

# HIGH CURRENT SNAP ACTION SERIES (HCP)

## ALCOSWITCH

### INTRODUCTION

TE Connectivity (TE)'s Alcoswitch HCP series offers more flexibility through various combinations of lever styles in a higher current rated switch. The new current rating options include 10, 16, 20 and 26 amp versions. These switches are designed to convert a mechanical action in an electrical one. This makes them very suitable for applications such as home appliances and factory automation as well as other domestic and industrial uses.

TE's Alcoswitch snap action switches are designed to industry standard sizes, making them extremely suitable for use in existing designs. They are available with various contact styles to aid flexibility.

### APPLICATIONS

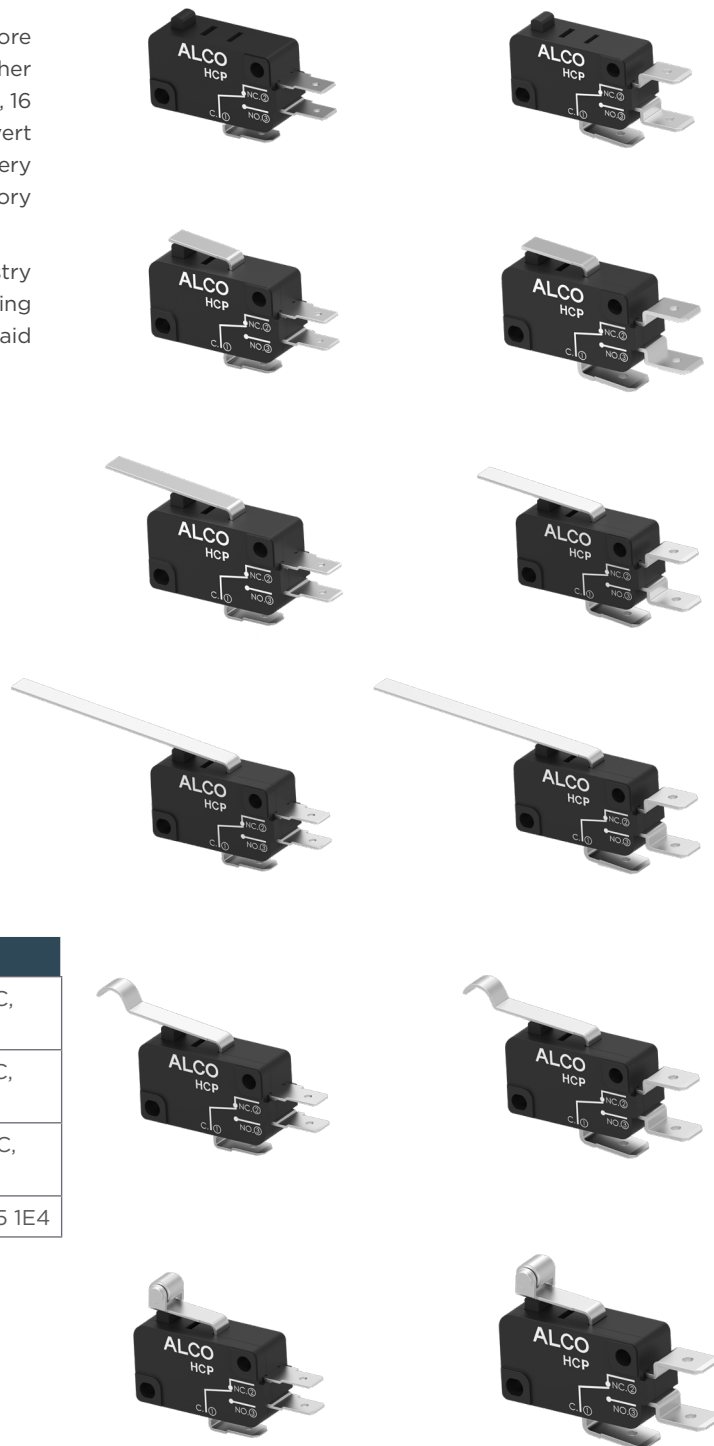
- Industry common size
- Home appliances
- White goods
- Automation and process control
- Security
- Electronic equipment

### FEATURES

- Solder terminals.
- Highly reliable with long operating life.

### APPROVALS

Model Name	UL, cUL	ENEC
HCP-10	10RA 125/250VAC μT85 5E4	10(4)A 125/250VAC, μ40T125 1E4
HCP-16	16RA 125/250VAC μT85 5E4	16(4)A 125/250VAC, μ40T125 1E4
HCP-20H	20RA 125/250VAC μT85 2E4	20(4)A 125/250VAC, μ40T125 1E4
HCP-26Q	None	26A 125/250VAC, μT85 1E4



# ALCOSWITCH HCP SERIES

## HIGH CURRENT SNAP ACTION SWITCHES

### PRODUCT SPECIFICATION

Contact resistance (Initial)	Max. 300 mΩ Measured by ohm meter - open voltage < 1VDC, driver current -100 mA
Insulation resistance (at 500 VDC / minute)	Min. 100 MΩ
Dielectric strength	Min. 500VAC (50-60HZ)/minute between Live parts. Min. 1500VAC (50-60HZ)/minute between Live parts and dead metal parts
Mechanical life	Min. 10,000,000 Operations
Electrical life	Min. 10,000 Operations
Mechanical operating frequency	120 operations per minute
Vibration	10-55Hz, displacement 0.75 mm (p-p)
Insulation resistance	100MΩ @500 VDC, 100mA, 1 minute
Operating temperature	-40°C to 125°C (with no icing)

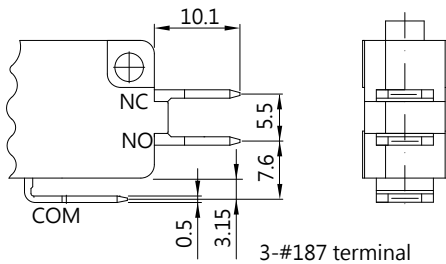
### ELECTRICAL RATINGS

Current rating	Refer. TE smart part number table	
Rated operational voltage	125 V	250 V

### TERMINAL STYLES

#### D TYPE

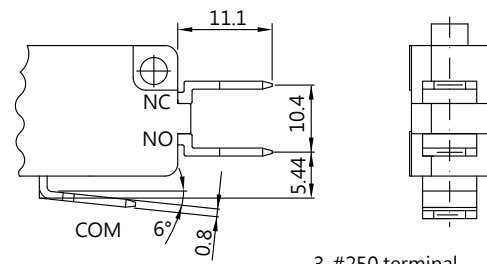
187 Series, straight (0.5t)



3-#187 terminal

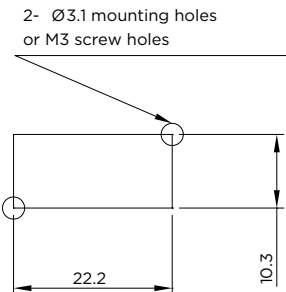
#### E TYPE

250 Series, dog-leg (0.8t)

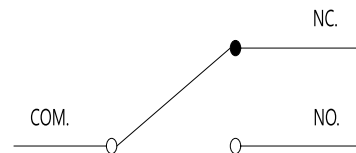


3-#250 terminal

### MOUNTING HOLE SHAPE



### CONTACT CONFIGURATION



#### Notes:

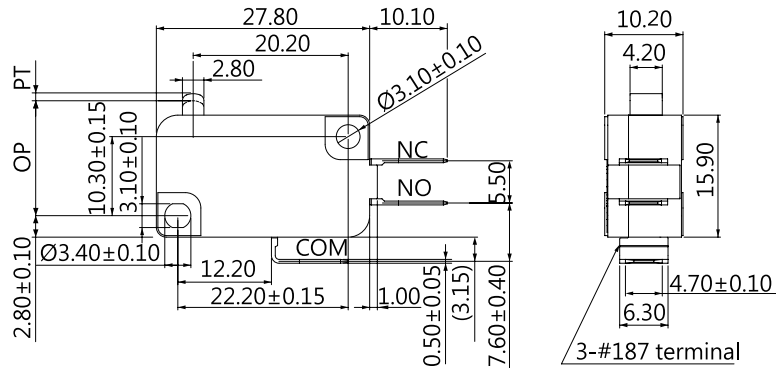
1. Dimensions in millimetres unless otherwise specified
2. Dimensions shown for reference purposes only. Specifications subject to change.

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## HIGH CURRENT SNAP ACTION SWITCHES

### DIMENSIONS (UNIT: mm)

Unless otherwise specified, a tolerance of  $\pm 0.4\text{mm}$  applies to all dimensions.



### OPERATING CHARACTERISTICS

Switch Type	Part Suffix	Operating Force Max. OF (gf)				Operating Position OP (mm)	Pre-Travel Max. PT Max. (mm)	Over-Travel Min. OT Min. (mm)	Movement Differential Max. MD Max. (mm)
		L	S	H	Q				
HCP□□DTD0□04		150	200		350	14.7 $\pm$ 0.5	1.9	1.0	0.4
HCP□□DTD1□04		150	190	290	340	15.3 $\pm$ 0.5	2.8	1.0	0.5
HCP□□DTD2□04		90	110	160	185	15.3 $\pm$ 1.1	5.9	1.2	1.0
HCP□□DTD3□04		50	65	95	110	15.3 $\pm$ 2.4	9.3	-	2.1
HCP□□DTD4□04		90	120	175	205	18.7 $\pm$ 1.3	5.5	1.9	1.1
HCP□□DTD5□04		170	220	310	375	20.7 $\pm$ 0.6	2.7	1.1	0.45

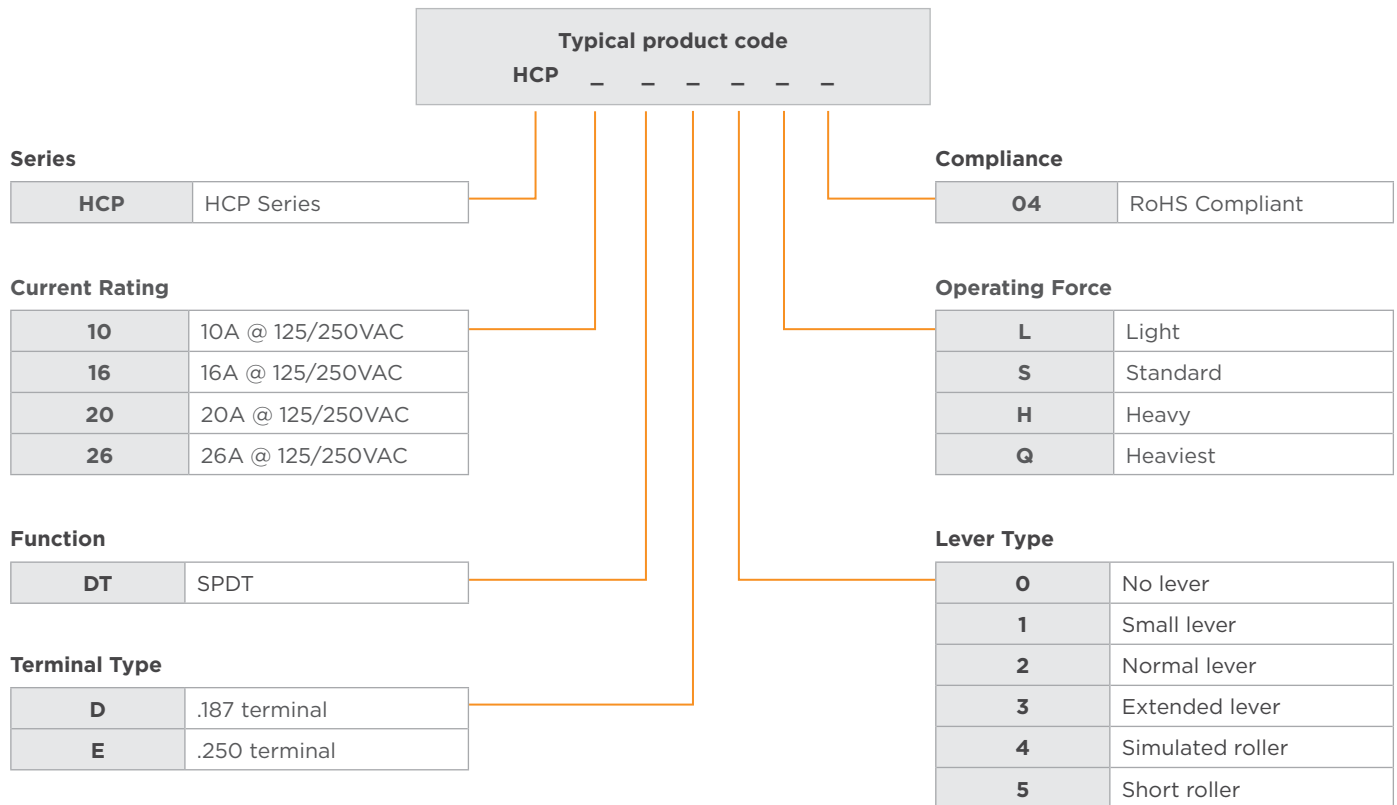
#### Notes:

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# ALCOSWITCH HCP SERIES

## HIGH CURRENT SNAP ACTION SWITCHES

### PRODUCT CODE STRUCTURE



NO LEVER



SMALL LEVER



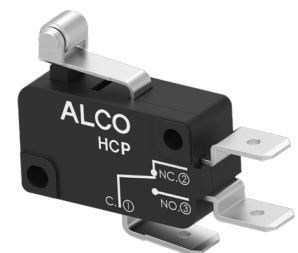
NORMAL LEVER



EXTENDED LEVER



SIMULATED ROLLER



SHORT ROLLER

# ALCOSWITCH HCP SERIES

## HIGH CURRENT SNAP ACTION SWITCHES

### PRODUCT INFORMATION

SI No.	TE Smart Number	Description	TE Part Number
1	HCPI0DTD0S04	HCP Series 10A, Standard Force, 0.187 Terminal, No Lever	2439028-1
2	HCPI0DTE0S04	HCP Series 10A, Standard Force, 0.250 Terminal, No Lever	2439028-2
3	HCPI0DTD0L04	HCP Series 10A, Light Force, 0.187 Terminal, No Lever	2439028-3
4	HCPI0DTE0L04	HCP Series 10A, Light Force, 0.250 Terminal, No Lever	2439028-4
5	HCPI0DTD1S04	HCP Series 10A, Standard Force, 0.187 Terminal, Small Lever	2439028-5
6	HCPI0DTE1S04	HCP Series 10A, Standard Force, 0.250 Terminal, Small Lever	2439028-6
7	HCPI0DTD1L04	HCP Series 10A, Light Force, 0.187 Terminal, Small Lever	2439028-7
8	HCPI0DTE1L04	HCP Series 10A, Light Force, 0.250 Terminal, Small Lever	2439028-8
9	HCPI0DTD2S04	HCP Series 10A, Standard Force, 0.187 Terminal, Normal Lever	2439028-9
10	HCPI0DTE2S04	HCP Series 10A, Standard Force, 0.250 Terminal, Normal Lever	1-2439028-0
11	HCPI0DTD2L04	HCP Series 10A, Light Force, 0.187 Terminal, Normal Lever	1-2439028-1
12	HCPI0DTE2L04	HCP Series 10A, Light Force, 0.250 Terminal, Normal Lever	1-2439028-2
13	HCPI0DTD3S04	HCP Series 10A, Standard Force, 0.187 Terminal, Extended Lever	1-2439028-3
14	HCPI0DTE3S04	HCP Series 10A, Standard Force, 0.250 Terminal, Extended Lever	1-2439028-4
15	HCPI0DTD3L04	HCP Series 10A, Light Force, 0.187 Terminal, Extended Lever	1-2439028-5
16	HCPI0DTE3L04	HCP Series 10A, Light Force, 0.250 Terminal, Extended Lever	1-2439028-6
17	HCPI0DTD4S04	HCP Series 10A, Standard Force, 0.187 Terminal, Simulated Roller	1-2439028-7
18	HCPI0DTE4S04	HCP Series 10A, Standard Force, 0.250 Terminal, Simulated Roller	1-2439028-8
19	HCPI0DTD4L04	HCP Series 10A, Light Force, 0.187 Terminal, Simulated Roller	1-2439028-9
20	HCPI0DTE4L04	HCP Series 10A, Light Force, 0.250 Terminal, Simulated Roller	2-2439028-0
21	HCPI0DTD5S04	HCP Series 10A, Standard Force, 0.187 Terminal, Short Roller	2-2439028-1
22	HCPI0DTE5S04	HCP Series 10A, Standard Force, 0.250 Terminal, Short Roller	2-2439028-2
23	HCPI0DTD5L04	HCP Series 10A, Light Force, 0.187 Terminal, Short Roller	2-2439028-3
24	HCPI0DTE5L04	HCP Series 10A, Light Force, 0.250 Terminal, Short Roller	2-2439028-4
25	HCPI6DTD0S04	HCP Series 16A, Standard Force, 0.187 Terminal, No Lever	2435260-1
26	HCPI6DTE0S04	HCP Series 16A, Standard Force, 0.250 Terminal, No Lever	2435260-2
27	HCPI6DTD0L04	HCP Series 16A, Light Force, 0.187 Terminal, No Lever	2435260-3
28	HCPI6DTE0L04	HCP Series 16A, Light Force, 0.250 Terminal, No Lever	2435260-4
29	HCPI6DTD1S04	HCP Series 16A, Standard Force, 0.187 Terminal, Small Lever	2435260-5
30	HCPI6DTE1S04	HCP Series 16A, Standard Force, 0.250 Terminal, Small Lever	2435260-6
31	HCPI6DTD1L04	HCP Series 16A, Light Force, 0.187 Terminal, Small Lever	2435260-7
32	HCPI6DTE1L04	HCP Series 16A, Light Force, 0.250 Terminal, Small Lever	2435260-8
33	HCPI6DTD2S04	HCP Series 16A, Standard Force, 0.187 Terminal, Normal Lever	2435260-9
34	HCPI6DTE2S04	HCP Series 16A, Standard Force, 0.250 Terminal, Normal Lever	1-2435260-0
35	HCPI6DTD2L04	HCP Series 16A, Light Force, 0.187 Terminal, Normal Lever	1-2435260-1
36	HCPI6DTE2L04	HCP Series 16A, Light Force, 0.250 Terminal, Normal Lever	1-2435260-2
37	HCPI6DTD3S04	HCP Series 16A, Standard Force, 0.187 Terminal, Extended Lever	1-2435260-3
38	HCPI6DTE3S04	HCP Series 16A, Standard Force, 0.250 Terminal, Extended Lever	1-2435260-4
39	HCPI6DTD3L04	HCP Series 16A, Light Force, 0.187 Terminal, Extended Lever	1-2435260-5
40	HCPI6DTE3L04	HCP Series 16A, Light Force, 0.250 Terminal, Extended Lever	1-2435260-6

SI No.	TE Smart Number	Description	TE Part Number
41	HCP16DTD4S04	HCP Series 16A, Standard Force, 0.187 Terminal, Simulated Roller	1-2435260-7
42	HCP16DTE4S04	HCP Series 16A, Standard Force, 0.250 Terminal, Simulated Roller	1-2435260-8
43	HCP16DTD4L04	HCP Series 16A, Light Force, 0.187 Terminal, Simulated Roller	1-2435260-9
44	HCP16DTE4L04	HCP Series 16A, Light Force, 0.250 Terminal, Simulated Roller	2-2435260-0
45	HCP16DTD5S04	HCP Series 16A, Standard Force, 0.187 Terminal, Short Roller	2-2435260-1
46	HCP16DTE5S04	HCP Series 16A, Standard Force, 0.250 Terminal, Short Roller	2-2435260-2
47	HCP16DTD5L04	HCP Series 16A, Light Force, 0.187 Terminal, Short Roller	2-2435260-3
48	HCP16DTE5L04	HCP Series 16A, Light Force, 0.250 Terminal, Short Roller	2-2435260-4
49	HCP20DTD0H04	HCP Series 20A, Heavy Force, 0.187 Terminal, No Lever	2435261-1
50	HCP20DTE0H04	HCP Series 20A, Heavy Force, 0.250 Terminal, No Lever	2435261-2
51	HCP20DTD1H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Small Lever	2435261-3
52	HCP20DTE1H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Small Lever	2435261-4
53	HCP20DTD2H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Normal Lever	2435261-5
54	HCP20DTE2H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Normal Lever	2435261-6
55	HCP20DTD3H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Extended Lever	2435261-7
56	HCP20DTE3H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Extended Lever	2435261-8
57	HCP20DTD4H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Simulated Roller	2435261-9
58	HCP20DTE4H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Simulated Roller	1-2435261-0
59	HCP20DTD5H04	HCP Series 20A, Heavy Force, 0.187 Terminal, Short Roller	1-2435261-1
60	HCP20DTE5H04	HCP Series 20A, Heavy Force, 0.250 Terminal, Short Roller	1-2435261-2
61	HCP26DTD0Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, No Lever	2435262-1
62	HCP26DTE0Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, No Lever	2435262-2
63	HCP26DTD1Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Small Lever	2435262-3
64	HCP26DTE1Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Small Lever	2435262-4
65	HCP26DTD2Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, NormalLever	2435262-5
66	HCP26DTE2Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Normal Lever	2435262-6
67	HCP26DTD3Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Extended Lever	2435262-7
68	HCP26DTE3Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Extended Lever	2435262-8
69	HCP26DTD4Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Simulated Roller	2435262-9
70	HCP26DTE4Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Simulated Roller	1-2435262-0
71	HCP26DTD5Q04	HCP Series 26A, Heaviest Force, 0.187 Terminal, Short Roller	1-2435262-1
72	HCP26DTE5Q04	HCP Series 26A, Heaviest Force, 0.250 Terminal, Short Roller	1-2435262-2

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