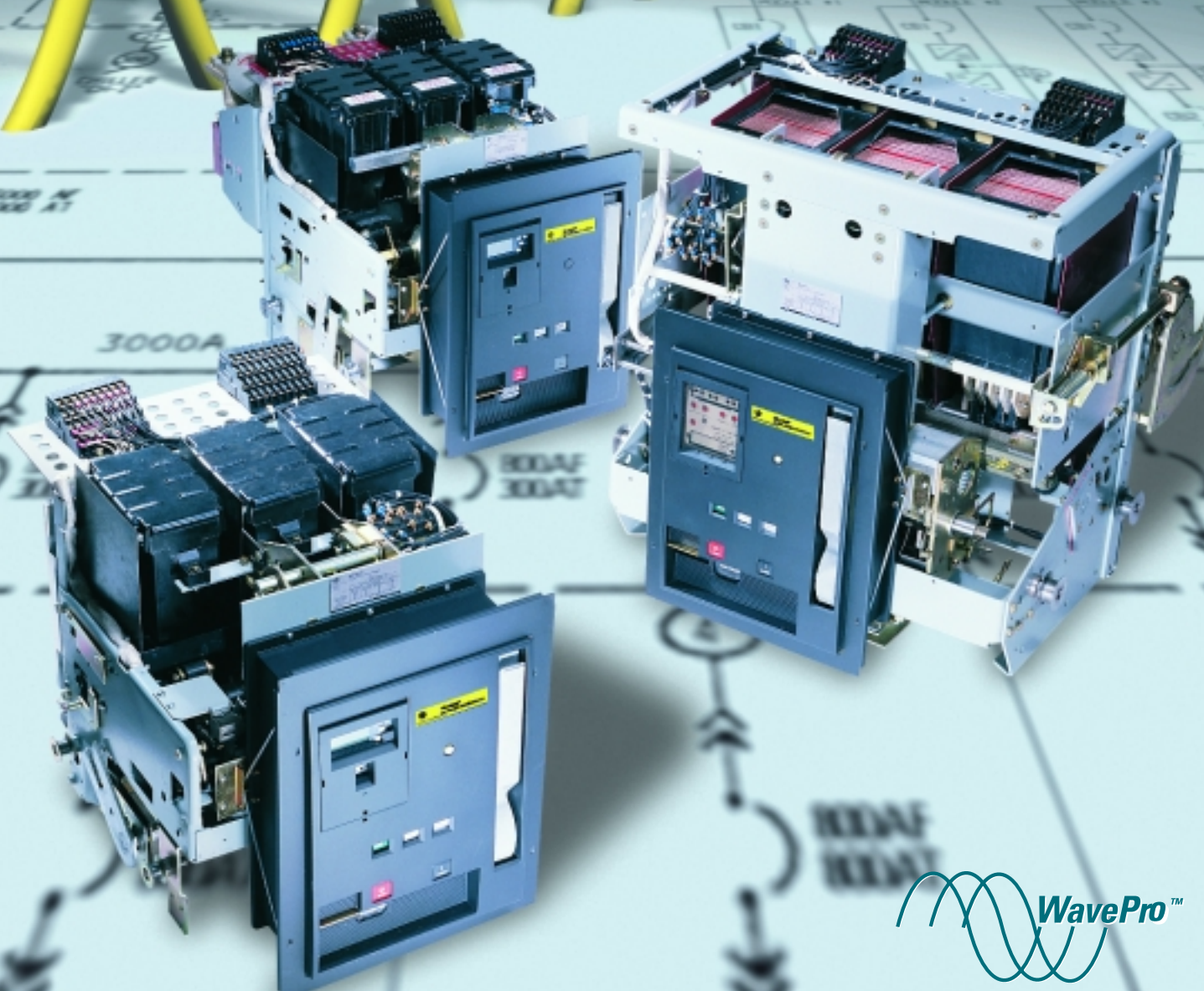




**WavePro™ Low Voltage Power Circuit Breakers
Selection & Pricing Guide**

*The Ultimate Assurance
In Uptime And Reliability*





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How to select and price WavePro low voltage power circuit breakers – One step at a time.

This Selection & Pricing Guide allows you to systematically arrive at the catalog number and list price for a WavePro OEM breaker. It also contains information you can use to specify applicable fuses, neutral current transformers and other associated devices (Tables A-1 to A-4 on pages 5-6 and Tables B-5 to B-12 on pages 15-16) and to select and order substructures and substructure accessories (Tables B-1 to B-4 on pages 12-15). The WavePro Breaker Application Guide (DET-167) contains additional information that will help you select options to specify for your particular application.

First, determine the appropriate WavePro breaker type from Table A-1 on page 5.

Rated AC Voltage, Nominal (max)	Breaker Type	Frame Size (amps)	Short-Circuit RMS Symmetrica	
			Short-Time Withstand	With Instantaneous Trip
600 (635)	WPS-08	800	30	30
	WPH-08	800	42	42
	WPX-08	800	50	50
	WPS-16	1600	42	42
	WPH-16	1600	65	65
	WPS-20	2000	65	65
	WFS-32	3200	65	65
	WPH-32	3200	85	85
	WPS-40	4000	85	85
	WFS-50	5000	85	85
	WPS-08	800	30	30
	WPH-08	800	42	42

Using that information, follow the step-by-step instructions beginning on page 7 to select options and accessories. At the end of each step, transfer the resulting catalog number digit(s) and price component for your selection to the appropriate boxes in the Catalog Number Line and Price Column. **Helpful Hint:** Make a photocopy of the Catalog Number Line and Price Column (page 4) every time you follow this process so you can use the form again.

When you're done, you'll have a complete breaker catalog number and, after you add up the price components, a total list price. *Note: To order, you must submit a complete 15-digit breaker catalog number.* If you reach a point where no further options or accessories are required, fill in each of the remaining catalog numbers digits with X (indicating no option or accessory) before submitting your order.

An example:

Here's an example of the selection and pricing process (see facing page), based on a WavePro breaker with the following specifications:

Option or Accessory		Option or Accessory	
Tables A-1 to A-4	WPF-08 Breaker, 800A Frame	Step 6	240V, 50/60 Hz electric lockout
Step 1	800A Class L Fuse, 800A Sensor	Step 7	4-stage aux switch
Step 2	MVT PM Trip Unit with LSIG functions	Step 8	Bell alarm & close/open push button covers
Step 3	700A Trip Unit Rating Plug	Step 9	24V dc shunt trip (second shunt trip)
Step 4	120V ac 60Hz Electrical Charge & Close Operation	Step 10	Hidden close push button and remote charge indicator (Note: "A" disconnect comes standard with the options selected here.)
Step 5	120V ac shunt trip, 60 Hz		

Catalog Number Line – WavePro Breaker

WavePro Breaker for Substructures	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Future use, but "X" required
W S G D C Q E F 1 5 A B B E X											

Price Column	(List Price, GO-128W)
Step 1	\$12,790.00
Step 2	\$6,500.00
Step 3	\$ 0.00
Step 4	\$2,150.00
Step 5	\$350.00
Step 6	\$595.00
Step 7	\$450.00
Step 8	\$635.00
Step 9	\$635.00
Step 10	\$500.00
Breaker Item List Price, GO-128W	\$24,605.00
Item Number	1
Quantity	1



Step 1 Select Interrupting Type And Current Sensor

Breaker Type	Interrupting Type & Rating	Current Sensor					
		No Sensor ①	List Price, GO-128W	150A	400A	800A	List Price, GO-128W
WFS-08	Standard	1A	\$5380.00	1B	1C	1D	\$5980.00
WPH-08	High	2A	7320.00	2B	2C	2D	7920.00
WFX-08	Extended	3A	10220.00	3B	3C	3D	10820.00
WFF-08	Class J Fuse	300A Fuse	—	AB	AC	AD	12790.00
		350A Fuse	—	BB	BC	BD	12790.00
		400A Fuse	—	CB	CC	CD	12790.00
		450A Fuse	—	DB	DC	DD	12790.00
		500A Fuse	—	EB	EC	ED	12790.00
	Class L Fuse	600A Fuse	—	FB	FC	FD	12790.00
		800A Fuse	—	GB	GC	GD	12790.00
		1000A Fuse	—	HB	HC	HD	12790.00
		1200A Fuse	—	JB	JC	JD	12790.00
		1600A Fuse	—	KB	KC	KD	12790.00

Step 2 Select Trip Unit

Function Code	Long Time	Short Time	Instantaneous	Ground Fault	Defeatable Ground Fault ①	Switchable ST or Inst & GF ②	ZSI - GF & ST	MicroVersaTrip Plus		MicroVersaTrip M		MicroVersaTrip PM	
								Cat. No. Digits	List Price, GO-128W	Cat. No. Digits	List Price, GO-128W	Cat. No. Digits	List Price, GO-128W
LI	•	•	•	•				AJ	\$1250.00	BJ	\$2600.00	CJ	\$3600.00
LIG	•	•	•	•				AK	3500.00	BK	4850.00	CK	5750.00
LIGZ1	•	•	•	•			•	AL	3915.00	BL	5265.00	CL	6165.00
LIGD2	•	•	•	•				AM	4000.00	BM	5350.00	CM	6250.00
LIGDZ1	•	•	•	•			•	AN	4500.00	BN	5850.00	CN	6750.00
LS	•	•	•	•				AA	2000.00	BA	3350.00	CA	4250.00
LSG	•	•	•	•				AB	4250.00	BB	5600.00	CB	6500.00
LSGZ1	•	•	•	•			•	AC	4665.00	BC	6015.00	CC	6915.00
LSGZ2	•	•	•	•				AD	5080.00	BD	6430.00	CD	7330.00
LSGD2	•	•	•	•				AE	4750.00	BE	6100.00	CE	7000.00
LSGDZ1	•	•	•	•			•	AF	5165.00	BF	6515.00	CF	7415.00
LSGDZ2	•	•	•	•				AG	5580.00	BG	6930.00	CG	7830.00
LSI	•	•	•	•				AP	2000.00	BP	3350.00	CP	4250.00
LSIG	•	•	•	•				AQ	4250.00	BQ	5600.00	CQ	6500.00
LSIGZ	•	•	•	•			•	AR	4920.00	BR	6270.00	CR	7170.00
LSIGZ1	•	•	•	•			•	AS	4665.00	BS	6015.00	CS	6915.00

Step 3 Select Trip Unit Rating Plug By Current Sensor

Rating Plug	Cat. No. Digit	Availability by Current Sensor Rating (shaded areas indicate availability)							
		150	400	800	1600	2000	3200	4000	5000
None	X								
60	1	①							
80	2								
100	3								
125	4								
150	5		①						
200	6								
225	7								
250	8								
300	9								
400	A								
450	B								
500	C								
600	D								
700	E								
750	F								
800	G								
1000	H								
1100	J								
1200	K								
1500	L								
1600	M								
2000	N								
2400	P								
2500	Q								
3000	R								
3200	S								①
3600	T								
4000	V								①
5000	W								①

Step 4 Select Charge And Close Operators

Voltage	Manual		Manual Charge Remote Close ①		Electrical Charge & Close ①	
	Cat. No. Digit	List Price, GO-128W	Cat. No. Digit	List Price, GO-128W	Cat. No. Digit	List Price, GO-128W
Manual	X	\$0.00	—	—	—	—
120V, 60 Hz	—	—	1	\$547.00	F	\$2150.00
120V, 50 Hz	—	—	4	547.00	H	2150.00
120V, 50/60 Hz - 48Vdc	—	—	—	—	N	2150.00
240V, 60 Hz	—	—	3	547.00	—	—
240V, 60 Hz	—	—	—	—	T	2150.00
240V, 50 Hz	—	—	6	547.00	W	2150.00
48Vdc	—	—	A	547.00	E	2150.00
110Vdc	—	—	B	547.00	P	2150.00
125Vdc	—	—	C	547.00	Q	2150.00

Step 5 Select Shunt Trip

Voltage	Catalog Number Digit	List Price, GO-128W	Voltage	Cat Num
None	X	\$0.00	240V, 50 Hz	
120V, 60 Hz	1	350.00	12Vdc	
208V, 60 Hz	2	350.00	24Vdc	
240V, 60 Hz	3	350.00	48 Vdc	
70V, 60 Hz	4	350.00	110/125Vdc	
120V, 50 Hz	5	350.00	250Vdc	
208V, 50 Hz	6	350.00	—	

Step 6 Select Undervoltage Trip OR Electric Lockout

Voltage	Undervoltage (Instantaneous)		Undervoltage with Time Delay ①		Electric Lockout	
	Catalog Number Digit	List Price, GO-128W	Catalog Number Digit	List Price, GO-128W	Catalog Number Digit	List Price, GO-128W
None	X	\$0.00	X	\$0.00	X	\$0.00
120V, 50/60 Hz	1	565.00	—	—	4	595.00
208V, 50/60 Hz	—	—	3 ③	565.00	—	—
240V, 50/60 Hz	2	565.00	3 ③	565.00	5	595.00
24Vdc	A	565.00	—	—	6	595.00
48Vdc	B	565.00	—	—	H	595.00
110Vdc	C	565.00	—	—	J	595.00
125Vdc	C	565.00	E ④	565.00	J	595.00

Step 7 Select Auxiliary Switch

Auxiliary Switch	Cat. No. Digit	List Price, GO-128W
None	X	\$0.00
4-stage Auxiliary Switch	A	450.00
7-stage Auxiliary Switch	B	450.00

Step 8 Select Bell Alarm & Close/Open Push Button Covers

Bell Alarm	Options			Cat. No. Digit	List Price, GO-128W
	Bell Alarm with Lockout	Cover over CLOSE Push Button	Cover over OPEN Push Button		
•				X	\$0.00
	•			A	635.00
		•		B	635.00

Step 9 Select Second Shunt Trip (not available with WPS-50 5000A breakers)

Voltage	Cat. No. Digit	List Price, GO-128W
None	X	\$0.00
120V, 60 Hz	1	635.00
240V, 60 Hz	3	635.00
24Vdc	B	635.00
110/125Vdc	E	635.00

Step 10 Select Additional Options

A-Disconnect ① "PM Ready"	Hidden Close Push Button	Operation Counter	Remote Charge Indicator ②	Cat. No. Digit	List Price, GO-128W
				X (None)	\$0.00
			•	A	375.00
			•	B	375.00
			•	C	750.00
			•	D	750.00
			•	E	500.00
			•	F	300.00
			•	G	875.00
			•	H	250.00
			•	J	625.00
			•	K	625.00
			•	L	1000.00
			•	M	375.00
			•	N	750.00
			•	P	750.00



Ordering Worksheet

The step-by-step process below allows you to systematically arrive at the catalog number and list price for your WavePro OEM breaker. As a result, you will get exactly what you need. In addition, this system reduces the cycle time, precisely specifies your requirements, allows tracking during production and ensures accurate invoicing. The final catalog number will appear on the breaker nameplate, so you can identify all components built into the original breaker and compare breakers within a facility for proper application.

Follow the instructions at each step and transfer the catalog number digit and price for each selection to the appropriate boxes in the Catalog Number Line and Price Column below. Note: You must submit a complete 15-digit catalog number when ordering. If you reach a point where no further options or accessories are desired, fill in the remaining catalog number digits with "X" (for none).

For options not listed, contact your GE ED&C Sales Engineer or GE Switchgear Marketing for assistance.

Catalog Number Line – WavePro Breaker

WavePro Breaker for Substructures		Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Future use, but "X" required
W	S											X

Date _____

Name _____

Title _____

Company _____

Address _____

City _____

State _____

Zip _____

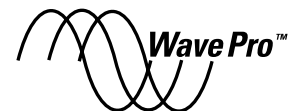
Telephone _____

Fax _____

Price Column (List Price, GO-128W)

Step 1	\$
Step 2	\$
Step 3	\$ 0.00
Step 4	\$
Step 5	\$
Step 6	\$
Step 7	\$
Step 8	\$
Step 9	\$
Step 10	\$
Breaker Item List Price, GO-128W	\$
Item Number	
Quantity	

Note: Photocopy this page for each breaker you select and submit it with your order.





Basic Selection Information

Table A-1. WavePro Breaker Interrupting Ratings

Rated AC Voltage, Nominal (max)	Breaker Type	Frame Size (amps)	Short-Circuit Ratings RMS Symmetrical kA		
			Short-Time Withstand	With Instantaneous Trip	Without Instantaneous Trip
600 (635)	WPS-08	800	30	30	30
	WPH-08	800	42	42	42
	WPX-08	800	50	50	50
	WPS-16	1600	42	42	42
	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	65	65
	WPH-32	3200	85	85	85
	WPX-32	3200	85	85	85
	WPS-40	4000	85	85	85
	WPX-40	4000	85	85	85
	WPS-50	5000	85	85	85
WPX-50	5000	85	85	85	
480 (508)	WPS-08	800	30	30	30
	WPH-08	800	42	42	42
	WPX-08	800	65	65	65
	WPS-16	1600	50	50	50
	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	65	65
	WPH-32	3200	85	85	85
	WPX-32	3200	100	100	100
	WPS-40	4000	85	85	85
	WPX-40	4000	100	100	100
	WPS-50	5000	85	85	85
WPX-50	5000	100	100	100	
240 (254)	WPS-08	800	30	42	30
	WPH-08	800	42	50	42
	WPX-08	800	65	65	65
	WPS-16	1600	50	65	50
	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	85	65
	WPH-32	3200	85	130	85
	WPX-32	3200	100	130	100
	WPS-40	4000	85	130	85
	WPX-40	4000	100	130	100
	WPS-50	5000	85	130	85
WPX-50	5000	100	130	100	

Table A-2. Fused Breaker Ratings. Max. 600V ac 50/60 Hz.

Frame Size (Amps)	Fuse Rating (Amps) ①		Interrupting Rating rms Symmetrical kA	Breaker Type
	Min	Max		
800	300	1600	200	WPF-08
1600	450	2500	200	WPF-16
2000	2000	2500	200	WPS-20 ②
3200	2000	4000	200	WPS-32 ②
4000	2000	5000	200	WPS-40 ②
5000	2000	5000	200	WPS-50 ②

① The maximum fuse rating is the largest fuse that tests show will result in proper performance of the breaker and fuse in combination under short circuit conditions.

② Fuses are mounted on separate fuse roll-out element and are ordered and shipped separately. See Table A-4 on page 6.



Basic Selection Information (cont.)

Table A-3. Allowable Fuse Sizes for WavePro WPF and WPS breakers with separate fused rollout elements.

Note: WPS breakers with separate fuse roll-out element require the open fuse lockout (OFLO) device. Select "OFLO only" option for breakers 2000A - 5000A. The "OFLO" option is standard on WPF breakers.

Breaker Type	Frame Size	Sensor Rating	Rating Plug	Gould-Shawmut Fuse Range (Amps) ①											
				Class J						Class L					
				300	350	400	450	500	600	800	1000	1200	1600	2000	2500
WPF-08	800A	150A	Below 150A	[Darkened area indicating available fuse ranges]											
		150A, 400A	150A												
		400A	225A												
		400A, 800A	300A												
		400A, 800A	400A												
		800A	600A												
		800A	700A												
WPF-16	1600A	800A	400A & below	[Darkened area indicating available fuse ranges]											
		800A	500A												
		800A, 1600A	600A												
		800A, 1600A	700A												
		800A, 1600A	800A												
		1600A	1000A												
		1600A	1200A												
WPS-20 ②	2000A	2000A	2000A & below	[Darkened area indicating available fuse ranges]											
WPS-32 ②	3200A	3200A	3200A & below	[Darkened area indicating available fuse ranges]											
WPS-40 ②	4000A	4000A	4000A & below	[Darkened area indicating available fuse ranges]											
WPS-50 ②	5000A	5000A	5000A & below	[Darkened area indicating available fuse ranges]											

① Class L fuses less than 800A are not UL or CSA listed. Use Class J fuses for 600A and below. 800A-2000A fuses are also available as welder limiters.
 ② Fuses are mounted on separate fuse roll-out element and are ordered and shipped separately. See Table B-3 on page 12.

Table A-4. Catalog Numbers for Replacement Fuses

Note: These catalog numbers are for field-installed replacement fuses. Original fuses for 800A and 1600A frame breakers are integral to the breaker and are factory installed. For larger frame breakers (2000A and greater), customers must provide and separately mount fuses.

Class J & Class L Breaker Mounted Fuses for 800A & 1600A Frames (replace original GE-installed fuses)

Fuse Class	Fuse Rating	Catalog Number
J	300A	A4J300
J	400A	A4J400
J	450A	A4J450
J	500A	A4J500
J	600A	A4J600
L	800A	A4BY800
L	1000A	A4BY1000BG
L	1200A	A4BY1200BG
L	1600A	A4BY1600BG
L	2000A	A4BY2000BG
L (Silver)	2500A	A4BQ2500GE

Class L Fuses for Roll-out Elements on 2000A, 3200A, 4000A & 5000A Frames (replace original customer-installed fuses)

Fuse Rating	Catalog Number
2000A	A4BY2000-55BA
2500A	A4BY2500-55BA
3000A	A4BY3000-55BA
4000A	A4BY4000-55BA
5000A	A4BY5000-55BA

Welder Limiters for Breaker Mounted Fuses

(replace original GE-installed fuses)

Fuse Rating	Catalog Number
800A	A4BX800
1000A	ABBX1000BG
1200A	A4BX1200BG
1600A	A4BX1600BG
2000A	A4BX2000



Selection & Pricing

Before beginning the selection and pricing process, first determine the appropriate WavePro breaker type from Table A-1 on page 5. You will need this information to proceed.



Step 1 Select Interrupting Type And Current Sensor

For WPF breaker types, see Table A-3 on page 6 for allowable combinations of fuse size, current sensor and rating plugs. From the table below that corresponds to your frame size, select the interrupting type and current sensor for your breaker type. Transfer the catalog number digits to the box marked **Step 1** in the Catalog Number Line and the price to the box marked **Step 1** in the Price Column on the Ordering Worksheet (page 4). Note: Power fuses and open fuse lockout (OFLO) devices are included in the pricing for WPF type 800 and 1600 amp fused breakers.

800 Amp Frame

Breaker Type	Interrupting Type & Rating		Current Sensor					
			No Sensor ①	List Price, GO-128W	150A	400A	800A	List Price, GO-128W
WPS-08	Standard	—	1A	\$5380.00	1B	1C	1D	\$5980.00
WPH-08	High	—	2A	7320.00	2B	2C	2D	7920.00
WPX-08	Extended	—	3A	10220.00	3B	3C	3D	10820.00
WPF-08	Class J Fuse	300A Fuse	—	—	AB	AC	AD	12790.00
		350A Fuse	—	—	BB	BC	BD	12790.00
		400A Fuse	—	—	CB	CC	CD	12790.00
		450A Fuse	—	—	DB	DC	DD	12790.00
		500A Fuse	—	—	EB	EC	ED	12790.00
		600A Fuse	—	—	FB	FC	FD	12790.00
	Class L Fuse	800A Fuse	—	—	GB	GC	GD	12790.00
		1000A Fuse	—	—	HB	HC	HD	12790.00
		1200A Fuse	—	—	JB	JC	JD	12790.00
		1600A Fuse	—	—	KB	KC	KD	12790.00
	Welder Limiter	800A Fuse	—	—	—	—	ND	12790.00
		1200A Fuse	—	—	—	—	PD	12790.00
		1600A Fuse	—	—	—	—	QD	12790.00

① Draw-out breaker only, non-automatic.

1600 Amp Frame

Breaker Type	Interrupting Type & Rating		Current Sensor				
			No Sensor ①	List Price, GO-128W	800A	1600A	List Price, GO-128W
WPS-16	Standard	—	1E	\$11730.00	1F	1G	\$12330.00
WPH-16	High	—	2E	13960.00	2F	2G	14560.00
WPF-16	Class J Fuse	450A Fuse	—	—	DF	—	19040.00
		500A Fuse	—	—	EF	—	19040.00
		600A Fuse	—	—	FF	FG	19040.00
	Class L Fuse	800A Fuse	—	—	GF	GG	19040.00
		1000A Fuse	—	—	HF	HG	19040.00
		1200A Fuse	—	—	JF	JG	19040.00
		1600A Fuse	—	—	KF	KG	19040.00
		2000A Fuse	—	—	LF	LG	19040.00
		2500A Fuse	—	—	MF	MG	19040.00
		800A Fuse	—	—	NF	NG	19040.00
	Welder Limiter	1200A Fuse	—	—	PF	PG	19040.00
		1600A Fuse	—	—	QF	QG	19040.00
		2000A Fuse	—	—	RF	RG	19040.00

① Draw-out breaker only, non-automatic.

2000 Amp Frame

Breaker Type	Interrupting Type	No Sensor ①	List Price, GO-128W	2000A Sensor	List Price, GO-128W
WPS-20	Standard	1H	\$19190.00	1J	\$19790.00
	OFLO only ②	—	—	4J	20765.00

① Draw-out breaker only, non-automatic.

② List price includes OPEN FUSE LOCKOUT (OFLO) device. Use with separate fuse roll-out element (see Table B-2 on page 12).

3200 Amp Frame

Breaker Type	Interrupting Type	No Sensor ①	List Price, GO-128W	3200A Sensor	List Price, GO-128W
WPS-32	Standard	1K	\$25100.00	1L	\$25700.00
	OFLO only ②	—	—	4L	26675.00
WPH-32	High	2K	28550.00	2L	29150.00
WPX-32	Extended	3K	33045.00	3L	33645.00



Selection & Pricing (cont.)

Step 1 (Cont.)

4000 Amp Frame

Breaker Type	Interrupting Type	No Sensor ①	List Price, GO-128W	4000A Sensor	List Price, GO-128W
WPS-40	Standard	1M	\$32190.00	1N	\$32790.00
	OFLO only ②	—	—	4N	33765.00
WPX-40	Extended	3M	37115.00	3N	37715.00

5000 Amp Frame

Breaker Type	Interrupting Type	No Sensor ①	List Price, GO-128W	4000A Sensor	List Price, GO-128W
WPS-50	Standard	1P	\$36060.00	1R	\$36660.00
	OFLO only ②	—	—	4N	37635.00
WPX-50	Extended	3P	41565.00	3R	42165.00

① Draw-out breaker only, non-automatic.

② List price includes OPEN FUSE LOCKOUT (OFLO) device. Use with separate fuse roll-out element (see Table B-2 on page 12).



Step 2 Select Trip Unit

From the table that corresponds to your preferred trip unit type (Power+ or MicroVersaTrip), select your trip unit. Transfer the catalog number digits to the boxes marked **Step 2** in the Catalog Number Line and the price to the box marked **Step 2** in the Price Column.

Power+ Trip Unit

Function Code	Functions					Power+		Power+ With Targets	
	Long Time	Short Time	Instantaneous	Ground Fault ①	Defeatable Ground Fault ① ③	Cat. No. Digits	List Price, GO-128W	Cat. No. Digits	List Price, GO-128W
None ②						XX	\$0.00	XX	\$0.00
LI	•		•			GJ	0.00	KJ	315.00
LIG	•		•	•		HJ	2250.00	LJ	2565.00
LIGD ③	•		•	•	•	JJ	2750.00	MJ	3065.00
LS	•	•				GA	750.00	KA	1065.00
LSG	•	•		•		HA	3000.00	LA	3315.00
LSGD ③	•	•			•	JA	3500.00	MA	3815.00
LSI	•	•	•			GP	750.00	KP	1065.00
LSIG	•	•	•	•		HP	3000.00	LP	3315.00
LSIGD ③	•	•	•	•	•	JP	3500.00	MP	3815.00

① Ground fault is 3-wire/4-wire. If 4-wire ground fault is required, then one of the A-Disconnect options in **Step 10** must be selected and the sensor for the 4th wire (neutral) must be ordered separately. See Table B-5 on page 15.

② Non-automatic drawout breaker.

③ Function combination is not UL Listed.

MicroVersaTrip™ Trip Unit

All MicroVersaTrip trip units include integral targets and ammeter display. MicroVersaTrip M adds full metering and communications; MicroVersaTrip PM adds relaying, metering and communications.

Function Code	Functions								MicroVersaTrip Plus		MicroVersaTrip PM			
	Long Time	Short Time	Instantaneous	Ground Fault ①	Defeatable Ground Fault ① ②	Switchable ST or Inst & GF ① ②	ZSI - GF ③	ZSI - GF & ST ③	Cat. No. Digits	List Price, GO-128W	M		PM	
											Cat. No. Digits	List Price, GO-128W	Cat. No. Digits	List Price, GO-128W
LI	•		•					AJ	\$1250.00	BJ	\$2600.00	CJ	\$3500.00	
LIG	•		•	•				AK	3500.00	BK	4850.00	CK	5750.00	
LIGZ1	•		•	•		•		AL	3915.00	BL	5265.00	CL	6165.00	
LIGD ②	•		•	•	•			AM	4000.00	BM	5350.00	CM	6250.00	
LIGDZ1 ②	•		•	•	•	•		AN	4500.00	BN	5850.00	CN	6750.00	
LS	•	•						AA	2000.00	BA	3350.00	CA	4250.00	
LSG	•	•		•				AB	4250.00	BB	5600.00	CB	6500.00	
LSGZ1	•	•		•		•		AC	4665.00	BC	6015.00	CC	6915.00	
LSGZ2	•	•		•			•	AD	5080.00	BD	6430.00	CD	7330.00	
LSGD ②	•	•			•			AE	4750.00	BE	6100.00	CE	7000.00	
LSGDZ1 ②	•	•		•	•	•		AF	5165.00	BF	6515.00	CF	7415.00	
LSGDZ2 ②	•	•		•	•		•	AG	5580.00	BG	6930.00	CG	7830.00	
LSI	•	•	•					AP	2000.00	BP	3350.00	CP	4250.00	
LSIG	•	•	•	•				AQ	4250.00	BQ	5600.00	CQ	6500.00	
LSIGX ②	•	•	•	•		•		AR	4920.00	BR	6270.00	CR	7170.00	
LSIGZ1	•	•	•	•		•		AS	4665.00	BS	6015.00	CS	6915.00	
LSIGZ2	•	•	•	•			•	AT	5080.00	BT	6430.00	CT	7330.00	
LSIGD ②	•	•	•	•	•			AV	4750.00	BV	6100.00	CV	7000.00	
LSIGDZ1 ②	•	•	•	•	•	•		AW	5165.00	BW	6515.00	CW	7415.00	
LSIGDZ2 ②	•	•	•	•	•		•	AY	5580.00	BY	6930.00	CY	7830.00	

① Ground fault is 3-wire/4-wire. If 4-wire ground fault is required, then one of the A-Disconnect options in **Step 10** must be selected and the sensor for the 4th wire (neutral) must be ordered separately. See Table B-5 on page 15.

② Function combination is not UL Listed.

③ Requires zone selective interlock module, Type TIM1 (120Vac control voltage), List Price \$402.00, GO-245B.



Step 3 Select Trip Unit Rating Plug By Current Sensor

Select your rating plug and current sensor combination. Transfer the catalog number digit to the box marked **Step 3** in the catalog number line. There is no price component for this step.

Rating Plug	Cat. No. Digit	Availability by Current Sensor Rating (shaded areas indicate availability)							
		150	400	800	1600	2000	3200	4000	5000
None	X								
60	1	①							
80	2								
100	3								
125	4								
150	5		①						
200	6								
225	7								
250	8								
300	9			①					
400	A								
450	B			①					
500	C								
600	D				①				
700	E								
750	F					①			
800	G					①			
1000	H								
1100	J				①				
1200	K								
1500	L					①			
1600	M								
2000	N								
2400	P								
2500	Q								
3000	R								
3200	S								①
3600	T							①	
4000	V								①
5000	W								①

① At coordinate indicated, rating plug and current sensor combination available only on MicroVersaTrip trip units. Not available on Power+ trip units.

Step 4 Select Charge And Close Operators

Select your charge and close options. Transfer the catalog number digit to the box marked **Step 4** in the Catalog Number Line and the price to the box marked **Step 4** in the Price Column.

Voltage	Manual		Manual Charge, Remote Close ①		Electrical Charge & Close ①	
	Cat. No. Digit	List Price, GO-128W	Cat. No. Digit	List Price, GO-128W	Cat. No. Digit	List Price, GO-128W
Manual	X	\$0.00	—	—	—	—
120V, 60 Hz	—	—	1	\$547.00	F	\$2150.00
120V, 50 Hz	—	—	4	547.00	H	2150.00
120V, 50/60 Hz - 48Vdc	—	—	—	—	N	2150.00
240V, 60 Hz	—	—	3	547.00	T	2150.00
240V, 50 Hz	—	—	6	547.00	W	2150.00
48Vdc	—	—	A	547.00	E	2150.00
110Vdc	—	—	B	547.00	P	2150.00
125Vdc	—	—	C	547.00	Q	2150.00
250Vdc	—	—	D	547.00	R	2150.00

① Requires the selection of a shunt trip in **Step 5** and a 4-stage or higher auxiliary switch in **Step 7**.



Selection & Pricing (cont.)

Step 5 Select Shunt Trip

Select your shunt trip. Transfer the catalog number digit to the box marked **Step 5** in the Catalog Number Line and the price to the box marked **Step 5** in the Price Column. (Note: All shunt trips require the selection of a 4- or 7-stage auxiliary switch in **Step 7** . Second shunt trip may be selected in **Step 9** .)



Voltage	Catalog Number Digit	List Price, GO-128W
None	X	\$0.00
120V, 60 Hz	1	350.00
208V, 60 Hz	2	350.00
240V, 60 Hz	3	350.00
70V, 60 Hz	4	350.00
120V, 50 Hz	5	350.00

Voltage	Catalog Number Digit	List Price, GO-128W
208V, 50 Hz	6	\$350.00
240V, 50 Hz	7	350.00
24Vdc	B	350.00
48 Vdc	D	350.00
110/125Vdc	E	350.00
250Vdc	F	350.00

Step 6 Select Undervoltage Trip OR Electric Lockout

Select your undervoltage trip or electric lockout option. Transfer the catalog number digit to the box marked **Step 6** in the Catalog Number Line and the price to the box marked **Step 6** in the Price Column.



Voltage	Undervoltage (Instantaneous)		Undervoltage with Time Delay ①		Electric Lockout	
	Catalog Number Digit	List Price, GO-128W	Catalog Number Digit	List Price, GO-128W	Catalog Number Digit	List Price, GO-128W
None	X	\$0.00	X	\$0.00	X	\$0.00
120V, 50/60 Hz	1	565.00	—	—	4	595.00
208V, 50/60 Hz	—	—	3 ⑤	565.00	—	—
240V, 50/60 Hz	2	565.00	3 ④	565.00	5	595.00
24Vdc	A	565.00	—	—	G	595.00
48Vdc	B	565.00	—	—	H	595.00
110Vdc	C	565.00	—	—	J	595.00
125Vdc	C	565.00	E ②	565.00	J	595.00
250Vdc	D	565.00	F ③	565.00	K	595.00

① Time delay module is provided as a separate component.

② Order static time delay TAKYUVT1 separately. See Table B-6 on page 15.

③ Order static time delay TAKYUVT2 separately. See Table B-6 on page 15.

④ Order static time delay TAKYUVT4 separately. See Table B-6 on page 15.

⑤ Order static time delay TAKYUVT5 separately. See Table B-6 on page 15.

Step 7 Select Auxiliary Switch

Select your auxiliary switch option. Transfer the catalog number digit to the box marked **Step 7** in the Catalog Number Line and the price to the box marked **Step 7** in the Price Column.



Auxiliary Switch	Cat. No. Digit	List Price, GO-128W
None	X	\$0.00
4-stage Auxiliary Switch	A	450.00
7-stage Auxiliary Switch	B	765.00



Step 8 Select Bell Alarm & Close/Open Push Button Covers

Select your bell alarm and close/open push button cover options. Transfer the catalog number digit to the box marked **Step 8** in the Catalog Number Line and the price to the box marked **Step 8** in the Price Column.



Options				Cat. No. Digit	List Price, GO-128W
Bell Alarm	Bell Alarm with Lockout	Cover over CLOSE Push Button	Cover over OPEN Push Button		
				X	\$0.00
•				A	635.00
	•			B	635.00
		•		C	40.00
•		•		D	675.00
	•	•		E	675.00
			•	F	40.00
•			•	G	675.00
	•		•	H	675.00
		•	•	J	80.00
•		•	•	K	715.00
	•	•	•	L	715.00

Step 9 Select Second Shunt Trip (not available with WPS-50 5000A breakers)

If you select a shunt trip in **Step 5** and require another, select your second shunt trip option. Transfer the catalog number digit to the box marked **Step 9** in the Catalog Number Line and the price to the box marked **Step 9** in the Price Column. Note: All shunt trips require the selection of a 4- or 7-stage auxiliary switch in **Step 7**

Voltage	Cat. No. Digit	List Price, GO-128W
None	X	\$0.00
120V, 60 Hz	1	635.00
240V, 60 Hz	3	635.00
24Vdc	B	635.00
110/125Vdc	E	635.00
250Vdc	F	635.00

Step 10 Select Additional Options

Select your combination of additional options. Transfer the catalog number digit to the box marked **Step 10** in the Catalog Number Line and the price to the box marked **Step 10** in the Price Column.



Optional Hidden Close button feature shown

A-Disconnect ① "PM Ready"	Hidden Close Push Button (E/O Only)	Operation Counter	Remote Charge Indicator	Cat. No. Digit	List Price, GO-128W
				X (none)	\$0.00
			•	A	375.00
		•		B	375.00
		•	•	C	750.00
	•			D	125.00
	•		•	E	500.00
	•	•		F	500.00
	•	•	•	G	875.00
•				H	250.00
•			•	J	625.00
•		•		K	625.00
•		•	•	L	1000.00

① The 36-point A-Disconnect is automatically supplied if any of the following options were selected in previous steps:

- zone selective interlock
- shunt trip
- auxiliary switch
- bell alarm
- undervoltage trip
- electric lockout device
- electrical charge and close
- MicroVersaTrip PM trip unit ("M" or "PM" option)

Select the A-Disconnect here only if (1) none of these options were selected in previous steps and 4-wire ground fault is required or (2) your WavePro breaker is to be "PM ready." "PM ready" wiring includes inputs for 24V dc auxiliary power, communications, and 3 phase voltage.



OEM Substructures & Substructure Accessories

Table B-1. Breaker Substructures



Large frame substructure (shown with optional accessories)

Frame Size	Breaker Type	Substructure Type	Substructure Cat. No.	List Price GO-128W
800	WPS-08	Shallow	WPS08SUBSH1	\$1,650.00
		Deep	WPS08SUBDP1	1,850.00
	WPH-08	Shallow	WPH08SUBSH1	1,650.00
		Deep	WPH08SUBDP1	1,850.00
	WPX-08	Shallow	WPX08SUBSH1	1,950.00
		Deep	WPX08SUBDP1	2,100.00
1600	WPS-16	Shallow	WPS16SUBSH1	1,950.00
		Deep	WPS16SUBDP1	2,100.00
	WPH-16	Shallow	WPH16SUBSH1	1,950.00
		Deep	WPH16SUBDP1	2,250.00
	WPF-16	Deep	WPF16SUBDP1	2,300.00
		Deep, with 2500A CL fuses	WPF16SUBDP2	2,450.00
2000	WPS-20	Shallow	WPS20SUBSH1	2,100.00
		Deep	WPS20SUBDP1	2,250.00
	WPS-20 with OFLO	Shallow	WPS20SUBSH2	2,100.00
		Deep	WPS20SUBDP2	2,250.00
3200	WPS-32	Shallow	WPS32SUBSH1	3,450.00
	WPS-32 with OFLO	Shallow	WPS32SUBSH2	3,450.00
	WPH-32	Shallow	WPH32SUBSH1	3,450.00
	WPX-32	Shallow	WPX32SUBSH1	3,450.00
4000	WPS-40	Shallow	WPS40SUBSH1	5,300.00
	WPS-40 with OFLO	Shallow	WPS40SUBSH2	5,300.00
	WPX-40	Shallow	WPX40SUBSH1	5,300.00
5000	WPS-50	Deep	WPS50SUBDP1	7,650.00
	WPS-50 with OFLO	Deep	WPS50SUBDP2	7,650.00
	WPX-50	Deep	WPX50SUBDP1	7,650.00

Table B-2. Fuse Rollout Elements and Substructures for Drawout Equipment Substructures 600 Volts AC, 50/60 HZ

NOTE: When used in conjunction with these fuse roll out elements, WavePro Type WPS drawout circuit breaker elements should be equipped with an open fuse lockout (OFLO) device, and the WPS breaker substructure should be ordered with a Keylock Mounting Kit. Key interlock is supplied and mounted by the customer.

Frame Size	Substructure Type	Fuse Roll Out Element (FRE) Only (No Fuses) ① ②		FRE Drawout Substructures ② ③	
		Cat. No.	List Price, GO-128W	Cat. No.	List Price, GO-128W
2000A/3200A	Shallow	WP32FRE	\$7470.00	WP32FRSUBSH1	\$4150.00
4000A	Shallow	WP40FRE	7950.00	WP40FRSUBSH1	5250.00
5000A	Deep	WP50FRE	8690.00	WP50FRSUBSH1	6375.00

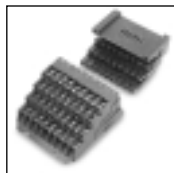
① Fuse rollouts accept special Class L fuses 2000-5000 Amps. See WavePro Application Guide (DET-167) for additional information.

② UL recognized component.

③ Substructures for fuse rollouts include provision for keylock mounting as standard feature.

Table B-3. Breaker Substructures Accessories

Substructure accessories shown assembled are shipped separately for field installation.



Secondary disconnect blocks

Substructure Cat. No.	Accessory	Accessory Cat. No.	List Price, GO-128W
WPS08SUBSH1 WPH08SUBSH1 WPX08SUBSH1	Secondary Disconnect (bracket only)	WPSDSFSH1	\$75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCMTMG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCMTMG2	50.00
	One-stage Position Switch Kit	WPPSMTG1	375.00
	Three-stage Position Switch Kit	WPPSMTG2	475.00
	Shutter Kit	WPSHMTG1	515.00
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
	Door Interlock Kit	WPDIMTG1	125.00

Continued on next page



Table B-3. Breaker Substructures Accessories (cont.)



Secondary disconnect bracket with disconnects installed



CT mounting hardware kit



Position switch kit



Shutter kit as installed on substructure

Substructure Cat. No.	Accessory	Accessory Cat. No.	List Price, GO-128W
WPS08SUBDP1 WPH08SUBDP1 WPX08SUBDP1	Secondary Disconnect (bracket only)	WPSDSFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG3	375.00
	Three-stage Position Switch Kit	WPPSMTG4	475.00
	Shutter Kit	WPSHMTG2	515.00
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
WPF08SUBDP1	Door Interlock Kit	WPDIMTG1	125.00
	Secondary Disconnect (bracket only)	WPSDSFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG5	375.00
	Three-stage Position Switch Kit	WPPSMTG6	475.00
	Shutter Kit	WPSHMTG3	515.00
	Padlock Kit	Standard on breaker	—
WPS16SUBSH1 WPH16SUBSH1	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
	Door Interlock Kit	WPDIMTG1	125.00
	Secondary Disconnect (bracket only)	WPSDSFSH1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG1	375.00
	Three-stage Position Switch Kit	WPPSMTG2	475.00
	Shutter Kit	WPSHMTG1	515.00
WPS16SUBDP1 WPH16SUBDP1	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
	Door Interlock Kit	WPDIMTG1	125.00
	Secondary Disconnect (bracket only)	WPSDSFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG3	375.00
	Three-stage Position Switch Kit	WPPSMTG4	475.00
WPF16SUBDP1 (Fuse < 2500A)	Shutter Kit	WPSHMTG2	515.00
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
	Door Interlock Kit	WPDIMTG1	125.00
	Secondary Disconnect (bracket only)	WPSDSFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG6	375.00
WPF16SUBDP2 (Fuse = 2500A)	Three-stage Position Switch Kit	WPPSMTG5	475.00
	Shutter Kit	WPSHMTG3	515.00
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
	Door Interlock Kit	WPDIMTG1	125.00
	Secondary Disconnect (bracket only)	WPSDSFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
WPF16SUBDP2 (Fuse = 2500A)	One-stage Position Switch Kit	WPPSMTG7	375.00
	Three-stage Position Switch Kit	WPPSMTG8	475.00
	Shutter Kit	Contact factory	—
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
	Door Interlock Kit	WPDIMTG1	125.00

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OEM Substructures & Substructure Accessories (cont.)

Table B-3. Breaker Substructures Accessories (cont.)




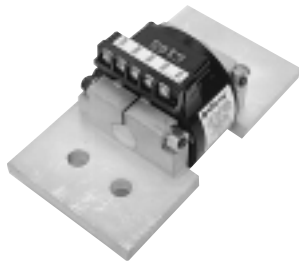
Substructure Cat. No.	Accessory	Accessory Cat. No.	List Price, GO-12BW
 WPS20SUBSH1 WPS20SUBSH2 <i>Padlock kit (standard on small frame breakers, optional on large frame breakers)</i>	Secondary Disconnect (bracket only)	WPSDSFSH1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG1	375.00
	Three-stage Position Switch Kit	WPPSMTG2	475.00
	Shutter Kit	WPSHMTG1	515.00
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
Door Interlock Kit	WPDIMTG1	125.00	
 WPS20SUBDP1 WPS20SUBDP2 <i>Keylock mounting kit bracket</i>	Secondary Disconnect (bracket only)	WPSDSFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM1	350.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG3	375.00
	Three-stage Position Switch Kit	WPPSMTG4	475.00
	Shutter Kit	WPSHMTG2	515.00
	Padlock Kit	Standard on breaker	—
	Keylock Mounting Kit (bracket only)	WPSKLMTG1	390.00
Door Interlock Kit	WPDIMTG1	125.00	
 WPS32SUBSH1 WPS32SUBSH2 WPH32SUBSH1 WPX32SUBSH1 <i>Door interlock kit</i>	Secondary Disconnect (bracket only)	WPSDLFSH1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM2	375.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG9	375.00
	Three-stage Position Switch Kit	WPPSMTG10	475.00
	Shutter Kit	WPSHMTG4	575.00
	Padlock Kit	WPPKMTG1	175.00
	Keylock Mounting Kit (bracket only)	WPSKLMTG2	475.00
Door Interlock Kit	WPDIMTG2	155.00	
WPS40SUBSH1 WPS40SUBSH2 WPX40SUBSH1	Secondary Disconnect (bracket only)	WPSDLFSH1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM2	375.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG1	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG9	375.00
	Three-stage Position Switch Kit	WPPSMTG10	475.00
	Shutter Kit	WPSHMTG4	575.00
	Padlock Kit	WPPKMTG1	175.00
	Keylock Mounting Kit (bracket only)	WPSKLMTG2	475.00
Door Interlock Kit	WPDIMTG2	155.00	
WPS50SUBDP1 WPS50SUBDP2 WPX50SUBDP1	Secondary Disconnect (bracket only)	WPSDLFDP1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM2	375.00
	CT Hardware Mounting Kit, Metering Type (for 3 CTs)	WPCTMTG3	50.00
	CT Hardware Mounting Kit, Relaying Type (for 3 CTs)	Contact factory	—
	One-stage Position Switch Kit	WPPSMTG9	375.00
	Three-stage Position Switch Kit	WPPSMTG10	475.00
	Shutter Kit	WPSHMTG5	575.00
	Padlock Kit	WPPKMTG2	175.00
	Keylock Mounting Kit (bracket only)	WPSKLMTG3	475.00
Door Interlock Kit	WPDIMTG3	180.00	



Table B-4. Fuse Rollout Substructure Accessories

Substructure Cat. No.	Accessory	Accessory Cat. No.	List Price, GO-128W
WP32FRSUBSH1 WP40FRSUBSH1	Secondary Disconnect (bracket only)	WPSDLFSH1	\$75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM2	375.00
	Metering CT Hardware Mounting Kit (for three CTs)	WPCTMTG1	50.00
	Relaying CT Hardware Mounting Kit (for three CTs)	WPCTMTG2	50.00
	One-stage Position Switch Kit	WPPSMTG9	375.00
	Three-stage Position Switch Kit	WPPSMTG10	475.00
	Shutter Kit	WPSHMTG4	575.00
	Padlock Kit	WPPKMTG1	175.00
	Keylock Mounting Kit (bracket only)	Part of substructure	—
	Door Interlock Kit	WPDIMTG2	155.00
WP50FRSUBSH1	Secondary Disconnect (bracket only)	WPSDLFSH1	75.00
	Secondary Disconnect (one 36-pin block)	WPSDSUBM2	375.00
	Metering CT Hardware Mounting Kit (for three CTs)	WPCTMTG3	50.00
	Relaying CT Hardware Mounting Kit (for three CTs)	Not available	—
	One-stage Position Switch Kit	WPPSMTG9	375.00
	Three-stage Position Switch Kit	WPPSMTG10	475.00
	Shutter Kit	WPSHMTG5	575.00
	Padlock Kit	WPPKMTG2	175.00
	Keylock Mounting Kit (bracket only)	Part of substructure	—
	Door Interlock Kit	WPDIMTG3	180.00

Table B-5. Neutral Current Transformers (required with 4-wire ground fault)



Frame (Amps)	Circuit Breaker Sensor Amps Rating	Neutral Sensor Rating (Amps)	Cat. No.	List Price, GO-128C
800	150	100-300	TSVG303B	\$805.00
	400,800	300-800	TSVG508B	805.00
1600	800	300-800	TSVG508B	805.00
	1600	600-1600	TSVG516B	805.00
2000	2000	800-2000	TSVG620B	1417.00
3200	3200	1200-3200	TSVG832B	1962.00
4000	4000	1600-4000	TSVG940B	1962.00
5000	5000	5000	TSVG950B	1962.00

Table B-6. Static Time Delays for Undervoltage Option



Voltage	Static Time Delay Cat. No.①	List Price, GO-128W
125Vdc	TAKYUVT1	\$1091.00
250Vdc	TAKYUVT2	1091.00
240Vac (50/60Hz)	TAKYUVT4	1091.00
208Vac (50/60Hz)	TAKYUVT5	1091.00

① Must be ordered in conjunction with “Undervoltage with Time Delay” option in **Step 6** on page 10.

Table B-7. Miscellaneous Accessories

Accessory	Cat. No.	List Price, GO-128W
Breaker Racking Handle ①	0324B4721G001	\$175.00
Maintenance Closing Handle	568B386G1	325.00
Small Frame Lifting Assembly, WP08, 16, 20	0324B4551G001	85.00
Large Frame Lifting Assembly, WP32, 40	0247B8961G001	95.00
Extra Large Frame Lifting Assembly, WP50	0247B8961G003	105.00
Fuse Rollout Out Element Lifting Assembly, 3200A & 4000A	0247B8961G004	95.00
Fuse Rollout Element Lifting Assembly, 5000A	0247B8961G005	105.00
WavePro Breaker Maintenance Video (Approx. 40”, VHS format) ①	DEV-042	2500.00

① Order only from Burlington OEM marketing.



OEM Substructures & Substructure Accessories (cont.)

Table B-8. POWER LEADER™ Power Supply

The POWER LEADER power supply provides 24Vdc control power to MicroVersaTrip PM™ trip units used on WavePro low voltage power circuit breakers. The control power is needed to configure the trip unit, energize the liquid crystal display, and perform protective relay functions when other external power is not available. The control power is required for the trip unit's communication function.

Description	Cat. No.	List Price, GO-104A	System Requirements (Not included with power supply)
1.5A power supply. Maximum wire length from power supply to trip device is 100 feet. A maximum of 45 trip units may be powered from a single power supply.	PLPS4G01	\$1250.00	Input power, 100VA (85-265Vac or 100-370Vdc)

Table B-9. POWER LEADER Voltage Conditioner

Conditions and scale 120Vac to 1.76Vac for use by the trip unit for voltage sensing. Provides transient protection. Requires isolation PTs. Supports up to 15 trip units at a maximum distance of 20 feet. Required for PM trip units only.

Description	Cat. No.	List Price, GO-104A	System Requirements (Not included with voltage conditioner)
Supplies isolated bus voltage signal to MicroVersaTrip Plus and PM trip units.	PLVC1G01	\$200.00/set	One set of 3 voltage conditioners required for each sensing location. PTs also required.

Table B-10. MicroVersaTrip™ Portable Power Pack

The hand-held MicroVersaTrip portable battery pack, which provides an independent power source for MicroVersaTrip Plus and PM trip units, is an alternative to the TVRMS2 Test Set. It is used to power up the trip unit to set or adjust trip set points when the breaker is on the bench or otherwise not powered up. It connects to the trip unit through the rating plug test jack. It requires three (3) standard 9Vdc alkaline batteries (not included).

Description	Cat. No.	List Price, GO-245A
MicroVersaTrip Portable Power Pack	TVPBP	\$75.00

Table B-11. MicroVersaTrip Rating Plug Removal Tool

Description	Cat. No.	List Price, GO-135S
MicroVersaTrip Rating Plug Removal Tool	TRTOOL	\$12.00

Table B-12. GE Trip Unit Portable Test Set

This portable, battery-powered test kit allows for self-tests and functioning trip/no trip tests on Power+, MicroVersaTrip Plus and MicroVersaTrip PM trip units (excluding 4- or 9-function MicroVersaTrip trip units). It can also defeat the ground fault function and be used in conjunction with high current test equipment. The interface is via a plug on the front of the trip units, and tests can be conducted with the breaker in service. The Test Set uses six rechargeable nickel-cadmium or standard alkaline D cell batteries (not included), or it can be powered by a 120Vac source.



Description	Cat. No.	List Price, GO-245B
Portable Test Set that may also be used to temporarily defeat ground fault function when using primary injection (high current test set).	TVRMS2	\$3000.00



Accessory Wiring Guide for WavePro Breakers

A-Disc Block (left side from front)

10	Aux Switch (N.O. contact)	
1	Aux Switch	
2	Aux Switch	
11	Aux Switch (N.C. contact)	
12	Aux Switch (N.O. contact)	
3	Aux Switch	
4	Aux Switch	
13	Aux Switch (N.C. contact)	
or		
5	Aux Switch (N.O. contact)	
6	Aux Switch (N.C. contact)	
7	(Note 1) Aux Switch (common)	
or		
5	Shunt Trip (N.O. contact)	
6	Shunt Trip (N.C. contact)	
7	(Note 1) Shunt Trip (common)	
14	Bell Alarm (N.O. contact)	
15	Bell Alarm (N.C. contact)	
16	Bell Alarm (common)	
19	Bell Alarm (N.O. contact)	
20	Bell Alarm (N.C. contact)	
21	Bell Alarm (common)	
8	Closing Spring Charging Motor	
17	Closing Spring Charging Motor	
9	Close Circuit (electric bkr) *	
18	Close Circuit	
22	Undervoltage or Electric Lockout	
23	Undervoltage or Electric Lockout	
24	Neutral Sensor — Tap	
25	Neutral Sensor — Common	
26	Commnet +	
27	Commnet -	
28	Zone Selective Interlock (In +)	
29	Zone Selective Interlock (In -)	
30	Zone Selective Interlock (Out +)	
31	Zone Selective Interlock (Out -)	
32	Va (voltage conditioner)	
33	Vb (voltage conditioner)	
34	Vc (voltage conditioner)	
35	Trip Unit Auxiliary Power (24VDC +)	
36	Trip Unit Auxiliary Power (24VDC -)	

* Remote Close Accessory on manual breaker

** Remote Charge Indicator (closing springs) applies to E/O breakers only

C-Disc Block (right side from front)

10	Aux Switch (N.O. contact)	
1	Aux Switch	
2	Aux Switch	
11	Aux Switch (N.C. contact)	
12	Aux Switch (N.O. contact)	
3	Aux Switch	
4	Aux Switch	
13	Aux Switch (N.C. contact)	
14	2nd Shunt Trip	
5	(Note 1) 2nd Shunt Trip	
or		
14	Aux Switch (N.O. contact)	
5	(Note 1) Aux Switch	
6	Aux Switch	
15	Aux Switch (N.C. contact)	
8	Remote Charge Indicator **	
17	Remote Charge Indicator **	
16	WPS-50 Fan Motor — 120VAC (H)	
7	WPS-50 Fan Motor — 120VAC (N)	
9	Spare	
18	Spare	
19	Spare	
20	Spare	
21	Spare	
22	OFLO (phase A)	
23	OFLO (phase A)	
24	OFLO (phase B)	
25	OFLO (phase B)	
26	OFLO (phase C)	
27	OFLO (phase C)	
28	Spare	
29	Spare	
30	Spare	
31	Spare	
32	Spare	
33	Spare	
34	Spare	
35	Spare	
36	Spare	

Notes

1. Auxiliary switch contacts are wired out if shunt trip is not provided.
2. This drawing shows all breaker accessories. Refer to breaker catalog number for accessories included with the breaker.



Reference Publications

- DET-167 WavePro Breaker Application Guide
- DEU-020 WavePro Breaker Publications, Guideform Specification & Substructure Drawings (CD-ROM)
- DET-169 WavePro Breaker Catalog Numbering Guide
- DEH-178 MicroVersaTrip Plus & PM Trip Unit Users Guide
- DEH-179 Power+ Trip Unit Users Guide
- DES-001 Time current curve, Power+, MicroVersaTrip Plus & PM, LSI
- DES-002 Time current curve, Power+, MicroVersaTrip Plus & PM, GF
- DEE-019 POWER LEADER™ Product Information
- DEE-194 WavePro User Publications Summary
- GEP-1100 GE ED&C BuyLog



GE Electrical Distribution & Control

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