

**Pumps:** RBB 150-35C 4C55 M181 3

**Item:**

### LIQUIDO

|        |                |  |                     |      |                    |
|--------|----------------|--|---------------------|------|--------------------|
| Liquid | WASTEWATER     |  | Liquid Temperature  | 20   |                    |
| Liquid | SOLID SIZE N/A |  | Density             | 1,00 | kg/dm <sup>3</sup> |
| Liquid | -              |  | Kinematic Viscosity | 1,0  | mm <sup>2</sup> /s |

### DESIGN PARAMETER

|  |       |                   |                             |             |       |
|--|-------|-------------------|-----------------------------|-------------|-------|
| Working Capacity                           | 450,0 | m <sup>3</sup> /h | Working Absorbed Power      | 49,82       | kW    |
| Working Head                               | 31,5  | m                 | Nominal Working Speed       | 1.480       | 1/min |
| Required Capacity                          | 450,0 | m <sup>3</sup> /h | Service                     | -           |       |
| Required Head                              | 29,9  | m                 | Suction Conditions          | -           |       |
| Max. Capacity                              | 635,5 | m <sup>3</sup> /h | Geodetic Suction Head       | -           |       |
| Min. Capacity                              | 63,1  | m <sup>3</sup> /h | Gauge Suction Pressure      | 0,00        | bar   |
| Max. Head                                  | 40,7  | m                 | Minimum ambient temperature | -20         | °C    |
| NPSH available                             | 0,00  | m                 | Altitude of Installation    | <1000 m ASL |       |
| NPSH <sub>r</sub> (Required from the pump) | 2,05  | m                 |                             |             |       |
| Efficiency at Working Point                | 77,6  |                   |                             |             |       |

### PUMP DETAILS

|                              |              |     |                           |                               |    |
|------------------------------|--------------|-----|---------------------------|-------------------------------|----|
| Pump Standard                | ISO 5199     |     | Flange Face Finish        | RF - Flanged with Raised Face |    |
| Pump Designation             | RB           |     | Rated Impeller Trim       | C                             |    |
| Pump Size                    | 150-35       |     | Impeller Type             | Channel                       |    |
| Pump Group                   | 4            |     | Rated Impeller Diameter   | 340                           | mm |
| Installation area            | Safe Area    |     | Maximum Impeller Diameter | 359                           | mm |
| Atex Category                | Safe Zone    |     | Minimum Impeller Diameter | 280                           | mm |
| Design Pressure              | 10           | bar | Solids Free Passage [mm]  | 40X75                         |    |
| Hydrostatic Test Pressure    | 15           | bar | Casing Drain Hole         | 1/2 G                         |    |
| Suction Port Diameter [DN]   | 200          |     | Casing Venting Hole       | 1/2 G                         |    |
| Discharge Port Diameter [DN] | 150          |     | Painting Cycle            | STD-RAL5010-Poliacr.cat.      |    |
| Pump Flanges Norm            | EN 1092 PN10 |     | Pump RAL                  | 5010                          |    |

### PUMPS EXECUTION

|                              |                               |  |                           |                |    |
|------------------------------|-------------------------------|--|---------------------------|----------------|----|
| Pump Configuration           | Horizontal                    |  | Coupling Type             | MFR Standard   |    |
| Pump Execution               | On base With STD Flex. Coupl. |  | Coupling Spacer           | Without Spacer |    |
| Bearing Size/Arrangement     | STD                           |  | Spacer length             | 0              | mm |
| Bearing Lubrication Type     | Oil                           |  | Motor Shaft diameter      | 65,0           | mm |
| Bearing Housing Oil Capacity | 1,95 l                        |  | Shaft Diameter Drive side | 55             | mm |
| Bearing Temp. Probes         | Not Included                  |  | Baseplate Code Number     | 8              |    |
| Constant Level Oiler         | Not Included                  |  | Base-Plate Drain Pan      | Not Included   |    |
| Transmission Type            | Flex Coupling                 |  |                           |                |    |

### PUMPS MATERIALS

|                       |                              |  |                      |                              |  |
|-----------------------|------------------------------|--|----------------------|------------------------------|--|
| Pump Casing Material  | EN1.4408-A351 CF8M-AISI 316  |  | Wear Ring Material   | EN1.4404-A351 CF3M-AISI 316L |  |
| Impeller Material     | EN1.4408-A351 CF8M-AISI 316  |  | Gasket Main Material | SIL C-4400                   |  |
| Shaft Material        | EN10083 - C45                |  | Base-Plate Material  | Carbon Steel                 |  |
| Shaft Sleeve material | EN1.4404-A351 CF3M-AISI 316L |  | Coupling Material    | Cast Iron                    |  |
| Wear Plate Material   | Not Present                  |  |                      |                              |  |

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**MECHANICAL SEALS**

|                                |                            |                         |                            |   |
|--------------------------------|----------------------------|-------------------------|----------------------------|---|
| Seal Execution                 | M (Standard) (Single Seal) | Cartridge Type          | -                          |   |
| Mechanical Seal Nominal Diamet | 70                         | mm                      | Cartridge Seal Brand       | - |
| Seals Supply                   | Included                   | Cartdrige Internal Code | 999                        |   |
| Mech. Seal Type (Pump Side)    | UN L4K                     | Cartridge Seal          | -                          |   |
| Mech. Seal Pump Side Brand     | Uniten                     | API PLAN                | 02 (Dead end)              |   |
| MFR Internal Mech. Seals Code  | 181                        | Plan Pipes material     | N.A.                       |   |
| Mechanical Seal Pump Side      | SIC/SIC/VITON              | Flushing Pressure       | Ext. Flushing not required |   |
| Mech. Seal Pump Side Pin       | Not Present                | Flushing Tank           | Not Present                |   |
| Mech. Seal Type (Flush. Side)  | -                          | Flushing Tank Supply    | Tank Not Included          |   |
| Mech. Seal Motor Side Brand    | -                          |                         |                            |   |
| Mechanical Seal Motor side     | -                          |                         |                            |   |
| Mech. Seal Motor Side Pin      | Not Available              |                         |                            |   |

**EXTRA**

|                                |             |                          |             |  |
|--------------------------------|-------------|--------------------------|-------------|--|
| Heating/Cooling Casing Chamber | Not Present | Pump Casing Treatments   | Not Present |  |
| Seal Heating Jacket            | Not Present | Pump Impeller Treatments | Not Present |  |
| Heat Exchanger                 | Not Present | Special Pump Treatments  | Not Present |  |
|                                |             | Special Casing Execution | Not Present |  |

**MOTOR**

|                               |                |                        |                                |   |
|-------------------------------|----------------|------------------------|--------------------------------|---|
| Electric Motor Brand          | SEIPEE         | Motor Class Tolerances | NO - Standard Class            |   |
| El. Motor Serie               | GM             | Additional Fan Cooling | -                              |   |
| Electric Motor Poles          | 4              | Motor Roof             | -                              |   |
| Motor Power                   | 55,00          | kW                     | PT100 Probes                   | - |
| Motor Size                    | 250M           |                        | Auxiliary Electric Box         | - |
| El. Motor Flange Diameter     | 550            |                        | Motor Heaters                  | - |
| Electric Motor Supply         | Included       | Heaters Voltage [V]    | -                              |   |
| El Motor Standard/Customized  | Standard       | Working Temp. < -20°C  | -                              |   |
| Motor Category                | IEC (not Atex) | Working Temp. >40°C    | -                              |   |
| Std. Electric Motor Brand     | SEIPEE         | Motor Casing Material  | Cast Iron                      |   |
| Nominal Motor Frequency       | 50             | Hz                     | Downsized Motor                | - |
| Operating motor voltage       | 400/690        |                        | Derated Engine Power           | - |
| Motor Efficiency Class        | IE3            |                        | Additional Label               | - |
| Motor Shape                   | B3             |                        | Insulated Ball Bearing for VFD | - |
| Motor Protection              | IP55           |                        | Motor Extras                   | - |
| Insulation Class              | F              |                        | Extras                         | - |
| PTC                           | Included       |                        | Extras                         | - |
| Number of PTC Required        | -              |                        | Extras                         | - |
| Max Frequency (Inverter Use)  | 60             |                        | Extras                         | - |
| Min. Frequency (Inverter Use) | 30             |                        |                                |   |

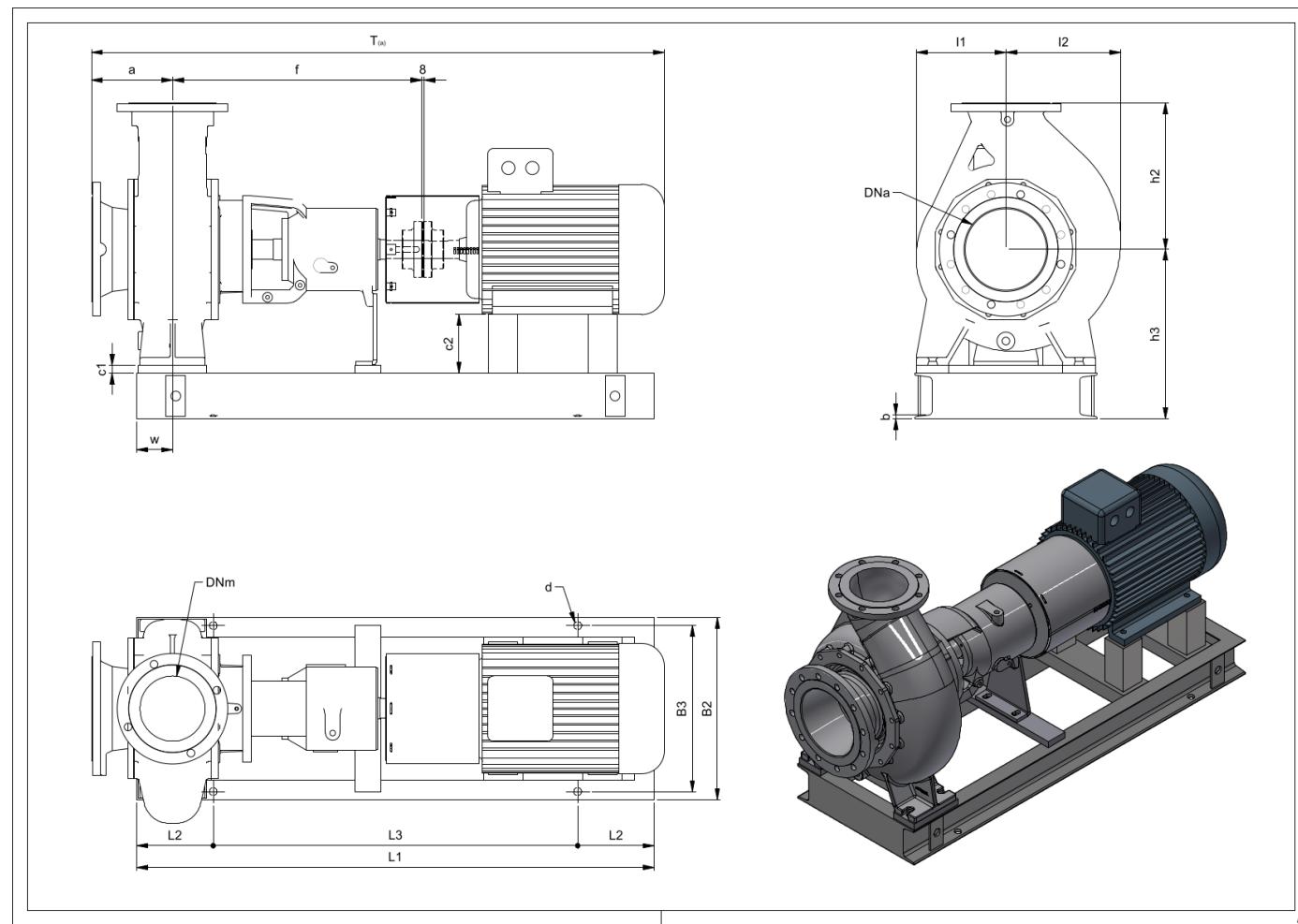
**TEST AND CERTIFICATES**

|                                |                               |                                |                               |  |
|--------------------------------|-------------------------------|--------------------------------|-------------------------------|--|
| Food Certificate               | No Certification Issue        | NPSH Test                      | No Certification Issue        |  |
| ATEX Declaration of Conformity | No                            | Noise Test                     | No Certificate Issue          |  |
| Impeller Balancing Certificate | No Certificate Issue (P-1006) | Painting Check                 | No Certificate Issue          |  |
| CE Declaration of Conformity   | Yes                           | Certificate of Quality         | No                            |  |
| Drawing Acc.To Customer Spec.  | No                            | End Supply Certification Book  | No                            |  |
| Certificate of Warranty        | No                            | Performance Test (Q-H-P)       | No Certificate Issue          |  |
| Hydrostatic Test               | No Certificate Issue (P-1005) | Visual a Dimensional Check     | No Certificate Issue (P-1012) |  |
| Inspection and Test Plan       | No                            | Vibration Test                 | No Certificate Issue          |  |
| Material Certificate           | -                             | Working Conformity Certificate | No Certification Issue        |  |
| Mechanical Running Test        | No Certification Issue        | Preferential Origin            | Not Included                  |  |

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**NOTE:**



| Serie | Size   | Mot. Size | a      | f      | h3     | h2     | L1      | L2     | L3      | B2     | B3     | w      | d     | b     | c1    | c2    | I1     | I2     | T(a)    | Weight |
|-------|--------|-----------|--------|--------|--------|--------|---------|--------|---------|--------|--------|--------|-------|-------|-------|-------|--------|--------|---------|--------|
| RB    | 150-35 | 250M      | 200,00 | 700,00 | 480,00 | 400,00 | 1.590,0 | 235,00 | 1.120,0 | 560,00 | 510,00 | 110,00 | 24,00 | 13,00 | 25,00 | 90,00 | 257,00 | 300,00 | 1.788,0 | 820,00 |

(\*) Lunghezza e peso possono variare in funzione della marca del motore  
 (\*) Length and weight may vary, it depends by the motor brand

Ref.Speed (rpm) 1.480

ITEM: R

Curve n.: T-1793 Max Diameter (mm): 359 Min Diameter (mm): 280 Sel. Diameter (mm): 340 Material: S. STEEL/SPEC. ALLOYS

Flow (m3/h): 450,0000 Head (m): 31,520000 Power (kW): 49,820000 Efficiency (%): 77,5900 NPSH (m) 2,050000 NS: 49 SSS: 309 GD2:0

Density (kg/dm3): 1,000000 Viscosity (cSt): 1,0000000 Fluid: Non Specificato Impeller Type: MULTI\_CHANNEL

