

Main Features:

The M221 switch is designed for main and auxiliary circuits operated by hand as ON/OFF, code, gang, changeover, multi-step, instrument or motor switches. The modular design offers different switching stages which can be easily assembled and disassembled. Spring pressure keeps the bridge closed and a cam disk opens it forcibly.

- Sturdy, double-pivoted stop ensures precise switching.
- Switching stages, latching mechanisms and cover plates are bolted together to form the basic switch.
- Three cam disks per switching stage prevents unilateral lifting forces to the slide.
- Switching angles of 30, 45, 60 and 90 degrees are available.
- Dust protection cover, cylinder locking, padlockable handle options available.

Ordering Information

- Determine basic switching design.** Standard switches may be selected from the standard switch listing. We require the number of positions; contact closure in each position.
- Select mounting unit.** Type A -- Standard Mounting -- Size 2 (S2 switches); Type B -- Larger Mounting -- Size 4 (use on S2 switches).
- If escutcheon plate** (name plate) is desired, select appropriate item.
- Choose a handle** to operate switch.

Note: If "A" is selected, choose matching units from "A" column.



Building the Part Number ...

	Mounting Units	
	A	B
Front	E03	E13
Rear	E02	E12
Front & Rear	E10	E14
Single Hole	E04	
	22.5 mm	30.5 mm
	-20	-30
Square escutcheon		
	-21	-31
Rectangular escutcheon		
	-22	-32
Without escutcheon		

See reverse side for dimensions. If rear mounting is needed, long shaft or door interlock must be specified in the order.

	Escutcheon Plates		
	A	B	
Square			
Order	2PS	4PS	
Dimen. (H)	1.89"	2.52"	
Dimen. (W)	1.89"	2.52"	
Rectangular			
Order	2PR	4PR	
Dimen. (H)	1.89"	2.52"	
Dimen. (W)	2.36"	3.15"	
Combination of escutcheon and handle			
Change the last two digits of the order number to reflect your escutcheon and handle type combinations.			
Escutcheon	Legend Plate	Handle	Order No.
Black	Silver	Black	...M1/N1
Grey	Silver	Grey	...M2/N2
White	Silver	White	...M3/N3
Yellow	Yellow	Red	...M4/N4
Black	Silver	Red	...M5/N5

Handles / Operators	
M-Handle (Modern)	
	mm in.
	L 27 1.06
	W 37 1.46
	D 28 1.10
...M1	
N-Handle (Bar)	
	mm in.
	L 27 1.06
	W 27 1.06
	D 23 0.91
...N1	
Also available: Key operator and padlockable handle	
Standard handle: Black. See "Combinations of escutcheon and handle" table to the left for other color selections.	

M221 20A / 300V Cam Switch



PC&S products are manufactured under a total quality system that provides total engineering integrity. Products have been engineered to satisfy specifications, performance, reliability and life cycle to exacting standards.

PC&S strives to meet customer requirements and exceed expectations. We do this through monitoring and measuring our process and product, customer satisfaction, internal auditing, analysis of production data, continual improvement including corrective and preventative action. Our quality management systems are certified in accordance with ISO 9001:2000 standards.

AC Ratings

Operating Voltage	Volts	300
U/L 508 and/or CSA C22.2-14		

Continuous Current	AMPS	20
--------------------	------	----

Horsepower Rating	120V	1
(40-60 hz) per	240V	2

U/L 508 and/or	480V	5
CSA C22.2-14	600V	5

Ampere Rating per	AMPS	20
-------------------	------	----

U/L 508 and/or CSA C22.2-14

Make and break = 6 to 10 times
normal current min.

Kilowatt Rating per	220V	3
---------------------	------	---

IEC 408, 30, AC3	380V	5.5
------------------	------	-----

	500V	5.5
--	------	-----

Wire Size	AWG	12
-----------	-----	----

	MM ²	2.5
--	-----------------	-----

Operating Temperature

Range °F: -13°F to +122°F

Range °C: -25°C to +50°C

Mechanical Details

Mounting Forms

- Four hole panel mounting
- Single hole panel mounting
- Base mounting
- Insulated enclosure, surface mount

Handles / Operators

- M-Handle
- N-Handle
- Key Operator
- Padlockable Handle

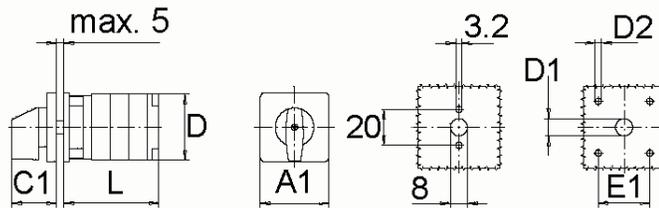
Options

- Dust protective cover
- Cylinder lock
- Door clutch
- Door clutch, interlock, padlock device
- Installation snap mounting

UL Approved

For other ratings, refer to the appropriate data sheet.

Dimensions



	mm	in.
A1	48	1.89
C1	31.5	1.24
D	46	1.81
D1	12	0.47
D2	4.5	0.18
E1	36	1.42

'L'	Stages	1	2	3	4	5	6	7
Dimensions	Length (in.)	1.57	1.97	2.36	2.76	3.15	3.54	3.94

Max. 12 stages. Each additional stage adds 0.39" (10mm)



Power Measurement and Control Specialists

1 800 523-9194 • www.pc-s.com

Your Local PC&S Representative:

PANEL COMPONENTS & SYSTEMS, INC.
USA: 149 Main Street, Stanhope, NJ 07874
Telephone: (973) 448-9400 Fax: (973) 448-1674

CANADA: 213 Jespersen Ave., Spruce Grove, Alberta T7X 2J1
Telephone: (877) 962-0557 Fax: (780) 962-0557