

NOTICE: For installation by a qualified electrician in accordance with national and local electrical codes, and the following instructions.

CAUTION: RISK OF ELECTRICAL SHOCK. Disconnect power before installing. Never wire energized electrical components.

Select conductors having 90°C or higher rated insulation having sufficient ampacity in accordance with the 60°C column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2

DO NOT USE TIN CONDUCTORS.

Warning

DO NOT wire more than one operator to a single pole switch. A second operator can be wired to the second pole of a double pole switch.

DO NOT connect two switches to an operator without a relay.

Wiring for one motor and one rocker switch

Power from wall

BLACK (120v - 60hz)

WHITE (neutral)

GREEN (ground)

RED (direction 1)

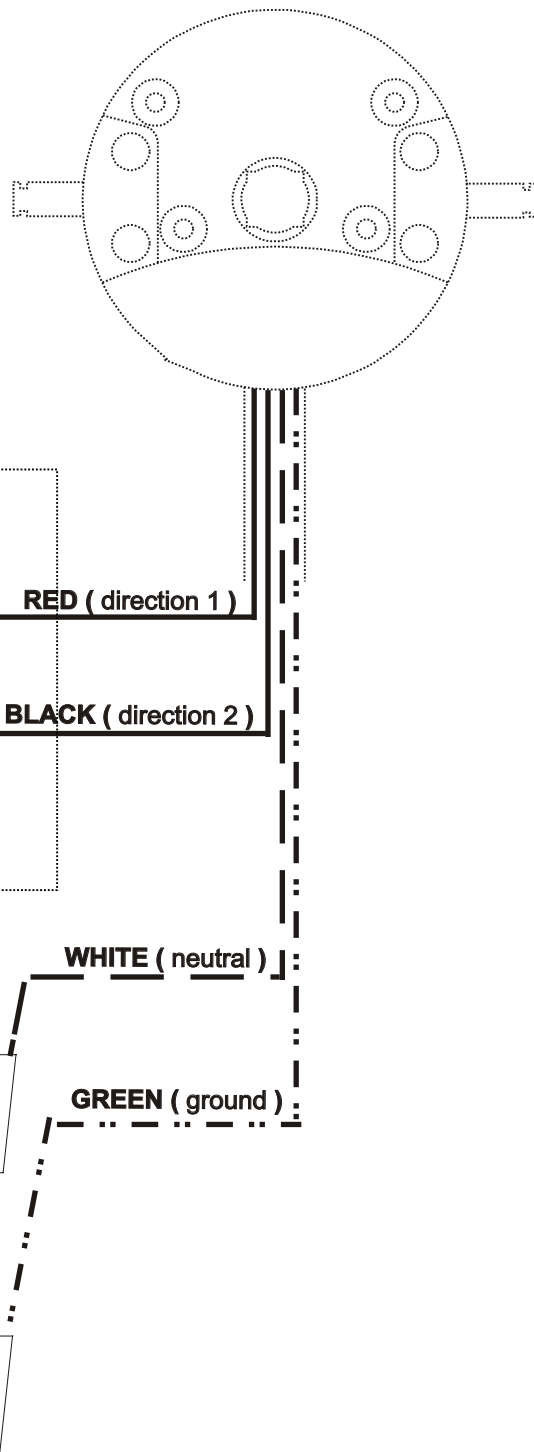
BLACK (direction 2)

WHITE (neutral)

GREEN (ground)

Power in		
Hot	Black	—————
Neutral	White	— — — — —
Ground	Green	- · - · - · - · -

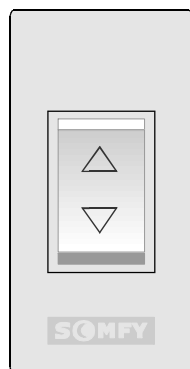
Motor Leads		
Direction 1	Red	—————
Direction 2	Black	—————
Neutral	White	— — — — —
Ground	Green	- · - · - · - · -





MAINTAINED ROCKER SWITCH

Double Pole - Double Throw - Center Off



INSTALLATION INSTRUCTIONS

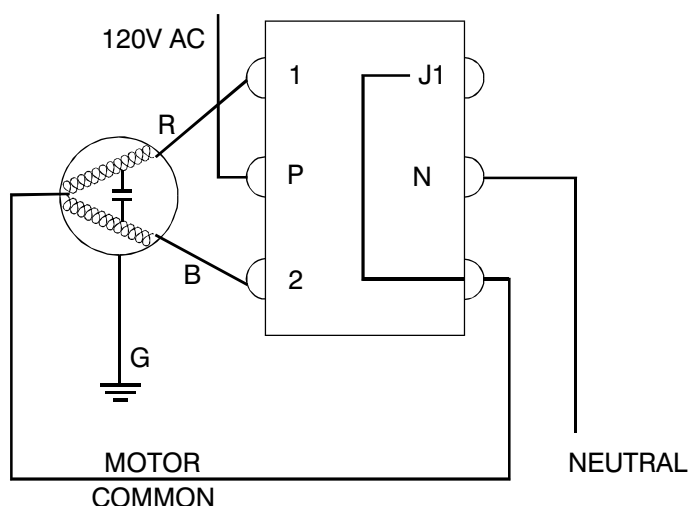
For Cat. No. 6120687

TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS

TO INSTALL:

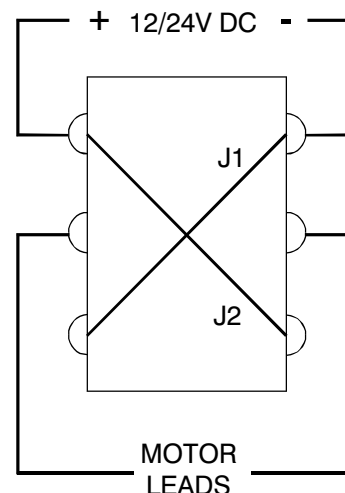
1. **WARNING:** IN AC INSTALLATIONS TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE. TEST THAT POWER IS OFF-BEFORE WIRING! Use this device only with copper or copper clad wire. With aluminum wire use only devices marked CO/ALR.
2. Remove insulation from wires, expose 3/4 inch of conductor. Loop wires clockwise 3/4 turn around terminal screws and tighten screws firmly.
3. Connect wires per WIRING DIAGRAM.
4. Mount device with long mounting screws. Replace wallplate and tighten cover screws.
5. Restore power at circuit breaker or fuse. INSTALLATION IS COMPLETE.

SWITCH WIRING AC INSTALLATION



Back of Switch

SWITCH WIRING DC INSTALLATION



Back of Switch

MOTOR WIRING:

R - RED	Direction 1
B - BLACK	Direction 2
WHITE	Neutral
G - GREEN	Ground

NOTE: If motor turns in wrong direction, reverse red and black motor leads

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Limit Switch Setting for Standard Motors

CAUTION:

- It is strongly recommended that you use an approved tester cable to set the motor limits, and ensure that the system is operating correctly before the final electrical connection is made.
- Be sure to take all necessary precautions to protect yourself from accidental electrical shock.
- Refer to the trouble shooting guide below for any problems encountered.

NOTE:

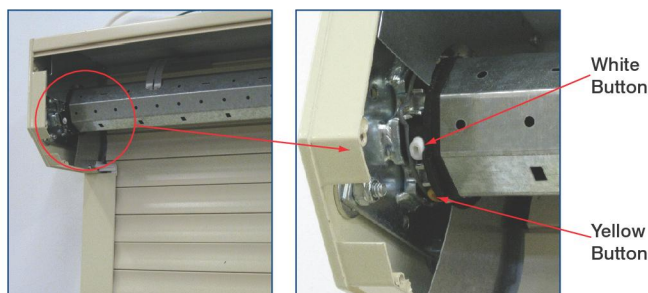
- **Two positions have to be set: the UP and DOWN positions where the motor will stop automatically.**
- The limit switches are found inside the front access hole of the end cap.
- Determine if the motor on your shutter is on the right hand or left hand side by observing which side the wire exits from.

UP Position



DOWN Position

MOTOR ON **LEFT** SIDE OF SHUTTER

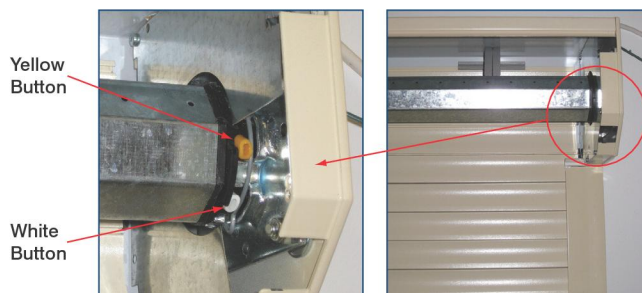


The white button controls the **DOWN** limit and is operated by the black wire.

The yellow button controls the **UP** limit and is operated by the red wire.

- 1 Depress fully both the yellow and the white buttons. They must stay 'in'.
- 2 Use a test cord to move the shutter to the desired **DOWN** position.
- 3 Press the white button and it will pop back to the **OUT** position. This will set the limit.
- 4 Use the test cord to move the shutter to the desired **UP** position.
- 5 Press the yellow button and it will pop back to the **OUT** position. This will set the limit.
- 6 Verify the up and down limit settings.

MOTOR ON **RIGHT** SIDE OF SHUTTER



The yellow button controls the **DOWN** limit and is operated by the red wire.

The white button controls the **UP** limit and is operated by the black wire.

- 1 Depress fully both the yellow and the white buttons. They must stay 'in'.
- 2 Use a test cord to move the shutter to the desired **DOWN** position.
- 3 Press the yellow button and it will pop back to the **OUT** position. This will set the limit.
- 4 Use the test cord to move the shutter to the desired **UP** position.
- 5 Press the white button and it will pop back to the **OUT** position. This will set the limit.
- 6 Verify the up and down limit settings.

TROUBLE SHOOTING

System does not respond

Is the power supply switched on? Check any circuit breakers in the power supply.

Is the control switch wired correctly? Refer to instructions.

Are limit switches set properly? Review limit switch settings.

The thermal protective device may have shut the motor off. Wait 30 minutes for it to cool down.

Check the wiring between the motor and the switch.

Disconnect the switch and test the motor with a tester cable.

CM-1100/2000

CAST ALUMINUM KEY SWITCH CONTROLS

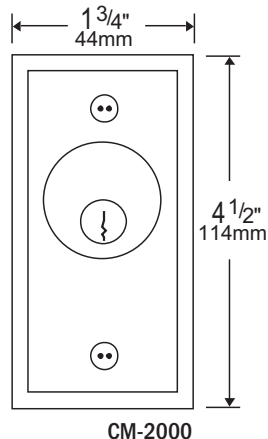
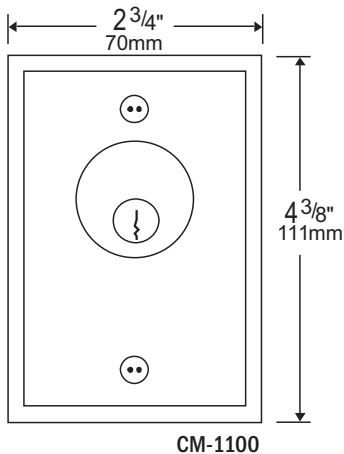


CM-1100



CM-2000

Shown with mortise
cylinder (sold separately)



FEATURES

- SINGLE GANG AND NARROW STYLE MODELS
- ACCEPTS STANDARD MORTISE CYLINDERS, 1" – 1 1/4"
- HEAVY DUTY 1/4" THICK ALUMINUM PLATE
- 1 PIECE DIE CAST CONSTRUCTION
- LOCATORS PREVENT CYLINDER FROM SPINNING
- NO SET SCREWS REQUIRED
- VANDAL RESISTANT
- CYLINDER SITS FLUSH TO FACEPLATE
- TAMPER PROOF SCREWS PROVIDED
- INDOOR OR OUTDOOR APPLICATIONS
- UL/CSA APPROVED SWITCHES
- 1 OR 2 SWITCHES MAY BE INSTALLED
- LEFT AND/OR RIGHT OPERATION
- WIDE RANGE OF SWITCH CONFIGURATIONS
- COLOR CODED 18 AWG SOLDERED LEADS
- HEAT SHRINK PROTECTIVE SLEEVE OVER CONTACTS
- CASTED CENTRE RIB PROTECTS SWITCHES FROM DAMAGE
- BRUSHED ALUMINUM FINISH
- CUSTOM COLOR FINISHES & ENGRAVING AVAILABLE
- OPTIONAL LED INDICATORS
- FAST & EASY TO INSTALL
- OPTIONAL 1-60 SECOND DPST PNEUMATIC TIME DELAY

DESCRIPTION

CAMDEN DOOR CONTROLS, CM-1100 and CM 2000 Series flush mount key switches meet the stringent demands of key switch controls. They are designed for use with standard 1", 1 1/8", or 1 1/4" mortise cylinders. Fabricated from 1/4" thick aluminum, into a one piece die cast construction, with unique Camden Manufacturing features.

CM-1100 is single gang (2 3/4") width, CM-2000 is only 1 3/4" wide, perfect for door frames or narrow areas. Both models accept one or two switches, and have a counter sunk cylinder opening, in a one piece casted assembly. A brass cylinder lock ring, 2 socket/slotted screws, and 2 tamperproof screws, are also supplied. (The mortise cylinder is available separately from CAMDEN DOOR CONTROLS.) The design and construction makes it ideal for all-weather environments. The assembly is tamper and vandal resistant.

CM Key Switches are flexible, and can be supplied in numerous switch configurations to suit varied commercial and industrial applications, and functions. CAMDEN Key Switches provide a practical, cost effective means for authorized personnel to control and signal various functions within a complex.

APPLICATION

CM-1100 and CM-2000 Series Key Switches will control overhead doors, electric locks, electro-magnetic locks, electric strikes, and motors. They are also used for shunting, bypassing, timed functions, activating and deactivating CCTV and access control equipment, and other applications. They are constructed for high frequency use, and will accept a standard mortise cylinder.

CAST ALUMINUM KEY SWITCH CONTROLS

ARCHITECTS / ENGINEERS SPECIFICATIONS

Key Switch Controls to be used throughout the site, or complex will be supplied exclusively by CAMDEN DOOR CONTROLS. The CM-1100 and CM-2000 SERIES key switches shall be used for all flush mount applications.

The faceplate will incorporate a mounting platform for both the cylinder and switches, in a single piece construction. The faceplate will have 180° locators so that set screws shall not be required to prevent the cylinder from rotating. Only a brass cylinder lock ring will be employed to hold the mortise cylinder to the faceplate. The one piece 1/4" thick aluminum assembly shall be tamper and vandal resistant, with a countersunk cylinder opening, and the edges beveled. The key switch shall be supplied with stainless steel Torx or snake eye security screws.

The one piece faceplate with casted mounting platform, will have two holes for switch mounting. It shall be possible to select either left or right operation. In areas requiring dual control, two switches shall be used offering bi-directional operation from the same key switch.

The switch used will be a UL/CSA approved type, rated for 6A/125V AC, and 3A/250V AC. Switches are to be supplied with color coded soldered leads, encased in heat shrink tubing. The switch must be protected from accidental damage from the cylinder cam, by having an integral metal centre rib incorporated into the design of the faceplate.

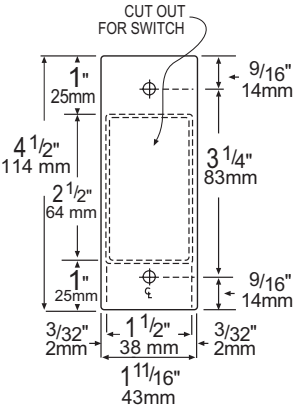
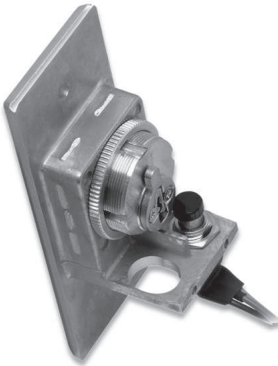
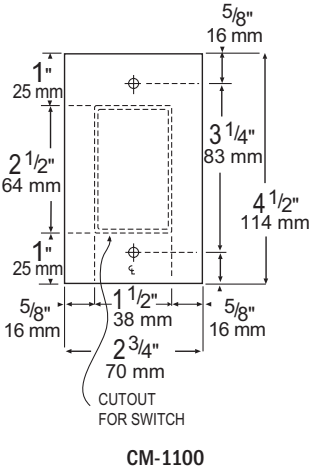
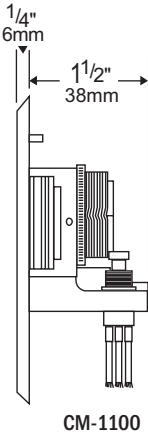
ORDERING INFORMATION

All CM-1100 and CM-2000 Series Key Switches are supplied with a brushed aluminum cast faceplate, cylinder lock ring, 2 socket/slotted screws, and 2 tamperproof screws. (The mortise cylinder is not included, but is available from CAMDEN DOOR CONTROLS.)

MODEL	MODEL	DESCRIPTION
SINGLE GANG NARROW STYLE		
CM-1100	CM-2000	1 SPST MOMENTARY SWITCH, N/O
CM-1105	CM-2005	1 SPST MOMENTARY SWITCH, N/C
CM-1110	CM-2010	1 SPST MAINTAINED SWITCH
CM-1120	CM-2020	1 SPDT MOMENTARY SWITCH
CM-1130	CM-2030	1 SPDT MAINTAINED SWITCH
CM-1150	CM-2050	2 SPDT MOMENTARY SWITCHES
CM-1160	CM-2060	2 SPDT MAINTAINED SWITCHES
CM-1170	CM-2070	1 SPDT MAINTAINED, + 1 SPDT MOMENTARY
CM-1180	CM-2080	1 DPDT MOMENTARY SWITCH
CM-1185	CM-2085	1 PNEUMATIC SWITCH, WITH 1-60 SECOND ADJUSTABLE TIME DELAY
CM-1190	CM-2090	1 DPDT MAINTAINED SWITCH

For Finishes, add:
'DUR' for DURANODIC (US 40)

For LED Indicators, add:
-7012 Red 12V LED
-7112 Green 12V LED
-7212 Red & Green 12V LED's
-7312 Bi-Color 12V LED
-7412 Amber 12V LED
-7024 Red 24V LED
-7124 Green 24V LED
-7224 Red & Green 24V LED's
-7324 Bi-Color 24V LED
-7424 Amber 24V LED

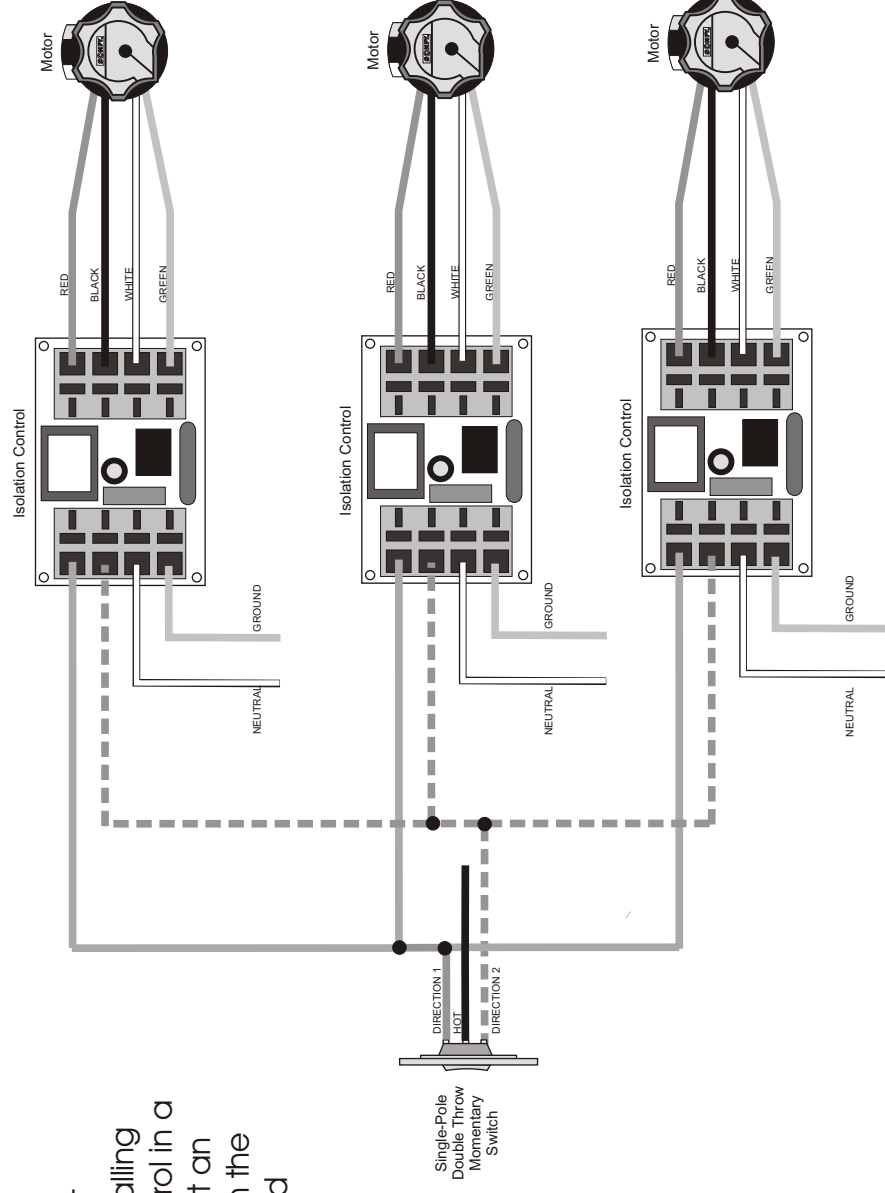


CM-2000

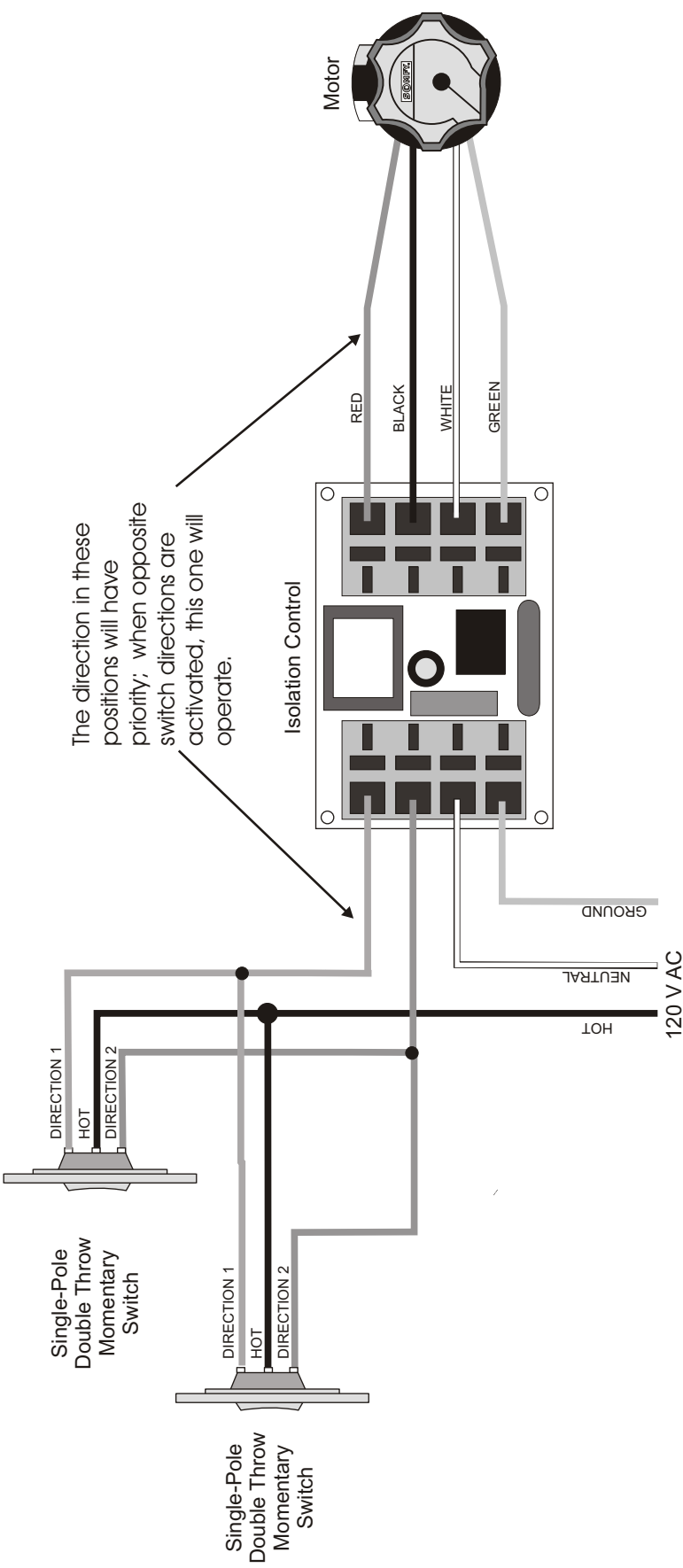
DESCRIPTION

The Somfy Isolation Control (Part Number 6300105) should be used whenever a single switch is operating two or more motors. The control can be used on existing job sites where motors might be parallel wired. Using one Isolation Control per motor will keep the directions separated and protect the motor from damage. The control should only be used with Momentary Contact switches and 120V AC rated motors.

SOMFY DOES NOT recommend installing the isolation control in a metal box without an insulator between the control board and enclosure.



The Somfy Isolation Control can also be used whenever a single motor is operated by two or more switches. The control will keep the switches isolated and prevent both UP and DOWN directions from being activated simultaneously, thus protecting the motor. The control should only be used with Momentary Contact switches and 120V AC rated motors.



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REF. NO: 2500105a

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Wiring Diagram for Key Switch

NOTICE: For installation by a qualified electrician in accordance with national and local electrical codes, and the following instructions.

CAUTION: Risk of electrical shock. Disconnect power before installing. Never wire energized components.

WARNING

DO NOT wire more than one operator to a single pole switch without an isolation control.

DO NOT connect more than one switch to an operator without an isolation control.

If your application requires more than one switch for each motor, or you want to control more than one motor with one switch, refer to isolation control instruction sheet.

The motor warranty is subject to cancellation if the above instructions are not followed.

PRECAUTIONS: Select conductors having 90°C or higher rated insulation having sufficient ampacity in accordance with the 60°C column of National Electric Code® Table 310-16 or Canadian Electric Code Table 2.

- DO NOT USE TIN CONDUCTORS

Power from Source	
120VAC	Black
Neutral	White
Ground	Green

Motor Leads	
Direction 1	Red
Direction 2	Black
Neutral	White
Ground	Green

