HV Cable Assembly #:	HV Cable Assembly #: Robot Model / Configuration:
EE-4696-625-001	P-500
EE-4696-625-002	P-500 Long Arm
EE-4696-625-003	P-700iA
EE-4696-625-004	P-250iA Short Arm
EE-4696-625-005	P-250iA Standard Arm
EE-4696-625-006	P-700iA Flex
EE-4696-625-007	P-500iA Flex Standard Arm
EE-4696-625-008	P-500iA Flex Long Arm

Table 2-2: HV cable assemblies

For High Voltage Cable Installation see Remote mode – High voltage Controller FB-200 HVU section.

# 2.16 Overview - ITW Ransburg High Voltage Control System

The ITW Ransburg High Voltage Controller A12311-00 in conjunction with the Cascade A12295-00 (legacy type) or Cascade A12296-00 (integrated type) is used to provide high voltage for electrostatic application equipment.

The ITW Ransburg High Voltage Controller uses a combination of proven high voltage generation technology microprocessor-based control with diagnostic and communication functions. It uses a variable voltage output to drive a cascade that amplifies the voltage to a high value. It also uses feedback with both current and voltage information to attempt to maintain actual value at set point. The processor circuitry provides the maximum in applicator transfer efficiency, while maintaining the maximum safety.

# 2.2 Operation and Setup – ITW HV Controller

On all of the menus, if there is a parameter that can be changed there are a number of "#" characters to show that it is an enterable value. If there is more than one enterable value, pressing the Up or Down Buttons will move the "#s" to the next changeable value. When the "#s" are next to the value, once the password has been entered, it will remain active for an appropriate amount of time and then time out, requiring you to re-enter it. When a valid password has been entered for any value (even if the value has not been changed) different menus will be available. These Menus are the Display Contrast Menu, the IP Address Menu, and the Enter New Password Menu.

When a numeric value is being changed (using the buttons to the left and right of the SET Button) the numeric will increase with the right button and decrease with the left button until it passes the maximum or minimum allowed value at which time it will "roll over" to the other limit.

#### 2.2.1 Start-Up Menu

This is the menu that displays on the unit for 5 seconds (approximately) at power up. It displays the Model Number, Copyright Date, Serial Number, Software Version, and Hardware Version of the unit. It then changes to the Run Menu.



Figure 2-7: ITW Start-Up Menu

#### 2.2.2 Run Menu

This menu displays the set point (KVSET if in Voltage Mode, uASET if in Current Mode), the current actual KV value, the current uA value, the current hardware check value, the High Voltage status, and the current controller status. The set point (KVSET or uASET) is the only changeable value on this menu.



Figure 2-8: ITW Run Menu

#### 2.2.3 Mode Menu

This menu displays the current mode (Voltage or Current) and the high and low limits allowed for the Dependent Value in that mode. Consult FANUC Robotics before changing any of these values.



Figure 2-9: ITW Mode Menu

### 2.2.4 Sensitivity Menu

This menu displays the current di/dt or dv/dt limit value and the enable status for di/dt or dv/dt depending on the mode. Consult FANUC Robotics before changing any of these values.

## #TW Ransburg



Figure 2-10: ITW Sensitivity Menu

#### 2.2.5 Fault Menu

This menu displays the latest fault and is displayed automatically upon the fault detection.





Figure 2-11: ITW Fault Menu

### 2.2.6 IP Address Menu

This menu allows the setting of the units IP Address. When the new IP Address has been entered, the unit must have the power cycled before the new IP Address will be used. \*\*TWRansburg



Figure 2-12: ITW IP Address Menu