

|                                                                                                    |                                     |                                      |
|----------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|
| CLIENT                                                                                             | SPECIFICATION OF CLIENT             |                                      |
| <div>SPECIFICATION<br/>OF<br/>ELECTROSTATIC OIL CLEANER<br/>TYPE ELC-R50TP<br/>(TOUCH PANEL)</div> |                                     |                                      |
| SPECIFICATION No.<br>0554008S01-R05                                                                | APPROVED BY<br>Feb. 4. 2022 Y. Aoki | DESIGNED BY<br>Apr. 18. 2018 Y. Aoki |
| KLEENTEK Corporation                                                                               |                                     |                                      |

| To apply the drawing number |                                                                                               |
|-----------------------------|-----------------------------------------------------------------------------------------------|
| General View                | 0554008G01-R03                                                                                |
| Flow Diagram                | 0554008F01-R02                                                                                |
| Circuit Diagram             | 0554008E01-R04                                                                                |
| Electric Parts List         | 0554008L01-R02                                                                                |
| Revision history            |                                                                                               |
| May. 17. 2019               | Circuit Diagram was revised R3 to R4. (Y. Aoki)<br>Output signal was added.                   |
| May. 31. 2019               | General view was revised R01 to R02. (Y. Aoki)<br>Specification of output signal was changed. |
| Jul. 4. 2019                | Flow diagram was revised. (Y. Aoki)<br>Oil viscosity and Moisture level was revised.          |
| Feb. 4. 2022                | General view was revised R02 to R03. (Y. Aoki)<br>Height of dimensions is corrected.          |

|                      |                                     |                                                                                                                                                                                                                                                                                |
|----------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTENDED OIL         | Type                                | -----                                                                                                                                                                                                                                                                          |
|                      | Use                                 | -----                                                                                                                                                                                                                                                                          |
| ALLOWABLE CONDITIONS | Oil viscosity                       | 150 mm <sup>2</sup> /s (at 40 deg. C) or less                                                                                                                                                                                                                                  |
|                      | Oil temperature                     | 60 deg. C or less                                                                                                                                                                                                                                                              |
|                      | Moisture level                      | No free water in oil                                                                                                                                                                                                                                                           |
| GENERAL              | Power source                        | AC230-240V 50Hz Single phase 1.2kW                                                                                                                                                                                                                                             |
|                      | Control voltage                     | DC24V / AC230-240V (Only for high voltage transformer)                                                                                                                                                                                                                         |
|                      | Dimension                           | Approx. 738 (L) x 453 (W) x 1104 (H)                                                                                                                                                                                                                                           |
|                      | Designed weight                     | Approx. 100 kg (Optional accessories are not included.)                                                                                                                                                                                                                        |
|                      | Operation                           | All instruments are operated with Start button and Stop button automatically. Also pump and high voltage can be operated separately through touch panel with manual mode. Automatic restart after recovery from power outage is possible to select ON or OFF with touch panel. |
|                      | Oil discharging method (from tanks) | Reverse operation of pump with manual mode on touch panel.                                                                                                                                                                                                                     |
|                      | Power cable                         | 1.5mm <sup>2</sup> x 5m                                                                                                                                                                                                                                                        |
| PUMP                 | Type (with motor)                   | KTP2-4024-206HBMVB                                                                                                                                                                                                                                                             |
|                      | Manufacturer                        | NIPPON OIL PUMP                                                                                                                                                                                                                                                                |
|                      | Capacity                            | 9.0 L/min (at 50Hz, 1500rpm)                                                                                                                                                                                                                                                   |
|                      | Relief pressure                     | 0.3 MPa (gauge)                                                                                                                                                                                                                                                                |
| PUMP MOTOR           | Voltage                             | AC230-240V 50Hz Single phase                                                                                                                                                                                                                                                   |
|                      | Output                              | 400W                                                                                                                                                                                                                                                                           |
|                      | Enclosure                           | Totally enclosed                                                                                                                                                                                                                                                               |
|                      | Protection class                    | IP44                                                                                                                                                                                                                                                                           |
|                      | Poles                               | 4                                                                                                                                                                                                                                                                              |
|                      | Revolution                          | 1440 rpm (at 50Hz)                                                                                                                                                                                                                                                             |
|                      | Insulation                          | B                                                                                                                                                                                                                                                                              |
| CLEANING TANK        | Material of body                    | SUS304                                                                                                                                                                                                                                                                         |
|                      | Material of centre electrode        | SUS304                                                                                                                                                                                                                                                                         |
|                      | Material of Insulator               | PVC (Polyvinyl chloride)                                                                                                                                                                                                                                                       |
|                      | Material of O-ring                  | NBR (Nitrile butadiene rubber)                                                                                                                                                                                                                                                 |
|                      | Quantity                            | 1                                                                                                                                                                                                                                                                              |
|                      | Capacity                            | Approx. 35 L                                                                                                                                                                                                                                                                   |
|                      | Collector type                      | CC-R50SP                                                                                                                                                                                                                                                                       |
|                      | Collector quantity                  | 1                                                                                                                                                                                                                                                                              |
| PAINTING COLOUR      | Base and control box                | MUNSELL No. N3.5                                                                                                                                                                                                                                                               |
|                      | Surface of stainless (Steel tanks)  | No painting                                                                                                                                                                                                                                                                    |
|                      | Piping                              | No painting                                                                                                                                                                                                                                                                    |
|                      | Motor and pump                      | Maker's standard                                                                                                                                                                                                                                                               |

|                      | NAME                                                                                                                                                                                                                                                                                                                                                                    | TYPE OR SPECIFICATIONS | Qty | NOTE                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----|------------------------------------------------------------------------------|
| ACCESSORIES          | Collector                                                                                                                                                                                                                                                                                                                                                               | CC-R50SP               | 1   | Installed in electrostatic oil cleaning tank before shipping.                |
|                      | Spare O Ring                                                                                                                                                                                                                                                                                                                                                            | P260, NBR              | 1   | For lid                                                                      |
|                      | Instruction manual                                                                                                                                                                                                                                                                                                                                                      |                        | 1   |                                                                              |
|                      | Suction hose                                                                                                                                                                                                                                                                                                                                                            | 3/4" x 5m              | 1   | 3/4" self-sealing coupler and Y-shaped strainer are mounted in one end only. |
|                      | Delivery hose                                                                                                                                                                                                                                                                                                                                                           | 3/4" x 5m              | 1   | 3/4" self-sealing coupler is mounted in one end only.                        |
|                      | Inspection Door key                                                                                                                                                                                                                                                                                                                                                     |                        | 1   |                                                                              |
| SOUND PRESSURE LEVEL | Less than 85db<br>(at 1 metre from equipment)                                                                                                                                                                                                                                                                                                                           |                        |     |                                                                              |
| APPLICATION STANDARD | JIS and JEM                                                                                                                                                                                                                                                                                                                                                             |                        |     |                                                                              |
| OTHER INFORMATION    | 1) Status output<br>1-1) Signal : 4 – 20mA<br>1-2) Terminal : “0+” and “0-“<br>1-3) Status<br>1-3-1) 0mA : No power<br>1-3-2) 4mA : Standby<br>1-3-3) 8mA : In operation<br>1-3-4) 12mA : Prepare collector<br>1-3-5) 16mA : Change collector<br>1-3-6) 20mA : Any alarm<br><br>2) High voltage value output<br>2-1) Signal : 4 – 20mA<br>2-2) Terminal : “1+” and “1-“ |                        |     |                                                                              |

A

B

C

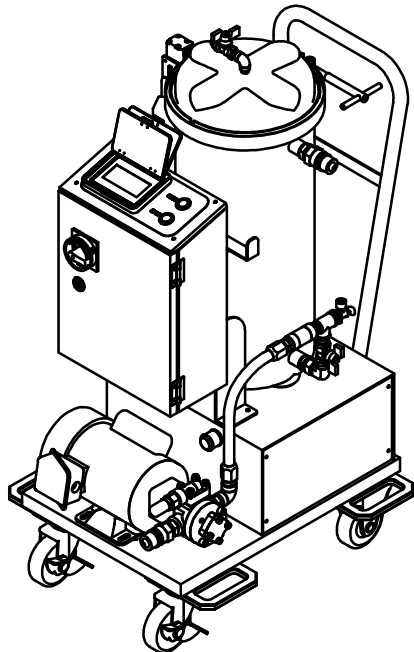
D

A

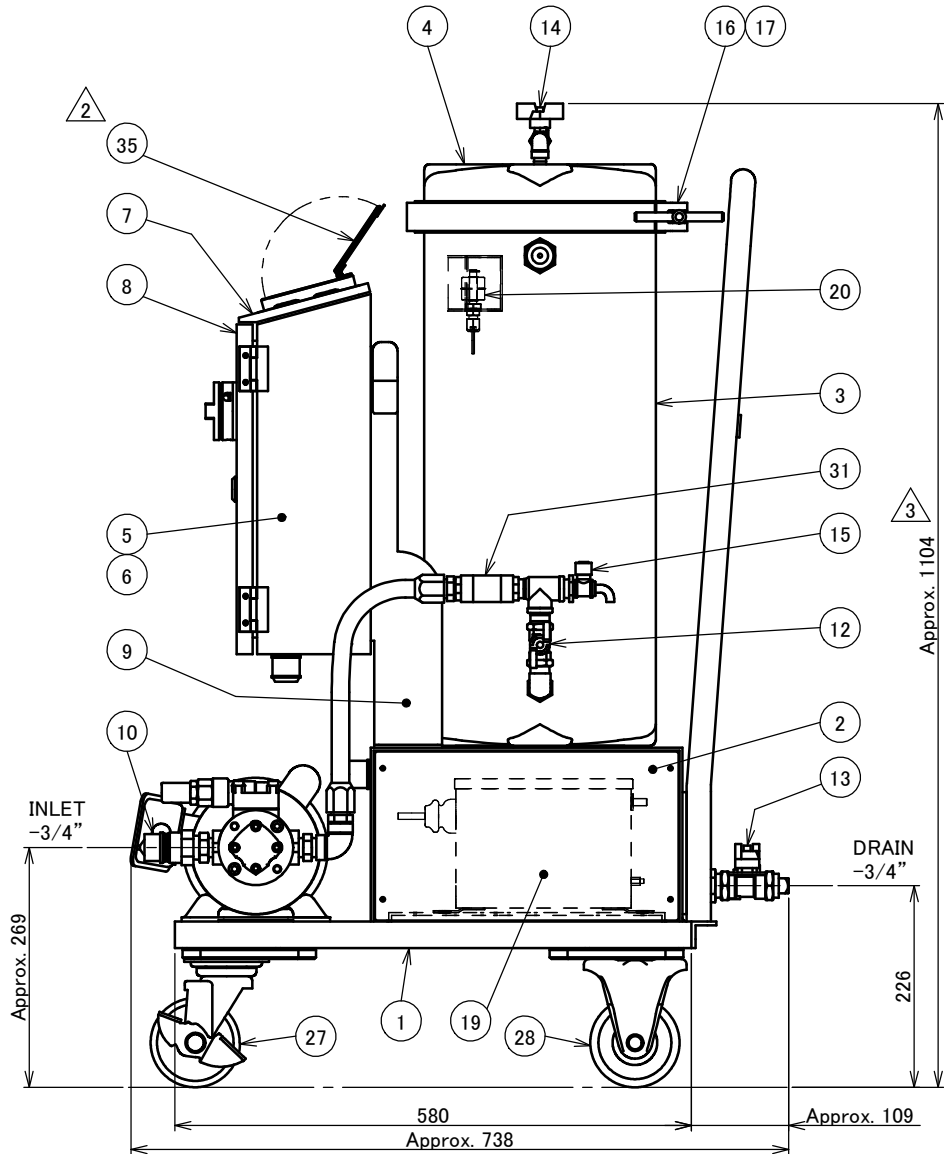
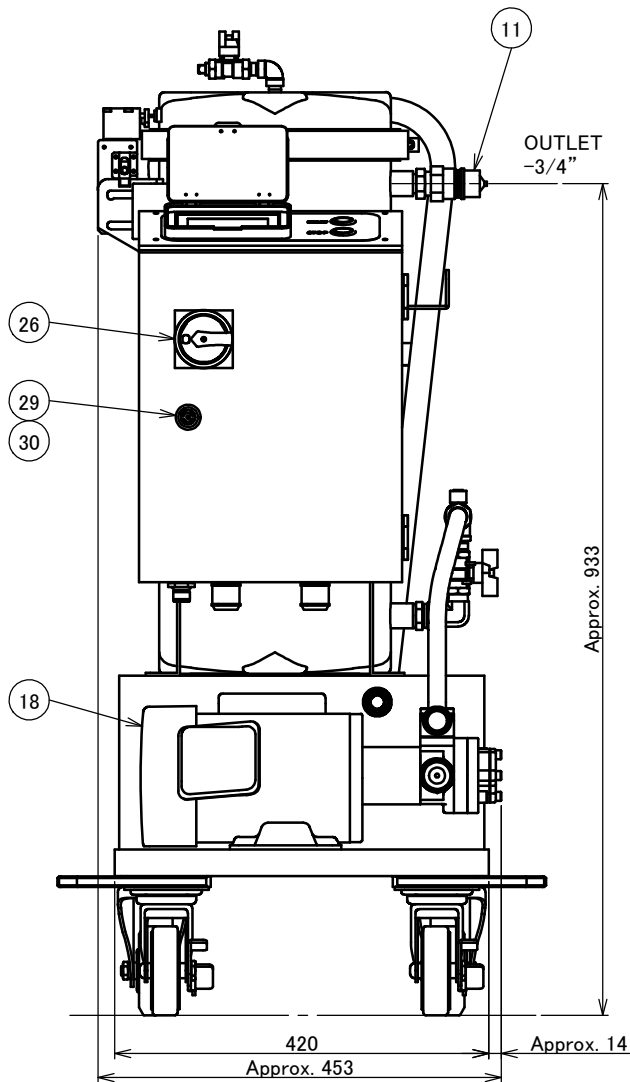
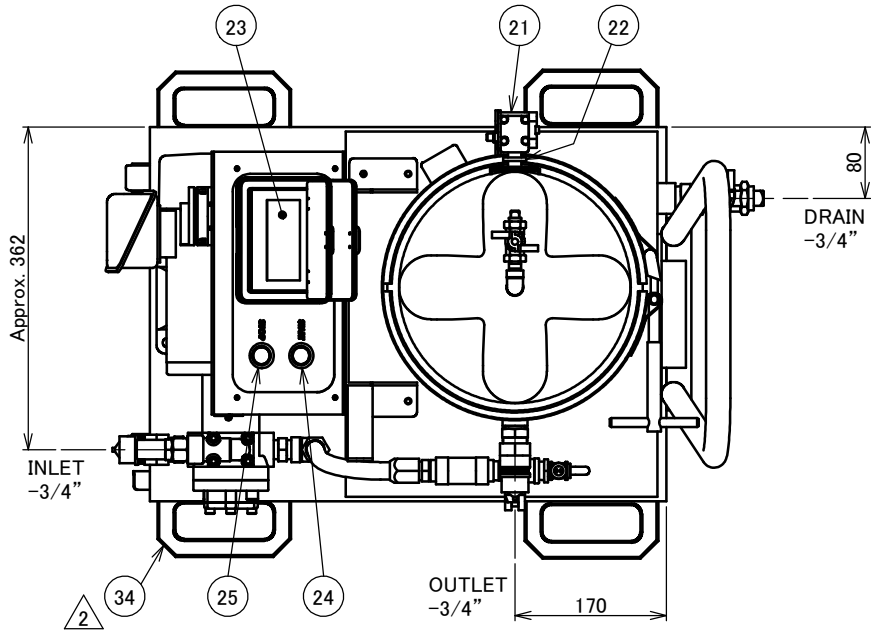
B

C

D



PROJECTION VIEW  
SCALE (1 : 10)

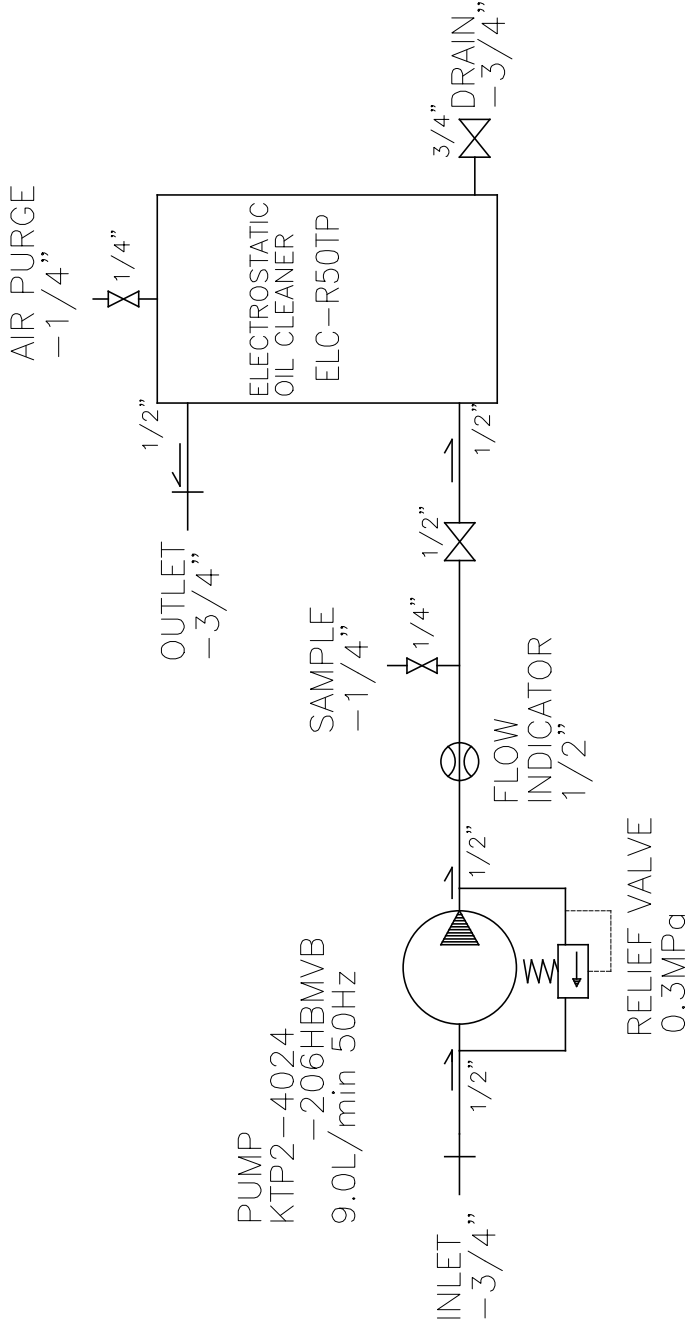


| リビジョン |            |                                   |  |     |
|-------|------------|-----------------------------------|--|-----|
| リビジョン | 日付         | 訂正履歴                              |  | 訂正者 |
| 1     | 2018/12/17 | 製品化に伴い図番DA170516G01-R00より変更、製品名変更 |  | 青木  |
| 2     | 2019/05/31 | オプションGRIPおよびTOUCH PANEL COVERを追加  |  | 青木  |
| 3     | 2022/02/04 | 全高の表記を修正                          |  | 青木  |

|                   |                    |                                                      |             |                    |               |                          |
|-------------------|--------------------|------------------------------------------------------|-------------|--------------------|---------------|--------------------------|
| 2                 | 35                 | TOUCH PANEL COVER<br>(OPTIONAL ACCESSORIES)          |             |                    | (1)           |                          |
|                   | 34                 | GRIP<br>(OPTIONAL ACCESSORIES)                       | SS          |                    | (4)           |                          |
|                   | 33                 | HANDLE<br>(OPTIONAL ACCESSORIES)                     | SS          |                    | (1)           |                          |
|                   | 32                 | HANDLE BASE<br>(OPTIONAL ACCESSORIES)                | SPHC        |                    | (1)           |                          |
|                   | 31                 | 1/2" FLOW INDICATOR                                  | BC          | CVF3B              | 1             | ELETTROTEC               |
|                   | 30                 | KEY                                                  | ZDC         | PH-58-handle       | 1             | Geo. Prince<br>Takeshita |
|                   | 29                 | LATCH                                                | ZDC         | PH-58-R-11         | 1             | Geo. Prince<br>Takeshita |
|                   | 28                 | φ 100 FIXED CASTER                                   |             | WK-100UB           | 2             | TOSEI                    |
|                   | 27                 | φ 100 SWING CASTER                                   |             | WJ-100UB-S         | 2             | TOSEI                    |
|                   | 26                 | MANUAL LOAD CONTACTOR                                |             | P1-25/V/SVB        | 1             | EATON                    |
|                   | 25                 | PUSH BUTTON                                          |             | CW4B               | 1             | IDEC                     |
|                   | 24                 | LIGHTING PUSH BUTTON                                 |             | CW4L               | 1             | IDEC                     |
|                   | 23                 | TOUCH PANEL WITH<br>PROGRAMMABLE LOGIC<br>CONTROLLER |             | FT1A-C14KA         | 1             | IDEC                     |
|                   | 22                 | OPERATION KEY                                        |             | D4BS-K2            | 1             | OMRON                    |
|                   | 21                 | LIMIT SWITCH                                         |             | D4BS-25FS          | 1             | OMRON                    |
|                   | 20                 | FLOAT SWITCH                                         | SUS         | RFS940309          | 1             | RIKO<br>SANGYO           |
|                   | 19                 | HIGH VOLTAGE TRANSFORMER                             |             | DCL16U18           | 1             | KLEENTEK                 |
|                   | 18                 | TROCHOID PUMP / MOTOR                                | FC/NBR      | KTP2-4024-206HBMVB | 1             | NIPPON OIL PUMP          |
|                   | 17                 | "O"-RING                                             | NBR         | P260               | 1             |                          |
|                   | 16                 | FASTENER                                             | SUS         | YMV15090K-290      | 1             | YOKOHAMA                 |
|                   | 15                 | 1/4" SAMPLING VALVE                                  | BC          |                    | 1             |                          |
|                   | 14                 | 1/4" AIR PURGE VALVE                                 | BC          |                    | 1             |                          |
|                   | 13                 | 3/4" DRAIN VALVE                                     | BC          |                    | 1             |                          |
|                   | 12                 | 1/2" BALL VALVE                                      | BC          |                    | 1             |                          |
|                   | 11                 | 3/4" OUTLET                                          | SS          | M-BIR-34-BSPT      | 1             | Stucchi                  |
|                   | 10                 | 3/4" INLET                                           | SS          | M-BIR-34-BSPT      | 1             | Stucchi                  |
|                   | 9                  | CONTROL BOX BRACKET                                  | SPHC        |                    | 1             |                          |
|                   | 8                  | INSPECTION DOOR                                      | SPCC        |                    | 1             |                          |
|                   | 7                  | CONTROL PANEL                                        | SPCC        |                    | 1             |                          |
|                   | 6                  | PARTS BASE                                           | SPCC        |                    | 1             |                          |
|                   | 5                  | CONTROL BOX                                          | SPCC        |                    | 1             |                          |
|                   | 4                  | LID                                                  | SUS304      |                    | 1             |                          |
|                   | 3                  | CLEANING TANK                                        | SUS304      |                    | 1             |                          |
|                   | 2                  | SIDE COVER                                           | SPCC        |                    | 2             |                          |
|                   | 1                  | BASE                                                 | SPHC        |                    | 1             |                          |
| 品番<br>PART<br>NO. | 部 品 名<br>PART NAME | 材 質<br>MATERIAL                                      | 型 式<br>TYPE | 数量<br>Q'TY         | 備 考<br>NOTICE |                          |

|                                                                                                                         |                                   |              |                       |                     |                         |                                          |                         |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------|-----------------------|---------------------|-------------------------|------------------------------------------|-------------------------|
| <br>三角法<br>3RD ANGLE<br>PROJECTION | 尺 度<br>SCALE                      | 単 位<br>UNITS | 承 認<br>APPROVED<br>BY | 設 計<br>DESIGN<br>BY | 図 面 名 称<br>DRAWING NAME | ELC-R50TP(CE / TOUCH PANEL) General view |                         |
|                                                                                                                         | 1/6                               | mm           | 22. 2. 4<br>青 木       | 17.6.28<br>青 木      | 図 面 番 号<br>DRAWING NO.  | 0554008G01                               | 改訂番号<br>REVISION<br>NO. |
|                                                                                                                         | 株式会社 クリーンテック KLEENTEK Corporation |              |                       |                     |                         |                                          | 03                      |
| A2                                                                                                                      |                                   |              |                       |                     |                         |                                          |                         |

| Rev. No. | 訂正履歴                                | 訂正者 |
|----------|-------------------------------------|-----|
| 18.12.17 | 製品化に伴い図番 DAI80302F01-R004より家族・製品名変更 | 青木  |
| 19.7.4   | フローインジケータのサイズを訂正                    | 青木  |



| 納入先<br>CLIENT        |  | 図番<br>DRAWING NO. | 設計<br>DESIGN | 承認<br>APPROVED | 単位<br>UNITS | 尺法<br>SCALE | 三角法<br>3RD ANGLE<br>PROJECTION |
|----------------------|--|-------------------|--------------|----------------|-------------|-------------|--------------------------------|
| KLEENTEK Corporation |  | 0554008F01        | 18.4.17      | 19.7.4         | mm          | FREE        |                                |
| 製品名<br>PRODUCT NAME  |  | ELC-R50TP         |              | FLOW DIAGRAM   |             |             |                                |
| 訂正番号<br>REVISION NO. |  | 0554008F01        |              | 02             |             |             |                                |



## ELECTRICAL PARTS LIST

| No.                                  | Symbol      | Part name                                         | Type                               | Manufacturer      | Q<br>ty                            | Note                         |
|--------------------------------------|-------------|---------------------------------------------------|------------------------------------|-------------------|------------------------------------|------------------------------|
| 1                                    | LC          | Manual load contactor                             | P1-25V/SVB                         | EATON<br>ELECTRIC | 1                                  |                              |
| 2                                    | CB          | Circuit breaker                                   | BW32SAG                            | FUJI<br>ELECTRIC  | 1                                  | 32AF/10AT                    |
| 3                                    | ADC         | DC power supply                                   | AC100-240V<br>PS5R-VC24            | IDEC              | 1                                  | 30W<br>DC24V output          |
| 4                                    | MS1,2<br>TH | Motor starter with overload<br>detector           | DC24V<br>SK06GWR-E01WK2P8          | FUJI<br>ELECTRIC  | 1                                  | TH: 2.8A                     |
| 5                                    | TP/<br>PLC  | Touch panel with programmable<br>logic controller | DC24V<br>FT1A-C14KA-S              | IDEC              | 1                                  |                              |
| 6                                    | MR1         | Auxiliary relay                                   | DC24V<br>RU2S-D24                  | ↑                 | 1                                  |                              |
| 7                                    | MR2         | ↑                                                 | DC24V<br>G5CA-1A-H                 | OMRON             | 1                                  |                              |
| 8                                    | PB1,<br>PL  | Lighting push button                              | CW4L-M1E10Q4G                      | IDEC              | 1                                  | Coil: DC24V<br>Colour: Green |
| 9                                    | PB2         | Push button                                       | CW4B-M1E10B                        | ↑                 | 1                                  | Colour: Black                |
| 10                                   | FS          | Float switch                                      | RFS940309                          | RIKO<br>SANGYO    | 1                                  |                              |
| 11                                   | LS          | Limit switch                                      | D4BS-25FS                          | OMRON             | 1                                  |                              |
| 12                                   | ↑           | Operation key                                     | D4BS-K2                            | ↑                 | 1                                  |                              |
| 13                                   | HVT         | High voltage transformer                          | DCL16U18                           | KLEENTEK          | 1                                  | Coil: AC230-240V             |
| 14                                   |             |                                                   |                                    |                   |                                    |                              |
| 15                                   |             |                                                   |                                    |                   |                                    |                              |
| 16                                   |             |                                                   |                                    |                   |                                    |                              |
| 17                                   |             |                                                   |                                    |                   |                                    |                              |
| 18                                   |             |                                                   |                                    |                   |                                    |                              |
| Customer                             |             |                                                   | Type<br>ELC-R50TP<br>(Touch panel) |                   | Drawing No.<br>0554008L01-R02      |                              |
| 18. 12 製品化に伴い図番:DA180302L01-R01 より変更 |             |                                                   | Designed by<br>Apr.17.2018 Y. Aoki |                   | Approved by<br>Dec.19.2018 Y. Aoki |                              |