

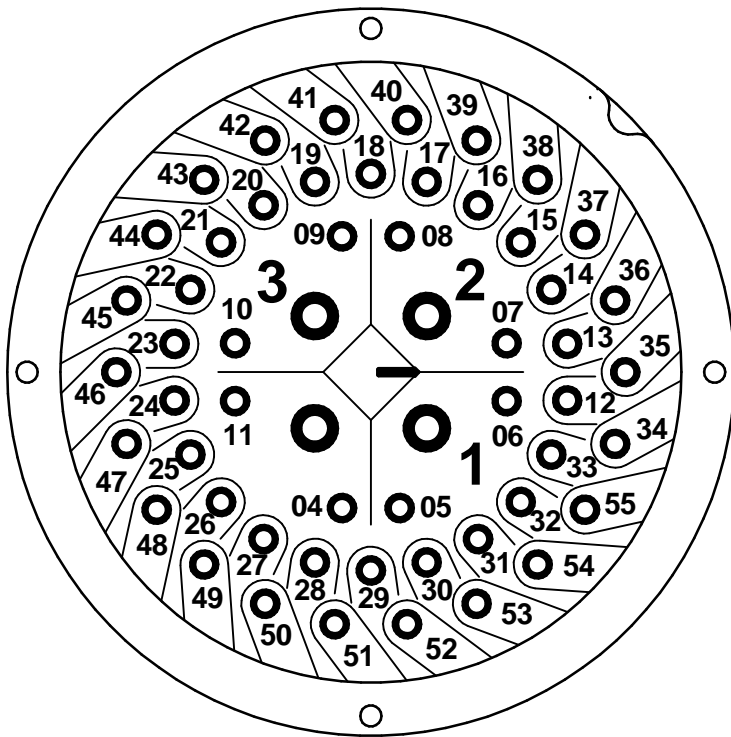
**PLUG-AND-SOCKET CONNECTOR LAYOUT**

**LEGENDS:**

- M1** ELECTRIC MOTOR
- CTS** CLOSE TORQUE SWITCH
- OTS** OPEN TORQUE SWITCH
- CLS** CLOSE LIMIT SWITCH
- OLS** OPEN LIMIT SWITCH
- TRM** THERMAL PROTECTION DEVICE (MOTOR WIND).
- HT** ANTI-CONDENSATION HEATER
- BLK** BLINKER SWITCH
- POT** POTENTIOMETER (VALVE POSITION SIGNAL)
- CPT** CURRENT POSITION TRANSMITTER (VALVE POSITION SIGNAL)
- ACTS** AUXILIARY CLOSE TORQUE SWITCH
- AOTS** AUXILIARY OPEN TORQUE SWITCH
- ACLS** AUXILIARY CLOSE LIMIT SWITCH
- AOLS** AUXILIARY OPEN LIMIT SWITCH

**NOTES:**

1. THE TERMINAL PLAN SHOWS THE QUARTER-TURN ELECTRIC ACTUATOR IN INTERMEDIATE POSITION, ACTUATOR CLOSES VALVE COUNTER-CLOCKWISE.
2. SEE ACTUATOR USER MANUAL AND DATASHEETS FOR TECHNICAL DATA, PARAMETERS AND DESCRIPTION OF THE ACTUATOR ELECTRIC AND ELECTRONIC EQUIPMENT.
3. IF THE ACTUATOR IS CONFIGURED TO BYPASS THE MOTOR PROTECTION THERMOSTAT (TRM), THE ACTUATOR WILL NO LONGER COMPLY WITH THE ESSENTIAL SAFETY REQUIREMENTS.
4. THE USER MUST FIT A OVERLOAD RELAY. THE RELAY MUST BE SIZED ACCORDING TO THE OVERCURRENT PROT. DEVICE SETTING VALUE FOR THE MOTOR.
5. REFER TO THE MOTOR DATA SHEET FOR THIS VALUE. THE OVERLOAD RELAY MUST BE SIZED TO ENSURE THAT IT TRIPS WITHIN 10 SECONDS IN A FAULT CONDITION.
6. THE USER MUST COMPLETE A RISK ASSESSMENT AND IMPLEMENT WHATEVER MEASURES ARE REQUIRED TO ENSURE THAT THE RESULTANT SYSTEM COMPLIES WITH ALL APPLICABLE LEGISLATION.



| PARAMETER                 | VALUE | DESCRIPTION  |
|---------------------------|-------|--|
| TYPE                      | H     | QUARTER-TURN ELECTRIC ACTUATOR, STANDARD UNIT (SYNCRASET), MECHANICAL SWITCH MECH, COUNTER-CLOCKWISE |
| MAIN POWER SUPPLY         | 0     | A.C. THREE PHASE   |
| FEEDBACK ANALOG POS. SIG. | 1     | 0/4-20mA CPT CURRENT POSITION TRANSMITTER, 2 WIRES   |
| HEATER                    | 3     | ANTI-CONDENSATION HEATER, 110-120VAC   |
| LIMIT SWITCHES            | 0     | STANDARD: 1 OPEN AND 1 CLOSE LIMIT SWITCHES (DPDT)   |
| TORQUE SWITCHES           | 0     | STANDARD: 1 OPEN AND 1 CLOSE TORQUE SWITCHES (DPDT)  |
| AUX. MIDDLE TRAVEL SWITCH | 0     | STANDARD: NOT INCLUDED (WITHOUT)   |

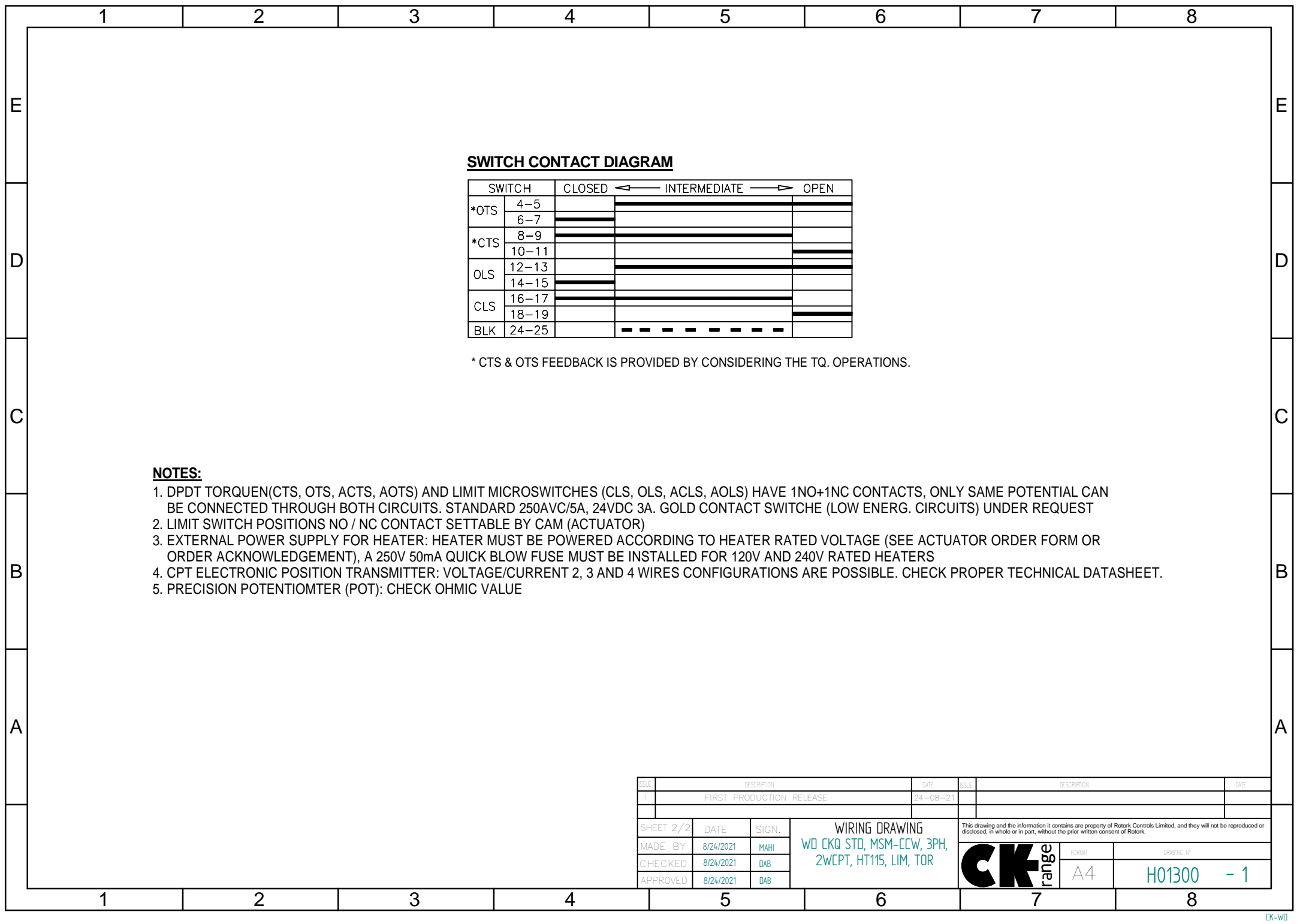
| ISSUE | DESCRIPTION              | DATE     | ISSUE | DESCRIPTION | DATE |
|-------|--------------------------|----------|-------|-------------|------|
| 1     | FIRST PRODUCTION RELEASE | 24-08-21 |       |             |      |

|           |           |       |   |   |
|-----------|-----------|-------|---|---|
| SHEET 1/2 | DATE      | SIGN. | <b>TERMINAL PLAN</b><br>WD CKQ STD, MSM-CCW, 3PH,<br>2WCPT, HT115, LIM, TOR | This drawing and the information it contains are property of Rotork Controls Limited, and they will not be reproduced or disclosed, in whole or in part, without the prior written consent of Rotork. |
| MADE BY   | 8/24/2021 | MAHI  |   |   |
| CHECKED   | 8/24/2021 | DAB   |   |   |
| APPROVED  | 8/24/2021 | DAB   |   |   |

|    |       |        |            |
|----|-------|--------|------------|
| CK | range | FORMAT | DRAWING NO |
|    |       | A4     | H01300 - 1 |



**SWITCH CONTACT DIAGRAM**

| SWITCH | CLOSED ← | INTERMEDIATE | → OPEN |
|--------|----------|--------------|--------|
| *OTS   | 4-5      | —————        | —————  |
|        | 6-7      | —————        | —————  |
| *CTS   | 8-9      | —————        | —————  |
|        | 10-11    | —————        | —————  |
| OLS    | 12-13    | —————        | —————  |
|        | 14-15    | —————        | —————  |
| CLS    | 16-17    | —————        | —————  |
|        | 18-19    | —————        | —————  |
| BLK    | 24-25    | -----        | -----  |


\* CTS & OTS FEEDBACK IS PROVIDED BY CONSIDERING THE TQ. OPERATIONS.

**NOTES:**

1. DPDT TORQUEN(CTS, OTS, ACTS, AOTS) AND LIMIT MICROSWITCHES (CLS, OLS, ACLS, AOLS) HAVE 1NO+1NC CONTACTS, ONLY SAME POTENTIAL CAN BE CONNECTED THROUGH BOTH CIRCUITS. STANDARD 250AVC/5A, 24VDC 3A. GOLD CONTACT SWITCHE (LOW ENERG. CIRCUITS) UNDER REQUEST
2. LIMIT SWITCH POSITIONS NO / NC CONTACT SETTABLE BY CAM (ACTUATOR)
3. EXTERNAL POWER SUPPLY FOR HEATER: HEATER MUST BE POWERED ACCORDING TO HEATER RATED VOLTAGE (SEE ACTUATOR ORDER FORM OR ORDER ACKNOWLEDGEMENT), A 250V 50mA QUICK BLOW FUSE MUST BE INSTALLED FOR 120V AND 240V RATED HEATERS
4. CPT ELECTRONIC POSITION TRANSMITTER: VOLTAGE/CURRENT 2, 3 AND 4 WIRES CONFIGURATIONS ARE POSSIBLE. CHECK PROPER TECHNICAL DATASHEET.
5. PRECISION POTENTIOMTER (POT): CHECK OHMIC VALUE

| REV | DESCRIPTION              | DATE     | BY | DESCRIPTION | DATE |
|-----|--------------------------|----------|----|-------------|------|
| 1   | FIRST PRODUCTION RELEASE | 24-08-21 |    |             |      |

|           |           |       |  |  |        |            |
|-----------|-----------|-------|--|--|--------|------------|
| SHEET 2/2 | DATE      | SIGN. | <b>WIRING DRAWING</b><br>WD CKQ STD, MSM-CCW, 3PH,<br>2WCPT, HT115, LIM, TOR | <small>This drawing and the information it contains are property of Rotork Controls Limited, and they will not be reproduced or disclosed, in whole or in part, without the prior written consent of Rotork.</small> |        |            |
| MADE BY   | 8/24/2021 | MAHI  |  |   | FORMAT | DRAWING NO |
| CHECKED   | 8/24/2021 | DAB   |  |  | A4     | H01300     |
| APPROVED  | 8/24/2021 | DAB   |  |  |        | - 1        |