

Defender® condensate neutralisers should only be installed by a qualified professional.

Read all instructions before installing. Perform steps in the order given. Failure to comply could result in a defective installation with the risk of property damage and personal injury.

Do not allow flue gases to vent through condensate neutraliser. Vent in cap is designed to allow proper flow through neutraliser.

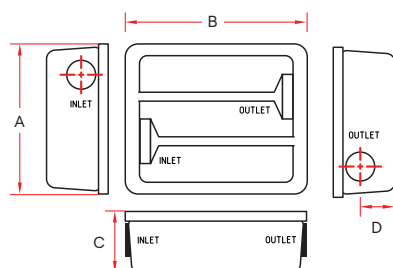
All condensate drain lines must have a water trap before entering the neutraliser.

Defender neutralisers should only be connected to a condensate outlet that is installed per the appliance manufacturer's instructions.

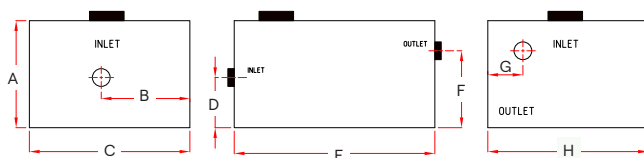


## Dimensions

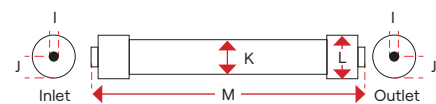
All measurements in mm



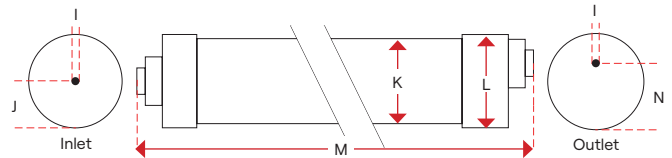
DCN1475



DCN1750



DCN65V



DCN175/350/600

| Model   | A   | B   | C   | D    | E   | F   | G  | H     |
|---------|-----|-----|-----|------|-----|-----|----|-------|
| DCN1475 | 356 | 433 | 150 | 85.5 | -   | -   | -  | -     |
| DCN1750 | 203 | 168 | 305 | 95   | 381 | 146 | 67 | 304.8 |

| Model  | kW  | I        | J  | K   | L   | M   | N  |
|--------|-----|----------|----|-----|-----|-----|----|
| DCN65V | 65  | 15 BSP F | 35 | 51  | 70  | 375 | -  |
| DCN175 | 176 | 15 BSP F | 64 | 114 | 121 | 324 | 86 |
| DCN350 | 352 | 15 BSP F | 64 | 114 | 121 | 473 | 86 |
| DCN600 | 586 | 15 BSP F | 64 | 114 | 121 | 705 | 86 |

### ! Important

All piping should be in accordance with relevant building and mechanical codes, as well as any local, state or federal regulations.

The Condensate Neutraliser should be installed below all traps and condensate outlets.

It is recommended that the installer maintain a pitch of 15mm per metre between the condensate neutraliser outlet and the pump or drain.

Do not use pipe dope on threaded fittings - use only Teflon tape.

Defender condensate neutralisers must **NOT** be installed in the vertical position (except for the DCN-65V vertical model)

It is recommended that the neutraliser be installed before a condensate pump where needed.

All condensate traps should be primed before commencing operation of the appliance.

Defender Condensate Neutraliser media should be replaced at least once a year or when pH falls below local regulations.

Defender Condensate Neutralisers are suitable for outdoor installation, however must be protected from sunlight and UV rays.

### Mounting Options

It is recommended that Defender condensate neutralisers be installed as close as possible to the outlet of the condensate trap.

Condensate neutraliser may be installed on level ground or mounting brackets (not provided).

Defender condensate neutralisers may be installed on or above the floor so long as a pitch of 15mm per metre is maintained between the neutraliser outlet and the drain or pump.

It is recommended that unions be installed to facilitate maintenance of the condensate neutraliser.

### Installation

1. If using PVC pipe, apply Teflon tape to the threads of PVC socket adaptors and attach to neutraliser. **Do not over tighten.**
2. Identify suitable location for assembled condensate neutraliser. **Observe direction of flow as indicated on neutraliser.**
3. PVC unions should be secured at either end of the neutralizer.
4. Prime and glue PVC pipe to fittings.  
*Note: If using flexible tubing, be sure to use hose clamps at barb fittings.*  
*Note: PVC pipe is the preferred method for piping condensate drain lines.*
5. Route PVC pipe or tubing to drain or pump, maintaining a pitch of 15mm per metre.
6. Fill condensate trap with water until flow is established through neutralizer.
7. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.
8. Location of unit must allow service access.

### Installation Advice

It is recommended that the Condensate Neutraliser be installed as close as possible to the outlet of the gas trap.

Do not allow flue gases to vent through the Condensate Neutraliser. All condensate drain lines must have a gas trap before entering the Neutraliser.

All Neutralisers must be installed in the horizontal position except for model DCN-65V which must be installed in the vertical position.

The Neutraliser media should be replaced at least once per year or when the pH level of condensate discharge falls below the level stipulated in your local regulations.

### Maintenance

1. All service items should be undertaken by a qualified professional.
2. Visually inspect unit for signs of leaking or damage.
3. Neutraliser media should be replaced at least once a year or when pH falls below local regulations. Neutraliser efficiency can only be determined by measuring pH level of condensate outflow. Replacement media is available as a spare part.
4. Treated condensate should be as close to 7 (neutral) as possible with 5 being the minimum.
5. Disconnect condensate line from both the inlet and the outlet of the neutralizer.
6. Unscrew cap and remove spent neutralizer media. Rinse empty neutralizer with water.
7. Add replacement media and replace cap.
8. Reattach neutralizer to condensate line and prime flue gas trap with a minimum of 1 gallon of water.
9. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

### Installation Examples

