

# Switches and Circuit Protection

Yachts, Cabin Cruisers, Ski  
Boats, Pontoons, Fishing Boats,  
Commercial/Work Boats, Sail  
Boats and more.

## Marine

Industry Brochure  
and Selector Guide



# Featured Switch Products

NEW



## AV/AVH-Series >

Sealed pushbutton switch featuring a stainless design with various LED illumination options.

1 Pole  
AV-Series: up to 10.1A 12VDC  
AVH-Series: up to 30A 12VDC  
IP67 Rated

NEW



## HR-Series >

Sealed and stylish, low-profile actuator with a variety of illumination options.

1-2 Poles  
1-20A, 12VDC  
IP68 Rated  
Up to 10 Terminals



## V-Series >

Countless options for actuator styles, illumination, and legends.

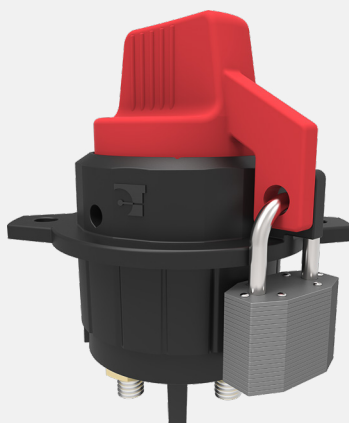
1-2 Poles  
Dry circuit up to 15A, 24VDC; 15A 125VAC; 10A 250VAC  
IP66/68 Rated



## W-Series >

Features dual level and multicolor LED illumination options; progressive

1-2 Poles  
2 or 3 Positions  
Full Sealing Protection  
Including Below Panel  
Up to 10A 24V  
.110 Tab Terminals



## BD-Series >

Minimizes battery drain, ensures maintenance personnel safety

1 Pole  
Full Sealing Protection, Including  
Below Panel  
100-300A, 12/24VDC  
M10 or M14 Stud Terminals



## LT-Series >

Offers a three-color lighting sequence from a single lamp

1-2 Poles, 2 or 3 Positions  
Independent or Dependent  
Illumination  
10/15A, 125/250VAC  
15A, 12-28VDC  
Paddle and Toggle Actuators



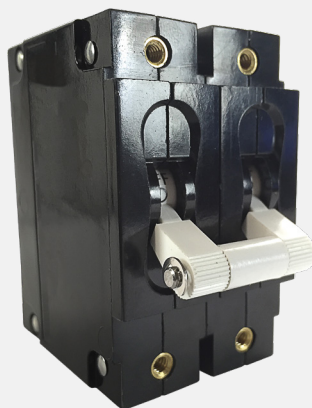
# Featured Circuit Protection Products



## A-Series >

A compact, temperature stable general purpose hydraulic-magnetic circuit breaker.

1-6 Poles  
0.02-50A, up to 80VDC, 250VAC  
UL1077, CSA, VDE, TUV (rocker)  
UL1500, UL489A



## C-Series >

Hydraulic-magnetic circuit breaker ideal for high amperage applications

1-6 Poles  
0.02-250A, up to 150VDC, 480VAC  
UL1077, CSA, VDE, TUV  
UL1500, UL489, UL489A



## M-Series >

Cost effective, general purpose, miniature hydraulic-magnetic circuit breaker.

1-2 Poles  
0.02-50A, up to 80VDC, 250VAC  
Illuminated Option Available  
UL1077, CSA, VDE, TUV, UL489A listed



## PC-Series >

GFCI/ELCI circuit breaker with maximum equipment and user protection. Optional seal.

1-3 Poles  
0.10-30A, 120-240VAC  
Status LED indicators  
UL943 Approved



## CLB-Series >

Compact thermal breaker that is reliable with high resistance against shock and vibration.

1 Pole  
3 to 60A, 125-250VAC, 32VDC  
2500A@32VDC  
Front Panel Snap-In Mounting



## CMB-Series >

Compact thermal breaker that is reliable with high resistance against shock and vibration.

1 Pole  
3 to 20A, 125-250VAC, 32VDC  
2500A@32VDC  
Front Panel Snap-In Mounting

# Selector Guide

## SWITCHES

Sealed Rockers, Rotary and Dual Port USB Charger



**HR-Series**

**V-Series**

**W-Series**

**V-Rotary**

**V-Charger**

Poles	1,2	1,2	1,2	2	1
Ratings	IP68; 20A 12V	IP66/68; up to 20/15A 12/24VDC 15A 125VAC 10A 250VAC	IP68 including connector; up to 10A 24VDC	up to 15A 24VDC 20A 12VDC	up to IP65 12V/24VDC
Actuator	Laser-Etched Rocker	Rocker, Paddle, Locking Rocker	Bezel-Less Rocker, Paddle & Locking Rocker	IP67, ergonomic knob	sealed spring-loaded access doors; curved or square
Mounting Hole Specifications	.830" x 1.450" [21.08mm x 36.83mm] snap-in mount	.830" x 1.450" [21.08mm x 36.83mm] snap-in mount	.830" x 1.450" [21.08mm x 36.83mm] snap-in mount	.830" x 1.450" [21.08mm x 36.83mm] snap-in mount	.830" x 1.450" [21.08mm x 36.83mm] snap-in mount
Termination	.110 tabs	.250 tabs, solder lug, wire leads	.110 tabs	solder lug .250 tabs wire leads	.250 tabs
Illumination	LED	incandescent, LED, neon	LED	incandescent, LED	LED
Approval	n/a	UL, CSA	n/a	n/a	n/a

Pushbuttons, Toggles and Battery Disconnects



**AV/AVH-Series**

**P26-Series**

**P27-Series**

**F/G-Series**

**BD1-Series**

**BD-Series**

Poles	1	1	1	1,2	1	1
Ratings	AV-Series: up to 10.1A 12VDC AVH-Series: up to 30A 12VDC	up to 3A 250VAC 6A 125VAC 3/4A 125V	up to 6A 125VAC 3A 277VAC	up to 20A 125VAC 20A 277VAC 2 HP 250VAC	250 Amps 12VDC/24VDC	100-300 Amps 12VDC/24VDC
Actuator	pushbutton	Pushbutton	pushbutton	paddle, toggle (bat)	ergonomic knob; removable option available	ergonomic knob
Mounting Hole Specifications	.748" dia [19mm] bushing mount	.500" diameter; 12.70mm diameter	.500" dia [12.7mm] bushing mount	.500" dia [12.7mm] bushing mount	M6/M7 Bolt and Nut	M8 Bolt and Nut
Termination	.110 tabs wire leads	Solder Lugs Wire Leads	.250 tabs solder lug wire leads	.187 tabs solder lug .250 tabs screw terms wire leads PC terms	M10 Stud; 19 and 27mm length	M10 Stud M14 Stud
Approval	UL1500	UL, CSA, VDE	UL, CSA	UL, CSA, VDE	n/a	n/a

# Selector Guide

## CIRCUIT PROTECTION

Hydraulic-Magnetic



**A-Series**



**B-Series**



**C-Series**

Poles	1-6 (handle) 1-3 (rocker/toggle)	1-6	1-6 (handle) 1-3 (rocker/toggle)
Actuator Style	sealed metal toggle, handle, rocker, paddle	handle, rocker	sealed metal toggle, handle, rocker
Available Delays	AC, DC, AC/DC: instantaneous, ultra-short, short, medium & long AC, DC: high inrush-short, medium & long	AC, DC, AC/DC: instantaneous, ultra-short, short, medium & long AC, DC: high inrush-short, medium & long	AC, DC, AC/DC: instant, ultrashort, short, medium & long AC, DC: high inrush-short, medium & long
Max Current & Voltage Ratings	0.02-30A@ 277VAC, 80VDC 31.0-50A@ 125/250VAC, 65VDC	0.02-30A@ 277VAC, 80VDC 0.02-30A@ 125/250VAC, 65VDC	UL Listed: 0.02-250A@80VDC 0.1-100A@125VDC 0.02-70A@120VAC 0.02-20A@240VAC UL Recognized: 0.02-30A@ 480WYE/277VAC 2 Pole, 1Ø; 3 Pole, 3Ø 0.02-50A@277VAC 0.02-100A@ 250VAC, 80VDC 0.02-100A@ 120/240VAC, 65VDC
Max Interrupting Capacity	7500A@80VDC, UL only 3000A @ 120/250VAC, UL only 5000A@277VAC, with fuse backup	7500A @ 80 VDC, UL only 3000A @ 125/250VAC, UL only 5000A @ 277VAC, with fuse backup	UL Listed: 50000A@80VDC, 1P only 10000A@120VAC 5000A@125VDC/240VAC UL Recognized: 7500A@80VDC 3000A@125/250VAC, UL only 5000A@250VAC listed construction 5000A@480WYE/277VAC with fuse backup
Auxiliary Switch Rating	10.1A@125VAC 0.1A@125VAC (gold contacts) 0.5A@65VDC 0.1A@80VDC	10.1A@125 VAC 0.1A@125 VAC (gold contacts), 0.5A@65 VDC 0.1A@80 VDC	10.1A@250 VAC 0.1A@125 VAC (gold contacts), 0.5A@80 VDC
Available Circuits	series, shunt, relay, switch only, series with remote shutdown, relay & shunt trip dual coil	series, shunt, relay, switch only, series with remote shutdown, relay & shunt trip dual coil, mid-trip with alarm switch	series, shunt, relay, switch only, series with remote shutdown, relay & shunt trip dual coil, mid-trip with alarm switch
Terminal Options	.250" QC tabs 8-32 & 10-32 screw (& metric), PCB	.250" QC tabs, 8-32 & 10-32 screw (& metric), PCB	10-32 stud, 1/4-20 stud, 10-32 screw with saddle clamp, 7/16 clip & push-In
Mounting Methods	threaded inserts: front panel snap-in	threaded inserts: front panel snap-in	threaded inserts
Agency Approvals	UL1077, CSA, VDE, TUV (rocker), UL1500, UL489A	UL1077, CSA, VDE, TUV; UL1500, UL489, UL489A	UL1077, CSA, VDE, TUV, UL1500, UL489, UL489A

# Selector Guide

## CIRCUIT PROTECTION

Hydraulic-Magnetic



**E-Series**



**M-Series**



**J-Series**



**H-Series**

Poles	1-6	1-2	1-3	1-3
Actuator Style	handle	rocker (curved & flat), visi-rocker, paddle, baton, push-to-reset & push-pull pushbuttons	curved rocker, flat rocker, push-to-reset guard, handle	handle, rocker (curved & flat)
Available Delays	AC, DC, AC/DC: instant, short, medium & long, high inrush-short, medium & long	AC/DC: instantaneous, short, medium, hi-inrush	AC, ultrashort, shot, medium, long, high inrush	AC, DC: instantaneous, ultra-short, short, medium & long
Max Current & Voltage Ratings	UL Listed 0.02-100A@ 240VAC, 80VDC, 125VDC UL Recognized 0.02-100A @ 277VAC, 160VDC, 1 pole 0.02-100A @600VAC, 2 Pole 1Ø 3 pole 3Ø 0.02-120A @125VDC, 1 pole	1 Pole: 0.02-15FLA@32VDC,125VAC 15.1-25GPA@32VDC,125VAC 0.02-12FLA@250VAC 0.02-7.5GPA@50VDC 0.02-30GPA@65VDC, 80VDC 2 Pole: 0.02-15FLA@65VDC, 250VAC 15.1-25GPA@65VDC, 250VAC Parallel Pole: 31-50GPA@80VDC	1-20A@ 240 VAC	1-35A@ 65VDC, 80VDC, 250VAC
Max Interrupting Capacity	UL Listed 50000A@80VDC 10000A@125VDC & 240VAC-5KA UL Recognized 5000A@125VDC 5000A@600VAC, without fuse backup 10000A@600VAC, with fuse backup	1 Pole: 1,000A@32VDC 1,000A@125VAC 2 Pole: 1,000A@65VDC 1,000A@250VAC Parallel Pole: 600A@80VDC	10,000 amps; 5,000 amps TUV	3,000 amps
Auxiliary Switch Rating	10.1A@250VAC 1.0A@65VDC 0.1A@80VDC	7A@250VAC 0.1A@125VAC (gold contacts) 7A (res.)@28VDC 4A (ind.)@28VDC 0.25A@80VDC	n/a	1.0A @ 65VDC/0.5A @ 80VDC, 0.1A @ 125VAC (gold contacts)
Available Circuits	series, shunt,relay, switch only, series with remote shutdown	series and switch only parallel pole	series trip	series, switch only, relay trip
Terminal Options	10-32 stud, 1/4-20 stud 0-32 screw, 1/4-20 screw, box wire connector	.250" QC tabs, 8-32 screw with upturned lugs, 8-32, 10-32 screw (bus type), push in stud terminals	8/32, 10/32, M4, M5	.250" QC tabs 8-32 & 10-32 screw (& metric), PCB
Mounting Methods	rear or front panel	snap-in front panel threaded bushing	threaded inserts	threaded inserts
Agency Approvals	UL1077, CSA, VDE, UL1500, UL489	UL1077, CSA, VDE, TUV, UL489A listed	UL 489, cULus, TUV certified to IEC/EN 60947-2, CCC	UL 1077, CSA Accepted, TUV certified to IEC/EN 60934, CCC

# Selector Guide

## CIRCUIT PROTECTION

GFCI / ELCI



**PC-Series**



**PB-Series**

<b>Poles</b>	1-3 poles + ELCI sensor module	1-3 poles, 3rd pole switched neutral
<b>Actuator Style</b>	handle, rocker, flat rocker, push-to-reset	handle, rocker, flat rocker
<b>Leakage Current Trip Level</b>	30mA & 6mA	30mA & 6mA
<b>Leakage Current Trip Time</b>	For 30mA leakage trip: $\leq 22.2\text{mA}$ , shall not trip 30mA, shall trip within .10 seconds, complying with UL-1053 & ABYC E11. For 6mA leakage trip: $\leq 25\text{ms}$	For 30mA leakage trip: $\leq 22.2\text{mA}$ , shall not trip 30mA, shall trip within .10 seconds, complying with UL-1053 & ABYC E11. For 6mA leakage trip: $\leq 25\text{ms}$
<b>Max Current &amp; Voltage Ratings</b>	0.10-50A@120/240VAC - 240VAC	0.10-30A@120/240VAC
<b>Max Interrupting Capacity</b>	5,000A	5,000A
<b>Available Circuits</b>	series trip	series trip
<b>Termination</b>	10-32 threaded stud	.250" tabs, 8-32, 10-32, M4,M5 screw with upturned lugs, 8-32, 10-32, M4, M5 screw, bus type
<b>Mounting Method</b>	front panel	front panel
<b>Operating Temperature</b>	-35° C to +65° C	-35° C to +65° C
<b>Agency Approvals</b>	UL 943 & CSA Approved, UL 1053, UL 1500	UL 489, UL 1077, UL 1500

## Thermal



**CLB-Series**



**CMB-Series**



**C1005B-Series**



**CTB-Series**

<b>Poles</b>	1	1	1	1
<b>Actuator Style</b>	pushbutton	pushbutton	rocker, lighted rocker	rocker
<b>Max Current &amp; Voltage Ratings</b>	3 to 60A, 125-250VAC, 32 VDC	3 to 20A, 125-250VAC, 32 VDC	7 to 16A, 125-250VAC, 32VDC	3 to 16A, 125-250VAC, 50VDC
<b>Max Interrupting Capacity</b>	2500A@32VDC	2500A@32VDC	1000A	1000A
<b>Available Circuits</b>	series trip manual reset	series trip manual reset	series trip manual reset	series trip manual reset
<b>Termination</b>	.250" tab + 90° bend, screw terminal + 90° bend	.250" tab + 90° bend, screw terminal + 90° bend	.250" tab, solder lug	.250" tab
<b>Mounting Method</b>	threaded bushing, front panel snap-in	threaded bushing, front panel snap-in	front panel snap-in	front panel snap-in
<b>Operating Temperature</b>	-10°C to 60°C	-10°C to 60°C	-10°C to 65°C	-10°C to 60°C
<b>Agency Approvals</b>	UL, cUL, TUV, CE, ISO 8846 for ignition protection / marine	UL, cUL, TUV, CE, ISO 8846 for ignition protection / marine	UL, cUL, TUV	UL, cUL, VDE, CE





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