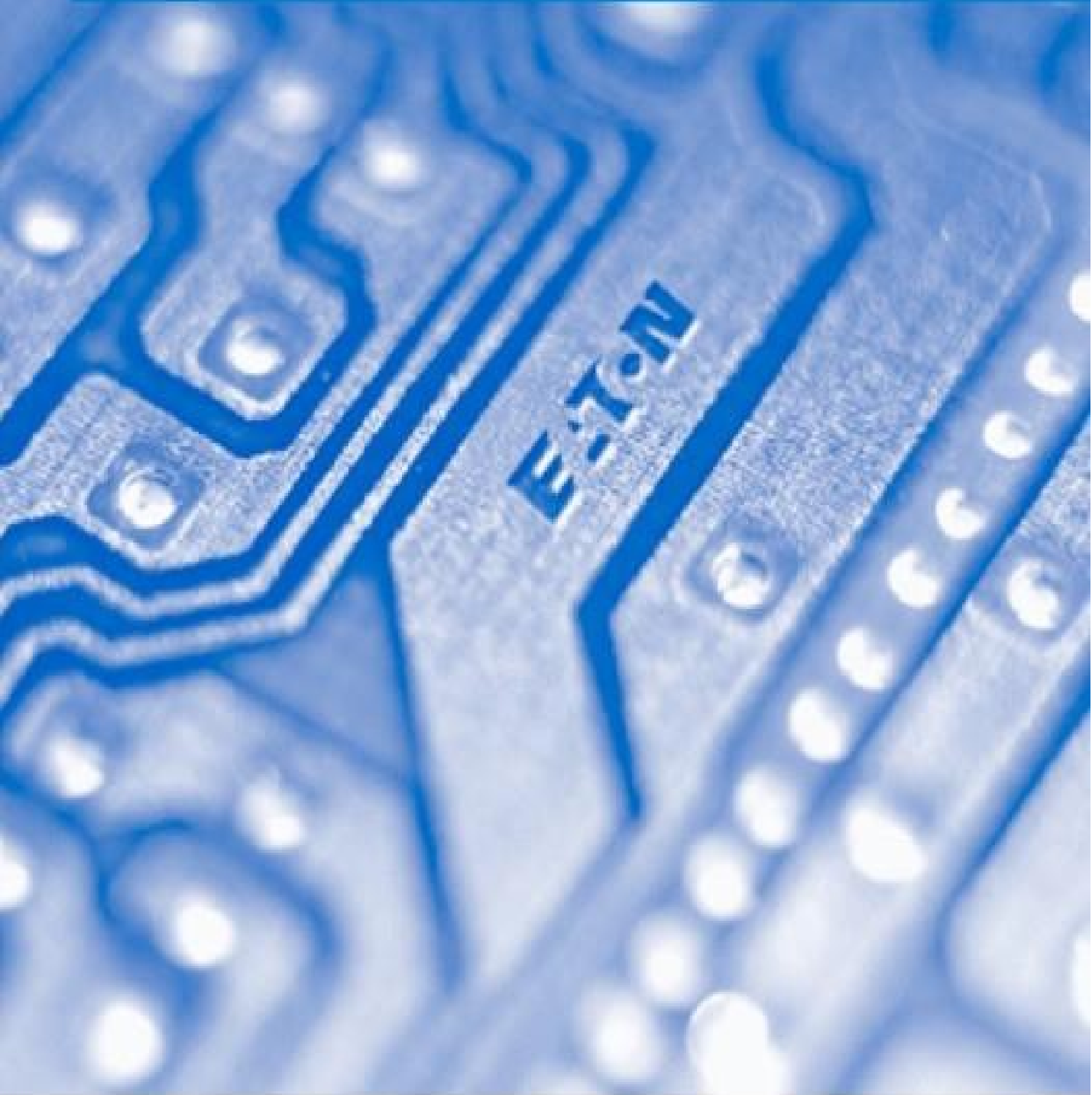


# CTO Configuration Guide



*Powering Business Worldwide*

## Eaton<sup>®</sup> Ferrups<sup>®</sup> Ferrups 60Hz RM Series

FER15GDE  
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# Table of Contents

Ferrups CTO Worksheet ..... 2

Ferrups 60Hz Rackmount Series Quick Reference Sheet..... 3

**Ferrups CTO Details**

FES1.4kVA.....1.4k-1  
FER2.1kVA.....2.1k-1  
FER3.1kVA.....3.1k-1  
FER7kVA.....7k-1

**Additional Ferrups External Options.....14**

- Voltage Matching Transformers
- Connectivity Options
- Software

## 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: RI000AA0A0A0A0A.

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   | R_                 |  |  |  |  |  |             |          |           |  |
| Input / Output Voltage  |                    |  |  |  |  |  |             |          |           |  |
| Battery and Battery Charger   |                    |  |  |  |  |  |             |          |           |  |
| Internal Maintenance Bypass Switch  |                    |  |  |  |  |  |             |          |           |  |
| Input Connection  |                    |  |  |  |  |  |             |          |           |  |
| Output Connection   |                    |  |  |  |  |  |             |          |           |  |
| Internal Options  |                    |  |  |  |  |  |             |          |           |  |
| Complete UPS CTO Number   | R_                 |  |  |  |  |  |             |          |           |  |
| 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  |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  |             |          |           |  |
| <b>Note:</b> Eaton offers a complete line of <b>Power Distribution Units (PDUs)</b> . Please contact your sales representative or visit our website, <a href="http://powerquality.eaton.com">powerquality.eaton.com</a> and <a href="http://www.epdu.com">www.epdu.com</a> details. |                    |  |  |  |  |  |             |          |           |  |
| Sub Total   |                    |  |  |  |  |  |             |          |           |  |
|   |                    |  |  |  |  |  | Freight     |          |           |  |
|   |                    |  |  |  |  |  | Insurance   |          |           |  |
|   |                    |  |  |  |  |  | Tax/Duty    |          |           |  |
|   |                    |  |  |  |  |  | Quote Total |          |           |  |

# Ferrups 60Hz Rackmount 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.

**RI 0 0 0 A A0A0A0A0 A**

| Base Unit (1-2) |
|-----------------|
| RC = 1.4kVA     |
| RH = 2.1kVA     |
| RI = 3.1kVA     |
| RK = 7.0kVA     |

| 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 |
| 6 = 240V in; 240V out     |

| Internal Bypass (5) |
|---------------------|
| 0 = None            |

| Input (6)     |
|---------------|
| A = Hardwired |
| B = 5-15P     |
| C = 5-20P     |
| D = 5-50P     |
| J = L5-30P    |
| K = L6-20P    |
| L = L6-30P    |

| Output (7-14)    |     |
|------------------|-----|
| Type             | Qty |
| A= None- HW      | 0   |
| B= 5-15R Duplex  | 1   |
| C= 5-20R Duplex  | 2   |
| E= 6-20R Duplex  | 3   |
| G= L5-15R Duplex |     |
| H= L5-20R        |     |
| I= L5-30R        |     |
| K= L6-20R        |     |
| L= L6-30R        |     |

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

| Battery / Battery Charger (4)                   |
|---|
| 0 = Standard Battery/ Standard Charger          |
| 3 = Setup for Internal w/o Battery/ Std Charger |
| 4 = External Battery/ Standard Charger          |
| 5 = External Battery/ 10A Charger               |

| Internal Options (15)                          |
|--|
| A = None                                       |
| B = AVR/ DVR (recommended for PFC loads)       |
| Q = Neutral to ground bond removal (shipboard) |
| R = Neutral to ground removed & AVR/DVR        |

# FES1.4kVA CTO Configuration Guide

## Ferrups 1.4kVA 60Hz Rackmount General Specifications

|                 |               |  |                           |
|-----------------|---------------|--|---------------------------|
| Capacity:       | 1.4kVA/ 1.0kW | Dimensions:                            | 10.5" (6U) x 19" x 21.25" |
| Input Voltage:  | 120V          | (HxWxD)                                | 267mm x 483mm x 540mm     |
| Output Voltage: | 120V          | Weight (with batteries <sup>1</sup> ): | 150 lb / 68 kg            |
|                 |               | Weight (without batteries):            | 98 lb / 45 kg             |

See Eaton® Ferrups® Rackmount Series 60Hz Datasheet (LTP0224) 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 |  |
| FER1.4kVA, 60 Hz Rackmount           | RC             | \$8,364    |  |

| 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 |
| 14 minute internal (36m half load)   | standard        | 0              | \$437        |
| Set up for internal (less batteries) | standard        | 3              | \$108        |

| Internal Maintenance Bypass Switch                                  |                | Digit 5      |  |
|---|----------------|--------------|--|
| Internal Maintenance Bypass Switch                                  | CTO Order Code | Option Price |  |
| No internal maintenance bypass switch option available <sup>1</sup> | 0              | \$0          |  |

<sup>1</sup>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-2.

| Input Connection       |                        |                | Digit 6      |
|------------------------|------------------------|----------------|--------------|
| Input Voltage Selected | Input Connection       | CTO Order Code | Option Price |
| Any                    | Hardwired <sup>1</sup> | A              | \$0          |
|                        | 5-15P w/6' Line Cord   | B              | \$24         |

<sup>1</sup> Hardwired input requires hardwired output

# FES1.4kVA 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 of receptacles.

| Output Voltage Required | Output Connection      | CTO Order Code | Option Price |
|-------------------------|------------------------|----------------|--------------|
| 120 volt                | Hardwired <sup>1</sup> | A0A0A0A0       | \$0          |
| 120 volt                | 5-15R Duplex           | B2A0A0A0       | \$100        |

<sup>1</sup> 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         |
| Neutral to Ground bond removal (For Shipboard Use)         | Q              | \$25         |
| Neutral to Ground bond removal and AVR (For Shipboard Use) | R              | \$110        |

## External Options

External 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 Maintenance Bypass Switches<sup>1</sup> (Recommended for hardwired units)

| UPS Input Voltage | Switch Type                       | Order Number | List Price |
|-------------------|-----------------------------------|--------------|------------|
| 120               | MBB (Make Before Break)           | BPE01MBB1A   | \$663      |
|                   | MBB, with AS/400 (iSeries) Option | BPE01MBBAS1A | \$690      |

<sup>1</sup> Bypass Switch must be mounted on the wall near the UPS.

# FER2.1kVA CTO Configuration Guide

## Ferrups 2.1kVA 60Hz Rackmount General Specifications

|                 |               |  |                           |
|-----------------|---------------|--|---------------------------|
| Capacity:       | 2.1kVA/ 1.5kW | Dimensions:                            | 10.5" (6U) x 19" x 26.25" |
| Input Voltage:  | 120V          | (HxWxD)                                | 267mm x 483mm x 667mm     |
| Output Voltage: | 120V          | Weight (with batteries <sup>1</sup> ): | 220 lb / 100 kg           |
|                 |               | Weight (without batteries):            | 116 lb / 53 kg            |

See Eaton® Ferrups® Rackmount Series 60Hz Datasheet (LTP0224) 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 |
| FER2.1kVA, 60 Hz Rackmount           | RH             | \$9,589    |

| 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 |
| 24 minute internal (58m half load)            | standard        | 0              | \$710        |
| Set up for internal (less batteries)          | standard        | 3              | \$216        |
| set up for external battery pack <sup>1</sup> | standard        | 4              | \$0          |

<sup>1</sup> Includes External Battery Connector. Order desired external battery pack as a separate line. See page 2.1k-3.

| Internal Maintenance Bypass Switch                                  |                | Digit 5      |
|---|----------------|--------------|
| Internal Maintenance Bypass Switch                                  | CTO Order Code | Option Price |
| No internal maintenance bypass switch option available <sup>1</sup> | 0              | \$0          |

<sup>1</sup> 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-2.

| Input Connection       |                        |                | Digit 6      |
|------------------------|------------------------|----------------|--------------|
| Input Voltage Selected | Input Connection       | CTO Order Code | Option Price |
| 120 volt               | Hardwired <sup>1</sup> | A              | \$0          |
|                        | 5-20P w/6' Line Cord   | C              | \$39         |

<sup>1</sup> Hardwired input requires hardwired output

# FER2.1kVA 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 of receptacles.

| Output Voltage Required | Output Connection      | CTO Order Code | Option Price |
|-------------------------|------------------------|----------------|--------------|
| 120 volt                | Hardwired <sup>1</sup> | A0A0A0A0       | \$0          |
|                         | (3) 5-15R Duplex       | B3A0A0A0       | \$150        |
|                         | (3) 5-20R Duplex (UL)  | C3A0A0A0       | \$150        |

<sup>1</sup> Hardwired output requires hardwired input with maximum of two output connections

## Internal Options

Digit 15

| Internal Options   | CTO Order Code | Option Price |
|--|----------------|--------------|
| DVR  | B              | \$0          |
| 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<sup>1</sup>

| Runtime Full/Half | Battery Charger Required | Order Number | List Price |
|-------------------|--------------------------|--------------|------------|
| 1h41m/3h54m       | Standard Battery Charger | 1re          | \$5,794    |
| 2h50m/6h37m       | Standard Battery Charger | 2re          | \$10,052   |

<sup>1</sup> UPS must be ordered set up for external battery pack. See page 2.1k-1.

## External Battery Accessories

| Option  | Order Number | List Price |
|---|--------------|------------|
| External Battery Connector Extension (72")<br>Also recommended for third-party external battery configurations. | BCS-0108     | \$131      |

## External Maintenance Bypass Switches<sup>1</sup> (Recommended for hardwired units)

| UPS Input Voltage | Switch Type                       | Order Number | List Price |
|-------------------|-----------------------------------|--------------|------------|
| 120               | MBB (Make Before Break)           | BPE01MBB1A   | \$663      |
|                   | MBB, with AS/400 (iSeries) Option | BPE01MBBAS1A | \$690      |

<sup>1</sup> Bypass Switch must be mounted on the wall near the UPS.



# FER3.1kVA CTO Configuration Guide

## Ferrups 3.1kVA 60Hz Rackmount General Specifications

|                 |  |  |                           |
|-----------------|--|--|---------------------------|
| Capacity:       | 3.1kVA/ 2.2kW                            | Dimensions:                            | 10.5" (6U) x 19" x 26.25" |
| Input Voltage:  | 120, 208, 240 V                          | (HxWxD)                                | 267mm x 483mm x 667mm     |
| Output Voltage: | 120, 120/208, 120/240,<br>240, 127/240 V | Weight (with batteries <sup>1</sup> ): | 238 lb / 108 kg           |
|                 |  | Weight (without batteries):            | 138 lb / 63 kg            |

See Eaton® Ferrups® Rackmount Series 60Hz Datasheet (LTP0224) for additional product specification.

1. Weights are approximate for standard batteries, option 0 for digit4.

| Base Unit                            |                | Digits 1-2 |
|--------------------------------------|----------------|------------|
| Base Model, Frequency, Cabinet Style | CTO Order Code | Base Price |
| FER3.1kVA, 60 Hz Rackmount           | RI             | \$10,646   |

| Input / Output Voltage |                            |                | Digit 3    |
|------------------------|----------------------------|----------------|------------|
| Input Voltage          | Output Voltage             | CTO Order Code | Base Price |
| 120                    | 120                        | 0              | \$0        |
| 208                    | 120/208                    | 1              | \$150      |
| 208                    | 120/240                    | 2              | \$150      |
| 240                    | 120/240                    | 3              | \$150      |
| 240                    | 240 (International Models) | 6              | \$150      |

| Battery and Battery Charger                   |                 |                | Digit 4      |
|---|-----------------|----------------|--------------|
| Battery Configuration                         | Battery Charger | CTO Order Code | Option Price |
| 14 minute internal (35m half load)            | standard        | 0              | \$695        |
| Set up for internal (less batteries)          | standard        | 3              | \$216        |
| set up for external battery pack <sup>1</sup> | standard        | 4              | \$0          |

<sup>1</sup> Includes External Battery Connector

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

| Internal Maintenance Bypass Switch                                  |                | Digit 5      |
|---|----------------|--------------|
| Internal Maintenance Bypass Switch                                  | CTO Order Code | Option Price |
| No internal maintenance bypass switch option available <sup>1</sup> | 0              | \$0          |

<sup>1</sup> 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.

| Input Connection       |                        |                | Digit 6      |
|------------------------|------------------------|----------------|--------------|
| Input Voltage Selected | Input Connection       | CTO Order Code | Option Price |
| Any                    | Hardwired <sup>1</sup> | A              | \$0          |
| 120 volt               | 5-50P w/6' Line Cord   | D              | \$90         |
|                        | L5-30P w/6' Line Cord  | J              | \$77         |
| 208 or 240 volt        | L6-20P w/6' Line Cord  | K              | \$77         |
|                        | L6-30P w/6' Line Cord  | L              | \$77         |

<sup>1</sup> Hardwired input requires hardwired output

# FER3.1kVA 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.

- Three output slots available with line cord input connection.
- 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 three 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 <sup>1</sup> | A              | 0   | \$0                    |    |
| 120 volt<br>Choose up to three panels         | 5-15R Duplex           | B              | ___ | \$50                   |    |
|   | 5-20R Duplex (UL)      | C              | ___ | \$50                   |    |
| 208, or 240 volt<br>Choose up to three panels | 6-20R Duplex           | E              | ___ | \$75                   |    |
| 120 volt<br>Choose up to three panels         | L5-15R Duplex          | G              | ___ | \$75                   |    |
|   | L5-20R                 | H              | ___ | \$75                   |    |
|   | L5-30R                 | I              | ___ | \$75                   |    |
| 208, or 240 volt<br>Choose up to three panels | L6-20R                 | K              | ___ | \$75                   |    |
|   | L6-30R                 | L              | ___ | \$75                   |    |
| Receptacle Output Connection CTO Order Code   |                        | ___            | ___ | ___                    | A0 |
| Hardwire Output Connection CTO Order Code     |                        | A0             | A0  | A0                     | A0 |

<sup>1</sup> Hardwired output requires hardwired input

## Internal Options

**Digit 15**

| Internal Options   | CTO Order Code | Option Price |
|--|----------------|--------------|
| DVR  | B              | \$0          |
| Neutral to Ground bond removal and DVR (For Shipboard Use) | R              | \$25         |

# FER3.1kVA 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<sup>1</sup>

| Runtime Full/Half | Battery Charger Required | Order Number | List Price |
|-------------------|--------------------------|--------------|------------|
| 57m/2h27m         | Standard Battery Charger | 1re          | \$5,794    |
| 1h41m/4h03m       | Standard Battery Charger | 2re          | \$10,052   |

<sup>1</sup> UPS must be ordered set up for external battery pack. See page 3.1k-1.

### External Battery Accessories

| Option  | Order Number | List Price |
|---|--------------|------------|
| External Battery Connector Extension (72")<br>Also recommended for third-party external battery configurations. | BCS-0108     | \$131      |

### External Maintenance Bypass Switches<sup>1</sup> (Recommended for hardwired units)

| UPS Input Voltage | Switch Type                       | Order Number | List Price |
|-------------------|-----------------------------------|--------------|------------|
| 120V              | MBB (Make Before Break)           | BPE01MBB1A   | \$663      |
|                   | MBB, with AS/400 (iSeries) Option | BPE01MBBAS1A | \$690      |
| 208V              | BBM (Break Before Make)           | BPE02BBM1A   | \$909      |
|                   | BBM with AS/400 (iSeries) Option  | BPE02BBMAS1A | \$950      |
| 240V              | MBB (Make Before Break)           | BPE02MBB1A   | \$909      |
|                   | MBB with AS/400 (iSeries) Option  | BPE02MBBAS1A | \$950      |

<sup>1</sup> Bypass Switch must be mounted on the wall near the UPS.

# FER7kVA CTO Configuration Guide

## Ferrups 7.0kVA 60Hz Rackmount General Specifications

|                 |                       |  |                             |
|-----------------|-----------------------|--|-----------------------------|
| Capacity:       | 7.0kVA/ 5.0kW         | Dimensions:                            | 19.25" (11U) x 19" x 26.25" |
| Input Voltage:  | 208, 240 V            | (HxWxD)                                | 489mm x 483mm x 540mm       |
| Output Voltage: | 120/208, 120/240, 240 | Weight (with batteries <sup>1</sup> ): | N/A                         |
|                 |                       | Weight (without batteries):            | 330 lb / 150 kg             |

See Eaton® Ferrups® Rackmount Series 60Hz Datasheet (LTP0224) 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 |
| FER7kVA, 60 Hz Rackmount             | RK             | \$22,175   |

| 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 |
| set up for external battery pack <sup>1</sup> | standard                | 4              | \$0          |
| set up for external battery pack <sup>1</sup> | 10 amp internal upgrade | 5              | \$270        |

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

| Internal Maintenance Bypass Switch                        |                | Digit 5      |
|---|----------------|--------------|
| Internal Maintenance Bypass Switch                        | CTO Order Code | Option Price |
| No internal maintenance bypass switch option <sup>1</sup> | 0              | \$0          |

<sup>1</sup> 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.

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

# FER7kVA 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 three different types of receptacles.

- Up to three output slots available.
- 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 three 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 <sup>1</sup> | A              | 0   | \$0                    |
| 120 volt                                    | 5-15R Duplex           | B              | ___ | \$50                   |
|   | 5-20R Duplex (UL)      | C              | ___ | \$50                   |
| 208 or 240 volt                             | 6-20R Duplex           | E              | ___ | \$75                   |
| 120 volt                                    | L5-15R Duplex          | G              | ___ | \$75                   |
|   | L5-20R                 | H              | ___ | \$75                   |
|   | L5-30R                 | I              | ___ | \$75                   |
| 208 or 240 volt                             | L6-20R                 | K              | ___ | \$75                   |
|   | L6-30R                 | L              | ___ | \$75                   |
| Receptacle Output Connection CTO Order Code |                        | __             | __  | <u>A0</u>              |
| Hardwire Output Connection CTO Order Code   |                        | A0             | A0  | A0                     |

<sup>1</sup> Hardwired output requires hardwired input

## Internal Options

**Digit 15**

| Internal Options   | CTO Order Code | Option Price |
|--|----------------|--------------|
| DVR  | B              | \$0          |
| Neutral to Ground bond removal and DVR (For shipboard use) | R              | \$25         |

# FER7kVA 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 <sup>1</sup>  | Order Number | List Price |
|-------------------|--|--------------|------------|
| 12m/33m           | Standard Battery Charger <sup>1</sup><br>10 Amp Battery Charger Upgrade Optional | EBPS4.3R     | \$5,693    |

<sup>1</sup>Order battery charger as part of UPS. See page 7k-1.

### External Maintenance Bypass Switches<sup>1</sup> (Recommended for hardwired units)

| UPS Input Voltage | Switch Type                      | Order Number | List Price |
|-------------------|----------------------------------|--------------|------------|
| 208, 220 volt     | BBM (Break Before Make)          | BPE02BBM1A   | \$909      |
|                   | BBM with AS/400 (iSeries) Option | BPE02BBMAS1A | \$950      |
| 240 volt          | MBB (Make Before Break)          | BPE02MBB1A   | \$909      |
|                   | MBB with AS/400 (iSeries) Option | BPE02MBBAS1A | \$950      |

<sup>1</sup> 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 |
| 7.5kVA Transformer  | RK (7kVA)                    | TRN-0239     | \$2,219    |

### Connectivity

| Option   | Order Number  | List Price |
|--|---------------|------------|
| Hand-held Remote Control Panel with Cable                              | RCK-0007      | \$423      |
| IBM AS/400 (iSeries) Interface Kit – UPS w/o maintenance bypass switch | IPK-0001      | \$131      |
| Serial RS-232 CheckUPS Cable DB25M to DB9F                             | INT-0035      | \$ 67      |
| BestLink SNMP/WEB Adapter  | 116750225-001 | \$388      |

### Software

Arriving bundled with every Ferrups UPS is the Eaton Intelligent Power Software Suite. The software suite includes links to LanSafe and NetWatch software.

Eaton's latest release of our free LanSafe® software 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. The most recent release of LanSafe software is available for download on our website [powerquality.eaton.com](http://powerquality.eaton.com).



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.

Ferrups products are also compatible with the Eaton PowerXpert Software, geared toward end users with mostly Eaton power distribution products such as switchgear, UPSs, breakers, PDUs, RPPs, meters, and relays amongst others. PowerXpert has web based views including Trend Viewer, Layout Manager and Quality Manager Modules.

Additionally, the CheckUPS® Software Suite is available for download under legacy software at [powerquality.eaton.com](http://powerquality.eaton.com). This product remains in Eaton's portfolio and is still used in a number of applications but is not under further development.

For more information on Eaton software products, visit [powerquality.eaton.com/Support/Software-Drivers](http://powerquality.eaton.com/Support/Software-Drivers)

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