



**C.R.I. PUMPS**  
Pumping trust... Worldwide.



**SUBMERSIBLE PUMPS**

**TURBOSUB**

**SERIES - 50Hz**

An ISO 9001 & 14001 Company



\* For specific models only.





**C.R.I. PUMPS**  
Pumping trust... Worldwide.

## T H E B E G I N N I N G

of C.R.I., way back in 1961, was a resolute attempt to produce a few irrigation equipments using the limited facilities of an inhouse foundry. Eventually the founder's dream was coming true as the small production unit he started kept growing rapidly. Now, after more than five eventful decades, it is an enormous, widely reputed organization, which produces more than 9000 varieties of perfectly engineered pumps and motors and sells its products in 120 countries across 6 continents

## C . R . I . I S O N E A M O N G

the few pioneers in the world to produce 100% stainless steel submersible pumps and it is a leading manufacturer of environment friendly water filled , rewindable motors .C.R.I.has extensive range of industrial pumps that include end suction pumps, Slurry pumps, Chemical pumps, Waste water pumps, Split case pumps, Booster pumps etc. today C.R.I. is rubbing its shoulders with the best brands in the world, with advanced technology and safety standards as its hallmarks.

## T H E I N F R A S T R U C T U R E

of C.R.I. is pretty comprehensive with state-of-the-art machineries and a high potential R&D wing, Total production area over 3.2 million SF, Fully equipped with world class, Machineries with a manufacturing capacities of more than 3 Million pumps and Motors per year and over 9000 product variant are accredited with international quality certifications such as NSF, CSA, CE, UR, UL, TSE, ISO 9001, ISO 14001 and OHAS 18001

## N E E D L E S S T O S A Y ,

behind this legendary growth lies the untiring, innovative, enthusiastic and dedicated team work. and, of course, a flawlessly maintained value system too. The name C.R.I. itself encapsulates the company's ethos:

“Commitment, Reliability, Innovation”.





### Vision, Mission and Values

To be the industry leader providing best - in - class fluid management solutions to individual and institutional customers and societies in our chosen markets.

We will achieve this through our dedicated efforts to enhance the welfare of all our stakeholders and by living by our values of commitment, reliability and innovation.

# C O N T E N T S

## SUBMERSIBLE PUMPS & MOTORS TURBOSUB SERIES (50Hz)

|                                | P a g e N o . |
|--------------------------------|---------------|
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## TURBOSUB SERIES

C.R.I. Turbosub series pumps are designed for pumping liquid from deep wells. These pumps are of multistage centrifugal type supplied with radial or mixed flow engineering thermoplastic impellers and diffusers for higher head and flow requirements. All the metal and non-metal components that come into contact with the liquid are made of stainless steel and food grade engineering thermoplastic. The optimized hydraulic design offers maximum efficiency at deeper installations. Floating impeller design can handle little higher sand than the normal pump and reduce the down thrust load that is transferred to motor. These pumps are offered in P and Y type construction suitable for 3" & 4" and above diameter borewells. All mounting dimensions of the 4" pumps are in accordance with NEMA standards.

### Design Features :

- High efficiency
- Wide hydraulic ranges
- Floating impeller design
- Stainless steel Inlet & Outlet

### Applications :

- Ground water supply to residences and commercial buildings
- Agriculture
- Pressure boosting system
- Fountains
- Gardens
- Landscaping
- Livestock watering

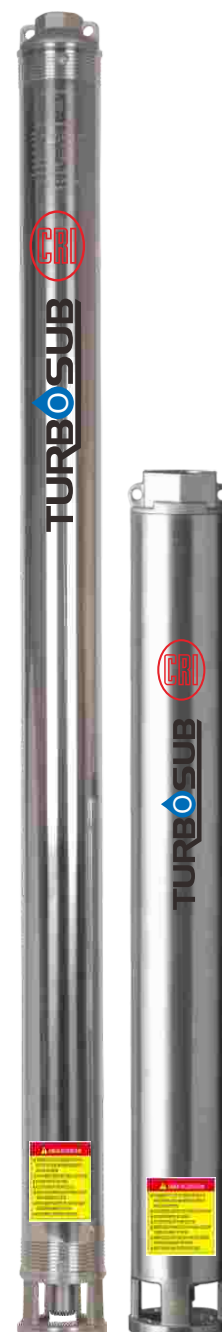
### Pumped Liquids

Clear, Thin, Non-aggressive, Non explosive, Clear, Cold, Fresh Water without abrasives, Solid particles or fibre having the following characteristics

|                               |                                    |
|-------------------------------|------------------------------------|
| a) Temperature                | 40°C (max.)                        |
| b) Permissible amount of sand | 50 g/m <sup>3</sup> (max.)         |
| c) Chlorine ion density       | 500 ppm (max.)                     |
| d) Allowable solids           | 100 ppm (max.)                     |
| e) Specific gravity           | 1.004 (max.)                       |
| f) Hardness (Drinking water)  | 300 (max.)                         |
| g) Kinematic viscosity        | 1 mm <sup>2</sup> /s (1cSt) (max.) |
| h) Turbidity                  | 50 ppm silica scale(max.)          |
| i) pH                         | 6.5 to 8.5                         |

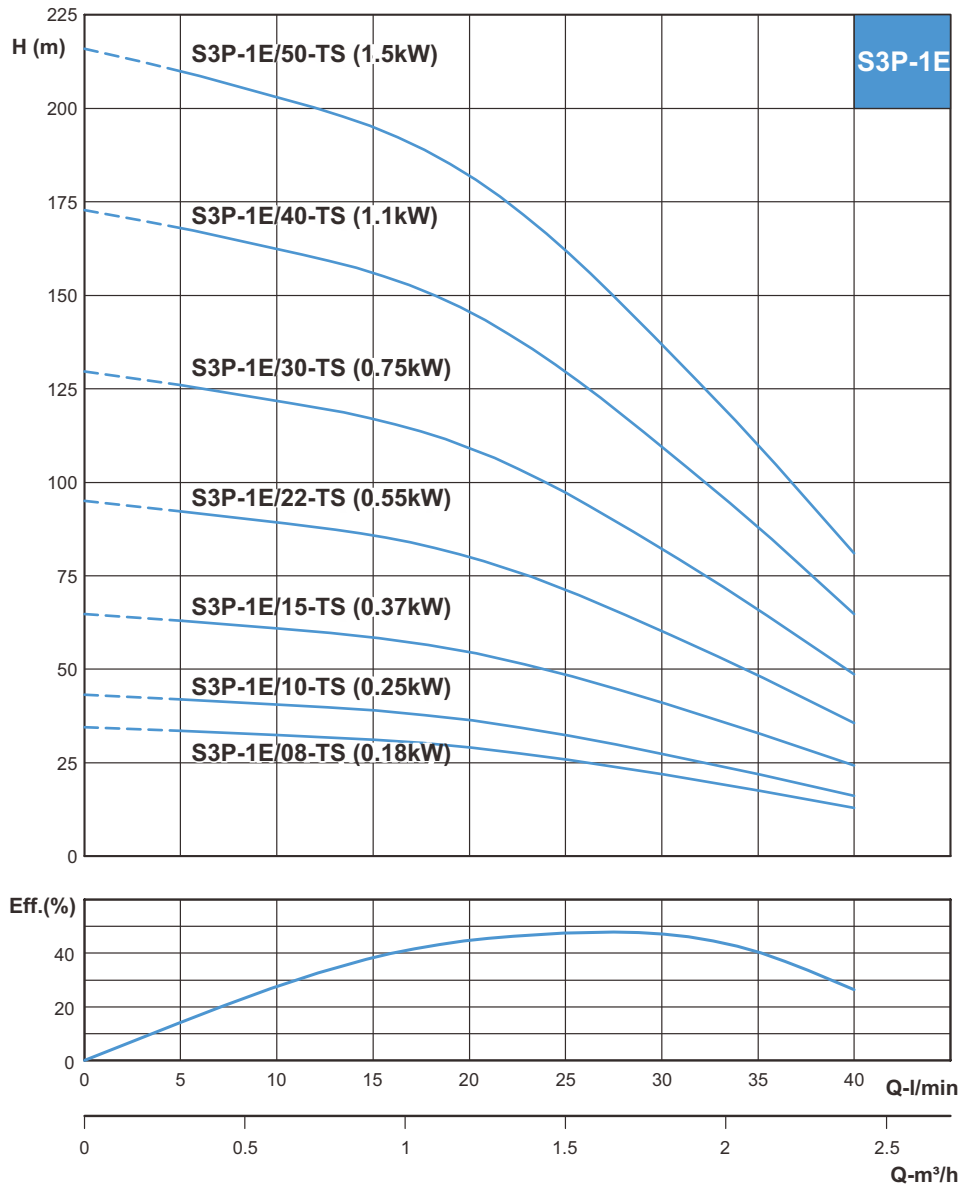
| PUMP OPERATING LIMITATIONS |                              |                             |
|----------------------------|------------------------------|-----------------------------|
| Nominal Diameter           | 3"(75mm)                     | 4"(97mm)                    |
| Power Range                | 0.18 - 1.5 kW                | 0.37 - 7.5 kW               |
| Speed                      | 2850 rpm                     | 2850 rpm                    |
| Discharge Range            | 0.60 - 3.6 m <sup>3</sup> /h | 0.60 - 21 m <sup>3</sup> /h |
| Head Range                 | 13 - 210 m                   | 12 - 430 m                  |
| Outlet Size                | 1"                           | 1¼", 1½" & 2"               |

| MODEL IDENTIFICATION OF SUBMERSIBLE PUMPS |                                                        |              |                                                        |
|-------------------------------------------|--------------------------------------------------------|--------------|--------------------------------------------------------|
| <b>S =</b>                                | SUBMERSIBLE PUMP                                       | <b>S =</b>   | SUBMERSIBLE PUMP                                       |
| <b>3 =</b>                                | 3" Well Diameter                                       | <b>4 =</b>   | 4" Well Diameter                                       |
| <b>P =</b>                                | SS 304 Body with Thermoplastic Hydraulics (Y = SS 201) | <b>Y =</b>   | SS 201 Body with Thermoplastic Hydraulics (P = SS 304) |
| <b>-</b>                                  |                                                        | <b>-</b>     |                                                        |
| <b>2 / =</b>                              | 2 m <sup>3</sup> /h Nominal Flow                       | <b>6 / =</b> | 6 m <sup>3</sup> /h Nominal Flow                       |
| <b>07 =</b>                               | 7 Stages                                               | <b>20 =</b>  | 20 Stages                                              |
| <b>-</b>                                  |                                                        | <b>-</b>     |                                                        |
| <b>TS</b>                                 | TURBOSUB Series                                        | <b>TS</b>    | TURBOSUB Series                                        |



## PERFORMANCE CURVE & DATA

3"



**TURBOSUB**

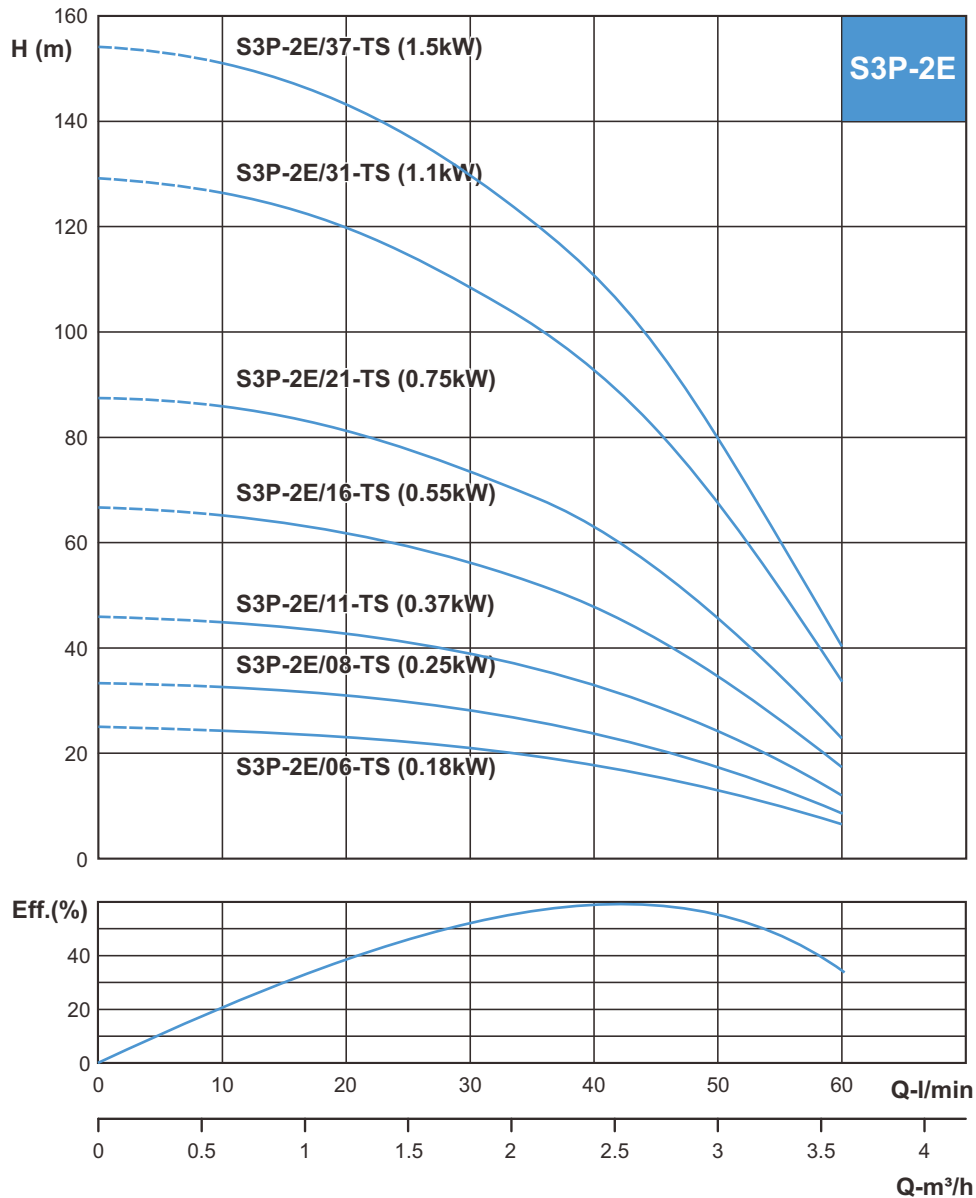
SPEED : 2850 rpm

OUTLET SIZE : 1" BSPP

| PUMP MODEL   |              | POWER |      | m³/h           | 0   | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 |
|--------------|--------------|-------|------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SS 201       | SS 304       | kW    | HP   | l/min          | 0   | 5   | 10  | 15  | 20  | 25  | 30  | 35  | 40  |
| S3Y-1E/08-TS | S3P-1E/08-TS | 0.18  | 0.25 | Head in Meters | 35  | 34  | 32  | 31  | 29  | 26  | 22  | 18  | 13  |
| S3Y-1E/10-TS | S3P-1E/10-TS | 0.25  | 0.33 |                | 43  | 42  | 41  | 39  | 36  | 32  | 27  | 22  | 16  |
| S3Y-1E/15-TS | S3P-1E/15-TS | 0.37  | 0.5  |                | 65  | 63  | 61  | 59  | 55  | 49  | 41  | 33  | 24  |
| S3Y-1E/22-TS | S3P-1E/22-TS | 0.55  | 0.75 |                | 95  | 92  | 89  | 86  | 80  | 71  | 60  | 48  | 36  |
| S3Y-1E/30-TS | S3P-1E/30-TS | 0.75  | 1.0  |                | 130 | 126 | 122 | 117 | 109 | 97  | 82  | 66  | 49  |
| S3Y-1E/40-TS | S3P-1E/40-TS | 1.1   | 1.5  |                | 173 | 168 | 162 | 156 | 146 | 130 | 110 | 88  | 65  |
| S3Y-1E/50-TS | S3P-1E/50-TS | 1.5   | 2.0  |                | 216 | 210 | 203 | 195 | 182 | 162 | 137 | 110 | 81  |

## PERFORMANCE CURVE & DATA

3"



**TURBOSUB**

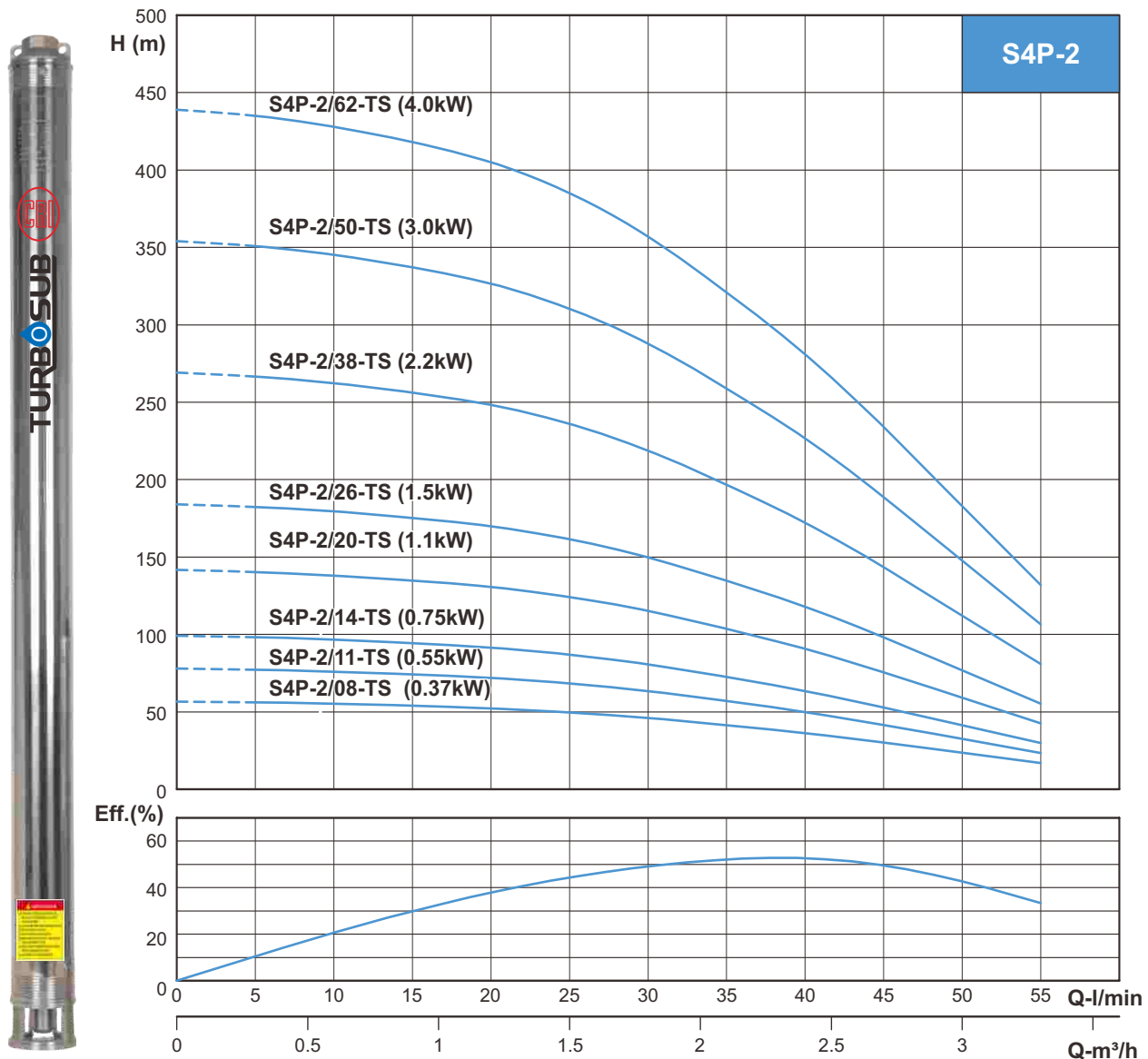
SPEED : 2850 rpm

OUTLET SIZE : 1" BSPP

| PUMP MODEL   |              | POWER |      | m³/h           | 0   | 0.6 | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 |
|--------------|--------------|-------|------|----------------|-----|-----|-----|-----|-----|-----|-----|
| SS 201       | SS 304       | kW    | HP   | l/min          | 0   | 10  | 20  | 30  | 40  | 50  | 60  |
| S3Y-2E/06-TS | S3P-2E/06-TS | 0.18  | 0.25 | Head in Meters | 25  | 25  | 23  | 21  | 18  | 13  | 6   |
| S3Y-2E/08-TS | S3P-2E/08-TS | 0.25  | 0.33 |                | 33  | 33  | 31  | 28  | 24  | 17  | 9   |
| S3Y-2E/11-TS | S3P-2E/11-TS | 0.37  | 0.5  |                | 46  | 45  | 43  | 38  | 33  | 24  | 12  |
| S3Y-2E/16-TS | S3P-2E/16-TS | 0.55  | 0.75 |                | 67  | 65  | 62  | 56  | 48  | 35  | 17  |
| S3Y-2E/21-TS | S3P-2E/21-TS | 0.75  | 1.0  |                | 88  | 86  | 81  | 73  | 63  | 45  | 23  |
| S3Y-2E/31-TS | S3P-2E/31-TS | 1.1   | 1.5  |                | 129 | 127 | 120 | 109 | 93  | 67  | 34  |
| S3Y-2E/37-TS | S3P-2E/37-TS | 1.5   | 2.0  |                | 154 | 151 | 143 | 130 | 111 | 80  | 40  |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

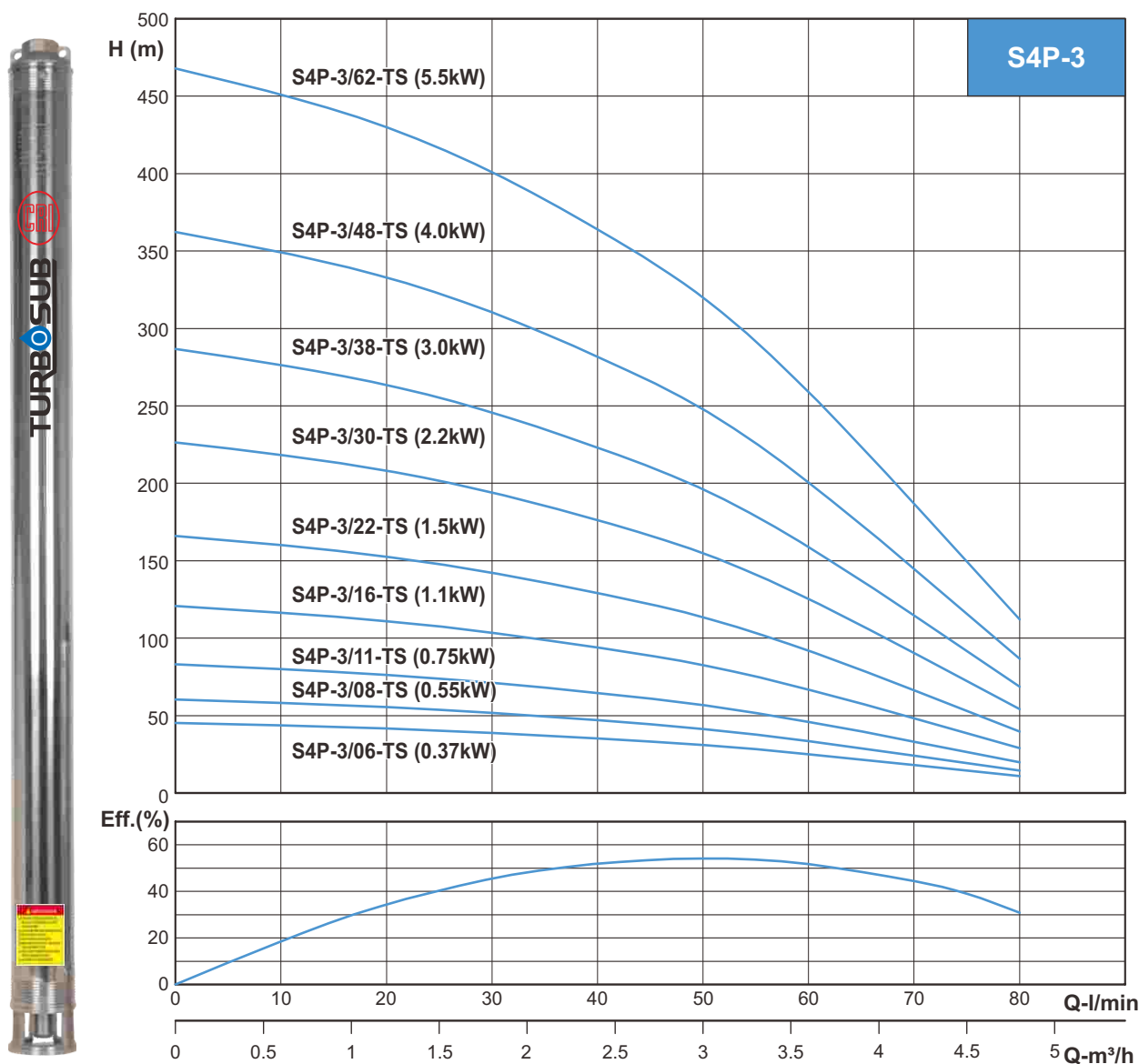
SPEED : 2850 rpm

OUTLET SIZE : 1 1/4" BSPP

| PUMP MODEL  |             | POWER |      | m³/h           | 0   | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 | 3.3 |
|-------------|-------------|-------|------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SS 201      | SS 304      | kW    | HP   | l/min          | 0   | 5   | 10  | 15  | 20  | 25  | 30  | 35  | 40  | 45  | 50  | 55  |
| S4Y-2/08-TS | S4P-2/08-TS | 0.37  | 0.5  | Head in Meters | 57  | 56  | 55  | 54  | 52  | 50  | 46  | 41  | 36  | 30  | 24  | 17  |
| S4Y-2/11-TS | S4P-2/11-TS | 0.55  | 0.75 |                | 78  | 77  | 76  | 74  | 72  | 68  | 63  | 57  | 50  | 42  | 32  | 23  |
| S4Y-2/14-TS | S4P-2/14-TS | 0.75  | 1.0  |                | 99  | 98  | 97  | 94  | 91  | 87  | 81  | 72  | 63  | 53  | 41  | 30  |
| S4Y-2/20-TS | S4P-2/20-TS | 1.1   | 1.5  |                | 142 | 140 | 138 | 135 | 131 | 124 | 115 | 104 | 91  | 75  | 59  | 43  |
| S4Y-2/26-TS | S4P-2/26-TS | 1.5   | 2.0  |                | 184 | 182 | 179 | 175 | 170 | 161 | 150 | 135 | 118 | 98  | 77  | 55  |
| S4Y-2/38-TS | S4P-2/38-TS | 2.2   | 3.0  |                | 269 | 267 | 262 | 256 | 248 | 236 | 219 | 197 | 172 | 143 | 112 | 81  |
| S4Y-2/50-TS | S4P-2/50-TS | 3.0   | 4.0  |                | 354 | 351 | 345 | 337 | 327 | 310 | 288 | 259 | 227 | 189 | 148 | 106 |
| S4Y-2/62-TS | S4P-2/62-TS | 4.0   | 5.5  |                | 439 | 435 | 428 | 418 | 405 | 385 | 357 | 321 | 281 | 234 | 183 | 132 |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

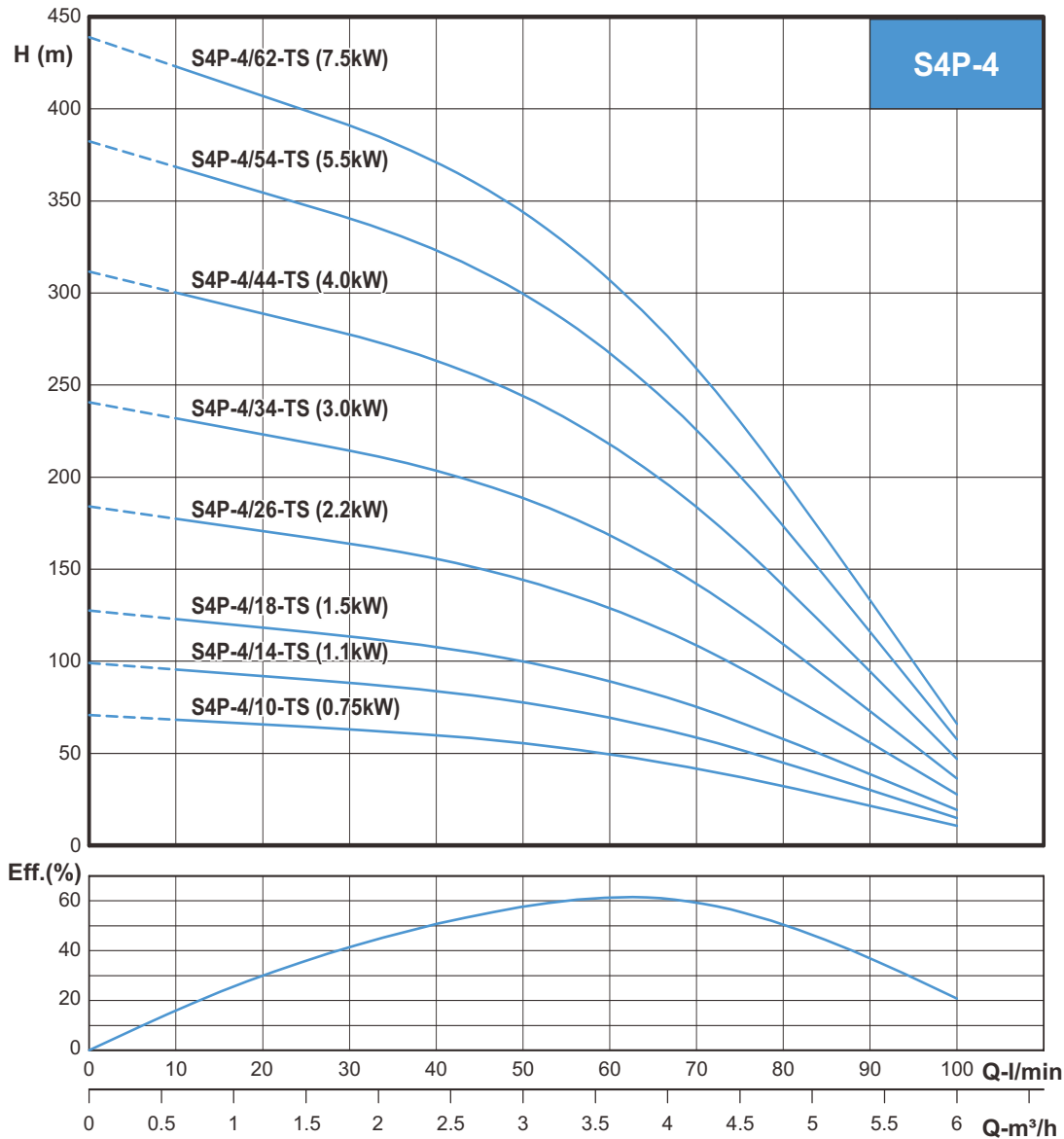
SPEED : 2850 rpm

OUTLET SIZE : 1 1/4" BSPP

| PUMP MODEL  |             | POWER |      | m³/h           | 0   | 0.6 | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 |
|-------------|-------------|-------|------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SS 201      | SS 304      | kW    | HP   | l/min          | 0   | 10  | 20  | 30  | 40  | 50  | 60  | 70  | 80  |
| S4Y-3/06-TS | S4P-3/06-TS | 0.37  | 0.5  | Head in Meters | 45  | 44  | 42  | 39  | 35  | 31  | 25  | 18  | 11  |
| S4Y-3/08-TS | S4P-3/08-TS | 0.55  | 0.75 |                | 60  | 58  | 55  | 52  | 47  | 41  | 33  | 24  | 14  |
| S4Y-3/11-TS | S4P-3/11-TS | 0.75  | 1.0  |                | 83  | 80  | 76  | 71  | 65  | 57  | 46  | 33  | 20  |
| S4Y-3/16-TS | S4P-3/16-TS | 1.1   | 1.5  |                | 121 | 116 | 111 | 103 | 94  | 83  | 67  | 48  | 29  |
| S4Y-3/22-TS | S4P-3/22-TS | 1.5   | 2.2  |                | 166 | 160 | 153 | 142 | 129 | 114 | 92  | 66  | 40  |
| S4Y-3/30-TS | S4P-3/30-TS | 2.2   | 3.0  |                | 226 | 218 | 208 | 194 | 176 | 155 | 125 | 90  | 54  |
| S4Y-3/38-TS | S4P-3/38-TS | 3.0   | 4.0  |                | 287 | 276 | 264 | 246 | 223 | 196 | 159 | 115 | 69  |
| S4Y-3/48-TS | S4P-3/48-TS | 4.0   | 5.5  |                | 362 | 349 | 333 | 310 | 282 | 248 | 201 | 145 | 87  |
| S4Y-3/62-TS | S4P-3/62-TS | 5.5   | 7.5  |                | 468 | 451 | 430 | 401 | 364 | 320 | 259 | 187 | 112 |

## PERFORMANCE CURVE & DATA

4"



**TURBO SUB**

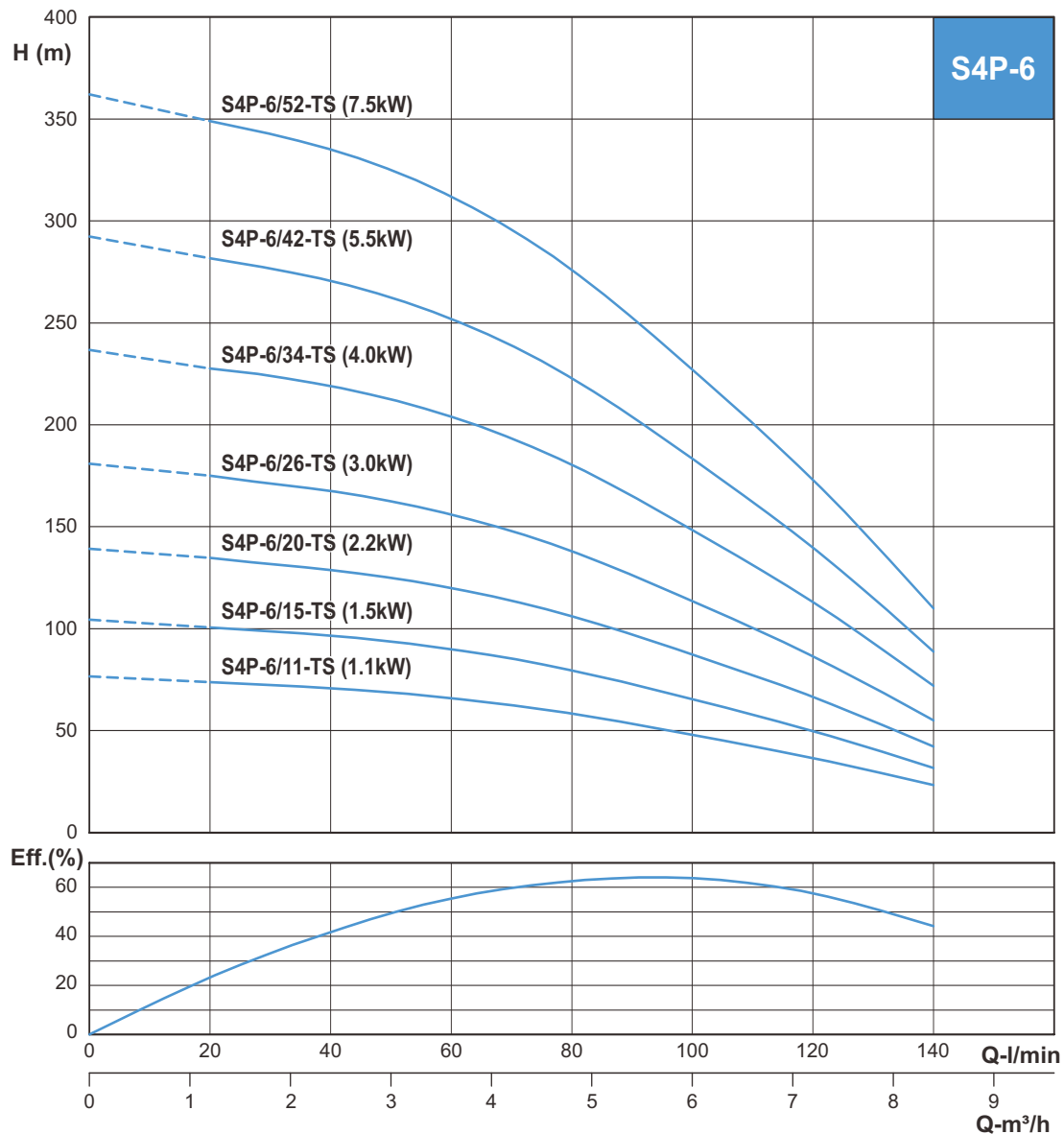
SPEED : 2850 rpm

OUTLET SIZE : 1 1/4" BSPP

| PUMP MODEL  |             | POWER |     | m³/h           | 0   | 0.6 | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | 5.4 | 6.0 |
|-------------|-------------|-------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SS 201      | SS 304      | kW    | HP  | l/min          | 0   | 10  | 20  | 30  | 40  | 50  | 60  | 70  | 80  | 90  | 100 |
| S4Y-4/10-TS | S4P-4/10-TS | 0.75  | 1.0 | Head in Meters | 71  | 68  | 66  | 63  | 60  | 55  | 50  | 42  | 32  | 21  | 11  |
| S4Y-4/14-TS | S4P-4/14-TS | 1.1   | 1.5 |                | 99  | 96  | 92  | 88  | 84  | 78  | 69  | 58  | 45  | 30  | 15  |
| S4Y-4/18-TS | S4P-4/18-TS | 1.5   | 2.0 |                | 127 | 123 | 118 | 114 | 108 | 100 | 89  | 75  | 58  | 39  | 19  |
| S4Y-4/26-TS | S4P-4/26-TS | 2.2   | 3.0 |                | 184 | 177 | 171 | 164 | 156 | 144 | 129 | 109 | 83  | 56  | 28  |
| S4Y-4/34-TS | S4P-4/34-TS | 3.0   | 4.0 |                | 241 | 232 | 223 | 214 | 203 | 189 | 168 | 142 | 109 | 73  | 36  |
| S4Y-4/44-TS | S4P-4/44-TS | 4.0   | 5.5 |                | 312 | 300 | 289 | 277 | 263 | 244 | 218 | 184 | 141 | 94  | 47  |
| S4Y-4/54-TS | S4P-4/54-TS | 5.5   | 7.5 |                | 382 | 368 | 354 | 341 | 323 | 300 | 267 | 226 | 173 | 116 | 57  |
| S4Y-4/62-TS | S4P-4/62-TS | 7.5   | 10  |                | 439 | 423 | 407 | 391 | 371 | 344 | 307 | 259 | 199 | 133 | 66  |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

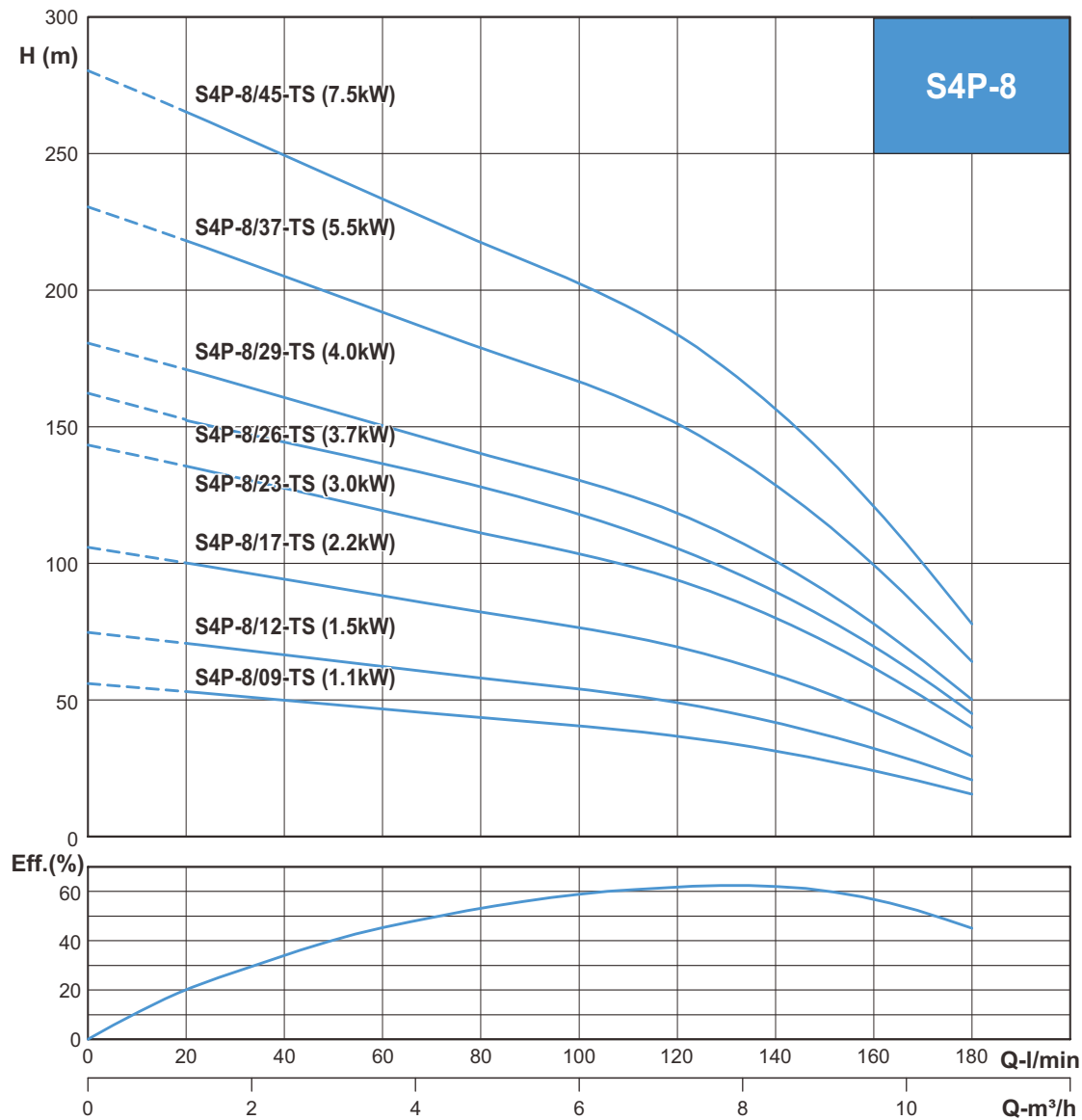
SPEED : 2850 rpm

OUTLET SIZE : 1½" BSPP

| PUMP MODEL  |             | POWER |     | m³/h           | 0   | 1.2 | 2.4 | 3.6 | 4.8 | 6   | 7.2 | 8.4 |
|-------------|-------------|-------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| SS 201      | SS 304      | kW    | HP  | l/min          | 0   | 20  | 40  | 60  | 80  | 100 | 120 | 140 |
| S4Y-6/11-TS | S4P-6/11-TS | 1.1   | 1.5 | Head in Meters | 77  | 74  | 71  | 66  | 58  | 48  | 37  | 23  |
| S4Y-6/15-TS | S4P-6/15-TS | 1.5   | 2.0 |                | 104 | 101 | 97  | 90  | 80  | 65  | 50  | 32  |
| S4Y-6/20-TS | S4P-6/20-TS | 2.2   | 3.0 |                | 139 | 134 | 129 | 120 | 106 | 87  | 67  | 42  |
| S4Y-6/26-TS | S4P-6/26-TS | 3.0   | 4.0 |                | 181 | 175 | 168 | 156 | 138 | 113 | 86  | 55  |
| S4Y-6/34-TS | S4P-6/34-TS | 4.0   | 5.5 |                | 237 | 228 | 219 | 204 | 180 | 148 | 113 | 72  |
| S4Y-6/42-TS | S4P-6/42-TS | 5.5   | 7.5 |                | 292 | 282 | 271 | 252 | 223 | 183 | 140 | 89  |
| S4Y-6/52-TS | S4P-6/52-TS | 7.5   | 10  |                | 362 | 349 | 335 | 312 | 276 | 227 | 173 | 110 |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

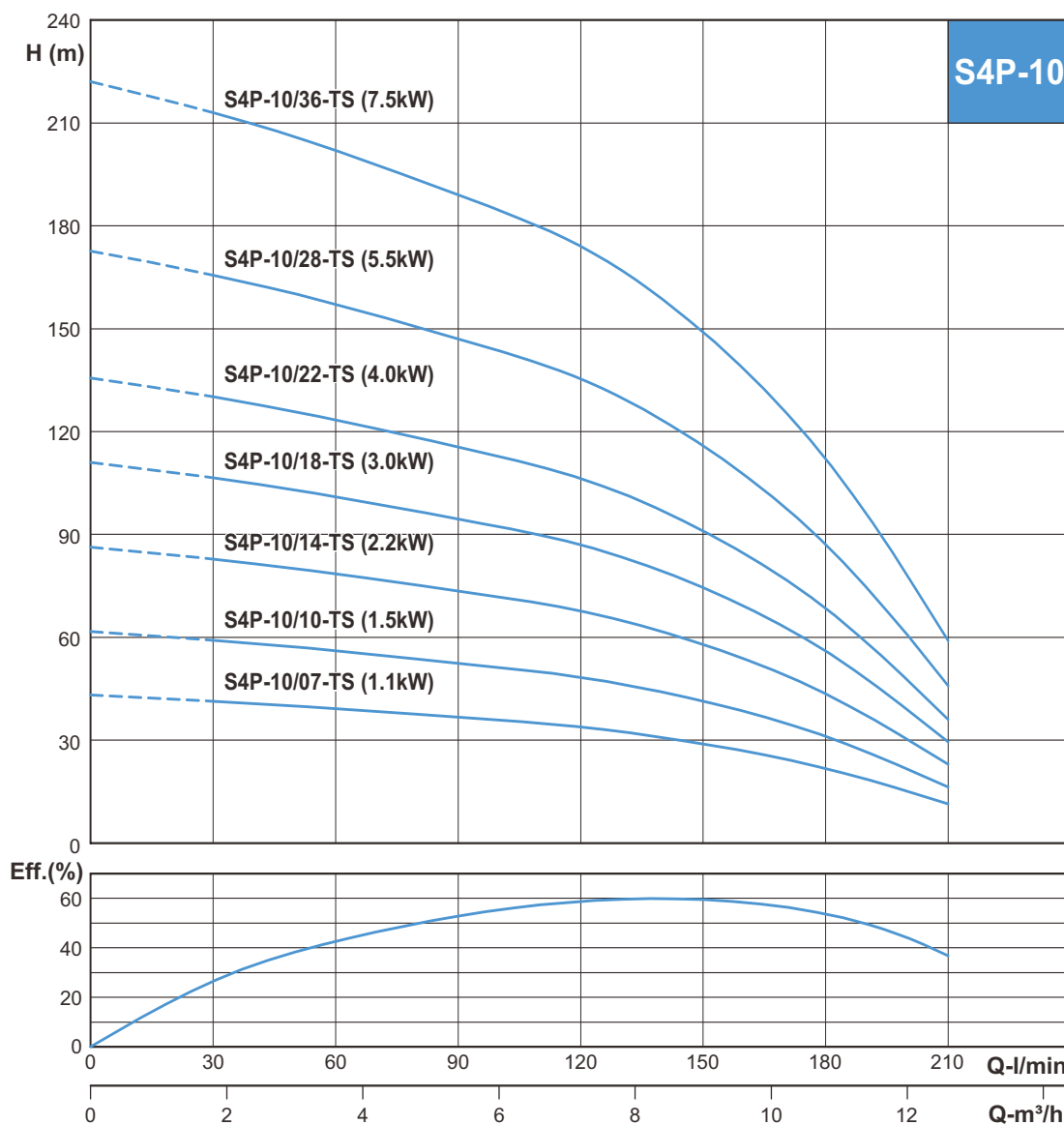
SPEED : 2850 rpm

OUTLET SIZE : 2" BSPP

| PUMP MODEL  |             | POWER |     | m³/h           | 0   | 1.2 | 2.4 | 3.6 | 4.8 | 6   | 7.2 | 8.4 | 9.6 | 10.8 |
|-------------|-------------|-------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| SS 201      | SS304       | kW    | HP  | l/min          | 0   | 20  | 40  | 60  | 80  | 100 | 120 | 140 | 160 | 180  |
| S4Y-8/09-TS | S4P-8/09-TS | 1.1   | 1.5 | Head in Meters | 56  | 53  | 50  | 47  | 43  | 40  | 37  | 31  | 24  | 16   |
| S4Y-8/12-TS | S4P-8/12-TS | 1.5   | 2.0 |                | 75  | 71  | 66  | 62  | 58  | 54  | 49  | 42  | 32  | 21   |
| S4Y-8/17-TS | S4P-8/17-TS | 2.2   | 3.0 |                | 106 | 100 | 94  | 88  | 82  | 76  | 69  | 59  | 46  | 29   |
| S4Y-8/23-TS | S4P-8/23-TS | 3.0   | 4.0 |                | 143 | 136 | 127 | 119 | 111 | 103 | 94  | 80  | 62  | 40   |
| S4Y-8/26-TS | S4P-8/26-TS | 3.7   | 5.0 |                | 162 | 153 | 144 | 135 | 126 | 117 | 106 | 90  | 70  | 45   |
| S4Y-8/29-TS | S4P-8/29-TS | 4.0   | 5.5 |                | 181 | 171 | 161 | 150 | 140 | 130 | 118 | 101 | 78  | 50   |
| S4Y-8/37-TS | S4P-8/37-TS | 5.5   | 7.5 |                | 230 | 218 | 205 | 192 | 179 | 167 | 151 | 129 | 99  | 64   |
| S4Y-8/45-TS | S4P-8/45-TS | 7.5   | 10  |                | 280 | 265 | 249 | 233 | 218 | 203 | 184 | 157 | 121 | 78   |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

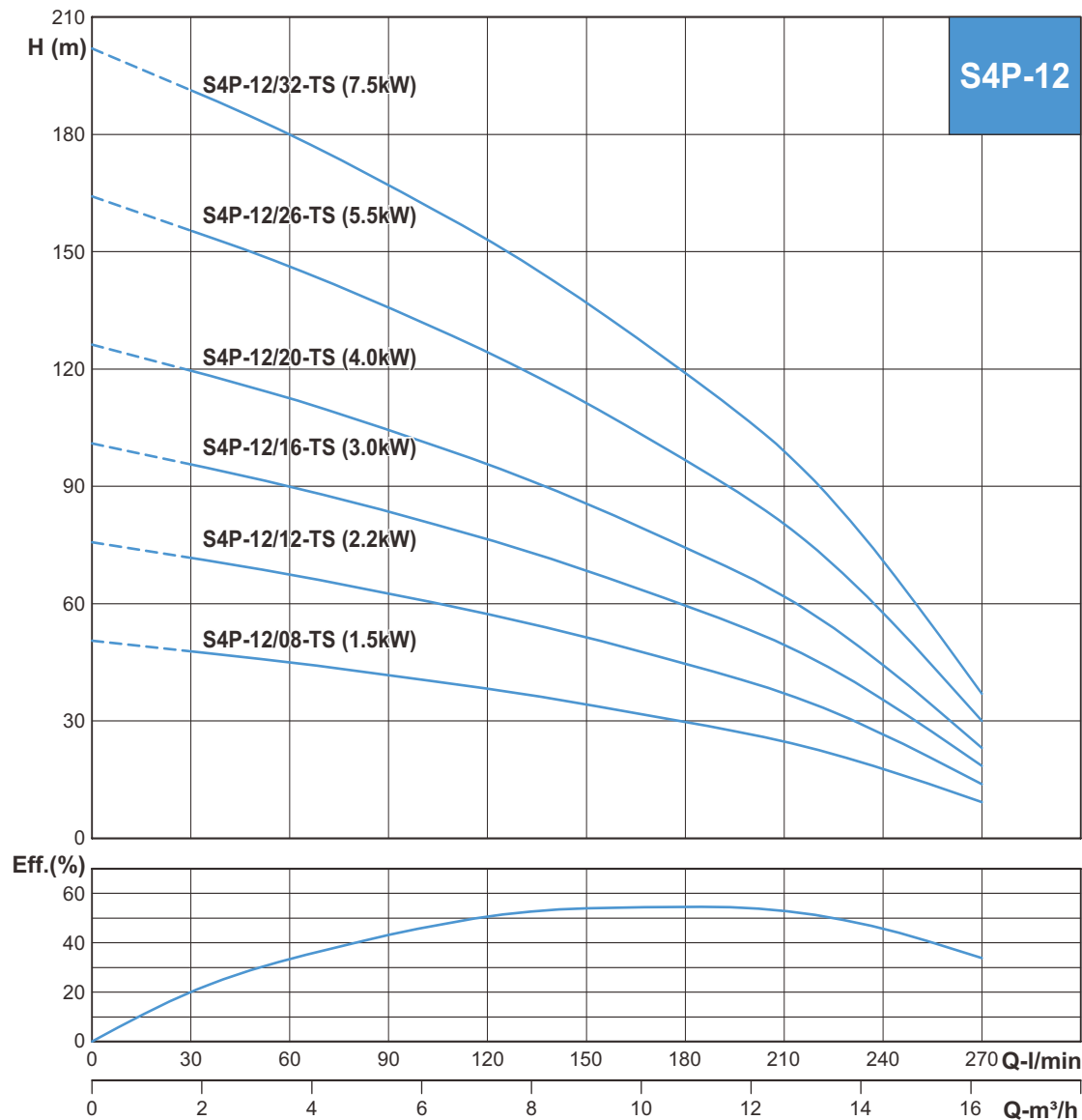
SPEED : 2850 rpm

OUTLET SIZE : 2" BSPP

| PUMP MODEL   |              | POWER |     | m³/h           | 0   | 1.8 | 3.6 | 5.4 | 7.2 | 9   | 10.8 | 12.6 |
|--------------|--------------|-------|-----|----------------|-----|-----|-----|-----|-----|-----|------|------|
| SS 201       | SS 304       | kW    | HP  | l/min          | 0   | 30  | 60  | 90  | 120 | 150 | 180  | 210  |
| S4Y-10/07-TS | S4P-10/07-TS | 1.1   | 1.5 | Head in Meters | 43  | 41  | 39  | 37  | 34  | 29  | 22   | 11   |
| S4Y-10/10-TS | S4P-10/10-TS | 1.5   | 2.0 |                | 62  | 59  | 56  | 52  | 48  | 41  | 31   | 16   |
| S4Y-10/14-TS | S4P-10/14-TS | 2.2   | 3.0 |                | 86  | 83  | 79  | 73  | 68  | 58  | 44   | 23   |
| S4Y-10/18-TS | S4P-10/18-TS | 3.0   | 4.0 |                | 111 | 106 | 101 | 94  | 87  | 74  | 56   | 29   |
| S4Y-10/22-TS | S4P-10/22-TS | 4.0   | 5.5 |                | 136 | 130 | 123 | 115 | 106 | 91  | 68   | 36   |
| S4Y-10/28-TS | S4P-10/28-TS | 5.5   | 7.5 |                | 173 | 166 | 157 | 147 | 135 | 116 | 87   | 46   |
| S4Y-10/36-TS | S4P-10/36-TS | 7.5   | 10  |                | 222 | 213 | 202 | 189 | 174 | 149 | 112  | 59   |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

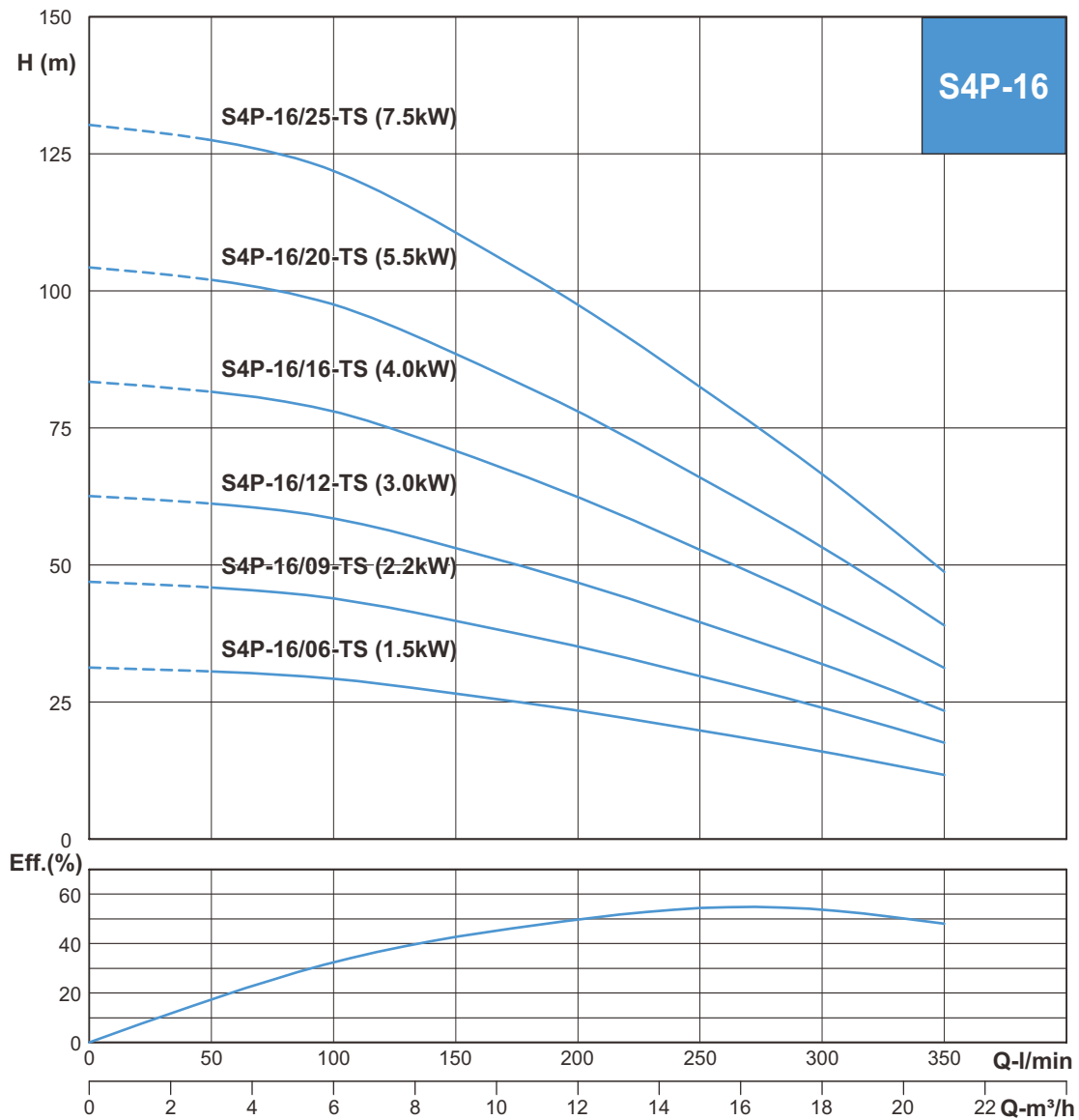
SPEED : 2850 rpm

OUTLET SIZE : 2" BSPP

| PUMP MODEL   |              | POWER |      | m³/h           | 0   | 1.8 | 3.6 | 5.4 | 7.2 | 9   | 10.8 | 12.6 | 14.4 | 16.2 |
|--------------|--------------|-------|------|----------------|-----|-----|-----|-----|-----|-----|------|------|------|------|
| SS 201       | SS 304       | kW    | HP   | l/min          | 0   | 30  | 60  | 90  | 120 | 150 | 180  | 210  | 240  | 270  |
| S4Y-12/08-TS | S4P-12/08-TS | 1.5   | 2.0  | Head in Meters | 51  | 48  | 45  | 42  | 38  | 34  | 30   | 25   | 18   | 9    |
| S4Y-12/12-TS | S4P-12/12-TS | 2.2   | 3.0  |                | 76  | 72  | 68  | 63  | 57  | 51  | 45   | 37   | 27   | 14   |
| S4Y-12/16-TS | S4P-12/16-TS | 3.0   | 4.0  |                | 101 | 96  | 90  | 84  | 77  | 69  | 60   | 50   | 36   | 19   |
| S4Y-12/20-TS | S4P-12/20-TS | 4.0   | 5.5  |                | 126 | 120 | 113 | 104 | 96  | 86  | 74   | 62   | 44   | 23   |
| S4Y-12/26-TS | S4P-12/26-TS | 5.5   | 7.5  |                | 164 | 155 | 146 | 136 | 124 | 111 | 97   | 80   | 58   | 30   |
| S4Y-12/32-TS | S4P-12/32-TS | 7.5   | 10.0 |                | 202 | 191 | 180 | 167 | 153 | 137 | 119  | 99   | 71   | 37   |

## PERFORMANCE CURVE & DATA

4"



**TURBOSUB**

SPEED : 2850 rpm

OUTLET SIZE : 2" BSPP

| PUMP MODEL   |              | POWER |      | m³/h           | 0   | 3   | 6   | 9   | 12  | 15  | 18  | 21  |
|--------------|--------------|-------|------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| SS 201       | SS 304       | kW    | HP   | l/min          | 0   | 50  | 100 | 150 | 200 | 250 | 300 | 350 |
| S4Y-16/06-TS | S4P-16/06-TS | 1.5   | 2.0  | Head in Meters | 33  | 33  | 31  | 28  | 25  | 21  | 17  | 12  |
| S4Y-16/09-TS | S4P-16/09-TS | 2.2   | 3.0  |                | 50  | 49  | 47  | 42  | 37  | 32  | 26  | 19  |
| S4Y-16/12-TS | S4P-16/12-TS | 3.0   | 4.0  |                | 67  | 65  | 62  | 57  | 50  | 42  | 34  | 25  |
| S4Y-16/16-TS | S4P-16/16-TS | 4.0   | 5.5  |                | 89  | 87  | 83  | 76  | 67  | 56  | 45  | 33  |
| S4Y-16/20-TS | S4P-16/20-TS | 5.5   | 7.5  |                | 111 | 109 | 104 | 94  | 83  | 70  | 57  | 42  |
| S4Y-16/25-TS | S4P-16/25-TS | 7.5   | 10.0 |                | 139 | 136 | 130 | 118 | 104 | 88  | 71  | 52  |

## 'L' SERIES

Oil filled submersible motors are energy-efficient, durable, low maintenance, quiet, versatile, easy to install and reliable. The oil in the motor provides lubrication for the bearings, reducing wear and tear, resulting in a longer lifespan. This makes them an ideal choice for applications where durability and longevity are important. Ball and angular contact bearings are used to handle radial and axial thrust loads. The oil in the motor also provides cooling to the motor, which helps to prevent overheating.

Motor sealing is done by 'O' rings, oil seal and mechanical seal. Pressure equalizing rubber diaphragm is provided to balance the pressure and volume variation due to thermal expansion of oil in the motor. Oil-filled submersible motors are often preferred in light duty applications where the installation depth is less than 150 meters.

### Design Features

- High efficiency
- Corrosion resistant stainless-steel parts
- Extremely hardwearing ball and angular contact bearings
- Rewindable motor
- Cable connected directly to the winding for better sealing & reliability

### Applications

These submersible motors are suitable for use with deepwell submersible pump ends.

- Ground water supply to residences and commercial buildings
- Agriculture
- Pressure boosting system
- Fountains
- Gardens
- Landscaping
- Livestock watering

### Technical Specifications

|                                      |                                                   |
|--------------------------------------|---------------------------------------------------|
| Nominal Dia                          | 3" & 4"                                           |
| Maximum Outer Diameter               | 75 mm & 97 mm                                     |
| Power Range                          | 0.18 - 2.2 kW - Single Phase                      |
|                                      | 0.18 - 7.5 kW - Three Phase                       |
| Speed                                | 2850 rpm                                          |
| Version                              | Single Phase - 220 - 240V, 50Hz, A.C Supply       |
|                                      | Three Phase - 380-415V, 50Hz, A.C Supply          |
| Class of Insulation                  | B                                                 |
| Degree of Protection                 | IP68                                              |
| Direction of Rotation                | CCW - When viewed from driving end - Single Phase |
|                                      | Electrically Reversible - Three Phase             |
| Type of Duty                         | S1 (Continuous)                                   |
| Down Thrust Load                     | 0.37 - 0.75 kW - 1500 N                           |
|                                      | 1.1 - 4.0 kW - 2500 N                             |
|                                      | 5.5 - 7.5 kW - 4500 N                             |
| Minimum Cooling Flow Along the Motor | 0.15 m/sec                                        |
| Maximum Liquid Temperature           | 40°C                                              |
| Maximum Immersion Depth              | 150 m                                             |
| Max. Starts per Hour                 | 20 Times                                          |
| Shaft End                            | Splines                                           |
| Mounting Standard                    | 4" NEMA                                           |
| Method of Starting                   | Single Phase - Permanent Split Capacitor (PSC)    |
|                                      | Three Phase - Direct On Line (DOL)                |
| Cable Lead out                       | 3+1 PVC Flat cable                                |



| MODEL IDENTIFICATION OF SUBMERSIBLE MOTORS |                                      |             |                                      |
|--------------------------------------------|--------------------------------------|-------------|--------------------------------------|
| <b>L =</b>                                 | Oil Filled Submersible Motor         | <b>L =</b>  | Oil Filled Submersible Motor         |
| <b>3 =</b>                                 | 3" Well Diameter                     | <b>4 =</b>  | 4" Well Diameter                     |
| <b>A =</b>                                 | SS304 Shell Material<br>(Y = SS 201) | <b>Y =</b>  | SS201 Shell Material<br>(A = SS 304) |
| <b>-</b>                                   |                                      | <b>-</b>    |                                      |
| <b>07 =</b>                                | 0.75kW Rated Power                   | <b>22 =</b> | 2.2kW Rated Power                    |
| <b>N =</b>                                 | PSC, 1Phase 50Hz Motor               | <b>T =</b>  | DOL, 3Phase 50Hz Motor               |
| <b>-</b>                                   |                                      | <b>-</b>    |                                      |
| <b>TS</b>                                  | TURBOSUB Series                      | <b>TS</b>   | TURBOSUB Series                      |

| MODEL IDENTIFICATION OF SMART MODEL CONTROL BOX |                                |           |                                |
|-------------------------------------------------|--------------------------------|-----------|--------------------------------|
| <b>CP</b>                                       | Plastic Enclosure              | <b>CP</b> | Plastic Enclosure              |
| <b>-</b>                                        |                                | <b>-</b>  |                                |
| <b>5</b>                                        | 50Hz                           | <b>5</b>  | 50Hz                           |
| <b>L</b>                                        | for Oil Filled Motor           | <b>L</b>  | for Oil filled Motor           |
| <b>E</b>                                        | 220 - 240V                     | <b>E</b>  | 220 - 240V                     |
| <b>-</b>                                        |                                | <b>-</b>  |                                |
| <b>07</b>                                       | 0.75kW                         | <b>07</b> | 0.75kW                         |
| <b>M3</b>                                       | Smart Control Box for 3" Motor | <b>M</b>  | Smart Control Box for 4" Motor |
| <b>-</b>                                        |                                | <b>-</b>  |                                |
| <b>TS</b>                                       | TURBOSUB Series                | <b>TS</b> | TURBOSUB Series                |



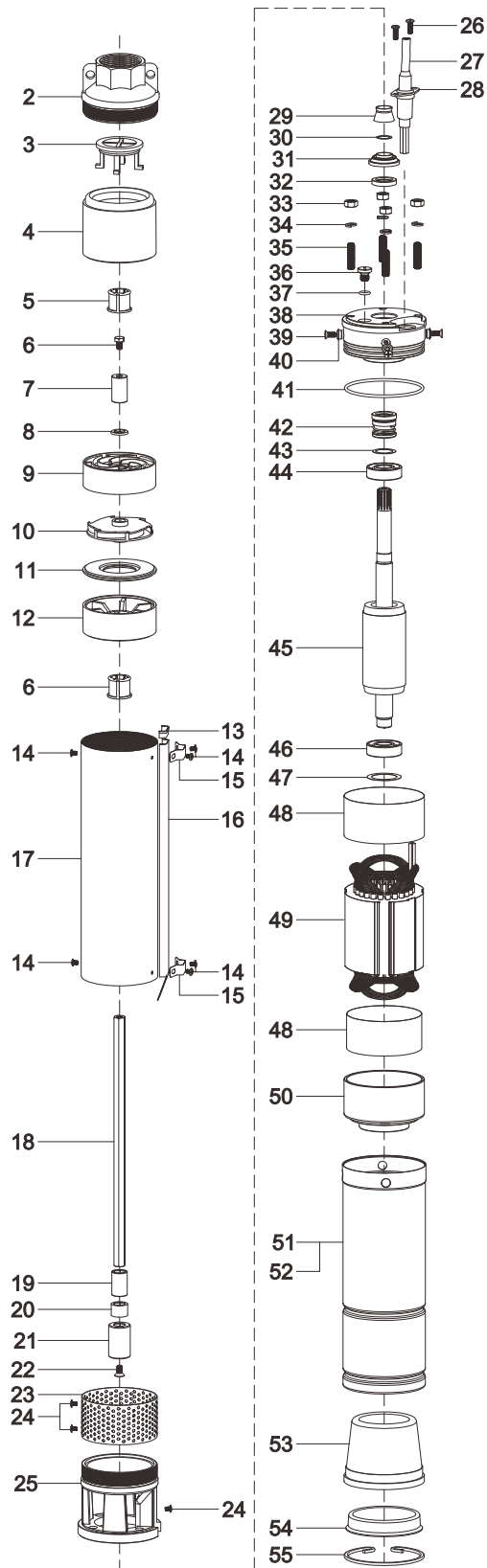
## Technical Datas : 4" Submersible Motor - PSC, 1Phase, 220-240V, 50Hz, 2850rpm

| MODEL      |            | POWER |      | RATED<br>CURRENT | POWER<br>FACTOR<br>(COSØ) | EFFICIENCY | RUN<br>CAPACITOR |
|------------|------------|-------|------|------------------|---------------------------|------------|------------------|
| SS201      | SS304      | kW    | HP   |                  |                           |            |                  |
| L4Y-02N-TS | L4A-02N-TS | 0.25  | 0.33 | 2.5 A            | 0.93                      | 55%        | 20 µF            |
| L4Y-03N-TS | L4A-03N-TS | 0.37  | 0.5  | 3.6 A            | 0.93                      | 57%        | 25 µF            |
| L4Y-05N-TS | L4A-05N-TS | 0.55  | 0.75 | 4.8 A            | 0.93                      | 60%        | 35 µF            |
| L4Y-07N-TS | L4A-07N-TS | 0.75  | 1.0  | 6.2 A            | 0.93                      | 63%        | 40 µF            |
| L4Y-11N-TS | L4A-11N-TS | 1.1   | 1.5  | 8.5 A            | 0.93                      | 66%        | 50 µF            |
| L4Y-15N-TS | L4A-15N-TS | 1.5   | 2.0  | 10.8 A           | 0.93                      | 68%        | 55 µF            |
| L4Y-22N-TS | L4A-22N-TS | 2.2   | 3.0  | 15.5 A           | 0.93                      | 69%        | 60 µF            |

## Technical Datas : 4" Submersible Motor - DOL, 3Phase, 380-400-415V, 50Hz, 2850rpm

| MODEL      |            | POWER |      | RATED<br>CURRENT | POWER<br>FACTOR (COSØ) | EFFICIENCY |
|------------|------------|-------|------|------------------|------------------------|------------|
| SS201      | SS304      | kW    | HP   |                  |                        |            |
| L4Y-02T-TS | L4A-02T-TS | 0.25  | 0.33 | 1.2 A            | 0.7                    | 55%        |
| L4Y-03T-TS | L4A-03T-TS | 0.37  | 0.5  | 1.4 A            | 0.72                   | 58%        |
| L4Y-05T-TS | L4A-05T-TS | 0.55  | 0.75 | 2.0 A            | 0.74                   | 61%        |
| L4Y-07T-TS | L4A-07T-TS | 0.75  | 1.0  | 2.5 A            | 0.75                   | 64%        |
| L4Y-11T-TS | L4A-11T-TS | 1.1   | 1.5  | 3.3 A            | 0.76                   | 67%        |
| L4Y-15T-TS | L4A-15T-TS | 1.5   | 2.0  | 4.3 A            | 0.77                   | 69%        |
| L4Y-22T-TS | L4A-22T-TS | 2.2   | 3.0  | 6.0 A            | 0.78                   | 71%        |
| L4Y-30T-TS | L4A-30T-TS | 3.0   | 4.0  | 8.0 A            | 0.79                   | 72%        |
| L4Y-40T-TS | L4A-40T-TS | 4.0   | 5.5  | 10.4 A           | 0.79                   | 74%        |
| L4Y-55T-TS | L4A-55T-TS | 5.5   | 7.5  | 13.9 A           | 0.80                   | 75%        |
| L4Y-75T-TS | L4A-75T-TS | 7.5   | 10.0 | 17.5 A           | 0.80                   | 76%        |

## EXPLODED VIEW



|    |                        |
|----|------------------------|
| 2  | Pump Outlet            |
| 3  | Non Return Valve       |
| 4  | Non Return Valve Seat  |
| 5  | Rubber bearing bush    |
| 6  | Lock Screw             |
| 7  | Upper bearing sleeve   |
| 8  | Washer                 |
| 9  | Diffuser               |
| 10 | Impeller               |
| 11 | Diffuser top plate     |
| 12 | Bearing bracket        |
| 13 | Cable shield Rubber    |
| 14 | Screw                  |
| 15 | Cable Guard Clamp      |
| 16 | Cable                  |
| 17 | Pump shell             |
| 18 | Pump shaft             |
| 19 | Bottom Bearing Sleeve  |
| 20 | Spacer Sleeve          |
| 21 | Coupling               |
| 22 | Coupling screw         |
| 23 | Strainer               |
| 24 | Screw                  |
| 25 | Pump Inlet             |
| 26 | Cable screw            |
| 27 | Motor cable Lead       |
| 28 | Cable clamp            |
| 29 | Sand Guard Rubber      |
| 30 | Sand Guard Washer      |
| 31 | Sand Guard Plastic     |
| 32 | Oil seal               |
| 33 | Nut                    |
| 34 | Spring Washer          |
| 35 | Allen Stud             |
| 36 | Oil Filling Plug       |
| 37 | 'O' ring               |
| 38 | Upper Housing          |
| 39 | Side screw             |
| 40 | Side Collar Bush       |
| 41 | 'O' ring               |
| 42 | Mechanical seal        |
| 43 | Mechanical seal washer |
| 44 | Top bearing            |
| 45 | Rotor with shaft       |
| 46 | Bottom bearing         |
| 47 | Bearing washer         |
| 48 | Winding Guard          |
| 49 | Stator                 |
| 50 | Lower Housing          |
| 51 | Motor Shell            |
| 52 | Oil                    |
| 53 | Rubber Diaphragm       |
| 54 | Base Plate             |
| 55 | Snap Ring              |

**TURBOSUB**



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