

INSTANT SWITCHBOARDS

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Service Entrance Switchboards
With Fused Main Switch and
EUSERC Utility Metering Provisions



Cutler-Hammer

EATON



Cutler-Hammer Instant Switchboards



Service Section with Main Fused Switch Only

METERING COMPARTMENT

- Meets EUSERC standards.
- Barriered hot sequence CT provisions.
- Provisions for meter socket with test block provision.
- Meter socket ordered separately.
- Hinged sealable compartment doors.
- Standard section includes two 15-inch high doors (one for socket; one blank).

MAIN LUGS

- Two #4-600 kcmil per phase and neutral (Cu/Al).



MAIN SWITCH

- 400 or 600 ampere ratings.
- Factory installed Class T fuses.
- Load lugs or connection to panelboard.
- Padlocking provisions for switch.
- Hinged cover with interlock.

DISTRIBUTION PANELBOARD

- Factory installed.
- Provisions for bolt-on circuit breakers.

SERVICE RATINGS

- 120/240 volts AC (1-phase, 3-wire), 208 or 240 volts AC (3-phase, 4-wire), and 480Y/277 volts AC (3-phase, 4-wire).

Dimensions - Inches

Enclosure	Height	Width	Depth
NEMA 1-Indoor	90	32	14
NEMA 3R-Outdoor	90	38	26



Service Section with Main Fused Switch and Distribution Panelboard

DESIGNED AND ENGINEERED FOR EASY INSTALLATION

Instant service switchboards are arranged for use as service entrance equipment and include EUSERC utility metering provisions and a fused main switch with optional distribution panelboard in a single compact section for easy installation with or without underground pull sections.

TYPICAL APPLICATIONS

Small office buildings, warehouses, retail stores, supermarkets, and shopping centers.

SHORT CIRCUIT RATINGS (SERIES RATINGS)

- 65,000 rms symmetrical amperes at 240 volts AC using types BAB and ED branch breakers.
- 65,000 rms symmetrical amperes at 480Y/277 volts AC using types GHB and FD branch breakers.

CONSTRUCTION FEATURES

- Completely enclosed with front, rear, and side covers.
- Manufactured of code gauge steel and painted ANSI-61 light gray.
- Available in indoor and outdoor enclosures.
- Outdoor units include front hinged padlockable door.
- UL listed and meet EUSERC, NEC, and NEMA standards, and local utility codes.

SEISMIC QUALIFIED

Cutler-Hammer Instant Service Switchboards are seismically tested, seismically qualified, and exceed requirements of both the Uniform Building Code (UBC) and the California Building Code (CBC) for all seismic zones.

Instant SWITCHBOARD



SERVICE SECTIONS



NEMA 1 Indoor NEMA 1 Indoor NEMA 3R Outdoor NEMA 3R Outdoor

Main Fused Switch Only

Service	Main Ampere Rating	Catalog Number	
		NEMA 1-Indoor	NEMA 3R-Outdoor

240 Volts AC Maximum

Service	Main Ampere Rating	MSB	RMSB
1-Phase, 3-Wire	400	MSB423	RMSB423
	600	MSB623	RMSB623
3-Phase, 4-Wire	400	MSB424	RMSB424
	600	MSB624	RMSB624

480Y/277 Volts AC

Service	Main Ampere Rating	MSB	RMSB
3-Phase, 4-Wire	400	MSB444	RMSB444
	600	MSB644	RMSB644

① Circuit breakers are ordered separately.

② 240 volts AC distribution panels have double branch provisions for four type ED breakers (2- or 3-poles) and 24-poles of type BAB breakers.

③ 480Y/277 volts AC distribution panelboards have double branch provisions for four type FD breakers and 24-poles of type GHB breakers.

Main Fused Switch and Distribution Panelboard

Service	Main Ampere Rating	Catalog Number	
		NEMA 1-Indoor	NEMA 3R-Outdoor

240 Volts AC Maximum^{①②}

Service	Main Ampere Rating	MSBP	RMSBP
1-Phase, 3-Wire	400	MSBP423	RMSBP423
	600	MSBP623	RMSBP623
3-Phase, 4-Wire	400	MSBP424	RMSBP424
	600	MSBP624	RMSBP624

480Y/277 Volts AC^{①③}

Service	Main Ampere Rating	MSBP	RMSBP
3-Phase, 4-Wire	400	MSBP444	RMSBP444
	600	MSBP644	RMSBP644

Circuit Breakers for Distribution Panelboards

Ampere Rating	240 Volts AC Panelboards				480Y/277 Volts AC Panelboards		
	1-Pole 120/240 Volts AC	2-Pole 120/240 Volts AC	2-Pole 240 Volts AC	3-Pole 240 Volts AC	1-Pole 277 Volts AC	2-Pole 480Y/277 Volts AC	3-Pole 480Y/277 Volts AC
	Catalog Number						

15	BAB1015	BAB2015	BAB2015H	BAB3015H	GHB1015	GHB2015	GHB3015
20	BAB1020	BAB2020	BAB2020H	BAB3020H	GHB1020	GHB2020	GHB3020
30	BAB1030	BAB2030	BAB2030H	BAB3030H	GHB1030	GHB2030	GHB3030
40	BAB1040	BAB2040	BAB2040H	BAB3040H	GHB1040	GHB2040	GHB3040
50	BAB1050	BAB2050	BAB2050H	BAB3050H	GHB1050	GHB2050	GHB3050
60	BAB1060	BAB2060	BAB2060H	BAB3060H	GHB1060	GHB2060	GHB3060
70	-	BAB2070	BAB2070H	BAB3070H	-	GHB2070	GHB3070
90	-	BAB2090	BAB2090H	BAB3090H	-	GHB2090	GHB3090
100	-	BAB2100	BAB2100H	BAB3100H	-	GHB2100	GHB3100
125	-	-	ED2125	ED3125	-	FD2125	FD3125
150	-	-	ED2150	ED3150	-	FD2150	FD3150
175	-	-	ED2175	ED3175	-	FD2175	FD3175
200	-	-	ED2200	ED3200	-	FD2200	FD3200
225	-	-	ED2225	ED3225	-	FD2225	FD3225

MODIFICATIONS AND ACCESSORIES

Underground Pull Sections with provisions to accept lug landing kits. Same depth as service section with provisions for lug landing kit. NEMA 1 indoor pull section can be installed separate from service section, add side closer plate Catalog Number UGCP.

Section Width (Inches)	Catalog Number	
	NEMA 1-Indoor	NEMA 3R-Outdoor
24 ^④	UG24W	RUG24W
30	UG30W	RUG30W

④ Check utility requirements for acceptability.

Lug Landing Kits provide studs for incoming cables per EUSERC standards and lugs for connection to the service section (two #4-600 kcmil). For underground pull sections.

Service	Maximum Ampere Rating	Catalog Number
1-Phase, 3-Wire	400	LL4003
	400	LL4004
3-Phase, 4-Wire	800	LL8003 ^⑤
	800	LL8004 ^⑤

⑤ Mounts in 30-inch wide section only.

Meter Compartment Doors

Meter socket not included.

Door Size (Inches)	Drilling	Catalog Number
15H x 32W	Blank	MD150
	1 Socket	MD151
30H x 32W	Blank	MD300
	2 Sockets	MD302

Meter Sockets

For field installation.

Number of Jaws	Catalog Number
4	M4
5 ^⑥	M5
6 ^⑦	M6
8	M8
13	M13
15 ^⑧	M15

⑥ 5th jaw at 9 o'clock position.

⑦ Basic 4 jaw socket with 5th and 6th jaws at 3 and 9 o'clock positions.

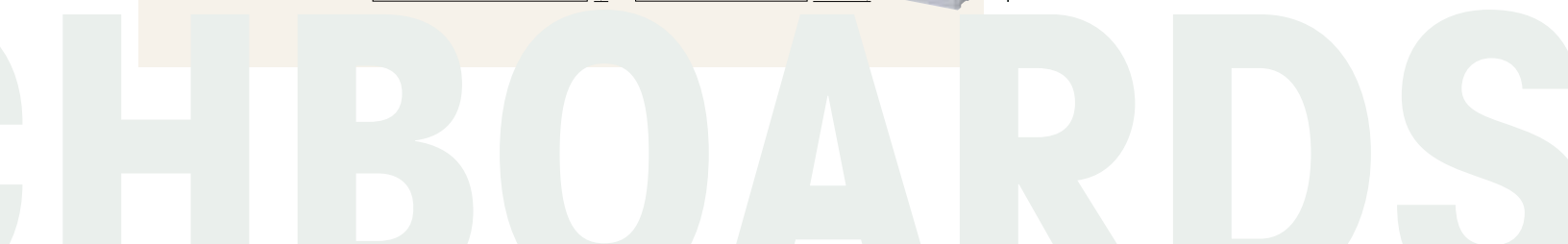
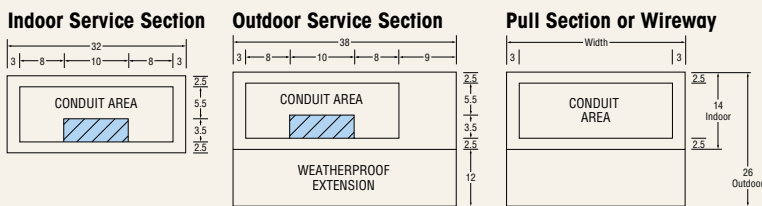
⑧ Required for all SDG&E services rated 3-phase, 4-wire.

Load Side Wireway for applications requiring top exit of load circuit conductors. Same depth as service section.

Section Width (Inches)	Catalog Number	
	NEMA 1-Indoor	NEMA 3R-Outdoor
12	LSS12W	RLSS12W

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Floor Plans - Dimensions in Inches



Instant Switchboard Circuit Breakers

120/240 Volts AC 1 Phase 3 Wire

208Y/120 Volts AC 3 Phase 4 Wire

240/120 Volts AC 3 Phase 4 Wire

Catalog Number to Order

<u>Amps</u>	<u>1 Pole</u>	<u>2 Pole</u>	<u>3 Pole</u>
15	BAB1015I	BAB2015I	BAB3015HI
20	BAB1020I	BAB2020I	BAB3020HI
30	BAB1030I	BAB2030I	BAB3030HI
40	BAB1040I	BAB2040I	BAB3040HI
50	BAB1050I	BAB2050I	BAB3050HI
60	BAB1060I	BAB2060I	BAB3060HI
70		BAB2070I	BAB3070HI
90		BAB2090I	BAB3090HI
100		BAB2100I	BAB3100HI
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125		ED2125I	ED3125I
150		ED2150I	ED3150I
175		ED2175I	ED3175I
200		ED2200I	ED3200I
225		ED2225I	ED3225I

Max. 24 Poles per Panel

Max. 4 Breakers per Panel

240 Volts AC 3 Phase 3 Wire

Catalog Number to Order

<u>Amps</u>	<u>2 Pole</u>	<u>3 Pole</u>
15	BAB2015HI	BAB3015HI
20	BAB2020HI	BAB3020HI
30	BAB2030HI	BAB3030HI
40	BAB2040HI	BAB3040HI
50	BAB2050HI	BAB3050HI
60	BAB2060HI	BAB3060HI
70	BAB2070HI	BAB3070HI
90	BAB2090HI	BAB3090HI
100	BAB2100HI	BAB3100HI
<hr/>		
125	ED2125I	ED3125I
150	ED2150I	ED3150I
175	ED2175I	ED3175I
200	ED2200I	ED3200I
225	ED2225I	ED3225I

Max. 24 Poles per Panel

Max. 4 Breakers per Panel

480Y/277 Volts AC 3 Phase 4 Wire

Catalog Number to Order

<u>Amps</u>	<u>1 Pole</u>	<u>2 Pole</u>	<u>3 Pole</u>
15	GHB1015I	GHB2015I	GHB3015I
20	GHB1020I	GHB2020I	GHB3020I
30	GHB1030I	GHB2030I	GHB3030I
40	GHB1040I	GHB2040I	GHB3040I
50	GHB1050I	GHB2050I	GHB3050I
60	GHB1060I	GHB2060I	GHB3060I
70		GHB2070I	GHB3070I
80		GHB2080I	GHB3080I
90		GHB2090I	GHB3090I
100		GHB2100I	GHB3100I
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125		FD2125I	FD3125I
150		FD2150I	FD3150I
175		FD2175I	FD3175I
200		FD2200I	FD3200I
225		FD2225I	FD3225I

Max. 24 Poles per Panel

Max. 4 Breakers per Panel