







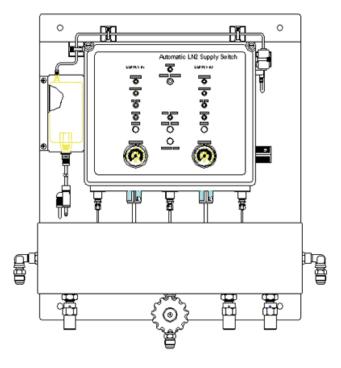
MVE Chart Tech Tips

July, 2011

PRODUCT INFORMATION

MVE Automatic LN2 Supply Switch

Chart manufactures two Supply Tank Switchers. Supply Tank Switch P/N 11207040 is CE marked. The Supply Switch is available with both the English text and Symbolic overlay labels. The symbolic label meets MDD Standards.



Supply Switch Diagram



Supply Switch (PN 11207040)

Supply Tank switch, P/N 13934911 is not CE marked.

The supply tank switch is assembled from the factory using the English text overlay label. The symbolic label, if desired, is available but would have to be ordered as a separate part number: PN 11814413.



Tank Supply Switch (PN 13934911)

Battery Back-up Assembly

Chart has been shipping Freezer Back-up Batteries efficiently but to further reduce the likelihood of potential shipping damage the packaging material inserts have been reinforced and enhanced.



New packaging for Battery Backup

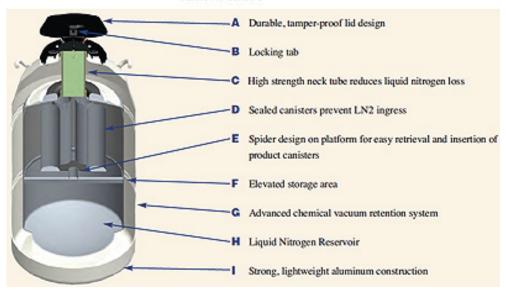
MVE XC 34/18 Plus

The MVE XC 34/18 Plus is designed specifically for storage in LN2 vapor. The tank is perfect for storing straws or vials, as well as IVF applications. Elevated storage areas protect the samples and keep them above the liquid nitrogen, while sealed canisters prevent LN2 ingress. The MVE XC 34/18 Plus capacity of 32.7 liters allows for an approximate 60 day hold time (pending inventory, usage and atmospheric conditions).



MVE XC 34/18 Plus

Tank Features



MVE XC 34/18 Plus Features

HELPFUL HINTS / FAQS

MVE TEC2000 to TEC3000 Global and Discrete Contacts

Q: How can one determine if the global contacts are functioning?

A:Use an ohm meter to establish continuity or open across the common (COM) and the normally closed (NC) and normally open contacts (NO).

Q: Can the TEC3000 be tested while it is actively reading temperatures and level and not in the alarm mode? *A:* Yes, in the no alarm state the global contacts COM to NC are closed whereas the COM to NO is open. In the alarm state these contacts change their state.

Q: How can one determine if the four discrete contacts are functioning?

A: Use an ohm meter set to the diode rectifier setting to establish continuity or open across the COM and Discrete contacts. In the no alarm state all Discrete contacts to COM would be open.

Please note that once the TEC3000 alarm is activated all latching contacts will retain their state until the alarm condition has been corrected and the "ALARM MUTE" is pressed.

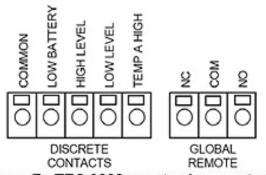
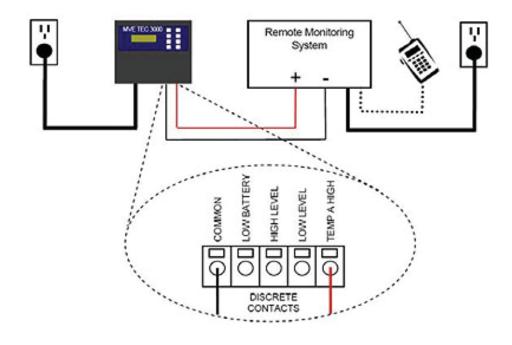


Figure 7: TEC 3000 remote alarm contacts

Table 2: TEC 3000 remote alarm contact specifications

Discrete Contacts	Global Remote
Normally Open	Normally Open or Normally Closed
Open Collector	Dry Contact Relay
Latching Latchi	ng
Polarity Sensitive	Non-Polarity Sensitive
24 VDC at 100 mA max	230 VAC at 1 A max



TEC3000 Remote Alarm Global/Discrete Contacts

ACCESSORIES

Low Level Alarms

Chart sells two CE marked liquid nitrogen low level alarms: PN 11905817 w/o alarm remote capabilities PN 14067502 with alarm remote capabilities



PN 11905817



PN 14067502

