Function code	Sienci Labs Spindle Kit Default Values Highlighted values are modified from factory values after reset using F013	Factory value after reset using F013	Name of parameter	Setting range and data content
Red highlighted parameters should never be changed				
Basic				
These settings determine how the VFD is controlled, key specs which must match the spindle, and acceleration/deceleration for the spindle				
F000	**0**	0	Parameter locking	0: Disabled 1: Enabled
F001	2	0	Control mode	0: Keyboard 1: External input terminals 2: Communication interface
F002	2	3	Frequency setting selection	0: Set by F003 1: AI1 (signal type set by F070) 2: Communication interface (frequency set by 0201h register value) 3: Potentiometer on keyboard 4: AI2 (signal type set by F070) 5: PFI (frequency set by pulse frequency of the X5 terminal input pulse) 6: AI1+AI2 7: PID (frequency set by output of PID regulator)
F003	400	50	Main frequency	0.0 ~ 1000.0 Hz
F004	400	50	Reference frequency	0.1 ~ 1000.0 Hz
F005	400	50	Maximum operating frequency	10.0 ~ 1000.0 Hz
F011	125	0	Lower frequency limit	0.0 ~ 1000.0 Hz
F013	**0**	0	Parameter resetting	8: Restore ex-factory value
F014	10	5	Acceleration time I	0.1 ~ 650.00s
F015	10	5	Deceleration time I	0.1 ~ 650.00s
Application				
These settings are largely unused, but determine some characteristics of spindle control				
F023	**1**	1	Reverse prohibit	0: Prohibited 1: Allowed
F024	**1**	1	Stop key enabled	0: Disabled 1: Enabled Parameter only works if F001 = 1 or 2
Analog Input/Output Parameters				
These settings configure the characteristics of the analog control I/O of the VFD (such as PWM control)				
F070	**0**	0	Input channel selection for analog quantity (can also be selected by channel 2 through jumper J3)	Units digit (AI1) 0: 0 ~ 10V 1: 0 ~ 5V Tens digit (AI2) 0: 0 ~ 20mA / 0 ~ 10V 1: 4 ~ 20mA / 2 ~ 10V (500Ω) 2: 4 ~ 20mA / 1 ~ 5V (250Ω)
F071	**20**	20	Filtering time of analog quantity	0 ~ 1000ms
F072	**100**	100	AI1 channel gain	0.0 ~ 500.0 %
F074	**0**	0	AI1 channel offset	-50.0 ~ 50.0 %
Protection				
These settings control electrical protection of the VFD and spindle in case of an issue or overloading of the spindle				
F118	**1**	1	Over-voltage stall prevention	0: Disabled 1: Enabled
F122	370	720	Prevent of over-voltage stalling level	200 ~ 800V
Motor				
These settings are used to match the VFD with the specifications of the spindle motor				
F140	**1.5**	1.5	Rated power of motor	kW set as per motor nameplate
F141	110	220	Rated voltage of motor	V set as per motor nameplate
F142	**7**	7	Rated current of motor	A set as per motor nameplate
F143	2	4	Number of motor poles	2 ~ 22
F144	2400	1450	Rated rotating speed of motor	0 ~ 60000 r/min Set according to the rotating speed at 50Hz
RS485 Communication Parameters				
These settings control the setup of RS485 communication to the VFD				
F163	2	1	Communication address	0 ~ 250 0: Disabled
F164	**2**	2	Communication transmission speed	0: 4800 bit/s 1: 9600 bit/s 2: 19200 bit/s 3: 38400 bit/s
F165	**3**	3	Communication data mode	0: 8N1 for ASCII 1: 8E1 for ACSII 2: 8O1 for ACSII 3: 8N1 for RTU 4: 8E1 for RTU 5: 8O1 for RTU