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2

3 SP6-7 Conveyor Transfer Station Control

4 Additional internal variable declarations:

Variables	Address	Data Type	
Run	%M1	BOOL	On while station running
Int_Reset	%M2	BOOL	Internal reset
Step_1 to Step_5	%T1 to %T5	BOOL	Step-in-progress bits
Dly_Tmr	%R1	INT[3]	Times delay after moving box on

5 Start/stop and initial start. During restart, prevent start

6 START_PB %I00087 | Int_Reset %M00002 | STOP_PB %I00088 | %M00001 Run → Run %M00001

7 %M00001 Run | Step_1 %T00001 | Step_2 %T00002 | Step_3 %T00003 | Step_4 %T00004 | Step_5 %T00005 → Step_1 %T00001

8 Step 1 Wait for box

9 Step_1 %T00001 | BOOX_PRESENT %I00091 → R Step_1 %T00001; S Step_2 %T00002

10 Step 2 Move box on

11 Step_2 %T00002 | BOOX_PRESENT %I00091 → R Step_2 %T00002; S Step_3 %T00003

12 Step 3 Delay 2 sec. If paused, reset timer.

13 Step_3 %T00003 | Run %M00001 | TMR HUNDS Dly_Tmr, 200 PV %R00001 → R Step_3 %T00003; S Step_4 %T00004

14 Step 4 Extend ram

15 Step_4 %T00004 | LS2 %I00093 → R Step_4 %T00004; S Step_5 %T00005

16 Step 5 Retract ram

17 Step_5 %T00005 | LS1 %I00092 → R Step_5 %T00005; S Step_1 %T00001

18 Physical Outputs Gate solenoid can not be turned off when paused

19 Step_2 %T00002 → GATE_SOL %Q00013

20 Step_4 %T00004 | Run %M00001 → EXTEND_SOL %Q00014

21 Retract ram during reset

22 Step_5 %T00005 | Run %M00001 | Int_Reset %M00002 → RETRACT_SOL %Q00015

23 Can not pause Motor 1 in Step 2

24 Run %M00001 | Step_2 %T00002 → MOTOR1 %Q00016

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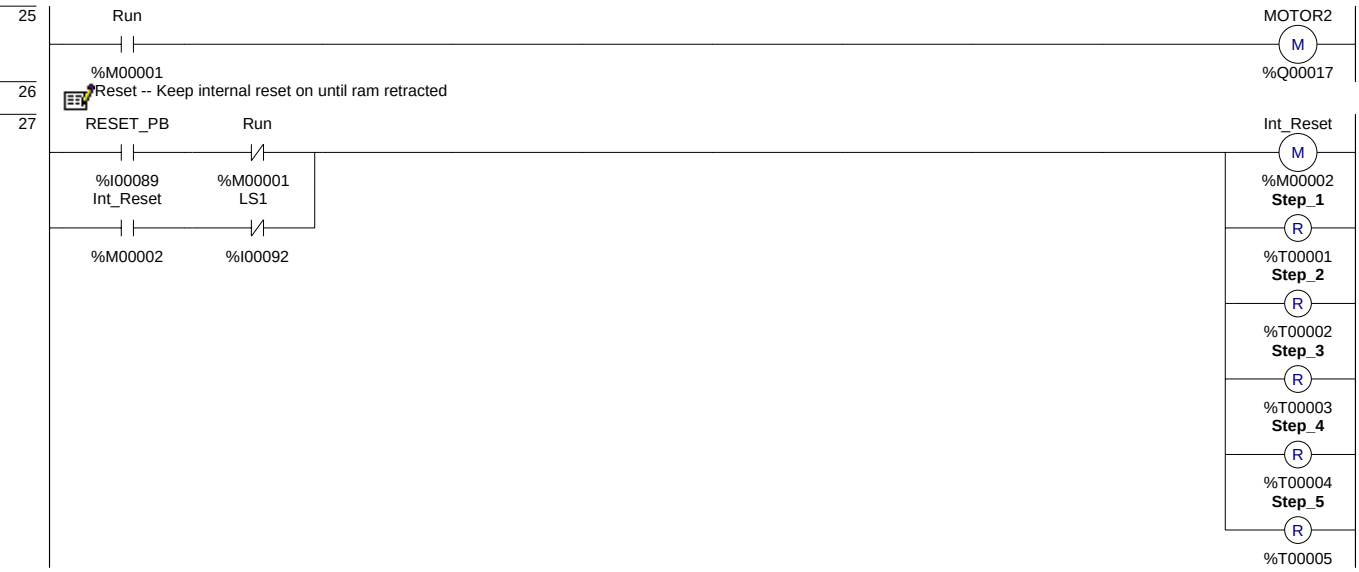

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