



eAPU Configuration Manual

Overview of Idle Free Series 5000 eAPU

This manual is intended to assist in understanding the various combinations of kits and options that can be specified when ordering an Idle Free Series 5000 eAPU. This manual also aids and follows the format of the online eAPU configurator located in the IFS Dealer Portal. (www.phillipsandtemro.com.)

There is only one model of electric APUs available to order. Below is a chart that summarizes that model.



How to Configure a Series 5000 eAPU

The Series 5000 mounts to the back of the cab and requires W 24.6 x L 27.2" of available space on the cab wall. The evaporator mounts to the back or side wall of the interior of the bunk and requires L 22" x W 6" x H 15.5" of space.



Once it has been determined that there is adequate space to mount the Series 5000, refer to the eAPU Configurator Tool in the Dealer Portal (www.phillipsandtemro.com) to configure the appropriate part number.

Step 1: Select "SC – Sleeper Cab" as the Vehicle Type.

eAPU® Configurator Tool

Use the Configurator Tool to determine what part number you should order. Part numbers are generated based on the options you select from the drop downs.

Vehicle Type

SC - Sleeper Cab

Step 2: Select “05 – Series 5000” as the Enclosure Type.

Enclosure Type

05 - Series 5000

Step 3: Select “2 – A/C Only” as the Heat/AC Option as the Series 5000 is only available with air conditioning.

Heat / A/C Option

2 - A/C Only

Step 4: Select “A – Evaporator, Series 5000” as the Evaporator Option. The dimensions of the evaporator are L 22” x W 6” x H 15.5”. It is installed on the back or side wall of the bunk.



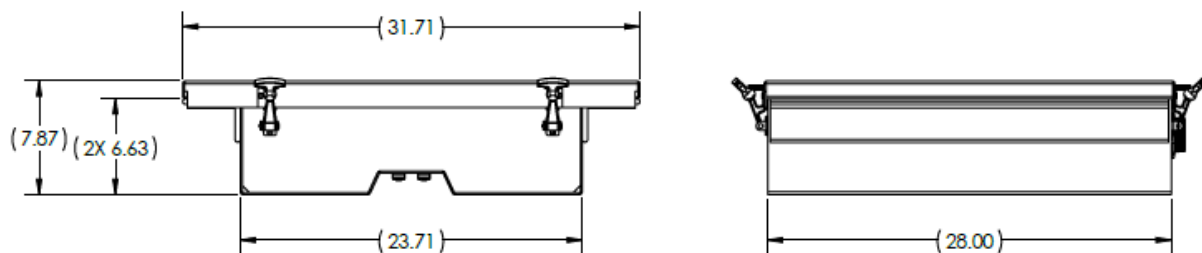
Step 5: The Series 5000 requires a separate battery box. There are several options available.

- In Frame Power Pack
- Rail Mount Power Pack
- Power Connection Kit

The **In Frame Power Pack** is mounted between the truck's frame rails, behind the sleeper. This battery box requires 28" of clearance between the cross members. This option is available with batteries or without batteries.



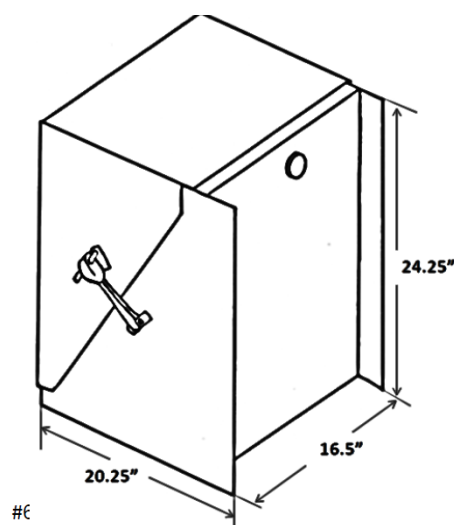
| Option | Description |
|--|--|
| A – In Frame Power Pack with Batteries | This In Frame option includes 4 AGM batteries, cables, battery separator, fuses and other components |
| B – In Frame Power Pack, NO Batteries | This In Frame option includes cables, battery separator, fuses, and other components, but does NOT include batteries |



The **Rail Mount Power Pack** is mounted on the frame rail of the truck and requires 18" of clearance. This option is available with and without batteries.

In Frame Battery Box

| Option | Description |
|--|---|
| C – Rail Mount Power Pack with Batteries | This Rail Mount option includes 4 AGM batteries, cables, battery separator, fuses and other components |
| D – Rail Mount Power Pack, NO Batteries | This Rail Mount option includes cables, battery separator, fuses and other components, but does NOT include batteries |



Power Connection Kit

The third option should be selected when the customer plans to supply the batteries and the battery box. Idle Free would be providing the Connection Kit.

| Option | Description |
|---|--|
| E – Power Connection Kit, NO Batteries or Box | This Power Connection kit includes the battery separator, cables and fuses |

Select the appropriate option in the eAPU Configurator.

Battery Options

A - In Frame Power Pack with Batteries ▼

Step 6: Select “0 – Included with System” for the Mounting Option.

Mounting Options

0 - Included with System ▼

Step 7: Select “0 – None” for the Shore Power Option as the Series 5000 does not come with Shore Power.

Shore Power Options

0 - None ▼

Step 8: The Series 5000 comes with Automatic Start-Stop technology. There are 15 options available based on truck brand and type of transmission. First, determine if the transmission is automatic or manual. If it is a manual transmission, determine if it is imperial or metric by following the steps below.

- Determine the manufacturer of the transmission
 - If the manufacturer is Meritor, then it is Imperial
 - If the manufacturer is Eaton, follow next step
- Go to <http://www.roadranger.com/rr/CustomerSupport/Support/LiteratureCenter/index.htm>
 - On the right side, find the model number in the transmission drop-down menu
 - Click “Illustrated Part List” PDF
 - Download the PDF
 - Search in the PDF for “Neutral”
 - If the neutral part is 22941, then it is Imperial
 - If the neutral part is 4302749, then it is Metric

- Use this information and the chart below to select the correct Automatic Start-Stop kit.

| Truck Brand | Transmission Type | Option |
|---|------------------------------|--|
| Freightliner, Mack, Kenworth, Peterbilt | Automatic Transmission | 8710018 – Freightliner, Kenworth, Peterbilt – Auto Transmission |
| Freightliner, Mack, Kenworth, Peterbilt | Manual Imperial Transmission | 8710019 - Freightliner, Mack, Kenworth, Peterbilt Manual Transmission (Imperial) |
| Freightliner, Mack, Kenworth, Peterbilt | Manual Metric Transmission | 8710020 - Freightliner, Mack, Kenworth, Peterbilt Manual Transmission (Metric) |
| International (Navistar) | Automatic Transmission | 8710021 – International – Auto Transmission |
| International (Navistar) | Manual Imperial Transmission | 8710022 – International – Manual Transmission (Imperial) |
| International (Navistar) | Manual Metric Transmission | 8710023 – International – Manual Transmission (Metric) |
| Volvo truck with a Cummins Engine | Automatic Transmission | 8710024 – Volvo with Cummins Engine – Auto Transmission |
| Volvo truck with a Cummins Engine | Manual Imperial Transmission | 8710025 – Volvo with Cummins Engine – Manual Transmission (Imperial) |
| Volvo truck with a Cummins Engine | Manual Metric Transmission | 8710026 – Volvo with Cummins Engine – Manual Transmission (Metric) |
| Volvo truck with an engine other than Cummins | Automatic Transmission | 8710027 – Volvo without Cummins Engine – Auto Transmission |

| | | |
|---|------------------------------|---|
| Volvo truck with an engine other than Cummins | Manual Imperial Transmission | 8710028 – Volvo without Cummins Engine – Manual Transmission (Imperial) |
| Volvo truck with an engine other than Cummins | Manual Metric Transmission | 8710029 – Volvo without Cummins Engine – Manual Transmission (Metric) |
| Mack Anthem Only | Automatic Transmission | 8710043 – Mack Anthem – Auto Transmission |
| Mack Anthem Only | Manual Imperial Transmission | 8710044 – Mack Anthem – Manual Transmission (Imperial) |
| Mack Anthem Only | Manual Metric Transmission | 8710045 – Mack Anthem – Manual Transmission (Metric) |

Select the appropriate option from the drop-down list.

Automatic Start-Stop Options

8710045 - Mack Anthem - Manual Transmission (Metric) ▼

The online eAPU Configurator Tool will generate an IFS Smart Part Number and an Automatic Start-Stop part number for the Series 5000. This may be provided to sales to provide a quote by contacting your sales manager or by clicking on the green “Contact for Quote & Information” button.

IFS Smart Part Number: SC052AA00, 8710045

Contact for Quote & Information

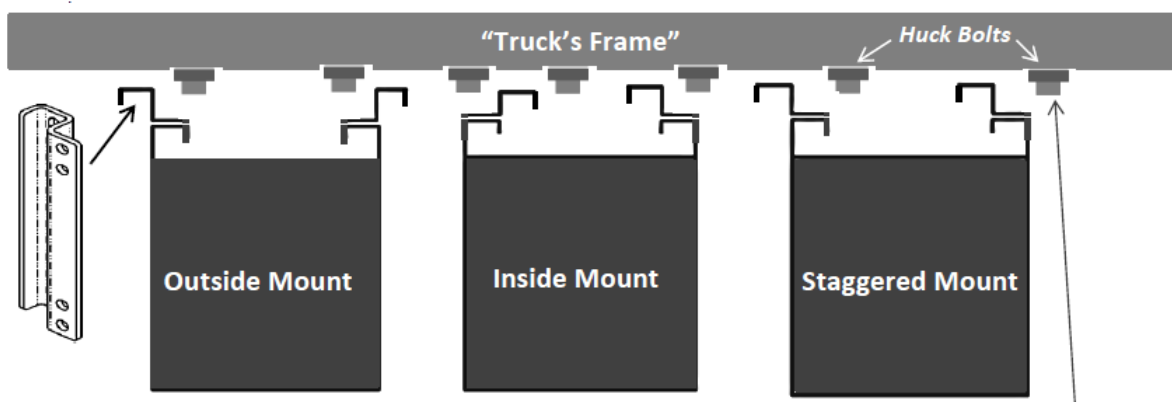
Additional Product for eAPUs

This section of the configuration manual is additional items that may be necessary to properly order and install an eAPU . If you have any questions on these items, please contact Idle Free Technical Support at techsupport@idlefreesystems.com

35001 – AGM Battery: If a customer utilizes a battery box that is not sourced from Idle Free, Trojan AGM batteries are available.



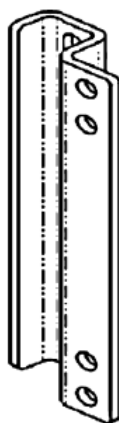
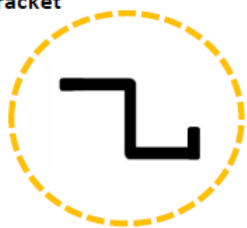
91902 – Offset Kit. (Frame Rail Unit) This offset kit should be used if there are huck bolts located where the eAPU will be mounted. The offset brackets, included in the kit, can be used to change the mount to the inside or outside of the eAPU. See diagram below. This kit works with the Series 1000, 2000 or 3000 eAPU.



3 top views of APU using different configurations

Huck bolts, can extend 2.75 inches from the truck's frame.

Top view of offset bracket



Offset bracket, kit contains two brackets and the needed mounting bolt sets

Technical Assistance: if assistance is required at any time in the configuration process, please contact our Technical Support Team at 920-206-9333 or techsupport@idlefreesystems.com.
