



April, 1980
Supersedes Technical Data 29-120 WEA
pages 45-46, dated October, 1975
Mailed to: E,D,C/1901, 1903, 1928/P.

Accessories

AB IDE-ION® Circuit Breakers

Accessories

List Prices: See Price List 29-120, Div. C 3-2

Reader Connected Studs®

For DA, EB, EHB, FB, JA, KA, LB, KB, LA 3, LA
LB, LBB, MA, HFB, HKA, HKB, HLA, HLE,
HMA, HNB, TRI-PAC FB, TRI-PAC LA and
TRI-PAC NB Breakers:

For complete stud assembly, order a stud and
appropriate tube paired on thickness of cus-
tomer's mounting panel. A short stud must
be assembled adjacent to a long stud to main-
tain clearances required by Underwriters'
Laboratories, Inc.®. Two studs are required
per pole. Refer to DS 29-170 for stud sizes and
extensions behind breaker.

For DA, EB, EHB, FB, FCL, JA, KA, JB, KB, LB,
LBB, HFB, HKA, HKB, HLB, TRI-PAC FB Break-
ers

Mounting Panel Thickness, Inches	Stud Length	Style Number	Tube® Length	Style Number
DA, LB, LBB, HLB Breakers				
1/4 - 1	Short	65D-65G01	27 1/2	313C-309H17
	Long	65D-65G02	29 1/2	313C-309H20
1/4 - 3/4	Short	65D-65G03	27 1/2	313C-309H18
	Long	65D-65G04	29 1/2	313C-309H21
3/4 - 1 1/2	Short	65D-65G05	27 1/2	313C-309H19
	Long	65D-65G06	29 1/2	313C-309H22

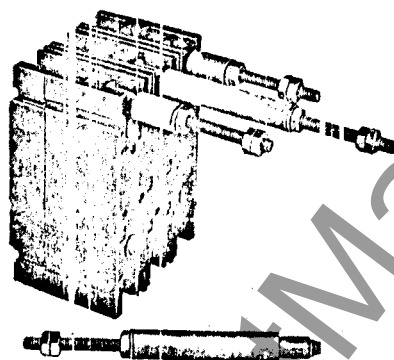
EB, EHB, FB, HFB, FCL, TRI-PAC FB (10 Amp Max.)				
1	Short	45D-374G01	27 1/2	323B-446H20
	Long	45D-374G02	29 1/2	323B-446H22
1 1/2 - 1 3/4	Short	45D-374G03	27 1/2	323B-446H21
	Long	45D-374G04	29 1/2	323B-446H23
3/4 - 1 1/2	Short	45D-374G05	27 1/2	323B-446H24
	Long	45D-374G06	29 1/2	323B-446H25

FB, HFB, 150 Amp Breakers				
1	Short	37D-383G01	27 1/2	374I-883H06
	Long	37D-383G02	29 1/2	374I-883H07
1 1/2 - 1 3/4	Short	37D-383G03	27 1/2	374I-883H08
	Long	37D-383G04	29 1/2	374I-883H09
3/4 - 1 1/2	Short	37D-383G05	27 1/2	374I-883H10
	Long	37D-383G06	29 1/2	374I-883H11

JA, KA, HKA Breakers				
1/4 - 1	Short	65D-65G01	27 1/2	456I-983H01
	Long	65D-65G02	29 1/2	456I-983H03
1/4 - 3/4	Short	65D-65G03	27 1/2	456I-983H02
	Long	65D-65G04	29 1/2	456I-983H04
3/4 - 1 1/2	Short	65D-65G05	27 1/2	456I-983H07
	Long	65D-65G06	29 1/2	456I-983H09

JB, KB, HKB Breakers				
1/4 - 1	Short	50D-023G01	27 1/2	456I-983H05
	Long	50D-023G02	29 1/2	501D-023H03
1/4 - 3/4	Short	50D-023G03	27 1/2	456I-983H06
	Long	50D-023G04	29 1/2	501D-023H04
3/4 - 1 1/2	Short	50D-023G05	27 1/2	456I-983H07
	Long	50D-023G06	29 1/2	501D-023H07

® Changed or added since previous issue.



For LAB, LA, MA, HLA, HMA, HNB, TRI-PAC
LA and TRI-PAC NB Breakers
For insulated panels only; 2 required per pole.

Stud Ampere Rating	Diameter, Inches and Thread	Extension Back of Breaker, Inches	Stud Style Number
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LAB, LA, HLA, LC, HLC, LCL, TRI-PAC LA Breakers

225®	1/2-13	37 1/2	1241-34E
225®	1/2-13	69 1/2	241-34E
225®	1/2-13	43 1/2	241-39E
400®	3/4-16	51 1/2	5873830-15
400®	3/4-16	73 1/2	5873830-16
400®	3/4-16	101 1/2	5873830-17
500®	1-12	52 1/2	14C9600-07
500®	1-12	81 1/2	14C9600-08
500®	1-12	102 1/2	14C9600-09

MA, HMA, MC, HMC Breakers

225	1/2-13	32 1/2	114C9600-01
400	3/4-16	52 1/2	114C9600-04
400	3/4-16	81 1/2	114C9600-05
400	3/4-16	102 1/2	114C9600-06
600	1-12	52 1/2	114C9600-07
600	1-12	81 1/2	114C9600-08
600	1-12	102 1/2	114C9600-09
800	1 1/4-12	52 1/2	114C9600-10
800	1 1/4-12	81 1/2	114C9600-11
800	1 1/4-12	102 1/2	114C9600-12

MB, HMB, NC, HNC Breakers

800	1 1/4-12	5 1/2	323B222-301
800	1 1/4-12	8	323B222-302
800	1 1/4-12	10 1/2	323B222-303
1200	1 1/4-12	5 1/2	373B375-304
2000	1 1/4-12	10 1/2	373B375-303

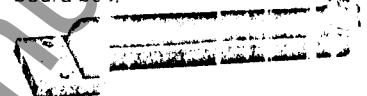
TRI-PAC NB Breakers

450	1 1/4-12	5 1/2	323B222-301
450	1 1/4-12	8	323B222-302
450	1 1/4-12	10 1/2	323B222-303
800	1 1/4-12	5 1/2	373B375-304
800	1 1/4-12	10 1/2	373B375-303

® This is a special stud which includes six contact
nuts for use where bus contact nuts must be used.
® 150, 150, 300 and 400 amp frames only.
® 400 ampere LA studs of the same length have suf-
ficient clearance; however, customer connections
may make it necessary to use a short stud adjacent
to a long stud.
® Not Underwriters' Laboratories, Inc. listed.
® Included at No Charge when ordered with stud d.
® 600 ampere frames only.

Panelboard Connecting Straps®

For connecting line end of breakers to panel-
board bus.



Ampere Rating	Connector Type	Style Number
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CA Breaker Power Panelboards (Convertible)

Bus Spacing 3 1/2"		
225	Center	1753C74G01
225	Outside	1753C74G02
3-Pole Mounting Bracket		674B624H01
2-Pole Mounting Bracket		674B624H02

EB, EHB, FB, HFB, TRI-PAC FB, FC, ® Breakers

Narrow Distribution Panelboards		
Bus Spacing 2 1/4" in Box 5 1/4" Deep (240 Volts Max.)		
50	Center	673B142G07
50	Outside	673B142G08

Bus Spacing 2 1/4" in Box 5 1/4" Deep (600 Volts Max.)		
50	Center	673B142G02
50	Outside	673B142G09
100	Center	673B142G02
100	Outside	673B142G10
150	Center	673B142G04
150	Outside	673B142G03

Power Panelboards (Convertible) Bus Spacing 3 1/2"

50	Center	1753C72G01
50	Outside	1753C72G02
100	Center	1753C72G03
100	Outside	1753C72G04
150	Center	1753C72G05
150	Outside	1753C72G06

3-Pole Mounting Bracket		674B624H01
2-Pole Mounting Bracket		674B624H02

DA, LB, LBB, HLB Breakers Bus Spacing 3 1/2"

400	Center	1753C72G04
400	Outside	1753C72G05
Mtg. Bracket (1 Req'd)		238B264H01

JA, KA, HKA Breakers Bus Spacing 3 1/2"

225	Center	1753C74G03
225	Outside	1753C74G04
Mtg. Bracket (1 Req'd)		238B264H01

JB, KB, HKB Breakers Bus Spacing 3 1/2"

250	Center	1753C76G01
250	Outside	1753C76G02
Mtg. Bracket (1 Req'd)		176-737

LAB, LA, LLA, LC, HLC 150, 300, 400 A Amp Frames

Bus Spacing 3 1/2"		
400	Center	1753C72G02
400	Outside	1753C72G03
Mtg. Bracket (2 Req'd)		238B264H01

OLA, HLA, LC, HLC 600 Amp Frames

Bus Spacing 5 1/2"		
600	Center	1753C76G01
600	Outside	1753C76G02
Mtg. Bracket (2 Req'd)		238B264H01

MA, HMA, MC, HMC Breakers Bus Spacing 3 1/2"

800	Short	1753C96G01
800	Medium	1753C96G02
800	Long	1753C96G03
Mtg. Bracket (4 Req'd)		1753C70H01

NB, HNB, NC, HNC Breakers Bus Spacing 3 1/2"

1200	Short	1753C96G04
1200	Medium	1753C96G05
1200	Long	1753C96G06
Mtg. Bracket (4 Req'd)		1753C70H01

OLCL Breakers Bus Spacing 3 1/2"

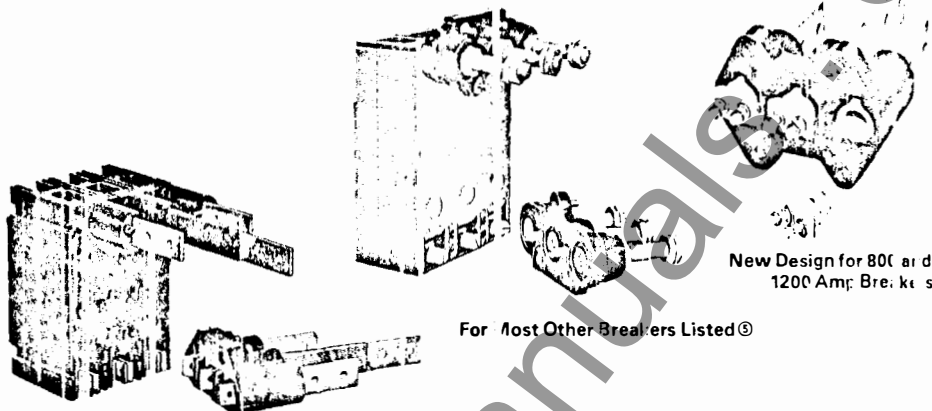
400	Short	1753C85G01
400	Medium	1753C85G02
400	Long	1753C85G03
Mtg. Bracket (4 Req'd)		1753C70H01

ories, Continued

Plug-in Adapter Kits®

For rear connected applications such as switchboards. Facilitates ease of installation and front removal of breaker. Includes conductor for mounting on breaker, plug-in mounting blocks with matching conductor, rear studs and mounting hardware®. Order 2 mounting blocks style number when line and load are required; order 1 mounting block style number when either line or load is required.

List Prices: See Price List 29-020, Dis. CB-1



New Design for 800 and 1200 Amp Breakers

For Most Other Breakers Listed®

For EB, EHB, FB and HFB

Description	Style Number
DA, LB, LBB, HLB Breakers®	
2 Mounting Blocks, Line and Load	
2-Pole	311 C644C 45
3-Pole	311 C644C 46
1 Mounting Block, Line or Load	
2-Pole	311 C932C 03
3-Pole	311 C932C 04
EB, EHB, FB Thermal Magnetic Breakers®	
1 Mounting Block, Line or Load	
100 Ampere	307 C036C 01
150 Ampere	307 C036C 02
200 Ampere	307 C036C 03
300 Ampere	307 C036C 04
EB and HFB Magnetic Only, HFE Thermal Magnetic, FB TRI-PAC and FCL® Breakers®	
1 Mounting Block, Line or Load	
2-Pole, 100 Ampere	307 C036C 05
2-Pole, 150 Ampere	307 C036C 06
3-Pole, 100 Ampere	307 C036C 03
3-Pole, 150 Ampere	307 C036C 04
KA, HKA Breakers®	
2 Mounting Blocks, Line and Load	
2-Pole	311 C644C 29
3-Pole	311 C644C 30
1 Mounting Block, Line or Load	
2-Pole	314 C932C 01
3-Pole	314 C932C 02
LAB, LA, HLA, LC, HLC, LCL (150, 250, 300) and 400 Amp Frames®	
2 Mounting Blocks, Line and Load	
2-Pole	313C644G25
3-Pole	313C644G26
1 Mounting Block, Line or Load	
2-Pole	450D010C15
3-Pole	450D010C16
HLA, HLA, LC, HLC (600 Ampere Frames)®	
2 Mounting Blocks, Line and Load	
2-Pole	311 C644C 50
3-Pole	311 C644C 51
1 Mounting Block, Line or Load	
2-Pole	307 C059C 01
3-Pole	307 C059C 02

Description	Style Number
JB, KB, HCB Breakers®	
2 Mounting Blocks, Line and Load	
2-Pole	506C144G17
3-Pole	506C144G18
1 Mounting Block, Line Only	
2-Pole	1260C66G01
3-Pole	1260C66G02
1 Mounting Block, Load Only	
2-Pole	1260C66G03
3-Pole	1260C66G04
MA, HMA, MC, HMC Breakers®	
2 Mounting Blocks, Line and Load	
2-Pole, 125-600 Ampere	313C644G17
2-Pole, 700-800 Ampere	176C544G11®
3-Pole, 125-600 Ampere	313C644G18
3-Pole, 700-800 Ampere	176C544G12®
1 Mounting Block, Line or Load	
2-Pole, 125-600 Ampere	313C370G13
2-Pole, 700-800 Ampere	507C049G11®
3-Pole, 125-600 Ampere	313C370G14
3-Pole, 700-800 Ampere	507C049G12®
QMA, HMA, MC, HMC, NB, HNB, NC, HNC, NE-TRI-PAC Breakers® (New Design)	
1 Mounting Block, Line or Load	
MA, HMA, MC, HMC 2-Poles	2614D53G05
MA, HMA, MC, HMC 3-Poles	2614D53G06
NB, HNB, NC, HNC, NB TRI-PAC, 2-Poles	2614D53G03
NB, HNB, NC, HNC, NB TRI-PAC, 3-Poles	2614D53G04
TRI-PAC LA Breakers®	
2 Mounting Blocks, Line and Load	
2-Pole	313C644G41
3-Pole	313C644G42
1 Mounting Block, Line Only	
2-Pole	450D010G17
3-Pole	450D010G19
1 Mounting Block, Load Only	
2-Pole	450D010G18
3-Pole	450D010G20

Mounting Block for Type N3, HNB, NC, HNC and NB TRI-PAC Breakers®

An insulated base having front-removable bolted connections for mounting and connecting the breaker and bus connectors extending from the rear of the base. One block required per breaker. (See DS 29-170.)

Ampere Rating	No. of Poles	Style Number
N3, HNB, NC, HNC Breakers		
100	2	499JD16G12
100	3	499JD16G13
NB TRI-PAC		
100	2	499JD16G14
100	3	499JD16G15

- ® Charged or added since previous issue.
- ® 700-800 amp adapter kit is front removable, bottom design — not plug-in type.
- ® Not Underwriters' Laboratories, Inc. listed.
- ® These plug-in adapter kits are UL listed as recognized components.
- ® EB, EHB, FB, HFB, KB, JB, HKB, NE and new design HMA, MC, NB and NC have flat bus rear connectors. Others have threaded studs.



April, 1980
Supersedes Technical Data 29-120 TWEA
pages 47-48, dated October, 1975
Mailed to: E,D,C/1901, 1902, 1928/FL

Accessories, Modifications

A3 DE-ION® Circuit Breakers

Accessories, Continued Extended Line Terminal Shields^②



For shielding line side terminal connections. One shield required per breaker. Order separately when needed. Sold only in lots of 10, including hardware.

Breaker Frame	Style Number
DA	314C420G06
JA, KA, LB, LBB (Saf-T-Vue)	314C420G04
JA, KA, HKA, LB, LBB, HLB (Standard Breaker)	314C420G06
LAB, LA, HLA, LC, HLC ^② , TRI-PAC LA	314C420G05
LAB, LA, (Saf-T-Vue)	314C420G02
MA, HMA, MC, HMC	238B166G01
NB, HNB, TRI-PAC [®] NB, NC, HNC	238B166G02
EB, EHB, FB, HFB, TRI-PAC FB, FC ^②	625B129G01
JB, KB, HKB ^②	1266C07G01

Base Mounting Hardware^②

No charge when ordered with breaker. Order separately when needed.

Breaker Frame	Style Number
1-Pole Breakers	
EB, EHB, FB, HFB ^②	624B175G01
EB, EHB, FB, HFB ^②	624B175G02

2-Pole Breakers	
CA	1C6182G23

2- and 3-Pole Breakers	
■A, JA, KA, HKA, LB, LBB, HLB	1C6182G22
EB, EHB, FB, HFB, TRI-PAC FB, FC ^②	1C6182G18
LAB, LA, HLA, LC, HLC ^② , TRI-PAC LA, LCL ^②	614613
MA, NB, HMA, HNB, TRI-PAC NE	
MC, HMC, NC, HNC	091716
PB, TRI-PAC PB, PC, PCC	24B375G22
JB, KB, HKB	24B375G14

3-Pole Breakers	
CA	1C6182G29

Non-Automatic Lock

For KA, KB, LA420, LA600, LI and MA breakers.

Breaker Frame	Style Numbers	2-Poles	3-Poles
KB	4974D52G25		0974D52G26
KA	177C981G05		77C381G06
LA 400	505C709G03		05C709G04
LA 600	505C709G05		05C709G06
MA	504C500G01		04C500G02
LB	177C981G09		77C381G10

Handle Locks^②



Typical Photos

Non-Padlockable

For prevention of unintentional operation of breaker. Fits over breaker handle and may be removed.

Padlockable^②

For prevention of unauthorized operation of breaker. Is non-removable once installed on breaker. Meets Underwriters' Laboratories, Inc. and California Code requirements. Note: All breakers are trip free and will trip with handle locks attached. Cannot be used when handle extension is used.

Breaker Frame	Style Number
Non-Padlockable	
EB, EHB, FB, HFB, TRI-PAC FB, CA	1720360
LA, JA, KA, HKA, LB, LBB, HLB	29B2721H14
LAB, LA, LC, HLC ^② , MA, NB, HLA, HMA, HNB, TRI-PAC LA, TRI-PAC NB, MC, HMC, NC, HNC	1720101

Padlockable

EA ^②	506C438C31
EB, EHB, FB, HFB, TRI-PAC FB, CA	735A754C01
DA, JA, KA, LB, LBB, HKA, HLB	673B796C32
LAB, LA, LC, HLC ^② , TRI-PAC LA	373B591C32
JB, KB, HKB	373B796C31

Handle Extension^②

For use in convertible power panelboards. Must be ordered separately. Style number 372B359G01 for LAB, LA, HLA breakers; no charge when ordered with breaker.

Molded Type Handle Extension^②

For MA, HMA, MC, HMC breakers. Style Number 1251C65G01

For NB, HNB, NC, HNC and TRI-PAC NB Breakers

Style Number 1251C65G01, included with frame at no charge if ordered separately. See Price List 29-020.

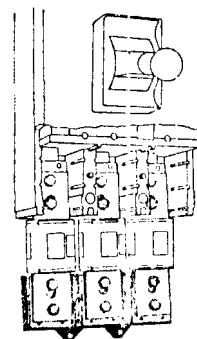
For PB, PC, PCC, TRI-PAC PB Breakers

Style Number 315C882G01
Included with frame at no charge; if ordered separately. See Price List 29-020.

List Prices: See Price List 29-020, Dis. CB-2

Fuse Mounting Base for PB Breakers^②

For 2000 amp non-automatic breakers only.



Catalog Number: FMB2000PB

For use with non-automatic, 3-pole circuit breaker. Includes fuse mounting base and hardware to mount standard class L current limiting fuses, 801 to 2000 amps (fuses not included).

For complete installation, order:

1. Standard rear connected FMB non-automatic breaker.^②
2. Fuse mounting base.
3. Fuses (from distributor).

Cable Connectors^②

The fuse mounting base will accept the following terminals for front cable connection (omit "T" connectors from rear connected breakers).

Style Number	Wire Range, Type No. of Cables
672B655C01	3 3.0-10 MCNI Cu
180C046C03	4 400-500 MCNI Cu

Single Phase Protector^②

An attachment for use with non-automatic PB breakers and fuse mounting block that will trip the breaker when a fuse blows preventing single phasing.

Mounting	AC Volts	Style Number
Right-Hand	240	17C576301
Right-Hand	430-600	17C576302
Left-Hand	240	17C576303
Left-Hand	430-600	17C576304

② Not Underwriters' Laboratories, Inc. listed.

③ Individually mounted.

④ Group mounted.

⑤ Designed for use with load centers.

⑥ Front connected non-automatic PB may also be used.

Order similar to standard front connected except omit load conductor extensions.

⑦ Interrupters used with fuse mounting base will accept all standard PB accessories. See DS 29-173 for mounting details.

⑧ Changed or added since previous issue.

breaker at 55% of nominal rating.) See Table 1 for available ratings.

10. Mechanically test the shunt trip before covering the breaker:

Caution: Keep fingers clear of the handle mechanism and the moving contact arms when tripping the breaker.

a. Latch the breaker handle mechanism and close the breaker.

b. Push the armature assembly (1) into the solenoid to the end of its travel. The breaker should trip before the armature stops.

c. Release the armature. It should return to its original open-gap position. Examine the cut-off switch plunger (9) to see that it is properly pushed upward by the breaker's moving contact arm. See Figure 4.

d. To insure breaker tripping, clearance between the trip bar and plunger (5) may be adjusted. See Figure 4. Loosen locking nut (3) and screw plunger (5) in or out of plate (8) to an approximate 1/32" gap to trip bar. Retighten locking nut securely against plate (8).

11. Use wire ties (12). Tie leads at opening for leads out the side or out the bottom. See Figures 3 and 4.

12. Replace main breaker cover after checking that nothing foreign, etc. has fallen into the breaker.

13. Attach nameplates (11) to top of cover over accessory. Nameplate 223P539H01 is to be applied only when shunt trip's rating is 120 or 240 volts Ac.

Note: Westinghouse assumes no responsibility for damage done to a circuit breaker during field mounting of any accessory.

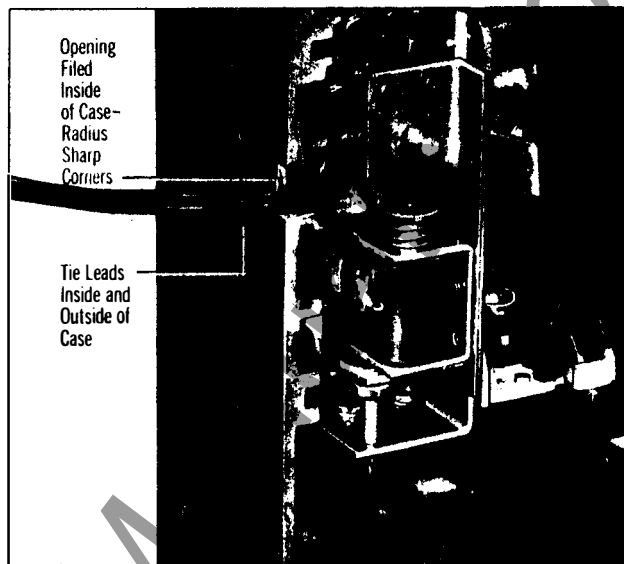


Fig. 3. Typical Shunt Trip Installation

Table 1 - Available Shunt Trip Ratings				
Rated Voltage	Amperes	Hz	Style Numbers	
			Left Pole	Right Pole
600 Ac	0.105	50/60	2605D15G01	2605D15G15
480 Ac	0.085	50/60	2605D15G02	2605D15G16
240 Ac	1.70	50/60	2605D15G03	2605D15G17
208 Ac	1.40	50/60	2605D15G04	2605D15G18
120 Ac	0.88	50/60	2605D15G05	2605D15G19
60 Ac	9.10	50/60	2605D15G06	2605D15G20
48 Ac	7.50	50/60	2605D15G07	2605D15G21
24 Ac	3.95	50/60	2605D15G08	2605D15G22
250 Dc	2.50	---	2605D15G09	2605D15G23
125 Dc	0.975	---	2605D15G10	2605D15G24
60 Dc	0.525	---	2605D15G11	2605D15G25
48 Dc	8.00	---	2605D15G12	2605D15G26
24 Dc	8.00	---	2605D15G13	2605D15G27
12 Dc	6.00	---	2605D15G14	2605D15G28

For
K N

SHUNT TRIPS



ations ①

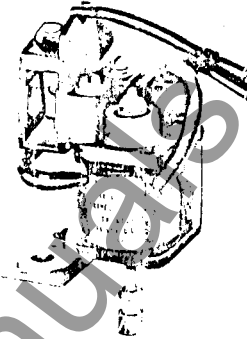
List Prices: See Price List 29-020 Dis. CB-2
Only two internally mounted modifications —
shunt trip, under voltage release, auxiliary
switch, alarm switch — may be mounted in
DA, JA thru PB, HKA thru HNB and thermal
magnetic EB, EHB, FB and HFB breakers. Only
one of these modifications may be mounted
in FB or HFB magnetic only, 2 pole EB, EHB,
FB and FB TRI-PAC® and SELTRONIC® break-
ers. None are available in 1-pole breakers ex-
cept alarm switch in EB, EHB and HFE. Refer
to Westinghouse for possible special combi-
nations of the following modification: not in
tabulations.

Shunt Trip ②

For tripping breaker from a remote point. A
solenoid device mounts within breaker case.
Breaker trips when coil is energized.

Shunt trips should not be used as circuit inter-
locks using maintained contact pilot devices.

A cut-off switch breaks the circuit to the
momentary rated coil when breaker opens
(except CA). Available for control voltages up
to 250 volts Dc or 600 volts Ac. Voltage and
frequency must be specified. Standard leads
extend 13" out side of breaker. Longer leads
may be specified.



Shunt Trip for Field Mounting ③ ④ ⑤ ⑥

Voltage/ Hertz	Breaker Type EB, EHB, FB, HFB ② (Thermal Magnetic only)	FCL ③	JB, KB, HKB	JA, KA, HKA, DA, LB, LBB, HLB	LA, LAB, HL	MA, HMA	NB, HNB, NB TRI-PAC	PB, PB TRI-PAC
Right Hand Mounting								
600/50-60 Hz	2609D39G15	1369L 80G15	2609D42G15	2605D15G15	2606D56G15	2606D57G15	2606D58G15	2606D59G15
480/50-60 Hz	2609D39G16	1369L 80G16	2609D42G16	2605D15G16	2606D56G16	2606D57G16	2606D58G16	2606D59G16
240/50-60 Hz	2609D39G17	1369L 80G17	2609D42G17	2605D15G17	2606D56G17	2606D57G17	2606D58G17	2606D59G17
208/50-60 Hz	2609D39G18	1369L 80G18	2609D42G18	2605D15G18	2606D56G18	2606D57G18	2606D58G18	2606D59G18
120/50-60 Hz	2609D39G19	1369L 80G19	2609D42G19	2605D15G19	2606D56G19	2606D57G19	2606D58G19	2606D59G19
60/50-60 Hz	2609D39G20	1369L 80G20	2609D42G20	2605D15G20	2606D56G20	2606D57G20	2606D58G20	2606D59G20
48/50-60 Hz	2609D39G21	1369L 80G21	2609D42G21	2605D15G21	2606D56G21	2606D57G21	2606D58G21	2606D59G21
24/50-60 Hz	2609D39G22	1369L 80G22	2609D42G22	2605D15G22	2606D56G22	2606D57G22	2606D58G22	2606D59G22
250 Dc	2609D39G23	1369L 80G23	2609D42G23	2605D15G23	2606D56G23	2606D57G23	2606D58G23	2606D59G23
125 Dc	2609D39G24	1369L 80G24	2609D42G24	2605D15G24	2606D56G24	2606D57G24	2606D58G24	2606D59G24
60 Dc	2609D39G25	1369L 80G25	2609D42G25	2605D15G25	2606D56G25	2606D57G25	2606D58G25	2606D59G25
48 Dc	2609D39G26	1369L 80G26	2609D42G26	2605D15G26	2606D56G26	2606D57G26	2606D58G26	2606D59G26
24 Dc	2609D39G27	1369L 80G27	2609D42G27	2605D15G27	2606D56G27	2606D57G27	2606D58G27	2606D59G27
12 Dc	2609D39G28	1369L 80G28	2609D42G28	2605D15G28	2606D56G28	2606D57G28	2606D58G28	2606D59G28
Left Hand Mounting								
600/50-60 Hz	2609D39G01	1369L 80G01	2609D42G01	2605D15G01	2606D56G01	2606D57G01	2606D58G01	2606D59G01
480/50-60 Hz	2609D39G02	1369L 80G02	2609D42G02	2605D15G02	2606D56G02	2606D57G02	2606D58G02	2606D59G02
240/50-60 Hz	2609D39G03	1369L 80G03	2609D42G03	2605D15G03	2606D56G03	2606D57G03	2606D58G03	2606D59G03
208/50-60 Hz	2609D39G04	1369L 80G04	2609D42G04	2605D15G04	2606D56G04	2606D57G04	2606D58G04	2606D59G04
120/50-60 Hz	2609D39G05	1369L 80G05	2609D42G05	2605D15G05	2606D56G05	2606D57G05	2606D58G05	2606D59G05
60/50-60 Hz	2609D39G06	1369L 80G06	2609D42G06	2605D15G06	2606D56G06	2606D57G06	2606D58G06	2606D59G06
48/50-60 Hz	2609D39G07	1369L 80G07	2609D42G07	2605D15G07	2606D56G07	2606D57G07	2606D58G07	2606D59G07
24/50-60 Hz	2609D39G08	1369L 80G08	2609D42G08	2605D15G08	2606D56G08	2606D57G08	2606D58G08	2606D59G08
250 Dc	2609D39G09	1369L 80G09	2609D42G09	2605D15G09	2606D56G09	2606D57G09	2606D58G09	2606D59G09
125 Dc	2609D39G10	1369L 80G10	2609D42G10	2605D15G10	2606D56G10	2606D57G10	2606D58G10	2606D59G10
60 Dc	2609D39G11	1369L 80G11	2609D42G11	2605D15G11	2606D56G11	2606D57G11	2606D58G11	2606D59G11
48 Dc	2609D39G12	1369L 80G12	2609D42G12	2605D15G12	2606D56G12	2606D57G12	2606D58G12	2606D59G12
24 Dc	2609D39G13	1369L 80G13	2609D42G13	2605D15G13	2606D56G13	2606D57G13	2606D58G13	2606D59G13
12 Dc	2609D39G14	1369L 80G14	2609D42G14	2605D15G14	2606D56G14	2606D57G14	2606D58G14	2606D59G14

Factory Mounted Shunt Trips ① ③

All of the above shunt trips can be specified
for factory mounting at the same price as
listed for the kit. These shunt trips have the
leads out the side and are UL listed when fac-
tory mounted, unless other non-UL listed
modifications are used.

Factory mounted shunt trips only can be
supplied for the following breaker:

- CA ②, FB magnetic only ② ④, HFE mag-
netic only ② ④, FB Tri-Pac ② ④, LA TRI PAC,
LCL and non-auto breakers (MCS)

Price same as similar kit except price CA from
accessory section of 29-020.

- ① and mounting considered standard unless specified
se.
- ② field mounting only.
- ③ similar to this except "Leads out the side" —
(UL listed). Order by description.
- ④ Not UL listed.
- ⑤ 120 volt Ac ratings suitable for 55% pickup for round aut
applications.

- ⑥ Not field mountable on non-automatic breakers (MCS).
- ⑦ CA shunt trip supplied without cut-off switch.
- ⑧ Field mounting voids breakers' UL listing except for K 3,
HKB, KA, HKA, LE, HLB, LA, HLA, MA, HMA, NB, HNB, NB
TRI-PAC, PB, PB TRI PAC and SELTRONIC breakers
- ⑨ Changed or added since previous issue.

all 120 v = 38 current



April, 1980
Supersedes Technical Data 29-120 TYPE A
pages 49-50, dated October, 1975
Mailed to: E, D, C/1901, 1903, 1928/PL

Modifications

AB DE-ION® Circuit Breakers

Left Hand Mounting Kits for SELTRONIC and Type LCL Current Limiting Breakers®

Provision to trip flux transfer shunt trip from external 32 to 120 volt (Dc to 60 Hz) source.①④

MC, HMC	Style 2609D10G1
NC, HNC	Style 2609D11G1
PC, PCC	Style 2609D12G1
LC, HLC	Style 1371D11G2
LCL③	Style 1372D49G2

Provision to trip flux transfer shunt trip from external 240 to 600 volt Ac, 50/60 Hz source.③④

MC, HMC	Style 2609D10G3
NC, HNC	Style 2609D11G3
PC, PCC	Style 2609D12G3
LC, HLC	Style 1371D11G3
LCL③	Style 1372D49G3

Shunt Trip Coil Data

Shunt Trip Voltage Rating	For All Breakers Listed Above Except CA and SELTRONIC Coil Inrush		Type CA		SELTRONIC and LCL	
	Amperes	Volt-Amperes	Coil Inrush		Coil Inrush	
			Amperes	Volt-Amperes	Amperes	Volt-Amperes
600 AC	0.105	63.0	..	..	..	..
480 AC	0.085	40.8	..	..	..	..
240 AC	1.7	408.0	.73	175.	..	..
208 AC	1.4	291.2	..	..	..	..
120 AC	0.88	155.6	1.66	189.	.15	18
120 AC	9.10	56.0	..	..	..	..
120 AC	7.50	30.0	..	..	..	..
120 AC	3.95	4.8	..	..	..	..
250 DC	0.10	5.0	.26	65.	..	..
125 DC	0.975	11.9	.54	67.	..	..
60 DC	0.525	1.5	1.02	61.	..	..
48 DC	8.	34.	1.28	48.	..	..
24 DC	8.	12.	2.63	63.	..	..
12 DC	6.	12.	6.52	73.	..	..

List Prices: See Price List 29-021, Dis. CB-2

① Changed since previous issue.

② Rated 48 volts minimum for ground fault applications.

③ Not for ground fault.

④ UL listing pending. Refer to Westinghouse.

⑤ Also available factory mounted for 24 volt Dc. Order by description.

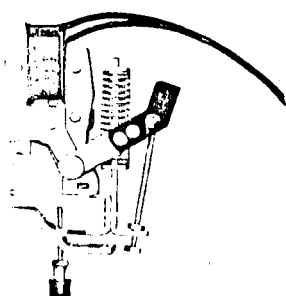
113 6UR
2000315 8
100 VAC
1000 1100
30

UUR



com

Undervoltage Release®



For undervoltage protection. A solenoid de-energizes breaker when voltage drops below 40 to 60% of coil rating. Picks up and seals in at 30% of coil rating. For line voltages up to 250 volts. Its DC coil rating. Externally mounted resistors are supplied for certain ratings. Standard leads extend 18" outside of breaker. Longer leads may be specified. **Note:** U.V.R. attachments are not designed for, and should not be used as, circuit interlocks. For further information, refer to Westinghouse.

Factory Mounted Undervoltage Release®

Factory mounted undervoltage releases can be supplied for factory mounting at the time the breaker is ordered for the kit. These attachments have the leads out the side and are UL listed when factory mounted unless other non-UL listed modifications are used.

Factory mounted undervoltage releases only can be supplied for the following breakers: EB®, EHB®, FB®, HFB®, FB TRI-PAC®, HFB TRI-PAC®, and HFB magnetic only®. J.B., KB, HKB, LA TRI-PAC and FCL; LCL 120 Volts Ac only®.

SELECTION BREAKERS (120 V Ac 60 Hz only standard), MC, HMC®, NC, HNC®, PC, PCC®, HLC.

SELECTION Breakers With Remote Trip Provisions: MC, HMC®, NC, HNC®, PC, PCC®, LCL, HLC®.

Price same as similar kits except SELECTION attachments are priced from attachment section of Price List 29-020.

Changed or added since previous issue.
Right hand mounting only.
Not UL listed.
Right hand mounting considered standard unless specified otherwise except JA, KA, DA, HKA, LB, LBB, HLB and selection available for left hand only, and JB, KB, HKB left hand standard (LCL is right hand).
Not available on ambient compensating breakers.
Not field mountable on non automatic breakers. (If ordered with other attachments except small primary switch rated 250 volts can be supplied in field).
With two leads (total of 4) for use with a remote open contact (pushbutton etc.) to trip the breaker. No external power required.
Field mounting voids UL listing on breaker except on KA, LB, HLB, LA, HLA, MA, HMA, NB, HNB, NB TRI-PAC, PB TRI-PAC.
Pending.

Undervoltage release Attachment Kits for Field Mounting®

Attachment Voltage, Hertz	Breaker Type				
	JA, KA, DA, HKA, LB, LBB, HLB	LA, LAB, HLA	MA, HMA	NB, HNB, NB TRI-PAC	PB, PB TRI-PAC
For Right Hand Mounting					
24 60	.....	60A9355G17	.....	.....	.....
48 60	.....	60A9355G08	.....	.....	5674D29G16
120 60	113201500	1318520	457D727G01	373D632G01	5674D29G09
208 60	.....	1318530	457D727G19	373D632G19	5674D29G10
240 60	.....	1318531	457D727G02	373D632G02	5674D29G11
40 60	.....	1318533	457D727G03	373D632G03	5674D29G13
80 60	.....	1318534	457D727G04	373D632G04	5674D29G14
120 60	.....	458D020G01	457D727G09	372D032G01	4976D35G11
24 DC	.....	458D020G02	457D727G10	372D032G02	4976D35G12
48 DC	.....	458D020G03	457D727G11	372D032G03	4976D35G13
60 DC	.....	458D020G04	457D727G12	372D032G04	4976D35G14
25 DC	.....	458D020G07	457D727G12	372D032G04	4976D35G17
50 DC	.....	458D020G08	457D727G13	372D032G05	4976D35G18
For Left Hand Mounting					
48 60	.....	60A9355G16	.....	.....	5674D29G18
120 60	458D070G01	60A9355G09	457D727G05	373D632G05	5674D29G11
208 60	458D070G05	60A9355G10	457D727G20	373D632G20	5674D29G12
240 60	458D070G02	60A9355G11	457D727G06	373D632G06	5674D29G13
40 60	458D070G03	60A9355G12	457D727G07	373D632G07	5674D29G15
80 60	458D070G04	60A9355G13	457D727G08	373D632G08	5674D29G16
120 60	458D070G09	458D020G14	457D727G14	372D032G06	4976D35G11
24 DC	458D070G10	458D020G12	457D727G15	372D032G07	4976D35G12
48 DC	458D070G11	458D020G13	457D727G16	372D032G08	4976D35G13
60 DC	.....	458D020G14	457D727G22	.....	4976D35G14
25 DC	458D070G12	458D020G17	457D727G17	372D032G09	4976D35G17
50 DC	458D070G13	458D020G18	457D727G18	372D032G10	4976D35G18

Undervoltage Release Coil Data®

Voltage Rating, Hertz	Breaker Type			JA, KA, HKA, DA, LB, LBB, HLB, MA and HMA			MC, HMC, NC, HNC, PC, PCC, LCL, F LCL, LCL	
	Coil Amperes	Series Resistance (Ohms)	Total VA	Coil Amperes	External Series Resistance (Ohms)	Total VA	Coil Amperes	Total VA
600 AC	0.020	25,000	12.0	0.012	50,000	7.2	.....	.....
480 AC	0.015	25,000	7.7	0.013	30,000	6.3	.....	.....
240 AC	0.021	6,000	5.1	0.013	.....	3.2	.....	.....
208 AC	0.019	6,000	4.0	0.018	.....	3.8	.....	.....
120 AC	0.023	.....	2.8	0.023	.....	2.8	0.05	6
60 AC	0.203	250	12.2	.....	.....	.....	.....	.....
48 AC	0.245	150	11.8	.....	.....	.....	.....	.....
24 AC	0.250	50	6.0	.....	.....	.....	.....	.....
250 DC	0.026	5,000	6.5	0.013	16,500	3.3	.....	.....
25 DC	0.026	.....	3.3	0.013	6,500	1.7	.....	.....
60 DC	0.248	200	14.9	0.013	1,500	0.8	.....	.....
48 DC	0.260	150	12.5	0.012	600	0.6	.....	.....
24 DC	0.141	.....	3.4	0.023	.....	0.6	.....	.....
12 DC	0.286	.....	3.5	0.048	.....	0.6	.....	.....

Voltage Rating, Hertz	Breaker Type			NB, HNB and NB TRI-PAC		
	Coil Amperes	External Series Resistance (Ohms)	Total VA	Coil Amperes	External Series Resistance (Ohms)	Total VA
600 AC	0.029	20,000	17.4	0.016	35,000	9.6
480 AC	0.014	.....	6.8	0.013	30,000	6.3
240 AC	0.036	.....	8.7	0.013	.....	3.2
208 AC	0.036	.....	7.5	0.013	.....	3.8
120 AC	0.073	.....	8.8	0.023	.....	2.8
48 AC	0.152	.....	7.3	.....	.....	.....
50 DC	0.035	5,000	8.8	0.013	16,500	3.3
25 DC	0.035	1,500	4.9	0.013	6,500	1.7
60 DC	0.034	.....	2.1	.....	.....	.....
48 DC	0.040	.....	2.0	0.012	600	0.6
24 DC	0.069	.....	1.7	0.023	.....	0.6
12 DC	0.136	.....	1.7	0.048	.....	0.6

List Prices: See Price List 29-020 Dis. CB-2.

www.ElectricalPartManuals.com



April, 1980
Supersedes Technical Data 29-120 TWEA
pages 51-52, dated August, 1978
Mailed to: E, D, C/1901, 1903, 1928, PL

Modifications

AB DE-ION® Circuit Breakers

AUX SWITCHES

Alarm Switch®

Availability: DA thru HNB, TRI-PAC NB, TRI-PAC PB Frames. For light or alarm indication when breaker trips. Does not function with manual operation. Automatically resets when breaker is relatched. Standard leads extend 18" out side of breaker. Longer leads may be specified. Not field mountable.

Breaker Frame	Normal Pole Mtg.	Contact Operation (Specify Type Desired)
DA, EB, EHB, FB, HFB®	Left	Make or Break
FCL®	Mechanism	Make or Break
JA, KA, LAB, LA, LB, LBB, MA, NB, HKA, HLA, HLB, HMA, HNB, TRI-PAC LA, TRI-PAC NB	Center	Make or Break
JB, KB, HKB	Left	Make or Break
PI, TRI-PAC PB	Left	Make or Break
MC, HMC	Left only®	Make or Break
NC, HNC	Left only®	Make or Break
PC, PCC	Left®	Make or Break
LC, HLC	Left®	Make or Break
LCL®	Left®	Make or Break

Alarm Switch Contact Rating (Non Inductive)

EB, EHB, FB, HFB:

5 amp, 120 volt Ac.

MC, HMC, LA, LAB, HLA, LC, L, LA Tri-Pac:

10 amps, 120 volt Ac; 5A, 200 volt Ac

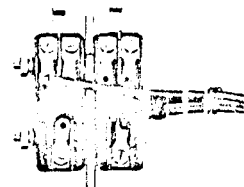
All other breakers:

10 amps, 120-240 volt Ac

List Prices: See Price List 29-C 20 Dkt. CE-2.

Auxiliary Switch®

For auxiliary control circuits. Miniature switches mount within breaker. Commonly used for remote indication of open or closed breaker and electrically interlocking components control circuits. "A" contacts are closed when breaker is closed. "B" contacts are open when breaker is closed. Standard leads extend 18" out side of breaker. Longer leads may be specified.



Auxiliary Switch Attachment Kits for Field Mounting®

Breaker Type	For Right Hand Mounting		For Left Hand Mounting		Max Ac Voltage Rating®	Max. Non-Inductive Amps.
	1A-1B	2A-2B	1A-1B	2A-2B		
EB, EHB, FB, HFB®	4979D06G03	4979D06G08	4979D06G03	4979D06G09	240	5
FCL®	1369D79G03	.....	1369D79G03	.....	240	5
JA, KA, DA, HKA, LB, LBB, HLB	458D067G08	.....	458D067G03	.....	480	10
LA, LAB, HLA	.....	656D527G09®	.....	656D527G01®	240	5
MA, HMA	655D555G05	655D555G06	655D555G12	655D555G13	480	10
NB, HNB, NB TRI-PAC	458D013G05	458D013G06	458D013G12	458D013G13	480	10
FB, PB TRI-PAC	4980D16G05	4980D16G06	4980D16G12	4980D16G13	480	10
JB, KB, HKB	2602D32G14	2602D32G15	2602D32G11	2602D32G12	480	10
J3, KB, HKB	2600D97G08	.....	2600D97G03	.....	480	10
J3, KB, HKB	.....	2609D45G08®	.....	2609D45G03®	240	5
MC, HMC, MCG, HMCG	.....	.....	2609D10G03	2609D10G06	480	(10/240)®
NC, HNC, NCG, HNCG	.....	.....	2609D11G03	2609D11G06	480	(10/240)®
PC, PCC, PCG, PCCG	.....	.....	2609D12G03	2609D12G06	480	(10/240)®
LC, HLC, LCG, HLCG	.....	.....	1371D11G03®	1371D11G06®	480	(10/240)®
LCL®	.....	.....	1372D49G03	1372D49G06	480	(10/240)®

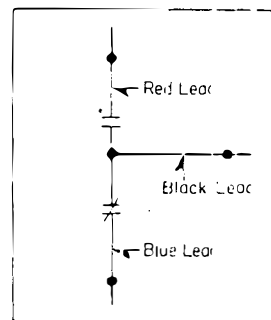
Factory Mounted Auxiliary Switches®

All of the above auxiliary switches can be specified for factory mounting at the same price as listed for the kit. These attachments have the leads out the side of the breaker and are U.L. listed when factory mounted unless other non U.L. listed modifications are used (except as noted).

Factory mounted switches only can be supplied for the following breakers:

CA®, FB®, and HFB magnet only®,
FB Tri-Pac®, LA Tri-Pac.

Price same as a similar kit except price CA from accessory section of PL 29-020.



- ® Changed or added since previous issue.
- ® Not for use on non-automatic breakers. (Molded case switches).
- ® Righthand mounting standard for CA, EB, EHB, FB, HFB, JB, KB, HKB. All others are lefthand mounting as standard unless otherwise specified.
- ® Not U.L. listed.
- ® For DC applications refer to factory.
- ® Thermal magnetic only.
- ® Righthand mounting only.
- ® All switches are multiples of 1A-1B with a common electrical connection (See diagram below).
- ® Except when other attachments are used, must be mounted in right pole.
- ® When alarm switch is used in conjunction with auxiliary switch, the auxiliary switch is rated 250 volt max., 5 amps. max.
- ® Not available for Magnetic Only, Ambient Compensating, breakers with Undervoltage Release, or TRI-PAC breakers.
- ® Field mounting voids UL listing of breaker except on K3, HKB, KA, HKA, LB, LBB, LA, HLA, MA, HMA, NB, HNB, JB, TRI-PAC, PB, PB TRI-PAC and SELTRONIC breakers.
- ® Underwriters' Laboratories listing pending.

Applications, Continued

Ground Current Limiter^①

Availability: DA, JA, KA, JB, KB, HKA Instantaneous magnetic type for use in Dc systems only. For mining applications. Trips breaker when ground currents become excessive. Standard leads extend 18" out side of breaker; longer leads or leads out rear of base may be specified.



Breaker Frame	Amp. Ratings Available	Normal Pole Mfg.
DA, JA, KA, HKA	5, 10, 20	Left
JB, KB, HKB	5, 10, 20	Left

Paralleling Straps^①

Availability: CA thru LB, HFB through HLB. Parallel magnetic breakers, 400 A mps. Max.) Parallel 2-pole breakers for high current single pole operation. Consists of straps at both line and load ends, as well as insulators ahead of trip unit to equalize current division. Review paralleling applications with Westinghouse. (Except FCL and LCL)

Moisture-Fungus-Corrosion Treatment^①

Availability: CA thru TRI-PAC[®] PB. Treatment can be provided to meet customer's specific atmospheric conditions. Moisture-fungus treating material used meets JAN-T-152; treatment meets MIL-V-173a. Requests and orders should specify government specifications or conditions to be met.

Field Discharge Breakers, 250 Volts Dc, 400 Amps. Max.^①

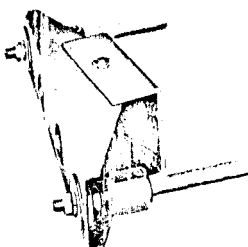
Field discharge breakers are composed of 3-pole frames having two outside non-automatic poles and a center pole field discharge contact arranged to close as the outside contacts open and vice versa. The discharge contact is not designed for load interruption. If automatic tripping for outside poles is desired, specify and give no extra charge.

Breaker Frame	Ampere Rating
	100
	150
	200
	250
	400

Mechanical Interlocks^①

For mechanically interlocking a pair of breakers so that only one may be closed at one time, but both may be open simultaneously.

Walking Beam Type^{①②④⑤}



Availability: DA thru TRI-PAC[®] PB^② except current limiting breakers

Mounts on panel (not included) at rear of breaker. Standard breaker spacing: DA, JA, KA, HKA, LB, LBB, HLB: 5 3/4" center to center; LAB, LA, LC, HLC, MA, MC, NB, NC, HLA, HMA, HMC, HNB, HNC, TRI-PAC LA, TRI-PAC NB: 8 1/2" center to center; EB, EHB, FB, JB, KB, HFB, HKB, TRI-PAC FB: 4 3/8" center to center; PB, PC, PCC, TRI-PAC PB: 12 1/4" center to center. Order as a set of two special factory drilled breakers and 1 walking beam interlock. Specify breaker type, panel thickness and center-to-center dimension of breakers.

Sliding Bar Type (Field Mountable)^{①④⑤}



Availability: DA thru TRI-PAC NB

Mounts on panel (not included) fitting over front of breakers. Standard breaker spacing: DA, JA, KA, HKA, LB, LBB, HLB: 5 3/4" center to center; LAB, LA, LC, HLC, MA, MC, NB, NC, HLA, HMA, HMC, HNB, HNC, TRI-PAC LA, TRI-PAC NB: 8 1/2"; EB, EHB, FB, HFB, TRI-PAC FB: 4 3/8" center to center; JB, KB, HKB: 4 3/4" center to center.

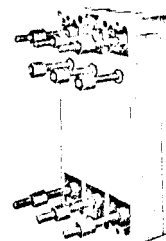
Kirk Key Interlock^③



Availability: 100 Amp Frames (EB) thru 3000 Amp Frames except FCL, LCL and CA.

Permits interlocking of two breakers or one breaker with other devices. Before breaker can be closed, key must be inserted and turned in breaker interlock. Breaker must be opened before key can be removed. It can then be inserted in interlock or other devices to permit their closure. Requests and orders should completely outline interlocking scheme, ultimate user and his address.

Center Studs^①



Availability: 100 Amp Frames (EB) thru 200 Amp Frames except SELTRONIC and current limiting breakers

Provides connections for dual voltage generators, so that same trip unit can be used for protection at both voltages. At higher voltage, the trip unit carries full load current. At lower voltage, half the current by-passes the trip unit through the center studs. Trip rating cannot exceed 50% of frame rating.

① Not UL Listed.
② 2000 amp maximum for PB breaker.
③ Not available on motor operated breakers.
④ Not available on draw-out breakers.
⑤ Not available for FCL or LCL breakers.



April, 1980
New Information
Mailed to: E, D, C/1901, 1903, 1928/PL

Motor Operators
Drawout Frames

AB DE-ION® Circuit Breakers

Accessories, Continued

Motor Operators②

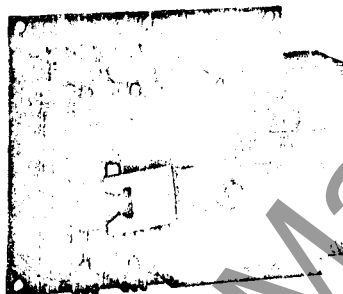
Motor operators provide complete remote control by means of a pushbutton or similar pilot device③. Positive switching action is accomplished by use of an operating arm engaging the breaker handle. The unit is energized momentarily to actuate the lever arm moving it to either the "ON" or "OFF" position. The control is broken by an internal cutoff switch. Means for emergency manual operation is provided.

Motor operators are available with motors rated 120 volts Ac, 208 volts Ac, and 240 volts Ac.④

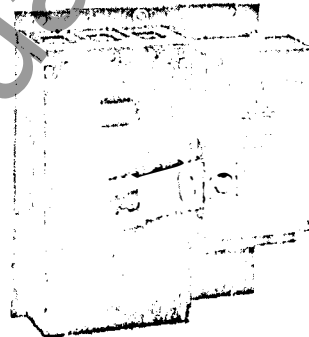
The 480 volt operators utilize a 120 volt Ac motor in conjunction with a 480/240 to 120 volt dual voltage transformer. (On LA and larger operators, the transformer is supplied for separate mounting by the customer.)

Note: The motor operator is intended only for infrequent operation in line with Underwriters' Laboratories, Inc. endurance standards for AB molded case breakers.

List Prices: See Price List 29-02), Dis. CB-2



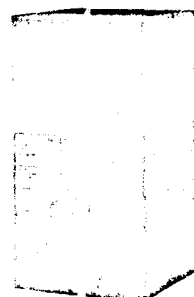
For EB, EHB, FB, HFB and
FB TRI-PAC Breakers



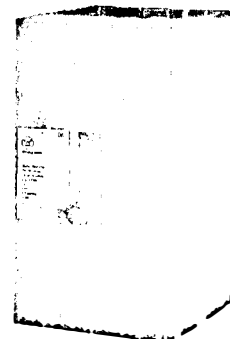
For DA, JA, KA, JB, LB, LBB, HKA,
HKB and HLB Breakers



For LAB, LA, HLA
Breakers



For MA, HMA, NB,
HNB Breakers



For PB Breakers

Motor Operator Selection ②

Type Breaker	Ac Voltage				Dc Voltage	
	120	208	240	480	125	250
EB, EHB, FB, HFB, FB TRI-PAC	Style Number	Style Number	Style Number	Style Number	Style Number	Style Number
FCL③	566D148G01	656D148G04	656D148G02	656D148G03	.....	.....
DA, JA, KA, HKA	566E148G07	656D148G10	656D148G09	656D148G09	.....	.....
LB, LBB, HLB	657D819G07	657D819G10	657D819G11	657D819G09	.....	.....
JB, KB, HKB	657D319G13	657D819G16	657D819G14	657D819G15	.....	.....
LAB, LA, HLA, LC, HLC	660D28G01	2600D28G04	2600D28G02	2600D28G03	.....	.....
MA, HMA, MC, HMC	2607D97G11④	2607D97G14④	2607D97G12④	2607D97G13④	2607D97G15④	2607D97G16④
NB, HNB, NC, HNC	5664D54G25④	5664D54G28④	5664D54G26④	5664D54G27④	5664D54G30④	5664D54G31④
PB, PC, PCC, PB, TRI-PAC	5664D54G21④	5664D54G24④	5664D54G22④	5664D54G23④	5664D54G29④	5664D54G32④
LA TRI-PAC	5661D52G01	5661D52G04	5661D52G02	5661D52G03	5661D52G14	.....
NB TRI-PAC	626F900G01	626F900G02	626F900G03	626F900G04	626F900G09	.....
	626F900G05	626F900G06	626F900G07	626F900G08	626F900G10	.....

Back Mounting Plates

Type Breaker	120, 208, 240, 480 Volts Ac
	Style Number
EB, EHB, FB, HFB	5J3-707G-11
DA, JA, KA, LB	5J3-981G-11
JB, KB, HKB	725-C26G-11
FCL③	728-C01G-11

Motor Data

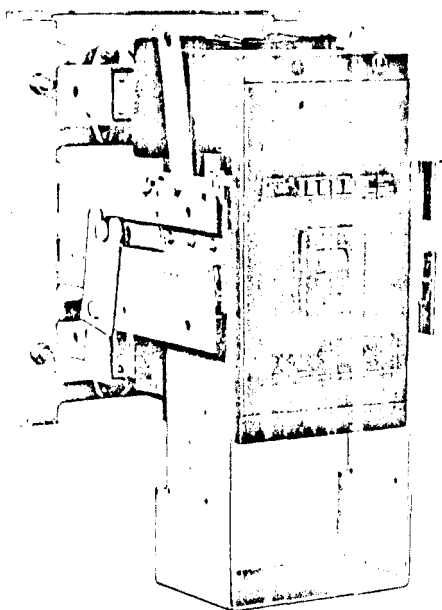
Type Breaker	Motor Type	Hp.	Inrush Current, Ampere (Peak)			Continuous Current (RMS)			Operating Time Open or Close
			120 Volts	208 Volts	240 Volts	120 Volts	208 Volts	240 Volts	
EB, EHB, FB, HFB, TRI-PAC FB	Solit Phase	1/75	10	4	5	2.3	1.17	1.35	1.5 seconds
DA, JA, KA, JB, KB, LB, LBB, HKB, HLB	Solit Phase	1/50	14	6	7	3.5	1.6	1.75	1.5 seconds
LAB, LA, HLA	Reversing	...	6	5	4	...	...	...	12 Cycles
MA, HMA, NB, HNB	Reversing	...	11	7	6	...	...	...	12 Cycles
PB	Reversing	...	20	12	11	...	...	...	10 Cycles

Local On-Off/Reset Pushbutton
Available LA, MA, NB and HNB only, must be
factory installed.

Dimensions: DS 29-170

- ② Changed or added since previous issue.
- ③ All voltage rated operators are UL listed as recognized components.
- ④ The pilot device must be main latched contact type for EB, EHB, FB, HFB, FB TRI-PAC, FCL, DA, JA, KA, JB, KB, HKB and LB mechanisms; momentary contact type for all others.
- ④ LA and larger available for 125 volts Dc. LA, MA and NB also available for 240 volt Dc.

Drawout Frame^②



These drawout frames are for use with standard 3-pole Westinghouse molded case circuit breakers. They consist of two separate parts: stationary mounting frame and movable carrier frame. Slide rails are drawer-type, and a screw mechanism is used to engage or withdraw the movable carrier frame.

The drawout frames have three positions: connected, test and disconnected. The frames do not include a safety tripping interlock, or secondary contacts. These are optional items and may be ordered at additional cost.

Breakers mounted in the drawout frames can be equipped with standard breaker accessories including shunt trip, undervoltage release, auxiliary switch, alarm switch and motor operator.

Optional Features

Safety Interlock^①

This feature trips the breaker as the movable carrier frame is withdrawn, and must be factory installed. Order as follows.

For LA, MA and NB breakers.^③

Order standard stationary mounting frame. Order breaker and movable carrier frame assembled with safety interlock.

Secondary Contacts

These are used to disconnect auxiliary circuits when attachments such as shunt trip or motor operator are used. Available in multiples of four contacts with a maximum of 4 contacts for the LA 600 or 32 contacts for the MA and NB. They must be factory mounted. Order by description as similar to stationary or moving frame and specify number of contacts required. Price from accessory section of Price List 29-020.

Selection Data^{① ③}

Breaker Type	Stationary Mounting Frame Style Number ^③	Movable Carrier Frame Style Number ^③
LA600, HLA600, LC600, HLC600	2603D84C 31	2608D35G01
MA, HMA, MC, HMC	2603D85C 31	2608D34G11
NB, HNB, NC, HNC	2603D85C 31	2608D34G01
NB TRI-PAC	2603D85C 39	2608D34G11 ^③

Ordering Information^③

Standard Installation

Order one stationary mounting frame and one movable carrier frame.

Order breakers without terminals or rear connectors.

Order any attachments desired (shunt trip, undervoltage release, etc.)

Order secondary contacts as required:

- a shunt trip, undervoltage release or alarm switch requires two contacts;
- a 1A-1B auxiliary switch requires three contacts;
- a motor operator requires a maximum of four contacts;
- others as required.

With Safety Interlock

Order stationary mounting frame and movable carrier frame as directed under Optional Features.

Racking Crank

A special crank to engage or withdraw the moving portion of the drawout. A standard 1/2 inch hex socket with extension can be used for this purpose.

Style Number: 765A767G01

Cell Switches Mounted on Draw-out Frames, All Ratings

Up to four switches can be provided. Order by description.

Each switch provides NO and NC contact that transfers before reaching the test position when being withdrawn, and after the test position when being racked in.

List Prices: See Price List 29-020, D s. C3-2

^① Safety interlock not available on NB TRI-PAC, MA, NC, HMC, HNC, LC, HLC.

^② These units are UL listed.

^③ SELTRONIC™ circuit breakers with built-in ground fault require a special breaker frame with a drawout side in place of standard terminal block. Order by description the breaker frame and carrier as one assembly.