

## **FOUL DRAINAGE DETAIL CONDITION 7**

**Date: 24<sup>th</sup> October 2023**

**Planning Reference: DC/23/02725**

**Prepared by: C&K Smith Ltd in conjunction with JRF Developments**

### **7. ACTION REQUIRED PRIOR TO FIRST OCCUPATION: FOUL DRAINAGE DETAIL**

The new dwelling hereby approved shall not be occupied until precise details of the foul drainage scheme, to serve the development hereby approved, have been submitted to, and approved in writing by, the Local Planning Authority. Where Package treatment plants are proposed, the applicant must provide confirmation, in writing, detailing how the proposal will meet the requirements of the updated General Binding Rule: General binding rules: small sewage discharge to surface water – GOV.UK

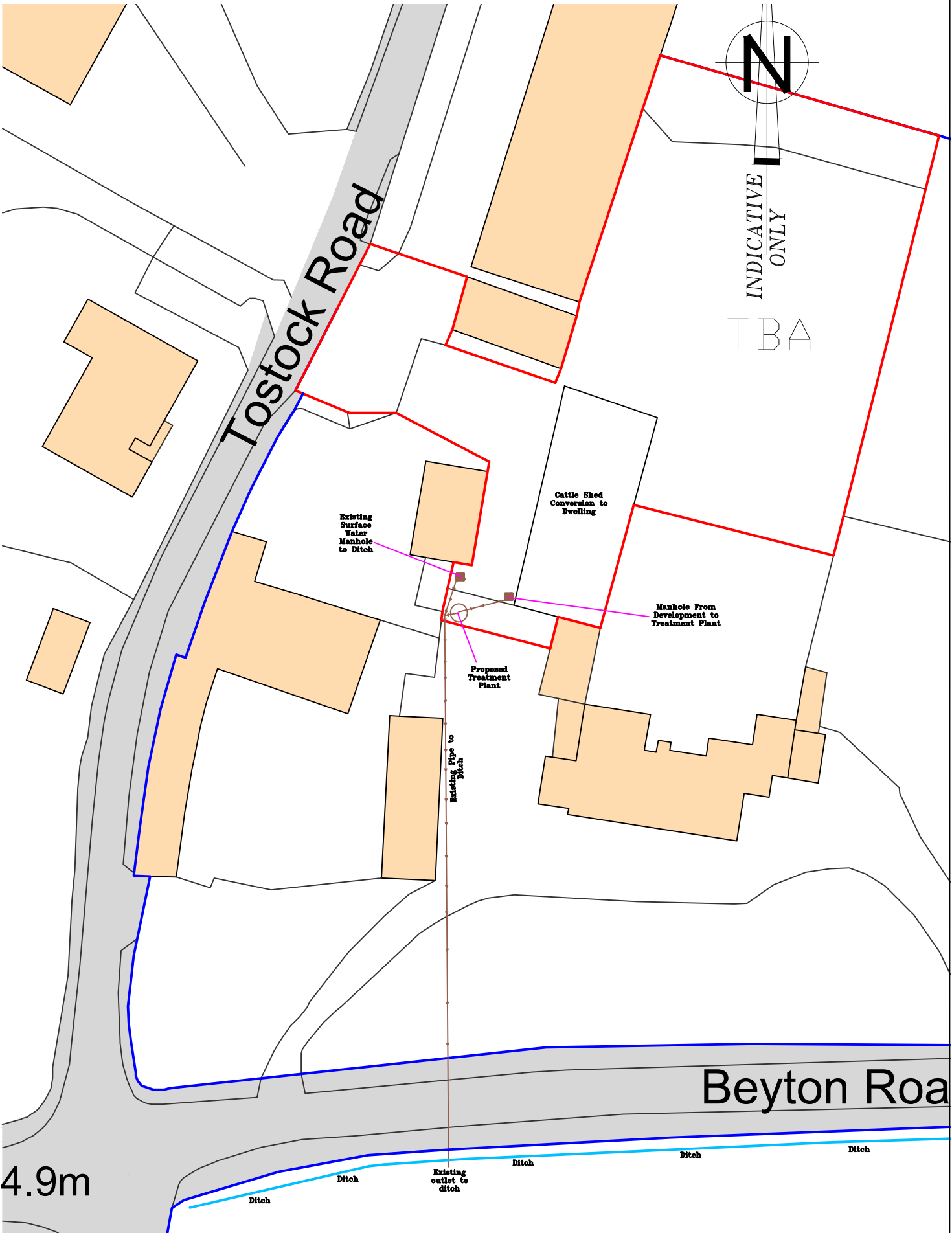
#### **INTRODUCTION**

Homeowners are responsible for their choice, installation and maintenance of their wastewater system under a new code of practice introduced by the Environment Agency. They have a legal responsibility to minimise the impact of their sewage waste if they manage it within the bounds of their property e.g., with a septic tank or sewage treatment plant (Binding Rules - England, DEFRA, January 2015)

#### **PROPOSED FOUL DRAINAGE DETAILS**

In order to conform to current General binding legislation, it is proposed that all foul sewerage from the proposed dwelling is discharged to a Klargestar BioDisc Domestic Sewage Treatment Plant (See appendix A) which produces a clear overflow that is environmentally and suitable for discharge.

Appendix B shows the proposed layout onsite.



- Site Boundary
- Ownership Boundary

**C&K SMITH LTD**  
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Drawing Number:- Appendix B\_ Foul Drainage  
 Drawn by:- Craig Smith      Amended:-  
 Checked by:- JRF              Sheet:- 1 of 1  
 Date :- 24.10.23              Scale:-1:500 @A4 Size

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Water Management Solutions

  
Kingspan



**Klargester**

# BioDisc<sup>®</sup> BA-BE Sewage Treatment Plant



[kingspan.co.uk/klargester](http://kingspan.co.uk/klargester)

  
**Kingspan**<sup>®</sup>

# Klargester BioDisc® Domestic Sewage Treatment Plant

## Support from start to finish from our expert team



Step 1

### Free survey

Contact us and we'll arrange for a local Kingspan Klargester expert to visit your home for a full site assessment, should you need it.



Step 2

### Choice

Our professional team will work with you to help choose the correct BioDisc model.



Step 3

### Set up

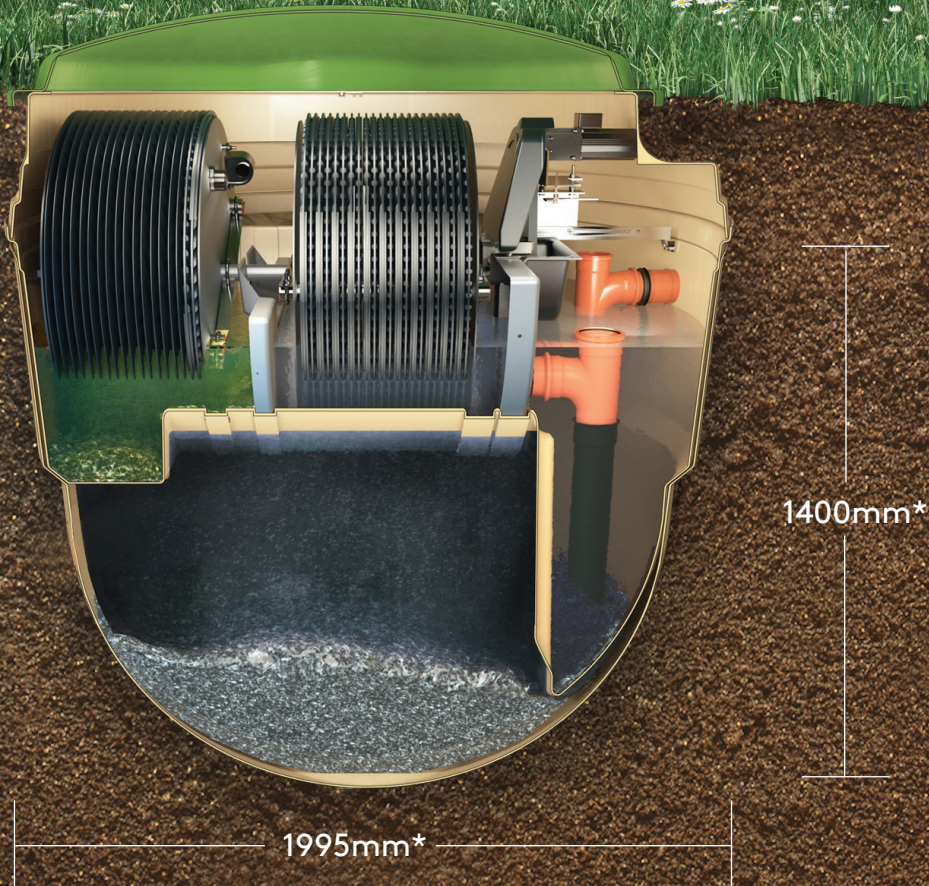
We offer full commissioning and activation for your BioDisc, ensuring it runs optimally right from the start.



Step 4

### Service

We offer tailored service and maintenance packages for your BioDisc treatment plant.



\* Dimensions illustrated here are applicable to the BA and BB models only.

## Choosing the right sewage treatment plant for your home with Kingspan Klargester

Kingspan Klargester provides relevant advice and support throughout the wastewater treatment purchasing process based on our in-depth local knowledge and expertise. We offer comprehensive free site visits, professional installation options (optional extra) and expert aftersales care through our national network of accredited installers and engineers.

BioDisc is 100% compliant with European standard EN 12566-3

I'm a homeowner - what do I need to consider before choosing my treatment plant?

The Kingspan Klargester BioDisc sewage treatment system is available to suit all types of domestic applications, catering for single and multi-house properties. BioDisc is engineered to treat wastewater to a very high standard and offers affordable lifetime costs compared to other treatment processes.

Our team will guide you through:

- Size of treatment plant required
- Ground conditions around the plant
- Wastewater discharge options
- Invert level options

## Why BioDisc®?

With strict Environment Agency standards, it's more important than ever to choose a sewage treatment plant that delivers peace of mind with reliable treatment of wastewater.

The Kingspan Klargester BioDisc is built on the back of 65 years' experience and offers the following benefits:

**7 YEAR WARRANTY\*\***

## Product benefits



Affordable lifetime running costs



Odour free



Trusted and reliable performance



Silent Operation

BioDisc is one of the few systems in the UK which doesn't make use of an air pump (used in an 'aerated' system) which means minimal odour being released. This is verified by an independent odour sampling report (available on request).

At a recent site, our expert team concluded that the domestic BioDisc has the same level of noise as the average ambient background noise outside (between 40-55 decibels) \*



40-55 DECIBELS

Domestic BioDisc  
Decibel equivalent to a modern refrigerator



75-80 DECIBELS

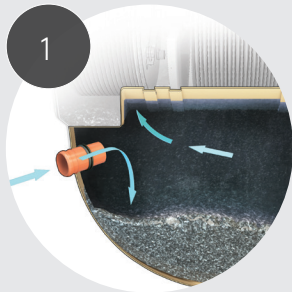
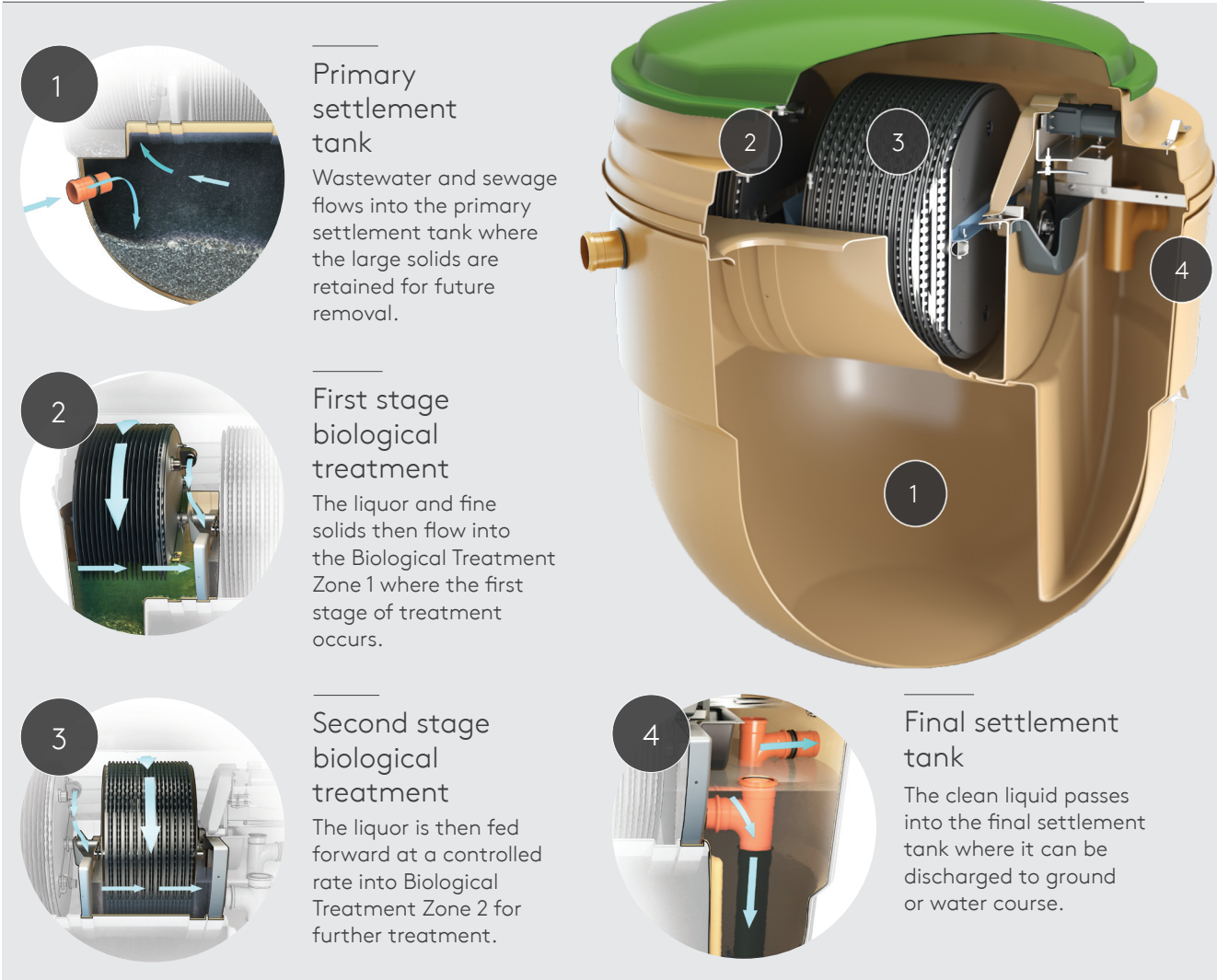
Typical aerated system  
Decibel equivalent to a coffee grinder machine

\* This is a representative figure based on a commercial BioDisc plant.

Register your guarantee online at [kingspan.co.uk/klargesterguarantee](https://www.kingspan.co.uk/klargesterguarantee) to arrange your service and enjoy an extended seven year guarantee period.\*\*

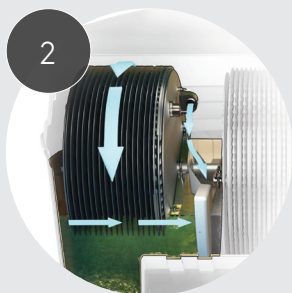
\*\* For BA and BB BioDisc models only, when registered online - terms and conditions apply.  
Visit: <https://www.kingspan.com/gb/en-gb/products/wastewater-management/warranty-terms>

# How it works



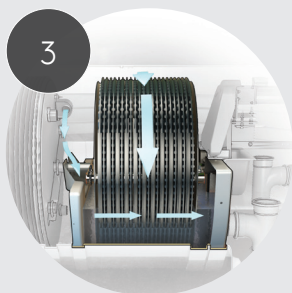
### Primary settlement tank

Wastewater and sewage flows into the primary settlement tank where the large solids are retained for future removal.



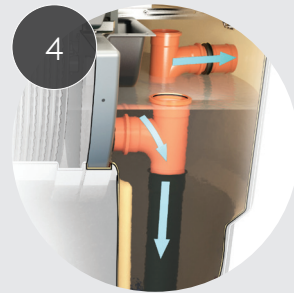
### First stage biological treatment

The liquor and fine solids then flow into the Biological Treatment Zone 1 where the first stage of treatment occurs.



### Second stage biological treatment

The liquor is then fed forward at a controlled rate into Biological Treatment Zone 2 for further treatment.



### Final settlement tank

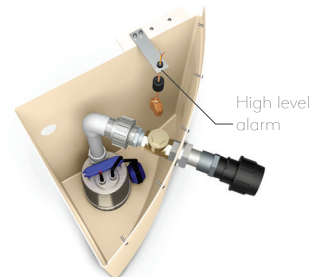
The clean liquid passes into the final settlement tank where it can be discharged to ground or water course.



Control panel and beacon featuring alarm\* and digital display to signal that your system is working optimally (beacon and alarm optional extras).

## SmartServ Pro

Ask us about our SmartServ Pro remote monitoring solution (optional extra). With early fault detection, SmartServ Pro lets you know when your system needs serviced, giving you peace of mind. Find out more at [helpingyou@kingspan.com](mailto:helpingyou@kingspan.com)



**Integrated Pump System** also available (for pumped systems only). Our technical team will guide you through the best options for your site.

Book your free site visit from our expert Klargester team at [klargester@kingspan.com](mailto:klargester@kingspan.com) or visit [kingspan.co.uk/klargester](http://kingspan.co.uk/klargester)

Silent  
operation

Odour Free

Trusted and  
reliable  
performance

## Technical Specifications

| Model Reference                         | BA             | BAX            | BB             | BC        | BD        | BE        |
|---|----------------|----------------|----------------|-----------|-----------|-----------|
| Population Equivalent                   | 8              | 12             | 16             | 24        | 33        | 47        |
| Maximum Daily BOD5 (g BOD5)             | 360            | 540            | 720            | 1080      | 1500      | 2100      |
| Maximum Daily Flow (m3)                 | 1.2            | 1.8            | 2.4            | 3.6       | 5         | 7         |
| Maximum Daily Ammonia (g NH4)           | 48             | 72             | 96             | 144       | 200       | 280       |
| Overall Diameter (mm)                   | 1995           | 1995           | 1995           | 2450      | 2450      | 2450      |
| Length (mm)                             | N/A            | N/A            | N/A            | N/A       | 3340      | 3340      |
| Inlet Invert depth (mm)                 | 450/750/1250   | 450/750/1250   | 450/750/1250   | 600/1100  | 600/1100  | 600/1100  |
| Depth Below Inlet Invert (mm)           | 1400           | 1400           | 1400           | 1400      | 1820      | 1820      |
| Outlet Invert Depth (mm)                | 1315           | 1315           | 1315           | 1735      | 1735      | 1735      |
| Overall Height (mm)                     | 2160/2460/2960 | 2160/2460/2960 | 2160/2460/2960 | 2825/3325 | 2825/3325 | 2825/3325 |
| Height to Rim of Cover (mm)             | 1945/2245/2745 | 1945/2245/2745 | 1945/2245/2745 | 2485/2985 | 2485/2985 | 2485/2985 |
| Empty Weight (kg)                       | 310/325/380    | 335/350/405    | 335/350/405    | 650/750   | 1100/1200 | 1200/1300 |
| Standard Power Supply                   | 1 phase        | 1 phase        | 1 phase        | 1 phase   | 1 phase   | 1 phase   |
| Motor Rating – Single Phase (Watts)     | 60             | 60             | 60             | 173       | 253       | 253       |
| Full Load Current - Single Phase (amps) | 0              | 0              | 0              | 1         | 1         | 1         |
| Optional Power Supply                   | N/A            | N/A            | N/A            | 3 phase   | 3 phase   | 3 phase   |
| Motor Rating – 3 Phase (Watts)          | N/A            | N/A            | N/A            | 90        | 90        | 90        |
| Full Load Current - 3 Phase (amps)      | N/A            | N/A            | N/A            | 0.38      | 0.38      | 0.38      |
| Sludge Return Pump Rating (Watts)       | 250            | 250            | 250            | 250       | 250       | 250       |

### Invert level options

Three standard drain invert level options are available from stock to match the site topography and where applicable, minimise the excavation depth. The BA, BB and BA-X models are available with an integral pump to move the effluent from the point of treatment, if site level demands.

## Environment Agency regulations

As an off-mains homeowner, you must comply with the General Binding Rules by ensuring your treatment system is maintained properly and does not cause pollution. These rules state that you must arrange regular

maintenance for your system, via a trusted service provider. Kingspan Service can help with expert servicing and alarm packages – email [helpingyou@kingspan.com](mailto:helpingyou@kingspan.com)

## Protect your investment with our Service and Maintenance Plans

We recommend that you service your BioDisc sewage treatment plant **once a year**. Under Environment Agency regulations, it's now your responsibility to ensure smooth running of your plant.

Our in house Service department offer a range of service packages

including Gold, Silver and Bronze to cater for all homeowners' needs.

To find out more about how you could benefit from a tailored service package from Kingspan, call us on **0333 240 6868** or email [helpingyou@kingspan.com](mailto:helpingyou@kingspan.com)

For further technical information & videos on the BioDisc treatment plant visit our website [atkingspan.co.uk/klargester](http://atkingspan.co.uk/klargester)

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# Contact Details

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