Zonecheck®

Residential with IMM

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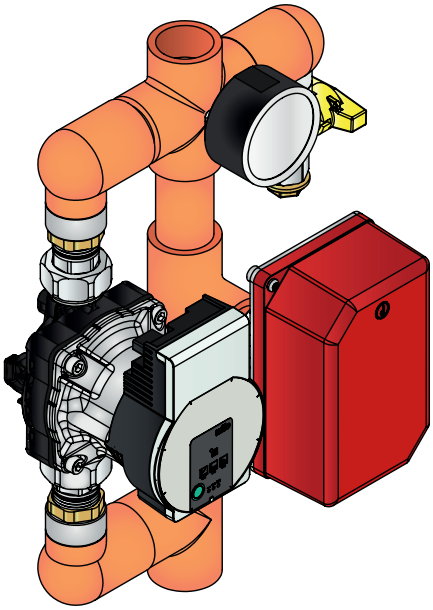
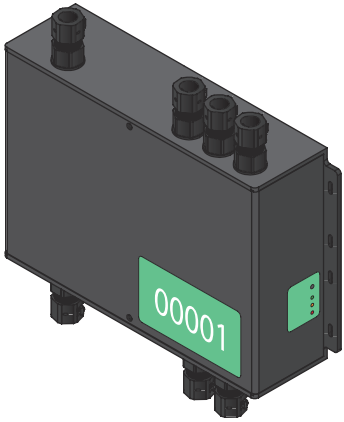




TESTED BY warringtonfire Ad Hoc Test Report No: 466529

Instruction Booklet

Information
While every effort has been made to ensure that the information contained within this document is correct, Project Fire makes no guarantee for completeness or accuracy. Project Fire Products Ltd reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligation.

Contents

Pre-checks

Before you install Zonecheck follow these simple steps.

1 Open the box and remove all packaging.
2 Check you have the correct size manifold.
3 Check that you have the correct model for your site.
4 Check that there is an Intelligent Monitoring Module (IMM) in the box (in some cases the IMM may have been pre-programmed for a set location, make sure you have the correct IMM for the zone you are in).
5 Check you have the IMM accessories pack.
6 Inspect the product to make sure it hasn't been tampered with. If you have any queries please contact your supplier.

Installation

Zonecheck should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.

1 Contact building management to inform them of the proposed works.
2 Isolate and drain down selected zone.
3 Orientate the Zonecheck in accordance with the diagrams in this booklet and install the Zonecheck.
4 Install the Zonecheck using the industry standard cold solvent welding process for plastic pipework.
5 Double check that the sprinkler flow arrow on Zonecheck pump is facing the correct direction.
6 Fit the IMM to the wall (or adjacent pipework using a bracket) in a suitable location.
7 Wire the Zonecheck pump and flow-switch to the IMM in accordance with the diagrams in this booklet.
8 Wire the appropriate power supply to the IMM.
9 Refer to Installation and Operating Guide for commissioning

DO NOT ATTEMPT TO MODIFY ZONECHECK,
TAMPERING WILL VOID THE WARRANTY.

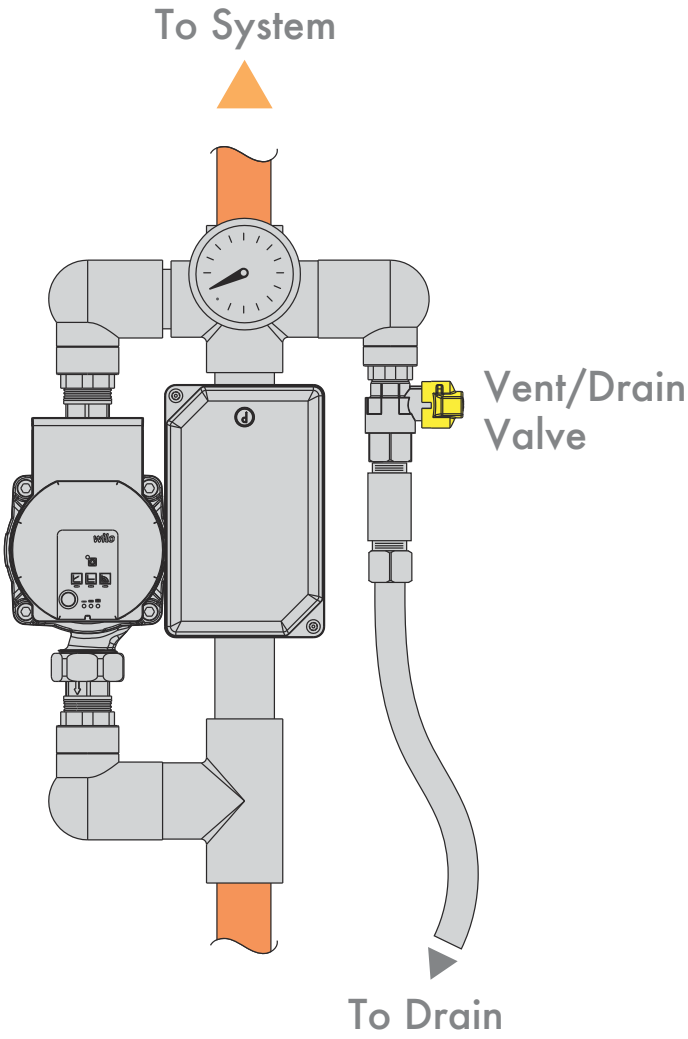
Commissioning

Before commissioning check:

- All Zonechecks have been mechanically installed correctly.
- Every Zonecheck is wired to its local IMM.
- Every IMM is wired into the loop.
- Controller is on and wired into the loop.
- All IMM details have been entered into the controller (i.e. serial number, location, zone & group details).
- Centre management/building control are aware of potential alarms/system activity caused during the commissioning process.

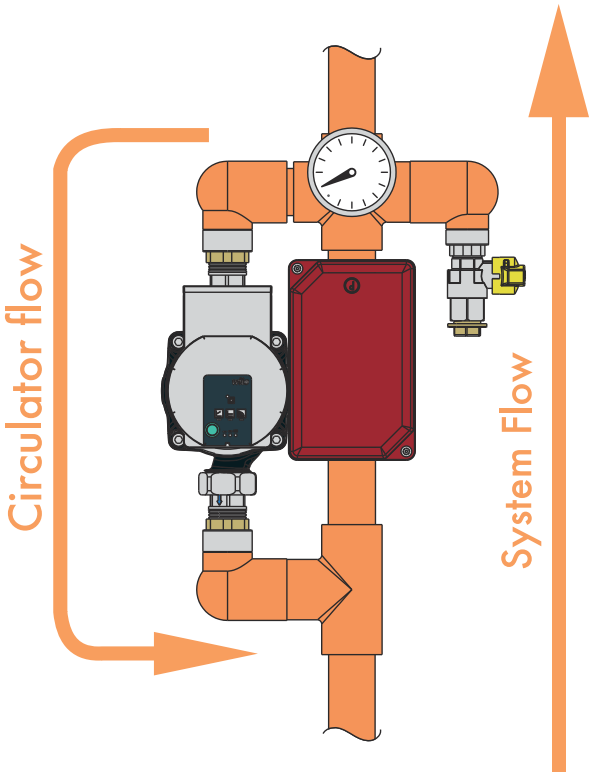
1 Contact the centre control room to authorise a flow-switch test.
2 Attach a barrel nipple and hosepipe to yellow vent valve on the Zonecheck. Carefully open the vent valve on the Zonecheck unit until only water (no air) is being expelled (this can take up to 10 minutes).
3 Discharge water through the hose to a local drain (this is a once only commissioning test).
4 Ensure that the IMM has received the signal from the flow-switch, the controller will assume that there is a fire condition from the Zonecheck unit being commissioned and sound the alarm (dependant on the set-up of the fire alarm, the controller may sound all fire alarms).
5 Close the valve, remove the barrel nipple and hose and replace plug.
6 Check the controller to ensure that the correct address for the Zonecheck/IMM have been shown on the display, this will be a fire alert. It will then read a zone, group and location these should all correspond with the last Zonecheck tested.
7 Contact the centre control room to check that a test signal has been received.
8 A test can be started from the IMM by pressing the internal TEST button for more than ½ second. The 'test in progress' LED will illuminate.
9 A pass is considered to be between 5 and 60 seconds from powering the pump and a fail otherwise. For internal reasons the unit will take at least 4 seconds to fail even if the flow-switch is always open or faulty. The tests will always time out after 61 seconds.
10 The 'pass/fail' LED will indicate the result of the test, green indicating that the test was successful.

Zonecheck Diagram

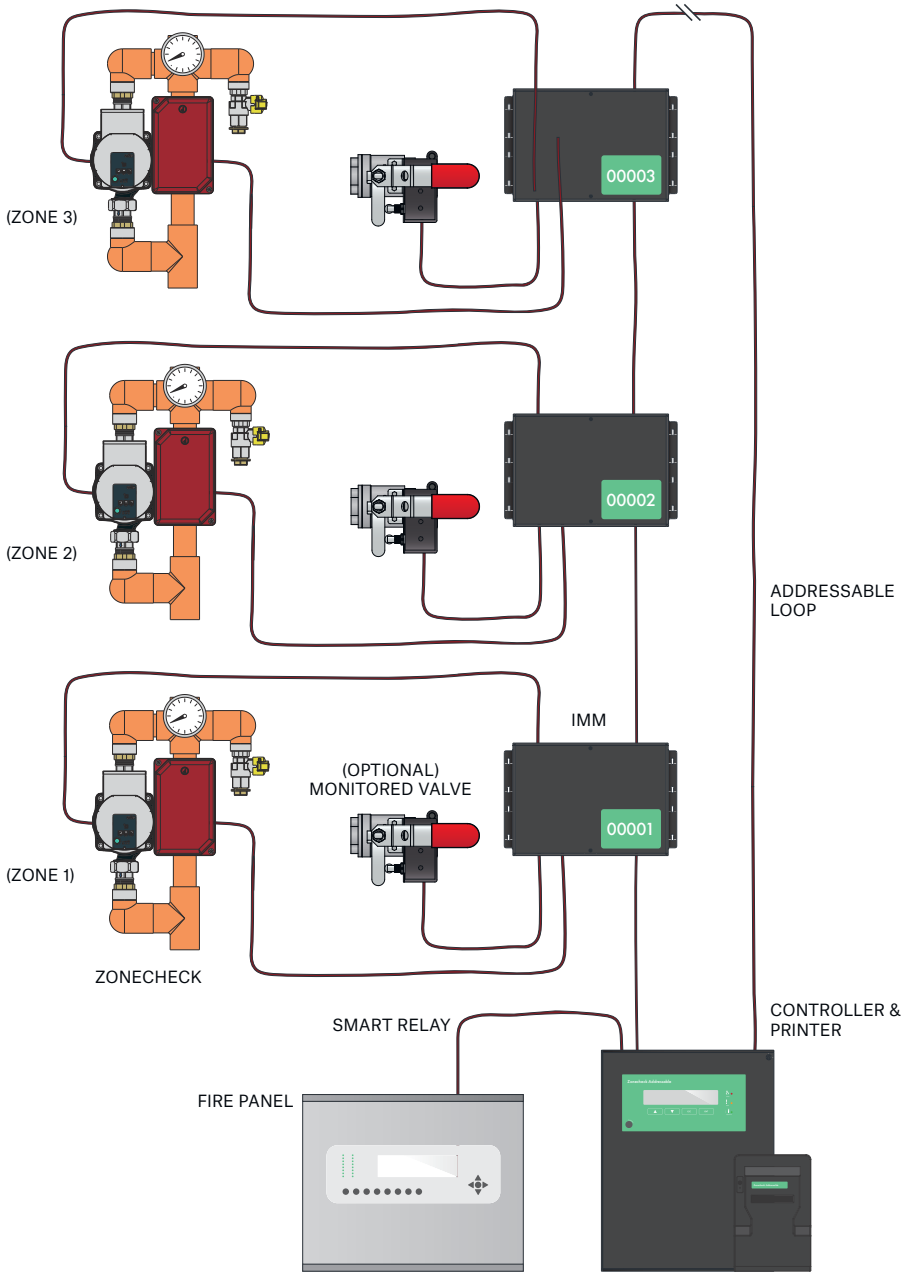


Orientation

- The pump direction-of-flow arrow faces the opposite direction to the system flow.
- For vertical flow applications, only mount flow-switch where up-flow conditions exist.

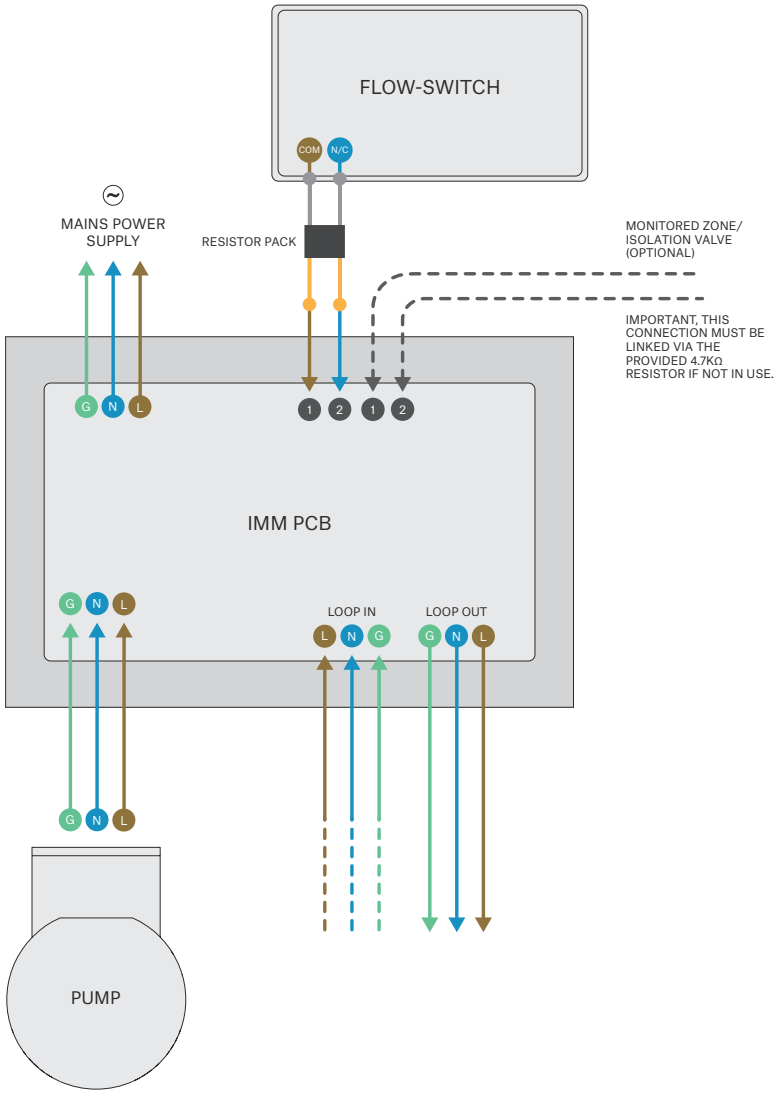


System Overview



IMM Wiring

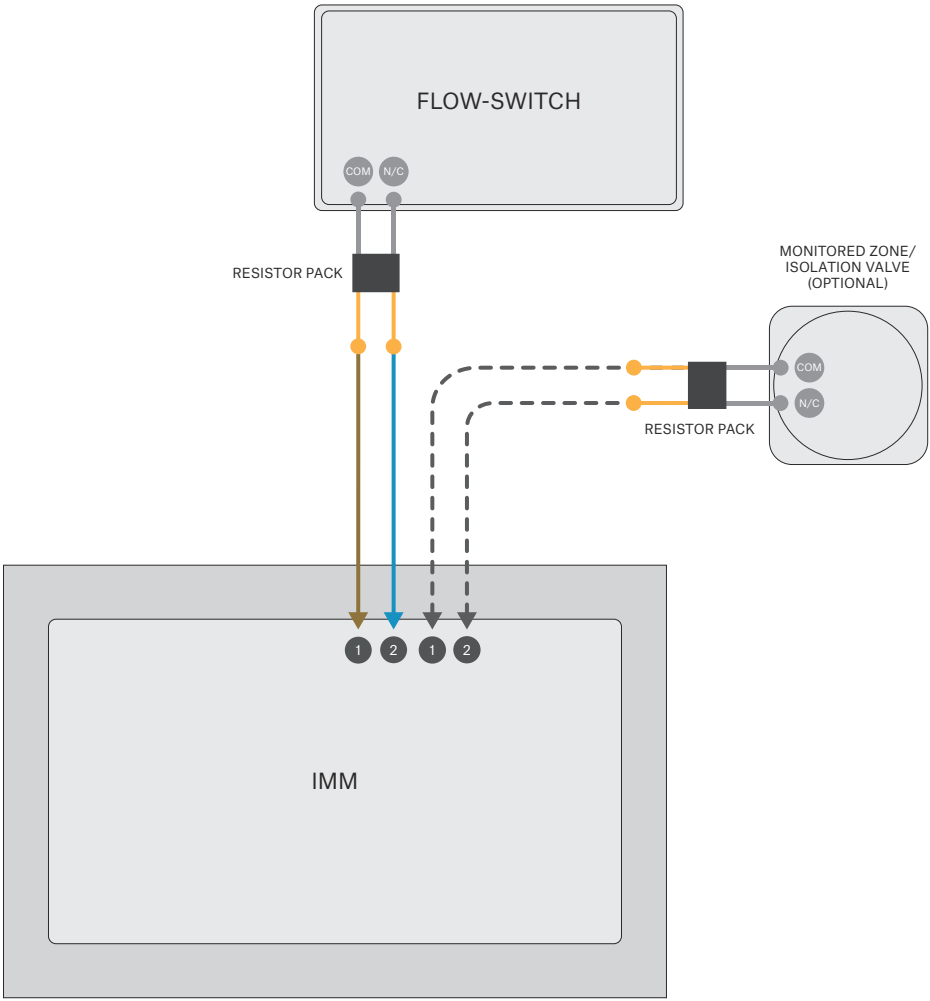
Please note Zonecheck and IMM should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.



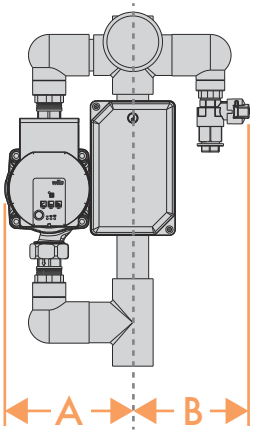
Flow-switch Wiring/Monitored Valve Wiring

Zonecheck should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.

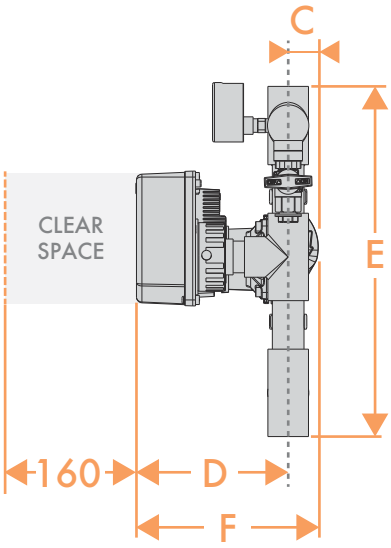
You can find the resistor packs in the IMM accessories pack that should be included in the IMM box.



Zonecheck Dimensions



Front View



Side View

in	Ø	A	B	C	D	E	F
1″	25	135	123	27	160	369	187
1¼″	32	155	148	27	165	395	192
1½″	40	161	154	52	145	404	197
2″	50	173	147	38	167	418	205

IMM Dimensions

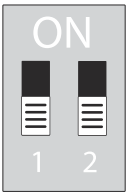
Ø4mm SLOTS

IMM Modes

Each IMM is equipped with a dip-switch. Each position determines the mode of that IMM. For typical applications the dip-switch should be set to NETWORK as shown below.

Network Mode

The IMM shall be connected to its local Zonecheck and sit on the wiring loop. Group testing can be done from the controller or solo testing from the concealed test button on the IMM itself.



NETWORK

Specifications

Zonecheck Residential	
Working pressure rating	Water, 10 bar (145 psi) maximum
Compatible pipe	BS EN 10255/CPVC
Pipe diameter	25, 32, 40 & 50mm (1", 1¼", 1½" & 2")
Pipe and fittings	Spears Flame Guard
Approvals	WarringtonFire (CPVC Zonecheck)

Circulation pump	
Operating voltage	1~230v 50/60Hz
Full load current	0.66A
Power rating	75W max
IP rating	IPX4D

Flow-switch	
Type	VSR-SG
Contact rating	10A@125/250 VAC; 2.0A @ 30VDC
IP rating	IP54
Triggering flow-rate	15-38 l/min (4-10 G/min) UL
Time delay	0 - 30 s

IMM	
Mains power supply	120-240 VAC 50/60Hz; 250W max
PCB voltage rating	120-240 VAC 50/60Hz; 250W max
Auxiliary outputs	
Number of outputs	1
Type	Relay, volt free, single pole, changeover/switched mains for Zonecheck pump
Max switching current	3A resistive
Max switching voltage	230VAC; 30VDC
Relay 1 (fire condition)	Active when a flow-switch is triggered, not under a test situation
Switched mains for pump	250 VAC; 3.0A
Inputs and auxiliary inputs	
Mains power supply	110-230 VAC 50/60Hz
Flow-switch input	Monitors flow-switch
Monitored valve input	Monitors external source

Troubleshooting

Zonecheck should be troubleshooted by a competent fire sprinkler installer and wiring checked by a qualified electrician.

No lights on IMM	Isolate the power then open the IMM and check the wiring against the wiring diagram. Confirm the power supply has been connected properly.
Pump fails to start	Isolate the power then check the IMM wiring against the wiring diagram. Confirm the power supply has been connected properly.
Flow-switch fails to operate.	1 Check Zonecheck has been installed facing the correct way. 2 Remove the plastic lid from the flow-switch, push and hold the trigger with your finger for 30 seconds. If the fire alarm operates see below. If not check the wiring against the diagram.
IMM status light is flashing red	Check monitored lines for an open or short circuit.
Pass/Fail light is red	Means the previous flow-switch test failed (A pass is considered to be between 15 and 90 seconds from powering the pump).
Pump runs hot and does not operate the flow-switch	1 Ensure isolation valves are open and there is water in the pipework 2 Attach hosepipe to the nearest vent valve to Zonecheck. 3 Carefully open the vent valve to remove the air, allow water to drain to make sure all air is bled from the unit.

Important Information

- Ensure Zonecheck is installed both mechanically and electrically commissioned and tested prior to leaving site.
- Ensure protection to Zonecheck is employed whenever there is an extended period from installation to commissioning.
- The suggested location for the IMM is at low level affixed to a wall or adjacent pipework using a suitable bracket.
- Each Zonecheck is factory assembled and tested. Do not attempt to reconfigure, tampering will void the warranty.
- Maximum working pressure - 10 bar (140 psi).
- Use Zonecheck flow-switch testers in wet-pipe systems only. Do not use in dry pipe, deluge, or pre-action systems.
- Only activate the Zonecheck when the sprinkler system is full.

Standards & Approvals

It is a requirement of BS 9251 that you should carry out a functional test on a fitted flow-switch annually. All international fire code standards such as NFPA, FM etc all make the flow-switch test mandatory. Zonecheck can carry out this test simply, at the turn of a key.

The Warringtonfire Logo is used by Project Fire Products Limited in the United Kingdom under licence from Warringtonfire and is evidence that 'Zonecheck Residential' a CPVC (Chlorinated polyvinyl chloride) flow-switch detector tester has been tested in England on February 5th 2019.

One Year Warranty

Project Fire Products warrants its enclosed Zonecheck flow-switch tester to be free from defects in materials and workmanship under normal use and service for a period of one year from date of manufacture. Project Fire Products makes no other express warranty for this flow-switch tester. No agent, representative, dealer or employee of the Company has the authority to increase or alter the obligations or limitations of this warranty. The Company's obligation of this warranty shall be limited to the repair or replacement of any part of the flow switch tester, which is found to be defective in materials or workmanship under normal use and service during the one-year period commencing with the date of manufacture. After phoning Project Fire's number, 01889 271 271 for a Return Authorization number, send defective units postage prepaid to Project Fire, Pasturefields Industrial Estate, Pasturefields Lane, Hixon, Staffs, ST18 0PH. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units, which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault.

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