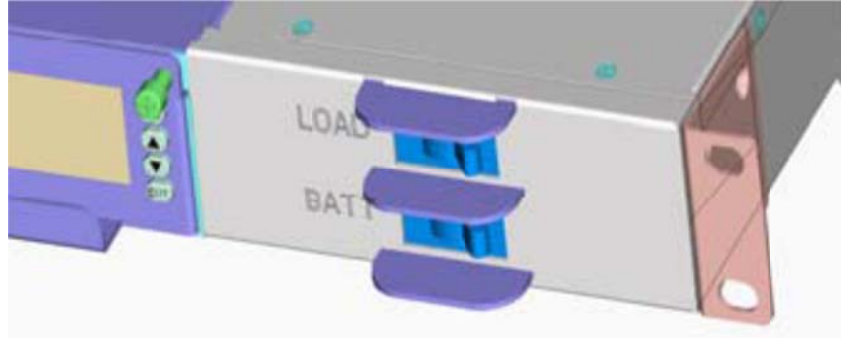


Load and Battery Circuit Breakers – Bulk Fixed

This power system is designed with the integrated load and battery circuit breakers, front access visual indication as a part of the label text on the breaker case. The power block terminal, for secured screw connection, is located on the system backside. This simple bulk configuration provides independent circuit protection and manual control for load and battery outputs. The battery circuit breaker, integrated for maintenance convenience, is located on the front next to the load breaker. The circuit breaker separates the battery connection from the main rectifier and load bus when open. The circuit breaker operates independently from the low voltage disconnect (LVD) that is part of the same battery protection circuitry in this system.



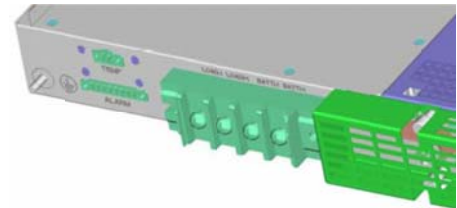
Availability:

48V power system – MTS48/50AT-1U-V12A

24V power system – MTS24/50AT-1U-V12A

Ratings: Factory installed, non-changeable, load is 50 amp and battery is 50 amp

The output terminal, consisting of secured screw connections, is located on the system backplane. The larger block is provided to support a ring terminal or single-hole lug landing for connection with load bus and battery.



Alarms and temperature probe connections are made with screw-less spring capture terminals. Use a small gauge flat-blade screwdriver in the top portal to lever the spring open, once open insert the stripped alarm wire in the lower access point, on the alarm terminal strip.

Note that the temperature probe **SOLID-COLOR** wire should be placed in the POSITIVE marked position and the color-with-stripe wire will be placed in the negative marked position.

Each rectifier slot is internally connected to a single source entry point, with a screw terminal appropriate to land bare solid copper wire. The typical source AC circuit should be engineered to provide 15A current at 230 VAC of either 50/60 Hz.

System Model	AC Circuit Quantity	Rectifier Type	AC Input Circuit Recommendation	Minimum AWG recommendation
MTS24/50AT-1U	1	MTR24/25-1U Qty=2	30A @ 120VAC 15A @ 230VAC	12 (THHN, RHH)
MTS48/50AT-1U	1	MTR48/25-1U Qty=2	30A @ 120VAC 15A @ 230VAC	12 (THHN, RHH)

Care should be taken to confirm the electrical service for the application is appropriately sized.

Single AC Entry:

1. Remove the AC protection cover plate.
2. Loosen the input terminal screws. L=Line, N(L2)=Neutral or Line 2, G= Ground/Earth
3. Strip 8mm of wire insulation from the end of each wire.
4. J-hook any solid copper wire around the terminal screws, or crimp a ring terminal on stranded wire and secure the terminal screws until hand tight.
5. Open the mechanical security handles on the rectifiers. Insert rectifiers into available slots and press firmly to ensure they are seated. Tighten the retaining screws on the top of each rectifier module's handles.
6. Switch the AC Mains input breaker to the ON position. The rectifiers will start in 5-8 seconds. (soft start)
7. After verification of soft start and system operation, turn off the AC mains breaker before proceeding to the output connection installation.

