) AROUND THE BODY AND THE PARALLEL – HEATING TAPE. (SEE PICTURE 2)
- 6) WRAP THE TAPE (6 X 40 X 2000 mm) ALL OVER THE BODY



## MANUAL FOR HEATING KIT HL82, FITTING TO HL80-SERIES

HEATING BELT IS ATTACHED THROUGH ELECTRICAL CABLE TO 230V. LENGTH OF THE CABLE IS 0,8 m CONNECTION IS MADE IN ELECTRICAL BOX SITUATED UNDER SUPPORTING STRUCTURE ACCORDING TO INDIVIDUAL CIRCUMSTANCES – ESPECIALLY CEILING STRUCTURE THICKNESS ACCORDING TO CABLE LENGTH. AUTOMATIC CIRCUIT-BREAKER MUST HAVE CHARACTERISTICS C, PROTECTIVE SWITCH 30 mA, 100 ms WITH SHORT-CIRCUIT PROTECTION 10A MUST BE INSTALLED.

HEATING BELT POWER OUTPUT CHANGES ACCORDING TO OUTSIDE TEMPERATURE CHANGES:

+10°C	5,55W
+ 5°C	9,25W
-10°C	12,95W

SELF-REGULATING HEATING BELT REACTS TO OUTSIDE TEMPERATURE WHEN VOLTAGE IS PRESENT. ACCORDING TO THIS IT HEATS ALSO IN SUMMER TIME (SEE TABLE). OUTDOOR THERMOSTAT IS VERY USEFUL FOR REGULATION. MANUAL CONTROL FOR HEATING RAISES HUMAN FAILURE FACTOR FOR SETTING SYSTEM OFF IN SUMMER TIME ESPECIALLY WHEN MORE DRAINS ARE PRESENT.

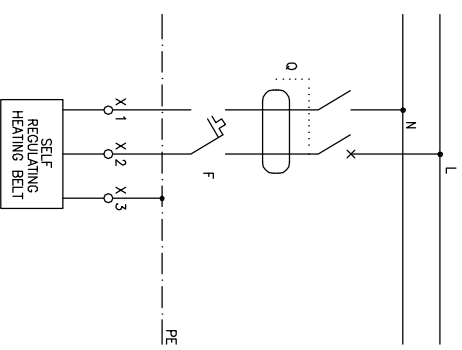
THERMOSTAT SETTING IS INFLUENCED BY SPECIFIC CLIMATIC CONDITIONS AND BUILDING SITE. USUALLY +5° CELSIUS CAN BE CONSIDERED AS MINIMUM TEMPERATURE FOR CONTACT MAKING. WHEN CONNECTING MORE DRAINS TO BIGGER HEATING SYSTEMS FOR EXAMPLE IN COMBINATION WITH SPOUTING HEATING USE OF THERMOSTATS WITH MOST SENSOR IS RECOMMENDED. HEATING BELT IS TESTED ACCORDING TO VDE 0721, PART 1/3.78 AND REG. NR. VDE1008.

CONNECTION DESIGN, USAGE MANUAL (EVENT. OPERATING INSTRUCTIONS) AND CONNECTION TO ELECTRICAL NETWORK CAN BE MADE ONLY BY SPECIALIZED COMPANIES.

ELECTRICAL CONNECTIONS AND REQUIREMENTS FOR MOUNTING HEATED DRAINS HAVE TO BE REALIZED ACCORDING TO STANDARDS AND REGULATIONS VALID IN YOUR COUNTRY.

WE RECOMMEND TO TEST WORKING CIRCUITS, RESISTANCE ON PHASE AND NEUTRAL WIRES ON HEATING BELT BEFORE CONNECTING IT TO ELECTRICAL BOX AND MEASURED VALUES RECORD TO TEST PROTOCOL (OR BUILDING LOG)

CONNECTING SCHEME:



- Q CURRENT GUARD
- F SWITCH (EVENT. CONTACTOR REGULATED BY THERMOSTAT)
- X1...X3 CLAMPS
- PE EARTHING CONDUCTOR
- N NEUTRAL CONDUCTOR
- L PHASE CONDUCTOR