

Prog1

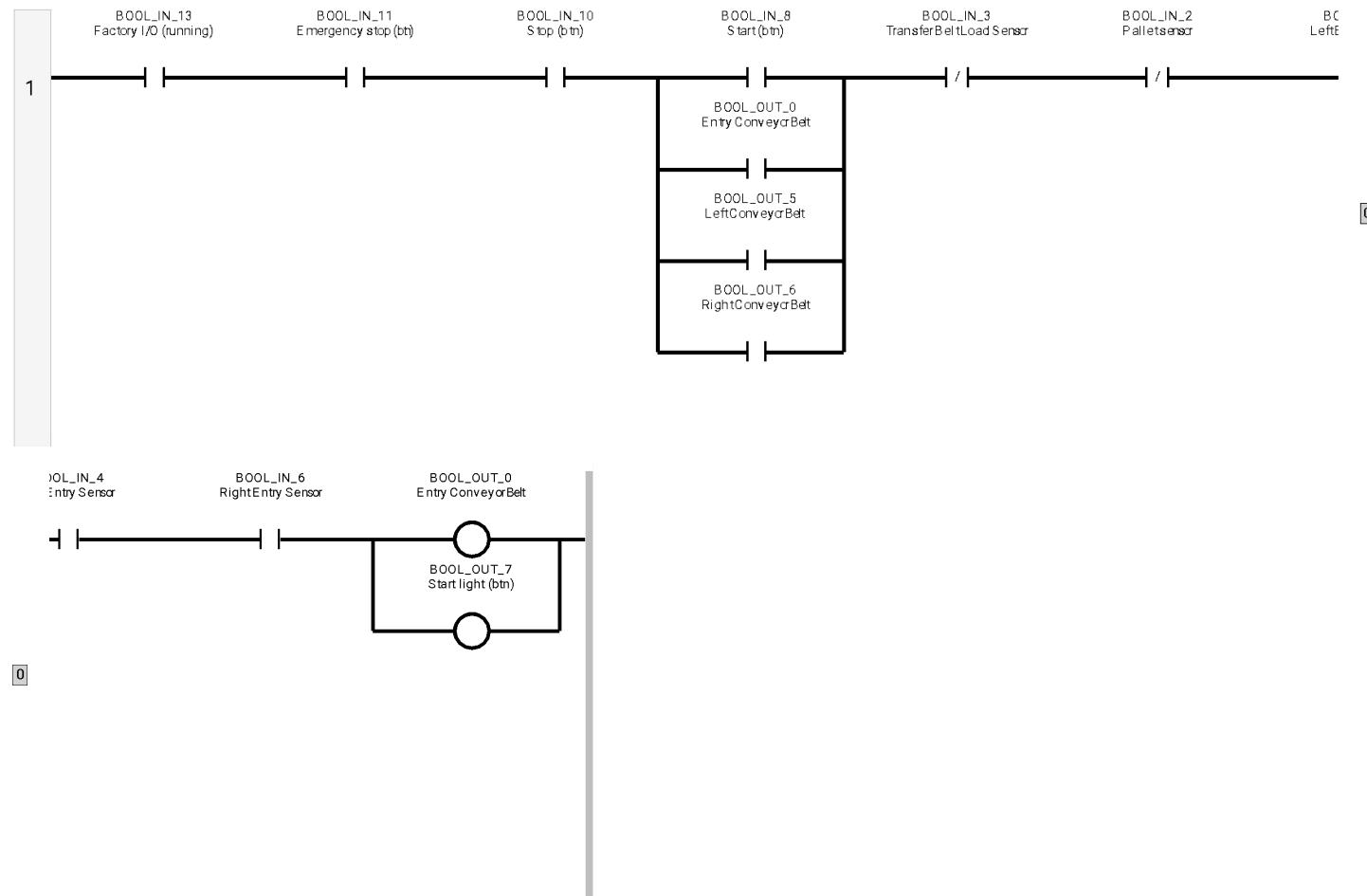
Local Variables

Name	Alias	Data Type	Dimension	Initial Value	Project Value	Comment	Direction	String Size
SmallBox	LOW	BOOL					Var	
LargeBox	HIGH	BOOL					Var	
COUNTER	VALUE	DINT		0			Var	
CTU_1		CTU			Var	
PALLET_E	XIT	BOOL					Var	

Rung1 Diagram

ENTRY CONVEYOR LOGIC

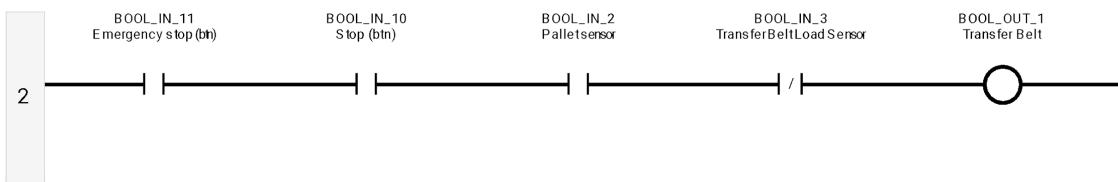
Unless there's a pallet on the transfer belt, or if the regular stop or emergency stop have been signaled, we want the entry conveyor to be running



Rung2 Diagram

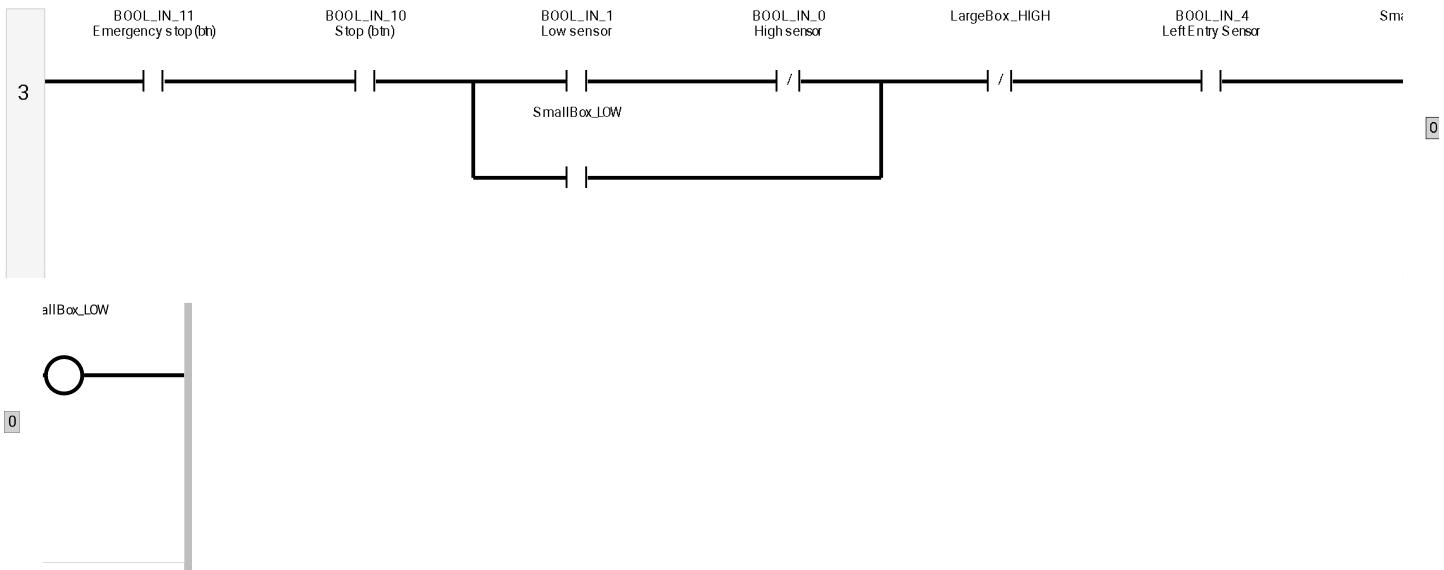
If a pallet has been detected yet it is not on the transfer belt, load it onto the transfer belt

Document Generator



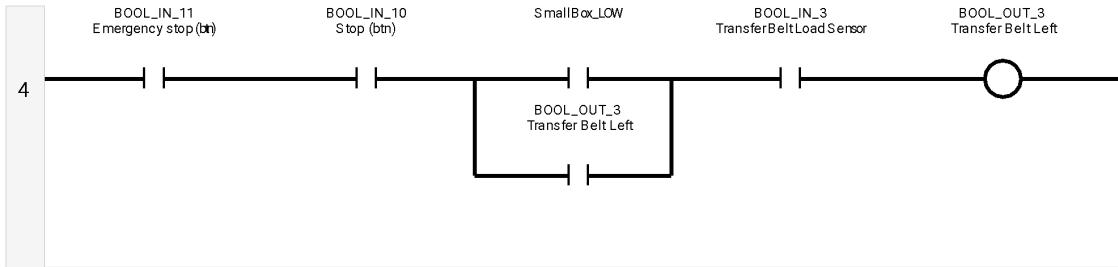
Rung3 Diagram

Logic to determine if the box on a pallet is small

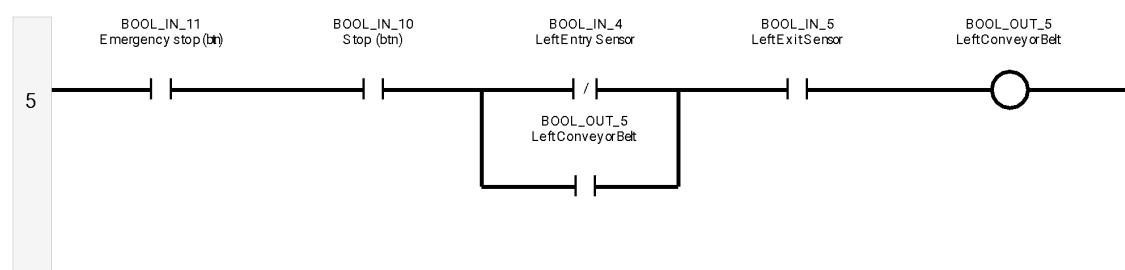


Rung4 Diagram

If we loaded a small box onto the pallet, transfer it to the left conveyor belt



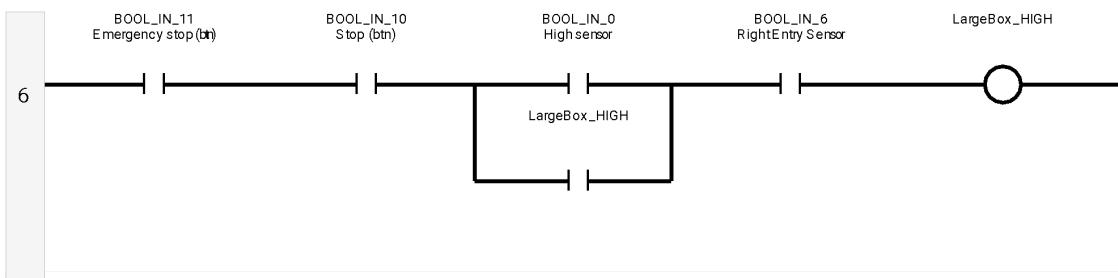
Rung5 Diagram



Rung6 Diagram

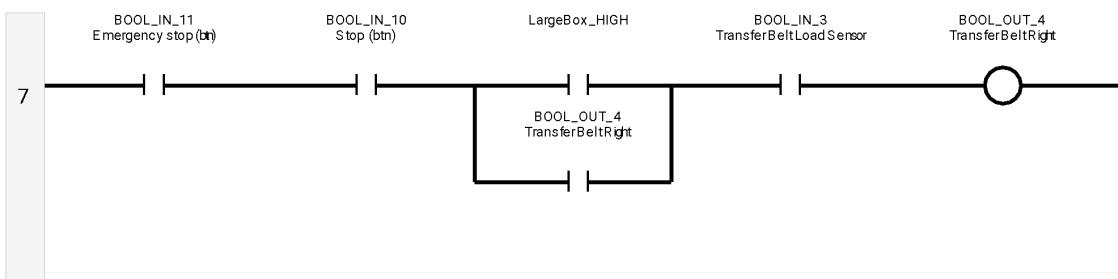
Logic to determine if the box on a pallet is large

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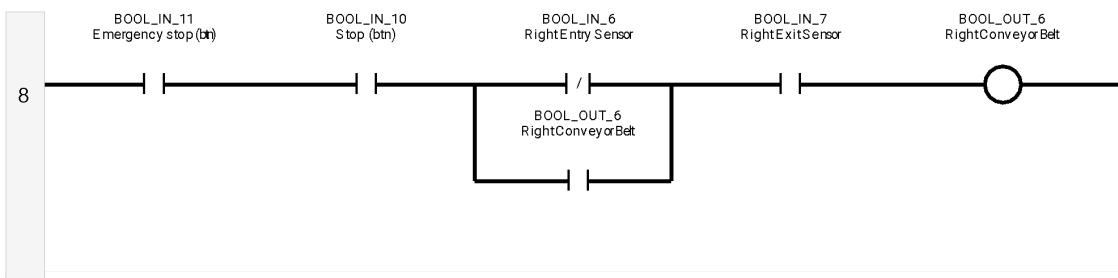


Rung7 Diagram

If we loaded a large box onto the pallet, transfer it to the right conveyor belt



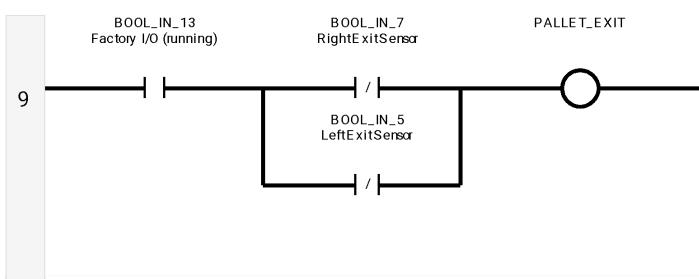
Rung8 Diagram



Rung9 Diagram

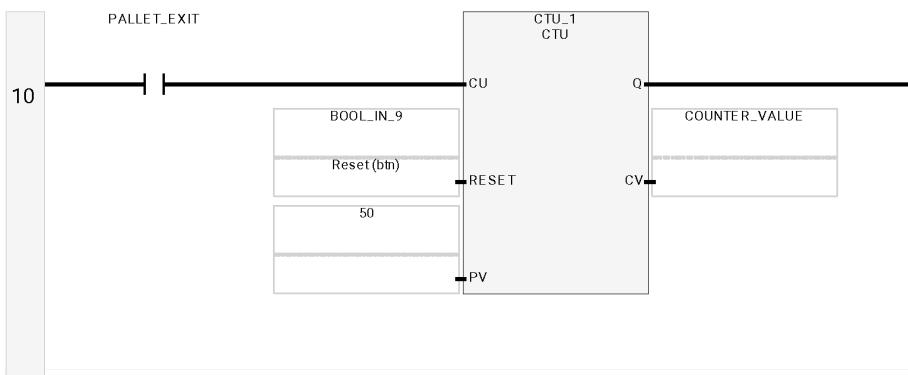
COUNTER LOGIC

We want to update the display as CTU_1.CV is increased, which requires a separate boolean check (since CTU_1.Q is not true until CV >= PV)



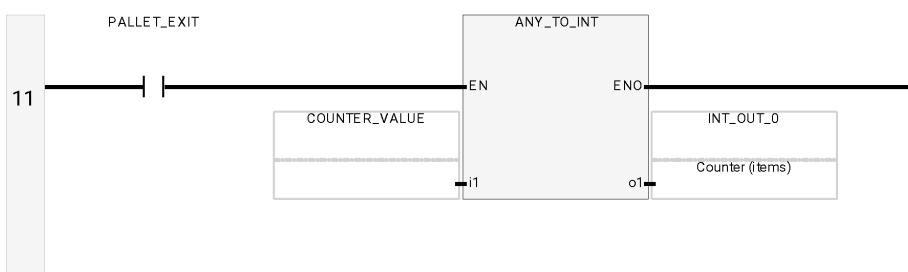
Rung10 Diagram

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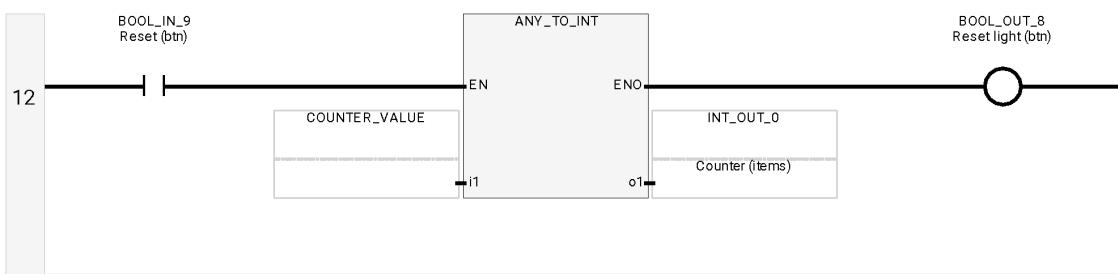
Rung11 Diagram

Since CTU_1.CV is a DINT, while the counter display is an INT, we need to convert THEN assign it



Rung12 Diagram

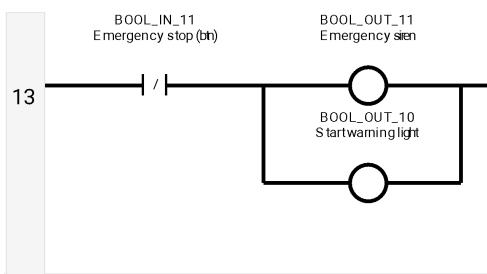
Rung 8 already handles the reset of the counter, while this rung handles the display and button light



Rung13 Diagram

EMERGENCY AND REGULAR STOP BUTTON LOGIC

We want the emergency to be on until it is manually turned off, while the regular stop can be turned off if the start button is pushed



Rung14 Diagram

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