

Stairwell light with pre-warning

Category:	GO-I/O-PRO 32 Library elements Building automation		
Name:		Fb StairwellLight2	
Type:	Function Function block X Program		
Library name:			
Applicable to:	StairwellLight_01.lib All programmable fieldbus controllers		
Applicable (0:			
Input parameter:	Data type:	Comment:	
xSwitch	BOOL	Input for switching signal	
xManuel	BOOL	Switching command, constant light	
dwT_10tel_s	DWORD	Stairwell time Value range 10 – 65535 [0,1s] Default setting = 1200	
dwTw_10tel_s	DWORD	Pre-warning time 50 – 300 [0,1s] Default setting = 150	
Feedback value:	Data type:	Comment:	
xActuator	BOOL	Output switching signal	
Fb_StairwellLight2 -xSwitch xA -xManuel	2 Actuator		
–xSwitch xA			
Fb_StairwellLight2 -xSwitch xA -xManuel -dwT_10tel_s	ior:	riggering Switching ON within the pre-warning time Ts	

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Function description:

The output "*xActuator*" is set to 1 with a rising flank at input "*xSwitch*". Once the settable stairwell time has elapsed "*dwT_10tel_s*" a switch-off pre-warning occurs in that the output is reset to 0 for the duration of 1 second. Subsequently the output for the pre-warning duration "*dwTw_10te_s*" is switched on. If another rising flank is detected at input "*xSwitch*" during this period, the stairwell time will be re-triggered. If the time is not re-triggered, the output is set (constant light) for as long as an ON signal is pending on input "*xManuel*".



Stairwell light without pre-warning with manual OFF

Category: Building automation Name: Fb_StairwellLight1 Type: Function [] Function block x] Program [] Library name: StairwellLight_01.lib Applicable to: All programmable fieldbus controllers Input parameter: Data type: Comment: xSwitch BOOL Input for switching signal xStop BOOL Stairwell time Value range 10 – 65535 [0,1s] Default setting = 1200 Feedback value: Data type: Comment: xActuator BOOL Output switching signal xActuator BOOL Output switching signal value range 10 – 65535 [0,1s] Default setting = 1200 Feedback value: Data type: Comment: xActuator BOOL Output switching signal dwT_10tel_s	WAGO-I/O-PRO 32 Library elements				
Type: Function Function block Program Library name: StairwellLight_01.lib Applicable to: All programmable fieldbus controllers Input parameter: Data type: Comment: xSwitch BOOL Input for switching signal XStop BOOL Stopping the stairwell time dwT_10tel_s DWORD Stairwell time Feedback value: Data type: Comment: xActuator BOOL Output switching signal Graphical display: Comment: XActuator	Category:	Building automation			
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Fb_StainwellLight1 xSwitch _xStop _dwT_10tel_s	xActuator	BOOL	Output switching signal		
Fb_StainwellLight1 xSwitch _xStop _dwT_10tel_s					
xSwitch dwT_10tel_s	–xSwitch xActuator –xStop				
dwT_10tel_s	Time referenced behavior:				
	dwT_10tel_s				



Function description:

The function module 'stairwell' operates as a dynamic, mono-stable flip flop. With a rising flank at input "**xSwitch**" a plus is generated at output "**xActuator**". The duration of the stairwell time is set via parameter "**dwT_10tel_s**". Should another rising flank occur at the input during the stairwell time, the time is reset and the pulse extended (retriggerable).

The stop input sets the output signal to zero at any time (stairwell light with manual OFF).

With the output set and the arrival of a signal on inputs "*xSwitch*" and "*xStop*" the stop input has the priority and the stairwell time will be discontinued. If the output is not set and if the inputs are simultaneously circuited with a 1, the output is set and the stairwell time started.