

# **Marine Switches, Circuit Breakers & ELCI/GFCIs**

## **SELECTOR GUIDE**



# Switches



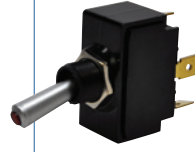
V-Series



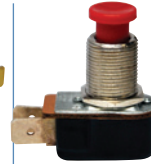
W-Series



L-Series



LT-Series



P27-Series



F-Series



G-Series

NUMBER OF POLES	Single & Double	Single & Double	Single & Double	Single & Double	Single	Single	Single & Double
RATINGS	dry circuit to 15A, 24VDC 15A, 125VAC 10A, 250VAC 20A, 18VDC	dry circuit to 10A, 24VDC	dry circuit to 15A, 24VDC 15A, 125VAC 10A, 250VAC 20A, 18VDC	10A 250VAC 15A 125VAC 3/4HP 125-250VAC	3A 250VAC 6A 125VAC 3/4A 125V	10A 250VAC 15A 125VAC 3/4HP120-240VAC  3A 250VAC 6A 125VAC 1/4HP 120-240VAC 12A, 250VAC  20A, 125VAC 1HP 120-240VAC	10A 250VAC 15A 125VAC 3/4HP 125-250VAC  3A 250VAC 6A 125VAC 1/4HP 125-250VAC  12A 250VAC 17A 125VAC 1HP 250VAC  20A 250VAC  20A 125-277VAC 1 1/2HP 125VAC 2HP 125-250VAC  10A 250VAC 15A 125VAC 12(6)A 250VAC T85 1/4HP 125-250VAC
AVAILABLE AGENCY APPROVALS	UL, CSA, VDE, UL 1500	N/A	N/A	UL CSA	UL CSA	UL, CSA	UL, CSA, VDE
ACTUATOR TYPE	Contura 2-7: Bezel-less Rocker & Locking Rocker Contura 10-12: Rocker w/Bezel, Paddle & Locking Rocker	Bezel-less Rocker, Paddle & Locking Rocker	Rocker, Paddle & Locking Rocker	Bat Toggle Translucent Paddle Clear Paddle	Nylon Concave Pushbutton	Metal Bat or Ball Style Toggles	Metal Bat or Nylon Paddle Styles
MOUNTING HOLE SPECIFICATIONS	1.45 x .83 [36.83mm x 21.08mm] Snap In	1.45 x .83 [36.83mm x 21.08mm] Snap In	1.734 x .867 [44mm x 22mm] Snap In	.500 diameter; 12.70mm diameter	.500 diameter; 12.70mm diameter	.500 diameter; through hole	.500 diameter; through hole
TERMINATION	Solder Lugs .250 tabs Wire Leads	.110 tabs	.187 tabs .250 tabs	.250 QC Tabs .187 QC Tabs Solder Lugs Wire Leads Screw Terminals PC Terminals	Solder Lugs Wire Leads .250 QC Tabs	.250 Tabs Solder Lugs Wire Leads Screw Terminals .187 Tabs	.250 QC Tabs .187 QC Tabs Solder Lugs Wire Leads Screw Terminals PC Terminals
CIRCUIT CAPACITY	10 Terminals	10 Terminals	12 Terminals	8 Terminals	2 Terminals	3 Terminals	6 Terminals
SEALING	IP66/68 above panel	IP68 above and below panel, fully submersible	IP67 above panel	Bushing O-Ring	N/A	Optional Bushing O-Ring	Optional Bushing O-Ring
ILLUMINATION	Incandescent LED Neon	LED	Incandescent LED	Incandescent Neon	N/A	N/A	N/A
ENVIRONMENTAL	MIL-STD 202F, 810C	MIL-STD 202F	MIL-STD 202F	N/A	N/A	N/A	N/A

# Circuit Breakers



**M-SERIES**



**A-SERIES**



**B-SERIES**



**C-SERIES**



**D-SERIES**



**E-SERIES**

	<b>M-SERIES</b>	<b>A-SERIES</b>	<b>B-SERIES</b>	<b>C-SERIES</b>	<b>D-SERIES</b>	<b>E-SERIES</b>
<b>NUMBER OF POLES</b>	1-2 poles	1-6 (handle); 1-3 (rocker)	1-6 (handle); 1-3 (rocker)	1-6 (handle); 1-3 (rocker)	1-4 (handle) 1-3 (rocker)	1-6
<b>ACTUATOR STYLE</b>	Solid Color Angled Rocker Solid Color Flat Rocker Two Color Visi-Rocker Illuminated Angled Rocker Illuminated Flat Rocker Solid Color Paddle Solid Color Baton Solid Color Push-to-Reset Pushbutton Solid Color Push-Pull Pushbutton	Sealed Metal Toggle, Handle, Rocker, Paddle	Handle, Rocker	Sealed Metal Toggle Handle, Rocker	Solid Color Curved Rocker (1 per unit) Two Color Visi-Rocker (1 per unit) Handle (1 per pole or 1 per unit)	Handle
<b>AVAILABLE DELAYS</b>	Instant, Short, Medium - AC/DC, Hi-Inrush	Instantaneous, Ultra- short, Short, Medium & Long, AC, DC, AC/DC High Inrush - Short, Medium & Long AC and DC	Instantaneous, Ultra-short, Short, Medium & Long, AC, DC, AC/DC High Inrush - Short, Medium & Long AC and DC	Instantaneous, Ultrashort, Short, Medium & Long, AC, DC, AC/DC High Inrush - Short, Medium & Long AC and DC	Instant, Ultra-Short, Short, Medium, Long (motor loads), AC, DC, AC/ DC; High Inrush - Short, Medium, Long	Instant, Short, Medium & Long -AC, DC, and AC/DC High Inrush - Short, Medium & Long- AC, DC, and AC/DC
<b>MAXIMUM CURRENT &amp; VOLTAGE RATINGS</b>	0.02-15FLA, 32VDC, 125VAC, 1 pole 15.1-25GPA, 32VDC, 125VAC, 1-pole 0.02-15FLA, 65VDC, 250VAC, 2-pole 15.1-25GPA, 65VDC, 250VAC, 2-pole 0.02-12FLA, 250VAC, 1-pole 0.02-7.5GPA, 50VDC, 1-pole 0.02-30GPA, 65VDC, 80VDC, 1 pole	0.02 -30A@277VAC, 80VDC 31.0-50A@125/250VAC, 65VDC	0.02 -30A@277VAC, 80VDC 31.0-50A@125/250VAC, 65VDC	UL Listed 0.02-250A@80VDC 0.02-60A@125VDC 0.02-70A@120VAC 0.02-20A@240VAC ULRecognized 0.02-30A@480WYE /277VAC2-pole, 1Ø, 3-pole, 3Ø 0.02-50A@277VAC 0.02-100A@250VAC, 80VDC 0.02-100A@120/240VAC, 65VDC	0.02-50A @ 277VAC, 65VDC 0.02-30A @ 480WYE/277VAC, 2 pole 1 phase, 3 pole 3 phase	UL Listed 0.02-100A@240VAC, 65VDC, 125VDC ULRecognized 0.02-100A@277VAC, 160VDC, 1-pole 0.02-100A@600VAC, 2-pole 1Ø, 3 pole 3Ø 0.02-120A@125VDC, 1-pole
<b>MAXIMUM INTERRUPTING CAPACITY</b>	1,000A @ 65VDC, 2-pole 1,000A @ 32VDC, 1-pole 1,000A @ 250VAC, 2-pole 1,000A @ 125VAC, 1-pole 600A @ 80VDC	3000A@65 VDC, UL only 3500A@65 VDC, w/fuse backup 3000A@125/250VAC, UL only 5000A@277VAC, w/fuse backup	3000A@65 VDC, UL only 3500A@65 VDC, w/fuse backup 3000A@125/250VAC, UL only 5000A@277VAC, w/fuse backup	UL Listed 50000A@80VDC, 10,000A@120VAC, 5000A@125VDC, 240VAC ULRecognized 7500A@80VDC 3000A@125/250VAC, ULonly 5000A@250VAC 5000A@480WYE/277V AC w/fuse backup	1,500A @ 65VDC, 250VAC (VDE only) 5,000A @ 65 VDC 5,000A @ 480WYE/277VAC w/fuse back up 3,000A @ 125/250VAC (UL only)	UL Listed 25000A@65VDC 5000A@125VDC& 240VAC ULRecognized 5000A@125VDC 5000A@600VAC, without fuse backup 10000A@600VAC, w/fuse backup
<b>AUXILIARY SWITCH RATING</b>	7A @ 250VAC 0.1A @ 125VAC (gold contacts) 7A (Res.) @ 28VDC 4A (Ind.) @ 28VDC 0.25A @ 80VDC	10.1A@125VAC 0.1A@125VAC (gold contacts) 0.5A@65VDC 0.1A@80VDC	10.1A@125VAC 0.1A@125VAC (gold contacts) 0.5A@65VDC 0.1A@80VDC	10.1A@250VAC 0.1A@125VAC(gold contacts) 0.5A@65VDC	N/A	10.1A@250VAC 1.0A@65VDC 0.1A@80VDC
<b>AVAILABLE CIRCUITS</b>	Series and Switch Only	Series, Shunt, Relay, Switch Only, Series w/Remote Shutdown, Relay & Shunt Trip Dual Coil	Series, Shunt, Relay, Switch Only, Series w/Remote Shutdown, Relay & Shunt Trip Dual Coil, Mid-Trip with Alarm Switch	Series, Shunt, Relay, Switch Only, Series w/Remote Shutdown, Relay & Shunt Trip Dual Coil, Mid-Trip with Alarm Switch	Series, Switch Only, Se- ries w/Remote Shutdown	Series, Shunt, Relay, Switch Only, Series w/Remote Shutdown
<b>TERMINAL OPTIONS</b>	.250 QC Tabs 8-32 Screw w/ Uptumed Lugs 8-32 Screw (Bus Type) Push in Stud Terminals	.250 Tab QC, 8-32 & 10-32 Screw (& metric), PCB	.250 Tab QC, 8-32 & 10-32 Screw (& metric), PCB	10-32 Stud, 1/4-20 Stud, 0-32 Screw/ saddle clamp, Clip Terminal, 1/4 & 7/16 Push-In	Recessed wire-ready, pressure plate type screw terminals	10-32 Stud, 1/4-20 Stud 0-32 Screw, 1/4-20 Screw, BoxWire Connector
<b>MOUNTING METHOD</b>	Snap-in Front Panel	Threaded inserts: Front Panel Snap-In	Threaded inserts: Front Panel Snap-In	Threaded inserts	Rear Mounted on DIN Rail or Front Panel Mounted	Rear or Front Panel
<b>OPERATING TEMPERATURE</b>	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C	-40° C to +85° C
<b>AGENCY APPROVALS</b>	UL recognized, CSA, VDE, TUV	UL, CSA, VDE, TUV(rocker), UL1500, UL489A	UL, CSA, VDE, TUV(rocker), UL1500, UL489, UL489A	UL, CSA, VDE, TUV, UL1500, UL489, UL489A	UL recognized, CSA, VDE -4006	UL, CSA, VDE, UL1500, UL489

# Thermal Circuit Breakers



CMB-Series



CLB-Series

Number Of Poles	Actuator Style	Max Current & Voltage Rating	Max Interrupting Capacity	Available Circuits	Terminal Options	Mounting Method	Operating Temp	Agency Approvals
Single	Pushbutton	3 to 20A, 125-250VAC, 32VDC	2500A	Series Trip	.250 Tab w/QC .250 Tab w/QC with 90° bend	Front Panel Front Panel Snap-in	-10°C to 60°C	UL, CUL, CSA, TUV, CE, UL1500/ ISO8846 for ignition protection/marine
Single	Pushbutton	3 to 60A, 125-250VAC, 32VDC	2500A	Series Trip	.250 Tab w/QC .250 Tab w/QC with 90° bend Screw Terminal	Front Panel Front Panel Snap-in	-10°C to 60°C	UL, CUL, CSA, TUV, CE, UL1500/ ISO8846 for ignition protection/marine

# ELCI/GFCIs

PB-Series



PC-Series



Number Of Poles	Actuator Style	Leakage Current Trip Level	Leakage Current Trip Time	Max Current & Voltage Ratings	Max Interrupting Capacity	Available Circuits	Terminal Options	Mounting Method	Operating Temp	Agency Approvals
1-3 poles, 3rd pole switched neutral	Handle, Rocker, Flat Rocker actuators	30mA & 6mA	For 30mA leakage trip: ≤ 22.2mA, shall not trip 30mA, shall trip within .10 seconds, complying with UL-1053 & ABYC E11. For 6mA leakage trip: ≤25ms, complying with UL-943.	0.10 - 30 amps @ 120/240VAC	5,000 amps	Series Trip	.250 Quick Connect Tabs 8-32, 10-32, M4, M5 screw with upturned lugs 8-32, 10-32, M4, M5 screw, Bus Type	Front Panel	-35° C to +65° C	UL489, UL1077, UL1500, UL943, UL1053, cUL
1-poles(1 CB + 1 GFCISensor Module), 120V 2-pole (2 CBs + 1 GFCI Sensor Module), 120/240V or 120V with Neutral Break. 3-pole 120/240V with Neutral Break (Sensor module has 2 pole width)	Handle, Rocker, Flat Rocker, Push-to-reset actuators	30mA & 6mA	For 30mA leakage trip: ≤ 22.2mA, shall not trip 30mA, shall trip within .10 seconds, complying with UL-1053 & ABYC E11. For 6mA leakage trip: ≤25ms, complying with UL-943.	0.10 - 50 amps @ 120/240VAC	5,000 amps	Series Trip	10-32 Threaded Stud	Front Panel	-35°C to +66°C	UL943, UL1053, UL1500, UL1077, UL489, cUL



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