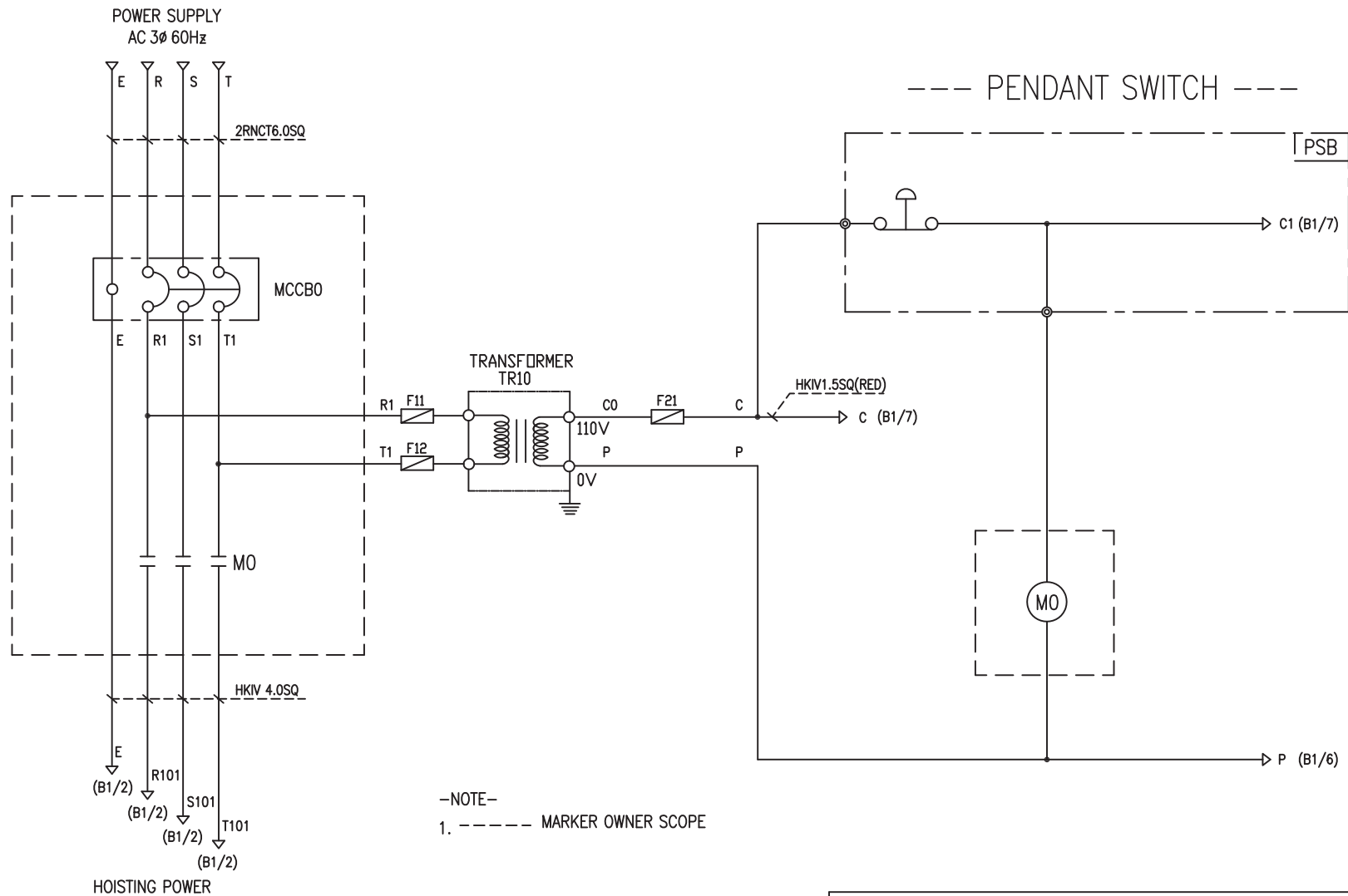


|               |   |   |   |   |                 |   |   |   |    |             |    |
|---------------|---|---|---|---|-----------------|---|---|---|----|-------------|----|
| 1             | 2 | 3 | 4 | 5 | 6               | 7 | 8 | 9 | 10 |             |    |
| POWER CIRCUIT |   |   |   |   | CONTROL CIRCUIT |   |   |   |    | ADDRESS NO. | A1 |

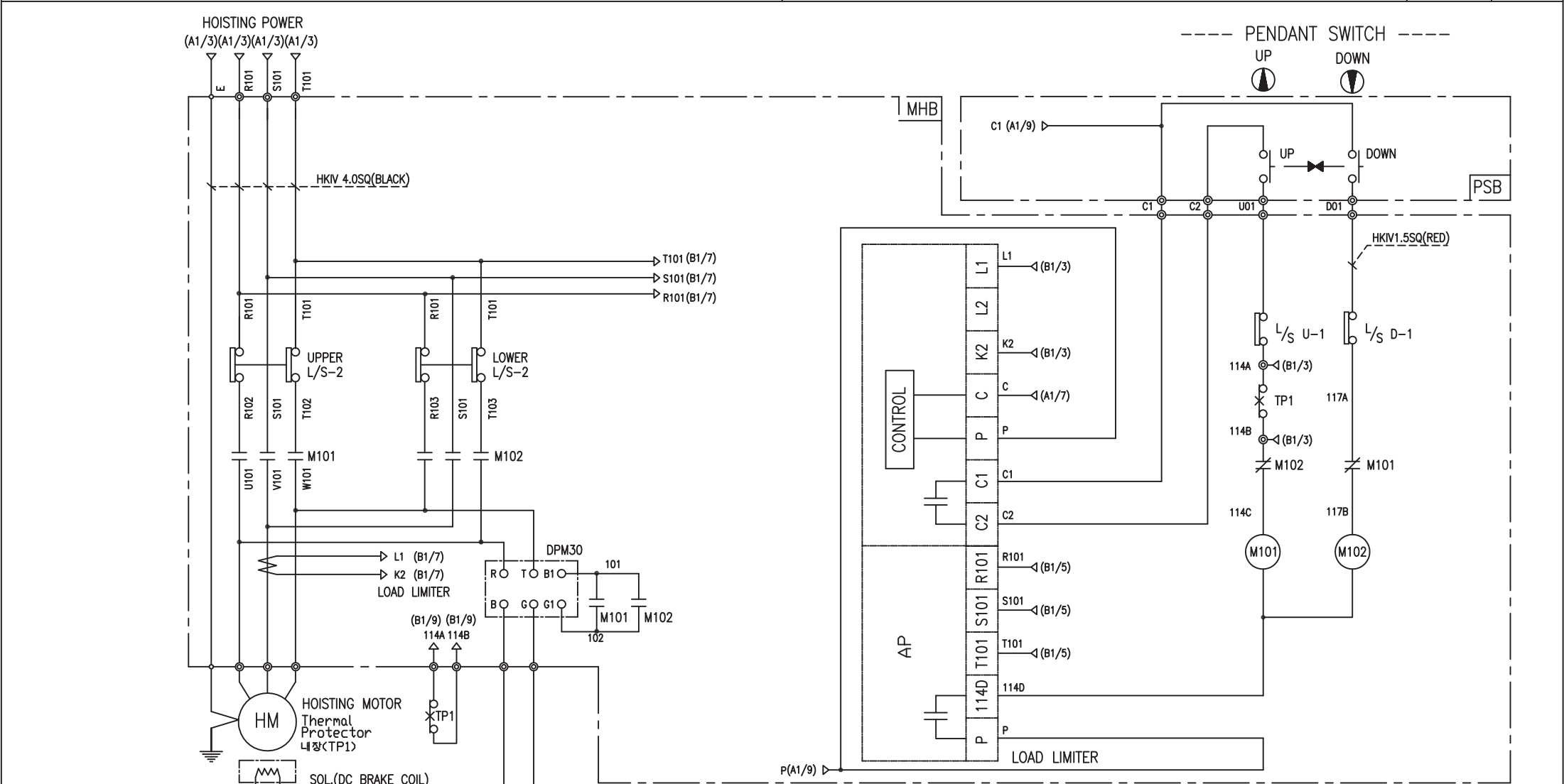


-NOTE-

1. ----- MARKER OWNER SCOPE

| SPECIFICATION | NO FUSE BREAKER |     | MAGNET CONTACT |        | TRANSFORMER | FUSE          |
|---------------|-----------------|-----|----------------|--------|-------------|---------------|
| SYMBOLS       | MCCBO           |     | MO             |        | TR10        | F11, F12, F21 |
| DESCRIPTION   | 220V            | 30A | GMC22          | DMC-22 | 60VA        | 1A            |
|               | 380V            | 20A |                |        |             |               |
|               | 440V            | 20A |                |        |             |               |
|               | 460V            | 20A |                |        |             |               |
|               | 480V            | 20A |                |        |             |               |
| MAKER         | LS              |     | LS             | DONGA  | LK          | —             |

|                                                                                                                  |         |                              |          |       |                                                                                       |       |
|------------------------------------------------------------------------------------------------------------------|---------|------------------------------|----------|-------|---------------------------------------------------------------------------------------|-------|
| TITLE                                                                                                            |         |                              |          |       | PROJECTION                                                                            |       |
| MAIN POWER & CONTROL CIRCUIT DIAGRAM                                                                             |         |                              |          |       |  |       |
| WORK                                                                                                             | NO      | WORK                         |          |       | NAME                                                                                  |       |
| 601                                                                                                              |         | DA                           |          |       | SCALE                                                                                 | Q' TY |
|                                                                                                                  |         | 220V, 380V, 440V, 460V, 480V |          |       | 1/1                                                                                   | 1     |
| DRAWN                                                                                                            | CHECKED | REVIEWED                     | APPROVED | MODEL | DA                                                                                    |       |
| LEE.G.H                                                                                                          |         |                              |          | CODE  | NO                                                                                    |       |
| 2010.07.30                                                                                                       |         |                              |          |       |                                                                                       |       |
|  <b>L K HOIST CO., LTD.</b> |         |                              |          |       |                                                                                       |       |



-NOTE-

1.  : Mechanical Interlock

| SPECIFICATION | MAGNET CONTACT |        | LOAD LIMITER | SILICON RECTIFIER |        |        |        | Thermal Protector | HOIST MOTOR |
|---------------|----------------|--------|--------------|-------------------|--------|--------|--------|-------------------|-------------|
| SYMBOLS       | M101, M102     |        | -            | DPM30             |        |        |        | TP1               | HM          |
| DESCRIPTION   | DMC-22         | GMC-22 | LKDL-60A     | AC220V            | AC440V | AC460V | AC480V | 17AM032           | 3.5Kw * 4P  |
|               |                |        |              | DC99V             | DC198V | DC207V | DC216V |                   |             |
| MAKER         | DONG-A         | LS     | LK           | LK                |        |        |        | Texas Instruments | LK          |

|                                                                                                           |         |                        |          |         |  |    |  |                                                                                       |  |
|-----------------------------------------------------------------------------------------------------------|---------|------------------------|----------|---------|--|----|--|---------------------------------------------------------------------------------------|--|
| TITLE                                                                                                     |         |                        |          |         |  |    |  | PROJECTION                                                                            |  |
| HOIST POWER & CONTROL CIRCUIT DIAGRAM                                                                     |         |                        |          |         |  |    |  |  |  |
| WORK NO                                                                                                   |         | WORK NAME              |          |         |  |    |  | SCALE                                                                                 |  |
| 602                                                                                                       |         | DA                     |          |         |  |    |  | Q' TY                                                                                 |  |
|                                                                                                           |         | 220V, 440V, 460V, 480V |          |         |  |    |  | 1/1                                                                                   |  |
| DRAWN                                                                                                     | CHECKED | REVIEWED               | APPROVED | MODEL   |  | DA |  |                                                                                       |  |
| LEE.G.H                                                                                                   |         |                        |          | CODE NO |  |    |  |                                                                                       |  |
| 2010.07.30                                                                                                |         |                        |          |         |  |    |  |                                                                                       |  |
|  L K HOIST CO., LTD. |         |                        |          |         |  |    |  |                                                                                       |  |

|                                             |                             |                 |
|---------------------------------------------|-----------------------------|-----------------|
| SPECIFICATION FOR<br>ELECTRIC MOTORS        | INTERNAL IDENTIFICATION NO. | PAGE :<br>REV : |
| SCHEDULE OF TECHNICAL DATA                  |                             |                 |
| 1. SERVICE                                  | HOISTING                    |                 |
| 2. MANUFACTURE                              | LK HOIST CO. LTD            |                 |
| 3. MOTOR MODEL NO                           | 3.5 - 4 - 22                |                 |
| 4. RATED POWER                              | 3.5 KW × 4 P                |                 |
| 5. RATED VOLTAGE AND FREQUENCY              | 220 V                       | 60HZ            |
| 6. MOTOR TYPE                               | SQUIRREL CAGE ROTOR TYPE    |                 |
| 7. RATING                                   | 30 MIN                      |                 |
| 8. LOCATION                                 | IN-DOOR , OUTDOOR           |                 |
| 9. INSULATION CLASS                         | B                           |                 |
| 10. DESIGN TEMPERATURE RISE (BY RESISTANCE) | 80℃                         |                 |
| 11. FULL LOAD SPEED                         | 1740 RPM                    |                 |
| 12. FULL LOAD CURRENT                       | 17.2 A                      |                 |
| 13. STARTING CURRENT AT RATED VOLTAGE       | 85.1 A                      |                 |
| 14. MINIMUM STARTING VOLTAGE                | 198 V                       |                 |
| 15. EFFICIENCY AT 100% RATED LOAD           | 73.5 %                      |                 |
| 16. POWER FACTOR AT 100% RATED LOAD         | 72.7 %                      |                 |
| 17. STARTING TORQUE                         | 240 %                       |                 |
| 18. TYPE OF ENCLOSURE                       | 전폐형(IP-54)                  |                 |
| 19. TYPE OF BEARING                         | PL : 6205DD OPL : 6008ZZ    |                 |
| 20. MOUNTING                                | VERTICAL                    |                 |
| 21. MAXIMUM AMBIENT TEMPURE                 | 40℃                         |                 |
| 22. BEARING LUBRICATION                     | GREASE                      |                 |
| 23. STARTING METHOD                         | FULL VOLTAGE                |                 |