



Cutler-Hammer

# HT800 30mm Pushbuttons

## Specifications

### Overview

The HT800 family of 30.5 mm pushbutton devices includes momentary, illuminated and mushroom-head pushbuttons, selector switches, indicating lights and push-pull switches.

#### Features

- Anodized aluminum mounting rings
- Watertight double V-gasket seals
- Extended height bulbs
- Transparent housing contact blocks
- Color-coded contact blocks
- Gold-plated contacts (on low voltage contact block)
- Reliability ridge on movable contact
- Stackable screw-mounted contact blocks
- Contact blocks can be mounted in left/right or top/bottom positions
- Standard N.C. contact opens before N.O. contact closes (break before make operation)
- Bright and long lasting LED indicating lights in six colors
- Field convertible maintained selector switches from two-position to three-position and vice versa
- Field selectable knob/lever mounting positions – at any 22.5° increment

#### Benefits

- Corrosion resistant NEMA 4X finish
- Watertight and oil-tight NEMA 4, 13 ingress protection
- Increased side illumination of indicating lights and illuminated pushbuttons
- Easy visual inspection of contact conditions
- Easily identifiable N.O. (white) or N.C. (black) contact blocks
- Gold-plated contacts suitable for logic level circuits
- Reliability ridge penetrates contamination buildup on stationary contacts
- Left/right or top/bottom mounted contact blocks allow correct positioning in retrofit applications
- All-purpose selector switches are convertible and can rotate in 22.5° increments to suit panel layouts

#### Standards and Certifications

- UL508, File No. E131568
- CSA C22.2 No. 14, File No. LR68551

#### Ingress Protection

- UL (NEMA) 1, 2, 3, 3R, 4, 4X, 12 and 13 when mounted in similarly rated enclosures

### Typical Wiring





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## Specifications

HT800 — Specifications	
Mechanical Ratings	
Frequency of Operation	
Pushbuttons	6,000 Operations per hour
Selector Switches	3,000 Operations per hour
Push-Pull Operators	3,000 Operations per hour
Mechanical Endurance/Life	
Pushbuttons	10 x 10 <sup>6</sup> Operations 6K Ops/Hr with 6 N.O. on left and 6 N.C. on right
Selector Switches	250 x 10 <sup>3</sup> Operations 3K Ops/Hr with 2 N.O. on left and 2 N.C. on right
Push-Pull Operators	250 x 10 <sup>3</sup> Operations 3K Ops/Hr with 6 N.O. on left and 6 N.C. on right
Environmental Specifications	
Operating Temperature	10 to 140°F (-12° to 60°C)
Storage Temperature	-40 to 176°F (-40° to 80°C)
Altitude	6,562 ft. (2,000m)
Humidity	95% RH @ 60°C
Terminals	
Contact Blocks	#6-32 posi-drive saddle clamp type, 1 x 16 AWG to 2 x 14 AWG, 12 in-lbs max.
Light Units	#6-32 posi-drive saddle clamp type, 1 x 22 AWG to 2 x 14 AWG, 7 in-lbs max.

HT800 Standard Contact Blocks UL (NEMA) Rating				
Electrical Ratings Description/Function	Contact Type	Catalog Number	AC	DC
Standard Normally Open contact	N.O.	<a href="#">HT8A</a>	A600	P600
Standard Normally Closed contact	N.C.	<a href="#">HT8B</a>	A600	P600
Normally Open Early Make Contact will make circuit before standard N.O. contact. DC ratings do not apply.	N.O.E.M.	<a href="#">HT8C</a>	A600	—
Normally Closed Late Break contact will open after standard N.C. contact. DC ratings do not apply.	N.C.L.B.	<a href="#">HT8D</a>	A600	—
Logic level, low voltage N.O. contact. Gold plated contacts.	N.O.	<a href="#">HT8E</a>	5V 1mA (minimum) 28V 500mA (maximum)	

UL (NEMA) A600 and P600 Ratings							
Description	Volts AC 50/60 Hz				Volts DC <sup>1</sup>		
	120	240	480	600	125	250	600
Make and Emerg. Interrupting Capacity (Amp)	60	30	15	12	1.1	0.55	0.2
Normal Load Break (Amp)	6	3	1.5	1.2	1.1	0.55	0.2
Thermal Current (Amp)	10	10	10	10	5	5	5
Volt amperes							
Make and Emerg. Interrupting Capacity	7200	7200	7200	7200	138 <sup>2</sup>	138 <sup>2</sup>	138 <sup>2</sup>
Normal Load Break	720	720	720	720	138	138	138

Note: 1: DC ratings do not apply to N.O.E.M. (Normally Open Early Make) and N.C.L.B. (Normally Closed Late Break) contact blocks HT8C and HT8D.

2: Maximum make or break volt-amperes at 300V or less





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# HT800 30mm Contact Blocks & Accessories

## Contact blocks

**HT8A****HT8B**

HT8 Series Contact Blocks		
Part Number	Description	Price
<b>HT8A</b>	Normally open contact block for HT8 series switches. NEMA Rated A600, P6001	\$16.50
<b>HT8B</b>	Normally closed contact block for HT8 series switches. NEMA Rated A600, P6001	\$16.50
<b>HT8C</b>	Early closing normally open contact block for HT8 series switches. NEMA Rated A6001	\$40.00
<b>HT8D</b>	Late opening normally closed contact block for HT8 series switches. NEMA Rated A6001	\$16.50
<b>HT8E</b>	Logic level normally open contact block for HT8 series switches. Gold plated contacts for reliable low energy switching. Power Rating: Min 1mA @ 5V; Max 500mA 28V.	\$33.00

### Notes

1. See HT800 specifications in this section for typical contact wiring diagram.
2. NEMA ICS 5-2000. For more information, refer to HT800 technical specifications and control circuit contact electrical ratings at the beginning of this section.

## Spare parts and tools

**HT8WRENCH****HT8LAMPTOOL****109305****HT8BULBV3****HT8LEDYF3**

HT8 Series Spare Parts and Tools		
Part Number	Description	Price
<b>HT8WRENCH</b>	Installation wrench for Cutler-Hammer HT8 series and E22 series pushbuttons, switches, and indicators	\$19.00
<b>HT8LAMPTOOL</b>	Bulb extraction tool for removing bulbs from switches, indicators and stacklights	\$10.00
<b>109305</b>	Knockout punch hole cutting tool for 30.5 mm mounting hole. Includes punch, die and draw stud	\$34.50
<b>HT8X1</b>	Spare anti-rotation ring for HT8 series. Included with each HT8 device. (not shown)	\$3.25
<b>HT8X2</b>	Spare trim ring for HT8 series. Included with each HT8 device. (not shown)	\$3.25
<b>HT8X3</b>	Spare sealing/spacing ring for HT8 series. Included with each HT8 device. (not shown)	\$3.25
<b>HT8GR1</b>	Spare grounding kit for HT8 series devices except non-PTT indicators. Included with each HT8 device. (not shown)	\$3.25
<b>HT8GR2</b>	Spare grounding kit for HT8 series non-PTT indicators. Included with each HT8 device. (not shown)	\$3.25
<b>HT8BULBV3</b>	24 volt incandescent bulb for HT8 illuminated devices. This is an extended bulb for enhanced illumination with HT8 devices. 50mA at 24 volts.	\$14.00
<b>HT8BULBV7</b>	120 volt incandescent bulb for HT8 illuminated devices. This is an extended bulb for enhanced illumination with HT8 devices. 19mA at 120 volts.	\$14.00
<b>HT8LEDRF3</b>	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Red	\$38.50
<b>HT8LEDYF3</b>	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Yellow	\$38.50
<b>HT8LEDGF3</b>	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Green	\$40.00
<b>HT8LEDBF3</b>	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Blue	\$44.00
<b>HT8LEDWF3</b>	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: White	\$48.50
<b>HT8LEDAF3</b>	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Amber	\$39.00
<b>HT8LEDRF7</b>	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Red	\$38.50
<b>HT8LEDYF7</b>	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Yellow	\$38.50
<b>HT8LEDGF7</b>	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Green	\$40.00
<b>HT8LEDBF7</b>	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Blue	\$44.00
<b>HT8LEDWF7</b>	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: White	\$48.50
<b>HT8LEDAF7</b>	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Amber	\$39.00

NOTE: LED modules have very low current draw and should not be used with triac output devices like PLC triac output modules.

# EATON 30mm Legend Plates

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## For Pushbutton Operators and Indicating Lights

Legend	Color of Field	Catalog Number	Price
Clamp	Black	<a href="#">HT8SP90</a>	\$7.75
Close	Black	<a href="#">HT8SP73</a>	\$7.75
Down	Black	<a href="#">HT8SP74</a>	\$7.75
Emergency Stop	Red	<a href="#">HT8SP13</a>	\$7.75
Fast	Black	<a href="#">HT8SP75</a>	\$7.75
Faster	Black	<a href="#">HT8SP87</a>	\$7.75
Feeder On	Black	<a href="#">HT8SP94</a>	\$7.75
Feeder Off	Black	<a href="#">HT8SP95</a>	\$7.75
Forward	Black	<a href="#">HT8SP15</a>	\$7.75
High	Black	<a href="#">HT8SP16</a>	\$7.75
In	Black	<a href="#">HT8SP17</a>	\$7.75
Inch	Black	<a href="#">HT8SP18</a>	\$7.75
Jog	Black	<a href="#">HT8SP19</a>	\$7.75
Jog Forward	Black	<a href="#">HT8SP20</a>	\$7.75
Jog Reverse	Black	<a href="#">HT8SP21</a>	\$7.75
Low	Black	<a href="#">HT8SP22</a>	\$7.75
Lower	Black	<a href="#">HT8SP23</a>	\$7.75
Lube-fail	Black	<a href="#">HT8SP92</a>	\$7.75
Motor Run	Black	<a href="#">HT8SP81</a>	\$7.75
Motor Stop	Black	<a href="#">HT8SP82</a>	\$7.75
Off	Red	<a href="#">HT8SP24</a>	\$7.75
On	Black	<a href="#">HT8SP25</a>	\$7.75
Open	Black	<a href="#">HT8SP26</a>	\$7.75
Out	Black	<a href="#">HT8SP27</a>	\$7.75
Power On	Black	<a href="#">HT8SP80</a>	\$7.75
Raise	Black	<a href="#">HT8SP28</a>	\$7.75
Ready	Black	<a href="#">HT8SP86</a>	\$7.75
Reset	Black	<a href="#">HT8SP29</a>	\$7.75
Reverse	Black	<a href="#">HT8SP30</a>	\$7.75
Run	Black	<a href="#">HT8SP31</a>	\$7.75
Safe	Black	<a href="#">HT8SP85</a>	\$7.75
Slow	Black	<a href="#">HT8SP32</a>	\$7.75
Slower	Black	<a href="#">HT8SP88</a>	\$7.75
Start	Black	<a href="#">HT8SP33</a>	\$7.75
Stop	Red	<a href="#">HT8SP34</a>	\$7.75
Test	Black	<a href="#">HT8SP83</a>	\$7.75
Transfer	Black	<a href="#">HT8SP93</a>	\$7.75
Trip	Black	<a href="#">HT8SP84</a>	\$7.75
Unclamp	Black	<a href="#">HT8SP91</a>	\$7.75
Up	Black	<a href="#">HT8SP35</a>	\$7.75

\*Note: Dimensions: 1.77" (45mm) x1.77" (45mm)

## For Selector Switch Operators/Two-Position

Legend	Color of Field	Catalog Number	Price
Forward Reverse	Black	<a href="#">HT8SP38</a>	\$7.75
Hand Auto	Black	<a href="#">HT8SP39</a>	\$7.75
High Low	Black	<a href="#">HT8SP40</a>	\$7.75
Jog Run	Black	<a href="#">HT8SP41</a>	\$7.75
Manual Auto	Black	<a href="#">HT8SP67</a>	\$7.75
Off On	Black	<a href="#">HT8SP42</a>	\$7.75
Open Close	Black	<a href="#">HT8SP43</a>	\$7.75
Run Jog	Black	<a href="#">HT8SP44</a>	\$7.75
Safe Run	Black	<a href="#">HT8SP45</a>	\$7.75
Start Jog	Black	<a href="#">HT8SP46</a>	\$7.75
Start Stop	Black	<a href="#">HT8SP47</a>	\$7.75
Up Down	Black	<a href="#">HT8SP48</a>	\$7.75

## For Selector Switch Operators/Three-Position

Legend	Color of Field	Catalog Number	Price
Auto Off Hand	Black	<a href="#">HT8SP49</a>	\$7.75
For. Off Rev	Black	<a href="#">HT8SP50</a>	\$7.75
For. Safe Rev.	Black	<a href="#">HT8SP69</a>	\$7.75
Hand Off Auto	Black	<a href="#">HT8SP51</a>	\$7.75
Man. Off Auto	Black	<a href="#">HT8SP68</a>	\$7.75
Open Off Close	Black	<a href="#">HT8SP53</a>	\$7.75
Run Safe Jog	Black	<a href="#">HT8SP70</a>	\$7.75
Up Off Down	Black	<a href="#">HT8SP54</a>	\$7.75
On Stop Safe	Black	<a href="#">HT8SP71</a>	\$7.75

## For PUSH/PULL Units

Legend 3/32" lettering	Color of Field	Catalog Number	Price
ON/OFF	Black	<a href="#">HT8PP5</a>	\$7.75
OPEN/CLOSE	Black	<a href="#">HT8PP8</a>	\$7.75
UP/DOWN	Black	<a href="#">HT8PP11</a>	\$7.75

## Square Blank Plastic Legend Plates

Lettering	Color of Field	Catalog Number	Price
Black	White/Silver	<a href="#">HT8SP76</a>	\$7.75
White	Red/Black	<a href="#">HT8SP77</a>	\$7.75

## Round Plastic Legend Plates

Legend	Color of Field	Catalog Number	Price
ESTOP	Yellow	<a href="#">HT8RP79</a>	\$7.75

NOTE: 70 mm / 2-3/4" diameter

NOTE: All 30 mm legend plates are plastic.