

Micro850

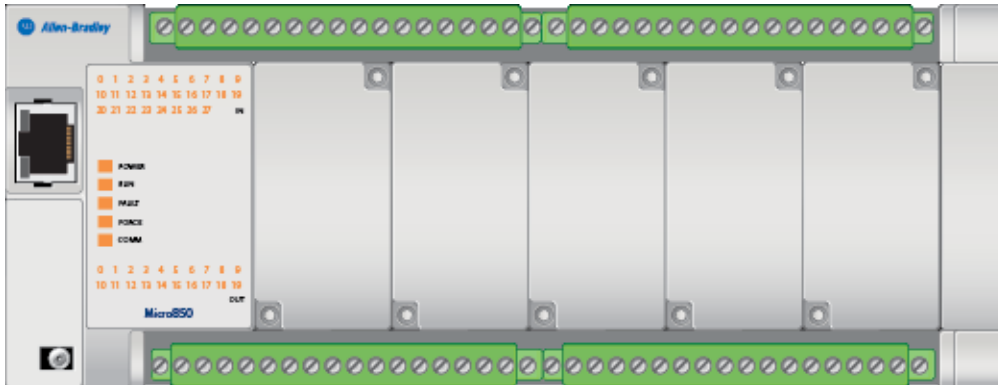
Table of Contents

Micro850

Device Configuration

Controller

Overview



General

Name	Description	Vendor Name	Catalog ID	Controller Project Version	Download Source Code
Micro850		Allen-Bradley	2080-LC50-48QWB-SIM	12	Yes

Memory

Memory usage is only updated after a build

Startup/Faults

Mode Behavior	Fault Override
Retain previous power-down mode	Do not clear fault

Embedded I/O

Input Filter

Inputs	0-1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-23	24-27
Input Filter	Default	Default	Default	Default	Default	Default	Default	Default	Default	Default

Input Latch and EII Edge

Input	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Enable Latch	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Latch Edge	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling
EII Edge	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling	Falling

Global Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
_IO_EM_DO_00	Dispense_Butter	BOOL					VarDirectlyRepresented	
_IO_EM_DO_01	Dispense_Sugar	BOOL					VarDirectlyRepresented	
_IO_EM_DO_02	Dispense_Vanilla	BOOL					VarDirectlyRepresented	
_IO_EM_DO_03	Dispense_Eggs	BOOL					VarDirectlyRepresented	
_IO_EM_DO_04	Mixer	BOOL					VarDirectlyRepresented	
_IO_EM_DO_05	Bake	BOOL					VarDirectlyRepresented	
_IO_EM_DO_06	Conveyor	BOOL					VarDirectlyRepresented	
_IO_EM_DO_07	Dispense_Flour	BOOL					VarDirectlyRepresented	
_IO_EM_DO_08	Egg_Dispenser	BOOL					VarDirectlyRepresented	
_IO_EM_DO_09		BOOL					VarDirectlyRepresented	
_IO_EM_DO_10		BOOL					VarDirectlyRepresented	
_IO_EM_DO_11		BOOL					VarDirectlyRepresented	
_IO_EM_DO_12		BOOL					VarDirectlyRepresented	
_IO_EM_DO_13		BOOL					VarDirectlyRepresented	
_IO_EM_DO_14		BOOL					VarDirectlyRepresented	
_IO_EM_DO_15		BOOL					VarDirectlyRepresented	
_IO_EM_DO_16		BOOL					VarDirectlyRepresented	
_IO_EM_DO_17		BOOL					VarDirectlyRepresented	
_IO_EM_DO_18		BOOL					VarDirectlyRepresented	
_IO_EM_DO_19		BOOL					VarDirectlyRepresented	
_IO_EM_DI_00	Start_Process	BOOL					VarDirectlyRepresented	
_IO_EM_DI_01		BOOL					VarDirectlyRepresented	

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Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
_IO_EM_DI_02		BOOL					VarDirectlyRepresented	
_IO_EM_DI_03		BOOL					VarDirectlyRepresented	
_IO_EM_DI_04		BOOL					VarDirectlyRepresented	
_IO_EM_DI_05		BOOL					VarDirectlyRepresented	
_IO_EM_DI_06		BOOL					VarDirectlyRepresented	
_IO_EM_DI_07		BOOL					VarDirectlyRepresented	
_IO_EM_DI_08		BOOL					VarDirectlyRepresented	
_IO_EM_DI_09		BOOL					VarDirectlyRepresented	
_IO_EM_DI_10		BOOL					VarDirectlyRepresented	
_IO_EM_DI_11		BOOL					VarDirectlyRepresented	
_IO_EM_DI_12		BOOL					VarDirectlyRepresented	
_IO_EM_DI_13		BOOL					VarDirectlyRepresented	
_IO_EM_DI_14		BOOL					VarDirectlyRepresented	
_IO_EM_DI_15		BOOL					VarDirectlyRepresented	
_IO_EM_DI_16		BOOL					VarDirectlyRepresented	
_IO_EM_DI_17		BOOL					VarDirectlyRepresented	
_IO_EM_DI_18		BOOL					VarDirectlyRepresented	
_IO_EM_DI_19		BOOL					VarDirectlyRepresented	
_IO_EM_DI_20		BOOL					VarDirectlyRepresented	
_IO_EM_DI_21		BOOL					VarDirectlyRepresented	
_IO_EM_DI_22		BOOL					VarDirectlyRepresented	
_IO_EM_DI_23		BOOL					VarDirectlyRepresented	
_IO_EM_DI_24		BOOL					VarDirectlyRepresented	
_IO_EM_DI_25		BOOL					VarDirectlyRepresented	

Document Generator

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
_IO_EM_DI_26		BOOL					VarDirectlyRepresented	
_IO_EM_DI_27		BOOL					VarDirectlyRepresented	
Flour_Tank_Capacity		REAL		0.0			Var	
Flour_Tank_Full		BOOL					Var	
Flour_Tank_Minimum		REAL					Var	
Flour_Tank_Low		BOOL					Var	
Process_Running		BOOL					Var	
Flour_Needed		REAL					Var	
Flour_Weight		REAL					Var	
Process_Index		INT					Var	
Next_Step		BOOL					Var	
Initialize		BOOL					Var	
Bowl_Weight		REAL				Weight [kg]	Var	
Recipe_Flour		REAL		4.0		Weight [kg]	Var	
Recipe_Eggs		INT		2		Number of eggs	Var	
Tare_Weight		REAL				Weight [kg]	Var	
Relative_Weight		REAL					Var	
Tare		BOOL					Var	
Sugar_Timer		TIME					Var	
Recipe_Sugar		REAL		2.0		Weight [kg]	Var	
Butter_Weight		REAL					Var	
Mix		BOOL					Var	
__SYSVA_CYCLECNT		DINT				Cycle counter	VarGlobal	
__SYSVA_CYCLEDATE		TIME				Timestamp of the beginning of the cycle in milliseconds (ms)	VarGlobal	
__SYSVA_KVBPERR		BOOL				Kernel variable binding producing error (production error)	VarGlobal	
__SYSVA_KVBCERR		BOOL				Kernel variable binding	VarGlobal	

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Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
						consuming error (consumption error)		
__SYSVA_RESNAME		STRING				Resource name (max length=255)	VarGlobal	
__SYSVA_SCANCNT		DINT				Input scan counter	VarGlobal	
__SYSVA_TCYCYCTIME		TIME				Programmed cycle time	VarGlobal	
__SYSVA_TCYCURRENT		TIME				Current cycle time	VarGlobal	
__SYSVA_TCYMAXIMUM		TIME				Maximum cycle time since last start	VarGlobal	
__SYSVA_TCYOVERFLOW		DINT				Number of cycle overflows	VarGlobal	
__SYSVA_RESMODE		SINT				Resource execution mode	VarGlobal	
__SYSVA_CCEXEC		BOOL				Execute one cycle when application is in cycle to cycle mode	VarGlobal	
__SYSVA_REMOTE		BOOL		FALSE		Remote status	VarGlobal	
__SYSVA_SUSPEND_ID		UINT		0		Last Suspend ID	VarGlobal	
__SYSVA_TCYWDG		UDINT		2000		Software Watchdog	VarGlobal	
__SYSVA_MAJ_ERR_HALT		BOOL		FALSE		Major Error Halted status	VarGlobal	
__SYSVA_ABORT_CYCLE		BOOL		FALSE		Aborting Cycle	VarGlobal	

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
__SYSVA_FIRST_SCAN		BOOL		TRUE		First scan bit	VarGlobal	
__SYSVA_USER_DATA_LOST		BOOL		FALSE		User data lost	VarGlobal	
__SYSVA_POWERUP_BIT		BOOL		TRUE		Power-up bit	VarGlobal	
__SYSVA_PROJ_INCOMPLETE		UDINT		0		Project Incomplete	VarGlobal	

Programs

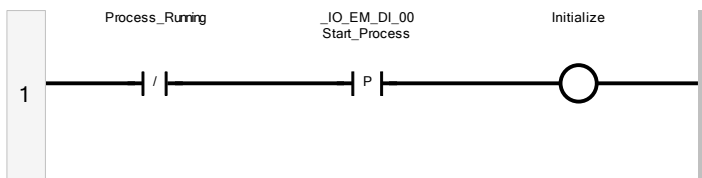
Equations

Programs

Process_Control

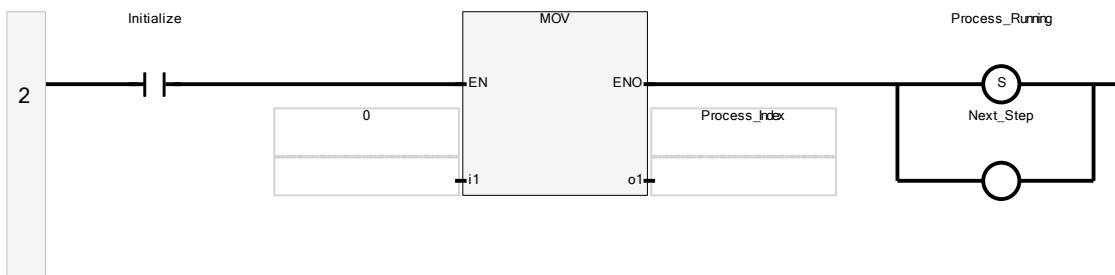
Rung1 Diagram

Detect new start



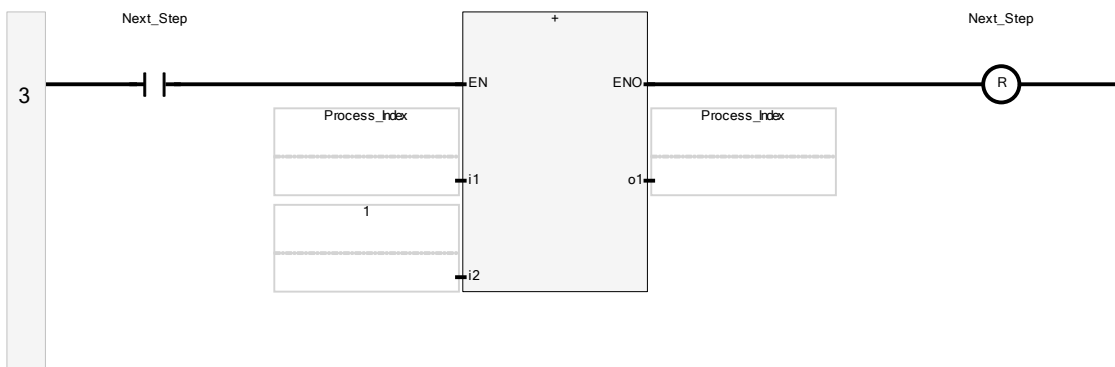
Rung2 Diagram

Initialize, set step to 0, next step



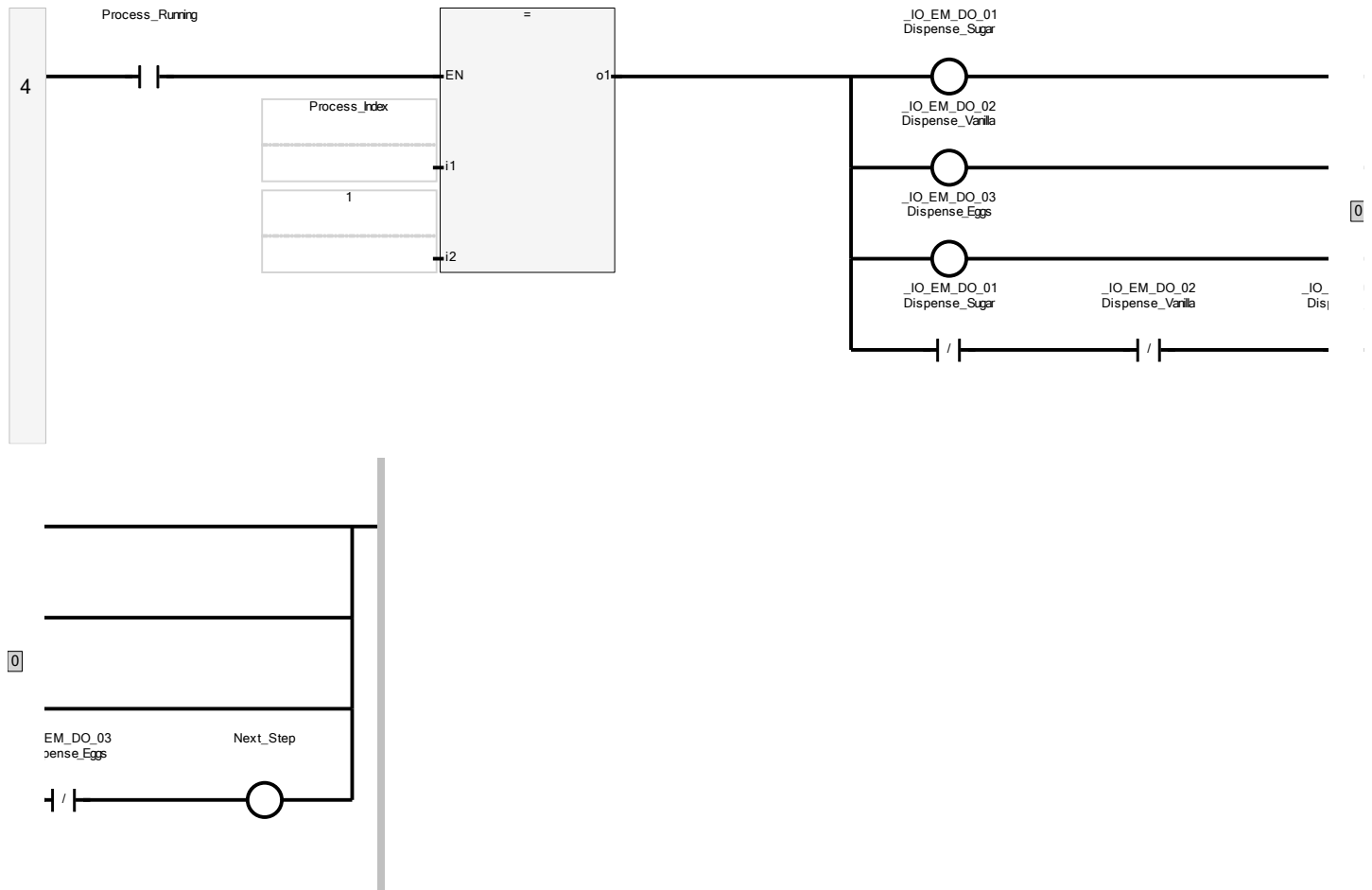
Rung3 Diagram

Increment step



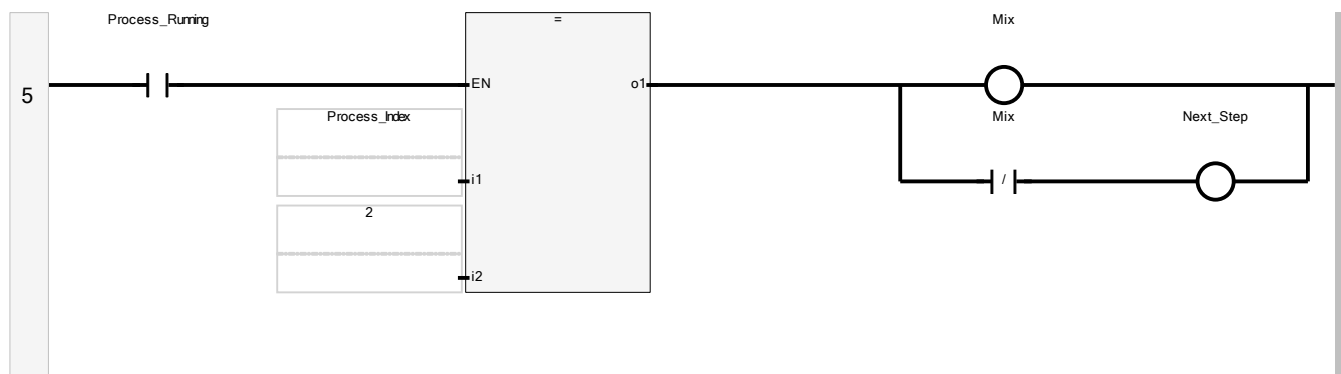
Rung4 Diagram

Dispense sugar, vanilla, egg



Rung5 Diagram

Mix



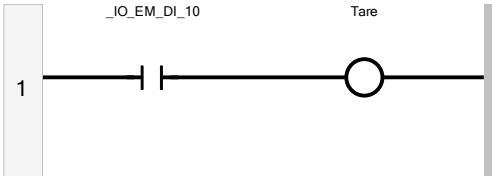
Step Controls

Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
TON_1		TON		...	...		Var	
TON_3		TON		...	...		Var	
TON_4		TON		...	...		Var	
TON_5		TON		...	...		Var	
TON_2		TON		...	...		Var	

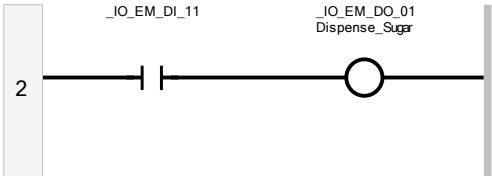
Rung1 Diagram

Testing



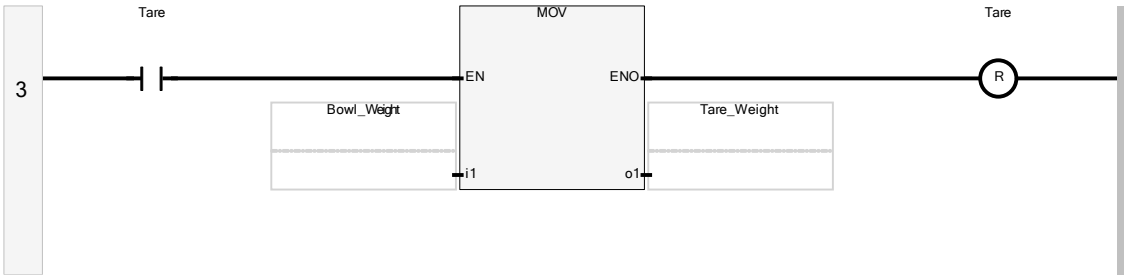
Rung2 Diagram

Testing



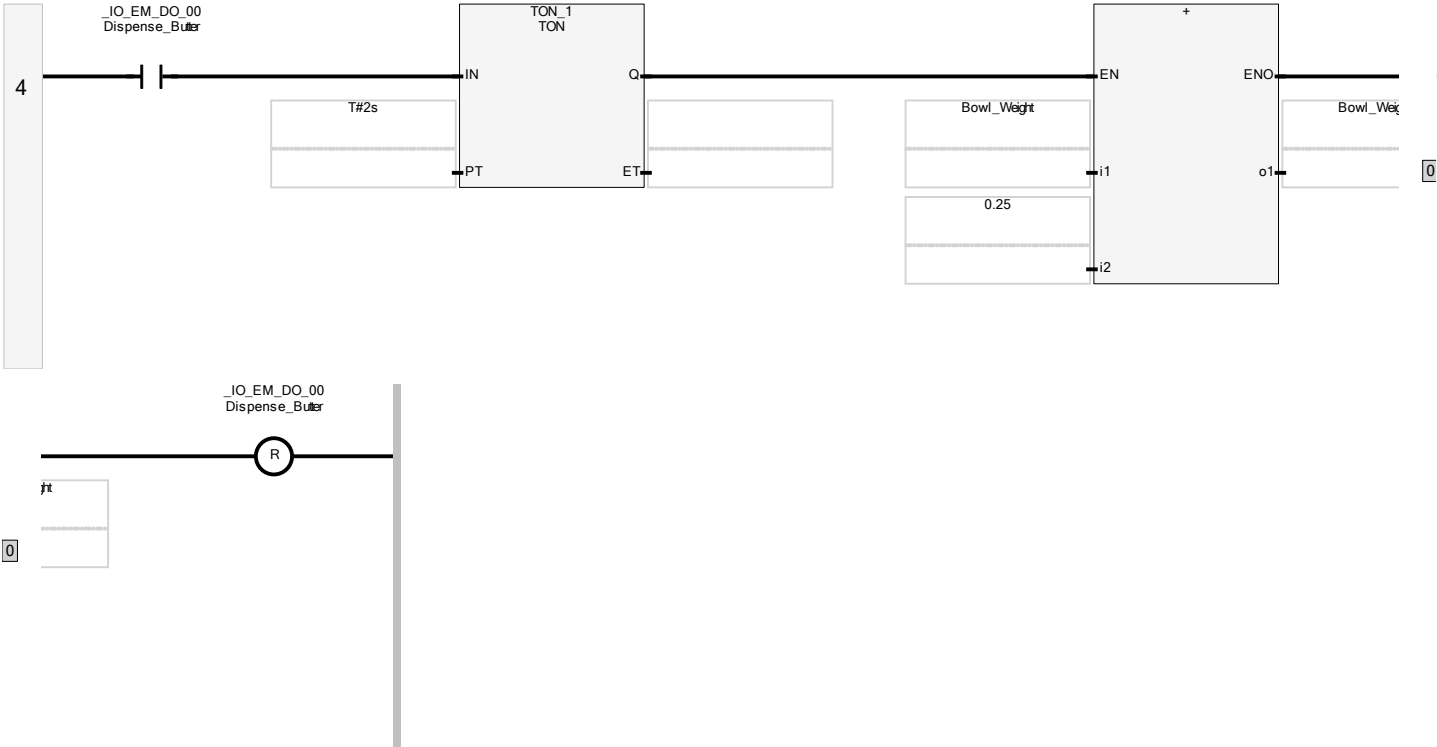
Rung3 Diagram

Tare



Rung4 Diagram

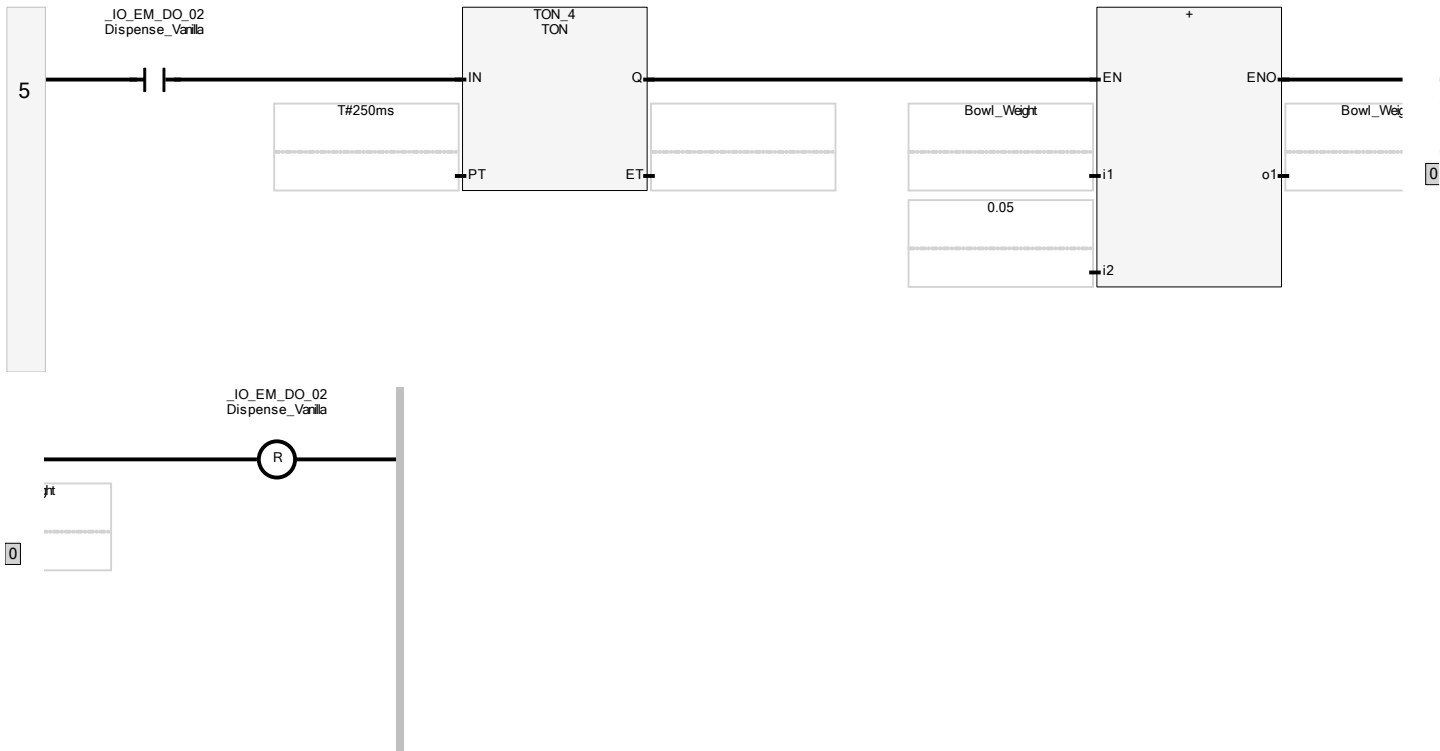
Dispense butter



Rung5 Diagram

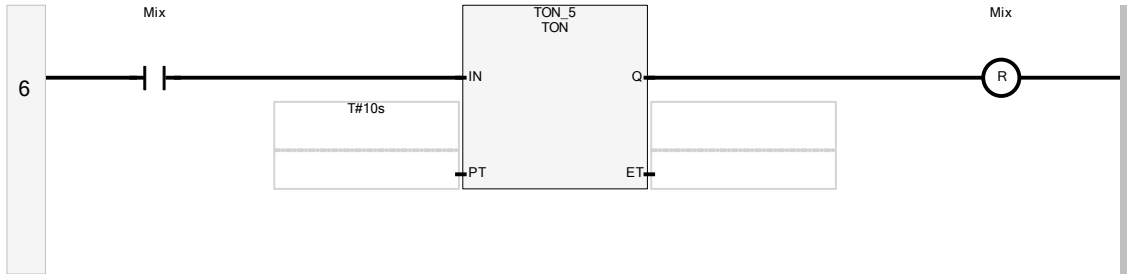
Dispense vanilla





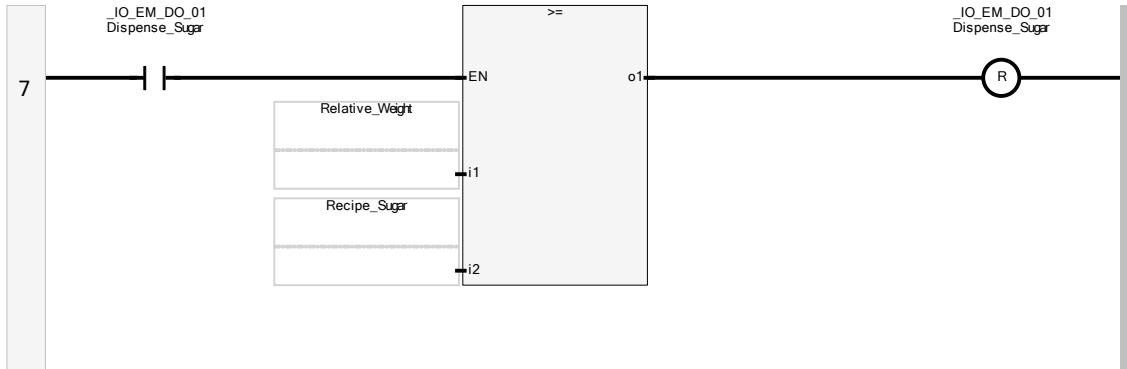
Rung6 Diagram

Mix for 10s



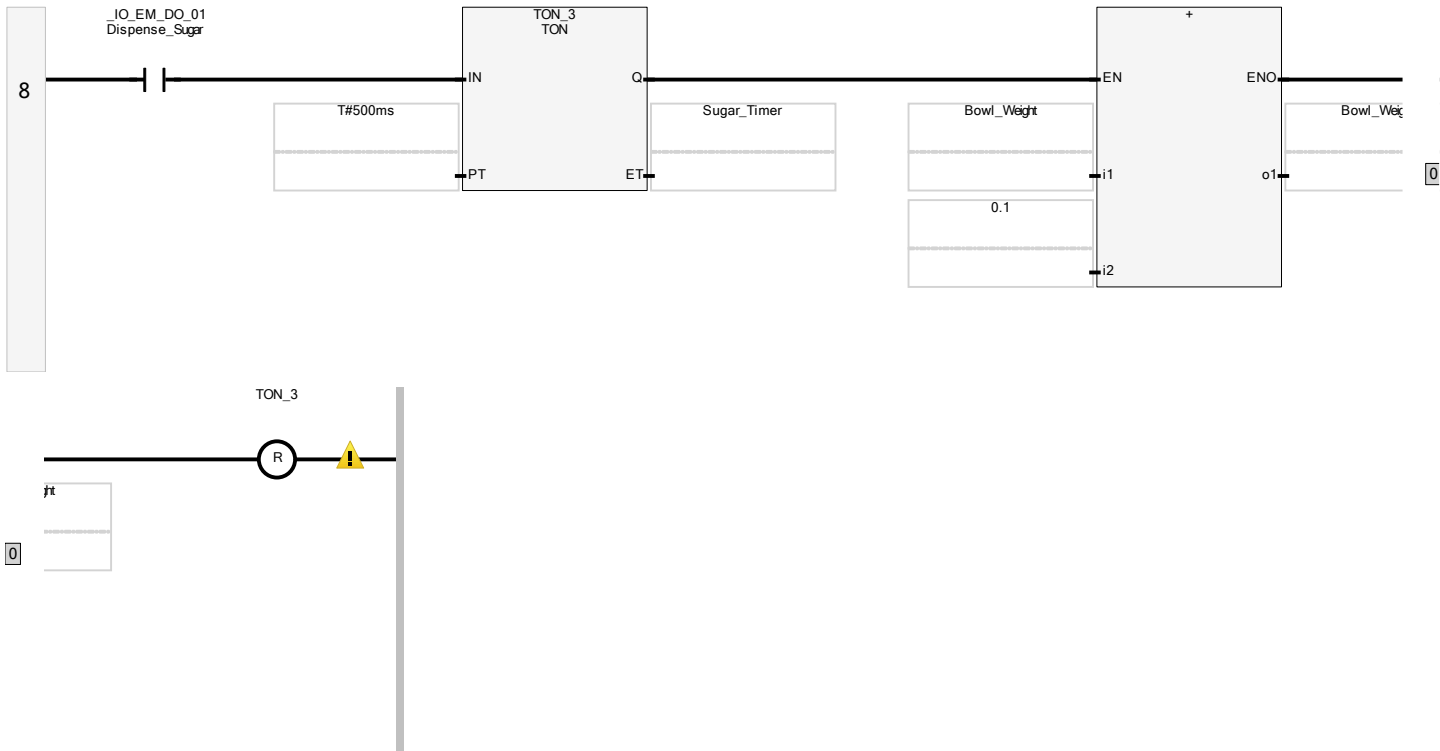
Rung7 Diagram

Dispense sugar until weight matches needed



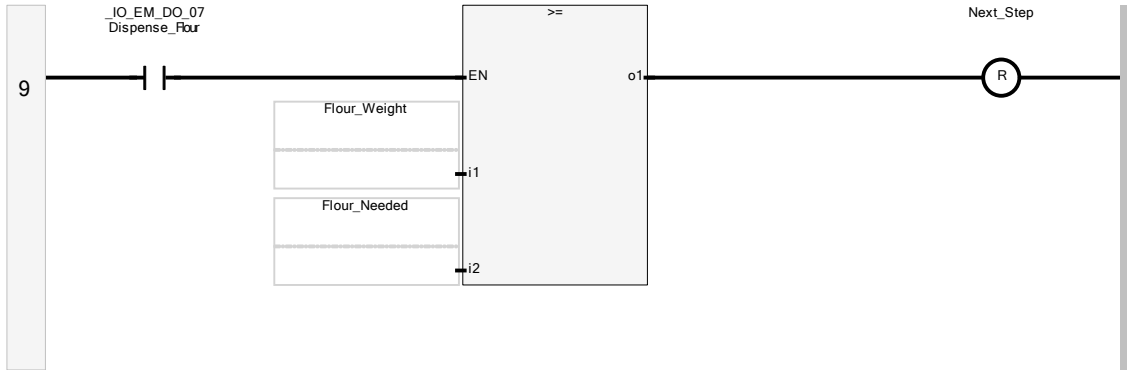
Rung8 Diagram

Simulate dispensing sugar



Rung9 Diagram

Dispense flour until weight reached



Rung10 Diagram

Simulate dispensing flour

