

Trove1 / Mercury Kits

Access & Power Integration Solution

Description

Altronix Trove Mercury kits are pre-assembled and consist of Trove1M1 enclosure/backplane with factory installed Altronix power supply/charger and sub-assemblies. These kits also accommodate various combinations of Mercury boards for up to four (4) doors in a single enclosure. Trove simplifies board layout and wire management, reduces installation time and labor costs.



T1MK1F4

Key Features

- Accommodates the following Mercury controllers: EP1502, LP1502, MR52, MR16IN, MR16OUT, EP1501, LP1501, MR51e, MR62e, MR50, EP2500, LP2500, MUX8.
- Convenient knockout configuration:
 - Single 2" diameter knockout located top center of enclosure
 - Nine (9) double knockouts (1" and 0.75").
- 16 AWG galvanized steel backplane simplifies board layout and wire management.
- Filtered and electronically regulated outputs.
- Thermal and short circuit protection with auto reset.
- AC input and DC output LED indicators.
- Supervision
 - AC Fail
 - Low Battery and Battery Presence
 - Low power shutdown.
- Built-in charger for sealed lead acid or gel type batteries.
- Instantaneous transfer to stand-by batteries.
- CE European Conformity.
- Enclosure accommodates up to two (2) 12VDC/7AH batteries.
- Lifetime Warranty* / Made in the U.S.A.

*Altronix Power Supply/Chargers and Sub-Assemblies only

Trove1 Mercury Kit Components Reference Chart

Altronix Model Number	Backplane Installed	Maximum Number of Doors Accommodated	Power Supply	Access Power Controllers	Voltage Regulator	Dual Input Power Distribution Module
T1MK1F4	TM1	4	eFlow4NB	ACM4	VR6	-
T1MK1F4D				ACM4CB		
T1MK1F4S				ACM4		PDS8
T1MK1F4SD				ACM4CB		PDS8CB

Trove1 Mercury Kit Configuration Reference Chart

Altronix Model Number	Nominal DC Output Voltage		Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACM4/ACM4CB Access Power Controller's outputs (A)	Fail-Safe/Fail-Secure Dry Form "C" Outputs	Fail-Safe/Fail-Secure Outputs (auto-resettable)	120VAC 60Hz Input Current (A)	Current Per ACM4 Output (A)	Current Per ACM4CB Output (A)	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	ACM4/ACM4CB Board Input Fuse Rating	ACM4 Board Output Fuse Rating	ACM4CB Board Output PTC Rating	PDS8/PDS8CB Board Input Fuse Rating	PDS8 Board Output Fuse Rating	PDS8CB Board Output PTC Rating
	[DC]	[Aux]														
	24VDC Output Range (V)	24VDC Output Range (V)														
T1MK1F4	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	-	3.5	2.5	-	5A/250V	10A/32V	10A/250V	3A	-	-	-	-
T1MK1F4D				-	4		-	2.0				-	2A	-	-	-
T1MK1F4S				4	-		2.5	-				3A	-	10A/250V	3A	-
T1MK1F4SD				-	4		-	2.0				-	2A	-	-	2.0A



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Specifications

Power Supply (eFlow4NB):

Input

Voltage	120VAC, 60Hz.
Fusing	5A/250V.

Output

Voltage	24VDC.
Current	4A continuous.
Other	Overvoltage protection. Filtered and regulated.

Battery Backup

Capacity	7AH / 12VDC (Up to 2 within enclosure). 40 AH / 65 AH (requires separate enclosure).
Type	Sealed lead acid or gel type.
Fuse Rating	10A/32V.
Failover	Upon AC loss, instantaneous.

Supervision

AC Failure	Form "C" contacts.
Battery	Form "C" contacts.

Access Power Controller (ACM4/ACM4CB):

Input

Voltage	24VDC from eFlow4NB.
Fusing	10A / 250V.

Outputs

Voltage	24VDC.
Four (4) independently controlled 2.5A outputs:	
a) Four (4) Fail-Safe and/or Fail-Secure power outputs.	
b) Four (4) dry form "C" 5A rated relay outputs (ACM4 only).	
c) Any combination of the above.	
Four (4) auxiliary power outputs (unswitched).	

Outputs Ratings

Fuses (ACM4)	3A / 32VDC.
PTCs (ACM4CB)	2.5A.

Indicators (LED)

Red LEDs	Outputs are triggered (relays energized).
Green LED	FACP disconnect is triggered.

Dual Input Power Distribution Module (PDS8/PDS8CB) (T1MK1F4S and T1MK1F4SD only):

Input

Voltage	12VDC from VR6 and 24VDC from eFlow4NB.
Main Fuse Rating	10A.

Outputs

Voltage	12VDC and/or 24VDC.
Any of the eight (8) power outputs are selectable to follow power Input 1 or Input 2.	
Individual outputs may be set to OFF position for servicing.	

Outputs Ratings

Fuses (PDS8)	3A / 250V.
PTCs (PDS8CB)	2A.

Indicators (LED)

DC Output	Eight (8) individual output LEDs.
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Agency Listings (all kits):

CE	European Conformity.
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Physical and Environmental (all kits):

Dimensions (H x W x D)	
18" x 14.5" x 4.62" (457.2mm x 368.3mm x 118.0mm).	
Weight (approx.)	
Product	16.23 lbs. (7.36 kg)
Shipping	20.23 lbs. (9.07 kg)
Temperature	
Operating	0°C to 49°C (32°F to 120°F).
Storage	-20°C to 70°C (-4°F to 158°F).
Relative Humidity	85% +/-5%.
BTU/Hr. (approx.):	90 BTU/Hr.