

Blinds Control

Introduction

The Blinds Function allows Comfort to control automated Blinds or curtains without programming pulses in Responses. Blinds are automated by installing a blinds motor and mechanism to roll up or down the blinds. A Blinds controller is needed connected to up and down switches, and sometimes RF/IR remote control

Blinds are driven by motors which can be controlled by relays either low voltage or 230V. One relay causes the blinds to go Up or Open and another causes the blinds to go down or close.

Types of Blinds Control

1. Pulse control with 2 or 3 outputs to the blinds controller. Stop control can be by output or by pulsing 2 outputs simultaneously This allows independent control by switches or remote controls. Comfort/SEM is able to support this only
2. Latched control with 2 outputs and timer to direct drive the motors without controller. A limit switch stops movement of motors at full travel. Independent control is by parallel switch or remote control - This will be implemented in RIO in future. RIO is used mainly for automation.

Minimum Requirements

Comfort Ultra or Logic Engine Firmware 7.039 and above

Configurator 3.7.6 and above

Configurator for Blinds

Go to Functions > Blinds

Up to 8 blinds can be configured

The screenshot shows the 'Blinds' configuration window. It contains a table with 8 rows for configuring individual blinds. The first row is pre-filled with 'Blind1' and 'Use 3rd Output'. The other rows are empty or have default values. To the right of the table is a 'Blind Function Properties' panel for the selected blind (Blind1). This panel includes fields for Number, Name, Output Numbers, Stop Method (a dropdown menu currently showing 'Use 3rd Output'), and Pulse Width. Below this panel is a 'Stop Method' section with a description: 'The method used to stop the blind.'

No	Name	Output Numbers	Stop Method
1	Blind1	1-3	Use 3rd Output
2	Blind2	4-5	Pulse Up/Down Outputs together
3	Blind3	6-7	Pulse Up/Down Outputs together
4	Blind4	Unassigned	Pulse Up/Down Outputs together
5	Blind5	Unassigned	Pulse Up/Down Outputs together
6	Blind6	Unassigned	Pulse Up/Down Outputs together
7	Blind7	Unassigned	Pulse Up/Down Outputs together
8	Blind8	Unassigned	Pulse Up/Down Outputs together

Blind Function Properties

Number: 1
Name: Blind1
Output Numbers: 1-3
Stop Method: Use 3rd Output
Pulse Width: No Stop

Stop Method
The method used to stop the blind.

For each blind the parameters are

Stop Method: Choose None, “Use 3rd Output” , “Pulse Up/Down Outputs together”

None means there is no command to Stop the blinds during movement.

“Use 3rd output” uses selected Output +2 for STOP.

“Pulse Up/Down Outputs together” gives a pulse on Up and Down outputs to stop the blinds.

Blind Function Properties	
Number	1
Name	Blind1
Output Numbers	1-3
Stop Method	Use 3rd Output
Pulse Width	No Stop

Output Number 1 to 16 only (not in slaves).

Blind Function Properties	
Number	1
Name	Blind1
Output Numbers	1-3
Stop Method	Use 3rd Output
Pulse Width	No Stop

Select the Output Numbers used for the blind. The outputs assigned will be sequentially numbered. The 1st Output for Up/Open.

Output+1 is assigned to Down/Close

Output+2 is assigned to STOP if the Stop method is “Use 3rd Output”

3 sequential Outputs are assigned for Stop Method “Use 3rd Output” and 2 sequential Outputs are assigned for Stop Method “Pulse Up/Down Outputs together”

Pulse width: 500 ms, 1000 ms, 1500 ms, 2000 ms.

Blind Function Properties	
Number	2
Name	Blind2
Output Numbers	4-5
Stop Method	Pulse Up/Down Outputs together
Pulse Width	1000 ms

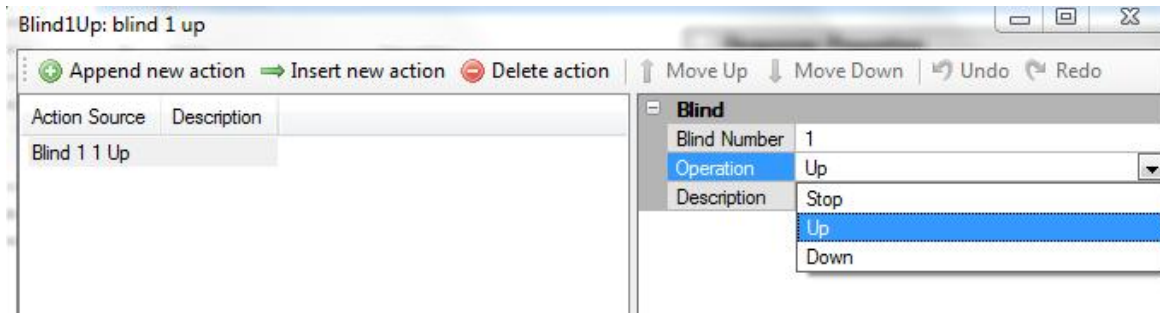
Pulse Width
The pulse width needed to open or close the blind.

Choose the pulse width of the pulse needed to open or close the blinds

Outputs allocated to Blinds show as referenced (in blue) in Names > Outputs. Each blind has 2 outputs or 3 outputs if “Use 3rd output” is selected

Action Code for Blinds Control

Action Code 189 is for blind control



189, ID, Blind #, Operation

ID for Comfort is 01 - this is the only ID supported now. In future other IDs will be applicable

Blind #

1 -8 in Comfort

Operation: 0 = stop, 1 = Up, 2 = down

Eg

189, 01, 3, 1 means Blind #3 Up full

189, 01, 2, 2 means Blinds #2 Down full

The Comfort Apps will include automatic configuration of the Blinds control in future

Pulse Control Algorithm for Blinds

To move, the output is turned on for pulse duration. The assigned output is addressed depending on up or down

A pulsed output command is activated

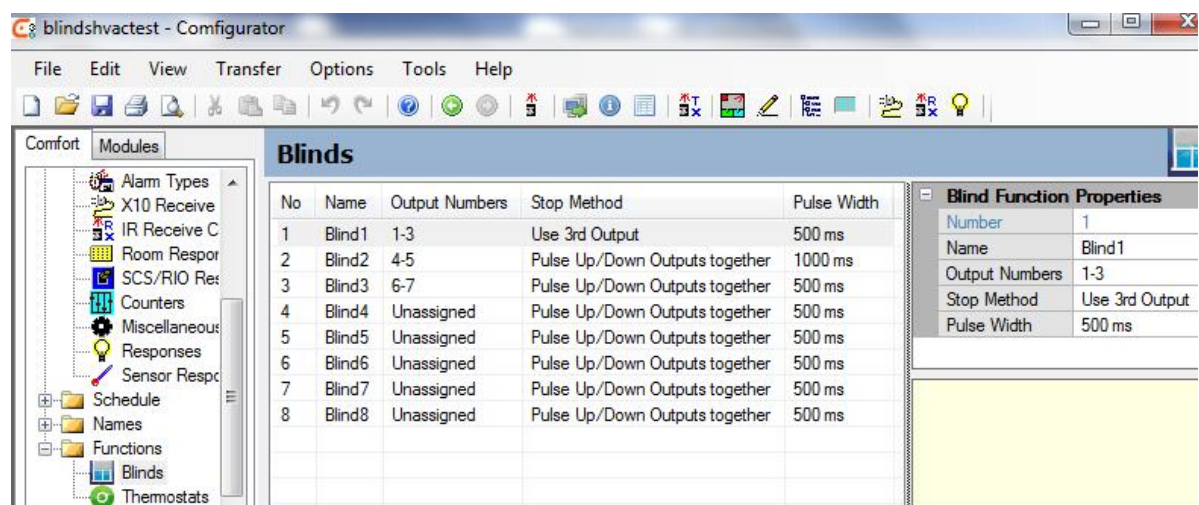
A Stop operation depends on the mode. If using a separate 3rd output, then a pulse is output to the 3rd output. If a simultaneous dual pulse is needed, pulse 2 outputs together is needed.

When an output is used for blinds control, any latched command is prevented. Only pulse commands are allowed.

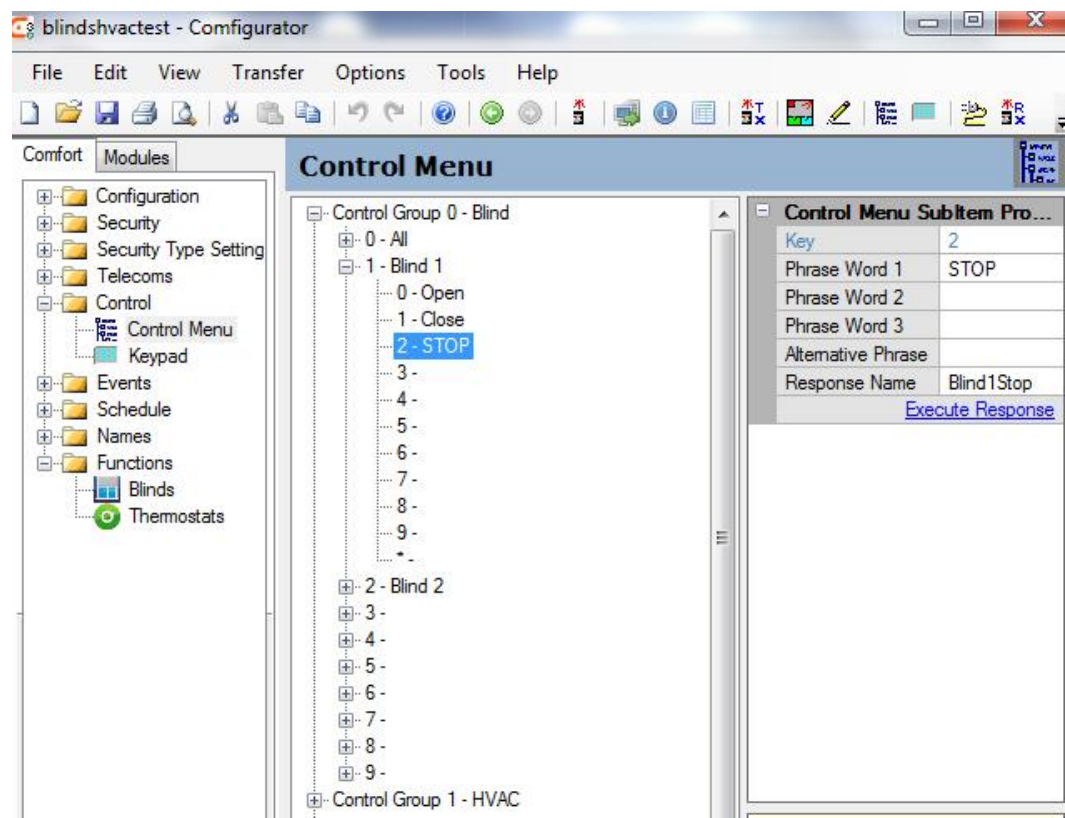
If two or more blinds are controlled at the same time, they will move at (almost) the same time instead of one after another.

Example

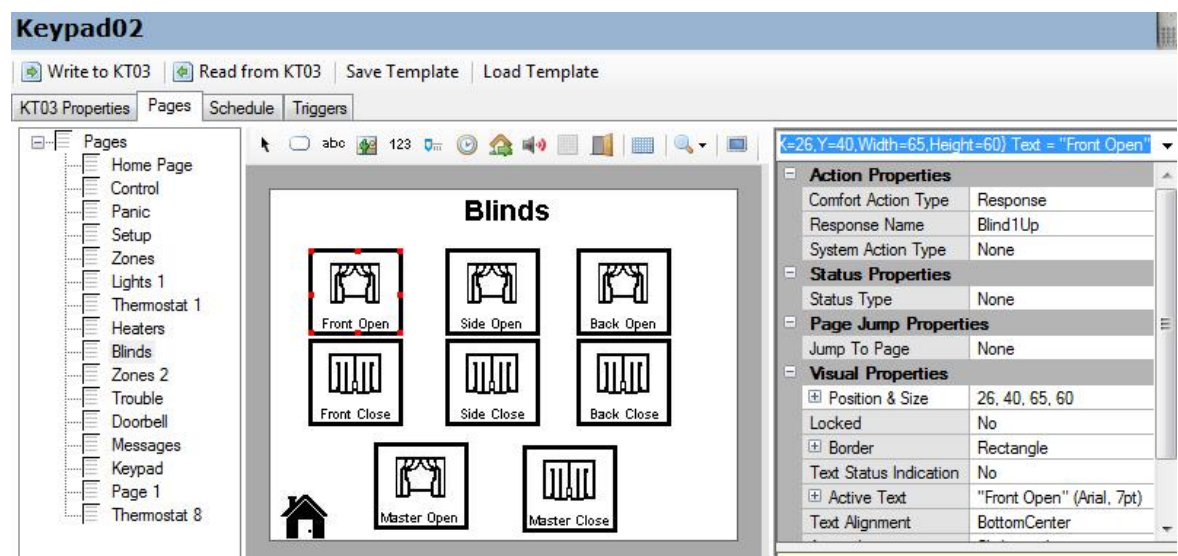
The file blindshvactest.cclx is an example of howw to configure and control the Blinds function



The screenshot below shows the Control Menu to control the 2 blinds for Up and Down as well as All blinds to control all blinds at the same time



The screenshot below shows a KT03 page controlling the Blinds



History
1 October 2013