

## **Programming Guide**









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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class 20 / Class 30 current, i-motor = motor current	Modbus PNU
Auto Setup >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Application:	The Unit has numerous preset applications built in as standard.  Select the application best suited to the load.  The selected application will automatically change several parameters and functions.  Depending on the application loaded the "Trip Class" may also change  Refer to the separate 'applications document' for more details  Range  Default  Default  Type  Read/Write	19200
Auto Setup >>>>>>>	Trip Class	The trip class is a numeric value that correlates the trip time with overload level.  Select Trip class according to application requirements  The trip time depends on the selected Trip Class. The duration of the overload and the level of the over current.  Refer to the Motor Overload 'cold' trip curves given in the Quick Start Guide.  When "Class 20" or "Class 30" are selected the Unit current rating (i-Unit) will be reduced to a lower value (i-rated).  Range  Trip Class 10 - Trip Class 30  Default  Trip Class 10  Type  Read/Write	25664
Auto Setup >>>>>>>	Motor Current	This should be set to the Full Load Current shown on the motor plate  The overload works with multiples of the set "Motor Current" (i-motor)  Also referred to as Motor FLA  Range 50% I-rated A - 100% I-rated A Default 100% I-rated A Type Read/Write	25728
Auto Setup >>>>>>>	Control Method	Local Touch Screen: Control using the button on the keypad User Programmable: Control using the terminals. Function defined in "I/O" menu Two Wire Control: Control using terminals. Functions fixed as shown on screen Three Wire Control: Control using terminals. Functions fixed as shown on screen Modbus Network: Control via remote Modbus network or remote Keypad or Modbus TCP  Range Local Touch Screen - Modbus Network Default Local Touch Screen Type Read/Write	59392
Auto Setup >>>>>>>	Digital Input Voltage	The digital inputs D1-1I D1-2I D2-1I are designed to work with a range of control supplies 230V: 'Active high level' Input voltage must be in the range 195.5V - 253V 110V: 'Active high level' Input voltage must be in the range 93.5V - 121V 24V: 'Active high level' input voltage must be in the range 20.4V-26.4V It is important to ensure the "Digital input Voltage" corresponds to the voltage applied to the input. Failure to do so may result in damage.  Range 230V - 24VDC Default 230V Type Read/Write	10880

SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or func i-synergy = synergy Class 10 current, i-rated = synergy Class20		Modbus PNU
Advanced		all Read /Write parameters to non volatile memory		
Advanced >>>>>>> >>>>>	Save Parameters	Parameters are permanently written		62144
Advantod	ouve r drameters	arameters remain changed until next power cycle		02144
		e No - Yes De	nult No Type Read/Write	
		natically controls the starting torque		
Automatic	Automatic	he initial torque is increased until the motor starts to rotate at	moderate speed.	
Advanced Settings >>>>>>>	Pedestal	ne initial torque is defined by the "Start Pedestal"		19840
		e Off - On Dei	ult Off Type Read/Write	
		natically controls the torque applied to the motor during the soft	tart.	
Automatic		he torque is adjusted to suit the load.		
Advanced Settings >>>>>>>	Automatic Ramp	he ramp time depends on the "Start Time" and "Current Limit"		20352
		Off - On Det	ult Off Type Read/Write	
		natically controls the time taken for the motor to start		
Automatic	Automatic End	he ramp time is shortened if the motor is at speed before the	nd of the "Start Time"	
Advanced Settings >>>>>>>	Start (1)	he ramp time depends on the "Start Time" and "Current Limit"		19968
		Off - On Det	Off Type Read/Write	
		natically controls the soft stop to suit the application. eature is particularly useful with pumping applications		
Advanced Automatic >>>>>>>	Automatic Stop	the motor is lightly loaded it decelerates rapidly to the point when	ere the soft stop becomes useful.	20160
Settings		the deceleration to the point where the soft stop becomes useful	will be slower.	
		e Off - On De	oult Off Type Read/Write	

SWI-SGY-USB-V05  [ SGY1051400 SGY2070000  Advanced Automatic Settings  Advanced Settings		Parameter  Automatic Stop Profile	Increase if When the Range	i-synergy = synerer response of the first the motor speed value is set to ze	"Automatic	efer to a Synergy param current, i-rated = syne	rgy Class20 / Class3	example "Start Time 00 current, i-motor =	e" = motor curre		Modbus PNU 20608
Advanced Automatic Settings  Advanced Automatic	>>>>>>	Automatic Stop	Increase if When the Range	i-synergy = synerer response of the first the motor speed value is set to ze	"Automatic	Stop" p quickly enough. matic Stop" is effect	rgy Class20 / Class3	0 current, i-motor =	= motor curre		
Advanced Settings  Advanced Automatic			Increase if When the Range	f the motor speed value is set to ze	l doesn't dro	p quickly enough. matic Stop" is effect	7 -	50 %	Туре	Read/Write	20608
Advanced	>>>>>		Automatic		-	100 %	Default	50 %	Туре	Read/Write	
Advanced	>>>>>			vally controls the "							
		Automatic End Stop		ramp time is short		motor reaches a ver Stop Time" and "Cui		ore the end of the	· "Stop Time	9"	20416
			Range	Off	-	On	Default	Off	Туре	Read/Write	
Advanced Automatic Settings	>>>>>>	Automatic Impact Load	On : The r	saving potential r	aving level ("	RS saving level.  'BackStop" ) is rese ced on applications				oulding	20480
			Range	Off	-	On	Default	Off	Туре	Read/Write	
Advanced Automatic Settings	>>>>>>	Auto Smooth Stop	On : The s	soft stop is adjusto	ed when osc	liminate oscillations cillations are detecte rque fluctuations ma	d. Refer to "Auto	smoothing Leve	e "		20224
Advanced Automatic Settings	>>>>>	Auto Smoothing Level	Increase t	ne response of the to provide a greate to zero the smoo	er smoothing	g effect If there are t	orque fluctuatior	ns that occur duri	ng the soft	·	20672

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SWI-SGY-USB-V05700	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"	Modbus
[ SGY1051400 SGY2070000 SGY3023400 ]		Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	PNU
		Automatically controls the time taken for the motor to start	
Advanced Automatic >>>>>>>	Automatic End	On: The ramp time is shortened if the motor current falls below the current limit level before the end of the "Start Time".	19904
Settings	Start (2)	Off: The ramp time depends on the "Start Time" and "Current Limit"	
		Range Off - On Default Off Type Read/Write	
		Automatically controls the time taken for the motor to start	
Automatic	Automatic End	On : The ramp time is shortened if torque fluctuations occur before the end of the "Start Time"	
Advanced Settings >>>>>>>	Start (3)	Off: The ramp time depends on the "Start Time" and "Current Limit"	20032
		Range Off - On Default Off Type Read/Write	
		Adjusts the response of the "Automatic End Start (3)"	
Automotio		Increase to provide a greater smoothing effect If there are torque fluctuations that occur during the soft start.	
Advanced Settings >>>>>>>	Rate End Start (3)	When set to zero the smoothing is effectively disabled.	768
		Range         0 %         -         100 %         Default         50 %         Type         Read/Write	
		Time taken to soft start from the "Start Pedestal" to the end of the start	
		Normally set between 5 and 30 seconds. Actual time to get to full voltage depends on the "Start Current Limit Level".	
Advanced Start Settings >>>>>>>	Start Time	If set too long the motor can be at speed before the end of the time set. Refer to "Automatic End Start"	7104
		Range 1 s - 300 s Default 10 s Type Read/Write	
		Percentage of the supply voltage applied to motor at the beginning of the soft start.	
		Increase to provide more torque If the load fails to break away.	
Advanced Start Settings >>>>>>>	Start Pedestal	Decrease if the motor accelerates too quickly.	704
		Range 10 % - 100 % Default 20 % Type Read/Write	$\Box$

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Advanced Start Settings Start Current Limit	Start Current Limit Trip	Selects trip or continue if the current limit has been active for too long  On: The Unit will trip  Off: The start will continue regardless of the motor current level  Range Off - On Default On Type Read/Write	53790
Advanced Start Settings Start Current Limit	Start Current Limit Level	The current in Amps at which the soft Start ramp is held.  Normally set to 350% of motor FLC. Increase if motor fails to accelerate at required rate  The "Current Limit Level" will effect actual time to start. If set too low the motor may not accelerate to full speed.  Range 50% I-motor A - 450% I-synergy A Default 350% I-motor A Type Read/Write	26880
Advanced Start Settings Start Current Limit	Start Current Limit Time	The maximum time allowed for the current limit.  If the current limit is still active at the end of this period the Unit will either 'Trip' or 'continue'	26944
		Range 1 s - 600 s Default 30 s Type Read/Write	
Advanced Start Settings Kick Start	Kick Start	Applies a short duration torque pulse to dislodge 'sticky' loads  On: The torque pulse is applied at start-up when complete the torque drops to the "Start Pedestal"  Off: The initial starting torque is defined by the "Start Pedestal"  Range  Off  On  Default  Off  Type  Read/Write	320
Advanced Start Settings Kick Start	Kick Start Time	Time that the torque pulse is applied to load  Increase to provide more torque If the load fails to break away.	7040
Travanoca Start Settings Rick Start	Trion Otar Time	Decrease if the motor accelerates too quickly.  Range 10 ms - 2000 ms Default 100 ms Type Read/Write	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Advanced Start Settings Kick Start	Kick Start Pedestal	Percentage of the supply voltage applied to the motor during the 'kick' period  Increase to provide more torque If the load fails to break away.  Decrease if the motor accelerates too quickly.	640
Advanced Start Settings >>>>>>>	Contactor Delay	Range 30 % - 80 % Default 75 % Type Read/Write  Time allowed for external contactors to close.  Increase if contactors are driven by buffer relays or motor trips on phase loss when start signal applied  Decrease if response to start signal needs to be improved  Range 20 ms - 800 ms Default 160 ms Type Read/Write	8320
Advanced Stop Settings >>>>>>>	Stop Time	The time taken to soft stop from full voltage or the iERS level to the 'Stop Pedestal'  Normally set between 15 and 60 seconds. Actual time to get to 'Stop Pedestal' depends on the "Stop Current Limit Level".  If set too long the motor may reach zero speed before the end of the time set. Refer to "Automatic End Stop"  Range  0 s  - 300 s  Default  0 s  Type  Read/Write	7296
Advanced Stop Settings >>>>>>>	Stop Pedestal	Percentage of the supply voltage applied to the motor at the end of the soft stop  Increase if the motor crawls at the end of the soft stop.  Decrease if a greater soft-stop effect is required at the end of the ramp.  Range 10 % - 40 % Default 10 % Type Read/Write	896
Advanced Stop Settings Stop Current Limit	Stop Current Limit Trip	Selects trip or continue if the stop current limit has been active for too long  On : The Unit will trip  Off: The stop will continue regardless of the motor current level  Range Off - On Default Off Type Read/Write	53791

SWI-SGY-L	USB-V057	00	Parameter	Description  Text in quotes refer to a Synergy parameter or function for example "Start Time"	Modbus
[ SGY1051400 SGY2	2070000 S	GY3023400 ]		Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	PNU
				The current in Amps at which the soft stop ramp is not allowed to go above.	
Advanced Stop S	Cottings	Stop Current	Stop Current	Normally set to 350% motor FLC. Increase if motor decelerates too rapidly.	20000
Advanced Stop 3	Settings	Limit	Limit Level	The current limit level will effect actual time to stop the motor.	28800
				Range 100% I-motor A - 450% I-synergy A Default 350% I-motor A Type Read/Write	
				The maximum time allowed for the current limit.	
Advanced Stop S	Settings	Stop Current Limit	Stop Current Limit Time	If the current limit is still active at the end of this period the Unit will either trip or continue	2886
				Range 1 s - 300 s Default 10 s Type Read/Write	
				This should be set to the Full Load Current shown on the motor plate	
Advanced Motor P	Protection	>>>>>	Motor Current	The overload works with multiples of the set "Motor Current" (i-motor)	2572
				Also referred to as Motor FLA	
				Range 50% I-rated A - 100% I-rated A Default 100% I-rated A Type Read/Write	
				The trip class is a numeric value that correlates the trip time with overload level.  Select Trip class according to application requirements	
Advanced Motor D	Drotostian		Trin Class	The trip time depends on the selected Trip Class. The duration of the overload and the level of the over current. Refer to the Motor Overload 'cold' trip curves given in the Quick Start Guide.	2500
Advanced Motor P	Protection	>>>>>>	Trip Class	When "Class 20" or "Class 30" are selected the Unit current rating (i-Unit) will be reduced to a lower value (i-rated).	2566
				Range Trip Class 10 - Trip Class 30 Default Trip Class 10 Type Read/Write	
				This can be used to detect if the motor is running lightly loaded.	
Advanced Motor P	Protection	Low Current	Low Current Trip	On : The Unit will trip. This feature is not active during soft start and soft stop.	5378
Advanced Wotor P	Totection	Settings	Low Current Hip	Off: The Unit will continue to operate regardless of motor current	
				Range Off - On Default Off Type Read/Write	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Advanced Motor Protection Low Current Settings	Low Current Trip Level	The current in Amps that will cause a trip  A trip will occur if the motor current is less than the "Trip Level" for the "Trip Time"	26304
		Range 25% I-motor A - 100% I-motor A Default 25% I-motor A Type Read/Write	
Advanced Motor Protection Low Current Settings	Low Current Trip Time	The trip time for the Low current trip  A trip will occur if the motor current is less than the "Trip Level" for the "Trip Time"	26368
		Range 100 ms - 9000 ms Default 100 ms Type Read/Write	
Advanced Motor Protection Shearpin Settings	Shearpin Trip	The shearpin is an electronic equivalent of a mechanical shearpin  On: The Unit will trip. This feature is not active during soft start and soft stop.  Off: The Unit will continue to operate regardless of motor current level	53793
		Range Off - On Default On Type Read/Write	
Advanced Motor Protection Shearpin Settings	Shearpin Trip Current	The current in Amps that will cause a "Shearpin Trip"  A trip will occur if the motor current is greater than the "Trip Level" for the "Trip Time"  Range 100% I-motor A - 450% I-synergy A Default 450% I-synergy A Type Read/Write	27584
Advanced Motor Protection Shearpin Settings	Shearpin Trip Time	The trip time for the Shearpin trip  A trip will occur if the motor current is greater than the "Trip Level" for the "Trip Time"  Range 100 ms - 9000 ms Default 100 ms Type Read/Write	27648

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SWI-SGY-USB-V05700	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"	Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]  Advanced Motor Protection Overload Settings	Overload Trip	i-synergy = synergy Class 10 current, i-rated = synergy Class 20 / Class 30 current, i-motor = motor current  The Unit has an "Overload" function that is an electronic equivalent to a thermal overload.  On: The Unit will trip when the "Overload" capacity (Modbus PNU 33408) exceeds 100%	53792
		Off: The Unit will continue to operate regardless of motor current level  Range Off - On Default On Type Read/Write	
Advanced Motor Protection Overload Settings	Overload Level	Determines the level in Amps at which the overload will start.  Normally set to 115% of the set motor current (i-motor)  Reduce to speed up trip response	28224
Advanced iERS >>>>>>	iERS	Range 50% I-motor A - 125% I-motor A Default 115% I-motor A Type Read/Write  Enables and disables the intelligent Energy Recovery System feature (iERS).  On: The voltage to the motor will be regulated to ensure optimum efficiency.	2112
		Off : The feature is disabled and the motor operates at full voltage  Range Off - On Default On Type Read/Write	
Advanced iERS >>>>>>	Dwell Time	The time from the End of the start to the point where the iERS saving mode becomes active.  Normally set to 5 seconds to ensure the motor is at full speed before the iERS saving becomes active.  Increase to allow time for the motor to stabilise.  Range 1 s - 300 s Default 5 s Type Read/Write	7360
Advanced iERS >>>>>>	iERS Rate	Determines the rate at which the load is regulated during the iERS energy saving mode  During periods of instability the "Current Irms" and "True Power Factor" will oscillate rapidly. Increase if the applications shows signs of instability.  Reduce to increase the speed of response	2118
		Range         0 %         -         100 %         Default         25 %         Type         Read/Write	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Advanced iERS >>>>>>>	iERS Level	Determines the maximum energy saving potential.  Reduce if the application shows signs of instability.  The amount of energy that can be saved may fall as the "iERS level" is reduced.  Range 0 % - 100 % Default 100 % Type Read/Write	21376
Advanced iERS >>>>>>>	Fixed Voltage	User settable voltage level for power calculations  If required can be used to improve accuracy of power calculations	35200
		Range 100 V - 500 V Default 100 V Type Read/Write	
Advanced iERS >>>>>>>	Fixed Voltage	Selects the source for the voltage value used in the power calculations.  on: KW KVar and KVA are calculated using the "Fixed Voltage"  off: KW KVar and KVA are calculated using the internally measured voltage.	35264
		Range Off - On Default Off Type Read/Write	
Advanced >>>>>>>	Control Method	Local Touch Screen: Control using the button on the keypad User Programmable: Control using the terminals. Function defined in "I/O" menu Two Wire Control: Control using terminals. Functions fixed as shown on screen Three Wire Control: Control using terminals. Functions fixed as shown on screen Modbus Network: Control via remote Modbus network or remote Keypad or Modbus TCP  Range Local Touch Screen - Modbus Network Default Local Touch Screen Type Read/Write	59392
Advanced Trip Settings >>>>>>>	Trip Sensitivity	Adjusts the reaction time to fault trips  Increase "Trip Sensitivity" to slow the response to fault trips.  Sometimes useful on sites were electrical noise is causing nuisance tripping  This is a global setting.  Increasing "Trip Sensitivity" will slow the response of all the trips.  Range 0 % - 100 % Default 0 % Type Read/Write	44864

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Advanced Trip Settings >>>>>>>	Cover Open Trip	For safety purposes the Unit has been designed to trip if the front cover is open  On: The Unit will trip if the front cover is open. This trip is active at all times.  Off: The Unit will continue to operate with the cover open  Range  Off  On  Default  Off  Type  Read/Write	53803
Advanced Trip Settings >>>>>>>	Shearpin Trip	The shearpin is an electronic equivalent of a mechanical shearpin  On: The Unit will trip. This feature is not active during soft start and soft stop.  Off: The Unit will continue to operate regardless of motor current level  Range Off - On Default On Type Read/Write	53793
Advanced Trip Settings >>>>>>>	Overload Trip	The Unit has an "Overload" function that is an electronic equivalent to a thermal overload.  On: The Unit will trip when the "Overload" capacity (ModbusPNU 33408) exceeds 100%  Off: The Unit will continue to operate regardless of motor current level  Range  Off  On  Type  Read/Write	53792
Advanced Trip Settings >>>>>>>	Low Current Trip	This can be used to detect if the motor is running lightly loaded.  On: The Unit will trip. This feature is not active during soft start and soft stop.  Off: The Unit will continue to operate regardless of motor current  Range Off - On Default Off Type Read/Write	53787
Advanced Trip Settings >>>>>>>	Start Current Limit Trip	Selects trip or continue if the current limit has been active for too long  On: The Unit will trip  Off: The start will continue regardless of the motor current level  Range  Off  On  Default  On  Type  Read/Write	53790

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class 20 / Class 30 current, i-motor = motor current	Modbus PNU
Advanced Trip Settings >>>>>>>	Stop Current Limit Trip	Selects trip or continue if the stop current limit has been active for too long  On : The Unit will trip  Off: The stop will continue regardless of the motor current level  Range Off - On Default Off Type Read/Write	53791
Advanced Trip Settings >>>>>>>	PTC Motor Thermistor Trip	A single PTC motor thermistor or set of PTC motor thermistors can be connected to the PTC terminals.  On :The Unit will trip if the motor thermistor exceed its response temperature or the PTC input is open circuit  Off : The Unit will continue to operate.  Range Off - On Default Off Type Read/Write	53794
Advanced Trip Settings >>>>>>>	L1-L2-L3 Trip	Determines if supply phase sequence is incorrect for motor rotation  On: Trips if the phase sequence is L1-L2-L3.  Off: The Unit will continue to operate normally  Range  Off  On  Default  Off  Type  Read/Write	53808
Advanced Trip Settings >>>>>>>	L1-L3-L2 Trip	Determines if supply phase sequence is incorrect for motor rotation  On: Trips if the phase sequence is L1-L3-L2.  Off: The Unit will continue to operate normally  Range Off - On Default Off Type Read/Write	53807
Advanced Trip Settings >>>>>>>	Remote Start Trip	For safety reasons the Unit will trip during some operations if the remote start signal is active  On: Trips if the remote start signal is active when the Unit is powered up or a reset is applied.  Off: The Unit will not trip and may start unexpectedly if the start signal is accidently left active.  Range  Off  On  Type  Read/Write	53804

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Advanced Trip Settings >>>>>>>	Current Sensor Trip	Detects if the internal current sensors have failed or reading a very low level.  On: The Unit will trip if the internal current sensors fail or the current measured falls to a very low level  Off: Will continue to operate even if the sensor has failed. Measurements and overload protection may be effected  Range  Off  Off  Type  Read/Write	53775
Advanced Trip Settings >>>>>>>	Fan Trip	Detects if the cooling fans have failed.  On: The Unit trips if the cooling fans fitted to the Unit fail.  Off: Will continue to operate and is likely to trip on a thermal trip as the heatsink will not be sufficiently cooled  Range  Off  On  Default  On  Type  Read/Write	53782
Advanced Trip Settings >>>>>>>	Communications Trip	Detects if the communications bus has failed or become inactive. To keep the bus active there must be at least one Modbus read or write (any PNU) during the "Timeout ms" period (ModbusPNU 15808)  On :Communication trip enabled.  Off: Communication trip disabled.  Range  Off  On  Default  On  Type  Read/Write	53796
Advanced Trip Settings >>>>>>>	Shut Down (1)	This features controls the soft stop improve stability  On: The stop time is truncated if the motor experiences severe torque fluctuations during the soft stop  Off: The motor will stop in the set time.  Range  Off  On  Default  On  Type  Read/Write	53769
Advanced Trip Settings >>>>>>>	Shut Down (2)	This features controls the soft stop improve stability  On: The stop time is truncated if the motor experiences severe torque fluctuations during the soft stop  Off: The motor will stop in the set time.  Range  Off  On  Default  On  Type  Read/Write	53770

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Advanced Trip Settings >>>>>>>	Thyristor Firing Trip	Detects if there is a fault with one or more of the internal Thyristors or bypass relays  On: Trips if one or more of the Thyristors / bypass relays has failed short circuit. ISOLATE SUPPLY. Check by measuring the resistance between L1 -T1 L2 -T2 L3 -T3 (Anything < 10R is assumed short circuit)  Off: The Unit will attempt to start and run although the operation may be erratic. Operating in this mode for prolonged periods may result in SCR failure  Range  Off - On  Default  On  Type  Read/Write	53774
Advanced Trip Settings >>>>>>>	Motor Side Phase Loss	Detects if there is a disconnection between the Unit output and the motor  On: Trips if there is a disconnection between the output side of the Unit and the motor  Off: The Unit will attempt to start and run although the operation may be erratic.  Operating in this mode for prolonged periods may result in SCR failure  Range  Off  On  Type  Read/Write	53777
Advanced Trip Settings >>>>>>>	Sensing Fault Trip	Detects if there is a fault with operation of one or more of the internal Thyristors  On: Trips if one or more of the Thyristors fails to turn on properly.  Off: The Unit will attempt to start and run although the operation may be erratic.  Operating in this mode for prolonged periods may result in SCR failure  Range  Off  On  Type  Read/Write	53781
Advanced Trip Settings >>>>>>>	Thermal Sensor Trip	Detects if the internal temperature sensor has malfunctioned  On: The Unit will trip if the internal temperature sensor malfunctions  Off: The Unit will continue to operate even if the temperature sensor has malfunctioned.  Operating in this mode for prolonged periods may result in SCR failure  Range  Off: On Default  On Type Read/Write	53768
Advanced Trip Settings >>>>>>>	External Trip	Allows a trip to be forced using one of the digital inputs  On: Trips when the programmed input is active  Off: External Trip is disabled  Range Off - On Default On Type Read/Write	53795

SWI-SGY-USB-V05700	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"	Modbus
[ SGY1051400 SGY2070000 SGY3023400 ]	T dramotor	i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	PNU
		Detects if the Control Board has failed to operate normally	
		On : Operation 3 trip enabled.	
Advanced Trip Settings >>>>>>>	Operation 3 Trip	Off: Operation 3 trip disabled.	53800
		Range Off - On Default On Type Read/Write	
		Detects if the keypad Board has failed to operate normally	
		On : Operation 1 trip enabled.	
Advanced Trip Settings >>>>>>>	Operation 1 Trip		53798
		Off: Operation 1 trip disabled.	
		Range Off - On Default Off Type Read/Write	
		Detects if the logging function has failed to operate normally	
Advanced Trip Settings >>>>>>>	Operation 2 Trip	On: Operation 2 trip enabled.	53799
		Off: Operation 2 trip disabled.	
		Range Off - On Default Off Type Read/Write	
		Detects if there is a disconnection between the Unit input and the supply when the motor is running.	
		On: Trips if there is a disconnection between the input side of the Unit and the supply when the motor is running.	
Advanced Trip Settings >>>>>>>	Input Side Phase Loss	Off: The Unit will attempt to run although the operation may be erratic.	53762
		Operating in this mode for prolonged periods may result in SCR failure	
		Range Off - On Default On Type Read/Write	
		Set to correspond with Unit connection to the Motor.	
		Refer to connection diagrams in the Quick Start Guide. In-Line : The Unit is connected in-line with a delta or star connected motor.	
Advanced >>>>>>	Firing Mode		128
		In-Delta : The Unit is connected inside the Delta of the motor. The iERS function is disabled	
		Range In-Line - In-Delta Default In-Line Type Read/Write	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	i-s		Descr notes refer to a Synergy paramass 10 current, i-rated = syner				nt	Modbus PNU
Advanced >>>>>>>	Legacy Delta Mode	On : Operates in	QFE / XFE (5MC	to "Delta" applications that c) delta compatibility mode Unit Delta connection diag	э.	·	Туре	Read/Write	192
Advanced >>>>>>>	Main Contactor Control	On : When a zero	o stop time is set	stop when the main conta some faults will be ignore ain contcator opens  On	·		Туре	Read/Write	14144

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
I/O  Digital Inputs >>>>>>>	Digital Input Voltage	The digital inputs D1-1I D1-2I D2-1I are designed to work with a range of control supplies 230V: 'Active high level' Input voltage must be in the range 195.5V - 253V    110V: 'Active high level' Input voltage must be in the range 93.5V - 121V   24V: 'Active high level' input voltage must be in the range 20.4V-26.4V    It is important to ensure the "Digital input Voltage" corresponds to the voltage applied to the input.   Failure to do so may result in damage.  Range	10880
I/O Digital Inputs >>>>>>>	Control Method	Local Touch Screen: Control using the button on the keypad User Programmable: Control using the terminals. Function defined in "I/O" menu Two Wire Control: Control using terminals. Functions fixed as shown on screen Three Wire Control: Control using terminals. Functions fixed as shown on screen Modbus Network: Control via remote Modbus network or remote Keypad or Modbus TCP  Range Local Touch Screen - Modbus Network Default Local Touch Screen Type Read/Write	59392
I/O Digital Inputs Digital Input 1 (D1-1I)	Select Function	Allows the Digital input (D1-1I) to be mapped to different functions  The selected function will change in proportion with the input  Digital inputs can only be mapped if the "Control Method" is set to "User Programmable"  Range Off - End of list Default Start/Stop Type Read/Write	10944
I/O Digital Inputs Digital Input 1 (D1-1I)	High Input = 1 Sets Value	Allows the polarity of the input to be reversed  On: When the input is on the selected function will be on.  Off: When the input is off the selected function will be on.  Range Off - On Default On Type Read/Write	11264
I/O Digital Inputs Digital Input 2 (D1-2I)	Select Function	Allows the Digital input (D1-2I) to be mapped to different functions  The selected function will change in proportion with the input  Digital inputs can only be mapped if the "Control Method" is set to "User Programmable"  Range  Off  - End of list  Default  Off  Type  Read/Write	10945

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
I/O Digital Inputs Digital Input 2 (D1-2I)	High Input = 1 Sets Value	Allows the polarity of the input to be reversed  On: When the input is on the selected function will be on.  Off: When the input is off the selected function will be on.  Range  Off  On  Default  On  Type  Read/Write	11266
I/O Digital Inputs Digital Input 3 (D2-1I)	Select Function	Allows the Digital input (D2-1I) to be mapped to different functions  The selected function will change in proportion with the input  Digital inputs can only be mapped if the "Control Method" is set to "User Programmable"  Range  Off  - End of list  Default  Reset  Type  Read/Write	10946
I/O Digital Inputs Digital Input 3 (D2-1I)	High Input = 1 Sets Value	Allows the polarity of the input to be reversed  On: When the input is on the selected function will be on.  Off: When the input is off the selected function will be on.  Range  Off - On  Default  On  Type  Read/Write	11268
I/O Digital Outputs Digital Output 1 N/C(12)	Select Function	Allows the Digital output (N/C (12)) to be mapped to different functions  The output will change in proportion with the selected output  Range Off - End of list Default Error Type Read/Write	11584
I/O Digital Outputs Digital Output 1 N/C(12)	High Output = 1 When Value	Allows the polarity of the output to be reversed  On: When the selected function is on the output will be on.  Off: When the selected function is on the output is off  Range  Off  On  Default  On  Type  Read/Write	11904

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter		Te:	xt in quotes refe	Descrier to a Synergy parameter in the control of t		or example "Start Time"	notor currer	NF .	Modbus PNU
			Digital output (N/0	0 (24)) to be n	napped to different	functions				11585
		Range	Off	-	End of list	Default	Error	Туре	Read/Write	
I/O Digital Outputs Digital Output 2 N/O(24)	High Output = 1	On : Whe	polarity of the out on the selected fund on the selected fund	ction is on the	output will be on.					11906
		Range	Off	-	On	Default	On	Туре	Read/Write	
I/O Digital Outputs Digital Output 3 N/O(34)					mapped to different					11586
		Range	Off	-	End of list	Default	Running	Туре	Read/Write	
I/O Digital Outputs Digital Output 3 N/O(34)	High Output = 1 When Value	On : Whe	e polarity of the out in the selected fund in the selected fund Off	ction is on the	output will be on.	Default	On	Туре	Read/Write	11908
I/O Digital Outputs Digital Output 4 N/O(44)	Select Function			oportion with t	mapped to different the selected output End of list		End Of Start	Туре	Read/Write	11587

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
I/O Digital Outputs Digital Output 4 N/O(44)	High Output = 1 When Value	Allows the polarity of the output to be reversed  On: When the selected function is on the output will be on.  Off: When the selected function is on the output is off  Range  Off  On  Default  On  Type  Read/Write	11910
I/O Analogue Inputs >>>>>>>	Analogue Input Type	Defines the function of the analogue input (AI)  0-10V : The input voltage varies from 0-10V  4-20mA : The input varies from 4 to 20mA  Range	9600
I/O Analogue Inputs >>>>>>>	Select Function	Allows the Analogue input to be mapped to different functions  The selected function will change in proportion with the input  By default the function will be at its maximum when the input is at it maximum  Range  Off  - End of list  Default  Off  Type  Read/Write	9664
I/O Analogue Inputs >>>>>>>	Scaling Level	Allows the selected function to be scaled  The selected function will change in proportion with the input  The function will be at its "Scaling Level" when the input is at its maximum  Range  0 % - Max value % Default  Max value % Type  Read/Write	9728
I/O Analogue >>>>>>>	Analogue Output Type	Defines the physical function of the analogue output (AO)  0-10V : The output voltage varies from 0 to 10V  4-20mA : The output current varies from 4 to 20mA  Range	8960

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	/I-SGY-USB-V05 SGY2070000		Parameter				Descr refer to a Synergy parame 0 current, i-rated = syner				nt	Modbi PNU
I/O	Analogue Outputs	>>>>>>>	Select Function	The output v	will change in prop	oortion w	oped to different PNU for with the selected function mum when the selected End of list	on	uals its maximum Off	value Type	Read/Write	9024
I/O	Analogue Outputs	>>>>>>	Scaling Level	The output v		oortion w	led with the selected function the selected function Max value %		caling Level"	Туре	Read/Write	908
I/O	>>>>>>	>>>>>>	PTC Motor Thermistor Trip	On :The Uni		tor therm	of PTC motor thermist nistor exceed its response.				circuit	5379

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Line Frequency	e frequency of the 3-phase supply	32000
		nge 45 Hz - 65 Hz Default - Hz Type	Read Only
		icates the phase sequence of the incoming supply.	
Monitor >>>>>>>>	Phase Rotation	B = L1-L2-L3 Y = L1-L3-L2	32064
		nge L1-L2-L3 - L1-L3-L2 Default L1-L2-L3 Type	Read Only
		e RMS current on phase L1	
Monitor >>>>>>> >>>	И		33536
		nge 0 A - 10000 A Default 0 A Type	Read Only
		e RMS current on phase L2	
Monitor >>>>>>>	12		33538
		nge 0 A - 10000 A Default 0 A Type	Read Only
		e RMS current on phase L3	
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	13		33540
		nge 0 A - 10000 A Default 0 A Type	Read Only

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Current Irms	The RMS motor current This is the maximum of the 3 phases. This value is used for the overload and power calculations	32896
		Range 0 A - 10000 A Default 0 A Type Read 0	nly
Monitor >>>>>>>	True Power Factor	The True Power Factor  The True Power Factor = ( Displacement Power Factor x Distortion Power Factor )	33024
		Range 0 - 1 Default 0 Type Read 0	nly
Monitor >>>>>>>	True Power P	Total true power This is an addition of the 3 phases	34688
		Range 0 kW - 10000 kW Default 0 kW Type Read 0	nly
Monitor >>>>>>>	Apparent Power S	Total Apparent Power  This is an addition of the 3 phases  Range 0 kVA - 10000 kVA Default 0 kVA Type Read 0	34816 nly
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Reactive Power Q	Total Reactive power  This is an addition of the 3 phases  Range 0 kvar - 10000 kvar Default 0 kvar Type Read 0	34944 nly

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Monitor >>>>>>>	iERS Saving Level	Indicates the level of potential saving  100% indicates that Unit is saving at its maximum level	35008
		Range         0 %         -         100 %         Default         0 %         Type         Read Only	
Monitor >>>>>>>	Delay Angle	Internal firing delay angle in Degrees  Displayed for diagnostic purposes	22400
		Range 0 Degrees - 60 Degrees Default 0 Degrees Type Read Only	
Monitor >>>>>>>	BackStop	The maximum possible Delay angle for the current iERS saving phase  Displayed for diagnostic purposes  May decrease during heavy load periods or instability	23040
		Range 0 Degrees - 55 Degrees Default 0 Degrees Type Read Only	
Monitor >>>>>>>	Delay Max	The maximum possible delay for iERS saving  Displayed for diagnostic purposes	22464
		Range 0 Degrees - 55 Degrees Default 0 Degrees Type Read Only	
Monitor >>>>>>>	Pres PF Degrees	The Present Power Factor used by the iERS saving function  This is the actual Power Factor for the iERS saving function.  The "Delay" is constantly adjusted to minimise the control loop error between "Pres PF Degrees" and "Ref PF Degrees"  The parameter displays the displacement part of the True Power Factor and is used for diagnostic purposes.	21824
		Range 0 Degrees - 90 Degrees Default 0 Degrees Type Read Only	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class 20 / Class 30 current, i-motor = motor current	Modbus PNU
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Ref PF Degrees	The Reference Power Factor used by the iERS saving function  This is the target Power Factor for the iERS saving function. The parameter will change dynamically dependant on motor operation  The parameter displays the displacement part of the True Power Factor and is used for diagnostic purposes.  Range 0 Degrees - 90 Degrees Default 0 Degrees Type Read Only	21760
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Start Saving Level	The current in Amps at which the iERS is enabled or disabled.  The iERS function is active when the motor current is less than the "Start Saving Level"  When the iERS function is disabled internal bypass relays close to improve efficiency.  Range 50% I-motor - 80% I-motor Default 80% I-motor Type Read Only	21320
Monitor >>>>>>>	Last Peak Current	Displays the peak current of the last successful start.  Range 0 A - 10000 A Default 0 A Type Read Only	38400
Monitor >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	HeatSink Temp	The temperature of the internal Unit heatsink.  The Unit will trip when the heatsink temperature exceeds 80°C.  The internal cooling fans will turn on if this temperature exceeds 40°C  Range -20 °C - 80 °C Default °C Type Read Only	36544
Monitor >>>>>>>	Motor Thermistor	Indicates the state of the Unit PTC input. Designed for single or double or triple PTC in series PTC thermistor standards DIN44081 / EN60738-1 apply ( < 300R @ 25°C. Typically 4K @ nominal temperature) The value indicated is a not in degrees Celsius but is an internal representation.  At 25°C the value displayed should be less than 100 and the Unit trips when value > 400 (open circuit = 1024) The value will increase rapidly when the motor thermistors approach their nominal temperature. If thermistors are connected the "Thermistor trip" should be turned "on"  Range 0 - 1024 Default 1024 Type Read Only	10432

]		I-SGY-USB-V05 SGY2070000	5700 SGY3023400 ]	Parameter				Descri efer to a Synergy paramet current, i-rated = synerg	er or function, f			ent	Modbus PNU
								at is an electronic equicity which is a measu			ng on "Ove	erload Trip"	
	Monitor	>>>>>	>>>>>>	Overload	When "C When the	Current Irms" is less of the contraction of the con	than "Overles 100% the	e "Overload Level" the load Level" the "Over e Unit will trip. al to (i-Unit) the overlo	load" decreas	ses exponentially (i	ance with f	the "Trip Class". nan 50%)	33408
					Range	0 %	-	100 %	Default	0 %	Туре	Read Only	

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SWI-SGY-USB-V05700	Parameter		T	ovt in quotos	Descri	ption	or evample "Start Time"			Modbus
[ SGY1051400 SGY2070000 SGY3023400 ]	r ar arriotor		i-synergy = syn	ext in quotes nergy Class 10	refer to a Synergy paramet 0 current, i-rated = synerg	y Class20 / Class	s30 current, i-motor =	motor curre	nt	PNU
Log		Displays	the last Fault trip							
Log Trip Log >>>>>>>	Last Trip									60608
		Range	0		65535	Default	0	Туре	Read Only	
		9							,	
		Displays	the last Fault trip -	1						
Log Trip Log >>>>>>>	Last Trip -1									60609
		Range	0	_	65535	Default	0	Туре	Read Only	
						L			•	
		Displays	the last Fault trip -	2						
Log Trip Log >>>>>>>	Last Trip -2									60610
		Range	0	-	65535	Default	0	Туре	Read Only	
						L				
		Displays	the last Fault trip -	3						
The State of the S	Laurente o									00044
Log Trip Log >>>>>>>	Last Trip -3									60611
		Range	0	-	65535	Default	0	Туре	Read Only	
						L				
		Displays	the last Fault trip -	4						
	l and <b>E</b>									00010
Log Trip Log >>>>>>>	Last Trip -4									60612
		Range	0	-	65535	Default	0	Туре	Read Only	
						Ĺ			•	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter		Text in i-synergy = synergy	Desc quotes refer to a Synergy param Class 10 current, i-rated = syne	ription eter or function, for rgy Class20 / Class3	example "Start Time' 0 current, i-motor =	, motor curren	t	Modbus PNU
		Displays the la	ast Fault trip -5						
Log Trip Log >>>>>>>	Last Trip -5				_				60613
		Range	0	- 65535	Default	0	Туре	Read Only	
		Displays the la	ast Fault trip -6						
Log Trip Log >>>>>>>	Last Trip -6								60614
		Range	0	- 65535	Default	0	Туре	Read Only	
		Displays the la	ast Fault trip -7						
Log Trip Log >>>>>>>	Last Trip -7								60615
		Range	0	- 65535	Default	0	Туре	Read Only	
		Displays the la	ast Fault trip -8						
Log Trip Log >>>>>>>	Last Trip -8								60616
		Range	0	- 65535	Default	0	Туре	Read Only	
		Displays the la	ast Fault trip -9						
Log Trip Log >>>>>>>	Last Trip -9								60617
		Range	0	- 65535	Default	0	Туре	Read Only	

SWI-SGY-USB-V05700	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"	Modbus
[ SGY1051400 SGY2070000 SGY3023400 ]		i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	PNU
Log Trip Log Trip Code Descriptions	101 Input Side Phase Loss	Phase L1 missing at the instant of start up.  The L1 phase is either missing or at a very low level  Check all incoming connections.  If a main contactor is being controlled by a digital output set to "Running" check contactor delay is sufficient  Range   Default Type Read Only	
Log Trip Log Trip Code Descriptions	102 Input Side Phase Loss	Phase L2 missing at the instant of start up  The L2 phase is either missing or at a very low level  Check all incoming connections.  If a main contactor is being controlled by a digital output set to "Running" check contactor delay is sufficient  Range  - Default  Type  Read Only	
Log Trip Log Trip Code Descriptions	103 Input Side Phase Loss	Phase L3 missing at the instant of start up  The L3 phase is either missing or at a very low level  Check all incoming connections.  If a main contactor is being controlled by a digital output set to "Running" check contactor delay is sufficient  Range  - Default  Type  Read Only	
Log Trip Log Trip Code Descriptions	104 - 117 Input Side Phase Loss	Any or all phases missing when the motor is being controlled  L1 L2 or L3 phase are missing or at a very low level.  Check all incoming connections. Check any fuses / breakers incorporated in the power circuit  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	201 Maximum Temp. Exceeded	Internal heatsink temperature has exceeded 90°C  It is possible the Unit is operating outside specified limits.  Check enclosure ventilation and airflow around the Unit. If the unit trips immediately the internal temperature sensor could be faulty.  Range - Default Type Read Only	

SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Log Trip Log Trip Code Descriptions	208 Thermal Sensor Trip	Thermal sensor Failure The internal temperature sensor has failed  Contact the supplier  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	301-308 Thyristor Firing Trip	One or more of the internal control thyristors (SCRs) have failed to turn on properly. (In-Line "Firing Mode")  The Unit has detected that the SCRs are not operating as expected.  Check all incoming and outgoing connections.  Range Default Type Read Only	
Log Trip Log Trip Code Descriptions	350-358 Thyristor Firing Trip	One or more of the internal control thyristors (SCRs) have failed to turn on properly. (Delta "Firing Mode")  The Unit has detected that the SCRs are not operating as expected.  Check all incoming and outgoing connections.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	401 Motor Side Phase Loss	One or all of the phases are missing on the motor side during the instant of start up  T1 T2 or T3 phase are missing or at a very low level.  Check that the motor is connected to T1 T2 and T3. Ensure any disconnecting device between the Unit and the motor is closed at the instant of start up.  Range  - Default  Type  Read Only	
Log Trip Log Trip Code Descriptions	402-403 Motor Side Phase Loss	One or all of the phases are missing on the motor side during the instant of start up when the motor being controlled T1 T2 or T3 phase are missing or at a very low level.  Check all incoming and outgoing connections.  Range  - Default  Type  Read Only	

SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Log Trip Log Trip Code Descriptions	601 Control Voltage Too Low	The internal control supply of the Unit level has fallen to a low level  Can be caused by a weak 24VDC control supply.  Ensure 24VDC supply meets the requirements specified in the Quick Start Guide.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	701-710 Sensing Fault Trip	One or more of the internal control thyristors (SCRs) have failed to turn on properly.  The Unit has detected that the SCRs are not operating as expected.  Check connections all incoming and outgoing connections.  Range   Default Type Read Only	
Log Trip Log Trip Code Descriptions	801-802 Fan Problem	One or more of the internal cooling fans has failed  To ensure the heatsink is cooled sufficiently the Unit Will trip if the fans fail to operate  Check Unit fans for signs of damage or contamination  Range Default Type Read Only	
Log Trip Log Trip Code Descriptions	1001 Short Circuit Thyristor	One or more of the internal control thyristors (SCRs) have failed short circuit  The Unit has detected that the SCRs are not operating as expected.  ISOLATE SUPPLY. Check by measuring the resistance between L1-T1 L2-T2 L3-T3 (Anything < 10R is assumed short circuit)  Range   Default Type Read Only	
Log Trip Log Trip Code Descriptions	1101 Low Current Trip	The motor current has been lower than the low trip level for the low trip time  This trip is not active during soft start and soft stop and is "off" by default.  If the low current trip is not required turn "off" in "Trip Settings".  Range - Default Type Read Only	

SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Log Trip Log Trip Code Descriptions	1201 Current Limit Timeout Trip	The motor has been held in current limit longer than the "Start current limit Time"  It is likely that the current limit level has been set too low for the application.  Increase the current limit level or timeout period.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	1202 Current Limit Timeout Trip	The motor has been held in current limit longer than the "Stop current limit Time"  It is likely that the current limit level has been set too low for the application.  Increase the current limit level or timeout period.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	1301 Overload Trip	The "Overload" has exceeded 100%  The Unit is attempting to start an application that is outside its capacity or it is starting too often.  Refer to the overload trip curves to determine whether the Unit has been sized correctly.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	1302 Overload Trip	The motor current has exceeded 475% (i-Unit) for a time greater than 250ms  The Unit is attempting to start an application that is outside its capacity with a "high current limit level" set  Refer to the overload trip curves to determine whether the Unit has been sized correctly and check current limit level.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	1401 Shearpin Trip	The motor current has been higher than the "Shearpin Trip Level" for the trip time.  This trip is not active during soft start and soft stop and is "off" by default.  If Shearpin trip is not required turn "off" in "Trip Settings".  Range - Default Type Read Only	

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[ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	PNU
Log Trip Log Trip Code Descriptions	1501 PTC Thermistor Trip	The PTC thermistor value has exceed the trip level.  The PTC thermistor connected to the PTC input has exceeded it response temperature or the PTC input is open circuit.  If the PTC TRIP is not required turn "off" in "Trip Settings".  Range - Default Type Read Only  External Trip	
Log Trip Log Trip Code Descriptions	1601 External Trip	The input programmed to External Trip is active  If the External trip is not required turn "off" in "Trip settings  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	1701 Communications Trip	Communications failure  The command or status PNU has not ben polled in the time set in the "Timeout" period  If the communication trip is disabled the Unit cannot be stopped in the communications fail  Range  - Default  Type  Read Only	
Log Trip Log Trip Code Descriptions	1801-1802 Bypass Relay Trip	One or more of the internal bypass relays has failed to close  The internal bypass relay has failed or the control supply is to weak.  Ensure 24VDC supply meets the requirements specified in the Quick Start Guide.  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	1803 Bypass Relay Trip	One or more of the internal bypass relays has failed to open  The internal bypass relay has failed or the control supply is too weak.  Ensure 24VDC supply meets the requirements specified in the Quick Start Guide.  Range Default Type Read Only	

SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Log Trip Log Trip Code Descriptions	1901 Cover Open, Close to Enable Motor Start	The Unit cover is open The cover is open or not closed properly Close Cover or if Cover trip is not required turn off in "Trip Settings" Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	2001-2003 Remote Start is Enabled	The remote start signal is active.  The remote start signal was active during power up or Reset or Parameter Load.  Turn off remote or if Remote On trip is not required turn "off" in "Trip Settings"  Range - Default Type Read Only	
Log Trip Log Trip Code Descriptions	2101 Rotation L1 L2 L3 Trip	The input phase rotation is RYB (L1-L2-L3)  The phase rotation is opposite to that required.  Change phase rotation or if "RYB" trip is not required turn "off" in trip settings.  Range Default Type Read Only	
Log Trip Log Trip Code Descriptions	2102 Rotation L1 L3 L2 Trip	The input phase rotation is RBY (L1-L3-L2)  The phase rotation is opposite to that required.  Change phase rotation or if "RBY" trip is not required turn "off" in trip settings.  Range Default Type Read Only	
Log Trip Log Trip Code Descriptions	2201-2299 2701-2799 MPU Trip	Internal Unit Failure  The Unit has failed internally and is unable to recover automatically.  Cycle the control supply.  If the fault is not cleared then contact the supplier  Range  - Default  Type  Read Only	

SWI-SGY-USB-V05700	Damamatan	Description	Modbus
[ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	PNU
	2301-2303	Current sensor failure  One or more of the internal sensors used to measure current has failed or is reading a low value.	
Log Trip Log Trip Code Descriptions	Current Sensor Trip	Check the connections to the supply and motor as disconnection will result in a zero current reading.  Check the plate FLA of the motor being controlled is at least 25% of the "i-motor" rating	
		Range - Default Type Read Only	
Log Trip Log Trip Code	2401-2499	Fail Safe operation  A process associated with the Control Board has been affected and is unable to recover automatically	
Descriptions	Operation 3 Trip	The trip MUST be reset by either the digital input or keypad or the bus command depending on the control method set.  This trip is a special case and it is NOT possible to reset this trip by cycling the control supply  Range  - Default  Type Read Only	
		Tange - Default Type Read Only	
		Fail Safe operation	
Log Trip Log Trip Code Descriptions	2501-2599 Operation 1 Trip	A process associated with the Keypad board has been affected and is unable to recover automatically  The trip can be reset by either the digital input or keypad or the bus command depending on the control method set.  It is also possible to reset this trip by cycling the control supply	
		Range - Default Type Read Only	
		Fail Safe operation	
Log Trip Log Trip Code Descriptions	2601-2699 Operation 2 Trip	A process associated with the Logging function has been affected and is unable to recover automatically  The trip can be reset by either the digital input or keypad or the bus command depending on the control method set.  It is also possible to reset this trip by cycling the control supply	
		Range - Default Type Read Only	
		Displays the peak current of the last successful start.	
Log Trip Log >>>>>>	Last Peak Current		38400
		Range 0 A - 10000 A Default 0 A Type Read Only	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class 20 / Class 30 current, i-motor = motor current	Modbus PNU
Log Trip Log >>>>>>>	Last peak start current -1	isplays the peak current of the last successful start -1	38402
		ange 0 A - 10000 A Default 0 A Type F	ad Only
		splays the peak current of the last successful start -2	
Log Trip Log >>>>>>>	Last peak start current -2		38404
		ange 0 A - 10000 A Default 0 A Type F	ad Only
		splays the peak current of the last successful start -3	
Log Trip Log >>>>>>>	Last peak start current -3		38406
		ange 0 A - 10000 A Default 0 A Type F	ad Only
		splays the peak current of the last successful start -4	
Log Trip Log >>>>>>>	Last peak start current -4		38408
		ange 0 A - 10000 A Default 0 A Type F	ad Only
		splays the peak current of the last successful start -5	
Log Trip Log >>>>>>>	Last peak start current -5		38410
		ange 0 A - 10000 A Default 0 A Type F	ad Only

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SWI-SGY-USB-V05700	Parameter		Text in	Descriquotes refer to a Synergy parame Class 10 current, i-rated = synerg		example "Start Time"			Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]  Log Trip Log >>>>>>>>	Last peak start current -6	Displays th		Class 10 current, Frated = synerg	gy Class20 / Class3(	current, i-motor =	motor curren	it	38412
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful start -7					
Log Trip Log >>>>>>>	Last peak start current -7								38414
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful start -8					
Log Trip Log >>>>>>>	Last peak start current -8								38416
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful start -9					
Log Trip Log >>>>>>>	Last peak start current -9								38418
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful stop					
Log Trip Log >>>>>>>	Last peak stop current								39040
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	

MAN-SGY-001-V14 EC 5195	i alliolu Lie	ctionics Liu -	Synergy Programming (	Juide - 19th February 2016					Page 39 of 4
SWI-SGY-USB-V05700	Parameter		Text in	Descriquotes refer to a Synergy parame Class 10 current, i-rated = synerg		ample "Start Time"			Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]  Log Trip Log >>>>>>>>	Last peak stop current -1	Displays th		lass 10 current, i-rated = synerg	gy Class20 / Class30 c	urrent, i-motor =	motor curren	it	39042
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful stop -2					
Log Trip Log >>>>>>>	Last peak stop current -2								39044
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful stop -3					
Log Trip Log >>>>>>>	Last peak stop current -3								39046
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful stop -4					
Log Trip Log >>>>>>>	Last peak stop current -4								39048
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	
		Displays th	e peak current of the	last successful stop -5					
Log Trip Log >>>>>>>	Last peak stop current -5	_							39050
		Range	0 A	- 10000 A	Default	0 A	Туре	Read Only	

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SWI-SGY-USB-V05700	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]  Log Trip Log >>>>>>>>	Last peak stop current -6	i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current splays the peak current of the last successful stop -6	39052
		nge 0 A - 10000 A Default 0 A Type	Read Only
		splays the peak current of the last successful stop -7	
Log Trip Log >>>>>>>	Last peak stop current -7		39054
		nge 0 A - 10000 A Default 0 A Type	Read Only
		splays the peak current of the last successful stop -8	
Log Trip Log >>>>>>>	Last peak stop current -8		39056
		nge 0 A - 10000 A Default 0 A Type	Read Only
		splays the peak current of the last successful stop -9	
Log Trip Log >>>>>>>	Last peak stop current -9		39058
		nge 0 A - 10000 A Default 0 A Type	Read Only
		splays the heatsink temperature at the end of the last successful start	
Log Trip Log >>>>>>>	Last temperature		39680
		nge -20 °C - 80 °C Default °C Type	Read Only

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SWI-SGY-USB-V05700	Parameter		Text i	in quotes refe	Descrier to a Synergy parametrent, i-rated = synerg		example "Start Time"			Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]  Log Trip Log >>>>>>>>	Last temperature -	Displays th	i-synergy = synerg				0 current, i-motor = r	notor curren	t	39681
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays th	he heatsink temperat	ture at the	end of the last succ	essful start -2				
Log Trip Log >>>>>>>	Last temperature - 2	Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	39682
		L	he heatsink temperat	ture at the	end of the last succ	eessful start-3				
Log Trip Log >>>>>>>	Last temperature - 3	_				_				39683
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays th	he heatsink temperat	ture at the	end of the last succ	essful start-4				
Log Trip Log >>>>>>>	Last temperature - 4	_				_				39684
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays th	he heatsink temperat	ture at the	end of the last succ	essful start-5				
Log Trip Log >>>>>>>	Last temperature - 5					ı <u>-</u>				39685
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter		Tex	t in quotes	Descri refer to a Synergy paramet current, i-rated = synerg		r example "Start Time"			Modbus PNU
Log Trip Log >>>>>>>	Last temperature -	Displays t			ne end of the last succ		30 current, 1-motor = r	notor curren	it.	39686
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays t	the heatsink tempera	ature at th	ne end of the last succ	essful start-7				
Log Trip Log >>>>>>>	Last temperature - 7	Г				_				39687
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays t	the heatsink tempera	ature at th	ne end of the last succ	essful start-8				
Log Trip Log >>>>>>>	Last temperature - 8	_				_				39688
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays t	the heatsink tempera	ature at th	ne end of the last succ	essful start-9				
Log Trip Log >>>>>>>	Last temperature - 9	_				_				39689
		Range	-20 °C	-	80 °C	Default	°C	Туре	Read Only	
		Displays t	the overload level at	the end	of the last successful s	start				
Log Trip Log >>>>>>>	Last overload	_								40320
		Range	0 %	-	100 %	Default	0 %	Туре	Read Only	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter		Text in	Descr quotes refer to a Synergy parame Class 10 current, i-rated = synerg	iption ter or function, for expenses	ample "Start Time"	motor ourron		Modbus PNU
Log Trip Log >>>>>>>	Last overload-1	Displays t		e end of the last successful		житен, т-носог <u>=</u> г	notor curren		40321
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at th	e end of the last successful	start -2				
Log Trip Log >>>>>>>	Last overload-2								40322
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at th	e end of the last successful	start -3				
Log Trip Log >>>>>>>	Last overload-3								40323
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at th	e end of the last successful	start -4				
Log Trip Log >>>>>>	Last overload-4								40324
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at th	e end of the last successful	start -5				
Log Trip Log >>>>>>>	Last overload-5								40325
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter		Text ii	Descr n quotes refer to a Synergy parame cr Class 10 current, i-rated = synerg	iption eter or function, fo	r example "Start Time"	motor curren	Nf.	Modbus PNU
Log Trip Log >>>>>>>	Last overload-6	Displays t		he end of the last successful		30 current, 1-motor = 1	notor curren		40326
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at the	he end of the last successful	start -7				
Log Trip Log >>>>>>>	Last overload-7								40327
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at th	he end of the last successful	start -8				
Log Trip Log >>>>>>>	Last overload-8								40328
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		Displays t	the overload level at the	he end of the last successful	start -9				
Log Trip Log >>>>>>>	Last overload-9								40329
		Range	0 %	- 100 %	Default	0 %	Туре	Read Only	
		The total	number of successful	starts					
Log Totals Log >>>>>>>	Number of Starts								35840
		Range	0	- 4294836225	Default	0	Туре	Read Only	

WAN-3G1-001-V14 EC 3193	i amora Ere	Colonies Lie Synergy Programming Culae 15th Colonies	rage 40 or 4					
SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"  i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current						
Log >>>>>>>	Download Log File	Download the full log file on to the USB stick  The Unit logs several parameters during normal and fault conditions  Data is stored in CSV format. Please send all downloaded files to Fairford on request  Range - Default Type Read/Write						
Log >>>>>>	Clear Trip Log	Deletes all of the history in the Trip Log	62081					
		Range No - Yes Default No Type Read/Write						

[ ;	SWI- SGY1051400	-SGY-USB-V05 SGY2070000		Parameter		Text i-synergy = synerg	in quotes r gy Class 10	Descripute   Descriptute   Descriptute	er or function, fo	or example "Start Time" s30 current, i-motor = mot	or curren	ıt	Modbus PNU
	Device				Used to u	pgrade to the latest	version of	f software using a USE	3 stick				
	Device	>>>>>>	>>>>>>	Update Firmware	Details for	r the upgrading proce	ess are si	upplied with the update	ed version of	software			
					Range		-		Default		Туре	Read/Write	
					Enter curr	ent date							
	Device	>>>>>	>>>>>>	Date	Date form	at can be set to eithe	er dd/mm	/yyyy or mm/dd/yyyy. I	Refer to "Dat	e format" parameter.			
					Range		-		Default		Туре	Read/Write	
					Allows the	time to be changed	l to 'local'	time					
	Device	>>>>>>	>>>>>>	Time	By default	the time is set to GI	MT						14720
					Range	- hh:mm:ss	-	- hh:mm:ss	Default	GMT time hh:mm:ss	Туре	Read/Write	
					Selects th	e display language f	for the key	ypad					
	Device	>>>>>	>>>>>>	Language	Enter the	required language fr	rom the di	splayed list					13376
					Range	English	-	End of list	Default	English	Туре	Read/Write	
					Stops una	authorised access to	read/ writ	te parameters					
	Device	>>>>>	>>>>>>	Passcode	For the pa	asscode be active the	e "Screen	lock" must be turned	on				12864
					Range	0	-	Max Value	Default	0	Туре	Read/Write	

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SWI-SGY-USB-V05700	Parameter		т	ext in quotes	Descri refer to a Synergy paramet	- ter or function, fo	or example "Start Time"			Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]		Time for	i-synergy = syn	nergy Class 1	0 current, i-rated = synerg	y Class20 / Class	30 current, i-motor = r	notor currer	nt	1110
Device >>>>>>>	Backlight Timeout				ne screen will turn off					14208
		To reactive Range	vate touch screen 0 s	anywhere.	To disable set to 0  3600 s	Default	60 s	Туре	Read/Write	
		. tallige								
		Sets the	Modbus station nu	ımber						
Device Networks Modbus Network Settings	Address									16000
		Range	1	-	32	Default	1	Туре	Read/Write	
		Sets the	serial communicati	ions baud ı	rate					
Device Networks Modbus Network Settings	Baud Rate	The avail	able baud rates ar	re 9600 192	200 38400 57600 or 11	15200				16064
		Range	9600	-	115200	Default	19200	Туре	Read/Write	
		Sets the	serial communicati	ions parity	bit					
Device Networks Modbus Network	Parity	The avail	able parity options	are None	Even Odd					16128
Settings		Also sets	the stop bits. No p	parity uses	2 stop bits. Odd or eve	en parity uses	1 stop bit			1
		Range	None	-	Odd	Default	Even	Туре	Read/Write	
			e user to check the receive. Green LE		ne modbus communica it.	ation network.				
Device Networks Modbus Network Settings	Traffic LEDS				y the traffic on the Mod		cations network			14080
				EDs display	the Unit status inform	Г				]
		Range	Off	-	On	Default	Off	Туре	Read/Write	

SWI-SGY-USB-V05700	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time"	Modbus PNU
[ SGY1051400 SGY2070000 SGY3023400 ]		i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	1110
		Anybus expansion module	
Device Networks >>>>>>	Anybus	Only active with Anybus module fitted	
		Range - Default Type Read Only	
		Communications trip Timeout period	
Device Networks >>>>>>>	Timeout ms	To prevent a 'Communications Trip' (If enabled) the bus must be kept active.  To keep the bus active there must be at least one Modbus read or write (any PNU) during the "Timeout ms" period	15808
		Range 0 ms - 60000 ms Default 5000 ms Type Read/Write	
		Restores the Unit to the factory defaults	
Device >>>>>>>	Reset Defaults		62080
		Range No - Yes Default No Type Read/Write	
		Gives the Model number. Serial Number and current software versions	
Device >>>>>>>	About	The software versions are SGY1xxxxxx SGY2xxxxxx and SGY3xxxxxx.	
		Range - Default Type Read Only	
		Stops unauthorised access to read/ write parameters	
Device >>>>>>>	Screen Lock		12992
		Range Off - On Default Off Type Read/Write	

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SWI-SGY-USB-V05700 [ SGY1051400 SGY2070000 SGY3023400 ]	Parameter	Description  Text in quotes refer to a Synergy parameter or function, for example "Start Time" i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current	Modbus PNU
Device >>>>>>>	Date Format	Allows the date format to be changed dd/mm/yyyy or mm/dd/yyyy	13248
		Range dd/mm/yyyy - mm/dd/yyyy Default dd/mm/yyyy Type Read/Write	
Device >>>>>>>	Temperature Format	Selects °C or °F for displayed temperatures  °C : All displayed temperatures are °C  °F : All displayed temperatures are °F  Range °C - °F Default °C Type Read/Write	13312
Device >>>>>>>	Parameters to USB	Allows the user to save parameters  Downloads the parameters from the Unit to the USB drive  Data is stored in CSV format.  Range No - Yes Default No Type Read/Write	62272
Device >>>>>>>	Parameters from USB	Allows the user to load parameters stored on a USB flash drive  Uploads the parameters from the USB drive to the Unit  Data is stored in CSV format.  Range No - Yes Default No Type Read/Write	62336
Device >>>>>>>	Service Code	Diagnostic parameter  For Fairford use only  Range - Default Type	13120