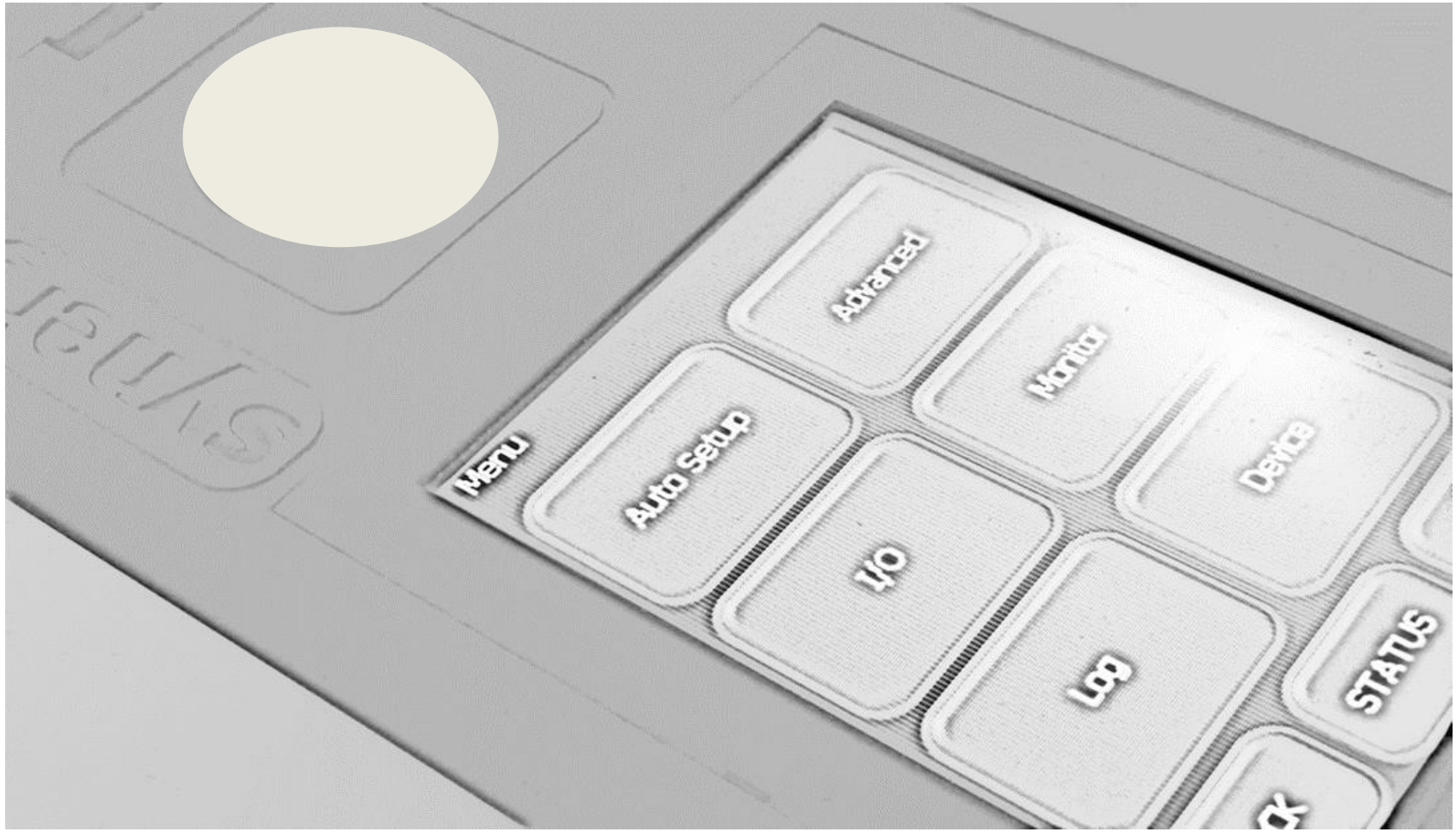
Innovation in soft start technology

MOTORTRONICS™
Solid State AC Motor Control




# VMX-synergy™

## MODBUS RTU PARAMETER TABLES

MAN-SGY-042. Version 01

| | SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|---|
| 1 | **PNU Number** 128 ( 80 hex )<br>**PNU Name** Firing Mode<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Set to correspond with Unit connection to the Motor.<br>Refer to connection diagrams in the Quick Start Guide.<br>In-Line : The Unit is connected in-line with a delta or star connected motor.<br>In-Delta : The Unit is connected inside the Delta of the motor. The iERS function is disabled<br>Range 0 ( 0 hex ) In-Line - 1 ( 1 hex ) In-Delta Default 0 ( 0 hex ) In-Line Type Read/Write |
| 2 | **PNU Number** 192 ( C0 hex )<br>**PNU Name** Legacy Delta Mode<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Allows the Unit to be retro-fitted into "Delta" applications that previously used QFE / XFE (5MC)<br>On : Operates in QFE / XFE (5MC) delta compatibility mode.<br>Off : Operates normally. Refer to Unit Delta connection diagram in the Quick Start Guide.<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write |
| 3 | **PNU Number** 320 ( 140 hex )<br>**PNU Name** Kick Start<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Applies a short duration torque pulse to dislodge 'sticky' loads<br>On : The torque pulse is applied at start-up when complete the torque drops to the "Start Pedestal"<br>Off: The initial starting torque is defined by the "Start Pedestal"<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write |
| 4 | **PNU Number** 640 ( 280 hex )<br>**PNU Name** Kick Start Pedestal<br>**PNU Format** 16 bit unsigned<br>**PNU Note** Linear Scaling ( 1 = 0.006104 % ) | Percentage of the supply voltage applied to the motor during the 'kick' period<br>Increase to provide more torque If the load fails to break away.<br>Decrease if the motor accelerates too quickly.<br>Range 4915 ( 1333 hex ) 30% - 13107 ( 3333 hex ) 80% Default 12288 ( 3000 hex ) 75% Type Read/Write |
| 5 | **PNU Number** 704 ( 2C0 hex )<br>**PNU Name** Start Pedestal<br>**PNU Format** 16 bit unsigned<br>**PNU Note** Linear Scaling ( 1 = 0.006104 % ) | Percentage of the supply voltage applied to motor at the beginning of the soft start.<br>Increase to provide more torque If the load fails to break away.<br>Decrease if the motor accelerates too quickly.<br>Range 1638 ( 666 hex ) 10% - 16384 ( 4000 hex ) 100% Default 3276 ( CCC hex ) 20% Type Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

**6**

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|---|---|
| **PNU Number** | 768 ( 300 hex ) |
| **PNU Name** | Rate End Start (3) |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Adjusts the response of the "Automatic End Start (3)"

Increase to provide a greater smoothing effect If there are torque fluctuations that occur during the soft start.

When set to zero the smoothing is effectively disabled.

| Range | 0 ( 0 hex ) 0% - 16384 ( 4000 hex ) 100% | Default | 8192 ( 2000 hex ) 50% | Type | Read/Write |
|---|---|---|---|---|---|

**7**

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|---|---|
| **PNU Number** | 896 ( 380 hex ) |
| **PNU Name** | Stop Pedestal |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

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 | 1638 ( 666 hex ) 10% - 6553 ( 1999 hex ) 40% | Default | 1638 ( 666 hex ) 10% | Type | Read/Write |
|---|---|---|---|---|---|

**8**

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|---|---|
| **PNU Number** | 7040 ( 1B80 hex ) |
| **PNU Name** | Kick Start Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ms ) |

Time that the torque pulse is applied to load

Increase to provide more torque If the load fails to break away.

Decrease if the motor accelerates too quickly.

| Range | 10 ( A hex ) 10ms - 2000 ( 7D0 hex ) 2000ms | Default | 100 ( 64 hex ) 100ms | Type | Read/Write |
|---|---|---|---|---|---|

**9**

| | |
|---|---|
| **PNU Number** | 7104 ( 1BC0 hex ) |
| **PNU Name** | Start Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

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".

If set too long the motor can be at speed before the end of the time set. Refer to "Automatic End Start"

| Range | 1 ( 1 hex ) 1s - 300 ( 12C hex ) 300s | Default | 10 ( A hex ) 10s | Type | Read/Write |
|---|---|---|---|---|---|

**10**

| | |
|---|---|
| **PNU Number** | 7296 ( 1C80 hex ) |
| **PNU Name** | Stop Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

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 ( 0 hex ) 0s - 300 ( 12C hex ) 300s | Default | 0 ( 0 hex ) 0s | Type | Read/Write |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

11

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|---|---|
| **PNU Number** | 7360 ( 1CC0 hex ) |
| **PNU Name** | Dwell Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 1 ( 1 hex ) 1s | - | 300 ( 12C hex ) 300s | | 5 ( 5 hex ) 5s | | Read/Write |

12

| | |
|---|---|
| **PNU Number** | 8320 ( 2080 hex ) |
| **PNU Name** | Contactor Delay |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ms ) |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 20 ( 14 hex ) 20ms | - | 60000 ( EA60 hex ) 60000ms | | 160 ( A0 hex ) 160ms | | Read/Write |

13

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|---|---|
| **PNU Number** | 8960 ( 2300 hex ) |
| **PNU Name** | Analogue Output Type |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 - 10V | - | 1 ( 1 hex ) 4 - 20mA | | 0 ( 0 hex ) 0 - 10V | | Read/Write |

14

| | |
|---|---|
| **PNU Number** | 9024 ( 2340 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 514=Imeasued, 522=Overload, 161=OverloadSCR, 542=Ptotal |

Allows the Analogue output to be mapped to different PNU functions

The output will change in proportion with the selected function

By default the output will be at a maximum when the selected function equals its maximum value

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) Off | - | 999 ( 3E7 hex ) End of list | | 0 ( 0 hex ) Off | | Read/Write |

15

| | |
|---|---|
| **PNU Number** | 9088 ( 2380 hex ) |
| **PNU Name** | Scaling Level |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Allows the selected function to be scaled

The output will change in proportion with the selected function

The output will be at a maximum when the selected function equals the "Scaling Level"

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) Max value % | | 0 ( 0 hex ) 0% | | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

16

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|---|---|
| **PNU Number** | 9152 ( 23C0 hex ) |
| **PNU Name** | Analogue Output Value |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

The value of the Analogue output

The internal Digital to analogue converter is 10 bit.

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 | | 1024 ( 400 hex ) 1024 | | 0 ( 0 hex ) 0 | | Read Only |

17

| | |
|---|---|
| **PNU Number** | 9600 ( 2580 hex ) |
| **PNU Name** | Analogue Input Type |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 - 10V | | 1 ( 1 hex ) 4 - 20mA | | 0 ( 0 hex ) 0 - 10V | | Read/Write |

18

| | |
|---|---|
| **PNU Number** | 9664 ( 25C0 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 420=Current Limit Start, 431=I Shearpin, 441=I Overload |

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 | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) Off | | 999 ( 3E7 hex ) End of list | | 0 ( 0 hex ) Off | | Read/Write |

19

| | |
|---|---|
| **PNU Number** | 9728 ( 2600 hex ) |
| **PNU Name** | Scaling Level |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

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 | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | | 16384 ( 4000 hex ) Max value % | | 0 ( 0 hex ) Max value % | | Read/Write |

20

| | |
|---|---|
| **PNU Number** | 9792 ( 2640 hex ) |
| **PNU Name** | Analogue Input Value |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

The value of the analogue Input

The internal Analogue to Digital converter is 10 bit.

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 | | 1024 ( 400 hex ) 1024 | | 0 ( 0 hex ) 0 | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

21

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|---|---|
| **PNU Number** | 10432 ( 28C0 hex ) |
| **PNU Name** | Motor Thermistor |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

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 ( 0 hex ) 0 - 1024 ( 400 hex ) 1024 | Default | 0 ( 0 hex ) 1024 | Type | Read Only |
|---|---|---|---|---|---|

22

| | |
|---|---|
| **PNU Number** | 10880 ( 2A80 hex ) |
| **PNU Name** | Digital Input Voltage |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 0=230V, 1=110V, 2=24V |

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 | 0 ( 0 hex ) 230V - 2 ( 2 hex ) 24VDC | Default | 0 ( 0 hex ) 230V | Type | Read/Write |
|---|---|---|---|---|---|

23

| | |
|---|---|
| **PNU Number** | 10944 ( 2AC0 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 280=Start/Stop, 285=FreezeRamp,<br>287=Reset, 330=iErs,295=ExternalTrip |

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 | 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default | 280 ( 118 hex ) Start/Stop | Type | Read/Write |
|---|---|---|---|---|---|

24

| | |
|---|---|
| **PNU Number** | 10945 ( 2AC1 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 280=Start/Stop, 285=FreezeRamp,<br>287=Reset, 330=iErs,295=ExternalTrip |

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 | 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default | 0 ( 0 hex ) Off | Type | Read/Write |
|---|---|---|---|---|---|

25

| | |
|---|---|
| **PNU Number** | 10946 ( 2AC2 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 280=Start/Stop, 285=FreezeRamp,<br>287=Reset, 330=iErs,295=ExternalTrip |

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 | 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default | 287 ( 11F hex ) Reset | Type | Read/Write |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

26

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|---|---|
| **PNU Number** | 11584 ( 2D40 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 581=Rdy,582=En,583=Error,588=Running, 590=EndOfStart,591=C/L,595=iErsActive |

Allows the Digital output (N/C (12)) to be mapped to different functions

The output will change in proportion with the selected output

Range 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default 583 Error | Type Read/Write

27

| | |
|---|---|
| **PNU Number** | 11585 ( 2D41 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 581=Rdy,582=En,583=Error,588=Running, 590=EndOfStart,591=C/L,595=iErsActive |

Allows the Digital output (N/0 (24)) to be mapped to different functions

The output will change in proportion with the selected output

Range 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default 583 Error | Type Read/Write

28

| | |
|---|---|
| **PNU Number** | 11586 ( 2D42 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 581=Rdy,582=En,583=Error,588=Running, 590=EndOfStart,591=C/L,595=iErsActive |

Allows the Digital output (N/0 (34)) to be mapped to different functions

The output will change in proportion with the selected output

Range 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default 588 Running | Type Read/Write

29

| | |
|---|---|
| **PNU Number** | 11587 ( 2D43 hex ) |
| **PNU Name** | Select Function |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 581=Rdy,582=En,583=Error,588=Running, 590=EndOfStart,591=C/L,595=iErsActive |

Allows the Digital output (N/0 (44)) to be mapped to different functions

The output will change in proportion with the selected output

Range 0 ( 0 hex ) Off - 999 ( 3E7 hex ) End of list | Default 590 End Of Start | Type Read/Write

30

| | |
|---|---|
| **PNU Number** | 12800 ( 3200 hex ) |
| **PNU Name** | Serial Number |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | ASCII alpha numeric character Byte 7 (MSB) |

The device serial number stored at the point of manufacture

Range 0 ( 0 hex ) 0 - 255 ( FF hex ) 255 | Default Not Applicable | Type Read Only

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

31

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12801 ( 3201 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 6 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

32

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12802 ( 3202 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 5 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

33

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12803 ( 3203 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 4 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

34

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12804 ( 3204 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 3 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

35

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12805 ( 3205 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 2 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

36

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12806 ( 3206 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 1 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

37

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12807 ( 3207 hex ) | The device serial number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Serial Number | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 0 | Range | 0 ( 0 hex ) 0 | - | 255 ( FF hex ) 255 | Default | Not Applicable | Type | Read Only |

38

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12864 ( 3240 hex ) | Stops unauthorised access to read/ write parameters | | | | | | | |
| **PNU Name** | Passcode | For the passcode be active the "Screen lock" must be turned on | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character (MSB) Byte 3 | Range | 48 ( 30 hex ) 0 | - | 57 ( 39 hex ) Max Value | Default | 48 ( 30 hex ) 0 | Type | Read/Write |

39

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12865 ( 3241 hex ) | Stops unauthorised access to read/ write parameters | | | | | | | |
| **PNU Name** | Passcode | For the passcode be active the "Screen lock" must be turned on | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 2 | Range | 48 ( 30 hex ) 0 | - | 57 ( 39 hex ) Max Value | Default | 48 ( 30 hex ) 0 | Type | Read/Write |

40

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12866 ( 3242 hex ) | Stops unauthorised access to read/ write parameters | | | | | | | |
| **PNU Name** | Passcode | For the passcode be active the "Screen lock" must be turned on | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 1 | Range | 48 ( 30 hex ) 0 | - | 57 ( 39 hex ) Max Value | Default | 48 ( 30 hex ) 0 | Type | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12867 ( 3243 hex ) | Stops unauthorised screen access to read/ write parameters | | | | | | | |
| **PNU Name** | Passcode | For the passcode be active the "Screen lock" must be turned on | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | ASCII alpha numeric character Byte 0 | Range | 48 ( 30 hex ) 0 | - | 57 ( 39 hex ) Max Value | Default | 48 ( 30 hex ) 0 | Type | Read/Write |

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12928 ( 3280 hex ) | The device Model number stored at the point of manufacture | | | | | | | |
| **PNU Name** | Model Number | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 = 1 ) | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) Max Value | Default | Not Applicable | Type | Read Only |

43

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 12992 ( 32C0 hex ) | Stops unauthorised access to read/ write parameters | | | | | | | |
| **PNU Name** | Screen Lock | | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |

44

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 13120 ( 3340 hex ) | Diagnostic parameter | | | | | | | |
| **PNU Name** | Service Code | For Motortronics use only | | | | | | | |
| **PNU Format** | | | | | | | | | |
| **PNU Note** | | Range | - | | | Default | | Type | |

45

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 13184 ( 3380 hex ) | Software Version for the Main control PCB. | | | | | | | |
| **PNU Name** | Software Version (PCB2) | Software version recorded in log file | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 = 1 ) | Range | 0 ( 0 hex ) 0 | - | 4294967295 ( FFFFFFFF hex ) Max Value | Default | Not Applicable | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

46

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 13248 ( 33C0 hex ) | Allows the date format to be changed | | | | | | | |
| **PNU Name** | Date Format | dd/mm/yyyy or mm/dd/yyyy | | | | | | | |
| **PNU Format** | 8 bit unsigned | | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) dd/mm/yyyy | - | 1 ( 1 hex ) mm/dd/yyyy | Default | 0 ( 0 hex ) dd/mm/yyyy | Type | Read/Write |

47

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 13312 ( 3400 hex ) | Selects °C or °F for displayed temperatures | | | | | | | |
| **PNU Name** | Temperature Format | °C : All displayed temperatures are °C | | | | | | | |
| **PNU Format** | 8 bit unsigned | °F : All displayed temperatures are °F | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) °C | - | 1 ( 1 hex ) °F | Default | 0 ( 0 hex ) °C | Type | Read/Write |

48

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 13376 ( 3440 hex ) | Selects the display language for the keypad | | | | | | | |
| **PNU Name** | Language | Enter the required language from the displayed list | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | 1=GBR,2=DEU,3=FRA,4=ITA,5=CHN,<br>6=TUR,7=POR,8=JPN,9=SRB,10=RUS | Range | 1 ( 1 hex ) English | - | 10 ( A hex ) End of list | Default | 1 ( 1 hex ) English | Type | Read/Write |

49

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 14080 ( 3700 hex ) | Allows the user to check the state of the Modbus communication network.<br>Red LED receive. Green LED Transmit. | | | | | | | |
| **PNU Name** | Traffic LEDS | On : The Red and Green LEDS display the traffic on the Modbus communications network | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off : The Red and Green LEDs display the Unit status information | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |

50

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 14144 ( 3740 hex ) | Used when the motor is required to start when the Main Contactor closes, and stop when it opens.<br>An auxiliary contact from the main contactor is used as a Start / Stop signal. The ' Stop Time' must be set to zero | | | | | | | |
| **PNU Name** | Main Contactor Control | On : When the contactor opens and the stop signal is given at the same time the unit will not trip on "Phase Loss" | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off : When the contactor opens and the stop signal is given at the same time the unit may trip on "Phase Loss" | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

51

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 14208 ( 3780 hex ) | Time for backlight on display | | | | | | | |
| **PNU Name** | Backlight Timeout | After the period set the back light on the screen will turn off | | | | | | | |
| **PNU Format** | 16 bit unsigned | To reactivate touch screen anywhere. To disable set to 0 | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) | Range | 0 ( 0 hex ) 0s | - | 3600 ( E10 hex ) 3600s | Default | 60 ( 3C hex ) 60s | Type | Read/Write |

52

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 14720 ( 3980 hex ) | Allows the time to be changed to 'local' time | | | | | | | |
| **PNU Name** | Time | By default the time is set to GMT | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read/Write |

53

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 15808 ( 3DC0 hex ) | Communications trip Timeout period | | | | | | | |
| **PNU Name** | Timeout ms | To prevent a 'Communications Trip' (If enabled) the bus must be kept active.<br>To keep the bus active there must be at least one Modbus read or write (any PNU) during the "Timeout ms" period | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 = 1 ms ) | Range | 0 ( 0 hex ) 0ms | - | 60000 ( EA60 hex ) 60000ms | Default | 5000 ( 1388 hex ) 5000ms | Type | Read/Write |

54

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 16000 ( 3E80 hex ) | Sets the Modbus station number | | | | | | | |
| **PNU Name** | Address | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 = 1 ) | Range | 1 ( 1 hex ) 1 | - | 32 ( 20 hex ) 32 | Default | 1 ( 1 hex ) 1 | Type | Read/Write |

55

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 16064 ( 3EC0 hex ) | Sets the serial communications baud rate | | | | | | | |
| **PNU Name** | Baud Rate | The available baud rates are 9600 19200 38400 57600 or 115200 | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | 0=9600, 1=19200, 2=38400, 3=57600, 4=115200 | Range | 0 ( 0 hex ) 9600 | - | 4 ( 4 hex ) 115200 | Default | 1 ( 1 hex ) 19200 | Type | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

56

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|---|---|
| **PNU Number** | 16128 ( 3F00 hex ) |
| **PNU Name** | Parity |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 0=None, 1=Even, 2=Odd |

Sets the serial communications parity bit

The available parity options are None Even Odd

Also sets the stop bits. No parity uses 2 stop bits. Odd or even parity uses 1 stop bit

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) None | - | 2 ( 2 hex ) Odd | 1 ( 1 hex ) Even | Read/Write |

57

| | |
|---|---|
| **PNU Number** | 17600 ( 44C0 hex ) |
| **PNU Name** | Modbus Alias Register 0 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | 0 ( 0 hex ) 0 | Read/Write |

58

| | |
|---|---|
| **PNU Number** | 17601 ( 44C1 hex ) |
| **PNU Name** | Modbus Alias Register 1 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | 0 ( 0 hex ) 0 | Read/Write |

59

| | |
|---|---|
| **PNU Number** | 17602 ( 44C2 hex ) |
| **PNU Name** | Modbus Alias Register 2 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | 0 ( 0 hex ) 0 | Read/Write |

60

| | |
|---|---|
| **PNU Number** | 17603 ( 44C3 hex ) |
| **PNU Name** | Modbus Alias Register 3 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | 0 ( 0 hex ) 0 | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

61

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|---|---|
| **PNU Number** | 17604 ( 44C4 hex ) |
| **PNU Name** | Modbus Alias Register 4 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

62

| | |
|---|---|
| **PNU Number** | 17605 ( 44C5 hex ) |
| **PNU Name** | Modbus Alias Register 5 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

63

| | |
|---|---|
| **PNU Number** | 17606 ( 44C6 hex ) |
| **PNU Name** | Modbus Alias Register 6 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

64

| | |
|---|---|
| **PNU Number** | 17607 ( 44C7 hex ) |
| **PNU Name** | Modbus Alias Register 7 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

65

| | |
|---|---|
| **PNU Number** | 17608 ( 44C8 hex ) |
| **PNU Name** | Modbus Alias Register 8 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

66

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|---|---|
| **PNU Number** | 17609 ( 44C9 hex ) |
| **PNU Name** | Modbus Alias Register 9 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

67

| | |
|---|---|
| **PNU Number** | 17610 ( 44CA hex ) |
| **PNU Name** | Modbus Alias Register 10 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

68

| | |
|---|---|
| **PNU Number** | 17611 ( 44CB hex ) |
| **PNU Name** | Modbus Alias Register 11 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

69

| | |
|---|---|
| **PNU Number** | 17612 ( 44CC hex ) |
| **PNU Name** | Modbus Alias Register 12 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

70

| | |
|---|---|
| **PNU Number** | 17613 ( 44CD hex ) |
| **PNU Name** | Modbus Alias Register 13 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

Range 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 Default 0 ( 0 hex ) 0 Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

71

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|---|---|
| **PNU Number** | 17614 ( 44CE hex ) |
| **PNU Name** | Modbus Alias Register 14 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

| Range | 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read/Write |
|---|---|---|---|---|---|

72

| | |
|---|---|
| **PNU Number** | 17615 ( 44CF hex ) |
| **PNU Name** | Modbus Alias Register 15 |
| **PNU Format** | |
| **PNU Note** | |

Used to arrange Modbus Parameters into groups

Holds the address of a Modbus Parameter

Refer to MAN-SGY-019-V01 for more details

| Range | 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read/Write |
|---|---|---|---|---|---|

73

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|---|---|
| **PNU Number** | 17920 ( 4600 hex ) |
| **PNU Name** | Start/Stop |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

CONTROL COMMAND : Start / Stop

On : Starts the Unit
Off : Stops or Soft stops the Unit

To map to digital input refer to PNU10944-PNU10946

| Range | 0 ( 0 hex ) (Soft) Stop - 1 ( 1 hex ) Start | Default | 0 ( 0 hex ) (Soft) Stop | Type | Read/Write |
|---|---|---|---|---|---|

74

| | |
|---|---|
| **PNU Number** | 18240 ( 4740 hex ) |
| **PNU Name** | Freeze Ramp |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

CONTROL COMMAND : Freeze Ramp

On : The Soft Start Ramp is held and the Unit will take longer than the time set to start
Off : The Soft Start Ramp is not held and the Unit will start in the time set.

If set to On this parameter will hold the Start Ramp even if "Current Irms" is less than the "Current Limit Level"
To map to digital input refer to PNU10944-PNU10946

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |
|---|---|---|---|---|---|

75

| | |
|---|---|
| **PNU Number** | 18368 ( 47C0 hex ) |
| **PNU Name** | Reset |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

CONTROL COMMAND : Reset

On : The initial state required for a reset.
Off : The final state required for a reset.

To reset pulse high and then low
To map to digital input refer to PNU10944-PNU10946

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

| | | |
|---|---|---|
| 76 | **PNU Number** | 18880 ( 49C0 hex ) |
| | **PNU Name** | External Trip |
| | **PNU Format** | 8 bit unsigned |
| | **PNU Note** | Binary value |

CONTROL COMMAND : External Trip

On : If "External Trip" is enabled the Unit trips
Off : The Unit will not trip
Ensure start signal is low before reset.
To map to digital input refer to PNU10944-PNU10946

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

| | | |
|---|---|---|
| 77 | **PNU Number** | 19200 ( 4B00 hex ) |
| | **PNU Name** | Application: |
| | **PNU Format** | 16 bit unsigned |
| | **PNU Note** | Linear Scaling ( 1 = 1 ) |

The Unit has numerous pre-set 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 0 ( 0 hex ) Default - 65535 ( FFFF hex ) End of list | Default 0 ( 0 hex ) Default | Type Read/Write

| | | |
|---|---|---|
| 78 | **PNU Number** | 19840 ( 4D80 hex ) |
| | **PNU Name** | Automatic Pedestal |
| | **PNU Format** | 8 bit unsigned |
| | **PNU Note** | Binary value |

Automatically controls the starting torque

On : The initial torque is increased until the motor starts to rotate at a moderate speed.

Off: The initial torque is defined by the "Start Pedestal"

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

| | | |
|---|---|---|
| 79 | **PNU Number** | 19904 ( 4DC0 hex ) |
| | **PNU Name** | Automatic End Start (2) |
| | **PNU Format** | 8 bit unsigned |
| | **PNU Note** | Binary value |

Automatically controls the time taken for the motor to start

On : The ramp time is shortened if the motor current falls below the current limit level before the end of the "Start Time".

Off: The ramp time depends on the "Start Time" and "Current Limit"

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

| | | |
|---|---|---|
| 80 | **PNU Number** | 19968 ( 4E00 hex ) |
| | **PNU Name** | Automatic End Start (1) |
| | **PNU Format** | 8 bit unsigned |
| | **PNU Note** | Binary value |

Automatically controls the time taken for the motor to start

On : The ramp time is shortened if the motor is at speed before the end of the "Start Time"

Off: The ramp time depends on the "Start Time" and "Current Limit"

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

| | SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current | | | | | |
|---|---|---|---|---|---|---|---|
| 81 | **PNU Number** 20032 ( 4E40 hex )<br>**PNU Name** Automatic End Start (3)<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Automatically controls the time taken for the motor to start<br>On : The ramp time is shortened if torque fluctuations occur before the end of the "Start Time"<br>Off: The ramp time depends on the "Start Time" and "Current Limit" | Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 82 | **PNU Number** 20160 ( 4EC0 hex )<br>**PNU Name** Automatic Stop<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Automatically controls the soft stop to suit the application.<br>This feature is particularly useful with pumping applications<br>On : If the motor is lightly loaded it decelerates rapidly to the point where the soft stop becomes useful.<br>Off : The deceleration to the point where the soft stop becomes useful will be slower. | Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 83 | **PNU Number** 20224 ( 4F00 hex )<br>**PNU Name** Auto Smooth Stop<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Automatically controls the soft stop to eliminate oscillations that can occur towards the end of the ramp<br>On : The soft stop is adjusted when oscillations are detected. Refer to "Auto smoothing Level"<br>Off : The soft stop is unadjusted and torque fluctuations may cause instability. This can often occur in pumping applications | Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 84 | **PNU Number** 20352 ( 4F80 hex )<br>**PNU Name** Automatic Ramp<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Automatically controls the torque applied to the motor during the soft start.<br>On : The torque is adjusted to suit the load.<br>Off: The ramp time depends on the "Start Time" and "Current Limit" | Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 85 | **PNU Number** 20416 ( 4FC0 hex )<br>**PNU Name** Automatic End Stop<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Automatically controls the "Stop Time"<br>On : The ramp time is shortened if the motor reaches a very low speed before the end of the "Stop Time"<br>Off: The ramp time " depends on the "Stop Time" and "Current Limit" | Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 86 | **PNU Number** | 20480 ( 5000 hex ) | Automatically controls the maximum iERS saving level. | | | | | | |
| | **PNU Name** | Automatic Impact Load | On : The maximum iERS saving level ("BackStop" ) is reset to maximum during each load cycle. | | | | | | |
| | **PNU Format** | 8 bit unsigned | Off : The saving potential may be reduced on applications with heavy load cycles. Such as injection moulding machines. | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 87 | **PNU Number** | 20608 ( 5080 hex ) | Adjusts the response of the "Automatic Stop" | | | | | | |
| | **PNU Name** | Automatic Stop Profile | Increase if the motor speed doesn't drop quickly enough. | | | | | | |
| | **PNU Format** | 16 bit unsigned | When the value is set to zero the "Automatic Stop" is effectively disabled | | | | | | |
| | **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) | Range | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | Default | 8192 ( 2000 hex ) 50% | Type Read/Write |
| 88 | **PNU Number** | 20672 ( 50C0 hex ) | Adjusts the response of the "Automatic smoothing" | | | | | | |
| | **PNU Name** | Auto Smoothing Level | Increase to provide a greater smoothing effect If there are torque fluctuations that occur during the soft stop. | | | | | | |
| | **PNU Format** | 16 bit unsigned | When set to zero the smoothing is effectively disabled. | | | | | | |
| | **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) | Range | 1638 ( 666 hex ) 10% | - | 16384 ( 4000 hex ) 100% | Default | 8192 ( 2000 hex ) 50% | Type Read/Write |
| 89 | **PNU Number** | 20736 ( 5100 hex ) | Enables the Auto Reset Feature | | | | | | |
| | **PNU Name** | Auto Reset | On : The Auto Reset feature is Enabled | | | | | | |
| | **PNU Format** | 16 bit unsigned | Off : The Auto Reset feature is disabled and all counters will be re-initialised | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 90 | **PNU Number** | 20737 ( 5101 hex ) | This is the delay between the trip event and the automatic reset, the unit will re-start following the reset if the start signal is active | | | | | | |
| | **PNU Name** | Reset Delay | If this is set to zero at any point the Auto Reset feature will terminate and the counters will be re-initialised | | | | | | |
| | **PNU Format** | 16 bit unsigned | When the delay is active the Restart Pending parameter is set and the time remaining can be viewed in the monitor menu. | | | | | | |
| | **PNU Note** | Linear Scaling ( 1 = 1 s ) | Range | 0 ( 0 hex ) 0s | - | 7200 ( 1C20 hex ) 7200s | Default | 0 ( 0 hex ) 0s | Type Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

91

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|---|---|
| **PNU Number** | 20738 ( 5102 hex ) |
| **PNU Name** | Reset Attempts |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

This is the number of restart attempts allowed before the Auto Reset terminates. If the Auto Reset has been successful, the counter is reset back to its maximum value when the unit has been running fault free for the Trip Free Time.

If the Auto Restart has been unsuccessful the counters are re-initialised by applying a reset signal or removing the start signal

If this is set to zero at any point the Auto Reset feature will terminate and the counters will be re-initialised

The number of attempts remaining can be viewed in the Monitor menu

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) 0 | - | 10 ( A hex ) 10 | 0 ( 0 hex ) 0 | Read/Write |

92

| | |
|---|---|
| **PNU Number** | 20739 ( 5103 hex ) |
| **PNU Name** | Trip Free Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

This is the time the unit must be run trip free before the counters are re-initialised back to zero

If this is set to zero at any point the Auto Reset feature will terminate and the counters will be re-initialised

The Trip Free Time can be viewed in the Monitor menu

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) 0s | - | 7200 ( 1C20 hex ) 7200s | 600 ( 258 hex ) 600s | Read/Write |

93

| | |
|---|---|
| **PNU Number** | 20800 ( 5140 hex ) |
| **PNU Name** | Input Side Phase Loss |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if an Input Side Phase Loss Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | 1 ( 1 hex ) On | Read/Write |

94

| | |
|---|---|
| **PNU Number** | 20801 ( 5141 hex ) |
| **PNU Name** | Thermal |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Thermal Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | 1 ( 1 hex ) On | Read/Write |

95

| | |
|---|---|
| **PNU Number** | 20802 ( 5142 hex ) |
| **PNU Name** | Thyristor Firing |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Thyristor Firing Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | | | Default | Type |
|---|---|---|---|---|
| 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | 1 ( 1 hex ) On | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

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|---|---|---|---|---|---|---|---|---|---|
| | **PNU Number** | 20803 ( 5143 hex ) | Allows the user to select whether the unit will auto reset if a Motor Side Phase Loss Trip occurs | | | | | | |
| | **PNU Name** | Motor Side Phase Loss | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| 96 | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |

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|---|---|---|---|---|---|---|---|---|---|
| | **PNU Number** | 20805 ( 5145 hex ) | Allows the user to select whether the unit will auto reset if a Control Voltage Low Trip occurs | | | | | | |
| | **PNU Name** | Control Voltage Low | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| 97 | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |

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|---|---|---|---|---|---|---|---|---|---|
| | **PNU Number** | 20806 ( 5146 hex ) | Allows the user to select whether the unit will auto reset if a Sensing Fault Trip occurs | | | | | | |
| | **PNU Name** | Sensing Fault | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| 98 | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |

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|---|---|---|---|---|---|---|---|---|---|
| | **PNU Number** | 20807 ( 5147 hex ) | Allows the user to select whether the unit will auto reset if a Fan Trip occurs | | | | | | |
| | **PNU Name** | Fan | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| 99 | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |

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|---|---|---|---|---|---|---|---|---|---|
| | **PNU Number** | 20810 ( 514A hex ) | Allows the user to select whether the unit will auto reset if a Low Current Trip occurs | | | | | | |
| | **PNU Name** | Low Current | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| 100 | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

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|---|---|---|---|---|---|---|---|---|---|
| 101 | **PNU Number** | 20811 ( 514B hex ) | Allows the user to select whether the unit will auto reset if a Current Limit Time Out Trip occurs | | | | | | |
| | **PNU Name** | Current Limit Time Out | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |
| 102 | **PNU Number** | 20812 ( 514C hex ) | Allows the user to select whether the unit will auto reset if an Overload Trip occurs | | | | | | |
| | **PNU Name** | Overload | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |
| 103 | **PNU Number** | 20813 ( 514D hex ) | Allows the user to select whether the unit will auto reset if a Shearpin Trip occurs | | | | | | |
| | **PNU Name** | Shearpin | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type Read/Write |
| 104 | **PNU Number** | 20814 ( 514E hex ) | Allows the user to select whether the unit will auto reset if a PTC Thermistor Trip occurs | | | | | | |
| | **PNU Name** | PTC Thermistor | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |
| 105 | **PNU Number** | 20815 ( 514F hex ) | Allows the user to select whether the unit will auto reset if an External Trip occurs | | | | | | |
| | **PNU Name** | External | On : The trip will auto reset when the Reset Delay reaches zero. | | | | | | |
| | **PNU Format** | 8 bit unsigned | Off : The trip will not auto reset | | | | | | |
| | **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

106

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|---|---|
| **PNU Number** | 20816 ( 5150 hex ) |
| **PNU Name** | Communications |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Communications Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

107

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|---|---|
| **PNU Number** | 20817 ( 5151 hex ) |
| **PNU Name** | Bypass |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Bypass Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

108

| | |
|---|---|
| **PNU Number** | 20818 ( 5152 hex ) |
| **PNU Name** | Cover |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Cover Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write

109

| | |
|---|---|
| **PNU Number** | 20820 ( 5154 hex ) |
| **PNU Name** | Phase Rotation |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Phase Rotation Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write

110

| | |
|---|---|
| **PNU Number** | 20821 ( 5155 hex ) |
| **PNU Name** | Operation 4 |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if an Operation 4 Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

111

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|---|---|
| **PNU Number** | 20822 ( 5156 hex ) |
| **PNU Name** | Current Sensor |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if a Current Sensor Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type | Read/Write |
|---|---|---|---|---|---|

112

| | |
|---|---|
| **PNU Number** | 20823 ( 5157 hex ) |
| **PNU Name** | Operation 3 |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if an Operation 3 Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type | Read/Write |
|---|---|---|---|---|---|

113

| | |
|---|---|
| **PNU Number** | 20824 ( 5158 hex ) |
| **PNU Name** | Operation 1 |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if an Operation 1 Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type | Read/Write |
|---|---|---|---|---|---|

114

| | |
|---|---|
| **PNU Number** | 20825 ( 5159 hex ) |
| **PNU Name** | Operation 2 |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if an Operation 2 Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type | Read/Write |
|---|---|---|---|---|---|

115

| | |
|---|---|
| **PNU Number** | 20826 ( 515A hex ) |
| **PNU Name** | Operation 5 |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Allows the user to select whether the unit will auto reset if an Operation 5 Trip occurs

On : The trip will auto reset when the Reset Delay reaches zero.

Off : The trip will not auto reset

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

116

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|---|---|
| **PNU Number** | 20864 ( 5180 hex ) |
| **PNU Name** | Reset Delay |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

This is the amount of time remaining in the Reset Delay counter

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0s | | 7200 ( 1C20 hex ) 7200s | | 0 ( 0 hex ) 0s | | Read Only |

117

| | |
|---|---|
| **PNU Number** | 20865 ( 5181 hex ) |
| **PNU Name** | Reset Attempts |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

This is the number of Reset Attempts remaining.

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 | | 10 ( A hex ) 10 | | 0 ( 0 hex ) 0 | | Read Only |

118

| | |
|---|---|
| **PNU Number** | 20866 ( 5182 hex ) |
| **PNU Name** | Trip Free Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

This is the amount of time remaining in the Trip Free Time counter

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0s | | 7200 ( 1C20 hex ) 7200s | | 600 ( 258 hex ) 600s | | Read Only |

119

| | |
|---|---|
| **PNU Number** | 20867 ( 5183 hex ) |
| **PNU Name** | Trip Event |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

This is the trip that occurred just prior to the auto reset

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 100 ( 64 hex ) 100 | | 2700 ( A8C hex ) 2700 | | 0 ( 0 hex ) 0 | | Read Only |

120

| | |
|---|---|
| **PNU Number** | 21120 ( 5280 hex ) |
| **PNU Name** | iERS |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Enables and disables the intelligent Energy Recovery System feature (iERS).

On : The voltage to the motor will be regulated to ensure optimum efficiency.

Off : The feature is disabled and the motor operates at full voltage

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) Off | | 1 ( 1 hex ) On | | 1 ( 1 hex ) Off | | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

121

| | |
|---|---|
| **PNU Number** | 21184 ( 52C0 hex ) |
| **PNU Name** | iERS Rate |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

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

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 4096 ( 1000 hex ) 25% | | Read/Write |

122

| | |
|---|---|
| **PNU Number** | 21320 ( 5348 hex ) |
| **PNU Name** | Start Saving Level |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 8192 ( 2000 hex ) 50% I-motor | - | 13107 ( 3333 hex ) 80% I-motor | | 13107 ( 3333 hex ) 80% I-motor | | Read Only |

123

| | |
|---|---|
| **PNU Number** | 21376 ( 5380 hex ) |
| **PNU Name** | iERS Level |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 16384 ( 4000 hex ) 100% | | Read/Write |

124

| | |
|---|---|
| **PNU Number** | 21760 ( 5500 hex ) |
| **PNU Name** | Ref PF Degrees |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1° of mains cycle)<br>Time(ms)=(Value/PNU32000)*(25/9) |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0Degrees | - | 90 ( 5A hex ) 90Degrees | | 0 ( 0 hex ) 0Degrees | | Read Only |

125

| | |
|---|---|
| **PNU Number** | 21824 ( 5540 hex ) |
| **PNU Name** | Pres PF Degrees |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1° of mains cycle)<br>Time(ms)=(Value/PNU32000)*(25/9) |

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.

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0Degrees | - | 90 ( 5A hex ) 90Degrees | | 0 ( 0 hex ) 0Degrees | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

126

| | |
|---|---|
| **PNU Number** | 22400 ( 5780 hex ) |
| **PNU Name** | Delay Angle |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1° of mains cycle)<br>Time(ms)=(Value/PNU32000)*(25/9) |

Internal firing delay angle in Degrees

Displayed for diagnostic purposes

Range 0 ( 0 hex ) 0Degrees - 60 ( 3C hex ) 60Degrees Default 0 ( 0 hex ) 0Degrees Type Read Only

127

| | |
|---|---|
| **PNU Number** | 22464 ( 57C0 hex ) |
| **PNU Name** | Delay Max |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1° of mains cycle)<br>Time(ms)=(Value/PNU32000)*(25/9) |

The maximum possible delay for iERS saving

Displayed for diagnostic purposes

Range 0 ( 0 hex ) 0Degrees - 55 ( 37 hex ) 55Degrees Default 0 ( 0 hex ) 0Degrees Type Read Only

128

| | |
|---|---|
| **PNU Number** | 23040 ( 5A00 hex ) |
| **PNU Name** | BackStop |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1° of mains cycle)<br>Time(ms)=(Value/PNU32000)*(25/9) |

The maximum possible Delay angle for the current iERS saving phase

Displayed for diagnostic purposes

May decrease during heavy load periods or instability

Range 0 ( 0 hex ) 0Degrees - 55 ( 37 hex ) 55Degrees Default 0 ( 0 hex ) 0Degrees Type Read Only

129

| | |
|---|---|
| **PNU Number** | 25600 ( 6400 hex ) |
| **PNU Name** | i-rated |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Unit Class20 / Class30 Current Rating

Range 17000 ( 4268 hex ) 17A - 2000000 ( 1E8480 hex ) 2000A Default 17000 ( 4268 hex ) 17A Type Read Only

130

| | |
|---|---|
| **PNU Number** | 25664 ( 6440 hex ) |
| **PNU Name** | Trip Class |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 10= Trip Class 10, 20 = Trip Class 20, 30 = Trip Class 30 |

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 "Class30" are selected the Unit current rating (i-Unit) will be reduced to a lower value (i-rated).

Range 10 ( A hex ) Trip Class 10 - 30 ( 1E hex ) Trip Class 30 Default 10 ( A hex ) Trip Class 10 Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

131

| | |
|---|---|
| **PNU Number** | 25728 ( 6480 hex ) |
| **PNU Name** | Motor Current |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

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 | ( 0.5 x PNU25600 ) 10% I-synergyA - ( 1 x PNU25600 ) 100% I-ratedA | Default | ( 1 x PNU25600 ) 100% I-ratedA | Type | Read/Write |
|---|---|---|---|---|---|

132

| | |
|---|---|
| **PNU Number** | 25792 ( 64C0 hex ) |
| **PNU Name** | i-Synergy |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Unit Class10 Current Rating

| Range | 17000 ( 4268 hex ) 17A - 2000000 ( 1E8480 hex ) 2000A | Default | 17000 ( 4268 hex ) 17A | Type | Read Only |
|---|---|---|---|---|---|

133

| | |
|---|---|
| **PNU Number** | 26304 ( 66C0 hex ) |
| **PNU Name** | Low Current Trip Level |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

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"

| Range | ( 0.25 x PNU25728 ) 25% I-motorA - ( 1 x PNU25728 ) 100% I-motorA | Default | ( 0.25 x PNU25728 ) 25% I-motorA | Type | Read/Write |
|---|---|---|---|---|---|

134

| | |
|---|---|
| **PNU Number** | 26368 ( 6700 hex ) |
| **PNU Name** | Low Current Trip Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ms ) |

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"

| Range | 100 ( 64 hex ) 100ms - 9000 ( 2328 hex ) 9000ms | Default | 100 ( 64 hex ) 100ms | Type | Read/Write |
|---|---|---|---|---|---|

135

| | |
|---|---|
| **PNU Number** | 26880 ( 6900 hex ) |
| **PNU Name** | Start Current Limit Level |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

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 | ( 0.5 x PNU25728 ) 50% I-motorA - ( 4.5 x PNU25792 ) 450% I-motorA | Default | ( 3.5 x PNU25728 ) 350% I-motorA | Type | Read/Write |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

136

| | |
|---|---|
| **PNU Number** | 26944 ( 6940 hex ) |
| **PNU Name** | Start Current Limit Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

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'

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 1 ( 1 hex ) 1s | | 600 ( 258 hex ) 600s | | 30 ( 1E hex ) 30s | | Read/Write |

137

| | |
|---|---|
| **PNU Number** | 27584 ( 6BC0 hex ) |
| **PNU Name** | Shearpin Trip Current |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

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 | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | ( 1 x PNU25728 ) 100% I-motorA | | ( 4.5 x PNU25792 ) 450% I-motorA | | ( 4.5 x PNU25792 ) 350% I-motorA | | Read/Write |

138

| | |
|---|---|
| **PNU Number** | 27648 ( 6C00 hex ) |
| **PNU Name** | Shearpin Trip Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ms ) |

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 | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 100 ( 64 hex ) 100ms | | 9000 ( 2328 hex ) 9000ms | | 100 ( 64 hex ) 100ms | | Read/Write |

139

| | |
|---|---|
| **PNU Number** | 28160 ( 6E00 hex ) |
| **PNU Name** | Hand-Auto Control |
| **PNU Format** | |
| **PNU Note** | 0 |

A Hand-Auto selection switch can be connected to Digital Input D1-2I to change the 'Control Method'
This can be used to change the Start / Stop to 'Hand' it the Communications fails

D1-2I = 0 : Control Method is set to "2 -Wire" ( Hand )
D1-2I = 1 : Control Method is set to "Modbus Network" (Auto )

Hand : Input D1-1I = Start / Stop , Input D2-1I = Reset
Auto : PNU 17920 = Start / Stop , PNU 18368 = Reset

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) Off | | 1 ( 1 hex ) On | | 0 ( 0 hex ) On | | Read/Write |

140

| | |
|---|---|
| **PNU Number** | 28224 ( 6E40 hex ) |
| **PNU Name** | Overload Level |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

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

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | ( 0.5 x PNU25728 ) 50% I-motorA | | ( 4.5 x PNU25792 ) 125% I-motorA | | ( 1.15 x PNU25728 ) 115% I-motorA | | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

141

| | |
|---|---|
| **PNU Number** | 28800 ( 7080 hex ) |
| **PNU Name** | Stop Current Limit Level |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

The current in Amps at which the soft stop ramp is not allowed to go above.

Normally set to 350% motor FLC. Increase if motor decelerates too rapidly.

The current limit level will effect actual time to stop the motor.

Range ( 1 x PNU25728 ) 100% I-motorA - ( 4.5 x PNU25792 ) 450% I-motorA Default ( 3.5 x PNU25728 ) 350% I-motorA Type Read/Write

142

| | |
|---|---|
| **PNU Number** | 28864 ( 70C0 hex ) |
| **PNU Name** | Stop Current Limit Time |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 s ) |

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

Range 1 ( 1 hex ) 1s - 300 ( 12C hex ) 300s Default 10 ( A hex ) 10s Type Read/Write

143

| | |
|---|---|
| **PNU Number** | 32000 ( 7D00 hex ) |
| **PNU Name** | Line Frequency |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling (1 = mHz)<br>Freq(Hz) = (Value / 1000) |

The frequency of the 3-phase supply

Range 45000 ( AFC8 hex ) 45Hz - 65000 ( FDE8 hex ) 65Hz Default Not Applicable -Hz Type Read Only

144

| | |
|---|---|
| **PNU Number** | 32064 ( 7D40 hex ) |
| **PNU Name** | Phase Rotation |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Binary value |

Indicates the phase sequence of the incoming supply.

RYB = L1-L2-L3

RBY = L1-L3-L2

Range 0 ( 0 hex ) L1-L2-L3 - 1 ( 1 hex ) L1-L3-L2 Default 0 ( 0 hex ) L1-L2-L3 Type Read Only

145

| | |
|---|---|
| **PNU Number** | 32896 ( 8080 hex ) |
| **PNU Name** | Current Irms |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

The RMS motor current

This is the maximum of the 3 phases.
This value is used for the overload and power calculations

Range 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A Default 0 ( 0 hex ) 0A Type Read Only

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

146

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|---|---|
| **PNU Number** | 32960 ( 80C0 hex ) |
| **PNU Name** | Vrms (Approx) |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 V ) |

The RMS 3-phase supply voltage.

This is the average of the 3 phases.
This value is used for power calculations

This value is derived internally. If a higher level of accuracy is required a "Fixed Voltage" value can be used.

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0V | - | 500 ( 1F4 hex ) 500V | | 0 ( 0 hex ) 0V | | Read Only |

147

| | |
|---|---|
| **PNU Number** | 33024 ( 8100 hex ) |
| **PNU Name** | True Power Factor |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.001 ) |

The True Power Factor

The True Power Factor = ( Displacement Power Factor x Distortion Power Factor )

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 | - | 1000 ( 3E8 hex ) 1 | | 0 ( 0 hex ) 0 | | Read Only |

148

| | |
|---|---|
| **PNU Number** | 33408 ( 8280 hex ) |
| **PNU Name** | Overload |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

The Unit has an "Overload" function that is an electronic equivalent to a thermal overload.
"Overload" displays the overload capacity which is a measure of how close the Unit to tripping on "Overload Trip"
When "Current Irms" is greater than the "Overload Level" the "Overload" increases in accordance with the "Trip Class".
When "Current Irms" is less than "Overload Level" the "Overload" decreases exponentially (if greater than 50%)
When the "Overload" reaches 100% the Unit will trip.
During situations when (i-motor) is equal to (i-Unit) the overload will indicate 50%

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

149

| | |
|---|---|
| **PNU Number** | 33536 ( 8300 hex ) |
| **PNU Name** | I1 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

The RMS current on phase L1

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

150

| | |
|---|---|
| **PNU Number** | 33538 ( 8302 hex ) |
| **PNU Name** | I2 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

The RMS current on phase L2

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

151

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 33540 ( 8304 hex ) | The RMS current on phase L3 | | | | | | | |
| **PNU Name** | I3 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

152

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 34688 ( 8780 hex ) | Total true power | | | | | | | |
| **PNU Name** | True Power P | This is an addition of the 3 phases | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1W)<br>True Power (KW) = (Value / 1000) | Range | 0 ( 0 hex ) 0kW | - | 10000000 ( 989680 hex ) 10000kW | Default | 0 ( 0 hex ) 0kW | Type | Read Only |

153

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 34816 ( 8800 hex ) | Total Apparent Power | | | | | | | |
| **PNU Name** | Apparent Power S | This is an addition of the 3 phases | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1VA)<br>Apparent Power (kVA) = (Value/1000) | Range | 0 ( 0 hex ) 0kVA | - | 10000000 ( 989680 hex ) 10000kVA | Default | 0 ( 0 hex ) 0kVA | Type | Read Only |

154

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 34944 ( 8880 hex ) | Total Reactive power | | | | | | | |
| **PNU Name** | Reactive Power Q | This is an addition of the 3 phases | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1Var)<br>Reactive Power (kVar) = (Value / 1000) | Range | 0 ( 0 hex ) 0kvar | - | 10000000 ( 989680 hex ) 10000kvar | Default | 0 ( 0 hex ) 0kvar | Type | Read Only |

155

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 35008 ( 88C0 hex ) | Indicates the level of potential saving | | | | | | | |
| **PNU Name** | iERS Saving Level | 100% indicates that Unit is saving at its maximum level | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) | Range | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | Default | 0 ( 0 hex ) 0% | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

156

| | |
|---|---|
| **PNU Number** | 35200 ( 8980 hex ) |
| **PNU Name** | Fixed Voltage |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 V ) |

User settable voltage level for power calculations

If required can be used to improve accuracy of power calculations

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 100 ( 64 hex ) 100V | | 500 ( 1F4 hex ) 500V | | 500 ( 1F4 hex ) 100V | | Read/Write |

157

| | |
|---|---|
| **PNU Number** | 35264 ( 89C0 hex ) |
| **PNU Name** | Fixed Voltage |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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.

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) Off | | 1 ( 1 hex ) On | | 0 ( 0 hex ) Off | | Read/Write |

158

| | |
|---|---|
| **PNU Number** | 35840 ( 8C00 hex ) |
| **PNU Name** | Number of Starts |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

The total number of successful starts

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0 | | 4294967295 ( FFFFFFFF hex ) 4294836225 | | 0 ( 0 hex ) 0 | | Read Only |

159

| | |
|---|---|
| **PNU Number** | 35904 ( 8C40 hex ) |
| **PNU Name** | Motor Running Time |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

The total time the motor has been running

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0s | | 4294836225s | | 0s | | Read Only |

160

| | |
|---|---|
| **PNU Number** | 35906 ( 8C42 hex ) |
| **PNU Name** | Control Supply On Time |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 1 ) |

The total time the Unit has been powered up

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0s | | 4294836225s | | 0s | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

161

| | |
|---|---|
| **PNU Number** | 36544 ( 8EC0 hex ) |
| **PNU Name** | HeatSink Temp |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

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 | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

162

| | |
|---|---|
| **PNU Number** | 37184 ( 9140 hex ) |
| **PNU Name** | Ready |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Ready

On : Indicates that the Unit is healthy and ready for a start. Remains on when Running
Off : The Unit has not powered up successfully or failed to reset from a trip

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

163

| | |
|---|---|
| **PNU Number** | 37248 ( 9180 hex ) |
| **PNU Name** | Enabled |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Enabled

On : Indicates that the Unit is enabled and the motor is being controlled. Remains on when Running
Off : The Unit has detected a fault and tripped

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

164

| | |
|---|---|
| **PNU Number** | 37312 ( 91C0 hex ) |
| **PNU Name** | Error |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Error

On : Indicates that the Unit has detected a fault and has shut down.
Off : The Unit is fault free

The fault must be cleared before a reset
To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

165

| | |
|---|---|
| **PNU Number** | 37376 ( 9200 hex ) |
| **PNU Name** | Auto Reset Pending |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Indicates that the Reset Delay counter is counting down

Yes : The Auto Reset Delay is counting down
No : The Auto Reset Delay is not counting down

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) No - 1 ( 1 hex ) Yes | Default | 0 ( 0 hex ) No | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

166

| | |
|---|---|
| **PNU Number** | 37568 ( 92C0 hex ) |
| **PNU Name** | Auto Reset Exceeded |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

Indicates that the maximum number of reset attempts has been reached.

Yes : The number of reset attempts has exceeded the value set
No : The number of reset attempts has not exceeded the value set

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) No - 1 ( 1 hex ) Yes | Default | 0 ( 0 hex ) No | Type | Read Only |
|---|---|---|---|---|---|

167

| | |
|---|---|
| **PNU Number** | 37632 ( 9300 hex ) |
| **PNU Name** | Running |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Running

On : Indicates that the unit has been given a run command and the motor is being controlled.
Off : The Unit has detected a fault and tripped

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

168

| | |
|---|---|
| **PNU Number** | 37632 ( 9300 hex ) |
| **PNU Name** | Running |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Running

On : Indicates that the unit has been given a run command and the motor is being controlled.
Off : The Unit has detected a fault and tripped

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

169

| | |
|---|---|
| **PNU Number** | 37760 ( 9380 hex ) |
| **PNU Name** | End Of Start |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : End Of Start

On : Indicates that the Soft Start ramp has been completed.
Off : The Unit is disabled or ramping down.

To map to digital output refer to PNU11584-PNU11587

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

170

| | |
|---|---|
| **PNU Number** | 37824 ( 93C0 hex ) |
| **PNU Name** | Current Limit |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Current Limit

On : The ramp is being held because "Current Irms" is greater or equal to " Current Limit Level "
Off : The ramp is not being held because " Current Irms " is less than " Current Limit Level "

To map to digital output refer to PNU11584-PNU11588

| Range | 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

171

| | |
|---|---|
| **PNU Number** | 38080 ( 94C0 hex ) |
| **PNU Name** | iERS Active |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : iERS Active

On : Indicates that the Unit is operating in the iERS energy saving Mode.
Off : The iERS saving mode has been disabled either internally or via ModbusPNU 21120

To map to digital output refer to PNU11584-PNU11587

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read Only

172

| | |
|---|---|
| **PNU Number** | 38144 ( 9500 hex ) |
| **PNU Name** | Shearpin |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Shearpin

On : Indicates that the motor current is above the Shearpin Level
Off : Indicates that the motor current is below the Shearpin Level

To map to digital output refer to PNU11584-PNU11587

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read Only

173

| | |
|---|---|
| **PNU Number** | 38208 ( 9540 hex ) |
| **PNU Name** | Low Current |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

STATUS INDICATION : Low Current

On : Indicates that the motor current is below the Low Current Level
Off : Indicates that the motor current is above the Low Current Level

To map to digital output refer to PNU11584-PNU11587

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read Only

174

| | |
|---|---|
| **PNU Number** | 38400 ( 9600 hex ) |
| **PNU Name** | Last Peak Current |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start.

Range 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default 0 ( 0 hex ) 0A | Type Read Only

175

| | |
|---|---|
| **PNU Number** | 38402 ( 9602 hex ) |
| **PNU Name** | Last peak start current -1 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start -1

Range 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default 0 ( 0 hex ) 0A | Type Read Only

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

176

| | |
|---|---|
| **PNU Number** | 38404 ( 9604 hex ) |
| **PNU Name** | Last peak start current -2 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start -2

| Range | 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |
|---|---|---|---|---|---|

177

| | |
|---|---|
| **PNU Number** | 38406 ( 9606 hex ) |
| **PNU Name** | Last peak start current -3 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start -3

| Range | 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |
|---|---|---|---|---|---|

178

| | |
|---|---|
| **PNU Number** | 38408 ( 9608 hex ) |
| **PNU Name** | Last peak start current -4 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start -4

| Range | 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |
|---|---|---|---|---|---|

179

| | |
|---|---|
| **PNU Number** | 38410 ( 960A hex ) |
| **PNU Name** | Last peak start current -5 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start -5

| Range | 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |
|---|---|---|---|---|---|

180

| | |
|---|---|
| **PNU Number** | 38412 ( 960C hex ) |
| **PNU Name** | Last peak start current -6 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful start -6

| Range | 0 ( 0 hex ) 0A - 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

181

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 38414 ( 960E hex ) | Displays the peak current of the last successful start -7 | | | | | | | |
| **PNU Name** | Last peak start current -7 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

182

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 38416 ( 9610 hex ) | Displays the peak current of the last successful start -8 | | | | | | | |
| **PNU Name** | Last peak start current -8 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

183

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 38418 ( 9612 hex ) | Displays the peak current of the last successful start -9 | | | | | | | |
| **PNU Name** | Last peak start current -9 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

184

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 38464 ( 9640 hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

185

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 38467 ( 9643 hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -1 ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

186

| | |
|---|---|
| **PNU Number** | 38470 ( 9646 hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -2 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

187

| | |
|---|---|
| **PNU Number** | 38473 ( 9649 hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -3 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

188

| | |
|---|---|
| **PNU Number** | 38476 ( 964C hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -4 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

189

| | |
|---|---|
| **PNU Number** | 38479 ( 964F hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -5 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

190

| | |
|---|---|
| **PNU Number** | 38482 ( 9652 hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -6 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

191

| | |
|---|---|
| **PNU Number** | 38485 ( 9655 hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -7 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | | | Default | | Type | |
|---|---|---|---|---|---|---|
| | -hh:mm:ss | - -hh:mm:ss | | GMT timehh:mm:ss | | Read Only |

192

| | |
|---|---|
| **PNU Number** | 38488 ( 9658 hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -8 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | | | Default | | Type | |
|---|---|---|---|---|---|---|
| | -hh:mm:ss | - -hh:mm:ss | | GMT timehh:mm:ss | | Read Only |

193

| | |
|---|---|
| **PNU Number** | 38491 ( 965B hex ) |
| **PNU Name** | Last peak start current / Last Temperature / Last Overload -9 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | | | Default | | Type | |
|---|---|---|---|---|---|---|
| | -hh:mm:ss | - -hh:mm:ss | | GMT timehh:mm:ss | | Read Only |

194

| | |
|---|---|
| **PNU Number** | 39040 ( 9880 hex ) |
| **PNU Name** | Last peak stop current |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful stop

| Range | | | Default | | Type | |
|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | - 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

195

| | |
|---|---|
| **PNU Number** | 39042 ( 9882 hex ) |
| **PNU Name** | Last peak stop current -1 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful stop -1

| Range | | | Default | | Type | |
|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | - 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

196

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 39044 ( 9884 hex ) | Displays the peak current of the last successful stop -2 | | | | | | | |
| **PNU Name** | Last peak stop current -2 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

197

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 39046 ( 9886 hex ) | Displays the peak current of the last successful stop -3 | | | | | | | |
| **PNU Name** | Last peak stop current -3 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

198

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 39048 ( 9888 hex ) | Displays the peak current of the last successful stop -4 | | | | | | | |
| **PNU Name** | Last peak stop current -4 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

199

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 39050 ( 988A hex ) | Displays the peak current of the last successful stop -5 | | | | | | | |
| **PNU Name** | Last peak stop current -5 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

200

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 39052 ( 988C hex ) | Displays the peak current of the last successful stop -6 | | | | | | | |
| **PNU Name** | Last peak stop current -6 | | | | | | | | |
| **PNU Format** | 32 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) | Range | 0 ( 0 hex ) 0A | - | 10000000 ( 989680 hex ) 10000A | Default | 0 ( 0 hex ) 0A | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

201

| | |
|---|---|
| **PNU Number** | 39054 ( 988E hex ) |
| **PNU Name** | Last peak stop current -7 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful stop -7

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | | 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

202

| | |
|---|---|
| **PNU Number** | 39056 ( 9890 hex ) |
| **PNU Name** | Last peak stop current -8 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful stop -8

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | | 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

203

| | |
|---|---|
| **PNU Number** | 39058 ( 9892 hex ) |
| **PNU Name** | Last peak stop current -9 |
| **PNU Format** | 32 bit unsigned |
| **PNU Note** | Linear Scaling (1 = 1mA)<br>Current (A) = (Value / 1000) |

Displays the peak current of the last successful stop -9

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0A | | 10000000 ( 989680 hex ) 10000A | | 0 ( 0 hex ) 0A | | Read Only |

204

| | |
|---|---|
| **PNU Number** | 39104 ( 98C0 hex ) |
| **PNU Name** | Last peak stop current ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | -hh:mm:ss | | -hh:mm:ss | | GMT timehh:mm:ss | | Read Only |

205

| | |
|---|---|
| **PNU Number** | 39107 ( 98C3 hex ) |
| **PNU Name** | Last peak stop current -1 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | | - | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | -hh:mm:ss | | -hh:mm:ss | | GMT timehh:mm:ss | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

206

| | |
|---|---|
| **PNU Number** | 39110 ( 98C6 hex ) |
| **PNU Name** | Last peak stop current -2 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

207

| | |
|---|---|
| **PNU Number** | 39113 ( 98C9 hex ) |
| **PNU Name** | Last peak stop current -3 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

208

| | |
|---|---|
| **PNU Number** | 39116 ( 98CC hex ) |
| **PNU Name** | Last peak stop current -4 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

209

| | |
|---|---|
| **PNU Number** | 39119 ( 98CF hex ) |
| **PNU Name** | Last peak stop current -5 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

210

| | |
|---|---|
| **PNU Number** | 39122 ( 98D2 hex ) |
| **PNU Name** | Last peak stop current -6 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

211

| | |
|---|---|
| **PNU Number** | 39125 ( 98D5 hex ) |
| **PNU Name** | Last peak stop current -7 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

212

| | |
|---|---|
| **PNU Number** | 39128 ( 98D8 hex ) |
| **PNU Name** | Last peak stop current -8 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

213

| | |
|---|---|
| **PNU Number** | 39131 ( 98DB hex ) |
| **PNU Name** | Last peak stop current -9 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

214

| | |
|---|---|
| **PNU Number** | 39680 ( 9B00 hex ) |
| **PNU Name** | Last temperature |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

215

| | |
|---|---|
| **PNU Number** | 39681 ( 9B01 hex ) |
| **PNU Name** | Last temperature -1 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start -1

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

216

| | |
|---|---|
| **PNU Number** | 39682 ( 9B02 hex ) |
| **PNU Name** | Last temperature -2 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start -2

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

217

| | |
|---|---|
| **PNU Number** | 39683 ( 9B03 hex ) |
| **PNU Name** | Last temperature -3 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-3

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

218

| | |
|---|---|
| **PNU Number** | 39684 ( 9B04 hex ) |
| **PNU Name** | Last temperature -4 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-4

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

219

| | |
|---|---|
| **PNU Number** | 39685 ( 9B05 hex ) |
| **PNU Name** | Last temperature -5 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-5

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

220

| | |
|---|---|
| **PNU Number** | 39686 ( 9B06 hex ) |
| **PNU Name** | Last temperature -6 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-6

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

221

| | |
|---|---|
| **PNU Number** | 39687 ( 9B07 hex ) |
| **PNU Name** | Last temperature -7 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-7

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

222

| | |
|---|---|
| **PNU Number** | 39688 ( 9B08 hex ) |
| **PNU Name** | Last temperature -8 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-8

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

223

| | |
|---|---|
| **PNU Number** | 39689 ( 9B09 hex ) |
| **PNU Name** | Last temperature -9 |
| **PNU Format** | 16 bit (Highbyte=b11-b8, LowByte=b7-b0)<br>Ta >= 0 b12=0 Ta < 0 b12=1 |
| **PNU Note** | bit12=0 [HighByte*16 + LowByte/16]<br>bit12=1 256-[HighByte*16 + LowByte/16] |

Displays the heatsink temperature at the end of the last successful start-9

| Range | 7872 ( 1EC0 hex ) -20°C - 1280 ( 500 hex ) 80°C | Default | Not Applicable °C | Type | Read Only |
|---|---|---|---|---|---|

224

| | |
|---|---|
| **PNU Number** | 40320 ( 9D80 hex ) |
| **PNU Name** | Last overload |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start

| Range | 0 ( 0 hex ) 0% - 16384 ( 4000 hex ) 100% | Default | 0 ( 0 hex ) 0% | Type | Read Only |
|---|---|---|---|---|---|

225

| | |
|---|---|
| **PNU Number** | 40321 ( 9D81 hex ) |
| **PNU Name** | Last overload-1 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -1

| Range | 0 ( 0 hex ) 0% - 16384 ( 4000 hex ) 100% | Default | 0 ( 0 hex ) 0% | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

226

| | |
|---|---|
| **PNU Number** | 40322 ( 9D82 hex ) |
| **PNU Name** | Last overload-2 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -2

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

227

| | |
|---|---|
| **PNU Number** | 40323 ( 9D83 hex ) |
| **PNU Name** | Last overload-3 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -3

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

228

| | |
|---|---|
| **PNU Number** | 40324 ( 9D84 hex ) |
| **PNU Name** | Last overload-4 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -4

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

229

| | |
|---|---|
| **PNU Number** | 40325 ( 9D85 hex ) |
| **PNU Name** | Last overload-5 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -5

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

230

| | |
|---|---|
| **PNU Number** | 40326 ( 9D86 hex ) |
| **PNU Name** | Last overload-6 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -6

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

231

| | |
|---|---|
| **PNU Number** | 40327 ( 9D87 hex ) |
| **PNU Name** | Last overload-7 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -7

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

232

| | |
|---|---|
| **PNU Number** | 40328 ( 9D88 hex ) |
| **PNU Name** | Last overload-8 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -8

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

233

| | |
|---|---|
| **PNU Number** | 40329 ( 9D89 hex ) |
| **PNU Name** | Last overload-9 |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

Displays the overload level at the end of the last successful start -9

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read Only |

234

| | |
|---|---|
| **PNU Number** | 44864 ( AF40 hex ) |
| **PNU Name** | Trip Sensitivity |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Linear Scaling ( 1 = 0.006104 % ) |

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 | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) 0% | - | 16384 ( 4000 hex ) 100% | | 0 ( 0 hex ) 0% | | Read/Write |

235

| | |
|---|---|
| **PNU Number** | 53762 ( D202 hex ) |
| **PNU Name** | Input Side Phase Loss |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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.

Off : The Unit will attempt to run although the operation may be erratic.
Operating in this mode for prolonged periods may result in SCR failure

| Range | | | | Default | | Type | |
|---|---|---|---|---|---|---|---|
| | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | | 1 ( 1 hex ) On | | Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

236

| | |
|---|---|
| **PNU Number** | 53768 ( D208 hex ) |
| **PNU Name** | Thermal Sensor Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

237

| | |
|---|---|
| **PNU Number** | 53769 ( D209 hex ) |
| **PNU Name** | Shut Down (1) |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

238

| | |
|---|---|
| **PNU Number** | 53770 ( D20A hex ) |
| **PNU Name** | Shut Down (2) |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

239

| | |
|---|---|
| **PNU Number** | 53774 ( D20E hex ) |
| **PNU Name** | Thyristor Firing Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

240

| | |
|---|---|
| **PNU Number** | 53775 ( D20F hex ) |
| **PNU Name** | Current Sensor Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

241

| | |
|---|---|
| **PNU Number** | 53777 ( D211 hex ) |
| **PNU Name** | Motor Side Phase Loss |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

242

| | |
|---|---|
| **PNU Number** | 53781 ( D215 hex ) |
| **PNU Name** | Sensing Fault Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

243

| | |
|---|---|
| **PNU Number** | 53782 ( D216 hex ) |
| **PNU Name** | Fan Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

244

| | |
|---|---|
| **PNU Number** | 53787 ( D21B hex ) |
| **PNU Name** | Low Current Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write

245

| | |
|---|---|
| **PNU Number** | 53790 ( D21E hex ) |
| **PNU Name** | Start Current Limit Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

246

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 53791 ( D21F hex ) | Selects trip or continue if the stop current limit has been active for too long | | | | | | | |
| **PNU Name** | Stop Current Limit Trip | On : The Unit will trip | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off: The stop will continue regardless of the motor current level | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |

247

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 53792 ( D220 hex ) | The Unit has an "Overload" function that is an electronic equivalent to a thermal overload. | | | | | | | |
| **PNU Name** | Overload Trip | On : The Unit will trip when the "Overload" capacity (ModbusPNU 33408) exceeds 100% | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off: The Unit will continue to operate regardless of motor current level | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type | Read/Write |

248

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 53793 ( D221 hex ) | The Shearpin is an electronic equivalent of a mechanical Shearpin | | | | | | | |
| **PNU Name** | Shearpin Trip | On : The Unit will trip. This feature is not active during soft start and soft stop. | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off: The Unit will continue to operate regardless of motor current level | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 1 ( 1 hex ) On | Type | Read/Write |

249

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 53794 ( D222 hex ) | A single PTC motor thermistor or set of PTC motor thermistors can be connected to the PTC terminals. | | | | | | | |
| **PNU Name** | PTC Motor Thermistor Trip | On :The Unit will trip if the motor thermistor exceed its response temperature or the PTC input is open circuit | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off : The Unit will continue to operate. | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) Off | Type | Read/Write |

250

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 53795 ( D223 hex ) | Allows a trip to be forced using one of the digital inputs | | | | | | | |
| **PNU Name** | External Trip | On : Trips when the programmed input is active | | | | | | | |
| **PNU Format** | 8 bit unsigned | Off : External Trip is disabled | | | | | | | |
| **PNU Note** | Binary value | Range | 0 ( 0 hex ) Off | - | 1 ( 1 hex ) On | Default | 0 ( 0 hex ) On | Type | Read/Write |

| | SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|---|
| 251 | **PNU Number** 53796 ( D224 hex )<br>**PNU Name** Communications Trip<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | 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)<br>On :Communication trip enabled.<br>Off : Communication trip disabled.<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write |
| 252 | **PNU Number** 53798 ( D226 hex )<br>**PNU Name** Operation 1 Trip<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Detects if the keypad Board has failed to operate normally<br>On : Operation 1 trip enabled.<br>Off : Operation 1 trip disabled.<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) Off Type Read/Write |
| 253 | **PNU Number** 53799 ( D227 hex )<br>**PNU Name** Operation 2 Trip<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Detects if the logging function has failed to operate normally<br>On : Operation 2 trip enabled.<br>Off : Operation 2 trip disabled.<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) Off Type Read/Write |
| 254 | **PNU Number** 53800 ( D228 hex )<br>**PNU Name** Operation 3 Trip<br>**PNU Format** 8 bit unsigned<br>**PNU Note** Binary value | Detects if the Control Board has failed to operate normally<br>On : Operation 3 trip enabled.<br>Off : Operation 3 trip disabled.<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 1 ( 1 hex ) On Type Read/Write |
| 255 | **PNU Number** 53802 ( D22A hex )<br>**PNU Name** Communications Shutdown<br>**PNU Format**<br>**PNU Note** 0 | This works in conjunction with the 'Communications Trip'.<br>On : If the 'Communication Trip' is turned 'On' the unit will shutdown instead of tripping if the communications fail<br>Off : If the 'Communication Trip' is turned 'On' the unit will trip if the communications fail<br>Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On Default 0 ( 0 hex ) Off Type Read/Write |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

256

| | |
|---|---|
| **PNU Number** | 53803 ( D22B hex ) |
| **PNU Name** | Cover Open Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

For safety purposes the Unit has been designed to trip if the front cover is open

Off : The Unit will continue to operate with the cover open

Range 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

257

| | |
|---|---|
| **PNU Number** | 53804 ( D22C hex ) |
| **PNU Name** | Remote Start Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 1 ( 1 hex ) On | Type Read/Write

258

| | |
|---|---|
| **PNU Number** | 53807 ( D22F hex ) |
| **PNU Name** | L1-L3-L2 Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

259

| | |
|---|---|
| **PNU Number** | 53808 ( D230 hex ) |
| **PNU Name** | L1-L2-L3 Trip |
| **PNU Format** | 8 bit unsigned |
| **PNU Note** | Binary value |

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 0 ( 0 hex ) Off - 1 ( 1 hex ) On | Default 0 ( 0 hex ) Off | Type Read/Write

260

| | |
|---|---|
| **PNU Number** | 59392 ( E800 hex ) |
| **PNU Name** | Control Method |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | 0 = Local, 1 = User, 2 = TwoWire,<br>3 = ThreeWire, 4 = Modbus |

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 0 ( 0 hex ) Local Touch Screen - 4 ( 4 hex ) Modbus Network | Default 0 ( 0 hex ) Local Touch Screen | Type Read/Write

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

261

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60608 ( ECC0 hex ) | Displays the last Fault trip | | | | | | | |
| **PNU Name** | Last Trip | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

262

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60609 ( ECC1 hex ) | Displays the last Fault trip -1 | | | | | | | |
| **PNU Name** | Last Trip -1 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

263

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60610 ( ECC2 hex ) | Displays the last Fault trip -2 | | | | | | | |
| **PNU Name** | Last Trip -2 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

264

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60611 ( ECC3 hex ) | Displays the last Fault trip -3 | | | | | | | |
| **PNU Name** | Last Trip -3 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

265

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60612 ( ECC4 hex ) | Displays the last Fault trip -4 | | | | | | | |
| **PNU Name** | Last Trip -4 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

266

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60613 ( ECC5 hex ) | Displays the last Fault trip -5 | | | | | | | |
| **PNU Name** | Last Trip -5 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

267

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60614 ( ECC6 hex ) | Displays the last Fault trip -6 | | | | | | | |
| **PNU Name** | Last Trip -6 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

268

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60615 ( ECC7 hex ) | Displays the last Fault trip -7 | | | | | | | |
| **PNU Name** | Last Trip -7 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

269

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60616 ( ECC8 hex ) | Displays the last Fault trip -8 | | | | | | | |
| **PNU Name** | Last Trip -8 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

270

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60617 ( ECC9 hex ) | Displays the last Fault trip -9 | | | | | | | |
| **PNU Name** | Last Trip -9 | | | | | | | | |
| **PNU Format** | 16 bit unsigned | | | | | | | | |
| **PNU Note** | Linear Scaling ( 1 =1 )<br>See Trip Code Descriptions | Range | 0 ( 0 hex ) 0 | - | 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

271

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|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60672 ( ED00 hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last Trip ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

272

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60675 ( ED03 hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last Trip -1 ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

273

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60678 ( ED06 hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last Trip -2 ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

274

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60681 ( ED09 hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last Trip -3 ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

275

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PNU Number** | 60684 ( ED0C hex ) | Displays the event time | | | | | | | |
| **PNU Name** | Last Trip -4 ( Time ) | | | | | | | | |
| **PNU Format** | 6 Bytes | | | | | | | | |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) | Range | -hh:mm:ss | - | -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

276

| | |
|---|---|
| **PNU Number** | 60687 ( ED0F hex ) |
| **PNU Name** | Last Trip -5 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

277

| | |
|---|---|
| **PNU Number** | 60690 ( ED12 hex ) |
| **PNU Name** | Last Trip -6 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

278

| | |
|---|---|
| **PNU Number** | 60693 ( ED15 hex ) |
| **PNU Name** | Last Trip -7 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

279

| | |
|---|---|
| **PNU Number** | 60696 ( ED18 hex ) |
| **PNU Name** | Last Trip -8 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

280

| | |
|---|---|
| **PNU Number** | 60699 ( ED1B hex ) |
| **PNU Name** | Last Trip -9 ( Time ) |
| **PNU Format** | 6 Bytes |
| **PNU Note** | Time(ms) since midnight (bytes5,4,3,2) and Days since 01/01/1984 (bytes1,0) |

Displays the event time

| Range | -hh:mm:ss - -hh:mm:ss | Default | GMT timehh:mm:ss | Type | Read Only |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

281

| | |
|---|---|
| **PNU Number** | 62016 ( F240 hex ) |
| **PNU Name** | I/O Status Register |
| **PNU Format** | |
| **PNU Note** | 0 |

Displays the current status of the hardware inputs and Outputs

b0 ( Input DI-1I) b1 (Input D1-2I) b2 (input D2-I1) b3 (undefined)

b4 ( Output 12) b5 ( Output 24) b6 (Output 34) b7 (Output 44)

| Range | 0 ( 0 hex ) 0 - 65535 ( FFFF hex ) 65535 | Default | 0 ( 0 hex ) 0 | Type | Read Only |
|---|---|---|---|---|---|

282

| | |
|---|---|
| **PNU Number** | 62080 ( F280 hex ) |
| **PNU Name** | Reset Defaults |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Binary value |

Restores the Unit to the factory defaults

| Range | 0 ( 0 hex ) No - 1 ( 1 hex ) Yes | Default | 0 ( 0 hex ) No | Type | Read/Write |
|---|---|---|---|---|---|

283

| | |
|---|---|
| **PNU Number** | 62144 ( F2C0 hex ) |
| **PNU Name** | Save Parameters |
| **PNU Format** | 16 bit unsigned |
| **PNU Note** | Binary value |

Saves all Read /Write parameters to non volatile memory

Yes : Parameters are permanently written

No : Parameters remain changed until next power cycle

| Range | 0 ( 0 hex ) No - 1 ( 1 hex ) Yes | Default | 0 ( 0 hex ) No | Type | Read/Write |
|---|---|---|---|---|---|

284

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 101 Input Side<br>Phase Loss |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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 |
|---|---|---|---|---|---|

285

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 102 Input Side<br>Phase Loss |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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 |
|---|---|---|---|---|---|

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

286

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 103 Input Side Phase Loss |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

287

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 104 - 117 Input Side Phase Loss |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

288

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 201 Maximum Temp. Exceeded |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

289

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 208 Thermal Sensor Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

Thermal sensor Failure

The internal temperature sensor has failed

Contact the supplier

Range - Default Type Read Only

290

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 301-308 Thyristor Firing Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 291 | **PNU Number** | Trip Code Descriptions | One or more of the internal control thyristors (SCRs) have failed to turn on properly. (Delta "Firing Mode") | | | | | |
| | **PNU Name** | 350-358 Thyristor Firing Trip | The Unit has detected that the SCRs are not operating as expected. | | | | | |
| | **PNU Format** | | Check all incoming and outgoing connections. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 292 | **PNU Number** | Trip Code Descriptions | One or all of the phases are missing on the motor side during the instant of start up | | | | | |
| | **PNU Name** | 401 Motor Side Phase Loss | T1 T2 or T3 phase are missing or at a very low level. | | | | | |
| | **PNU Format** | | 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. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 293 | **PNU Number** | Trip Code Descriptions | One or all of the phases are missing on the motor side during the instant of start up when the motor being controlled | | | | | |
| | **PNU Name** | 402-403 Motor Side Phase Loss | T1 T2 or T3 phase are missing or at a very low level. | | | | | |
| | **PNU Format** | | Check all incoming and outgoing connections. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 294 | **PNU Number** | Trip Code Descriptions | The internal control supply of the Unit level has fallen to a low level | | | | | |
| | **PNU Name** | 601 Control Voltage Too Low | Can be caused by a weak 24VDC control supply. | | | | | |
| | **PNU Format** | | Ensure 24VDC supply meets the requirements specified in the Quick Start Guide. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 295 | **PNU Number** | Trip Code Descriptions | One or more of the internal control thyristors (SCRs) have failed to turn on properly. | | | | | |
| | **PNU Name** | 701-710 Sensing Fault Trip | The Unit has detected that the SCRs are not operating as expected. | | | | | |
| | **PNU Format** | | Check connections all incoming and outgoing connections. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 296 | **PNU Number** | Trip Code Descriptions | One or more of the internal cooling fans has failed | | | | | |
| | **PNU Name** | 801-802 Fan Problem | To ensure the heatsink is cooled sufficiently the Unit Will trip if the fans fail to operate | | | | | |
| | **PNU Format** | | Check Unit fans for signs of damage or contamination | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 297 | **PNU Number** | Trip Code Descriptions | One or more of the internal control thyristors (SCRs) have failed short circuit | | | | | |
| | **PNU Name** | 1001 Short Circuit Thyristor | The Unit has detected that the SCRs are not operating as expected. | | | | | |
| | **PNU Format** | | ISOLATE SUPPLY.<br>Check by measuring the resistance between L1-T1 L2-T2 L3-T3 ( Anything < 10R is assumed short circuit) | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 298 | **PNU Number** | Trip Code Descriptions | The motor current has been lower than the low trip level for the low trip time | | | | | |
| | **PNU Name** | 1101 Low Current Trip | This trip is not active during soft start and soft stop and is "off" by default. | | | | | |
| | **PNU Format** | | If the low current trip is not required turn "off" in "Trip Settings". | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 299 | **PNU Number** | Trip Code Descriptions | The motor has been held in current limit longer than the "Start current limit Time" | | | | | |
| | **PNU Name** | 1201 Current Limit Timeout Trip | It is likely that the current limit level has been set too low for the application. | | | | | |
| | **PNU Format** | | Increase the current limit level or timeout period. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |
| 300 | **PNU Number** | Trip Code Descriptions | The motor has been held in current limit longer than the "Stop current limit Time" | | | | | |
| | **PNU Name** | 1202 Current Limit Timeout Trip | It is likely that the current limit level has been set too low for the application. | | | | | |
| | **PNU Format** | | Increase the current limit level or timeout period. | | | | | |
| | **PNU Note** | The Trip Number shown in PNU Name is a decimal value | Range | - | Default | | Type | Read Only |

| SWI-SGY-USB-V5952<br>[ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

301

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1301 Overload Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

302

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1302 Overload Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

303

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1401 Shearpin Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

304

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1501 PTC Thermistor Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

305

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1701 Communications Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

306

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1801-1802<br>Bypass Relay Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

307

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1803 Bypass<br>Relay Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

308

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 1901 Cover<br>Open, Close to Enable Motor Start |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

309

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2001-2003<br>Remote Start is Enabled |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

310

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2101 Rotation L1<br>L2 L3 Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

| SWI-SGY-USB-V5952 [ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|

311

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2102 Rotation L1<br>L3 L2 Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

312

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2201-2299 2701-2799<br>MPU Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

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

313

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2301-2303<br>Current Sensor Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

Current sensor failure

One or more of the internal sensors used to measure current has failed or is reading a low value.

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

314

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2401-2499<br>Operation 3 Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

Fail Safe operation

A process associated with the Control Board has been affected and is unable to recover automatically

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

315

| | |
|---|---|
| **PNU Number** | Trip Code Descriptions |
| **PNU Name** | 2501-2599<br>Operation 1 Trip |
| **PNU Format** | |
| **PNU Note** | The Trip Number shown in PNU Name is a decimal value |

Fail Safe operation

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

| SWI-SGY-USB-V5952<br>[ SGY1052900 SGY2095200 SGY3023400 ] | Description<br>Text in quotes refer to a Synergy parameter or function, for example "Start Time"<br>i-synergy = synergy Class 10 current, i-rated = synergy Class20 / Class30 current, i-motor = motor current |
|---|---|