

W6 SERIES MAGNETIC HYDRAULIC CIRCUIT BREAKERS

FEATURES:

- Compact design.
- Variety of time delay options.
- Toggle actuation for manual on/off and reset.
- Optional aux. switch.
- Approx. dimensions a(19.1) x b(50.8) x c(42.1d).
- Weight per pole 71g.
- Operating Voltage 65VDC, 277VAC.
- Terminal options 6.35 Quick connect #10-32 screw.
- Mounting options #6-32 tapped holes.
- UL Recognized, CSA Certified, VDE Component.

W6 MAGNETIC CIRCUIT BREAKERS

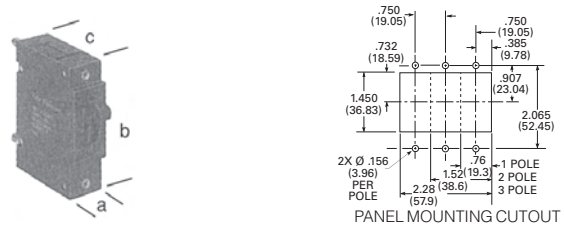
Cat. No.	Voltage	Trip Curve	Rating (Amps)	Net Price
SINGLE POLE				
W67-X2Q12-2	AC	2	2●*▲	\$22.66
W67-X2Q12-5			5●*▲	23.23
W67-X2Q12-10			10●*▲	23.23
W67-X2Q12-15			15●*▲	23.23
W67-X2Q12-20			20●*▲	23.23
W67-X2Q12-30			30●*▲	23.23
W67-X2Q12-25			25●*▲	23.23

W67X2Q12-5: "X" denotes series trip.
 W67A2Q12-5: "A" denotes series trip with .093 (2.36) Q.C. terminated auxiliary switch.
 W67X2Q12-5: "Q" denotes .250 (6.35) Q.C. main terminals.
 ●Denotes UL. *Denotes CSA. ▲Denotes VDE.

W6 MAGNETIC CIRCUIT BREAKERS (CONTINUED)

Cat. No.	Voltage	Trip Curve	Rating (Amps)	Net Price
SINGLE POLE				
W67-X2Q52-10	DC	2	10●*▲	\$22.66
W67-X2Q52-15			15●*▲	22.66
W67-X2Q52-20			20●*▲	22.66
W67-X2Q52-25			25●*▲	22.66
SINGLE POLE W/AUX. SWITCH				
W67-A2Q12-5	AC	2	5●*▲	17.35
W67-A2Q12-10			10●*▲	17.35
TWO POLE				
W68-X2Q12-5	AC	2	5●*▲	51.20
W68-X2Q12-7			7●*▲	51.20
W68-X2Q12-10			10●*▲	51.20
W68-X2Q12-15			15●*▲	51.20
W68-X2Q12-20			20●*▲	51.20
W68-X2Q12-25			25●*▲	51.20
W68-X2Q12-30	30●*▲	51.20		
W68-X2Q12-20	AC	10	20●*▲	52.49
THREE POLE				
W69-X2Q12-10	AC	2	10●*▲	69.58
W69-X2Q12-15			15●*▲	69.58
W69-X2Q12-30			30●*▲	71.46

W67X2Q12-5: "X" denotes series trip.
 W67A2Q12-5: "A" denotes series trip with .093 (2.36) Q.C. terminated auxiliary switch.
 W67X2Q12-5: "Q" denotes .250 (6.35) Q.C. main terminals.
 ●Denotes UL. *Denotes CSA. ▲Denotes VDE.



W9 SERIES MAGNETIC HYDRAULIC CIRCUIT BREAKERS

FEATURES:

- Variety of time delay options.
- Toggle actuation for manual on/off and reset.
- Approx. dimensions a(19.1) x b(63.5) x c(53.0d).
- Weight per pole 71g.
- Operating voltage 65VDC, 277VAC.
- Terminal options #10-32 stud.
- Mounting options #6-32 tapped holes.
- UL Recognized, CSA Certified, VDE Component.

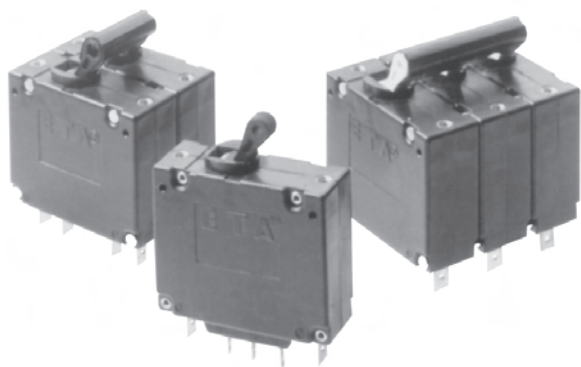
TIME VS. CURRENT TRIP CURVES

Curves are same as W6 series. See W6 data.

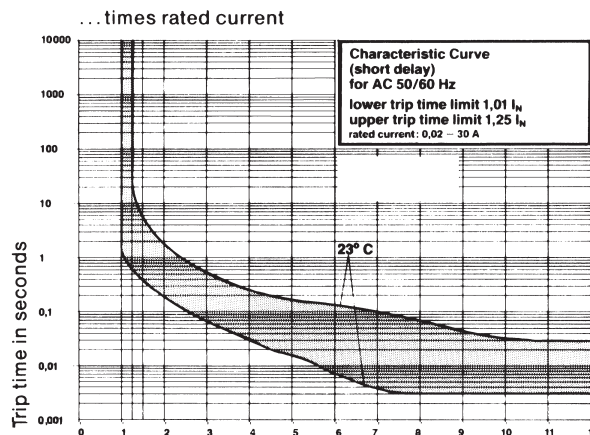
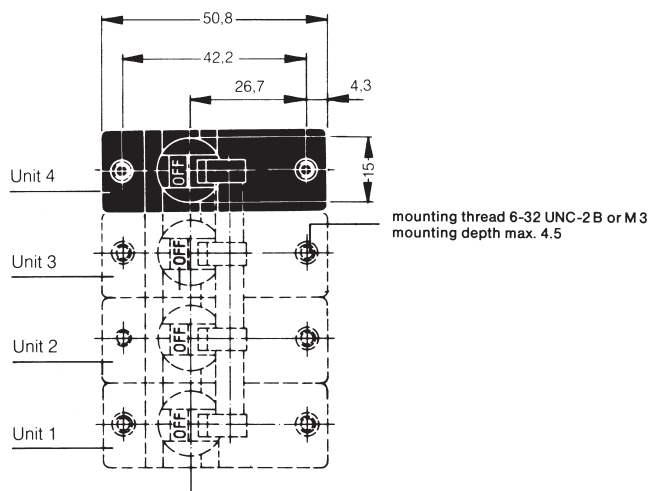
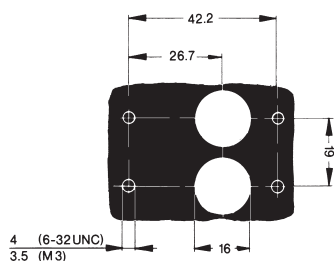
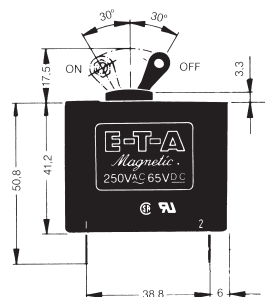
W9 MAGNETIC CIRCUIT BREAKERS

Cat. No.	Voltage	Trip Curve	Rating (Amps)	Net Price
SINGLE POLE				
W91-X112-5	AC	2	5●*▲	\$22.66
W91-X112-10			10●*▲	22.07
W91-X112-15			15●*▲	23.23
W91-X112-20			20●*▲	23.23
W91-X113-5	AC	3	5●*▲	22.66
W91-X152-20			20●*▲	22.07
W91-X152-30			30●*▲	23.23
W91-X152-40			40●*▲	22.66
W91-X152-50			50●*▲	23.23
TWO POLE				
W92-X112-1	AC	2	1●*▲	51.20
W92-X112-5			5●*▲	52.59
W92-X112-7			7●*▲	52.59
W92-X112-10			10●*▲	51.20
W92-X112-15			15●*▲	51.20
W92-X112-20			20●*▲	51.20
W92-X112-25			25●*▲	51.20
W92-X112-30			30●*▲	51.20
W92-X112-40			40●*▲	52.59
W92-X112-50			50●*▲	51.20
W92-X113-15	AC	3	15●*▲	51.20
W92-X1110-20	AC	10	20●*▲	52.59
W92-X1110-30			30●*▲	51.20
THREE POLE				
W93-X112-10	AC	2	10●*▲	94.31
W93-X112-20			20●*▲	96.67
W93-X112-30			30●*▲	94.31
W93-X112-40			40●*▲	94.31
W93-X112-50			50●*▲	94.31

●Denotes UL.
 *Denotes CSA.
 ▲Denotes VDE.



8340-F...



E-T-A MAGNETIC HYDRAULIC CIRCUIT BREAKERS

The 8340 Series uses proven magnetic hydraulic technology in an industry standard frame size. Available in single, two or three pole models. The models shown have standard medium delay. **FEATURES:** Current ratings up to 50A. Toggle operation. **TECHNICAL DATA:** Max. voltage rating: 250V AC 65V DC. Temperature range: -40°C to +85°C. Typical life at rated current: 10,000 operations. Switch capacities: Max 1000A, UL 1077 tested and approved to 5000A (Multi-Pole), 3500A (Single Pole). **APPROVALS:** CSA, UL, VDE. Amperages from 0.025 to 30 amps available.

STANDARD CURRENT RATINGS AND TYPICAL INTERNAL RESISTANCE VALUES

Current rating (A)	Curves and internal resistance per pole (Ω)			
	F1	F2	K1, M1, T1	K2, M2, T2
0.02	1493	953	2669	2457
0.05	276	152	452	376
0.1	58	37	100	94
0.25	8.2	6.0	15.5	14.7
0.5	2.3	1.47	3.9	3.2
0.75	0.98	0.63	1.65	1.56
1	0.58	0.35	0.95	0.90
2	0.145	0.096	0.26	0.20
2.5	0.096	0.061	0.15	0.15
3	0.065	0.048	0.10	0.10
5	0.025	<0.02	0.042	0.040
6	<0.02	<0.02	0.029	0.028
8	<0.02	<0.02	<0.02	<0.02
10	<0.02	<0.02	<0.02	<0.02
12	<0.02	<0.02	<0.02	<0.02
15	<0.02	<0.02	<0.02	<0.02
16	<0.02	<0.02	<0.02	<0.02
20	<0.02	<0.02	<0.02	<0.02
25	<0.02	<0.02	<0.02	<0.02
30	<0.02	<0.02	<0.02	<0.02
40	<0.01	—	<0.01	—
50	<0.01	—	<0.01	—

MAGNETIC HYDRAULIC CIRCUIT BREAKERS

Cat. No.	Amps	Net Price
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SINGLE POLE CIRCUIT BREAKERS

8340-F110-P1M2-B2H0-0.5	0.5	\$39.04
8340-F110-P1M2-B2H0-2	2.0	\$31.67

DOUBLE POLE CIRCUIT BREAKERS

8340-F120-P1M2-BLH0-2A	2.0	\$91.55
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NOTE: Fixed prices from 2.0 amp upwards see price table. Ordering information and current rating tables shown above.

MAGNETIC HYDRAULIC CIRCUIT BREAKERS

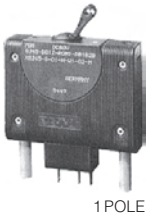
Cat. No.	Amps	Net Price
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THREE POLE CIRCUIT BREAKERS

8340-F130-P1M2-B2H0-3	3.0	\$91.55
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NOTE: Fixed prices from 3.0 amp upwards see price table. Ordering information and current rating tables shown above.

NOTE: Visit the E-T-A link at www.e-sonic.com for parts configuration



1 POLE



2 POLE

E-T-A MAGNETIC AND HYDRAULIC-MAGNETIC CIRCUIT BREAKERS

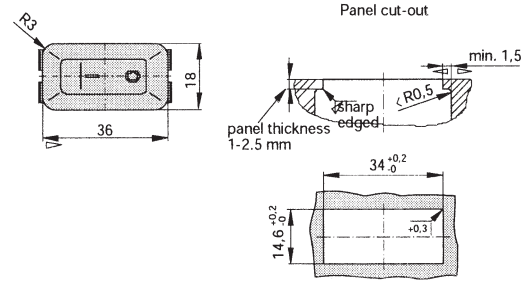
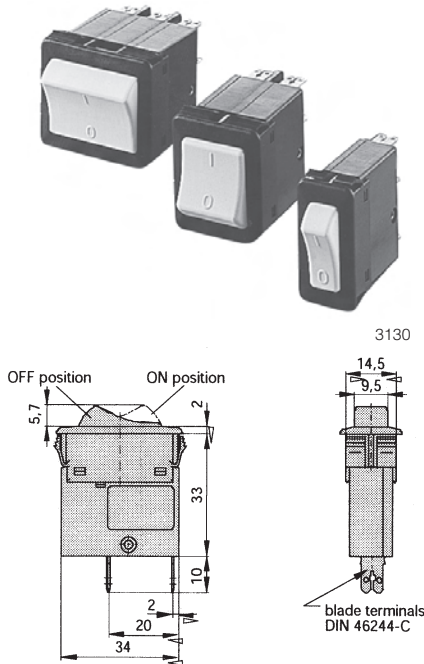
Series 8345 Single or multipole hydraulic-magnetic circuit breakers with trip-free-mechanism and toggle actuation. A choice of switching characteristics ensures suitability for a wide range of applications. Industry standard dimensions and panel mounting. Auxiliary contacts optional. Low temperature sensitivity at rated load. Approved to CBE standard EN 60934 (IEC 60934 s-type HM CBE). **TYPICAL APPLICATIONS:** In the business fields. Communication and Transport: Power supplies, switchgear, instrumentation and process control engineering.

STANDARD CURRENT RATINGS AND TYPICAL INTERNAL RESISTANCE VALUES

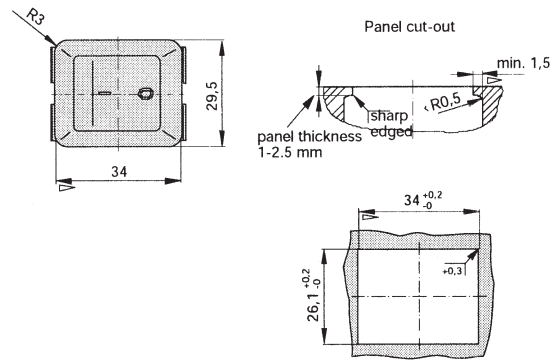
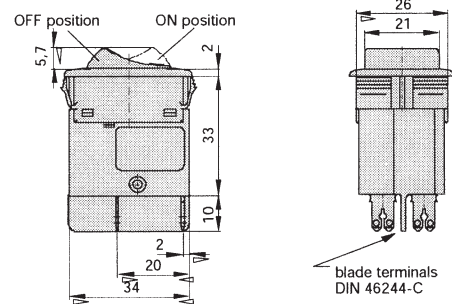
Current rating (A)	Trip curves and internal resistance (Ω) per pole	
	K1, M1, T1	K2, M2, T2
0.05	452	376
0.1	100	94
1	0.95	0.90
2	0.26	0.20
3	0.10	0.10
5	0.042	0.040
10	< 0.02	< 0.02
15	< 0.02	< 0.02
20	< 0.02	< 0.02
25	< 0.02	< 0.02
30	< 0.02	< 0.02
40	< 0.01	< 0.01
50	< 0.01	< 0.01
60	< 0.01	< 0.01
80	< 0.01	< 0.01
100	< 0.01	< 0.01
125	< 0.01	< 0.01

SINGLE OR MULTIPLE HYDRAULIC-MAGNETIC CIRCUIT BREAKERS WITH TRIP-FREE-MECHANISM AND TOGGLE ACTUATION

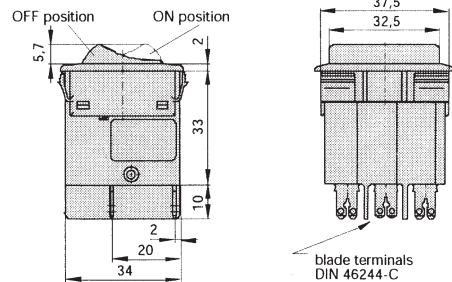
Cat. No.	Amps	Volts	Net Price
8345-CO1A-U3M1-DB1A1-100A	125A	110VDC	\$62.74



DIMENSIONS: 3130-F110...



DIMENSIONS: 3130-F120...



E-T-A 3130 THERMAL OVERCURRENT CIRCUIT BREAKER

E-T-A has achieved a new level of miniaturization with its 3130 series of thermal circuit breakers for equipment (CBEs). Design and manufacturing technology has not only reduced the physical size of the 3130 series, they also have enhanced the appearance with a satin finish, bevelled flange and soft contoured rocker switch in red, white, black or green. The 3130 Series rocker switch CBE is

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