c3controls®

22mm IEC Pilot Devices

series 22 iec

How to configure and buy c3controls 22mm selector switches.

c3controls' single cam design eliminates the need for multiple cam configurations and selector switch configuration nightmares, ensuring 100% cam selection configuration accuracy. c3controls' one cam does it all vs. our competitors who need up to fifteen cams to perform the same function.

To help you configure your c3controls 22mm selector switch on the web, choose from one of the scenarios below.

Scenario 1

I have a c3 part number and no description or an understanding of switch function:

If you have a c3controls part number and you do not have a product description or an understanding of how the switch functions, then click the button below for product configuration codes and descriptions.

CLICK HERE FOR SCENARIO 1 SUPPORT

Scenario 2

I do not have a c3 part number, but know how I want the switch to perform:

If you do not have a c3controls part number or a product description, and you understand how the switch functions, then click the button below for instructions on how to select your circuit designation, contact block, and mounting position to build your c3controls part number.

CLICK HERE FOR SCENARIO 2 SUPPORT

Scenario 1

I have a c3controls part number and no description or an understanding of switch function.

Use the product configurator charts below to help you match your c3controls part number with the corresponding description and part number CODE in each of the sections.

22mm IEC Selector Switches (Illuminated)

W22I ____ – ____ ____ ____ – ____ ____ – ____ / ____

I II III IV V VI VII VIII IX**

Example: To build one of our most popular Selector Switches, the part number would be
W22I + II + III + IV + V + VI + VII + VIII + IX or **W22ISRC-IHG-FM24LG-10**

*NOTE: Contact block configurations are based on circuit designations (see charts below).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22I	Illuminated Selector Switch	$14.00

II. OPERATOR FUNCTION

CODE	POSITION/FUNCTION	LIST
S2	2/Maintained	—
SRL	2/Spring Return, R to L	$ 2.90
S3	3/Maintained	—
SLC	3/Spring Return, L to C	$ 2.90
SRC	3/Spring Return, R to C	$ 2.90
SAC	3/Spring Return, L & R to C	$ 2.90

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
A	Aluminum (Type 4)	$ 3.00

IV. HANDLE TYPE

CODE	DESCRIPTION	LIST
IH	Illuminated Standard	$ 7.00
IL	Illuminated Lever	$ 7.00

V. HANDLE/INSERT COLOR

CODE	HANDLE COLOR	INSERT COLOR
A	Amber	White
B	Blue	White
C	Clear	Black
G	Green	White
R	Red	White
W	White	Black
Y	Yellow	Black

VI. VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM6	6V AC/DC	$12.00
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	TRANSFORMER (50/60 Hz)	
TM120	120V AC*	$28.00
TM240	240V AC*	$28.00
TM480	480V AC*	$28.00
	RESISTOR	
RM120	120V AC/DC	$15.00
RM240	240V AC/DC*	$15.00
	MULTI-VOLTAGE, NON-RELAMPABLE (LED ONLY)	
MVD	20-277V AC or DC (Standard)	$37.00
MVF	20-277V AC or DC (Flashing)	$58.00
	MULTI-VOLTAGE, RELAMPABLE (LED ONLY)	
RMVD	20-277V AC or DC (Standard)	$40.00
RMVF	20-277V AC or DC (Flashing)	$61.00

*NOTE: A 3-position operator function is not an option for TM120, TM240, TM480 and RM240.

VII. LAMP TYPE/COLOR

CODE	COLOR	LIST
	LED	
LA	Amber	$14.00
LB	Blue	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	LED MULTI-VOLTAGE, NON-RELAMPABLE	
LW	White	—
	LED MULTI-VOLTAGE, RELAMPABLE	
LA	Amber	$ 8.00
LB	Blue	$ 8.00
LG	Green	$ 8.00
LR	Red	$ 8.00
LT	Translucent White	$ 8.00
LW	White	$ 8.00
NL	**No Lamp**	–$ 1.80

VIII. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

NOTE: When using a 120V, 240V or 480V transformer light module or 240V resistor light module, you are limited to two contact blocks on one side (left side).

IX. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VIII FROM ABOVE)

DISCOUNT SCHEDULE **E**

Circuit Designation Charts

0 = OPEN X = CLOSED

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
H	0	X	WNO	EITHER
G	X	0	WNC	EITHER

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION CENTER	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
A	X	0	0	WNO	LEFT
B	0	X	0	WNC	EITHER
C	0	0	X	WNO	RIGHT
D	0	X	X	WDB	LEFT
E	X	0	X	WEM	EITHER
F	X	X	0	WDB	RIGHT

HANDLE POSITIONS

2-POSITION	3-POSITION

Scenario 1 (*continued*)

22mm IEC Selector Switches (Non-Illuminated)

W22 ____ – ____ ____ ____ – ____ / ____

I *II* *III* *IV* *V* *VI** *VII**

Example: To build one of our most popular Selector Switches, the part number would be **W22 + II + III + IV + V + VI + VII** or **W22S3-HW-10/10**

*NOTE: Contact block configurations are based on circuit designations (see charts below).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22	Selector Switch	$10.00

II. OPERATOR FUNCTION

CODE	POSITION/FUNCTION	LIST
S2	2/Maintained	—
SRL	2/Spring Return, R to L	$ 2.90
S3	3/Maintained	—
SLC	3/Spring Return, L to C	$ 2.90
SRC	3/Spring Return, R to C	$ 2.90
SAC	3/Spring Return, L & R to C	$ 2.90

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
A	Aluminum (Type 4)	$ 3.00

IV. HANDLE TYPE

CODE	DESCRIPTION	LIST
H	Standard	$ 5.10
L	Lever	$ 5.10

V. HANDLE INSERT COLOR

CODE	COLOR
B	Blue
G	Green
E	Grey
R	Red
W	White
Y	Yellow

DISCOUNT SCHEDULE **E**

VI. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VI FROM ABOVE)

Each operating handle is black with a factory assembled color insert.

Circuit Designation Charts

0 = OPEN X = CLOSED

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
H	0	X	WNO	EITHER
G	X	0	WNC	EITHER

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION CENTER	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
A	X	0	0	WNO	LEFT
B	0	X	0	WNC	EITHER
C	0	0	X	WNO	RIGHT
D	0	X	X	WDB	LEFT
E	X	0	X	WEM	EITHER
F	X	X	0	WDB	RIGHT

HANDLE POSITIONS

2-POSITION	3-POSITION

Scenario 1 (*continued*)

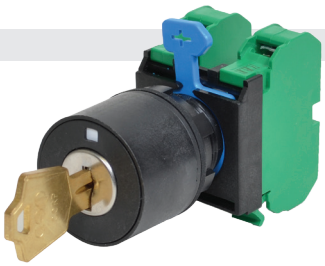
22mm IEC Keyed Selector Switches

W22K _____ – **K** _____ – _____ / _____

I *II* *III* *IV* *V** *VI**

Example: To build one of our most popular Keyed Selector Switches, the part number would be W22K + II + K + IV + V + VI or W22KS3-KRA-10/10

*NOTE: Contact block configurations are based on circuit designations (see charts below).



I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22K	Keyed Selector Switch	$22.00

II. OPERATOR FUNCTION

CODE	POS./FUNCTION	AVAIL. KEY REMOVAL POSITION(S)	LIST
S2	2/Maintained	RA,RR,RL	$16.00
SRL	2/Spring Return, R to L	RL	$18.00
S3	3/Maintained	RA,RL,RR,RC, RLC,RRC	$19.00
SLC	3/Spring Return, L to C	RC,RR,RRC	$22.00
SRC	3/Spring Return, R to C	RC,RL,RLC	$22.00
SAC	3/Spring Return, L & R to C	RC	$22.00

III. BEZEL/INDICATOR COLOR

CODE	DESCRIPTION
K	Black Bezel/White Indicator

IV. KEY REMOVAL POSITION

CODE	REMOVAL POSITION
RA	All
RL	Left Only
RR	Right Only
RC	Center Only
RLC	Left & Center Only
RRC	Right & Center Only

DISCOUNT SCHEDULE **E**

V. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

VI. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART V FROM ABOVE)

Circuit Designation Charts

O = OPEN X = CLOSED

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
H	O	X	WNO	EITHER
G	X	O	WNC	EITHER

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION CENTER	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
A	X	O	O	WNO	LEFT
B	O	X	O	WNC	EITHER
C	O	O	X	WNO	RIGHT
D	O	X	X	WDB	LEFT
E	X	O	X	WEM	EITHER
F	X	X	O	WDB	RIGHT

HANDLE POSITIONS

2-POSITION

3-POSITION

Scenario 2

I do not have a c3controls part number, but know how I want the switch to perform.

To create a complete c3controls part number, simply follow the steps below by using the corresponding circuit designation and product configurator charts.

1. **Using the circuit designation charts on page 6, choose the chart that corresponds with how many positions you need the switch to have**. Example: 2 or 3-positions.

2. **For each operator handle position you will need to select a circuit designation that matches the switch performance for each of these positions.**

3. **Once you have identified each circuit designation code, use the same circuit designation chart to determine the type of block (Normally Open, Normally Closed, etc.) and the mounting position (Left, Right, etc.).**

4. **Now that you know what type of contact blocks you need and their mounting positions, it is now time to build your complete c3controls part number. Using the product configurator charts on pages 6 and 7, match the c3controls product description and corresponding part number CODE in each of the sections to create your c3controls part number.**

Note: When ordering a fully assembled switch, the contact block catalog numbers in the circuit designation charts and the contact block configurator codes may not match. Here is a quick guide to their meanings:

WNO = 1 Normally Open Contact Block
WNC = 1 Normally Closed Contact Block
WDB = 1 Delayed Break Contact Block
WEM = 1 Early Make Contact Block

Example:

3-Position, Maintained, Hand-Off-Auto (HOA) Selector Switch

22mm IEC Non-Illuminated Selector Switch, 3-Position, Maintained, Black Polyester Bezel (Type 4X), Standard Handle with White Insert, and 1 Normally Open Contact Block (left mounted) and 1 Normally Open Contact Block (right mounted).

c3 Part #: W22S3-HW-10/10

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION			BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	CENTER	RIGHT		
A	X	0	0	WNO	LEFT
B	0	X	0	WNC	EITHER
C	0	0	X	WNO	RIGHT
D	0	X	X	WDB	LEFT
E	X	0	X	WEM	EITHER
F	X	X	0	WDB	RIGHT

Scenario 2 (*continued*)

Circuit Designation Charts

0 = OPEN X = CLOSED

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES				
CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
H	0	X	WNO	EITHER
G	X	0	WNC	EITHER

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES					
CIRCUIT DESIG.	HANDLE POSITION LEFT	HANDLE POSITION CENTER	HANDLE POSITION RIGHT	BLOCK CATALOG NUMBER	MOUNTING POSITION
A	X	0	0	WNO	LEFT
B	0	X	0	WNC	EITHER
C	0	0	X	WNO	RIGHT
D	0	X	X	WDB	LEFT
E	X	0	X	WEM	EITHER
F	X	X	0	WDB	RIGHT

HANDLE POSITIONS	
2-POSITION	3-POSITION

22mm IEC Selector Switches (Illuminated)

W22I ____ – ____ ____ ____ ____ – ____ ____ – ____ / ____

I II III IV V VI VII VIII IX**

Example: To build one of our most popular Selector Switches, the part number would be **W22I + II + III + IV + V + VI + VII + VIII + IX** or **W22ISRC-IHG-FM24LG-10**

*NOTE: Contact block configurations are based on circuit designations (see charts above).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22I	Illuminated Selector Switch	$14.00

II. OPERATOR FUNCTION

CODE	POSITION/FUNCTION	LIST
S2	2/Maintained	—
SRL	2/Spring Return, R to L	$ 2.90
S3	3/Maintained	—
SLC	3/Spring Return, L to C	$ 2.90
SRC	3/Spring Return, R to C	$ 2.90
SAC	3/Spring Return, L & R to C	$ 2.90

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
A	Aluminum (Type 4)	$ 3.00

IV. HANDLE TYPE

CODE	DESCRIPTION	LIST
IH	Illuminated Standard	$ 7.00
IL	Illuminated Lever	$ 7.00

V. HANDLE/INSERT COLOR

CODE	HANDLE COLOR	INSERT COLOR
A	Amber	White
B	Blue	White
C	Clear	Black
G	Green	White
R	Red	White
W	White	Black
Y	Yellow	Black

VI. VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM6	6V AC/DC	$12.00
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	TRANSFORMER (50/60 Hz)	
TM120	120V AC*	$28.00
TM240	240V AC*	$28.00
TM480	480V AC*	$28.00
	RESISTOR	
RM120	120V AC/DC	$15.00
RM240	240V AC/DC*	$15.00
	MULTI-VOLTAGE, NON-RELAMPABLE (LED ONLY)	
MVD	20-277V AC or DC (Standard)	$37.00
MVF	20-277V AC or DC (Flashing)	$58.00
	MULTI-VOLTAGE, RELAMPABLE (LED ONLY)	
RMVD	20-277V AC or DC (Standard)	$40.00
RMVF	20-277V AC or DC (Flashing)	$61.00

*NOTE: A 3-position operator function is not an option for TM120, TM240, TM480 and RM240.

VII. LAMP TYPE/COLOR

CODE	COLOR	LIST
	LED	
LA	Amber	$14.00
LB	Blue	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	LED MULTI-VOLTAGE, NON-RELAMPABLE	
LW	White	—
	LED MULTI-VOLTAGE, RELAMPABLE	
LA	Amber	$ 8.00
LB	Blue	$ 8.00
LG	Green	$ 8.00
LR	Red	$ 8.00
LT	Translucent White	$ 8.00
LW	White	$ 8.00
NL	**No Lamp**	–$ 1.80

VIII. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

NOTE: When using a 120V, 240V or 480V transformer light module or 240V resistor light module, you are limited to two contact blocks on one side (left side).

IX. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VIII FROM ABOVE)

DISCOUNT SCHEDULE E

Scenario 2 (*continued*)

22mm IEC Selector Switches (Non-Illuminated)

W22 ____ – ____ ____ ____ – ____ / ____

I *II* *III* *IV* *V* *VI** *VII**

Example: To build one of our most popular Selector Switches, the part number would be **W22 + II + III + IV + V + VI + VII** or **W22S3-HW-10/10**

*NOTE: Contact block configurations are based on circuit designations (see page 6 for circuit designation charts).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22	Selector Switch	$10.00

II. OPERATOR FUNCTION

CODE	POSITION/FUNCTION	LIST
S2	2/Maintained	—
SRL	2/Spring Return, R to L	$ 2.90
S3	3/Maintained	—
SLC	3/Spring Return, L to C	$ 2.90
SRC	3/Spring Return, R to C	$ 2.90
SAC	3/Spring Return, L & R to C	$ 2.90

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
A	Aluminum (Type 4)	$ 3.00

IV. HANDLE TYPE

CODE	DESCRIPTION	LIST
H	Standard	$ 5.10
L	Lever	$ 5.10

V. HANDLE INSERT COLOR

CODE	COLOR
B	Blue
G	Green
E	Grey
R	Red
W	White
Y	Yellow

DISCOUNT SCHEDULE **E**

VI. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

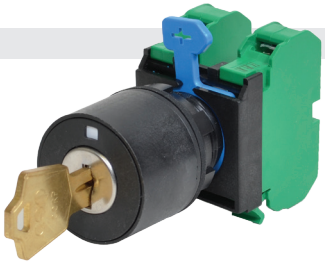
(USE CHART VI FROM ABOVE)

Each operating handle is black with a factory assembled color insert.

22mm IEC Keyed Selector Switches

W22K ____ – **K** ____ – ____ / ____

I *II* *III* *IV* *V** *VI**



Example: To build one of our most popular Keyed Selector Switches, the part number would be **W22K + II + K + IV + V + VI** or **W22KS3-KRA-10/10**

*NOTE: Contact block configurations are based on circuit designations (see page 6 for circuit designation charts).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22K	Keyed Selector Switch	$22.00

II. OPERATOR FUNCTION

CODE	POS./FUNCTION	AVAIL. KEY REMOVAL POSITION(S)	LIST
S2	2/Maintained	RA,RR,RL	$16.00
SRL	2/Spring Return, R to L	RL	$18.00
S3	3/Maintained	RA,RL,RR,RC, RLC,RRC	$19.00
SLC	3/Spring Return, L to C	RC,RR,RRC	$22.00
SRC	3/Spring Return, R to C	RC,RL,RLC	$22.00
SAC	3/Spring Return, L & R to C	RC	$22.00

III. BEZEL/INDICATOR COLOR

CODE	DESCRIPTION
K	Black Bezel/White Indicator

IV. KEY REMOVAL POSITION

CODE	REMOVAL POSITION
RA	All
RL	Left Only
RR	Right Only
RC	Center Only
RLC	Left & Center Only
RRC	Right & Center Only

DISCOUNT SCHEDULE **E**

V. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

VI. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART V FROM ABOVE)

Have questions? Contact your c3controls support team at customerfirst@c3controls.com.