

# Submittal Data

| PROJECT:        | UNIT TAG:        | QUANTITY: |  |
|-----------------|------------------|-----------|--|
|                 | TYPE OF SERVICE: |           |  |
| REPRESENTATIVE: | SUBMITTED BY:    | <br>DATE: |  |
| ENGINEER:       | APPROVED BY:     | DATE:     |  |
| CONTRACTOR:     | ORDER NO.:       | <br>DATE: |  |



## MQ3-35

Grundfos MQ booster are an all-in-one unit, designed for pumping clean water from break tanks and shallow wells, and for general pressure-boosting in private homes, farms, and irrigation. The boosters are suitable for both indoor and outdoor use.

Note! Product picture may differ from actual product

| Conditions of Service   |   | Pump Data  |   | Motor Data  |                                 |
|---|---|--|---|---|---------------------------------|
| Flow:<br>Head:<br>Efficiency:<br>Liquid:<br>Temperature:<br>NPSH required:<br>Viscosity:<br>Specific Gravity: | 3.09 m <sup>3</sup> /h<br>19.14 m<br>18.5 %<br>Water<br>20 °C<br>m<br>1.000 | Maximum operating pressure:<br>Liquid temperature range:<br>Maximum ambient temperature:<br>Approvals:<br>Shaft seal:<br>Pipe connection:<br>Product number: | 7.5 bar<br>0 35 °C<br>45 °C<br>CSACUS<br>BVBP<br>NPT1<br>96860201 | Rated voltage:<br>Mains frequency:<br>Enclosure class:<br>Insulation class: | 220-240 V<br>60 Hz<br>IP54<br>B |



# Submittal Data





### Materials:

| Pump housing:  |
|----------------|
| Impeller:      |
| Material code: |

POM + 25% glass fibre PPO + 20% glass fibre-PTFE A



Date:

21/02/2018

## **Tender Text**



Note! Product picture may differ from actual product

Product No.: 96860201 MQ3-35 A-B-A-BVBP

#### Complete system

The MQ is a complete, all-in-one unit, incorporating pump, motor, diaphragm tank, pressure and flow sensor, controller and non-return valve.

The controller ensures that the pump starts automatically when water is consumed and stops automatically when the consumption ceases. In addition, the controller protects the pump in case of faults.

#### Installation

Due to its compact design, the pump does not take up much space and is easy to install. No space around the pump is required.

#### Simple operation

The pump features a user-friendly control panel with ON/OFF button and indicator lights for indication of the operational state of the pump.

#### Self-priming pump

As it is self-priming, the MQ is able to pump water from a level below the pump. Provided it is filled with water, the pump is able to lift water from a depth of 8 m in less than 5 minutes. This facilitates installation and start-up of the pump and provides more reliable water supply in installations where there is a risk of dry running and leakages in suction hose or pipes.

#### Built-in protective functions

If exposed to dry running or excessive temperature, for example in case of seizure or overload, the pump will stop automatically, thus preventing a motor burnout.

#### Automatic reset

The pump features an automatic reset function. In case of dry running or similar alarm, the pump will stop. Restarting will be attempted every 30 minutes for a period of 24 hours. The reset function can be deactivated.

#### Low noise level

Thanks to its hydraulic design and internal cooling, the pump is extremely low-noise, which makes it suitable for indoor as well as outdoor use.

#### Pressure tank

The built-in pressure tank reduces the number of starts and stops in case of leakages in the pipe system, causing less wear on the pump.

Maintenance No maintenance of the pump is required.

| Water                   |
|-------------------------|
| 0 35 °C                 |
| operation: 20 °C        |
| 998.2 kg/m <sup>3</sup> |
|                         |



Date:

21/02/2018

## Technical:

| Actual calculated flow:     | 3.09 m³/h       |
|-----------------------------|-----------------|
| Resulting head of the pump: | 19.14 m         |
| Primary shaft seal:         | BVBP            |
| Approvals on nameplate:     | CSACUS          |
| Curve tolerance:            | ISO9906:2012 3B |
|                             |                 |

### Materials:

| Pump housing: | POM + 25% glass fibre      |
|---------------|----------------------------|
| Impeller:     | PPO + 20% glass fibre-PTFE |

## Installation:

| Range of ambient temperature: | 0 45 °C |
|-------------------------------|---------|
| Maximum operating pressure:   | 7.5 bar |
| Pipe connection:              | NPT1    |

### Electrical data:

| Power input - P1:           | 900 W         |
|-----------------------------|---------------|
| Mains frequency:            | 60 Hz         |
| Rated voltage:              | 1 x 220-240 V |
| Rated current:              | 4 A           |
| Enclosure class (IEC 34-5): | IP54          |
| Insulation class (IEC 85):  | В             |
| Length of cable:            | 2 m           |
| Type of cable plug:         | NEMA          |

#### Others:

| Net weight:      | 13 kg    |
|------------------|----------|
| Gross weight:    | 15.5 kg  |
| Shipping volume: | 0.055 m³ |



| G        | R    | UNDFOS 2  |                     |   |
|----------|------|---|---------------------|---|
|          |      |   | Date:               | 21/02/2018  |
| Position | Qty. | •   |                     |   |
|          | 1    | MQ3-35 A-B-A-BVBP   |                     |   |
|          |      |   |                     |   |
|          |      |   |                     |   |
|          |      |   |                     |   |
|          |      | anuman at   |                     |   |
|          |      |   |                     |   |
|          |      |   |                     |   |
|          |      | No  | tel Product nicture | may differ from actual product  |
|          |      | Product No.: 96860201   |                     |   |
|          |      |   |                     |   |
|          |      | Complete system<br>The MQ is a complete, all-in-one unit,                   | incorporating pu    | mp, motor, diaphragm tank, pressure and flow  |
|          |      | sensor, controller and non-return valve                                     | э.                  |   |
|          |      | automatically when the consumption of                                       | ceases. In addition | ally when water is consumed and stops on, the controller protects the pump in case of                 |
|          |      | faults.   |                     |   |
|          |      | Installation  |                     |   |
|          |      | Due to its compact design, the pump of around the pump is required.         | does not take up    | much space and is easy to install. No space   |
|          |      |   |                     |   |
|          |      | Simple operation  |                     | NVOFF button and indicator lights for indication of   |
|          |      | the operational state of the pump.  | itroi panel with C  | N/OFF button and indicator lights for indication of   |
|          |      |   |                     |   |
|          |      | Self-priming pump<br>As it is self-priming, the MQ is able to               | pump water fron     | n a level below the pump. Provided it is filled with  |
|          |      | water, the pump is able to lift water from                                  | im a depth of 8 r   | n in less than 5 minutes. This facilitates<br>e reliable water supply in installations where          |
|          |      | there is a risk of dry running and leaka                                    | ages in suction h   | ose or pipes.   |
|          |      | Built-in protective functions   |                     |   |
|          |      | If exposed to dry running or excessive                                      |                     | r example in case of seizure or overload, the   |
|          |      | pump will stop automatically, thus pre-                                     | venting a motor l   | burnout.  |
|          |      | Automatic reset   |                     |   |
|          |      | The pump features an automatic reset  | t function. In cas  | e of dry running or similar alarm, the pump will<br>r a period of 24 hours. The reset function can be |
|          |      | deactivated.  |                     |   |
|          |      | Low noise level   |                     |   |
|          |      | Thanks to its hydraulic design and inte                                     |                     | pump is extremely low-noise, which makes it   |
|          |      | suitable for indoor as well as outdoor                                      | use.                |   |
|          |      | Pressure tank   |                     |   |
|          |      | The built-in pressure tank reduces the system, causing less wear on the pur |                     | s and stops in case of leakages in the pipe   |
|          |      |   | E <sup>1</sup>      |   |
|          |      | Maintenance<br>No maintenance of the pump is require                        | ad                  |   |
|          |      |   | <del>.</del>        |   |
|          |      | Liquid:<br>Pumped liquid: Wate  | ar.                 |   |
|          |      | Liquid temperature range: 03  | 5 °C                |   |
|          |      | Liquid temperature during operation:  | 20 °C               |   |



|         |      |   | Date:                      | 21/02/2018 |
|---------|------|---|----------------------------|------------|
| osition | Qty. |   |                            |            |
|         |      | Density:  | 998.2 kg/m³                |            |
|         |      | Technical:  |                            |            |
|         |      | Actual calculated flow:                                   | 3.09 m³/h                  |            |
|         |      | Resulting head of the pump:                               | 19.14 m                    |            |
|         |      | Primary shaft seal:                                       | BVBP                       |            |
|         |      | Approvals on nameplate:<br>Curve tolerance:               | CSACUS                     |            |
|         |      | Curve tolerance:  | ISO9906:2012 3B            |            |
|         |      | Materials:  |                            |            |
|         |      | Pump housing:   | POM + 25% glass fibre      |            |
|         |      | Impeller:   | PPO + 20% glass fibre-PTFE |            |
|         |      | Installation:   |                            |            |
|         |      | Range of ambient temperature:                             | 0 45 °C                    |            |
|         |      | Maximum operating pressure:                               | 7.5 bar                    |            |
|         |      | Pipe connection:  | NPT1                       |            |
|         |      | Electrical data:  |                            |            |
|         |      | Power input - P1:   | 900 W                      |            |
|         |      | Mains frequency:  | 60 Hz                      |            |
|         |      | Rated voltage:  | 1 x 220-240 V              |            |
|         |      | Rated current:  | 4 A                        |            |
|         |      | Enclosure class (IEC 34-5):<br>Insulation class (IEC 85): | IP54<br>B                  |            |
|         |      | Length of cable:  | 2 m                        |            |
|         |      | Type of cable plug:                                       | NEMA                       |            |
|         |      |   |                            |            |
|         |      | Others:   | 10 1                       |            |
|         |      | Net weight:<br>Gross weight:                              | 13 kg<br>15.5 kg           |            |
|         |      | Shipping volume:  | 0.055 m <sup>3</sup>       |            |
|         |      |   | 0.000 m                    |            |
|         |      |   |                            |            |
|         |      |   |                            |            |
|         |      |   |                            |            |
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|         |      |   |                            |            |





|                             |                                | Date:                                    | 21/02/2018  |
|-----------------------------|--------------------------------|--|---|
| scription                   | Value                          | H<br>[m]                                 | MQ3-35, 60Hz eta                                  |
| eneral information:         | value                          | []                                       | Q = 3.09 m <sup>3</sup> /h                        |
|                             | MQ3-35 A-B-A-BVBP              | -  | H = 19.14 m<br>Pumped liquid = Water              |
|                             |                                |  | Liquid temperature during operation = 20 °C       |
|                             | 96860201                       | 35 -                                     | Density = 998.2 kg/m <sup>3</sup> - 35            |
| N number:                   | 5700312084211                  |  |   |
| chnical:                    |                                | 30 -                                     | - 30  |
|                             | 3.09 m³/h                      | -  |   |
|                             | 19.14 m                        | 25 -                                     | - 25  |
| • • • •                     | 35 m                           | -  |   |
|                             | BVBP                           | 20 -                                     | -20   |
| -                           |                                |  |   |
| 1 1                         | CSACUS                         | 15 -                                     | -15   |
|                             | ISO9906:2012 3B                |  |   |
|                             | A                              | 10                                       |   |
| odel:                       | В                              | 10-                                      | 10  |
| terials:                    |                                | 5  | -5  |
|                             | POM + 25% glass fibre          | °1/                                      |   |
|                             | -                              |  | Eta pump+motor = 18.5 %                           |
| peller:                     | PPO + 20% glass fibre-PTFE     | 0 0.5                                    | 1.0 1.5 2.0 2.5 3.0 3.5 Q [m³/h]                  |
| iterial code:               | Α                              | P1 [W]                                   |   |
|                             |                                | [vv]                                     |   |
| stallation:                 |                                | 800 -                                    |   |
| nge of ambient temperature: | 0 45 °C                        |  |   |
| iximum operating pressure:  | 7.5 bar                        | 600 -                                    |   |
|                             | В                              | -  |   |
|                             | NPT1                           | 400 -                                    |   |
|                             |                                | -  |   |
| quid:                       |                                | 200 -                                    |   |
|                             | Water                          | -  | P1 = 868.7 W                                      |
|                             | 0 35 °C                        | 0 –                                      |   |
|                             | 20 °C                          | . 2                                      | 240 J 1" NPT                                      |
|                             | 998.2 kg/m <sup>3</sup>        | · · · · ·                                |   |
| nsity.                      | 990.2 kg/m²                    | 1" N                                     |   |
| ectrical data:              |                                |  |   |
|                             | 900 W                          |  |   |
|                             | 60 Hz                          | <b>                                 </b> |   |
|                             | 1 x 220-240 V                  |  |   |
|                             | 4 A                            |  |   |
|                             |                                | <u> </u>                                 |   |
| · · · · ·                   | IP54                           | -  | 190 4 x -   |
| . ,                         | В                              |  |   |
| •                           | 2 m                            |  | 570 218   |
| pe of cable plug:           | NEMA                           | - 1-                                     |   |
| ntrols:                     |                                |  |   |
|                             | on/off switch included         |  |   |
| nen.                        | on/on switch included          |  |   |
| hers:                       |                                |  |   |
|                             | 13 kg                          |  |   |
| _                           | 15.5 kg                        |  |   |
|                             |                                |  |   |
|                             |                                |  |   |
| les region.                 | Nameg                          |  |   |
|                             |                                |  |   |
|                             |                                | · · · · · · · · · · · · · · · · · · ·    |   |
|                             |                                |  |   |
|                             |                                | 1  | $\bigoplus \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ |
| ipping volume:              | 0.055 m <sup>3</sup><br>Namreg |  |   |



21/02/2018

# 96860201 MQ3-35 60 Hz







21/02/2018

Date:

96860201 MQ3-35 60 Hz



Note! All units are in [mm] unless others are stated.



21/02/2018

**Order Data:** 

Product name: MQ3-35 A-B-A-BVBP Amount: 1 Product No: 96860201

Total: Price on request





TM028409



Company name: Created by:



TM028411



21/02/2018

## Parts list MQ3-35, Product No. 96860201 Valid from 1.1.2004 (0401)

| Pos | Description | Annotation | <b>Classification Data</b> | Part no. | Qty. | Unit |
|-----|-------------|------------|----------------------------|----------|------|------|
| 91  | Screw       |            |                            |          | 1    | pcs  |
| 100 | Union nut   |            |                            |          | 1    | pcs  |