

**Program:** DMS-6W 6-Step Rotation

**Operation:** This program is used to control the rotation of 6 water pumps.

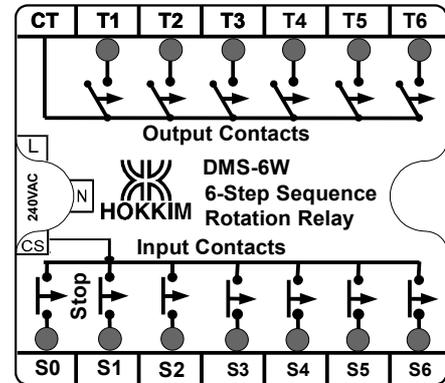
**Supply:** L-N (240VAC)

**Inputs:** CS-S0-S1-S2-S3-S4-S5-S6 (Use only volt-free contacts)

- CS-S0 Stop Level
- CS-S1 Level 1 - 1st Pump
- CS-S2 Level 2 - 2nd Pump
- CS-S3 Level 3 - 3rd Pump
- CS-S4 Level 4 - 4th Pump
- CS-S5 Level 5 - 5th Pump
- CS-S6 Level 6 - 6th Pump

**Outputs:** CT-T1-T2-T3-T4-T5-T6 (Volt-free contacts rating: 5A 240VAC)

- CS-T1 Pump 1
- CS-T2 Pump 2
- CS-T3 Pump 3
- CS-T4 Pump 4
- CS-T5 Pump 5
- CS-T6 Pump 6



- (1) Only volt-free contacts should be used to signal inputs.
- (2) On power on, with all inputs opened, all outputs will stay opened.
- (3) When CS-S0 closes, latching of the volt-free output contacts CT-T1, CT-T2, CT-T3, CT-T4, CT-T5 and CT-T6 are enabled.
- (4) The closing of any one of the input terminals CS-S1, CS-S2, CS-S3, CS-S4, CS-S5 or CS-S6 will cause one of the output contacts CT-T1, CT-T2, CT-T3, CT-T4, CT-T5 or CT-T6 to close. CS-S1 will energised the 1st output which may be CT-T1, CT-T2, CT-T3, CT-T4, CT-T5 or CT-T6 depending on the sequence in effect. Every time CS-S0 re-opens after closing, the sequence changes from T1-T2-T3-T4-T5-T6 to T2-T3-T4-T5-T6-T1 to T3-T4-T5-T6-T1-T2 to T4-T5-T6-T1-T2-T3 to T5-T6-T1-T2-T3-T4 and back to T1-T2-T3-T4-T5-T6 and so on.

Sequence	1st Output	2nd Output	3rd Output	4th Output	5th Output	6th Output
1	T1	T2	T3	T4	T5	T6
2	T2	T3	T4	T5	T6	T1
3	T3	T4	T5	T6	T1	T2
4	T4	T5	T6	T1	T2	T3
5	T5	T6	T1	T2	T3	T4
6	T6	T1	T2	T3	T4	T5

- (5) The input signal must be present continuously for 1 sec. before the output contacts will close. This is to prevent false trigger. Also, if for any reason all four input signals are present simultaneously, there will be 10 sec. intervals between the closing of the output contacts. The delay intervals are to prevent excessively high transient currents.
- (6) The output contacts will remain close until CS-S0 re-opens. CS-S0 must remain open continuously for 5 sec before the first output releases. This is to avoid false trigger owing to water ripples. Thereafter, the second, third, fourth and fifth outputs are released after 5 sec. intervals. The delay intervals are again to prevent excessively high transient currents.
- (7) Upon power failure, the sequence will reset to T1-T2-T3-T4-T5-T6. The DMS-6W is based on a microcontroller whose embedded program will always reset upon power up. If you have to maintain the sequence upon mains failure, battery backup power must be used to maintain supply to the DMS-6W.

