MOTORTRONICS™
Solid State AC Motor Control

VMX- Synergy Plus Modbus Parameter Tables

Software Version : SWI-SGP-USB-V0101

PNU		Description					
PNU Number	128 (80 hex)	Set to correspond with Unit connection to the Motor. Refer to connection diagrams in the manual. In-Line : The Unit is connected in-line with a delta or star connected motor. In-Delta : The Unit is connected inside the Delta of the motor. The iERS function is disabled					
PNU Name	Firing Mode						
PNU Format	8 bit unsigned						
PNU Note	Binary value	Range	0 (0 hex) In-Line - 1 (1 hex) In-Delta	Default	0 (0 hex) In-Line	Type	Read/Write
PNU Number	192 (C0 hex)	Allows the Unit to be retro-fitted into "Delta" applications that previously used QFE / XFE (5MC) On : Operates in QFE / XFE (5MC) delta compatibility mode. Off : Operates normally. Refer to Unit Delta connection diagram in the manual.					
PNU Name	Legacy Delta Mode						
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
PNU Number	193 (C1 hex)	Allows the overload percentage to displayed as either 0% to 100% (IEC model) or 100% to 0% (ANSI model). On : Overload Capacity shown is 100% (Empty) to 0% (Full) Off : Overload Capacity shown is 0% (Empty) to 100% (Full)					
PNU Name	Legacy OL Display						
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
PNU Number	194 (C2 hex)	Reserved for future development					
PNU Name	Legacy 2						
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
PNU Number	195 (C3 hex)	Reserved for future development					
PNU Name	Legacy 3						
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

PNU		Description					
PNU Number	196 (C4 hex)	Reserved for future development					
PNU Name	Legacy 4						
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
PNU Number	320 (140 hex)	Applies a short duration torque pulse to dislodge 'sticky' loads					
PNU Name	Kick Start	On : The torque pulse is applied at start-up when complete the torque drops to the "Start Pedestal"					
PNU Format	8 bit unsigned	Off: The initial starting torque is defined by the "Start Pedestal"					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	0 (0 hex) Off	Type	Read/Write
PNU Number	384 (180 hex)	This feature is only available for ANSI models When selected it allows a different overload class to be selected during the running period.					
PNU Name	Trip Class Run	On : The overload will use the "Trip Class " selection when Starting "Trip Class Run Value" selection when Running					
PNU Format	8 bit unsigned	On : The overload will use the " Trip class " selection for Starting and Running					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	0 (0 hex) Off	Type	Read/Write
PNU Number	448 (1C0 hex)	Dynamically tracks the thermal capacity needed for a successful restart after an overload trip. It averages the thermal capacity consumed in the previous three successful starts, and calculates a thermal capacity to Start.					
PNU Name	Dynamic Reset	On : If there is insufficient capacity to start the unit will be "Inhibited" from starting					
PNU Format	8 bit unsigned	Off : If there is insufficient capacity to start the unit will not be "Inhibited" from starting. If there is insufficient capacity the unit will trip on "overload" before the end of the start					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	0 (0 hex) Off	Type	Read/Write
PNU Number	640 (280 hex)	Percentage of the supply voltage applied to the motor during the 'kick' period					
PNU Name	Kick Start Pedestal	Increase to provide more torque If the load fails to break away.					
PNU Format	16 bit unsigned	Decrease if the motor accelerates too quickly.					
PNU Note	Linear Scaling (1 = 0.01 %)	Range	3000 (BB8 hex) 30% - 8000 (1F40 hex) 80%	Default	7500 (1D4C hex) 75%	Type	Read/Write

PNU		Description						
PNU Number	704 (2C0 hex)	Percentage of the supply voltage applied to motor at the beginning of the soft start.						
PNU Name	Start Pedestal	Increase to provide more torque If the load fails to break away.						
PNU Format	16 bit unsigned	Decrease if the motor accelerates too quickly.						
PNU Note	Linear Scaling (1 = 0.01 %)	Range	1000 (3E8 hex) 10% - 10000 (2710 hex) 100%	Default	2000 (7D0 hex) 20%	Type	Read/Write	
PNU Number	768 (300 hex)	Adjusts the response of the "Automatic End Start (3)"						
PNU Name	Rate End Start (3)	Increase to provide a greater smoothing effect If there are torque fluctuations that occur during the soft start.						
PNU Format	16 bit unsigned	When set to zero the smoothing is effectively disabled.						
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0% - 10000 (2710 hex) 100%	Default	7500 (1D4C hex) 75%	Type	Read/Write	
PNU Number	896 (380 hex)	Percentage of the supply voltage applied to the motor at the end of the soft stop						
PNU Name	Stop Pedestal	Increase if the motor crawls at the end of the soft stop.						
PNU Format	16 bit unsigned	Decrease if a greater soft-stop effect is required at the end of the ramp.						
PNU Note	Linear Scaling (1 = 0.01 %)	Range	1000 (3E8 hex) 10% - 4000 (FA0 hex) 40%	Default	1000 (3E8 hex) 10%	Type	Read/Write	
PNU Number	7040 (1B80 hex)	Time that the torque pulse is applied to load						
PNU Name	Kick Start Time	Increase to provide more torque If the load fails to break away.						
PNU Format	16 bit unsigned	Decrease if the motor accelerates too quickly.						
PNU Note	Linear Scaling (1 = 1 ms)	Range	10 (A hex) 10ms - 2000 (7D0 hex) 2000ms	Default	100 (64 hex) 100ms	Type	Read/Write	
PNU Number	7104 (1BC0 hex)	Time taken to soft start from the "Start Pedestal" to the end of the start						
PNU Name	Start Time	Normally set between 5 and 30 seconds. Actual time to get to full voltage depends on the "Start Current Limit Level".						
PNU Format	16 bit unsigned	If set too long the motor can be at speed before the end of the time set. Refer to "Automatic End Start"						
PNU Note	Linear Scaling (1 = 1 s)	Range	1 (1 hex) 1s - 300 (12C hex) 300s	Default	10 (A hex) 10s	Type	Read/Write	

PNU		Description						
PNU Number	7296 (1C80 hex)	The time taken to soft stop from full voltage or the iERS level to the 'Stop Pedestal'						
PNU Name	Stop Time	Normally set between 15 and 60 seconds. Actual time to get to 'Stop Pedestal' depends on the "Stop Current Limit Level".						
PNU Format	16 bit unsigned	If set too long the motor may reach zero speed before the end of the time set. Refer to "Automatic End Stop"						
PNU Note	Linear Scaling (1 = 1 s)	Range	0 (0 hex) 0s	-	300 (12C hex) 300s	Default	0 (0 hex) 0s	Type Read/Write
PNU Number	7360 (1CC0 hex)	The time from the End of the start to the point where the iERS saving mode becomes active.						
PNU Name	Dwell Time	Normally set to 5 seconds to ensure the motor is at full speed before the iERS saving becomes active						
PNU Format	16 bit unsigned	Increase to allow time for the motor to stabilise.						
PNU Note	Linear Scaling (1 = 1 s)	Range	1 (1 hex) 1s	-	300 (12C hex) 300s	Default	5 (5 hex) 5s	Type Read/Write
PNU Number	8320 (2080 hex)	Time allowed for external contactors to operate before starting						
PNU Name	Contactor Delay	Increase if contactors are driven by buffer relays or motor trips on phase loss when start signal applied						
PNU Format	16 bit unsigned	Decrease if response to start signal needs to be improved						
PNU Note	Linear Scaling (1 = 1 ms)	Range	20 (14 hex) 20ms	-	60000 (EA60 hex) 60000ms	Default	160 (A0 hex) 160ms	Type Read/Write
PNU Number	8960 (2300 hex)	Defines the physical function of the analogue output (AO)						
PNU Name	Analogue Output Type	0-10V : The output voltage varies from 0 to 10V						
PNU Format	8 bit unsigned	4-20mA : The output current varies from 4 to 20mA						
PNU Note	Binary value	Range	0 (0 hex) 0 - 10V	-	1 (1 hex) 4 - 20mA	Default	0 (0 hex) 0 - 10V	Type Read/Write
PNU Number	9024 (2340 hex)	Allows the Analogue output to be mapped to different PNU functions						
PNU Name	Select Function	The output will change in proportion with the selected function						
PNU Format	16 bit unsigned	By default the output will be at a maximum when the selected function equals its maximum value						
PNU Note	514=Imeasued, 522=Overload, 161=OverloadSCR, 542=Ptotal	Range	0 (0 hex) Off	-	999 (3E7 hex) End of list	Default	0 (0 hex) Off	Type Read/Write

PNU		Description						
PNU Number	9088 (2380 hex)	Allows the selected function to be scaled						
PNU Name	Scaling Level	The output will change in proportion with the selected function						
PNU Format	16 bit unsigned	The output will be at a maximum when the selected function equals the "Scaling Level"						
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) Max value %	Default	0 (0 hex) 0%	Type Read/Write
PNU Number	9152 (23C0 hex)	The value of the Analogue output						
PNU Name	Analogue Output Value	The internal Digital to analogue converter is 10 bit.						
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1)	Range	0 (0 hex) 0	-	1024 (400 hex) 1024	Default	0 (0 hex) 0	Type Read Only
PNU Number	9600 (2580 hex)	Defines the function of the analogue input (AI)						
PNU Name	Analogue Input Type	0-10V : The input voltage varies from 0-10V						
PNU Format	8 bit unsigned	4-20mA : The input varies from 4 to 20mA						
PNU Note	Binary value	Range	0 (0 hex) 0 - 10V	-	1 (1 hex) 4 - 20mA	Default	0 (0 hex) 0 - 10V	Type Read/Write
PNU Number	9664 (25C0 hex)	Allows the Analogue input to be mapped to different functions						
PNU Name	Select Function	The selected function will change in proportion with the input						
PNU Format	16 bit unsigned	By default the function will be at its maximum when the input is at it maximum						
PNU Note	420=Current Limit Start, 431=I Shearpin, 441=I Overload	Range	0 (0 hex) Off	-	999 (3E7 hex) End of list	Default	0 (0 hex) Off	Type Read/Write
PNU Number	9728 (2600 hex)	Allows the selected function to be scaled						
PNU Name	Scaling Level	The selected function will change in proportion with the input						
PNU Format	16 bit unsigned	The function will be at its "Scaling Level" when the input is at its maximum						
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) Max value %	Default	0 (0 hex) Max value %	Type Read/Write

PNU		Description						
PNU Number	9792 (2640 hex)	The value of the analogue Input						
PNU Name	Analogue Input Value	The internal Analogue to Digital converter is 10 bit.						
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1)	Range	0 (0 hex) 0 - 1024 (400 hex) 1024		Default	0 (0 hex) 0	Type	Read Only
PNU Number	10432 (28C0 hex)	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)						
PNU Name	Motor Thermistor	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)						
PNU Format	16 bit unsigned	The value will increase rapidly when the motor thermistors approach their nominal temperature. If thermistors are connected the "Thermistor trip" should be turned "on"						
PNU Note	Linear Scaling (1 = 1)	Range	0 (0 hex) 0 - 1024 (400 hex) 1024		Default	0 (0 hex) 1024	Type	Read Only
PNU Number	10880 (2A80 hex)	The digital inputs D1-1I D1-2I D2-1I D2-2I are designed to work with a range of control supplies 230V : 'Active high level' Input voltage must be in the range 195.5V - 253V						
PNU Name	Digital Input Voltage	110V : 'Active high level' Input voltage must be in the range 93.5V - 132V 24V : 'Active high level ' input voltage must be in the range 20.4V-26.4V						
PNU Format	16 bit unsigned	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.						
PNU Note	0=230V, 1=110V, 2=24V	Range	0 (0 hex) 230V - 2 (2 hex) 24VDC		Default	0 (0 hex) 230V	Type	Read/Write
PNU Number	10944 (2AC0 hex)	Allows the Digital input (D1-1I) to be mapped to different functions						
PNU Name	Select Function	The selected function will change in proportion with the input						
PNU Format	16 bit unsigned	Digital inputs can only be mapped if the "Control Method" is set to "User Programmable"						
PNU Note	280=Start/Stop, 285=FreezeRamp, 287=Reset, 330=iErs,295=ExternalTrip	Range	0 (0 hex) Off - 999 (3E7 hex) End of list		Default	280 (118 hex) Start/Stop	Type	Read/Write
PNU Number	10945 (2AC1 hex)	Allows the Digital input (D1-2I) to be mapped to different functions						
PNU Name	Select Function	The selected function will change in proportion with the input						
PNU Format	16 bit unsigned	Digital inputs can only be mapped if the "Control Method" is set to "User Programmable"						
PNU Note	280=Start/Stop, 285=FreezeRamp, 287=Reset, 330=iErs,295=ExternalTrip	Range	0 (0 hex) Off - 999 (3E7 hex) End of list		Default	0 (0 hex) Off	Type	Read/Write

PNU	Description
PNU Number 10946 (2AC2 hex) **PNU Name** Select Function **PNU Format** 16 bit unsigned **PNU Note** 280=Start/Stop, 285=FreezeRamp, 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
PNU Number 10947 (2AC3 hex) **PNU Name** Select Function **PNU Format** 16 bit unsigned **PNU Note** 280=Start/Stop, 285=FreezeRamp, 287=Reset, 330=iErs,295=ExternalTrip	Allows the Digital input (D2-2I) 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 287 (11F hex) Off Type Read/Write
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 digital output will change in accordance with the selected function Range 0 (0 hex) Off - 999 (3E7 hex) End of list Default 583 Error Type Read/Write
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/O (24)) to be mapped to different functions The digital output will change in accordance with the selected function Range 0 (0 hex) Off - 999 (3E7 hex) End of list Default 583 Error Type Read/Write
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/O (34)) to be mapped to different functions The digital output will change in accordance with the selected function Range 0 (0 hex) Off - 999 (3E7 hex) End of list Default 588 Running Type Read/Write

PNU		Description						
PNU Number	11587 (2D43 hex)	Allows the Digital output (N/O (44)) to be mapped to different functions						
PNU Name	Select Function	The digital output will change in accordance with the selected function						
PNU Format	16 bit unsigned							
PNU Note	581=Rdy,582=En,583=Error,588=Running, 590=EndOfStart,591=C/L,595=iErsActive	Range	0 (0 hex) Off - 999 (3E7 hex) End of list	Default	590 End Of Start	Type	Read/Write	
PNU Number	11588 (2D44 hex)	Allows the Digital output (N/O (54)) to be mapped to different functions						
PNU Name	Select Function	The digital output will change in accordance with the selected function						
PNU Format	16 bit unsigned							
PNU Note	581=Rdy,582=En,583=Error,588=Running, 590=EndOfStart,591=C/L,595=iErsActive	Range	0 (0 hex) Off - 999 (3E7 hex) End of list	Default	590 Running	Type	Read/Write	
PNU Number	12800 (3200 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 7 (MSB)	Range	0 (0 hex) 0 - 255 (FF hex) 255	Default	Not Applicable	Type	Read Only	
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	
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	

PNU		Description						
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
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
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
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
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

PNU		Description						
PNU Number	12928 (3280 hex)	The Raw 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	
PNU Number	13120 (3340 hex)	Diagnostic parameter						
PNU Name	Service Code	For Internal use only						
PNU Format								
PNU Note		Range	-	Default		Type		
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	
PNU Number	14080 (3700 hex)	Allows the user to check the state of the Modbus communication network. 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	
PNU Number	14144 (3740 hex)	The unit is configured to start and stop when the main contactor opens and closes 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 a zero stop time is set some faults will be ignored when main contactor opens.						
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	

PNU		Description						
PNU Number	14720 (3980 hex)	Allows the time to be changed to 'local' time By default the time is set to GMT						
PNU Name	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/Write
PNU Number	15808 (3DC0 hex)	Communications trip Timeout period To prevent a 'Communications Trip' (If enabled) the bus must be kept active. To keep the bus active there must be at least one Modbus read or write (any PNU) during the "Timeout ms" period						
PNU Name	Timeout ms							
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
PNU Number	15809 (3DC1 hex)	Keypad Communications trip Timeout period When enabled the unit will trip if there is a loss of communication greater than the "Timeout ms" period						
PNU Name	Timeout ms							
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
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
PNU Number	16064 (3EC0 hex)	Sets the serial communications baud rate The available baud rates are 9600 19200 38400 57600 or 115200						
PNU Name	Baud Rate							
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

PNU		Description						
PNU Number	16128 (3F00 hex)	Sets the serial communications parity bit						
PNU Name	Parity	The available parity options are None Even Odd						
PNU Format	16 bit unsigned	Also sets the stop bits. No parity uses 2 stop bits. Odd or even parity uses 1 stop bit						
PNU Note	0=None, 1=Even, 2=Odd	Range	0 (0 hex) None - 2 (2 hex) Odd	Default	1 (1 hex) Even	Type	Read/Write	
PNU Number	17600 (44C0 hex)	Used to arrange Modbus Parameters into groups						
PNU Name	Modbus Alias Address Register 0	Holds the address of a Modbus Parameter						
PNU Format		Refer to User Manual for more details						
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write	
PNU Number	17601 (44C1 hex)	Used to arrange Modbus Parameters into groups						
PNU Name	Modbus Alias Address Register 1	Holds the address of a Modbus Parameter						
PNU Format		Refer to User Manual for more details						
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write	
PNU Number	17602 (44C2 hex)	Used to arrange Modbus Parameters into groups						
PNU Name	Modbus Alias Address Register 2	Holds the address of a Modbus Parameter						
PNU Format		Refer to User Manual for more details						
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write	
PNU Number	17603 (44C3 hex)	Used to arrange Modbus Parameters into groups						
PNU Name	Modbus Alias Address Register 3	Holds the address of a Modbus Parameter						
PNU Format		Refer to User Manual for more details						
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write	

PNU		Description					
PNU Number	17604 (44C4 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 4	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17605 (44C5 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 5	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17606 (44C6 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 6	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17607 (44C7 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 7	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17608 (44C8 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 8	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write

PNU		Description					
PNU Number	17609 (44C9 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 9	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17610 (44CA hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 10	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17611 (44CB hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 11	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17612 (44CC hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 12	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17613 (44CD hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Address Register 13	Holds the address of a Modbus Parameter					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read/Write

PNU	Description
PNU Number 17614 (44CE hex)	Used to arrange Modbus Parameters into groups
PNU Name Modbus Alias Address Register 14	Holds the address of a Modbus Parameter
PNU Format	Refer to User Manual for more details
PNU Note	Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read/Write
PNU Number 17615 (44CF hex)	Used to arrange Modbus Parameters into groups
PNU Name Modbus Alias Address Register 15	Holds the address of a Modbus Parameter
PNU Format	Refer to User Manual for more details
PNU Note	Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read/Write
PNU Number 17664 (4500 hex)	Used to arrange Modbus Parameters into groups
PNU Name Modbus Alias Data Register 0	Holds the data for alias PNU 17600
PNU Format	Refer to User Manual for more details
PNU Note	Range 0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225 Default 0 (0 hex) 0 Type Read/Write
PNU Number 17666 (4502 hex)	Used to arrange Modbus Parameters into groups
PNU Name Modbus Alias Data Register 1	Holds the data for alias PNU 17601
PNU Format	Refer to User Manual for more details
PNU Note	Range 0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225 Default 0 (0 hex) 0 Type Read/Write
PNU Number 17668 (4504 hex)	Used to arrange Modbus Parameters into groups
PNU Name Modbus Alias Data Register 2	Holds the data for alias PNU 17602
PNU Format	Refer to User Manual for more details
PNU Note	Range 0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225 Default 0 (0 hex) 0 Type Read/Write

PNU		Description					
PNU Number	17670 (4506 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 3	Holds the data for alias PNU 17603					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17672 (4508 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 4	Holds the data for alias PNU 17604					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17674 (450A hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 5	Holds the data for alias PNU 17605					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17676 (450C hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 6	Holds the data for alias PNU 17606					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17678 (450E hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 7	Holds the data for alias PNU 17607					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write

PNU		Description					
PNU Number	17680 (4510 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 8	Holds the data for alias PNU 17608					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17682 (4512 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 9	Holds the data for alias PNU 17609					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17684 (4514 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 10	Holds the data for alias PNU 17610					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17686 (4516 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 11	Holds the data for alias PNU 17611					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17688 (4518 hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 12	Holds the data for alias PNU 17612					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write

PNU		Description					
PNU Number	17690 (451A hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 13	Holds the data for alias PNU 17613					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17692 (451C hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 14	Holds the data for alias PNU 17614					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17694 (451E hex)	Used to arrange Modbus Parameters into groups					
PNU Name	Modbus Alias Data Register 15	Holds the data for alias PNU 17615					
PNU Format		Refer to User Manual for more details					
PNU Note		Range	0 (0 hex) 0 - 4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read/Write
PNU Number	17920 (4600 hex)	CONTROL COMMAND : Start / Stop					
PNU Name	Start/Stop	On : Starts the Unit Off : Stops or Soft stops the Unit					
PNU Format	8 bit unsigned	To map to digital input refer to PNU10944-PNU10946					
PNU Note	Binary value	Range	0 (0 hex) (Soft) Stop - 1 (1 hex) Start	Default	0 (0 hex) (Soft) Stop	Type	Read/Write
PNU Number	18240 (4740 hex)	CONTROL COMMAND : Freeze Ramp					
PNU Name	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.					
PNU Format	8 bit unsigned	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					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	0 (0 hex) Off	Type	Read/Write

PNU	Description
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
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
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 motor 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 Full User Manual for more details. Range 0 (0 hex) Default - 65535 (FFFF hex) End of list Default 0 (0 hex) Default Type Read/Write
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
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

PNU		Description
PNU Number	19968 (4E00 hex)	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
PNU Name	Automatic End Start (1)	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	20032 (4E40 hex)	Automatically controls the time taken for the motor to start On : The ramp time is shortened if torque fluctuations occur 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
PNU Name	Automatic End Start (3)	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	20160 (4EC0 hex)	Automatically controls the soft stop to suit the application. This feature is particularly useful with pumping applications On : If the motor is lightly loaded it decelerates rapidly to the point where the soft stop becomes useful. 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
PNU Name	Automatic Stop	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	20224 (4F00 hex)	Automatically controls the soft stop to eliminate oscillations that can occur towards the end of the ramp On : The soft stop is adjusted when oscillations are detected. Refer to "Auto smoothing Level" 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
PNU Name	Auto Smooth Stop	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	20352 (4F80 hex)	Automatically controls the torque applied to the motor during the soft start. On : The torque is adjusted to suit the load. 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
PNU Name	Automatic Ramp	
PNU Format	8 bit unsigned	
PNU Note	Binary value	

PNU	Description
PNU Number 20416 (4FC0 hex) **PNU Name** Automatic End Stop **PNU Format** 8 bit unsigned **PNU Note** Binary value	Automatically controls the "Stop Time" On : The ramp time is shortened if the motor reaches a very low speed before the end of the "Stop Time" 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
PNU Number 20480 (5000 hex) **PNU Name** Automatic Impact Load **PNU Format** 8 bit unsigned **PNU Note** Binary value	Automatically controls the maximum iERS saving level. On : The maximum iERS saving level ("BackStop") is reset to maximum during each load cycle. Off : The saving potential may be reduced on applications with heavy load cycles. Such as injection moulding machines. Range 0 (0 hex) Off - 1 (1 hex) On Default 0 (0 hex) Off Type Read/Write
PNU Number 20608 (5080 hex) **PNU Name** Automatic Stop Profile **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Adjusts the response of the "Automatic Stop" Increase if the motor speed doesn't drop quickly enough. When the value is set to zero the "Automatic Stop" is effectively disabled Range 0 (0 hex) 0% - 10000 (2710 hex) 100% Default 5000 (1388 hex) 50% Type Read/Write
PNU Number 20672 (50C0 hex) **PNU Name** Auto Smoothing Level **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Adjusts the response of the "Automatic smoothing" Increase to provide a greater smoothing effect If there are torque fluctuations that occur during the soft stop. When set to zero the smoothing is effectively disabled. Range 1000 (3E8 hex) 10% - 10000 (2710 hex) 100% Default 5000 (1388 hex) 50% Type Read/Write
PNU Number 20736 (5100 hex) **PNU Name** Auto Reset **PNU Format** 16 bit unsigned **PNU Note** Binary value	Enables the Auto Reset Feature On : The Auto Reset feature is Enabled Off : The Auto Reset feature is disabled and all counters will be re-initialised Range 0 (0 hex) Off - 1 (1 hex) On Default 0 (0 hex) Off Type Read/Write

PNU	Description
PNU Number 20737 (5101 hex) **PNU Name** Reset Delay **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 1 s)	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 If this is set to zero at any point the Auto Reset feature will terminate and the counters will be re-initialised When the delay is active the Restart Pending parameter is set and the time remaining can be viewed in the monitor menu. Range 0 (0 hex) 0s - 7200 (1C20 hex) 7200s Default 0 (0 hex) 0s Type Read/Write
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 0 (0 hex) 0 - 10 (A hex) 10 Default 0 (0 hex) 0 Type Read/Write
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 0 (0 hex) 0s - 7200 (1C20 hex) 7200s Default 600 (258 hex) 600s Type Read/Write
PNU Number 20801 (5141 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 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write
PNU Number 20802 (5142 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 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write

PNU		Description					
PNU Number	20803 (5143 hex)	Allows the user to select whether the unit will auto reset if a Thyristor Firing Trip occurs					
PNU Name	Thyristor Firing	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
PNU Number	20804 (5144 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.					
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
PNU Number	20806 (5146 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.					
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
PNU Number	20807 (5147 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.					
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
PNU Number	20808 (5148 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.					
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

PNU		Description					
PNU Number	20811 (514B 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.					
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
PNU Number	20812 (514C 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
PNU Number	20813 (514D hex)	Allows the user to select whether the unit will auto reset if a 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
PNU Number	20814 (514E 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
PNU Number	20815 (514F 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

PNU		Description
PNU Number	20816 (5150 hex)	Allows the user to select whether the unit will auto reset if a 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
PNU Number	20817 (5151 hex)	Allows the user to select whether the unit will auto reset if a Communications Trip occurs
PNU Name	Communications	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
PNU Number	20818 (5152 hex)	Allows the user to select whether the unit will auto reset if a Bypass Trip occurs
PNU Name	Bypass	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
PNU Number	20821 (5155 hex)	Allows the user to select whether the unit will auto reset if a Phase Rotation Trip occurs
PNU Name	Phase Rotation	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
PNU Number	20822 (5156 hex)	Allows the user to select whether the unit will auto reset if a Operation 4 Trip occurs
PNU Name	Operation 4	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

PNU		Description					
PNU Number	20823 (5157 hex)	Allows the user to select whether the unit will auto reset if a Current Sensor Trip occurs					
PNU Name	Current Sensor	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
PNU Number	20824 (5158 hex)	Allows the user to select whether the unit will auto reset if a Operation 2 Trip occurs					
PNU Name	Operation 2	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
PNU Number	20826 (515A hex)	Allows the user to select whether the unit will auto reset if a Operation 1 Trip occurs					
PNU Name	Operation 1	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
PNU Number	20827 (515B hex)	Allows the user to select whether the unit will auto reset if a Operation 5 Trip occurs					
PNU Name	Operation 5	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
PNU Number	20827 (515B hex)	Allows the user to select whether the unit will auto reset if a Operation 5 Trip occurs					
PNU Name	Operation 5	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

PNU	Description
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 0 (0 hex) 0s - 7200 (1C20 hex) 7200s Default 0 (0 hex) 0s Type Read Only
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 0 (0 hex) 0 - 10 (A hex) 10 Default 0 (0 hex) 0 Type Read Only
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 0 (0 hex) 0s - 7200 (1C20 hex) 7200s Default 600 (258 hex) 600s Type Read Only
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 100 (64 hex) 100 - 2700 (A8C hex) 2700 Default 0 (0 hex) 0 Type Read Only
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 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) Off Type Read/Write

PNU	Description
PNU Number 21184 (52C0 hex) **PNU Name** iERS Rate **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	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 0 (0 hex) 0% - 10000 (2710 hex) 100% Default 2500 (9C4 hex) 25% Type Read/Write
PNU Number 21320 (5348 hex) **PNU Name** Start Saving Level **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	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 5000 (1388 hex) 50% I-motorA - 8000 (1F40 hex) 80% I-motorA Default 8000 (1F40 hex) 80% I-motorA Type Read Only
PNU Number 21376 (5380 hex) **PNU Name** iERS Level **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Determines the maximum energy saving potential. Reduce if the application shows signs of instability. The amount of energy that can be saved may fall as the "iERS level" is reduced. Range 0 (0 hex) 0% - 10000 (2710 hex) 100% Default 10000 (2710 hex) 100% Type Read/Write
PNU Number 21760 (5500 hex) **PNU Name** Ref PF Degrees **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 1° of mains cycle) 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 0 (0 hex) 0Degrees - 90 (5A hex) 90Degrees Default 0 (0 hex) 0Degrees Type Read Only
PNU Number 21824 (5540 hex) **PNU Name** Pres PF Degrees **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 1° of mains cycle) 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 0 (0 hex) 0Degrees - 90 (5A hex) 90Degrees Default 0 (0 hex) 0Degrees Type Read Only

PNU		Description						
PNU Number	22400 (5780 hex)	Internal firing delay angle in Degrees						
PNU Name	Delay Angle	Displayed for diagnostic purposes						
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1° of mains cycle) Time(ms)=(Value/PNU32000)*(25/9)	Range	0 (0 hex) 0Degrees	-	60 (3C hex) 60Degrees	Default	0 (0 hex) 0Degrees	Type Read Only
PNU Number	22464 (57C0 hex)	The maximum possible delay for iERS saving						
PNU Name	Delay Max	Displayed for diagnostic purposes						
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1° of mains cycle) Time(ms)=(Value/PNU32000)*(25/9)	Range	0 (0 hex) 0Degrees	-	55 (37 hex) 55Degrees	Default	0 (0 hex) 0Degrees	Type Read Only
PNU Number	23040 (5A00 hex)	The maximum possible Delay angle for the current iERS saving phase						
PNU Name	BackStop	Displayed for diagnostic purposes						
PNU Format	16 bit unsigned	May decrease during heavy load periods or instability						
PNU Note	Linear Scaling (1 = 1° of mains cycle) Time(ms)=(Value/PNU32000)*(25/9)	Range	0 (0 hex) 0Degrees	-	55 (37 hex) 55Degrees	Default	0 (0 hex) 0Degrees	Type Read Only
PNU Number	25600 (6400 hex)	Unit Class 10 / Class20 / Class30 Current Rating						
PNU Name	I-rated							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	17000 (4268 hex) 17A	-	2000000 (1E8480 hex) 2000A	Default	17000 (4268 hex) 17A	Type Read Only
PNU Number	25664 (6440 hex)	The "Trip Class" is a numeric value that correlates the trip time with overload level. Select "Trip class" according to application requirements.						
PNU Name	Trip Class	The trip time depends on the selected Trip Class, the duration of the overload and the level of the over current. Refer to the Motor Overload 'cold' trip curves given in the manual.						
PNU Format	16 bit unsigned	When "Class 20" or "Class 30" are selected the Unit current rating (i-Unit) may be reduced to a lower value (i-rated).						
PNU Note	10= Trip Class 10, 20 = Trip Class 20, 30 = Trip Class 30	Range	10 (A hex) Trip Class 10	-	30 (1E hex) Trip Class 30	Default	10 (A hex) Trip Class 10	Type Read/Write

PNU	Description

PNU Number	25668 (6444 hex)
PNU Name	Trip Class Run Value
PNU Format	16 bit unsigned
PNU Note	10= Trip Class 10, 20 = Trip Class 20, 30 = Trip Class 30

This feature is only available for ANSI models
When selected it allows a different overload class to be selected during the running period.
The trip time depends on the selected Run Trip Class value , the duration of the overload and the level of the over current.
Refer to the Motor Overload 'cold' trip curves given in the manual.

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

PNU Number	25728 (6480 hex)
PNU Name	Motor Current
PNU Format	32 bit unsigned
PNU Note	Linear Scaling (1 = 1mA) 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 (I-motor).

Range		-		Default		Type	
	(0.1 x PNU25792) 10% I-unitA		(1 x PNU25600) 100% I-ratedA		(1 x PNU25600) 100% I-ratedA		Read/Write

PNU Number	25792 (64C0 hex)
PNU Name	I-unit
PNU Format	32 bit unsigned
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)

Unit Class10 Current Rating

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

PNU Number	26304 (66C0 hex)
PNU Name	Low Current Trip Level
PNU Format	32 bit unsigned
PNU Note	Linear Scaling (1 = 1mA) 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		-		Default		Type	
	(0.25 x PNU25728) 25% I-motorA		(1 x PNU25728) 100% I-motorA		(0.25 x PNU25728) 25% I-motorA		Read/Write

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

PNU		Description						
PNU Number	26880 (6900 hex)	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.						
PNU Name	Start Current Limit Level							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	(0.5 x PNU25728) 50% I-motorA	-	(4.5 x PNU25792) 450% I-unitA	Default	(3.5 x PNU25728) 350% I-motorA	Type Read/Write
PNU Number	26944 (6940 hex)	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'						
PNU Name	Start Current Limit Time							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1 s)	Range	1 (1 hex) 1s	-	600 (258 hex) 600s	Default	30 (1E hex) 30s	Type Read/Write
PNU Number	27584 (6BC0 hex)	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"						
PNU Name	Shearpin Trip Current							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	(1 x PNU25728) 100% I-motorA	-	(4.5 x PNU25792) 450% I-motorA	Default	(4.5 x PNU25792) 350% I-motorA	Type Read/Write
PNU Number	27648 (6C00 hex)	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"						
PNU Name	Shearpin Trip Time							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1 ms)	Range	100 (64 hex) 100ms	-	9000 (2328 hex) 9000ms	Default	100 (64 hex) 100ms	Type Read/Write
PNU Number	28160 (6E00 hex)	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						
PNU Name	Hand-Auto Control							
PNU Format								
PNU Note	0	Range	0 (0 hex) Off	-	1 (1 hex) On	Default	0 (0 hex) Off	Type Read/Write

PNU		Description						
PNU Number	28224 (6E40 hex)	Determines the level in Amps at which the overload will start.						
PNU Name	Overload Level	Normally set to 115% of the set motor current (i-motor)						
PNU Format	32 bit unsigned	Reduce to speed up trip response						
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	(0.5 x PNU25728) 50% I-motorA - (4.5 x PNU25792) 125% I-motorA	Default	(1.15 x PNU25728) 115% I-motorA	Type	Read/Write	
PNU Number	28800 (7080 hex)	The current in Amps at which the soft stop ramp is not allowed to go above.						
PNU Name	Stop Current Limit Level	Normally set to 350% motor FLC. Decrease if motor decelerates too rapidly.						
PNU Format	32 bit unsigned	The current limit level will effect actual time to stop the motor.						
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	(1 x PNU25728) 100% I-motorA - (4.5 x PNU25792) 450% I-unitA	Default	(3.5 x PNU25728) 350% I-motorA	Type	Read/Write	
PNU Number	28864 (70C0 hex)	The maximum time allowed for the current limit.						
PNU Name	Stop Current Limit Time	If the current limit is still active at the end of this period the Unit will either trip or continue						
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1 s)	Range	1 (1 hex) 1s - 300 (12C hex) 300s	Default	10 (A hex) 10s	Type	Read/Write	
PNU Number	32000 (7D00 hex)	The frequency of the 3-phase supply						
PNU Name	Line Frequency							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = mHz) Freq(Hz) = (Value / 1000)	Range	45000 (AFC8 hex) 45Hz - 65000 (FDE8 hex) 65Hz	Default	Not Applicable -Hz	Type	Read Only	
PNU Number	32064 (7D40 hex)	Indicates the phase sequence of the incoming supply.						
PNU Name	Phase Rotation	RYB = L1-L2-L3						
PNU Format	16 bit unsigned	RBY = L1-L3-L2						
PNU Note	Binary value	Range	0 (0 hex) L1-L2-L3 - 1 (1 hex) L1-L3-L2	Default	0 (0 hex) L1-L2-L3	Type	Read Only	

PNU		Description						
PNU Number	32896 (8080 hex)	The RMS motor current This is the maximum of the 3 phases. This value is used for the overload and power calculations						
PNU Name	Current Irms							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	32960 (80C0 hex)	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.						
PNU Name	Voltage Vrms							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 1 V)	Range	0 (0 hex) 0V	-	1000 (3E8 hex) 1000V	Default	0 (0 hex) 0V	Type Read Only
PNU Number	33024 (8100 hex)	The True Power Factor The True Power Factor = (Displacement Power Factor x Distortion Power Factor)						
PNU Name	True Power Factor							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.001)	Range	0 (0 hex) 0	-	1000 (3E8 hex) 1	Default	0 (0 hex) 0	Type Read Only
PNU Number	33408 (8280 hex)	The Unit has an "Overload" function that is an electronic equivalent to a thermal overload. "Overload" displays the overload level 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%						
PNU Name	Overload							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only
PNU Number	33409 (8281 hex)	Dynamically tracks the thermal capacity needed for a successful restart after an overload trip. It averages the thermal capacity consumed in the previous three successful starts, and calculates a thermal capacity to Start. The calculated thermal capacity required is stored in the "Dynamic Reset" register. After tripping on Overload the thermal "Overload" Register must have regained the amount recorded in" Dynamic Reset" before a Reset will be allowed. If there is insufficient capacity to start the unit will be "Inhibited" from starting. The unit can be reset when there is sufficient capacity to start and the start stop signal is not present						
PNU Name	Dynamic Reset							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only

PNU		Description						
PNU Number	33536 (8300 hex)	The RMS current on phase L1						
PNU Name	I1							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	33538 (8302 hex)	The RMS current on phase L2						
PNU Name	I2							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	33920 (8480 hex)	The voltage on phase L1						
PNU Name	V1							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1 V)	Range	0 (0 hex) 0V	-	1000 (3E8 hex) 1000V	Default	0 (0 hex) 0V	Type Read Only
PNU Number	33921 (8481 hex)	The voltage on phase L2						
PNU Name	V2							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1 V)	Range	0 (0 hex) 0V	-	1000 (3E8 hex) 1000V	Default	0 (0 hex) 0V	Type Read Only

PNU		Description						
PNU Number	33922 (8482 hex)	The voltage on phase L3						
PNU Name	V3							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1 V)	Range	0 (0 hex) 0V	-	1000 (3E8 hex) 1000V	Default	0 (0 hex) 0V	Type Read Only
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) True Power (kW) = (Value / 1000)	Range	0 (0 hex) 0kW	-	10000000 (989680 hex) 10000kW	Default	0 (0 hex) 0kW	Type Read Only
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) Apparent Power (kVA) = (Value/1000)	Range	0 (0 hex) 0kVA	-	10000000 (989680 hex) 10000kVA	Default	0 (0 hex) 0kVA	Type Read Only
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) Reactive Power (kVar) = (Value / 1000)	Range	0 (0 hex) 0kvar	-	10000000 (989680 hex) 10000kvar	Default	0 (0 hex) 0kvar	Type Read Only
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	Does not indicate real percentage saving.						
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only

PNU		Description							
PNU Number	35200 (8980 hex)	User settable voltage level for power calculations If a very high level of accuracy is required the user can input the 3-Phase voltage directly							
PNU Name	Fixed Voltage								
PNU Format	16 bit unsigned								
PNU Note	Linear Scaling (1 = 1 V)	Range	100 (64 hex) 100V	-	1000 (3E8 hex) 1000V	Default	400 (190 hex) 400V	Type	Read/Write
PNU Number	35264 (89C0 hex)	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.							
PNU Name	Fixed Voltage								
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
PNU Number	35840 (8C00 hex)	The total number of successful starts							
PNU Name	Number of Starts								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1)	Range	0 (0 hex) 0	-	4294967295 (FFFFFFFF hex) 4294836225	Default	0 (0 hex) 0	Type	Read Only
PNU Number	35904 (8C40 hex)	The total time the motor has been running							
PNU Name	Motor Running Time								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1)	Range	0 (0 hex) 0s	-	4294967295 (FFFFFFFF hex) 4294836225s	Default	0 (0 hex) 0s	Type	Read Only
PNU Number	35906 (8C42 hex)	The total time the Unit has been powered up							
PNU Name	Control Supply On Time								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1)	Range	0 (0 hex) 0s	-	4294967295 (FFFFFFFF hex) 4294836225s	Default	0 (0 hex) 0s	Type	Read Only

PNU		Description
PNU Number	36544 (8EC0 hex)	The temperature of the internal Unit heatsink. The Unit will trip when the heatsink temperature exceeds 90°C. The internal cooling fans will turn on if this temperature exceeds 40°C Range: 7872 (1EC0 hex) -20°C - 1280 (500 hex) 90°C Default: Not Applicable °C Type: Read Only
PNU Name	HeatSink Temp	
PNU Format	16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1	
PNU Note	bit12=0 [HighByte*16 + LowByte/16] bit12=1 256-[HighByte*16 + LowByte/16]	
PNU Number	37184 (9140 hex)	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
PNU Name	Ready	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	37248 (9180 hex)	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
PNU Name	Enabled	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	37312 (91C0 hex)	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
PNU Name	Error	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	37376 (9200 hex)	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
PNU Name	Auto Reset Pending	
PNU Format	8 bit unsigned	
PNU Note	Binary value	

PNU		Description					
PNU Number	37568 (92C0 hex)	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					
PNU Name	Auto Reset Exceeded						
PNU Format	8 bit unsigned						
PNU Note	Binary value	Range	0 (0 hex) No - 1 (1 hex) Yes	Default	0 (0 hex) No	Type	Read Only
PNU Number	37632 (9300 hex)	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					
PNU Name	Running						
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 Only
PNU Number	37632 (9300 hex)	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					
PNU Name	Running						
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 Only
PNU Number	37760 (9380 hex)	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					
PNU Name	End Of Start						
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 Only
PNU Number	37824 (93C0 hex)	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					
PNU Name	Current Limit						
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 Only

PNU		Description					
PNU Number	38080 (94C0 hex)	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					
PNU Name	iERS Active						
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 Only
PNU Number	38144 (9500 hex)	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					
PNU Name	Shearpin						
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 Only
PNU Number	38208 (9540 hex)	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					
PNU Name	Low Current						
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 Only
PNU Number	38400 (9600 hex)	Displays the peak current of the last successful start.					
PNU Name	Last Peak Current						
PNU Format	32 bit unsigned						
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A - 10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
PNU Number	38402 (9602 hex)	Displays the peak current of the last successful start -1					
PNU Name	Last peak start current -1						
PNU Format	32 bit unsigned						
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A - 10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only

PNU		Description						
PNU Number	38404 (9604 hex)	Displays the peak current of the last successful start -2						
PNU Name	Last peak start current -2							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	38406 (9606 hex)	Displays the peak current of the last successful start -3						
PNU Name	Last peak start current -3							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	38408 (9608 hex)	Displays the peak current of the last successful start -4						
PNU Name	Last peak start current -4							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	38410 (960A hex)	Displays the peak current of the last successful start -5						
PNU Name	Last peak start current -5							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
PNU Number	38412 (960C hex)	Displays the peak current of the last successful start -6						
PNU Name	Last peak start current -6							
PNU Format	32 bit unsigned							
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only

PNU		Description							
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
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
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

PNU		Description							
PNU Number	38470 (9646 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	38473 (9649 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	38476 (964C hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	38479 (964F hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	38482 (9652 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only

PNU		Description							
PNU Number	38485 (9655 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	38488 (9658 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	38491 (965B hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39040 (9880 hex)	Displays the peak current of the last successful stop							
PNU Name	Last peak stop current								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
PNU Number	39042 (9882 hex)	Displays the peak current of the last successful stop -1							
PNU Name	Last peak stop current -1								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only

PNU		Description						
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only
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) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type Read Only

PNU		Description							
PNU Number	39054 (988E hex)	Displays the peak current of the last successful stop -7							
PNU Name	Last peak stop current -7								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
PNU Number	39056 (9890 hex)	Displays the peak current of the last successful stop -8							
PNU Name	Last peak stop current -8								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
PNU Number	39058 (9892 hex)	Displays the peak current of the last successful stop -9							
PNU Name	Last peak stop current -9								
PNU Format	32 bit unsigned								
PNU Note	Linear Scaling (1 = 1mA) Current (A) = (Value / 1000)	Range	0 (0 hex) 0A	-	10000000 (989680 hex) 10000A	Default	0 (0 hex) 0A	Type	Read Only
PNU Number	39104 (98C0 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39107 (98C3 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only

PNU		Description							
PNU Number	39110 (98C6 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39113 (98C9 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39116 (98CC hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39119 (98CF hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39122 (98D2 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only

PNU		Description							
PNU Number	39125 (98D5 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39128 (98D8 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39131 (98DB hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	39680 (9B00 hex)	Displays the heatsink temperature at the end of the last successful start							
PNU Name	Last temperature								
PNU Format	16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1								
PNU Note	bit12=0 [HighByte*16 + LowByte/16] bit12=1 256-[HighByte*16 + LowByte/16]	Range	7872 (1EC0 hex) -20°C	-	1280 (500 hex) 80°C	Default	Not Applicable °C	Type	Read Only
PNU Number	39681 (9B01 hex)	Displays the heatsink temperature at the end of the last successful start -1							
PNU Name	Last temperature -1								
PNU Format	16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1								
PNU Note	bit12=0 [HighByte*16 + LowByte/16] bit12=1 256-[HighByte*16 + LowByte/16]	Range	7872 (1EC0 hex) -20°C	-	1280 (500 hex) 80°C	Default	Not Applicable °C	Type	Read Only

PNU	Description
PNU Number 39682 (9B02 hex) **PNU Name** Last temperature -2 **PNU Format** 16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1 **PNU Note** bit12=0 [HighByte*16 + LowByte/16] 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
PNU Number 39683 (9B03 hex) **PNU Name** Last temperature -3 **PNU Format** 16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1 **PNU Note** bit12=0 [HighByte*16 + LowByte/16] 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
PNU Number 39684 (9B04 hex) **PNU Name** Last temperature -4 **PNU Format** 16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1 **PNU Note** bit12=0 [HighByte*16 + LowByte/16] 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
PNU Number 39685 (9B05 hex) **PNU Name** Last temperature -5 **PNU Format** 16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1 **PNU Note** bit12=0 [HighByte*16 + LowByte/16] 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
PNU Number 39686 (9B06 hex) **PNU Name** Last temperature -6 **PNU Format** 16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1 **PNU Note** bit12=0 [HighByte*16 + LowByte/16] 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

PNU		Description						
PNU Number	39687 (9B07 hex)	Displays the heatsink temperature at the end of the last successful start-7						
PNU Name	Last temperature -7							
PNU Format	16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1							
PNU Note	bit12=0 [HighByte*16 + LowByte/16] bit12=1 256-[HighByte*16 + LowByte/16]	Range	7872 (1EC0 hex) -20°C	-	1280 (500 hex) 80°C	Default	Not Applicable °C	Type Read Only
PNU Number	39688 (9B08 hex)	Displays the heatsink temperature at the end of the last successful start-8						
PNU Name	Last temperature -8							
PNU Format	16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1							
PNU Note	bit12=0 [HighByte*16 + LowByte/16] bit12=1 256-[HighByte*16 + LowByte/16]	Range	7872 (1EC0 hex) -20°C	-	1280 (500 hex) 80°C	Default	Not Applicable °C	Type Read Only
PNU Number	39689 (9B09 hex)	Displays the heatsink temperature at the end of the last successful start-9						
PNU Name	Last temperature -9							
PNU Format	16 bit (Highbyte=b11-b8, LowByte=b7-b0) Ta >= 0 b12=0 Ta < 0 b12=1							
PNU Note	bit12=0 [HighByte*16 + LowByte/16] bit12=1 256-[HighByte*16 + LowByte/16]	Range	7872 (1EC0 hex) -20°C	-	1280 (500 hex) 80°C	Default	Not Applicable °C	Type Read Only
PNU Number	40320 (9D80 hex)	Displays the overload level at the end of the last successful start						
PNU Name	Last overload							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only
PNU Number	40321 (9D81 hex)	Displays the overload level at the end of the last successful start -1						
PNU Name	Last overload-1							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only

PNU		Description						
PNU Number	40322 (9D82 hex)	Displays the overload level at the end of the last successful start -2						
PNU Name	Last overload-2							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only
PNU Number	40323 (9D83 hex)	Displays the overload level at the end of the last successful start -3						
PNU Name	Last overload-3							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only
PNU Number	40324 (9D84 hex)	Displays the overload level at the end of the last successful start -4						
PNU Name	Last overload-4							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only
PNU Number	40325 (9D85 hex)	Displays the overload level at the end of the last successful start -5						
PNU Name	Last overload-5							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only
PNU Number	40326 (9D86 hex)	Displays the overload level at the end of the last successful start -6						
PNU Name	Last overload-6							
PNU Format	16 bit unsigned							
PNU Note	Linear Scaling (1 = 0.01 %)	Range	0 (0 hex) 0%	-	10000 (2710 hex) 100%	Default	0 (0 hex) 0%	Type Read Only

PNU	Description
PNU Number 40327 (9D87 hex) **PNU Name** Last overload-7 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Displays the overload level at the end of the last successful start -7 Range: 0 (0 hex) 0% - 10000 (2710 hex) 100% Default: 0 (0 hex) 0% Type: Read Only
PNU Number 40328 (9D88 hex) **PNU Name** Last overload-8 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Displays the overload level at the end of the last successful start -8 Range: 0 (0 hex) 0% - 10000 (2710 hex) 100% Default: 0 (0 hex) 0% Type: Read Only
PNU Number 40329 (9D89 hex) **PNU Name** Last overload-9 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Displays the overload level at the end of the last successful start -9 Range: 0 (0 hex) 0% - 10000 (2710 hex) 100% Default: 0 (0 hex) 0% Type: Read Only
PNU Number 44864 (AF40 hex) **PNU Name** Trip Sensitivity **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 = 0.01 %)	Adjusts the reaction time to fault trips Increase "Trip Sensitivity" to slow the response to fault trips. This is sometimes useful on sites were electrical noise is causing nuisance tripping This is a global setting. Increasing "Trip Sensitivity" will slow the response of nearly all the trips. Range: 0 (0 hex) 0% - 10000 (2710 hex) 100% Default: 0 (0 hex) 0% Type: Read/Write
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 three-phase supply when the motor is running. On : Trips if there is a disconnection between the input side of the unit and the three-phase 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: 0 (0 hex) Off - 1 (1 hex) On Default: 1 (1 hex) On Type: Read/Write

PNU		Description
PNU Number	53765 (D205 hex)	Detects if the communications bus has failed or become inactive between the keypad and the main unit. On :Keypad trip enabled. Off : Keypad trip disabled. Range 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write
PNU Name	Keypad Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53766 (D206 hex)	Detects if there is an imbalance between the phases on the incoming three-phase supply On : Trips if there is an imbalance in the incoming three-phase supply. 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 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write
PNU Name	Voltage Imbalance Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53768 (D208 hex)	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
PNU Name	Thermal Sensor Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53769 (D209 hex)	This controls the soft stop improve stability On : The stop time is truncated if the motor experiences severe torque fluctuations during the soft stop Off : Follows normal soft stop time Range 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write
PNU Name	Shut Down (1)	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53770 (D20A hex)	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 : Follows normal soft stop time Range 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write
PNU Name	Shut Down (2)	
PNU Format	8 bit unsigned	
PNU Note	Binary value	

PNU		Description
PNU Number	53774 (D20E hex)	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. (Not recommended) 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
PNU Name	Thyristor Firing Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53775 (D20F hex)	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
PNU Name	Current Sensor Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53777 (D211 hex)	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
PNU Name	Motor Side Phase Loss	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53781 (D215 hex)	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
PNU Name	Sensing Fault Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	
PNU Number	53782 (D216 hex)	Detects if the cooling fans have failed. On : The Unit trips if the cooling fans fitted to the Unit fail. Off : The unit 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
PNU Name	Fan Trip	
PNU Format	8 bit unsigned	
PNU Note	Binary value	

PNU		Description					
PNU Number	53787 (D21B hex)	This can be used to detect if the motor is running lightly loaded.					
PNU Name	Low Current 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					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	0 (0 hex) Off	Type	Read/Write
PNU Number	53790 (D21E hex)	Selects trip or continue if the current limit has been active for too long					
PNU Name	Start Current Limit Trip	On : The Unit will trip					
PNU Format	8 bit unsigned	Off: The start will continue regardless of the motor current level					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	1 (1 hex) On	Type	Read/Write
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
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" level (ModbusPNU 33408) exceeds 100%					
PNU Format	8 bit unsigned	Off: The Unit will continue to operate regardless of motor current level (Not recommended)					
PNU Note	Binary value	Range	0 (0 hex) Off - 1 (1 hex) On	Default	1 (1 hex) On	Type	Read/Write
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, dwell period 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

PNU	Description
PNU Number 53794 (D222 hex) **PNU Name** PTC Motor Thermistor Trip **PNU Format** 8 bit unsigned **PNU Note** Binary value	A single PTC motor thermistor or set of PTC motor thermistors can be connected to the PTC terminals. On :The Unit will trip if the motor thermistor exceed its response temperature or the PTC input is open circuit Off : The Unit will continue to operate. Range 0 (0 hex) Off - 1 (1 hex) On Default 0 (0 hex) Off Type Read/Write
PNU Number 53795 (D223 hex) **PNU Name** External Trip **PNU Format** 8 bit unsigned **PNU Note** Binary value	Allows a trip to be forced using one of the digital inputs On : Trips when the programmed input is active Off : External Trip is disabled Range 0 (0 hex) Off - 1 (1 hex) On Default 0 (0 hex) On Type Read/Write
PNU Number 53796 (D224 hex) **PNU Name** Communications Trip **PNU Format** 8 bit unsigned **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) On :Communication trip enabled. Off : Communication trip disabled. Range 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write
PNU Number 53799 (D227 hex) **PNU Name** Operation 1 Trip **PNU Format** 8 bit unsigned **PNU Note** Binary value	Detects if the logging function has failed to operate normally On : Operation 1 trip enabled. (Trip Code 2601-2699) Off : Operation 1 trip disabled. Range 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) Off Type Read/Write
PNU Number 53800 (D228 hex) **PNU Name** Operation 2 Trip **PNU Format** 8 bit unsigned **PNU Note** Binary value	Detects if the Control Board has failed to operate normally On : Operation 2 trip enabled. (Trip Code 2401-2499) Off : Operation 2 trip disabled. Range 0 (0 hex) Off - 1 (1 hex) On Default 1 (1 hex) On Type Read/Write

PNU		Description
PNU Number	53802 (D22A hex)	This works in conjunction with the 'Communications Trip'.
PNU Name	Communications Shutdown	On : If the 'Communication Trip' is turned 'On' the unit will shutdown instead of tripping if the communications fail
PNU Format		Off : If the 'Communication Trip' is turned 'On' the unit will trip if the communications fail
PNU Note	0	Range: 0 (0 hex) Off - 1 (1 hex) On; Default: 0 (0 hex) Off; Type: Read/Write
PNU Number	53804 (D22C hex)	For safety reasons the Unit will trip during some operations if the remote start signal is active
PNU Name	Remote Start Trip	On : Trips if the remote start signal is active when the Unit is powered up or a reset is applied.
PNU Format	8 bit unsigned	Off : The Unit will not trip and may start unexpectedly if the start signal is accidently left active.
PNU Note	Binary value	Range: 0 (0 hex) Off - 1 (1 hex) On; Default: 1 (1 hex) On; Type: Read/Write
PNU Number	53807 (D22F hex)	Determines if supply phase sequence is incorrect for motor rotation
PNU Name	L1-L3-L2 Trip	On : Trips if the phase sequence is L1-L3-L2.
PNU Format	8 bit unsigned	Off : The Unit will continue to operate normally
PNU Note	Binary value	Range: 0 (0 hex) Off - 1 (1 hex) On; Default: 0 (0 hex) Off; Type: Read/Write
PNU Number	53808 (D230 hex)	Determines if supply phase sequence is incorrect for motor rotation
PNU Name	L1-L2-L3 Trip	On : Trips if the phase sequence is L1-L2-L3.
PNU Format	8 bit unsigned	Off : The Unit will continue to operate normally
PNU Note	Binary value	Range: 0 (0 hex) Off - 1 (1 hex) On; Default: 0 (0 hex) Off; Type: Read/Write
PNU Number	59392 (E800 hex)	Local Touch Screen : Control using the buttons 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: Control via remote Modbus network
PNU Name	Control Method	
PNU Format	16 bit unsigned	
PNU Note	0 = Local, 1 = User, 2 = TwoWire, 3 = ThreeWire, 4 = Modbus	Range: 0 (0 hex) Local Touch Screen - 4 (4 hex) Modbus; Default: 0 (0 hex) Local Touch Screen; Type: Read/Write

PNU		Description						
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) See Trip Code Descriptions	Range	0 (0 hex) 0	-	65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type Read Only
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) See Trip Code Descriptions	Range	0 (0 hex) 0	-	65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type Read Only
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) See Trip Code Descriptions	Range	0 (0 hex) 0	-	65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type Read Only
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) See Trip Code Descriptions	Range	0 (0 hex) 0	-	65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type Read Only
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) See Trip Code Descriptions	Range	0 (0 hex) 0	-	65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type Read Only

PNU	Description
PNU Number 60613 (ECC5 hex) **PNU Name** Last Trip -5 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 =1) See Trip Code Descriptions	Displays the last Fault trip -5 Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read Only
PNU Number 60614 (ECC6 hex) **PNU Name** Last Trip -6 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 =1) See Trip Code Descriptions	Displays the last Fault trip -6 Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read Only
PNU Number 60615 (ECC7 hex) **PNU Name** Last Trip -7 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 =1) See Trip Code Descriptions	Displays the last Fault trip -7 Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read Only
PNU Number 60616 (ECC8 hex) **PNU Name** Last Trip -8 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 =1) See Trip Code Descriptions	Displays the last Fault trip -8 Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read Only
PNU Number 60617 (ECC9 hex) **PNU Name** Last Trip -9 **PNU Format** 16 bit unsigned **PNU Note** Linear Scaling (1 =1) See Trip Code Descriptions	Displays the last Fault trip -9 Range 0 (0 hex) 0 - 65535 (FFFF hex) 65535 Default 0 (0 hex) 0 Type Read Only

PNU		Description							
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
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
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
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
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

PNU		Description							
PNU Number	60687 (ED0F hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	60690 (ED12 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	60693 (ED15 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	60696 (ED18 hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only
PNU Number	60699 (ED1B hex)	Displays the event time							
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)	Range	-hh:mm:ss	-	-hh:mm:ss	Default	GMT timehh:mm:ss	Type	Read Only

PNU		Description					
PNU Number	62016 (F240 hex)	Displays the current status of the hardware inputs and Outputs					
PNU Name	I/O Status Register	b0 (Input DI-1I) b1 (Input D1-2I) b2 (input D2-I1) b3 (undefined)					
PNU Format		b4 (Output 12) b5 (Output 24) b6 (Output 34) b7 (Output 44)					
PNU Note	0	Range	0 (0 hex) 0 - 65535 (FFFF hex) 65535	Default	0 (0 hex) 0	Type	Read Only
PNU Number	62080 (F280 hex)	Restores the Unit to the factory defaults					
PNU Name	Reset Defaults						
PNU Format	16 bit unsigned						
PNU Note	Binary value	Range	0 (0 hex) No - 1 (1 hex) Yes	Default	0 (0 hex) No	Type	Read/Write
PNU Number	62144 (F2C0 hex)	Saves all Read /Write parameters to non volatile memory					
PNU Name	Save Parameters	Yes : Parameters are permanently written					
PNU Format	16 bit unsigned	No : Parameters remain changed until next power cycle					
PNU Note	Binary value	Range	0 (0 hex) No - 1 (1 hex) Yes	Default	0 (0 hex) No	Type	Read/Write
PNU Number	Trip Code Descriptions	Phase L1 missing at the instant of start up.					
PNU Name	101 Input Side Phase Loss	The L1 phase is either missing or at a very low level					
PNU Format		Check all incoming connections. If a main contactor is being controlled by a digital output set to "Running" check contactor delay is sufficient					
PNU Note	0	Range	-	Default		Type	Read Only
PNU Number	Trip Code Descriptions	Phase L2 missing at the instant of start up					
PNU Name	102 Input Side Phase Loss	The L2 phase is either missing or at a very low level					
PNU Format		Check all incoming connections. If a main contactor is being controlled by a digital output set to "Running" check contactor delay is sufficient					
PNU Note	0	Range	-	Default		Type	Read Only

PNU	Description
PNU Number Trip Code Descriptions **PNU Name** 103 Input Side Phase Loss **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 104 - 117 Input Side Phase Loss **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 150 Voltage Imbalance Trip **PNU Format** **PNU Note** 0	The three phase input voltages are imbalanced The maximum volatge is determined and the other voltages are compared to it Check all incoming connections. Check any fuses / breakers incorporated in the power circuit Range - Default Type Read Only
PNU Number Trip Code Descriptions **PNU Name** 201 Maximum Temp. Exceeded **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 208 Thermal Sensor Trip **PNU Format** **PNU Note** 0	Thermal sensor Failure The internal temperature sensor has failed Contact the supplier Range - Default Type Read Only

PNU		Description
PNU Number	Trip Code Descriptions	One or more of the internal control thyristors (SCRs) have failed to turn on properly. (In-Line "Firing Mode")
PNU Name	301-308 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	0	Range - Default Type Read Only
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	0	Range - Default Type Read Only
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	0	Range - Default Type Read Only
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	0	Range - Default Type Read Only
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 manual.
PNU Note	0	Range - Default Type Read Only

PNU		Description
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	0	Range - Default Type Read Only
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	0	Range - Default Type Read Only
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 + MOTOR Disconnect supply. Check by measuring the resistance between L1-T1 L2-T2 L3-T3 (Anything < 10R is assumed short circuit).
PNU Note	0	Range - Default Type Read Only
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	0	Range - Default Type Read Only
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	0	Range - Default Type Read Only

PNU		Description
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	0	Range - Default Type Read Only
PNU Number	Trip Code Descriptions	The "Overload" has exceeded 100%
PNU Name	1301 Overload Trip	The Unit is attempting to start an application that is outside its rating or it is starting too often.
PNU Format		Refer to the overload trip curves to determine whether the Unit has been sized correctly.
PNU Note	0	Range - Default Type Read Only
PNU Number	Trip Code Descriptions	The motor current has exceeded 475% (i-Unit) for a time greater than 250ms
PNU Name	1302 Overload Trip	The Unit is attempting to start an application that is outside its rating with a "high current limit level" set
PNU Format		Refer to the overload trip curves to determine whether the Unit has been sized correctly and check current limit level.
PNU Note	0	Range - Default Type Read Only
PNU Number	Trip Code Descriptions	The motor current has been higher than the "Shearpin Trip Level" for the trip time.
PNU Name	1401 Shearpin Trip	This trip is not active during soft start and soft stop and is "off" by default.
PNU Format		If Shearpin trip is not required turn "off" in "Trip Settings".
PNU Note	0	Range - Default Type Read Only
PNU Number	Trip Code Descriptions	The PTC thermistor value has exceed the trip level.
PNU Name	1501 PTC Thermistor Trip	The PTC thermistor connected to the PTC input has exceeded it response temperature or the PTC input is open circuit.
PNU Format		If the PTC TRIP is not required turn "off" in "Trip Settings".
PNU Note	0	Range - Default Type Read Only

PNU		Description				
PNU Number	Trip Code Descriptions	Modbus RTU Communications failure				
PNU Name	1701 Communications Trip	The command or status PNU has not been polled in the time set in the "Timeout" period				
PNU Format		If the communication trip is disabled the Unit cannot be stopped in the communications fail				
PNU Note	0	Range	-	Default		Type Read Only
PNU Number	Trip Code Descriptions	Modbus TCP Communications failure				
PNU Name	1702 Communications Trip	The command or status PNU has not been polled in the time set in the "Timeout" period				
PNU Format		If the communication trip is disabled the Unit cannot be stopped in the communications fail				
PNU Note	0	Range	-	Default		Type Read Only
PNU Number	Trip Code Descriptions	Anybus Communications failure				
PNU Name	1703 Communications Trip	The command or status PNU has not been polled in the time set in the "Timeout" period				
PNU Format		If the communication trip is disabled the Unit cannot be stopped in the communications fail				
PNU Note	0	Range	-	Default		Type Read Only
PNU Number	Trip Code Descriptions	Keypad Communications failure				
PNU Name	1704 Communications Trip	The communications bus has failed or become inactive between the keypad and the main unit.				
PNU Format		If the communication trip is disabled the Unit cannot be stopped in the communications fail				
PNU Note	0	Range	-	Default		Type Read Only
PNU Number	Trip Code Descriptions	One or more of the internal bypass relays has failed to close				
PNU Name	1801-1802 Bypass Relay Trip	The internal bypass relay has failed or the control supply is to weak.				
PNU Format		Ensure 24VDC supply meets the requirements specified in the manual.				
PNU Note	0	Range	-	Default		Type Read Only

PNU	Description
PNU Number Trip Code Descriptions **PNU Name** 1803 Bypass Relay Trip **PNU Format** **PNU Note** 0	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 manual. Range - Default Type Read Only
PNU Number Trip Code Descriptions **PNU Name** 2001-2003 Remote Start is Enabled **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 2101 Rotation L1 L2 L3 Trip **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 2102 Rotation L1 L3 L2 Trip **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 2201-2299 MPU Trip **PNU Format** **PNU Note** 0	Internal Unit Failure (MPU / Operation 4) 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

PNU	Description
PNU Number Trip Code Descriptions **PNU Name** 2301-2303 Current Sensor Trip **PNU Format** **PNU Note** 0	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
PNU Number Trip Code Descriptions **PNU Name** 2401-2499 Operation 2 Trip **PNU Format** **PNU Note** 0	Fail Safe operation (Operation 2) A process associated with the Main micro controller 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
PNU Number Trip Code Descriptions **PNU Name** 2601-2699 Operation 1 Trip **PNU Format** **PNU Note** 0	Fail Safe operation (Operation 1) A process associated with the Logging function has been affected and is unable to recover automatically The trip can be reset by either the digital input or keypad or the bus command depending on the control method set. It is also possible to reset this trip by cycling the control supply Range - Default Type Read Only
PNU Number Trip Code Descriptions **PNU Name** 2701-2799 MPU Trip **PNU Format** **PNU Note** 0	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