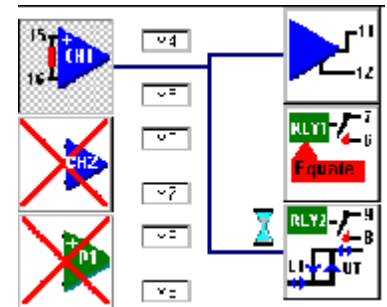


Reverse Acting Relay with Long Off Delay Example

Because the on and off delays on the relays only go up to 2330 seconds this example uses an equation to obtain a one hour delay.

Operating Description

- If input on CH1 is below a low limit then RY1 should switch on.
- If input on CH1 then goes above hi limit then a switch off timer should start.
- RY1 will switch off after the switch off timer has expired as long as the input to CH1 is above the low limit (This functionality could be changed in a number of ways).



Declarations




Constant	Description
Con_a	Low Limit (3)
Con_b	Hi Limit (12)
Con_c	Maximum Time (3600 for 1 hour)
Con_d	Timer not running flag value and decrement value
M4	Timer counter
Timer enable:	must be set to Y
Update on input	must be set to N
Timer period:	1 second

Program List

Command	Comment
Send M4	send timer value for debug purposes
If RY1 Goto 014	Branch if relay on.
Read Ch1	Check if
Con_a	below low
Subtract	trip
Send M4	send timer value for debug purposes
If < 0 Goto 028	
Exit	-----
Line 014	Check if timer
Read Mem4	is running
Exit	If > 0 Goto 034
Del S	
Read Ch1	Check hi limit
Con_b	if timer not
Subtract	running
If > 0 Goto 048	
Exit	-----
Line 028:	Switch on
RY1 on	relay and
Con_d	initialise
Save Mem4	timer to not started
Exit	-----
Line 034	STEP TIMER
Con_d	
Add	
If= 0 Goto 042	Branch if time out.
Save Mem4	

Exit	-----
Line 042	TIME OUT
Read Ch1	Check if
Con_a	below low
Subtract	trip before
If < 0 Goto 028	switching off
RY1 off	relay
Con_d	
Save Mem4	
Exit	-----
Line 048:	START TIMER
Del S	
Con_c	
Save Mem4	
Exit	-----

USC Programs

File	Comment
<div>  Help </div>	If unexpected results occur when loading the .usc file press back and click on help for instructions.
<div>  UAP00101.usc </div>	First Issue.
<div>  UAP00102.usc </div>	Convert to USC config 105 standard.

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