

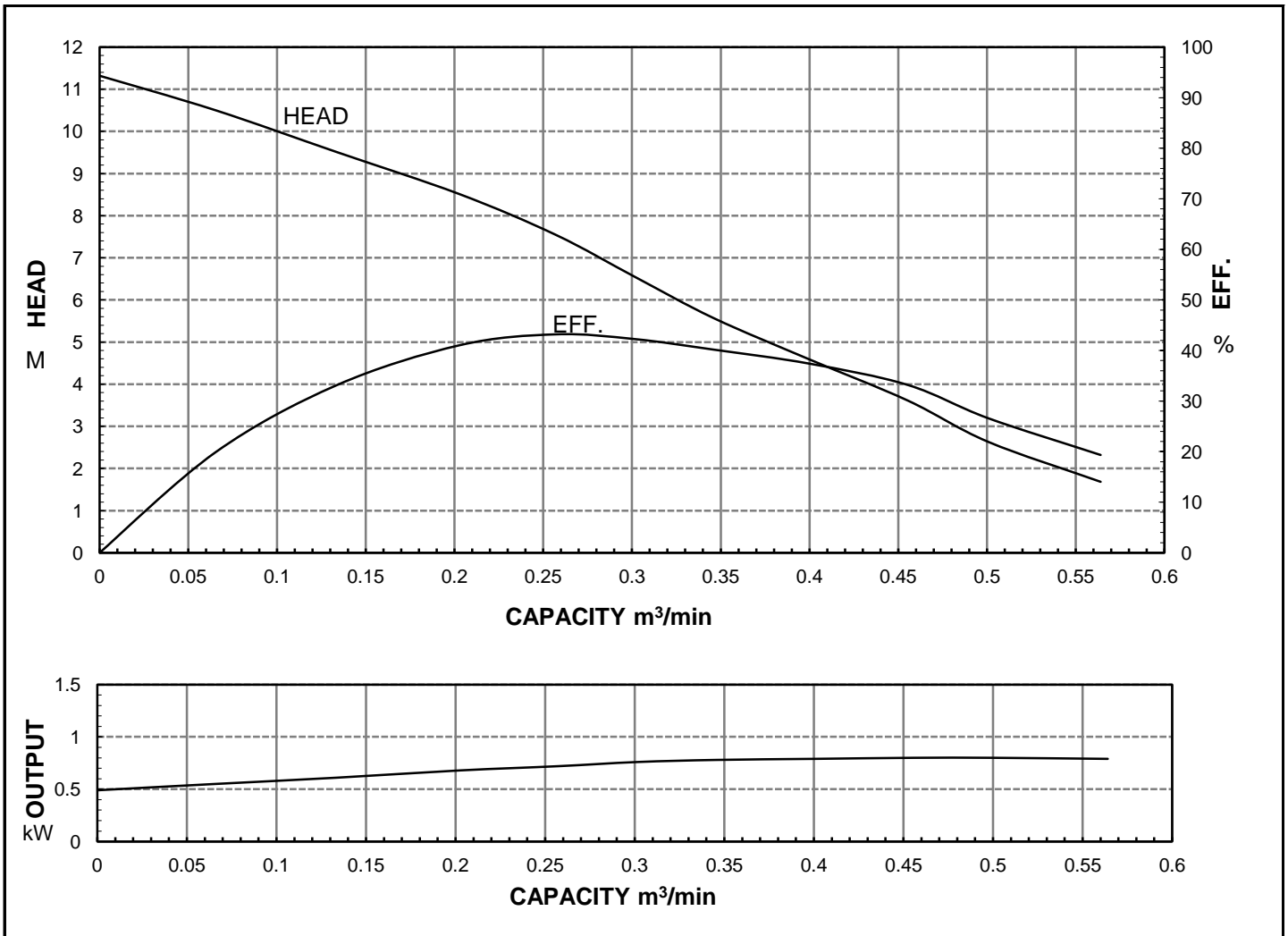


# HCP PUMP

FILE NO PC-M-E5-A311

## PUMP PERFORMANCE CURVES

|                  |                        |       |       |       |                     |                         |        |
|------------------|------------------------|-------|-------|-------|---------------------|-------------------------|--------|
| MODEL            | A-31                   |       |       |       |                     | DATE:                   | 2011.1 |
|                  | STANDARD SPECIFICATION |       |       |       |                     | REFERENCE SPECIFICATION |        |
| FREQUENCY        | 50                     |       |       |       | Hz                  |                         |        |
| DISCHARGE        | 3                      | inch  | /     | 80    | mm                  |                         |        |
| OUTPUT           | 1                      | HP    | /     | 0.75  | kW                  | HP                      | kW     |
| HEAD             | 6.5                    |       |       |       | M                   |                         |        |
| CAPACITY         | 0.3                    |       |       |       | m <sup>3</sup> /min |                         |        |
| PHASE/VOLTAGE    | 1                      | φ     | 220 V | 230 V | 240 V               |                         | φ V    |
| RATED CURRENT    |                        | 5.4 A | 5.2 A | 5.0 A |                     |                         | A      |
| POLE / R.P.M.    | 2                      | P     | /     | 2850  | R.P.M.              |                         |        |
| START METHOD     | DIRECT                 |       |       |       |                     |                         |        |
| INSULATION CLASS | B                      |       |       |       |                     |                         |        |
| REMARK           |                        |       |       |       |                     |                         |        |



HCP PUMP MANUFACTURER CO.,LTD.

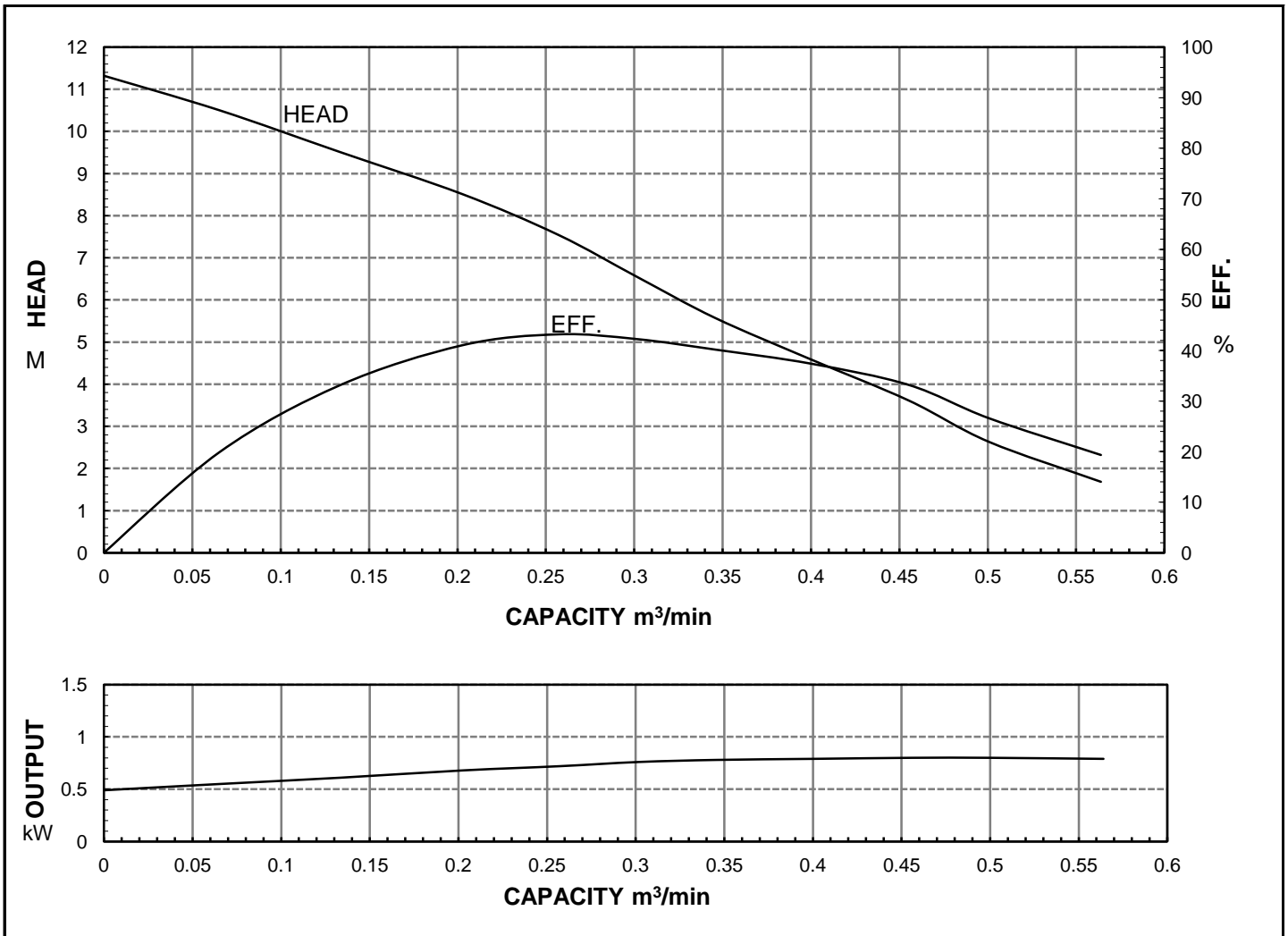


# HCP PUMP

FILE NO PC-M-E5-A313

## PUMP PERFORMANCE CURVES

|                  |                        |       |       |                     |                         |            |
|------------------|------------------------|-------|-------|---------------------|-------------------------|------------|
| MODEL            | A-31                   |       |       |                     | DATE:                   | 2011.1     |
|                  | STANDARD SPECIFICATION |       |       |                     | REFERENCE SPECIFICATION |            |
| FREQUENCY        | 50                     |       |       | Hz                  |                         |            |
| DISCHARGE        | 3                      | inch  | /     | 80                  | mm                      |            |
| OUTPUT           | 1                      | HP    | /     | 0.75                | kW                      | HP      kW |
| HEAD             | 6.5                    |       |       | M                   |                         |            |
| CAPACITY         | 0.3                    |       |       | m <sup>3</sup> /min |                         |            |
| PHASE/VOLTAGE    | 3 φ                    | 230 V | 380 V | 400 V               | 415 V                   | φ      V   |
| RATED CURRENT    |                        | 3.3 A | 2.0 A | 1.9 A               | 1.8 A                   | A          |
| POLE / R.P.M.    | 2                      | P     | /     | 2850                | R.P.M.                  |            |
| START METHOD     | DIRECT                 |       |       |                     |                         |            |
| INSULATION CLASS | B                      |       |       |                     |                         |            |
| REMARK           |                        |       |       |                     |                         |            |



**HCP PUMP MANUFACTURER CO.,LTD.**

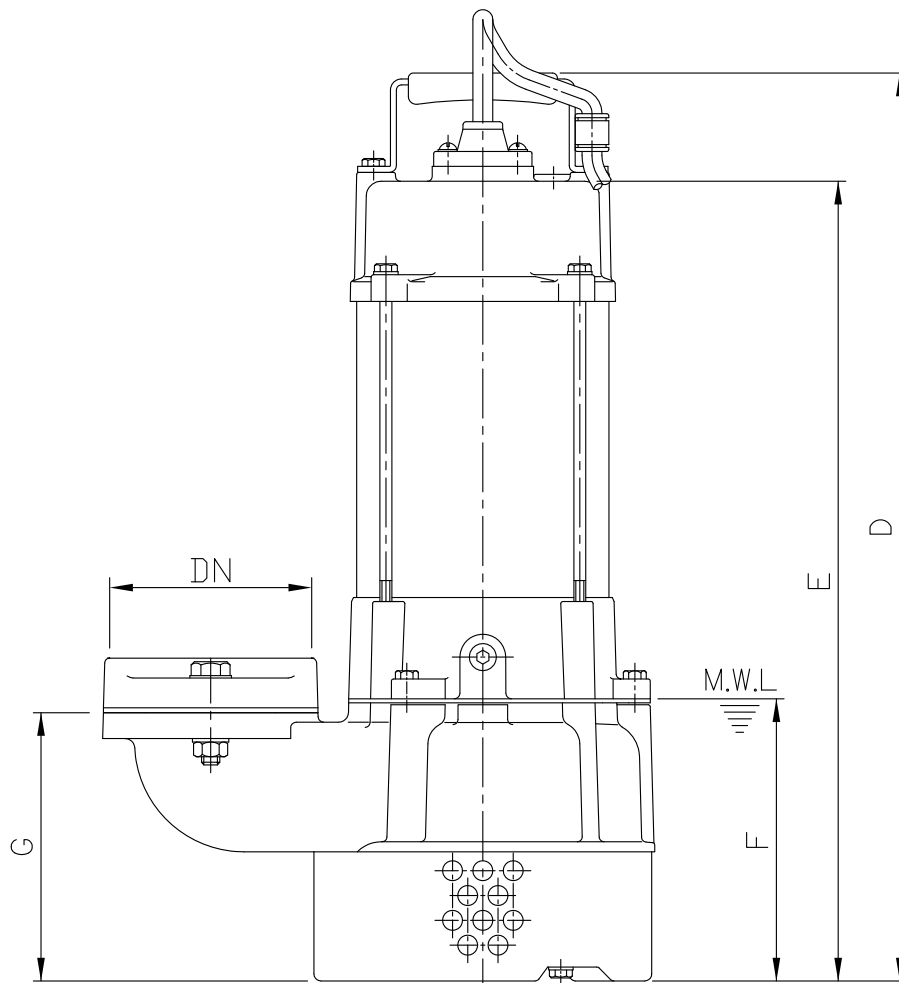
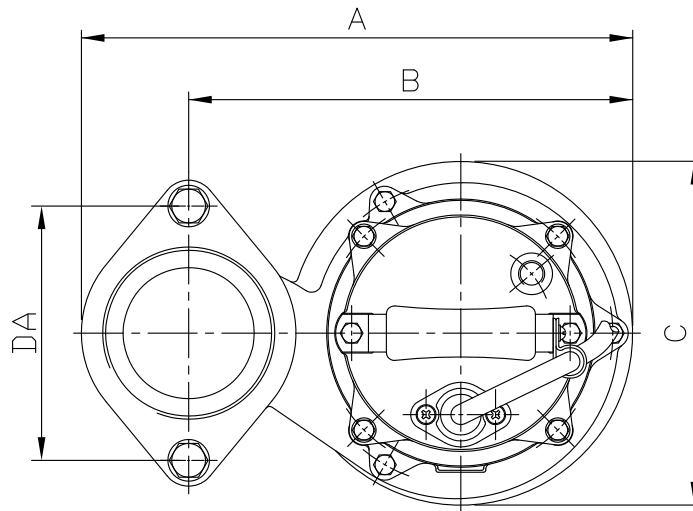
HCP PUMP

DIMENSIONAL DRAWING

No:DE-A31-1

Date:2011-01

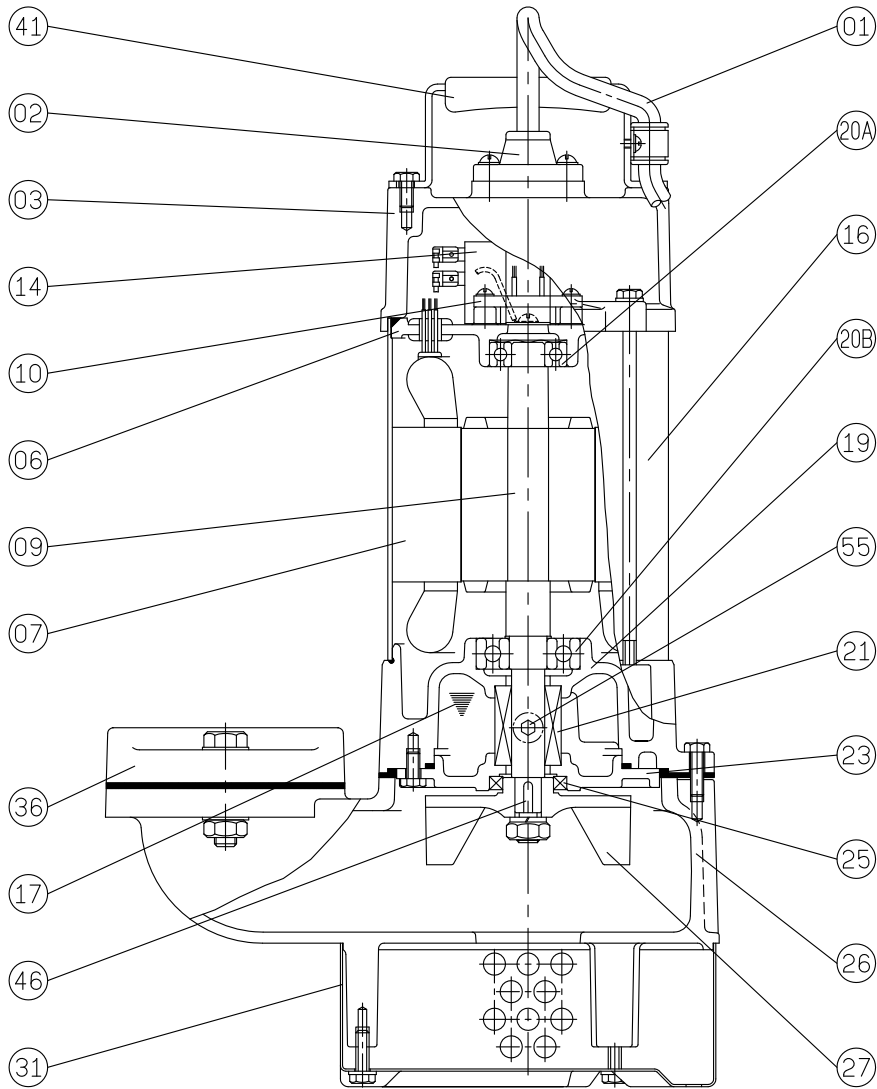
MODEL: A-31;F-31U



| Model | DN | DA  | A   | B   | C   | D   | E   | F   | G   |
|-------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| A-31  | 80 | 130 | 278 | 224 | 173 | 457 | 403 | 142 | 135 |
| F-31U | 80 | 130 | 278 | 224 | 173 | 457 | 403 | 142 | 135 |

M.W.L: Minimun water level

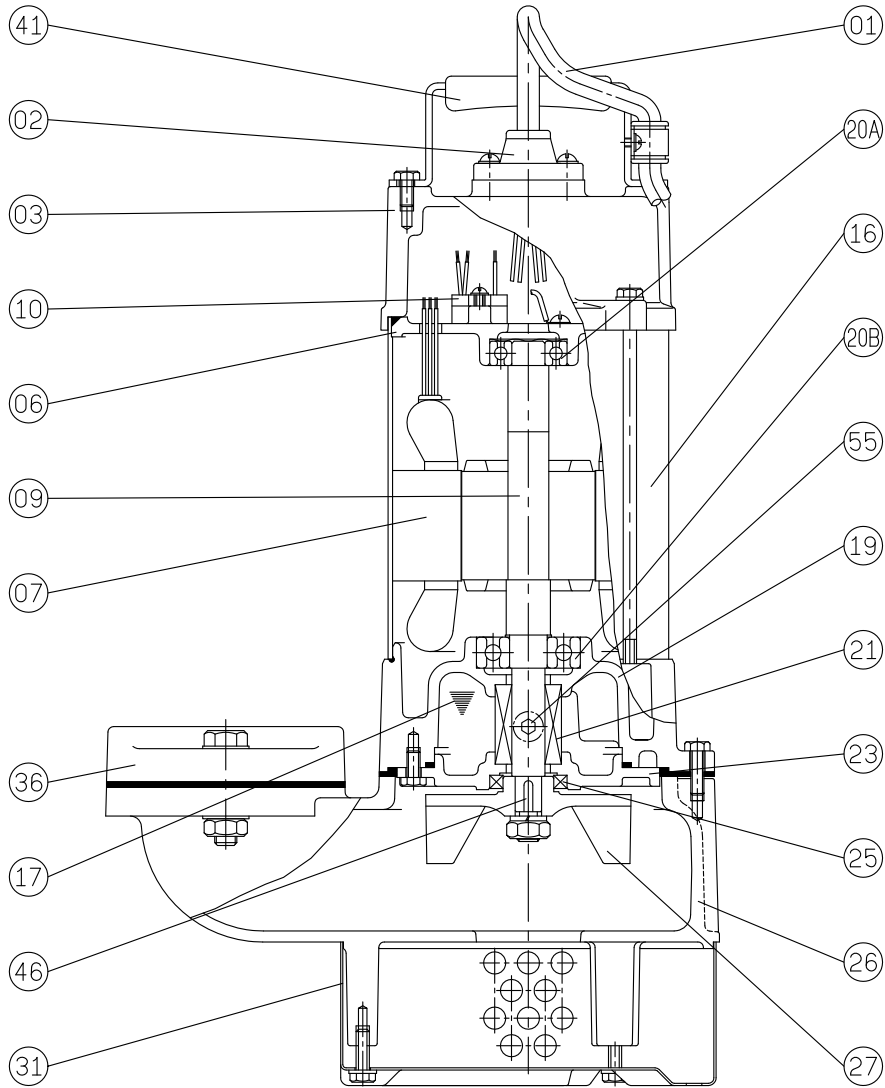
MODEL: A-31;F-31U 1Ø



| No. | Part name         | Material               | QTY | Remark                  |
|-----|-------------------|------------------------|-----|-------------------------|
| 01  | Cable             |                        | 1   | VCT/H07RN-F<br>UL / CSA |
| 02  | Cable base        | PC+PBT                 | 1   |                         |
| 03  | Upper cover       | FC-200                 | 1   |                         |
| 06  | Bracket           | FC-200                 | 1   |                         |
| 07  | Stator            |                        | 1   |                         |
| 09  | Shaft(with Rotor) | SUS410                 | 1   |                         |
| 10  | Auto-cut          |                        | 1   |                         |
| 14  | Capacitor         |                        | 1   |                         |
| 16  | Motor frame       | SUS304                 | 1   |                         |
| 17  | Lubricant         | Turbine oil<br>#32     | 1   |                         |
| 19  | Bearing bracket   | FC-200                 | 1   |                         |
| 20A | Upper bearing     |                        | 1   |                         |
| 20B | Lower bearing     |                        | 1   |                         |
| 21  | M. seal           | CA VS CE<br>SIC VS SIC | 1   |                         |

| No. | Part name       | Material | QTY | Remark |
|-----|-----------------|----------|-----|--------|
| 23  | M. seal bracket | FC-200   | 1   |        |
| 25  | Oil seal        | NBR      | 1   |        |
| 26  | Casing          | FC-200   | 1   |        |
| 27  | Impeller        | FC-200   | 1   |        |
| 31  | Strainer        | SUS304   | 1   |        |
| 36  | Flange          | FC-200   | 1   |        |
| 41  | Handle          | SUS304   | 1   |        |
| 46  | Impeller key    | SUS304   | 1   |        |
| 47  | Packing (1 set) |          | 1   |        |
| 55  | Oil plug        | SUS304   | 1   |        |
|     |                 |          |     |        |
|     |                 |          |     |        |
|     |                 |          |     |        |
|     |                 |          |     |        |

MODEL: A-31;F-31U 3Ø



| No. | Part name         | Material               | QTY | Remark                  |
|-----|-------------------|------------------------|-----|-------------------------|
| 01  | Cable             |                        | 1   | VCT/H07RN-F<br>UL / CSA |
| 02  | Cable base        | PC+PBT                 | 1   |                         |
| 03  | Upper cover       | FC-200                 | 1   |                         |
| 06  | Bracket           | FC-200                 | 1   |                         |
| 07  | Stator            |                        | 1   |                         |
| 09  | Shaft(with Rotor) | SUS410                 | 1   |                         |
| 10  | Auto-cut          |                        | 1   |                         |
| 16  | Motor frame       | SUS304                 | 1   |                         |
| 17  | Lubricant         | Turbine oil<br>#32     | 1   |                         |
| 19  | Bearing bracket   | FC-200                 | 1   |                         |
| 20A | Upper bearing     |                        | 1   |                         |
| 20B | Lower bearing     |                        | 1   |                         |
| 21  | M. seal           | CA VS CE<br>SIC VS SIC | 1   |                         |

| No. | Part name       | Material | QTY | Remark |
|-----|-----------------|----------|-----|--------|
| 23  | M. seal bracket | FC-200   | 1   |        |
| 25  | Oil seal        | NBR      | 1   |        |
| 26  | Casing          | FC-200   | 1   |        |
| 27  | Impeller        | FC-200   | 1   |        |
| 31  | Strainer        | SUS304   | 1   |        |
| 36  | Flange          | FC-200   | 1   |        |
| 41  | Handle          | SUS304   | 1   |        |
| 46  | Impeller key    | SUS304   | 1   |        |
| 47  | Packing (1 set) |          | 1   |        |
| 55  | Oil plug        | SUS304   | 1   |        |
|     |                 |          |     |        |
|     |                 |          |     |        |
|     |                 |          |     |        |