

The Eaton logo, consisting of the word "EATON" in a bold, sans-serif font with a vertical line through the letter "O".

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Powerware

CTO Configuration Guide

A close-up, blue-tinted photograph of a printed circuit board (PCB) with various components and traces.

Powerware[®] Ferrups[®]
FE 60Hz Tower Series

FER01GDE
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Configuring Your FERRUPS UPS

FERRUPS must be ordered using a Configure To Order (CTO) Number that reflects the cabinet style, VA rating, voltages, runtime, and other options pertaining to the FERRUPS configuration. As you select the options needed, they will become part of the CTO number.

Sample CTO Number: FA000BB2A0A0A0A.

External battery packs, bypass switches and other external options should be ordered as separate items.

The UPS CTO Worksheet										
	UPS CTO Order Code						List Price	Discount	Net Price	
Base Unit	F_									
Input / Output Voltage										
Battery and Battery Charger										
Internal Maintenance Bypass Switch										
Input Connection										
Output Connection										
Internal Options										
Complete UPS CTO Number		F_								
UPS Subtotal										
External Battery Pack										
Battery Pack Selected:										
Other External Battery Options Selected:										
External Maintenance Bypass Switch										
External Maintenance Bypass Switch Selected:										
Other External Options										
Note: Eaton offers a complete line of Power Distribution Units (PDUs) . Please contact your sales representative or visit our website, www.Powerware.com , for details.										
Sub Total										
							Freight			
							Insurance			
							Tax/Duty			
							Quote Total			

Ferrups 60Hz Tower Series Quick Reference

Note: **Not all options are available on each base unit.** Options restrictions exist. Please consult information in this guide for further detail.

FG 0 0 0 C C3A0A0A0 A

Base Unit (1-2)	
FA =	500VA
FB =	700VA
FC =	850VA
FD =	1.15kVA
FE =	1.4kVA
FF =	1.8kVA
FG =	2.1kVA
FH =	3.1kVA
FI =	4.3kVA
FJ =	5.3kVA
FK =	7kVA
FL =	10kVA
FM =	12.5kVA
FN =	18kVA

Input/Output Voltage (3)	
0 =	120V in; 120V out
1 =	208V in; 120/208V out
2 =	208V in; 120/240V out
3 =	240V in; 120/240V out
4 =	220V in; 220V out
5 =	230V in; 230V out
6 =	240V in; 240V out
7 =	220V in; 127/220V out

Internal Bypass (5)	
0 =	None
1 =	Make Before Break
2 =	Break Before Make
<i>AS400 (I Series) contacts included with options 1 & 2</i>	

Input (6)	
A =	Hardwired
B =	5-15P
C =	5-20P
D =	5-50P
E =	6-15P
F =	6-50P
G =	14-50P*
H =	L5-15P*
I =	L5-20P
J =	L5-30P
K =	L6-20P
L =	L6-30P
M =	L14-30P
O =	IEC320
S =	IEC309 16A

Output (7-14)		
Type	Qty	
A=	None- HW	0
B=	5-15R Duplex	1
C=	5-20R Duplex	2
D=	6-15R Duplex	3
E=	6-20R Duplex	4
G=	L5-15R Duplex	6
H=	L5-20R	7
I=	L5-30R	8
J=	L6-15R Duplex	
K=	L6-20R	
L=	L6-30R	
M=	L14-20R	
N=	L14-30R	
V=	15A/ 1P CB	
W=	15A/ 2P CB	
X=	20A/ 1P CB	
Y=	20A/ 2P CB	
Z=	30A/ 1P CB	
2=	30A/ 2P CB	

Enter receptacle types alphabetically, followed by the qty desired, and complete necessary digits with "A0"

Battery / Battery Charger (4)	
0 =	Standard Battery/ Standard Charger
1 =	ERT Internal Battery/ Standard Charger
2 =	ERT Internal Battery/ Standard Charger
3 =	Setup for Internal w/o Battery/ Std Charger
4 =	External Battery/ Standard Charger
5 =	External Battery/ 10A Charger
6 =	External Battery/ 15A Charger
7 =	External Battery/ 20A Charger

Internal Options (15)	
A =	None
B =	AVR/ DVR (recommended for PFC loads)
D =	Anchor Kit for structural slab floor
E =	Anchor Kit for raised of access floor
I =	AVR/DVR with Anchor kit for slab
J =	AVR/DVR with Anchor kit for access floor
Q =	Neutral to ground bond removal (shipboard)
R =	Neutral to ground removed & AVR/DVR

* Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE500VA CTO Configuration Guide

Ferrups 500VA 60Hz Tower General Specifications

Capacity:	500VA/ 350W	Dimensions:	12" x 10" x 21.25"
Input Voltage:	120V	(HxWxD)	305mm x 255mm x 540mm
Output Voltage:	120V	Weight (with batteries ¹):	54lb / 24.5kg
		Weight (without batteries):	44lb / 20kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE500VA, 60 Hz Tower	FA	\$813

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
9 minute internal	standard	0	\$123
20 minute internal	standard	1	\$191
75 minute internal	standard	2	\$335
Set up for internal (less batteries)	standard	3	\$42
set up for external battery pack ¹	standard	4	\$41
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$456

¹ Includes External Battery Connector. Order desired external battery pack as a separate line. See page 500-3.

² Required for external battery packs 24me and 25me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems. Order desired maintenance bypass switch as a separate line item on your order. See page 500-3.

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
120 volt	Hardwired ¹	A	\$40
	5-15P ²	B	\$ 0
	L5-15P ^{2,3}	H	\$15

¹ Hardwired input requires hardwired output

² NEMA line cord requires NEMA receptacles

³ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE500VA CTO Configuration Guide

Output Connection			Digits 7-14
Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.			
Output Voltage Required	Output Connection	CTO Order Code	Option Price
120 volt	Hardwired ¹	A0A0A0A0	\$0
	(2) 5-15R Duplex	B2A0A0A0	\$0
	(1) 5-15R Duplex (1) L5-15R Duplex	B1G1A0A0	\$75
	(2) L5-15R Duplex	G2A0A0A0	\$150

¹ Hardwired output requires hardwired input

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
No other option	A	\$0
AVR (recommended when loads contain PFC power supplies)	B	\$85
Anchor Kit for structural slab floor ¹	D	\$170
Anchor Kit for raised or access floor ¹	E	\$170
AVR and Anchor Kit for structural slab floor ¹	I	\$255
AVR and Anchor Kit for raised or access floor ¹	J	\$255
Neutral to Ground bond removal (For Shipboard Use)	Q	\$25
Neutral to Ground bond removal and AVR (For Shipboard Use)	R	\$110

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
3h40m/10h22m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	21me	\$920
7h50m/22h09m	15 Amp Battery Charger Upgrade ¹	24me	\$1,885
8h45m/24h44m	15 Amp Battery Charger Upgrade ¹	25me	\$2,085

¹Order battery charger as part of UPS. See page 500-1.

External Battery Accessories		
Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400

¹ Bypass Switch must be mounted on the wall near the UPS.

FE700VA CTO Configuration Guide

Ferrups 700VA 60Hz Tower General Specifications

Capacity:	700VA/ 500W	Dimensions:	12" x 10" x 21.25"
Input Voltage:	120V	(HxWxD)	305mm x 255mm x 540mm
Output Voltage:	120V	Weight (with batteries ¹):	62lb / 28kg
		Weight (without batteries):	46lb / 21kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE700VA, 60 Hz Tower	FB	\$907

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
11 minute internal	standard	0	\$134
16 minute internal	standard	1	\$268
45 minute internal	standard	2	\$334
Set up for internal (less batteries)	standard	3	\$37
set up for external battery pack ¹	standard	4	\$31
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$456

¹ Includes External Battery Connector. Order desired external battery pack as a separate line. See page 700-2.

² Required for external battery packs 24me and 25me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems. Order desired maintenance bypass switch as a separate line item on your order. See page 700-2.

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
120 volt	Hardwired ¹	A	\$40
	5-15P ²	B	\$ 0
	L5-15P ^{2,3}	H	\$15

¹ Hardwired input requires hardwired output

² NEMA line cord requires NEMA receptacles

³ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE700VA CTO Configuration Guide

Output Connection			Digits 7-14
Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.			
Output Voltage Required	Output Connection	CTO Order Code	Option Price
120 volt	Hardwired ¹	A0A0A0A0	\$0
	(2) 5-15R Duplex	B2A0A0A0	\$0
	(1) 5-15R Duplex (1) L5-15R Duplex	B1G1A0A0	\$75
	(2) L5-15R Duplex	G2A0A0A0	\$150

¹ Hardwired output requires hardwired input

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
No other option	A	\$0
AVR (recommended when loads contain PFC power supplies)	B	\$85
Anchor Kit for structural slab floor ¹	D	\$170
Anchor Kit for raised or access floor ¹	E	\$170
AVR and Anchor Kit for structural slab floor ¹	I	\$255
AVR and Anchor Kit for raised or access floor ¹	J	\$255
Neutral to Ground bond removal (For Shipboard Use)	Q	\$25
Neutral to Ground bond removal and AVR (For Shipboard Use)	R	\$110

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
2h10m/6h07m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	21me	\$920
5h40m/16h	15 Amp Battery Charger Upgrade ¹	24me	\$1,885
6h30m/18h23m	15 Amp Battery Charger Upgrade ¹	25me	\$2,085

¹Order battery charger as part of UPS. See page 700-1.

External Battery Accessories		
Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400

¹ Bypass Switch must be mounted on the wall near the UPS.

FE850VA CTO Configuration Guide

Ferrups 850VA 60Hz Tower General Specifications

Capacity:	850VA/ 600W	Dimensions:	12" x 10" x 21.25"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	305mm x 255mm x 540mm
Output Voltage:	120, 120/208, 120/240, 240V	Weight (with batteries ¹):	67lb / 30kg
		Weight (without batteries):	51lb / 23kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE850VA, 60 Hz Tower	FC	\$1,085

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0
208	120/208	1	\$130
208	120/240	2	\$130
240	120/240	3	\$130
240	240	6	\$130

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
9 minute internal	standard	0	\$160
38 minute internal	standard	1	\$271
Set up for internal (less batteries)	standard	3	\$37
set up for external battery pack ¹	standard	4	\$31
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$456

¹ Includes External Battery Connector. Order desired external battery pack as a separate line.
See page 850-3.

² Required for external battery packs 24me and 25me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems.
Order desired maintenance bypass switch as a separate line item on your order. See page 850-3.

FE850VA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A	\$40
120 volt	5-15P ²	B	\$ 0
	L5-15P ^{2,3}	H	\$15
208, 220, 240	6-15P ²	E	\$ 0

¹ Hardwired input requires hardwired output

² NEMA line cord requires NEMA receptacles

³ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

Output Connection			Digits 7-14
Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.			
Output Voltage Required	Output Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A0A0A0A0	\$0
120 volt only	(2) 5-15R Duplex	B2A0A0A0	\$0
	(2) L5-15R Duplex	G2A0A0A0	\$150
208, 220, 240 only	(2) 6-15R Duplex	D2A0A0A0	\$150
Mixed Voltages 120/208 or 120/240	(1) 5-15R Duplex (1) 6-15R Duplex	B1D1A0A0	\$75

¹ Hardwired output requires hardwired input

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
No other option	A	\$0
AVR (recommended when loads contain PFC power supplies)	B	\$85
Anchor Kit for structural slab floor ¹	D	\$170
Anchor Kit for raised or access floor ¹	E	\$170
AVR and Anchor Kit for structural slab floor ¹	I	\$255
AVR and Anchor Kit for raised or access floor ¹	J	\$255
Neutral to Ground bond removal (For Shipboard Use)	Q	\$25
Neutral to Ground bond removal and AVR (For Shipboard Use)	R	\$110

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE850VA CTO Configuration Guide

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs

Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
1h40m/4h42m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	21me	\$920
3h50m/10h50m	15 Amp Battery Charger Upgrade ¹	24me	\$1,885
4h10m/11h47m	15 Amp Battery Charger Upgrade ¹	25me	\$2,085

¹Order battery charger as part of UPS. See page 850-1.

External Battery Accessories

Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

External Maintenance Bypass Switches¹ (Recommended for hardwired units)

UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400
208	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE1.15kVA CTO Configuration Guide

Ferrups 1.15kVA 60Hz Tower General Specifications

Capacity:	1.15kVA/ 800W	Dimensions:	15.1" x 15.2" x 20.2"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	385mm x 390mm x 515mm
Output Voltage:	120, 120/208, 120/240, 240, 127/240 V	Weight (with batteries ¹):	102lb / 46kg
		Weight (without batteries):	92lb / 42kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE1.15kVA, 60 Hz Tower	FD	\$1,512

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0
208	120/208	1	\$130
208	120/240	2	\$130
240	120/240	3	\$130
240	240 (International Models)	6	\$130
220	127/220	7	\$130

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
8 minute internal	standard	0	\$249
30 minute internal	standard	1	\$535
70 minute internal	standard	2	\$630
Set up for internal (less batteries)	standard	3	\$83
set up for external battery pack ¹	standard	4	\$39
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$587

¹ Includes External Battery Connector. Order desired external battery pack as a separate line.

See page 1.15k-3.

² Required for external battery pack 10me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems. Order desired maintenance bypass switch as a separate line item on your order. See page 1.15k-3.

FE1.15kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A	\$40
120 volt	5-15P ²	B	\$ 0
	5-20P ³	C	\$25 ³
208, 220, 240	6-15P	E	\$ 0
	L6-20P	K	\$60
	L6-30P	L	\$60

¹ Hardwired input requires hardwired output

² Cannot be used with 15 Amp battery charger

³ 5-20P option price is \$0 if 15 Amp battery charger is selected

Output Connection	Digits 7-14
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Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Three output slots available when a NEMA line cord is selected
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all four receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	___	\$0	
120 volt Choose up to three panels	5-15R Duplex	B	___	\$0	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt Choose up to three panels	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt Choose up to three panels	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt Choose up to three panels	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt Choose up to three panels	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
Receptacle Output Connection CTO Order Code		__	__	__	A 0
Hardwire Output Connection CTO Order Code		A 0	A 0	A 0	A 0

¹ Hardwired output requires hardwired input

FE1.15kVA CTO Configuration Guide

Internal Options		Digit 15
Option	CTO Order Code	Option Price
No other option	A	\$0
AVR (recommended when loads contain PFC power supplies)	B	\$85
Anchor Kit for structural slab floor ¹	D	\$170
Anchor Kit for raised or access floor ¹	E	\$170
AVR and Anchor Kit for structural slab floor ¹	I	\$255
AVR and Anchor Kit for raised or access floor ¹	J	\$255
Neutral to Ground bond removal (For Shipboard Use)	Q	\$25
Neutral to Ground bond removal and AVR (For Shipboard Use)	R	\$110

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
3h15m/9h11m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	8me	\$1,865
3h50m/10h50m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	9me	\$2,060
6h30m/18h23m	15 Amp Battery Charger Upgrade ¹	10me	\$3,530

¹ Order battery charger as part of UPS. See page 1.15k-1.

External Battery Accessories

Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

External Maintenance Bypass Switches¹ (Recommended for hardwired units)

UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400
208, 220	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE1.4kVA CTO Configuration Guide

Ferrups 1.4kVA 60Hz Tower General Specifications

Capacity:	1.4kVA/ 1.0kW	Dimensions:	15.1" x 15.2" x 20.2"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	385mm x 390mm x 515mm
Output Voltage:	120, 120/208, 120/240, 240, 127/240 V	Weight (with batteries ¹):	122lb / 55kg
		Weight (without batteries):	106lb / 48kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE1.4kVA, 60 Hz Tower	FE	\$1720

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0
208	120/208	1	\$130
208	120/240	2	\$130
240	120/240	3	\$130
240	240 (International Models)	6	\$130
220	127/220	7	\$130

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
11 minute internal	standard	0	\$231
22 minute internal	standard	1	\$490
45 minute internal	standard	2	\$598
Set up for internal (less batteries)	standard	3	\$75
set up for external battery pack ¹	standard	4	\$17
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$565

¹ Includes External Battery Connector. Order desired external battery pack as a separate line. See page 1.4k-3.

² Required for external battery pack 10me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems. Order desired maintenance bypass switch as a separate line item on your order. See page 1.4k-3.

FE1.4kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A	\$40
120 volt	5-15P ²	B	\$ 0
	5-20P ³	C	\$25 ³
208, 220, 240	6-15P	E	\$ 0
	L6-20P	K	\$60
	L6-30P	L	\$60

¹ Hardwired input requires hardwired output

² Cannot be used with 15 Amp battery charger

³ 5-20P option price is \$0 if 15 Amp battery charger is selected

Output Connection	Digits 7-14
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Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Three output slots available when a NEMA line cord is selected
- Two output slots available when an international line cord is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all four receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	0	\$0	
120 volt Choose up to three panels	5-15R Duplex	B	___	\$0	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt Choose up to three panels	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt Choose up to three panels	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt Choose up to three panels	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt Choose up to three panels	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
Receptacle Output Connection CTO Order Code		__	__	__	<u>A</u> <u>0</u>
Hardwire Output Connection CTO Order Code		<u>A</u> <u>0</u>	<u>A</u> <u>0</u>	<u>A</u> <u>0</u>	<u>A</u> <u>0</u>

¹ Hardwired output requires hardwired input

FE1.4kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
No other option	A	\$0
AVR (recommended when loads contain PFC power supplies)	B	\$85
Anchor Kit for structural slab floor ¹	D	\$170
Anchor Kit for raised or access floor ¹	E	\$170
AVR and Anchor Kit for structural slab floor ¹	I	\$255
AVR and Anchor Kit for raised or access floor ¹	J	\$255
Neutral to Ground bond removal (For Shipboard Use)	Q	\$25
Neutral to Ground bond removal and AVR (For Shipboard Use)	R	\$110

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
2h20m/6h35m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	8me	\$1,865
3h10m/8h57m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	9me	\$2,060
5h20m/15h5m	15 Amp Battery Charger Upgrade ¹	10me	\$3,530

¹Order battery charger as part of UPS. See page 1.4k-1.

External Battery Accessories		
Option	Order Number	List Price
External Battery Connector Extension (72") <small>Also recommended for third-party external battery configurations.</small>	BCS-0108	\$50

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400
208, 220	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE1.8kVA CTO Configuration Guide

Ferrups 1.8kVA 60Hz Tower General Specifications

Capacity:	1.8kVA/ 1.25kW	Dimensions:	21.2" x 15.25" x 22.9"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	540mm x 390mm x 585mm
Output Voltage:	120, 120/208, 120/240, 240, 127/240 V	Weight (with batteries ¹):	176lb / 80kg
		Weight (without batteries):	120lb / 54kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE1.8kVA, 60 Hz Tower	FF	\$2,409

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0
208	120/208	1	\$145
208	120/240	2	\$145
240	120/240	3	\$145
240	240 (International Models)	6	\$145
220	127/220	7	\$145

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
11 minute internal	standard	0	\$582
86 minute internal	standard	1	\$1085
Set up for internal (less batteries)	standard	3	\$210
set up for external battery pack ¹	standard	4	\$88
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$669

¹ Includes External Battery Connector. Order desired external battery pack as a separate line.

See page 1.8k-4.

² Required for external battery packs 12me – 15me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems.

Order desired maintenance bypass switch as a separate line item on your order. See page 1.8k-4.

FE1.8kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A	\$40
120 volt	5-20P ²	C	\$ 0
	5-50P ³	D	\$90 ³
	L5-20P ²	I	\$25
	L5-30P ²	J	\$60
208, 220, 240	6-15P ²	E	\$ 0
	L6-20P ⁴	K	\$60
	L6-30P	L	\$60

¹ Hardwired input requires hardwired output

² Cannot be used with 15 Amp battery charger

³ 5-50P option price is \$0 if 15 Amp battery charger is selected. Cannot be used with 86 minute internal runtime.

⁴ L6-20P option price is \$0 if 15 Amp battery charger is selected.

Output Connection	Digits 7-14
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Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Three output slots available when a NEMA line cord is selected
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all four receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	___	\$0	
120 volt Choose up to three panels	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL) ²	C	___	\$50 ²	
208, 220, or 240 volt Choose up to three panels	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt Choose up to three panels	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt Choose up to three panels	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt Choose up to three panels	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
Receptacle Output Connection CTO Order Code		__	__	__	<u>A 0</u>
Hardwire Output Connection CTO Order Code		<u>A 0</u>	<u>A 0</u>	<u>A 0</u>	<u>A 0</u>

¹ Hardwired output requires hardwired input

² If three 5-20R (UL), CTO Order Code C3A0A0A0, are selected option price is \$0.

FE1.8kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor ¹	I	\$195
DVR and Anchor Kit for raised or access floor ¹	J	\$195
Neutral to Ground bond removal and DVR (For Shipboard Use)	R	\$25

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
2h12m/4h53m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	9me	\$2,060
3h38m/8h22m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	10me	\$3,530
5h09m/11h30m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	11me	\$4,171
6h07m/14h06m	15 Amp Battery Charger Upgrade ¹	12me	\$5,225
8h30m/18h53m	15 Amp Battery Charger Upgrade ¹	13me	\$6,385
12h08m/27h06m	15 Amp Battery Charger Upgrade ¹	14me	\$8,315
18h52m/44h45m	15 Amp Battery Charger Upgrade ¹	15me	\$11,245

¹Order battery charger as part of UPS. See page 1.8k-1.

External Battery Accessories		
Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

FE1.8kVA CTO Configuration Guide

External Maintenance Bypass Switches¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400
208, 220	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE2.1kVA CTO Configuration Guide

Ferrups 2.1kVA 60Hz Tower General Specifications

Capacity:	2.1kVA/ 1.5kW	Dimensions:	21.2" x 15.25" x 22.9"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	540mm x 390mm x 585mm
Output Voltage:	120, 120/208, 120/240, 240, 127/240 V	Weight (with batteries ¹):	188lb / 85kg
		Weight (without batteries):	132lb / 60kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE2.1kVA, 60 Hz Tower	FG	\$2705

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0
208	120/208	1	\$145
208	120/240	2	\$145
240	120/240	3	\$145
240	240 (International Models)	6	\$145
220	127/220	7	\$145

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
9 minute internal	standard	0	\$591
66 minute internal	standard	1	\$1085
Set up for internal (less batteries)	standard	3	\$210
set up for external battery pack ¹	standard	4	\$88
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$669

¹ Includes External Battery Connector

Order desired external battery pack as a separate line. See page 2.1k-4.

² Required for external battery packs 12me – 15me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems.

Order desired maintenance bypass switch as a separate line item on your order. See page 2.1k-4.

FE2.1kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A	\$40
120 volt	5-20P ²	C	\$ 0
	5-50P ³	D	\$90 ³
	L5-20P ²	I	\$25
	L5-30P ²	J	\$60
208, 220, 240	6-15P ²	E	\$ 0
	L6-20P ⁴	K	\$60
	L6-30P ⁵	L	\$60

¹ Hardwired input requires hardwired output

² Cannot be used with 15 Amp battery charger

³ 5-50P option price is \$0 if 15 Amp battery charger is selected. Cannot be used with 66 minute internal runtime.

⁴ L6-20P option price is \$0 if 15 Amp battery charger and 220 or 240 volt input is selected. Cannot be used with 15 Amp battery charger and 208 volt input.

⁵ L6-30P option price is \$0 if 15 Amp battery charger and 208 volt input is selected.

Output Connection	Digits 7-14
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Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Three output slots available when a NEMA line cord is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all four receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0.

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	___	\$0	
120 volt Choose up to three panels	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL) ²	C	___	\$50 ²	
208, 220, or 240 volt Choose up to three panels	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt Choose up to three panels	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt Choose up to three panels	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt Choose up to three panels	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
Receptacle Output Connection CTO Order Code		__	__	__	<u>A</u> <u>0</u>
Hardwire Output Connection CTO Order Code		<u>A</u> <u>0</u>	<u>A</u> <u>0</u>	<u>A</u> <u>0</u>	<u>A</u> <u>0</u>

¹ Hardwired output requires hardwired input

² If three 5-20R (UL), CTO Order Code C3A0A0A0, are selected option price is \$0.

FE2.1kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor ¹	I	\$195
DVR and Anchor Kit for raised or access floor ¹	J	\$195
Neutral to Ground bond removal and DVR (For Shipboard Use)	R	\$25

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
1h41m/3h54m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	9me	\$2,060
2h50m/6h37m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	10me	\$3,530
4h03m/9h10m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	11me	\$4,171
4h46m/11h08m	15 Amp Battery Charger Upgrade ¹	12me	\$5,225
6h42m/15h04m	15 Amp Battery Charger Upgrade ¹	13me	\$6,385
9h33m/21h36m	15 Amp Battery Charger Upgrade ¹	14me	\$8,315
15h12m/36h28m	15 Amp Battery Charger Upgrade ¹	15me	\$11,245

¹Order battery charger as part of UPS. See page 2.1k-1.

External Battery Accessories

Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

FE2.1kVA CTO Configuration Guide

External Maintenance Bypass Switches¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400
208, 220	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE3.1kVA CTO Configuration Guide

Ferrups 3.1kVA 60Hz Tower General Specifications

Capacity:	3.1kVA/ 2.2kW	Dimensions:	21.2" x 15.25" x 22.9"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	540mm x 390mm x 585mm
Output Voltage:	120, 120/208, 120/240, 240, 127/240 V	Weight (with batteries ¹):	248lb / 112kg
		Weight (without batteries):	144lb / 65kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE3.1kVA, 60 Hz Tower	FH	\$3,456

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$0
208	120/208	1	\$145
208	120/240	2	\$145
240	120/240	3	\$145
240	240 (International Models)	6	\$145
220	127/220	7	\$145

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
14 minute internal	standard	0	\$641
37 minute internal	standard	1	\$1085
Set up for internal (less batteries)	standard	3	\$210
set up for external battery pack ¹	standard	4	\$88
set up for external battery pack ¹	15 amp internal upgrade ²	6	\$669

¹ Includes External Battery Connector

Order desired external battery pack as a separate line. See page 3.1k-3.

² Required for external battery packs 12me – 15me

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option available ¹	0	\$0

¹ External maintenance bypass switch available for hardwired systems.

Order desired maintenance bypass switch as a separate line item on your order. See page 3.1k-4.

FE3.1kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired ¹	A	\$40
120 volt	5-50P ³	D	\$90 ³
	L5-30P ²	J	\$ 0
208, 220, 240	6-15P ^{2,6}	E	\$ 0
	L6-20P ²	K	\$60
	L6-30P ⁴	L	\$60 ⁴

¹ Hardwired input requires hardwired output

² Cannot be used with 15 Amp battery charger

³ 5-50P option price is \$0 if 15 Amp battery charger is selected. Cannot be used with 37 minute internal runtime.

⁴ L6-30P option price is \$0 if 15 Amp battery charger is selected.

⁶ Cannot be used with 208 volt input

Output Connection Digits 7-14

Output Connection Configuration

Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Three output slots available when a NEMA line cord is selected
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all four receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	0	\$0	
120 volt Choose up to three panels	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL) ²	C	___	\$50 ²	
208, 220, or 240 volt Choose up to three panels	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt Choose up to three panels	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt Choose up to three panels	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt Choose up to three panels	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
Receptacle Output Connection CTO Order Code		__	__	__	<u>A 0</u>
Hardwire Output Connection CTO Order Code		<u>A 0</u>	<u>A 0</u>	<u>A 0</u>	<u>A 0</u>

¹ Hardwired output requires hardwired input

² If three 5-20R (UL), CTO Order Code C3A0A0A0, are selected, option price is \$0.

FE3.1kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor ¹	I	\$195
DVR and Anchor Kit for raised or access floor ¹	J	\$195
Neutral to Ground bond removal and DVR (For Shipboard Use)	R	\$25

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
57m/2h27m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	9me	\$2,060
1h41m/4h03m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	10me	\$3,530
2h29m/5h44m	Standard Battery Charger ¹ 15 Amp Battery Charger Upgrade Optional	11me	\$4,171
2h52m/6h50m	15 Amp Battery Charger Upgrade ¹	12me	\$5,225
4h07m/9h27m	15 Amp Battery Charger Upgrade ¹	13me	\$6,385
5h52m/13h30m	15 Amp Battery Charger Upgrade ¹	14me	\$8,315
9h41m/22h18m	15 Amp Battery Charger Upgrade ¹	15me	\$11,245

¹Order battery charger as part of UPS. See page 3.1k-1.

External Battery Accessories		
Option	Order Number	List Price
External Battery Connector Extension (72") Also recommended for third-party external battery configurations.	BCS-0108	\$50

FE3.1kVA CTO Configuration Guide

External Maintenance Bypass Switches¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120 ²	MBB (Make Before Break)	BPE01MBB1A	\$400
	MBB, with AS/400 (iSeries) Option	BPE01MBBAS1A	\$400
208, 220	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ³	BPE02BBM1A/L	\$650
240	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ³	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Use 240 volt maintenance bypass switch if 15 Amp battery charger is selected. See page 3.1k-1.

³ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE4.3kVA CTO Configuration Guide

Ferrups 4.3kVA 60Hz Tower General Specifications

Capacity:	4.3kVA/ 3.0kW	Dimensions:	29.5" x 15.5" x 25"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	750mm x 395mm x 635mm
Output Voltage:	120, 120/208, 120/240, 240	Weight (with batteries ¹):	348lb / 158kg
		Weight (without batteries):	243lb / 110kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE4.3kVA, 60 Hz Tower	FI	\$5,183

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$269
208	120/208	1	\$0
208	120/240	2	\$0
240	120/240	3	\$0
220	220	4	\$269
240	240 (International Models)	6	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
8 minute internal (20 m half load)	standard	0	\$625
27 minute internal (66 m half load)	standard	1	\$1,130
Set up for internal (less batteries)	standard	3	\$216
set up for external battery pack	standard	4	\$0
set up for external battery pack ¹	10 amp internal upgrade ²	5	\$270
set up for external battery pack ¹	20 amp internal upgrade ³	7	\$624

¹ Order desired external battery pack as a separate line. See page 4.3k-4.

² Required for external battery packs 4fe – 5fe

³ Required for external battery packs 6fe – 7fe

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option ¹	0	\$0
Internal maintenance bypass switch option – MBB ²	1	\$725
Internal maintenance bypass switch option - BBM	2	\$625

AS/400 (iSeries) contacts included with Options 1 and 2.

¹ External maintenance bypass switch also available for hardwired systems.

Order desired maintenance bypass switch as a separate line item on your order. See page 4.3k-4.

² Cannot be used with 208 or 220 input voltage.

FE4.3kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired	A	\$0
120 volt	5-50P	D	\$120
208, 220, 240 volt	6-50P ¹	F	\$120
	14-50P ^{2,3}	G	\$155
	L6-30P ¹	L	\$100
	L14-30 ²	M	\$125

¹ Cannot be used with internal maintenance bypass switch.

² UPS must have internal maintenance bypass switch.

³ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE4.3kVA CTO Configuration Guide

Output Connection

Digits 7-14

Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Up to four output slots available without internal maintenance bypass switch option.
- Up to four output slots available when internal maintenance bypass switch option is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	0	\$0	
120 volt	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
120 volt	15 Amp / 1 pole Circuit Breaker ²	V	___	\$60	
All voltages except 120 volt	15 Amp / 2 pole Circuit Breaker ²	W	___	\$60	
120 volt	20 Amp / 1 pole Circuit Breaker ²	X	___	\$60	
All voltages except 120 volt	20 Amp / 2 pole Circuit Breaker ²	Y	___	\$60	
120 volt	30 Amp / 1 pole Circuit Breaker ²	Z	___	\$60	
All voltages except 120 volt	30 Amp / 2 pole Circuit Breaker ²	2	___	\$60	
Receptacle Output Connection CTO Order Code		__	__	__	__
Hardwire Output Connection CTO Order Code		<u>A</u> 0	<u>A</u> 0	<u>A</u> 0	<u>A</u> 0

¹ Hardwired output requires hardwired input

² Internal maintenance bypass switch option required for circuit breaker output connections

FE4.3kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor	I	\$323
DVR and Anchor Kit for raised or access floor	J	\$323
Neutral to Ground bond removal and DVR (For shipboard use)	R	\$25

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
40m/1h42m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	1fe	\$2,600
1h11m/2h51m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	2fe	\$3,595
1h49m/4h5m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	3fe	\$4,200
2h6m/4h49m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	4fe	\$5,245
3h4m/6h46m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	5fe	\$6,385
4h27m/9h39m	20 Amp Battery Charger Upgrade ¹	6fe	\$8,240
7h12m/15h56m	20 Amp Battery Charger Upgrade ¹	7fe	\$11,380

¹Order battery charger as part of UPS. See page 4.3k-1.

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
208, 220 volt	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
120, 240 volt	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE5.3kVA CTO Configuration Guide

Ferrups 5.3kVA 60Hz Tower General Specifications

Capacity:	5.3kVA/ 3.7kW	Dimensions:	29.5" x 15.5" x 25"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	750mm x 395mm x 635mm
Output Voltage:	120, 120/208, 120/240, 240	Weight (with batteries ¹):	484lb / 220kg
		Weight (without batteries):	268lb / 122kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE5.3kVA, 60 Hz Tower	FJ	\$5,708

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$269
208	120/208	1	\$0
208	120/240	2	\$0
240	120/240	3	\$0
220	220	4	\$269
240	240 (International Models)	6	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
20 minute internal (50 m half load)	standard	0	\$1,099
Set up for internal (less batteries)	standard	3	\$388
set up for external battery pack	standard	4	\$0
set up for external battery pack ¹	10 amp internal upgrade ²	5	\$270
set up for external battery pack ¹	20 amp internal upgrade ³	7	\$624

¹ Order desired external battery pack as a separate line. See page 5.3k-4.

² Required for external battery packs 4fe – 5fe

³ Required for external battery packs 6fe – 7fe

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option ¹	0	\$0
Internal maintenance bypass switch option – MBB ²	1	\$825
Internal maintenance bypass switch option - BBM	2	\$725

AS/400 (iSeries) contacts included with Options 1 and 2.

¹ External maintenance bypass switch also available for hardwired systems.

Order desired maintenance bypass switch as a separate line item on your order. See page 5.3k-4.

² Cannot be used with 208 or 220 input voltage.

FE5.3kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired	A	\$0
120 volt	5-50P ¹	D	\$120
208, 220, 240 volt	6-50P ⁴	F	\$120
	14-50P ^{5,6}	G	\$155
	L6-30P ^{2,3,4}	L	\$100
	L14-30 ^{2,3,5}	M	\$125

¹ Cannot be used with 10 or 20 Amp battery charger.

² Cannot be used with 208 volt and 20 Amp battery charger.

³ Cannot be used with 220 volt and 20 Amp battery charger.

⁴ Cannot be used with internal maintenance bypass switch.

⁵ UPS must have internal maintenance bypass switch.

⁶ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE5.3kVA CTO Configuration Guide

Output Connection

Digits 7-14

Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Up to four output slots available without internal maintenance bypass switch option.
- Up to four output slots available when internal maintenance bypass switch option is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired ¹	A	0	\$0	
120 volt	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
120 volt	15 Amp / 1 pole Circuit Breaker ²	V	___	\$60	
All voltages except 120 volt	15 Amp / 2 pole Circuit Breaker ²	W	___	\$60	
120 volt	20 Amp / 1 pole Circuit Breaker ²	X	___	\$60	
All voltages except 120 volt	20 Amp / 2 pole Circuit Breaker ²	Y	___	\$60	
120 volt	30 Amp / 1 pole Circuit Breaker ²	Z	___	\$60	
All voltages except 120 volt	30 Amp / 2 pole Circuit Breaker ²	2	___	\$60	
Receptacle Output Connection CTO Order Code		__	__	__	__
Hardwire Output Connection CTO Order Code		<u>A</u> 0	<u>A</u> 0	<u>A</u> 0	<u>A</u> 0

¹ Hardwired output requires hardwired input

² Internal maintenance bypass switch option required for circuit breaker output connections

FE5.3kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor	I	\$323
DVR and Anchor Kit for raised or access floor	J	\$323
Neutral to Ground bond removal and DVR (For shipboard use)	R	\$25

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
27m/1h14m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	1fe	\$2,600
49m/2h10m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	2fe	\$3,595
1h12m/3h8m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	3fe	\$4,200
1h27m/3h39m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	4fe	\$5,245
2h13m/5h11m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	5fe	\$6,385
3h8m/7h22m	20 Amp Battery Charger Upgrade ¹	6fe	\$8,240
5h10m/12h10m	20 Amp Battery Charger Upgrade ¹	7fe	\$11,380

¹Order battery charger as part of UPS. See page 5.3k-1.

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120 volt	MBB (Make Before Break) ²	BPE04MBB1A	\$650
	MBB with AS/400 (iSeries) Option	BPE04MBBAS1A	\$650
	MBB with Locking Handle ²	BPE04MBB1A/L	\$850
208, 220 volt	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240 volt	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE7kVA CTO Configuration Guide

Ferrups 7.0kVA 60Hz Tower General Specifications

Capacity:	7.0kVA/ 5.0kW	Dimensions:	36.5" x 19.0" x 32.0"
Input Voltage:	120, 208, 220, 240 V	(HxWxD)	930mm x 485mm x 815mm
Output Voltage:	120, 220, 120/208, 120/240, 240	Weight (with batteries ¹):	578lb / 262kg
		Weight (without batteries):	362lb / 164kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit 4.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE7kVA, 60 Hz Tower	FK	\$7,430

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
120	120	0	\$269
208	120/208	1	\$0
208	120/240	2	\$0
240	120/240	3	\$0
220	220	4	\$269
240	240 (International Models)	6	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
12 minute internal (33 m half load)	standard	0	\$1,052
18 minute internal (50 m half load)	standard	1	\$1,580
Set up for internal (less batteries)	standard	3	\$388
set up for external battery pack	standard	4	\$0
set up for external battery pack ¹	10 amp internal upgrade ²	5	\$270
set up for external battery pack ¹	20 amp internal upgrade ³	7	\$624

¹ Order desired external battery pack as a separate line. See page 7k-3.

² Required for external battery packs 4fe – 5fe

³ Required for external battery packs 6fe – 7fe

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option ¹	0	\$0
Internal maintenance bypass switch option – MBB ²	1	\$900
Internal maintenance bypass switch option - BBM	2	\$800

AS/400 (iSeries) contacts included with Options 1 and 2.

¹ External maintenance bypass switch also available for hardwired systems.

Order desired maintenance bypass switch as a separate line item on your order. See page 7k-3.

² Cannot be used with 208 or 220 volt input

FE7kVA CTO Configuration Guide

Input Connection			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired	A	\$0
208, 220, 240 volt	6-50P ¹	F	\$120
	14-50P ^{2,3}	G	\$155

¹ Cannot be used with internal maintenance bypass switch.

² UPS must have internal maintenance bypass switch.

³Eaton will announce the End of Life of these Ferrups options. Products should be available through April 2007, while supplies last.

Output Connection	Digits 7-14
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Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Up to four output slots available without internal maintenance bypass switch option.
- Up to eight output slots available when internal maintenance bypass switch option is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection	CTO Order Code		Option Price per Panel
		Type	Qty	
Any	Hardwired ¹	A	0	\$0
120 volt	5-15R Duplex	B	___	\$50
	5-20R Duplex (UL)	C	___	\$50
208, 220, or 240 volt	6-15R Duplex	D	___	\$75
	6-20R Duplex	E	___	\$75
120 volt	L5-15R Duplex	G	___	\$75
	L5-20R	H	___	\$75
	L5-30R	I	___	\$75
208, 220, or 240 volt	L6-15R Duplex	J	___	\$75
	L6-20R	K	___	\$75
	L6-30R	L	___	\$75
120/240 volt	L14-20R	M	___	\$75
	L14-30R	N	___	\$75
120 volt	15 Amp / 1 pole Circuit Breaker ²	V	___	\$60
All voltages except 120 volt	15 Amp / 2 pole Circuit Breaker ²	W	___	\$60
120 volt	20 Amp / 1 pole Circuit Breaker ²	X	___	\$60
All voltages except 120 volt	20 Amp / 2 pole Circuit Breaker ²	Y	___	\$60
120 volt	30 Amp / 1 pole Circuit Breaker ²	Z	___	\$60
All voltages except 120 volt	30 Amp / 2 pole Circuit Breaker ²	2	___	\$60
Receptacle Output Connection CTO Order Code		_ _	_ _	_ _
Hardwire Output Connection CTO Order Code		A 0	A 0	A 0

¹ Hardwired output requires hardwired input

² Internal maintenance bypass switch option required for circuit breaker output connections

FE7kVA CTO Configuration Guide

Internal Options		Digit 15
Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor	I	\$323
DVR and Anchor Kit for raised or access floor	J	\$323
Neutral to Ground bond removal and DVR (For shipboard use)	R	\$25

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
34m/1h28m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	2fe	\$3,595
48m/2h13m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	3fe	\$4,200
60m/2h33m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	4fe	\$5,245
1h32m/3h41m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	5fe	\$6,385
2h16m/5h14m	20 Amp Battery Charger Upgrade ¹	6fe	\$8,240
3h45m/8h39m	20 Amp Battery Charger Upgrade ¹	7fe	\$11,380

¹Order battery charger as part of UPS. See page 7k-1.

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
120 volt	MBB (Make Before Break) ²	BPE04MBB1A	\$650
	MBB with AS/400 (iSeries) Option	BPE04MBBAS1A	\$650
	MBB with Locking Handle ²	BPE04MBB1A/L	\$850
208, 220 volt	BBM (Break Before Make)	BPE02BBM1A	\$450
	BBM with AS/400 (iSeries) Option	BPE02BBMAS1A	\$450
	BBM with Locking Handle ²	BPE02BBM1A/L	\$650
240 volt	MBB (Make Before Break)	BPE02MBB1A	\$550
	MBB with AS/400 (iSeries) Option	BPE02MBBAS1A	\$550
	MBB with Locking Handle ²	BPE02MBB1A/L	\$750

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE10kVA CTO Configuration Guide

Ferrups 10.0kVA 60Hz Tower General Specifications

Capacity:	10.0kVA/ 7.5kW	Dimensions:	36.5" x 19.0" x 32.0"
Input Voltage:	208, 240 V	(HxWxD)	930mm x 485mm x 815mm
Output Voltage:	120/208, 120/240, 240	Weight (with batteries):	N/A
		Weight (without batteries):	442lb / 200kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE10kVA, 60 Hz Tower	FL	\$8,720

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
208	120/208	1	\$0
208	120/240	2	\$0
240	120/240	3	\$0
240	240 (International Models)	6	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
12 minute internal (30 m half load) Floor Saver Cabinet	standard	0	\$3515
set up for external battery pack ¹	standard	4	\$0
set up for external battery pack ¹	10 amp internal upgrade ²	5	\$435
set up for external battery pack ¹	20 amp internal upgrade ³	7	\$775

¹ Order desired external battery pack as a separate line. If UPS is to be used with other than a Ferrups battery pack, also order DC Disconnect DCU-0001. See page 10k-3.

² Required for external battery packs 12fe – 13fe

³ Required for external battery packs 14fe – 15fe

Internal Maintenance Bypass Switch			Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price	
No internal maintenance bypass switch option ^{1,2}	0	\$0	
Internal maintenance bypass switch option – MBB ³	1	\$900	
Internal maintenance bypass switch option - BBM	2	\$800	

AS/400 (iSeries) contacts included with Options 1 and 2.

¹ Internal maintenance bypass switch required for receptacle or circuit breaker output connections.

² External maintenance bypass switch also available. Order desired maintenance bypass switch as a separate line item on your order. See page 10k-3.

³ Cannot be used with 208 or 220 volt input

Input Connection ¹			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired	A	\$0

¹ Line Cord input connection not available for 10kVA models

FE10kVA CTO Configuration Guide

Output Connection

Digits 7-14

Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Internal maintenance bypass switch required for receptacle or circuit breaker output connections.
- Up to eight output slots available when internal maintenance bypass switch option is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection ¹	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired	A	0	\$0	
120 volt	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
120 volt	15 Amp / 1 pole Circuit Breaker	V	___	\$60	
All voltages except 120 volt	15 Amp / 2 pole Circuit Breaker	W	___	\$60	
120 volt	20 Amp / 1 pole Circuit Breaker	X	___	\$60	
All voltages except 120 volt	20 Amp / 2 pole Circuit Breaker	Y	___	\$60	
120 volt	30 Amp / 1 pole Circuit Breaker	Z	___	\$60	
All voltages except 120 volt	30 Amp / 2 pole Circuit Breaker	2	___	\$60	
Receptacle Output Connection CTO Order Code		__	__	__	__
Hardwire Output Connection CTO Order Code		A0	A0	A0	A0

¹ Internal maintenance bypass switch required for receptacle or circuit breaker output connections

FE10kVA CTO Configuration Guide

Internal Options

Internal Options	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor ¹	I	\$300
DVR and Anchor Kit for raised or access floor ¹	J	\$300
Neutral to Ground bond removal and DVR (For shipboard use)	R	\$25

1. Anchor Kits cannot be used with Floor Saver Battery Option

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs

Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
11m/26m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	EBPS10F	\$2,430
27m/1h10m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	8fe	\$3,915
41m/1h48m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	9fe	\$5,145
1h13m/2h59m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	10fe	\$7,920
1h51m/4h16m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	11fe	\$9,270
2h09m/5h02m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	12fe	\$11,795
3h07m/7h04m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	13fe	\$14,825
4h26m/10h04m	20 Amp Battery Charger Upgrade ¹	14fe	\$18,435
7h20m/16h38m	20 Amp Battery Charger Upgrade ^{1,2}	15fe	\$26,780

¹Order battery charger as part of UPS. See page 10k-1.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE10kVA CTO Configuration Guide

External Battery Accessories		
Option	Order Number	List Price
External DC Disconnect Required for all non-Ferrups battery packs.	DCU-0001	\$451

External Maintenance Bypass Switches ¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
208, 220, 240 volt	BBM (Break Before Make) ²	BPE04BBM1A	\$550
	BBM with AS/400 (iSeries) Option	BPE04BBMAS1A	\$550
	BBM with Locking Handle ²	BPE04BBM1A/L	\$750
240 volt	MBB (Make Before Break) ²	BPE04MBB1A	\$650
	MBB with AS/400 (iSeries) Option	BPE04MBBAS1A	\$650
	MBB with Locking Handle ²	BPE04MBB1A/L	\$850

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE12.5kVA CTO Configuration Guide

Ferrups 12.5kVA 60Hz Tower General Specifications

Capacity:	12.5kVA/ 10.0kW	Dimensions:	36.5" x 19.0" x 32.0"
Input Voltage:	208, 240 V	(HxWxD)	930mm x 485mm x 815mm
Output Voltage:	120/208, 120/240, 240	Weight (with batteries):	N/A
		Weight (without batteries):	505lb / 229kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE12.5kVA, 60 Hz Tower	FM	\$9,312

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
208	120/208	1	\$0
208	120/240	2	\$0
240	120/240	3	\$0
240	240 (International Models)	6	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
8 minute internal (20 m half load) Floor Saver Cabinet	standard	0	\$3479
set up for external battery pack ¹	standard	4	\$0
set up for external battery pack ¹	10 amp internal upgrade ²	5	\$435
set up for external battery pack ¹	20 amp internal upgrade ³	7	\$775

¹ Order desired external battery pack as a separate line. If UPS is to be used with other than a Ferrups battery pack, also order DC Disconnect DCU-0001. See page 12.5k-3.

² Required for external battery packs 12fe – 13fe

³ Required for external battery packs 14fe – 15fe

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option ^{1,2}	0	\$0
Internal maintenance bypass switch option – MBB	1	\$900
Internal maintenance bypass switch option - BBM	2	\$800

AS/400 (iSeries) contacts included with Options 1 and 2.

¹ Internal maintenance bypass switch required for receptacle or circuit breaker output connections.

² External maintenance bypass switch also available. Order desired maintenance bypass switch as a separate line item on your order. See page 12.5k-3.

Input Connection ¹		Digit 6	
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired	A	\$0

¹ Line Cord input connection not available for 12.5kVA models

FE12.5kVA CTO Configuration Guide

Output Connection

Digits 7-14

Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Internal maintenance bypass switch required for receptacle or circuit breaker output connections.
- Up to eight output slots available when internal maintenance bypass switch option is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection ¹	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired	A	0	\$0	
120 volt	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
120 volt	15 Amp / 1 pole Circuit Breaker ²	V	___	\$60	
All voltages except 120 volt	15 Amp / 2 pole Circuit Breaker ²	W	___	\$60	
120 volt	20 Amp / 1 pole Circuit Breaker ²	X	___	\$60	
All voltages except 120 volt	20 Amp / 2 pole Circuit Breaker ²	Y	___	\$60	
120 volt	30 Amp / 1 pole Circuit Breaker ²	Z	___	\$60	
All voltages except 120 volt	30 Amp / 2 pole Circuit Breaker ²	2	___	\$60	
Receptacle Output Connection CTO Order Code		__	__	__	__
Hardwire Output Connection CTO Order Code		A0	A0	A0	A0

¹ Internal maintenance bypass switch required for receptacle or circuit breaker output connections

FE12.5kVA CTO Configuration Guide

Internal Options		Digit 15
Option	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor ¹	I	\$300
DVR and Anchor Kit for raised or access floor ¹	J	\$300
Neutral to Ground bond removal and DVR (For shipboard use)	R	\$25

1. Anchor Kits cannot be used with Floor Saver Battery Option

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
18m/48m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	EBPS12F	\$3,920
27m/1h13m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	9fe	\$5,145
49m/2h07m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	10fe	\$7,920
1h12m/3h04m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	11fe	\$9,270
1h38m/4h05m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	12fe	\$11,795
2h12m/5h05m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	13fe	\$14,825
3h08m/7h14m	20 Amp Battery Charger Upgrade ¹	14fe	\$18,435
5h10m/11h57m	20 Amp Battery Charger Upgrade ^{1,2}	15fe	\$26,780

¹Order battery charger as part of UPS. See page 12.5k-1.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Battery Accessories

Option	Order Number	List Price
External DC Disconnect Required for all non-Ferrups battery packs.	DCU-0001	\$451

FE12.5kVA CTO Configuration Guide

External Maintenance Bypass Switches¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
208, 220, 240 volt	BBM (Break Before Make) ²	BPE04BBM1A	\$550
	BBM with AS/400 (iSeries) Option	BPE04BBMAS1A	\$550
	BBM with Locking Handle ²	BPE04BBM1A/L	\$750
240 volt	MBB (Make Before Break) ²	BPE04MBB1A	\$650
	MBB with AS/400 (iSeries) Option	BPE04MBBAS1A	\$650
	MBB with Locking Handle ²	BPE04MBB1A/L	\$850

¹ Bypass Switch must be mounted on the wall near the UPS.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

FE18kVA CTO Configuration Guide

Ferrups 18kVA 60Hz Tower General Specifications

Capacity:	18.0kVA/ 15.0kW	Dimensions:	36.5" x 19.0" x 32.0"
Input Voltage:	208, 240 V	(HxWxD)	930mm x 485mm x 815mm
Output Voltage:	120/208, 120/240, 240	Weight (with batteries):	N/A
		Weight (without batteries):	625lb / 283kg

See Powerware® Ferrups® FE Series 60Hz Datasheet (LTP0368) for additional product specification.

Base Unit		Digits 1-2
Base Model, Frequency, Cabinet Style	CTO Order Code	Base Price
FE18kVA, 60 Hz Tower	FN	\$11,973

Input / Output Voltage			Digit 3
Input Voltage	Output Voltage	CTO Order Code	Base Price
208	120/208	1	\$0
208	120/240	2	\$0
240	120/240	3	\$0
240	240 (International Models)	6	\$0

Battery and Battery Charger			Digit 4
Battery Configuration	Battery Charger	CTO Order Code	Option Price
4 minute internal (10m half load) Floor Saver Cabinet	standard	0	\$3512
set up for external battery pack ¹	standard	4	\$0
set up for external battery pack ¹	10 amp internal upgrade ²	5	\$435
set up for external battery pack ¹	20 amp internal upgrade ³	7	\$775

¹ Order desired external battery pack as a separate line. If UPS is to be used with other than a Ferrups battery pack, also order DC Disconnect DCU-0001. See page 18k-3.

² Required for external battery packs 19fe – 20fe

³ Required for external battery packs 21fe – 22fe

Internal Maintenance Bypass Switch		Digit 5
Internal Maintenance Bypass Switch	CTO Order Code	Option Price
No internal maintenance bypass switch option ^{1,2}	0	\$0
Internal maintenance bypass switch option – MBB ³	1	\$1,075
Internal maintenance bypass switch option - BBM	2	\$975

AS/400 (iSeries) contacts included with Options 1 and 2.

¹ Internal maintenance bypass switch required for receptacle or circuit breaker output connections.

² External maintenance bypass switch also available. Order desired maintenance bypass switch as a separate line item on your order. See page 18k-3.

FE18kVA CTO Configuration Guide

Input Connection ¹			Digit 6
Input Voltage Selected	Input Connection	CTO Order Code	Option Price
Any	Hardwired	A	\$0

¹ Line Cord input connection not available for 18kVA models

Output Connection Digits 7-14

Output Connection Configuration

Designated by 8 digits within the unit CTO number. These eight digits allow selection of the type and quantity for up to four different types of receptacles.

- Internal maintenance bypass switch required for receptacle or circuit breaker output connections.
- Up to eight output slots available when internal maintenance bypass switch option is selected.
- For multiple quantities of one receptacle type, enter the type once with the total quantity (ex: B2 not B1B1).
- Always enter the receptacle types alphabetically (ex: B1C1 not C1B1).
- If hardwire output is desired, select type "A", quantity "0" for all receptacle types (ex: A0A0A0A0).
- If fewer than four types of receptacle are selected, complete the remaining receptacle digits with A0 (ex: B1C1A0A0).

Output Voltage Required	Output Connection ¹	CTO Order Code		Option Price per Panel	
		Type	Qty		
Any	Hardwired	A	0	\$0	
120 volt	5-15R Duplex	B	___	\$50	
	5-20R Duplex (UL)	C	___	\$50	
208, 220, or 240 volt	6-15R Duplex	D	___	\$75	
	6-20R Duplex	E	___	\$75	
120 volt	L5-15R Duplex	G	___	\$75	
	L5-20R	H	___	\$75	
	L5-30R	I	___	\$75	
208, 220, or 240 volt	L6-15R Duplex	J	___	\$75	
	L6-20R	K	___	\$75	
	L6-30R	L	___	\$75	
120/240 volt	L14-20R	M	___	\$75	
	L14-30R	N	___	\$75	
120 volt	15 Amp / 1 pole Circuit Breaker	V	___	\$60	
All voltages except 120 volt	15 Amp / 2 pole Circuit Breaker	W	___	\$60	
120 volt	20 Amp / 1 pole Circuit Breaker	X	___	\$60	
All voltages except 120 volt	20 Amp / 2 pole Circuit Breaker	Y	___	\$60	
120 volt	30 Amp / 1 pole Circuit Breaker	Z	___	\$60	
All voltages except 120 volt	30 Amp / 2 pole Circuit Breaker	2	___	\$60	
Receptacle Output Connection CTO Order Code		___	___	___	___
Hardwire Output Connection CTO Order Code		A0	A0	A0	A0

¹ Internal maintenance bypass switch required for receptacle or circuit breaker output connections

FE18kVA CTO Configuration Guide

Internal Options		Digit 15
Option	CTO Order Code	Option Price
DVR (recommended when loads contain PFC power supplies)	B	\$0
DVR and Anchor Kit for structural slab floor ¹	I	\$300
DVR and Anchor Kit for raised or access floor ¹	J	\$300
Neutral to Ground bond removal and DVR (For shipboard use)	R	\$25

1. Anchor Kits cannot be used with Floor Saver Battery Option

External Options

External battery packs, bypass switches and other external options are not a part of the CTO number and will need to be ordered as separate line items. Some external options require that the UPS be configured for use with the option. More options are listed in the Additional External Options section of this guide.

External Battery Packs			
Runtime Full/Half	Battery Charger Required ¹	Order Number	List Price
10m/26m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	EBPS18F	\$3,920
14m/39m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	16fe	\$5,135
27m/1h10m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	17fe	\$7,895
37m/1h46m	Standard Battery Charger ¹ 10 or 20 Amp Battery Charger Upgrade Optional	18fe	\$8,960
48m/2h04m	10 Amp Battery Charger Upgrade ^{1,2} 20 Amp Battery Charger Upgrade Optional	19fe	\$11,795
1h13m/3h01m	10 Amp Battery Charger Upgrade ¹ 20 Amp Battery Charger Upgrade Optional	20fe	\$14,840
1h49m/4h17m	20 Amp Battery Charger Upgrade ¹	21fe	\$17,920
3h04m/7h05m	20 Amp Battery Charger Upgrade ¹	22fe	\$26,795

¹Order battery charger as part of UPS. See page 18k-1.

² Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

External Battery Accessories		
Option	Order Number	List Price
External DC Disconnect Required for all non-Ferrups battery packs.	DCU-0001	\$451

FE18kVA CTO Configuration Guide

External Maintenance Bypass Switches¹ (Recommended for hardwired units)			
UPS Input Voltage	Switch Type	Order Number	List Price
208, 220, 240 volt	BBM (Break Before Make)	BPE05BBM1A	\$725
	BBM with AS/400 (iSeries) Option	BPE05BBMAS1A	\$725
	BBM with Locking Handle	BPE05BBM1A/L	\$925
240 volt	MBB (Make Before Break)	BPE05MBB1A	\$825
	MBB with AS/400 (iSeries) Option	BPE05MBBAS1A	\$825
	MBB with Locking Handle	BPE05MBB1A/L	\$1,025

¹ Bypass Switch must be mounted on the wall near the UPS.

Additional Ferrups External Options

Voltage Matching Transformers

208V in – 120/240V out. Required for applications using MBB bypass with source voltage of 208V.

Transformer Description	For use with Ferrups models:	Order Number	List Price
5kVA Transformer ³	FC-FI (850VA - 4.3kVA)	TRN-0244	\$772
7.5kVA Transformer	FJ, FK (5.3kVA - 7kVA)	TRN-0239	\$1013
10kVA Transformer	FL ¹ (10kVA)	TRN-0240	\$1260
15kVA Transformer	FL ² , FM (10kVA – 12kVA)	TRN-0245	\$1754
25kVA Transformer	FN (18kVA)	TRN-0599	\$2300

¹ Use with 10kVA UPS models having a 5 Amp battery charger.

² Use with 10kVA UPS models having a 10 or 20 Amp battery charger.

³ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

Caster Kits

For use with Ferrups models:	Order Number	List Price
FA, FB, FC (500VA – 850VA) ¹	CAA-0004	\$100
FD, FE (1.15kVA – 1.4kVA) ¹	CAA-0005	\$120
FF, FG, FH (1.8kVA – 3.1kVA)	CAA-0006	\$145

¹ Eaton has announced the End of Life of this Ferrups option. Product will be available while supplies last.

Connectivity

Option	Order Number	List Price
Hand-held Remote Control Panel with Cable	RCK-0007	\$250
Signal Splitter Box	IPK-0022	\$249
IBM AS/400 (iSeries) Interface Kit – UPS w/o maintenance bypass switch	IPK-0001	\$95
IBM AS/400 (iSeries) Interface Kit – UPS w/ maintenance bypass switch	BAA-0325	\$120
Sensaphone 1104 (previously EnviroCom™ I)	FGD-1104-PW	\$499
Sensaphone 1104 Temperature Sensor (previously EnviroCom™ I)	FGD-0101	\$45
BestLink SNMP/WEB Adapter	116750225-001	\$349

Software

Arriving bundled with every Ferrups UPS is the Powerware Software Suite. The Software Suite includes LanSafe v.5 software, Netwatch software and a 30-day trial of PowerVision® Management Software.



Eaton's latest release of our free LanSafe® software- v.5.11- is fully supportive of the Ferrups product line. Ferrups customers can use LanSafe to deliver comprehensive UPS support including graceful, remote shutdown of UPS systems and network monitoring tools via a serial connection. LanSafe v.5.11 is available for download on our website, and is included with our Powerware Software Suite CD, versions 5.07 and higher.

With PowerVision, you can proactively monitor the health and performance of UPS, power distribution, and environmental systems across the enterprise- and enhance the reliability of the entire power protection infrastructure.

NetWatch Clients UPS software enables users to shutdown a server or workstation and acts as a network-monitoring tool through the BestLink SNMP/WEB Adapter that monitors and controls it. During an extended power outage, the SNMP/WEB adapter informs all registered NetWatch Clients that it is time to shut down their respective operating systems, thus preparing them for the removal of AC power.

Additionally, the CheckUPS® Software Suite is available for download at Powerware.com. This product remains in Eaton's Powerware portfolio and is still used in a number of applications but is not under further development. CheckUPS provides enhanced UPS monitoring and unattended system shutdown features for most popular operating systems, including Windows 9x and Windows NT/2000, Novell NetWare, and many versions of UNIX.

For more information on Powerware software products, visit www.powerware.com/Software/Products.asp.

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Finland: 358.94.52.661
France: 33.1.6012.7400
Germany: 49.7841.666.0
Italy: 39.02.66.04.05.40
Norway: 47.23.03.65.50
Sweden: 46.8.598.940.00
United Kingdom: 44.1753.608.700

ASIA PACIFIC
Australia/NZ: 61.2.9878.5000
China: 86.21.6361.5599
HK/Korea/Taiwan: 852.2745.6682
India: 91.11.2649.9414 to 18
Singapore/SEA: 65.6829.8888

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Configuration Guide
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