


|                            |  |              |                   |
|----------------------------|--|--------------|-------------------|
| <b>hydroo</b> <sup>®</sup> | <b>Product information</b><br><b>VDROO15-5</b> | Manufacturer | Hydroo            |
|                            |  | Address      |                   |
|                            |  | Contact way  | (+34) 972 394 654 |
|                            |  | Date         | 2020/03/12        |
| <b>Project Name</b>        |  | Client Name  |                   |
|                            |  | Client Addr. |                   |
| <b>Station Number</b>      |  | Contacts     |                   |
|                            |  | Contact way  |                   |

|   |  |
|---|--|
| Product No.   | VF15-5R 0400 T 2340 5 2 IE3  |
| Product picture(Note: the picture may not be the same as the actual product.)     | Series description   |
|  | <p>VDROO is a new series of vertical multistage centrifugal pumps made by Hydroo. It includes different versions: VF, VX, VN and VD and their corresponding pumps sets with motor and with variable frequency drivers.</p> <p>VDROO range has been designed to meet the highest demanding in pumping installations. It has been designed, engineered, industrialized and finally, is being produced in the main factory of Hydroo in Palol de Revardit, Catalonia-Spain.</p> |

### Performance Date

|                               |       |
|-------------------------------|-------|
| Rated flow(m <sup>3</sup> /h) | 15    |
| Rated head(m)                 | 58    |
| Efficiency(%)                 | 71    |
| Rated power(kW)(kW)           | 3.34  |
| NPSHr(m)                      | 1.8   |
| Impeller Dia(mm)              | 105.2 |
| Rate Speed(rpm)               | 2900  |
| Impeller stage                | 5     |
| Min. Flow (m <sup>3</sup> /h) | 8     |
| Max. Flow (m <sup>3</sup> /h) | 24    |
| Max. Efficiency (%)           | 73    |
| MEI                           | 0,7   |
| Pump Weight (kg)              | 68    |

### MATERIAL

|                          |          |
|--------------------------|----------|
| Impeller/Diffuser/Casing | AISI 304 |
| Rubber code              | E        |
| Inlet & Outlet chamber   | ASTM 25B |

### INSTALLATION

|                             |                       |
|-----------------------------|-----------------------|
| Connection Code             | R                     |
| Connection type             | Threaded Round flange |
| Max. pressure (bar)         | 24                    |
| Low/High Temperature()      | -15 / 120             |
| Pressure rating             | PN25-40               |
| Inlet & Outlet Connection s | DN50                  |
| Max. Environment temperatur | 40                    |

### MOTOR

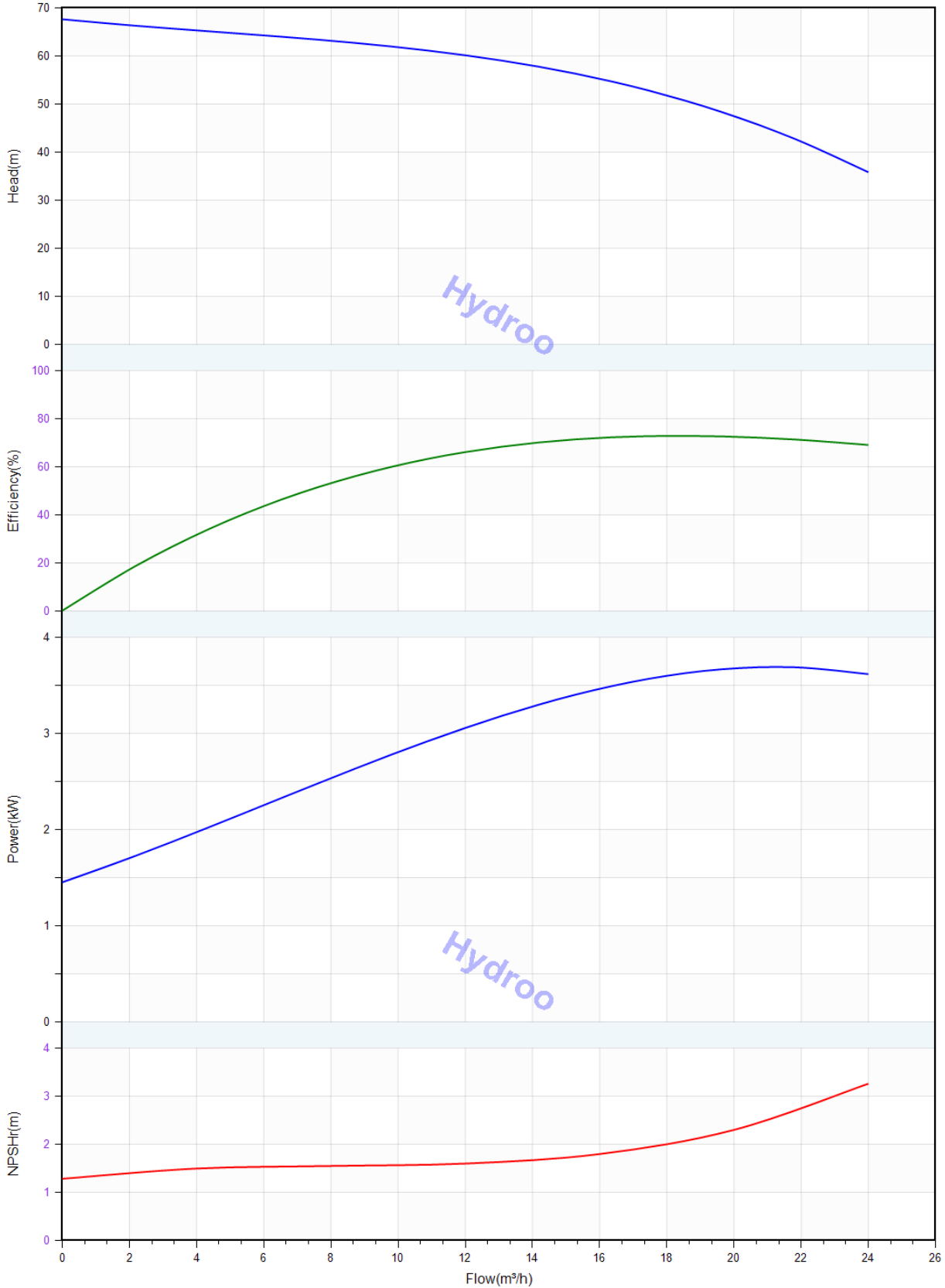
|                         |          |
|-------------------------|----------|
| Number of Motor Phases  | 3~       |
| Protection Class        | IP55     |
| Insulation Class        | F        |
| Motor Power (kW)        | 4        |
| Frequency(Hz)           | 50       |
| Rated speed(rpm)        | 2900     |
| Rated voltage (V)       | 230/400  |
| Rated current (A)       | 13.0/7.4 |
| cos                     | 0.88     |
| Energy efficiency Level | IE3      |

|                            |  |              |                   |
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|                            |  | Address      |                   |
|                            |  | Contact way  | (+34) 972 394 654 |
|                            |  | Date         | 2020/03/12        |
| <b>Project Name</b>        |  | Client Name  |                   |
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|                       |          |
|-----------------------|----------|
| Efficiency100%        | 88.1     |
| Efficiency75%         | 88.5     |
| Efficiency50%         | 87.9     |
| Drive end bearing     | 6306ZZ   |
| Non-drive end bearing | 6306ZZ   |
| Motor Weight (kg)     | 35       |
| <b>SEAL</b>           |          |
| Mechanical Seal       | D16 WBE4 |

|                            |  |              |                   |
|----------------------------|--|--------------|-------------------|
| <b>hydroo</b> <sup>®</sup> | <b>Performance Curve</b><br><b>VDROO15-5</b> | Manufacturer | Hydroo            |
|                            |  | Address      |                   |
|                            |  | Contact way  | (+34) 972 394 654 |
|                            |  | Date         | 2020/03/12        |
| <b>Project Name</b>        |  | Client Name  |                   |
|                            |  | Client Addr. |                   |
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|                            |  | Contact way  |                   |

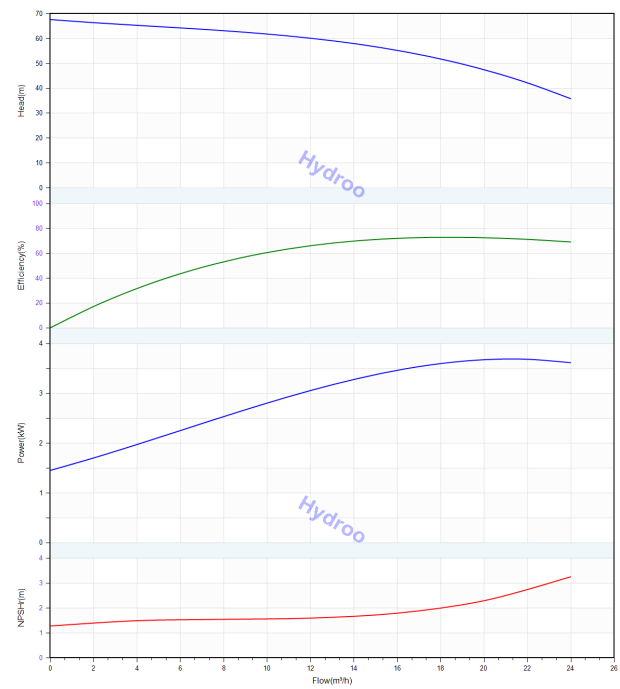
Medium Name Temperature °C, Density 1000 kg/m<sup>3</sup> Viscosity 1 mm<sup>2</sup>/s (ISO 9906 2012 Grande 3B)



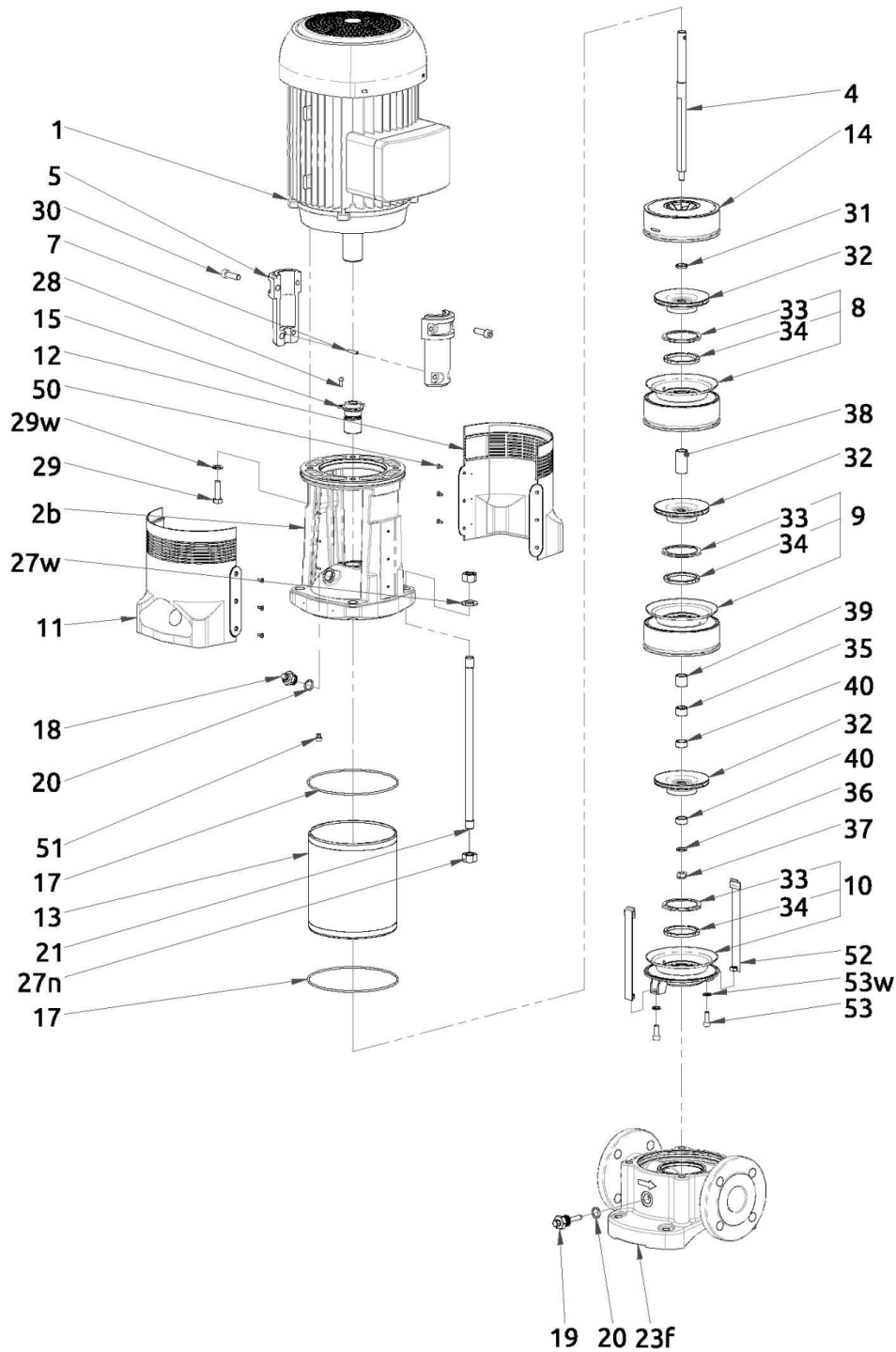
|                            |  |              |                   |
|----------------------------|--|--------------|-------------------|
| <b>hydroo</b> <sup>®</sup> | <b>Pump technical parameters</b><br><b>VDROO15-5</b> | Manufacturer | Hydroo            |
|                            |  | Address      |                   |
| Project Name               |  | Contact way  | (+34) 972 394 654 |
|                            |  | Date         | 2020/03/12        |
| Station Number             |  | Client Name  |                   |
|                            |  | Client Addr. |                   |
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|                            |  | Contact way  |                   |

| Rated parameters              |                                |
|-------------------------------|--------------------------------|
| Pump model                    | VDROO15-5                      |
| Product No.                   | VF15-5R 0400 T 2340 5 2<br>IE3 |
| Rated flow(m <sup>3</sup> /h) | 15                             |
| Rated pressure(m)             | 58                             |
| Rated efficiency(%)           | 71                             |
| Power(kW)                     | 3.34                           |
| NPSHr(m)                      | 1.8                            |
| Speed(rpm)                    | 2900                           |

| Medium                             |             |
|------------------------------------|-------------|
| Medium Name                        | clear water |
| Working temperature(°C)            | 20          |
| Medium density(kg/m <sup>3</sup> ) | 1000        |
| Viscosity(mm <sup>2</sup> /s)      | 1           |



|                            |  |              |                   |
|----------------------------|--|--------------|-------------------|
| <b>hydroo</b> <sup>®</sup> | <b>Structure picture</b><br><b>VDROO15-5</b> | Manufacturer | Hydroo            |
|                            |  | Address      |                   |
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|                            |   |              |                   |
|----------------------------|---|--------------|-------------------|
| <b>hydroo</b> <sup>®</sup> | <b>Installation drawing</b><br><b>VDROO15-5</b> | Manufacturer | Hydroo            |
|                            |   | Address      |                   |
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