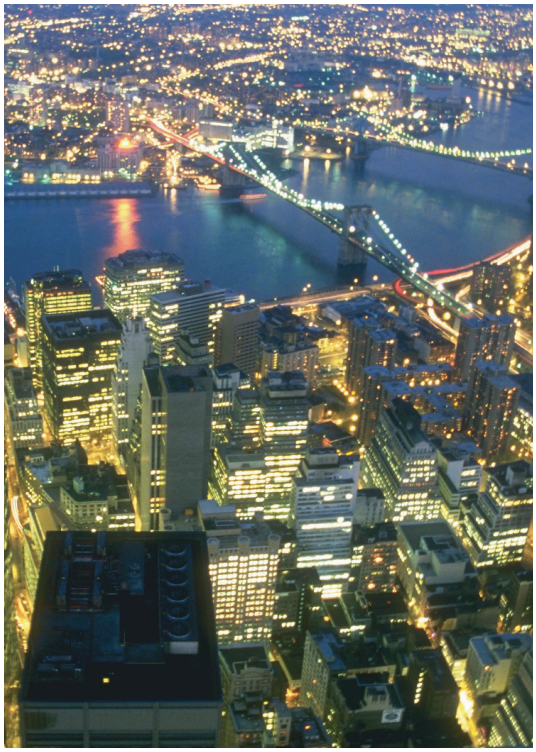
Power Switching & Controls
for Business-Critical Continuity

ASCO 920 Remote Control (RC) Switches



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Network Power

Maximum reliability and excellent value

ASCO 920 Remote Control (RC) Switches

ASCO 920 Remote Control Switch
in Type 1 Enclosure

The ASCO 920 is designed as a feeder disconnect switch for load capacities beyond the ASCO 917. ASCO 920 RC switches are available for separate mounting in NEMA type enclosures or direct mounting within lighting panelboards for total or split-bus applications.

It is available from 30 through 225 Amperes per pole with 2 or 3 poles and service voltages through 600 volts AC. The ASCO 920 is listed under UL 508 for ballast lighting, tungsten, general use and resistive loads. It also meets the withstand current requirements of UL 67 for panelboard applications.

The ASCO 920 is easy to install and features all position mounting, no derating for high inrush loads and a reliable single-solenoid operator. ASCO 920 RC switches can be used with energy management systems which automatically control lighting and power circuits through control devices such as photoelectric cells, microprocessors, timers and occupancy sensors.

ASCO 920 Features

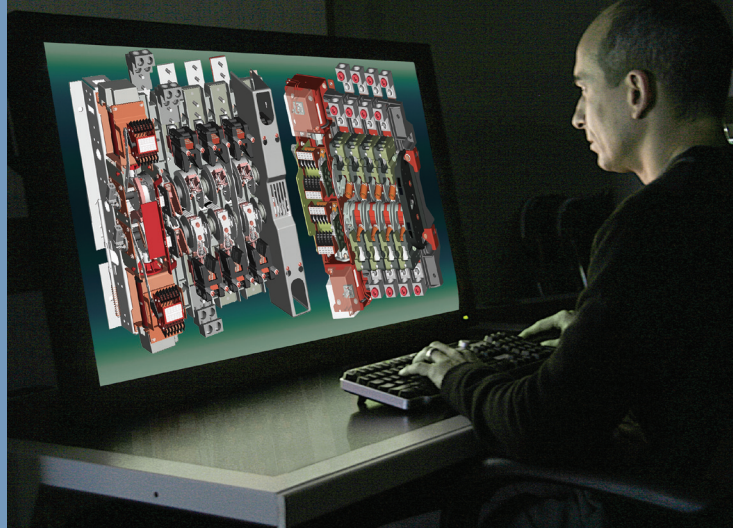
Electrical Features

- UL listed. CSA Approved
- Meets UL 67 requirements with short-circuit rating (Withstand Current Rating) of 22,000 Amps rms symmetrical at 480 volts for use with molded case circuit breakers; 100,000 Amps rms symmetrical at 600 volts for use with current-limiting fuses.
- Interrupts 300% of rated current at 480 volts, 0.4 to 0.5 power factor
- Can be used with metal halide, mercury vapor, quartz halogen, tungsten and fluorescent lighting.
- No derating when used on high inrush loads such as cold tungsten lamps.
- Wide arc gaps and arc splitters to quickly extinguish arcs. Isolated arcing chambers are widely spaced and symmetrically located.

Construction Features

- Long life. Designed for more demanding lighting contactor use. Provides extended life and quieter operation.
- Suitable for use with energy management systems.
- Rugged molded base and cover with superior electrical insulation.
- Provisions for manual operation during inspection and maintenance.
- Lightweight for easy installation.
- Plug-in auxiliary control relays available.
- Control line terminal clamps simplify installation: Insert wire and tighten. Wire range #14 AWG to #10 AWG.
- Contacts are power-driven in both directions for complete dependability.
- No extra wires or contacts needed to install signal lamps at control stations.
- Can be mounted in any position.
- Available from stock from 30-225 Amps.

ASCO is the global leader in power switching and controls



ASCO 920 Product Specifications

Switch Only (Panelboard Mounting) [1,2,3]

Switch Rating Amps	Dimensions, In. (mm)			Approx. Shipping Weight Lb. (kg)
	Width	Height	Depth	
30-100	7-15/16 (201)	8-5/16 (211)	3-1/2 (89)	6 (2.7)
150-225	7-15/16 (201)	9-1/2 (241)	3-1/2 (89)	7(3.2)

1. Suitable insulation must be behind switch unit.
2. Suitable for bus bar mounting. Lugs not supplied.
3. Dimensional data is approximate and subject to change. Certified dimensions available upon request.

Switch With Sub-Panel (Panelboard Mounting) [4]

Switch Rating Amps	Dimensions, In. (mm)			Approx. Shipping Weight Lb. (kg)	NEMA Type 1 Enclosure Dimensions, In. (mm)			Approx. Shipping Weight Lb. (kg)
	Width	Height	Depth		Width	Height	Depth	
30-100	7-15/16 (201)	11-3/4(298)	3-7/8 (98)	8(3.6)	13(330)	18-1/4(464)	4-1/2 (114)	23(10.4)
150-225	7-15/16 (201)	14-1/2(368)	3-15/16(100)	11(5.0)	13(330)	24(610)	4-1/2 (114)	31(14.0)

4. Enclosure gutter spaces are based on non-looping of cables within the enclosure. Where cables must be looped within the enclosure, oversize cabinets are available at extra cost. Contact ASCO for complete information.

Maximum Voltage Ratings at Rated Amps, Open or Enclosed [5]

When Connected 1 Pole to Load		When Connected 2 Poles to Load on 1Φ and 3 Poles to Load on 3Φ	
Ballast	277 VAC	Ballast	480 VAC
Tungsten	250 VAC	Tungsten	250 VAC
General Use	347 VAC	General Use	600 VAC

5. For DC service, maximum current rating is 75 amps or switch rating, whichever is less, with maximum voltage rating of 125 volts when connected 1 pole to load and 250 volts when connected 2 poles to load.

Inrush Current Values and Minimum Recommended Control Circuit Fuse Size [6,7,8]

Switch Rating Amps	120 Volts, 60 Hz		240 Volts, 60 Hz		277 Volts, 60 Hz		480 Volts, 60 Hz	
	Inrush Amps	Minimum Fuse	Inrush Amps	Minimum Fuse	Inrush Amps	Minimum Fuse	Inrush Amps	Minimum Fuse
30-100	24	8	12	4	11	4	6	2
150-225	30	10	15	5	13	5	7	3

6. Overcurrent protective device ratings for control circuits should be selected and installed in accordance with the NEC.
7. This table shows the minimum permissible control circuit fuse size, based on the operating coil's momentary inrush current.
8. ASCO furnished control fuses are rated at 15 Amps.

Wire Size for Service and Control Connections [9,10]

Switch Rating Amps	AL or CU Terminal Lug Wire Range AWG-MCM	No. of Cable per Terminal Lug Connector
30	14-8	1
60-75	12-2	1
100	14-1/0	1
150-200	6-250	1
225	4-400	1

9. Control circuit connections are supplied with terminals accommodate a copper wire range of #14 AWG to #10 AWG.
10. Service connection for switches on sub-panels are furnished with solderless lugs to accommodate copper or aluminum wire, except on 30 Amp size which is provided with 1/4" studs.

Maximum Distance Between Control Station and One ASCO 920 RC Switch with Source Line Voltage at 90% of Normal [11]

Switch Rating Amps	AWG No.	Distance in Feet [12,13]		
		120 Volts, 60Hz	240 Volts, 60Hz	277 Volts, 60Hz
30-100	14	465	1860	2480
	12	740	2960	3940
	10	1175	4700	6265
150-225	14	395	1580	2100
	12	630	2520	3350
	10	1000	4000	5325

11. If the control device does not have adequate current-carrying capacity to control the switch directly, or the control station is to be located a greater distance from the switch than is allowed in the above table, auxiliary control relays for 2-wire, or 3-wire control are available. See optional accessories on inside tab.
12. For 208 volt system, reduce 240 volt values by 15%.
13. For 265 volt system, reduce 277 volt values by 5%.

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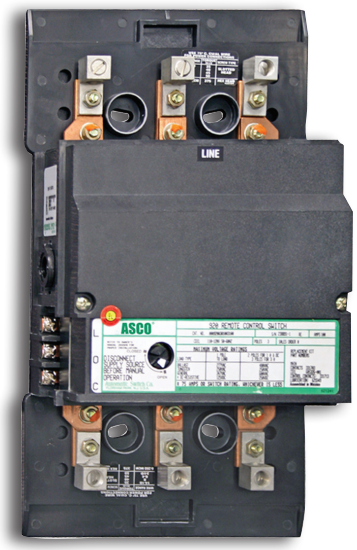
ASCO 920 Ordering Information

Product Code	No. of Poles	Continuous Ampere Rating		Voltage Code		Sub-Panel	Options	Enclosures
		AC/DC [1]	AC	Voltage [2]	Code			
920	2 3	30 60 75	100 150 200 225	110 to 120V 208 to 240V 265 to 277V 440 to 480V Other Voltages Up to 480	3 6 7 9 X	0 = No [3] Sub Panel 1= Sub-Panel	Leave Blank for No Options. "X" Indicates Options. List Separately. See Below.	Leave Blank for Open - Type. "C" Indicates NEMA Type1, or Specify Other Type Required.

1. For DC service, maximum current rating is 75 Amps or switch rating, whichever is less, with maximum voltage rating of 125 volts when connected 1 pole to load and 250 volts when connected 2 poles to the load.
2. All at 50 or 60 Hz. For voltages other than those listed, and for DC applications, contact your nearest ASCO source.
3. Specified only when ASCO 920 is to be mounted within a panelboard. A sub-panel is required when mounting in NEMA type enclosures

Example: The catalog number for an ASCO 920, 3-pole, 225-amp switch with a control coil voltage of 277 volts, 60 Hz, with an Optional Accessory 48 and a sub-panel, in a NEMA Type 1 enclosure is: 920322571XC with option 48A(120V)



ASCO 920 Remote Control Switch with sub-panel

Optional Accessories

Option Description	See Notes	Specify Option
Auxiliary contacts, one normally open and one normally closed. Supplied as a pair. Rated 10 amps at 480 VAC.	1	14A and 14B
Fully-rated neutral plate	2	22
Auxiliary control relay for 2-wire control	3,5,6	47
Auxiliary control relay for 3-wire control	3,5,6	48
Auxiliary control relay for Form 3 control	3,5,6	49
Control line fuse: For grounded control voltage (to 300V) For ungrounded control voltage (to 300V) For ungrounded control voltage (301 - 600V)	4,5	52A 52B 52C

1. A maximum of one pair of optional 14A and 14B contacts can be supplied on the above indicated remote control switches.
2. The Amperage of the neutral plate will be equal to the Amperage of the specified remote control switch. Lugs capable of accommodating the same cables as a single main pole are provided.
3. When ordering specify desired control voltage. See next page for control voltages.
4. Control line fuses can be used to supply power from the remote control switch enclosures to external control stations. Any incoming service or control power should have appropriate overcurrent protection at their source as required by application codes. For a grounded control voltage, one fuse should be ordered; for an ungrounded control voltage, two fuses should be ordered.
5. Shipped loose for open types. Installed for enclosed types.
6. U.L. recognized.

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ASCO 920 Optional Auxiliary Control Relays

Features

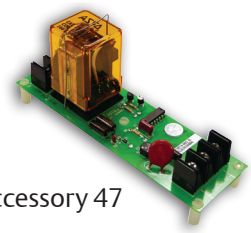
- Allows control of RC switches directly from energy management systems.
- UL recognized for use with ASCO RC switches.
- Permits low voltage AC or DC normal.
- Low VA burden.
- Narrow width design.
- Incorporates ASCO 115 relays.
- Polycarbonate dust cover for protection against industrial environment.
- Barrier screw type terminals with approved means for solderless connection of conductors.

Auxiliary Control Relays to Operate RC Switches are useful when:

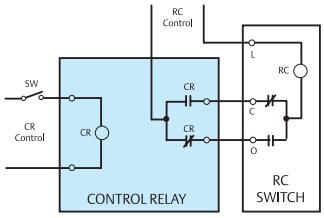
- When the controlling device does not have adequate current-carrying capacity to directly control the RC switch.
- When the control station is to be located at a distance greater than the allowable RC switch line run.
- When the controlling device is only available as a single pole, single throw contact, necessitating a two-wire control line.
- When Form 3 (start-stop) control for an RC switch is required.

Two-Wire Control Accessory 47
Catalog No. 321A40

ASCO relay for two-wire control.
Standard Control Voltages:
24,120, 208, 240, 277VAC, 50 or 60Hz, 24 or 110VDC



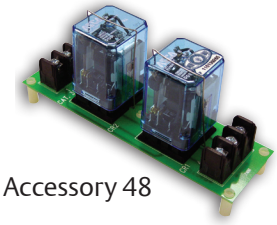
Accessory 47



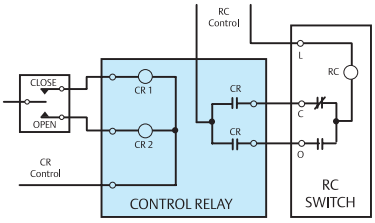
Two-wire relay control of a remote control switch

Three-Wire Control Accessory 48
Catalog No. 321A36

ASCO relay for three-wire control.
Standard Control Voltages:
24,120, 208, 240, 277VAC, 50 or 60Hz, 12, 24, 32, 48 or 110VDC



Accessory 48



Three-wire relay control of a remote control switch

Dimensions inches (mm) for ASCO two-wire and three-wire Control Relays [1]

Height	Width	Depth
6-1/2”	2”	3-3/8”
165 (mm)	51 (mm)	86 (mm)

1. Dimensional data is approximate and subject to change. Certified dimensions available upon request.

Operating Coil Characteristics

Rating	Accessory 47	Accessory 48
Nominal AC	3.0 VA	2.0 VA
Pickup Voltage AC	85% of Nominal	85% of Nominal
Nominal DC	2.5 Watts	1.2 Watts
Pickup Voltage DC	80% of Nominal	75% of Nominal
Maximum Voltage	120% of Nominal	120% of Nominal

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