

Trove3 / Mercury Kits

Access & Power Integration Solution

Description

Altronix Trove3 Mercury kits are pre-assembled and consist of Trove enclosure and backplane with factory installed Altronix power supply/chargers and sub-assemblies. These kits also accommodate various combinations of Mercury boards for up to sixteen (16) doors in a single enclosure. Trove simplifies board layout and wire management, reduces installation time and labor costs.



T3MK75F16D

Key Features

- Accommodate the following Mercury boards:
 - Mercury: EP1502, MR52, MR16IN, MR16OUT, EP2500, MUX8, and Genetec Synergis Cloud Link
- Convenient knockout configuration.
- 16 AWG galvanized steel backplane simplifies board layout and wire management.
- Filtered and electronically regulated outputs.
- Thermal and short circuit protection with auto reset.
- Supervision
 - AC Fail
 - Low Battery and Battery Presence
 - Low power shutdown.
- Built-in charger(s) for sealed lead acid or gel type batteries.
- Instantaneous transfer to stand-by batteries.
- AC input and DC output LED indicators.
- Enclosure accommodates up to four (4) 12VDC/12AH batteries.
- Lifetime Warranty* / Made in the U.S.A.

**Altronix Power Supply/Chargers and Sub-Assemblies only*

Trove3 / Mercury Kit Components Reference Chart

| Altronix Model Number | Maximum Number of Doors Accommodated | Power Supplies | | Access Power Controllers | Power Distribution Module | Rocker Switch |
|-----------------------|--------------------------------------|----------------|----------------|--------------------------|---------------------------|---------------|
| | | Power Supply 1 | Power Supply 2 | | | |
| T3MK75F16 | 16 | eFlow104NB | eFlow102NB | Two (2) ACM8 | PD8UL | 2 |
| T3MK75F16D | 16 | eFlow104NB | eFlow102NB | Two (2) ACM8CB | PD8ULCB | 2 |
| T3MK77F16 | 16 | eFlow104NB | eFlow104NB | Two (2) ACM8 | Two (2) PD8UL | 2 |
| T3MK77F16D | 16 | eFlow104NB | eFlow104NB | Two (2) ACM8CB | Two (2) PD8ULCB | 2 |

Trove3 / Mercury Kit Configuration Reference Chart

| Altronix Model Number | Nominal DC Output Voltage Options | | | | | | | | Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACM8(CB) Access Power Controller's outputs (A) | Fail-Safe/Fail-Secure or Dry Form "C" Outputs | 120VAC, 60Hz Input Current (A) | Current Per ACM8(CB) Output (A) | Power Supply Board Input Fuse Rating | Power Supply Board Battery Fuse Rating | ACM8(CB) Board Input Fuse Rating | ACM8 Board Output Fuse Rating | ACM8CB Board Output PTC Rating |
|-----------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|---|--------------------------------|---------------------------------|--|--|----------------------------------|-------------------------------|--------------------------------|
| | Power Supply 1 | | | | Power Supply 2 | | | | | | | | | | | | |
| | [DC] | | [AUX] | | [DC] | | [AUX] | | | | | | | | | | |
| | 12VDC Output Range (V) | 24VDC Output Range (V) | 12VDC Output Range (V) | 24VDC Output Range (V) | 12VDC Output Range (V) | 24VDC Output Range (V) | 12VDC Output Range (V) | 24VDC Output Range (V) | | | | | | | | | |
| T3MK75F16 | – | 20.19-26.4 | – | 20.19-26.4 | 10.0-13.2 | – | 10.03-13.2 | – | 24VDC @ 9.2A 12VDC @ 9.3A | 16 | 8.0 | 2.0 | 6.3A/250V (eFlow104NB) 5A/250V (eFlow102NB) | 15A/32V | 10A/250V | 2.5A | – |
| T3MK75F16D | – | 20.19-26.4 | – | 20.19-26.4 | 10.0-13.2 | – | 10.03-13.2 | – | | | | | | | 10A/250V | – | 2.0A |
| T3MK77F16 | – | 20.19-26.4 | – | 20.19-26.4 | – | 20.19-26.4 | – | 20.19-26.4 | 24VDC @ 9.2A | | 9.0 | | 6.3A/250V | | 10A/250V | 2.5A | – |
| T3MK77F16D | – | 20.19-26.4 | – | 20.19-26.4 | – | 20.19-26.4 | – | 20.19-26.4 | | | | | | | 10A/250V | – | 2.0A |

Specifications

Input

| | |
|---------|------------------------------------|
| Voltage | 120VAC, 60Hz. |
| Fusing | see Configuration Reference Chart. |

Outputs

| | |
|---------|--|
| Voltage | 12 or 24VDC, see Configuration Reference Chart |
| Current | Varies, see Configuration Reference Chart. |
| Other | Overvoltage protection. Filtered and regulated. |

Back-up Battery *(not included)*

| | |
|-------------|--|
| Capacity | 12AH / 12VDC (Up to 4 within enclosure). 40 AH / 65 AH (requires separate enclosure). |
| Type | Sealed lead acid or gel type. |
| Fuse Rating | 15A/32V. |
| Failover | Upon AC loss, instantaneous. |

Supervision

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

Low DC Power Shutdown

Shuts down DC output terminals if battery voltage drops below 71-73% for 12V units and 70-75% for 24V units (depending on the power supply). Prevents deep battery discharge.

Indicators (LED)

| | |
|-----------|------------------------------|
| Input | 120VAC is present. |
| DC Output | Powered. |
| Battery | Discharged or not connected. |

Physical and Environmental

Dimensions (H x W x D)

36.12" x 30.125" x 7.06" (917.5mm x 768.1mm x 179.3mm).

Weight (approx.):

| | | |
|------------|----------------------|----------------------|
| T3MK75F16 | 84.2 lbs. (38.2 kg) | 97.5 lbs. (44.22 kg) |
| T3MK75F16D | 84.2 lbs. (38.2 kg) | 97.5 lbs. (44.22 kg) |
| T3MK77F16 | 85.6 lbs. (38.83 kg) | 98.8 lbs. (44.82 kg) |
| T3MK77F16D | 85.6 lbs. (38.83 kg) | 98.8 lbs. (44.82 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.):

| | |
|-----------------------|-----|
| T3MK75F16, T3MK75F16D | 217 |
| T3MK77F16, T3MK77F16D | 289 |