Escena10_ST

```
1|      10|      20|      30|      40|      50|      60|      70|      80|      90|      100|      110|
```

```
R_TRIG_0 (CLK := start);

if em_stop and stop and not reseteo and R_TRIG_0.Q then
        start_light:=1;
        stop_light:=0;
        reset_light:=0;
        %M50:=0;
        down:=0;
end_if;
(*Modo automático-----------------------*)
if start_light and auto and em_stop then
        R_TRIG_1 (CLK := start);
        R_TRIG_2 (CLK := at_exit);
                if R_TRIG_1.Q or ( R_TRIG_2.Q and not %M50) then
                        conveyor0:=1;
                end_if;
        R_TRIG_10 (CLK := at1);
        R_TRIG_11 (CLK := at2);
        R_TRIG_12 (CLK := at3);
        CTU_3 (CU := R_TRIG_10.Q or R_TRIG_11.Q or R_TRIG_12.Q,
         R := aux_reset,
         PV := 4,
         CV => display);
                 if conveyor0 then
                        aux_reset:=0;
                end_if;
        R_TRIG_3 (CLK := at_elevator);
                if R_TRIG_3.Q then
                        conveyor0:=0;
                end_if;
                if not at_elevator or ( display=4 and at_0_high and at_0_low) then
                        load:=1;
                end_if;
        R_TRIG_4 (CLK := at_exit);
        R_TRIG_5 (CLK := at_entry);
                if R_TRIG_4.Q or R_TRIG_5.Q then
                        load:=0;
                end_if;
                if  R_TRIG_5.Q and at_0_high and not at_1_low then
                        slow:=1;
                        up:=1;
                end_if;

        F_TRIG_0 (CLK := at_0_high);
                if F_TRIG_0.Q and slow and at_1_low then
                        slow:=0;
                        up:=0;
                end_if;
                if at_1_low and not slow and not up and (display =0 or display =3) then
                        floor1:=1;
                        conveyor1:=1;
                end_if;
        R_TRIG_13 (CLK := at1);
                if at_1_low and not slow and not up and R_TRIG_13.Q then
                        floor1:=0;
                        conveyor1:=0;
                end_if;

        TON_4 (IN := (at_1_low or at_2_low or at_3_low) and not slow and not up,
                PT := t#4s);
                if TON_4.Q and not at_3_low and display<=3 then
                        up:=1;
                end_if;
        R_TRIG_6 (CLK := at_2_low);
        R_TRIG_7 (CLK := at_3_low);
        R_TRIG_8 (CLK := at_1_high);
                if (R_TRIG_6.Q and up) or (R_TRIG_7.Q and up) or (down and R_TRIG_8.Q) then
                        slow:=1;
                end_if;
                if (at_2_low and slow) or (at_3_low and slow) then
                        slow:=0;
                        up:=0;
                end_if;
                if at_2_low and not slow and not up and display =1 then
                        floor2:=1;
                        conveyor2:=1;
                end_if;
        R_TRIG_14 (CLK := at2);
                if at_2_low and not slow and not up and R_TRIG_14.Q then
                        floor2:=0;
                        conveyor2:=0;
                end_if;
                if at_3_low and not slow and not up and display =2 then
                        floor3:=1;
                        conveyor3:=1;
                end_if;
        R_TRIG_15 (CLK := at3);
                if at_3_low and not slow and not up and R_TRIG_15.Q then
                        floor3:=0;
                        conveyor3:=0;
                end_if;
                if (TON_4.Q and at_3_low) or (TON_5.Q and at_1_high and at_1_low and display=4) then
                        down:=1;
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Escena10_ST

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    1|       10|       20|       30|       40|       50|       60|       70|       80|       90|      100|      110|

 94                 end_if;
 95                 if (down and at_1_low and slow) or (at_0_low and at_0_high and aux and down) then
 96                         down:=0;
 97                         slow:=0;
 98                 end_if;
 99         TON_5 (IN := at_1_low and not slow and not down,
100                       PT := t#4s);
101                 if TON_5.Q then
102                         aux:=1;
103                 end_if;
104         F_TRIG_4 (CLK := at1);
105                 if F_TRIG_4.Q then
106                         conveyor1:=0;
107                 end_if;
108                 if at_0_low and at_0_high and aux and down then
109                         aux:=0;
110                 end_if;
111                 if not at_exit then
112                         exit_conveyor:=1;
113                         aux_reset:=1;
114                 end_if;
115         R_TRIG_16 (CLK := at_exit);
116                 if R_TRIG_16.Q then
117                         load:=0;
118                         exit_conveyor:=0;
119                 end_if;
120                 if F_TRIG_5.Q and %M50 then
121                         start_light:=0;
122                         stop_light:=0;
123                 end_if;
124 end_if;
125 (*Reseteo-----------------------------------------*)
126 R_TRIG_9 (CLK := reseteo);
127
128 if R_TRIG_9.Q then
129         %M51:=0;
130 end_if;
131 if (R_TRIG_9.Q and not start_light) or not em_stop then
132         reset_light:=1;
133         down:=1;
134         aux_reset:=1;
135         up:=0;
136         slow:=0;
137         exit_conveyor:=0;
138         conveyor0:=0;
139         conveyor1:=0;
140         conveyor2:=0;
141         conveyor3:=0;
142         load:=0;
143 end_if;
144 if %M51 and %S6 then
145         reset_light:=1;
146 end_if;
147 if %M51 and not %s6 then
148         reset_light:=0;
149 end_if;
150
151 F_TRIG_6 (CLK := stop);
152
153 if F_TRIG_6.Q then
154         stop_light:=1;
155         %M50:=1;
156 end_if;
157 F_TRIG_7 (CLK := em_stop);
158 if F_TRIG_7.Q then
159         %M51:=1;
160 end_if;
161 if up=1 or down =1 then
162         warning_light:=1;
163 end_if;
164 if up=0 and down =0 then
165         warning_light:=0;
166 end_if;
167
168
169 (*Modo manual-------------------------------------------*)
170 if start_light and manual and em_stop then
171         R_TRIG_1 (CLK := start);
172         R_TRIG_2 (CLK := at_exit);
173                 if R_TRIG_1.Q then
174                         conveyor0:=1;
175                 end_if;
176         R_TRIG_10 (CLK := at1);
177         R_TRIG_11 (CLK := at2);
178         R_TRIG_12 (CLK := at3);
179         CTU_3 (CU := R_TRIG_10.Q or R_TRIG_11.Q or R_TRIG_12.Q,
180          R := aux_reset,
181          PV := 4,
182          CV => display);
183                   if conveyor0 then
184                         aux_reset:=0;
185                 end_if;
186         R_TRIG_3 (CLK := at_elevator);
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Escena10_ST

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    1|       10|       20|       30|       40|       50|       60|       70|       80|       90|      100|      110|

187                     if R_TRIG_3.Q then
188                             conveyor0:=0;
189                     end_if;
190                     if not at_elevator or ( display=4 and at_0_high and at_0_low) then
191                             load:=1;
192                     end_if;
193             R_TRIG_4 (CLK := at_exit);
194             R_TRIG_5 (CLK := at_entry);
195                     if R_TRIG_4.Q or R_TRIG_5.Q then
196                             load:=0;
197                     end_if;
198                     if  R_TRIG_5.Q and at_0_high and not at_1_low then
199                             slow:=1;
200                             up:=1;
201                     end_if;
202
203             F_TRIG_0 (CLK := at_0_high);
204                     if F_TRIG_0.Q and slow and at_1_low then
205                             slow:=0;
206                             up:=0;
207                     end_if;
208                     if at_1_low and not slow and not up and (display =0 or display =3) then
209                             floor1:=1;
210                             conveyor1:=1;
211                     end_if;
212             R_TRIG_13 (CLK := at1);
213                     if at_1_low and not slow and not up and R_TRIG_13.Q then
214                             floor1:=0;
215                             conveyor1:=0;
216                     end_if;
217
218             TON_4 (IN := (at_1_low or at_2_low or at_3_low) and not slow and not up,
219                     PT := t#4s);
220                     if TON_4.Q and not at_3_low and display<=3 then
221                             up:=1;
222                     end_if;
223             R_TRIG_6 (CLK := at_2_low);
224             R_TRIG_7 (CLK := at_3_low);
225             R_TRIG_8 (CLK := at_1_high);
226                     if (R_TRIG_6.Q and up) or (R_TRIG_7.Q and up) or (down and R_TRIG_8.Q) then
227                             slow:=1;
228                     end_if;
229                     if (at_2_low and slow) or (at_3_low and slow) then
230                             slow:=0;
231                             up:=0;
232                     end_if;
233                     if at_2_low and not slow and not up and display =1 then
234                             floor2:=1;
235                             conveyor2:=1;
236                     end_if;
237             R_TRIG_14 (CLK := at2);
238                     if at_2_low and not slow and not up and R_TRIG_14.Q then
239                             floor2:=0;
240                             conveyor2:=0;
241                     end_if;
242                     if at_3_low and not slow and not up and display =2 then
243                             floor3:=1;
244                             conveyor3:=1;
245                     end_if;
246             R_TRIG_15 (CLK := at3);
247                     if at_3_low and not slow and not up and R_TRIG_15.Q then
248                             floor3:=0;
249                             conveyor3:=0;
250                     end_if;
251                     if (TON_4.Q and at_3_low) or (TON_5.Q and at_1_high and at_1_low and display=4) then
252                             down:=1;
253                     end_if;
254                     if (down and at_1_low and slow) or (at_0_low and at_0_high and aux and down) then
255                             down:=0;
256                             slow:=0;
257                     end_if;
258             TON_5 (IN := at_1_low and not slow and not down,
259                             PT := t#4s);
260                     if TON_5.Q then
261                             aux:=1;
262                     end_if;
263             F_TRIG_4 (CLK := at1);
264                     if F_TRIG_4.Q then
265                             conveyor1:=0;
266                     end_if;
267                     if at_0_low and at_0_high and aux and down then
268                             aux:=0;
269                     end_if;
270                     if not at_exit then
271                             exit_conveyor:=1;
272                             aux_reset:=1;
273                     end_if;
274
275             R_TRIG_16 (CLK := at_exit);
276                     if R_TRIG_16.Q then
277                             load:=0;
278                             exit_conveyor:=0;
279                     end_if;
```

Escena10_ST

```
    1|       10|       20|       30|       40|       50|       60|       70|       80|       90|       100|       110|

280                 if F_TRIG_5.Q and %M50 then
281                         start_light:=0;
282                         stop_light:=0;
283                 end_if;
284  end_if;
```