

Appendix –IV

APPENDIX-IV

VACON Software details (Vacon NC1131-3)

The Vacon NC1131-3 is a graphical programming tool for creating professional and efficient NX applications. It complies with the IEC 61131-3 PLC programming standard. All methods defined in the standard can be used:

- functional block diagrams
- structured text
- ladder diagrams
- instruction list and
- State diagrams.

These can be used separately or in combination.

One application can contain about 2000 blocks, depending on their size and complexity. When new applications are created, typically one of the existing applications is used as a template to minimize the effort, as the existing applications contain the majority of the functionality required.

The Vacon NC1131-3 Application Programming Suite supports many programming languages which are based on the IEC61131-3 standard. An entire application can be done in a few easy steps by using a specific tool for each programming phase. The Application Programming Suite offers a graphical programming environment for the functional design of an application.

The photograph shown below shows the parameter settings in software.

NCDrive - C:\DOCUME~1\ARCHAN-1\LOCALS~1\Temp\Rar\$DI00.281\Follower param.par (PreMarine) - [Parameter Window]					
File Edit View Drive Tools Window Help					
ON-LINE OFF-LINE					
C:\DOCUME~1\ARCHAN-1\LOCALS~1\Temp\Rar\$DI00.281\Follower param.par					
Index	Variable Text	Value	Default	Unit	Min Max
P 2.4.1	Ramp 1 Shape	2	2	%	
P 2.4.2	Ramp 2 Shape	4	4	%	
P 2.4.3	Accel Time 2	10.0	10.0	s	10.0
P 2.4.4	Decel Time 2	10.0	10.0	s	
P 2.4.5	Brake Chopper	0 / Not Used	0 / Not Used		
P 2.4.6	Start Function	0 / Ramping	0 / Ramping		
P 2.4.7	Stop Function	0 / Coasting	0 / Coasting		
P 2.4.8	DC Brake Current	3.78	0.00	A	
P 2.4.9	Stop DC-Brake Tm	0.000	0.000	s	
P 2.4.10	Stop DC-Brake Freq	1.50	1.50	Hz	
P 2.4.11	Start DC-Brake Tm	0.000	0.000	s	
P 2.4.12	Flux Brake	0 / Off	0 / Off		
P 2.4.13	Flux Brake Current	5.40	5.40	A	
P 2.4.14	Restart Delay OL	0.220	0.000	s	
P 2.4.15	DC Brake CutIn Stop	0.54	0.00	A	
P 2.4.16	Inching Ref 1	-2.00	2.00	Hz	
P 2.4.17	Inching Ref 2	1.0	653.36	\$	
P 2.4.18	Inching Ramp	1 / Norm.Voltage	1 / Norm.Voltage		
P 2.4.19	OverVol Rel Sel	1100	1100	V	
P 2.4.20	BrakeChopperLeve	0	0		
P 2.4.21	Control Options	0	0		
P 2.4.22	INV Commands	0	0		
P 2.4.23	Mot.Powed.Limit 1	100.0	100.0	%	
P 2.4.24	Mot.Powed.Limit 2	50.0	50.0	%	
P 2.4.25	PowerLimPamprRate	100	100	%/s	
P 2.4.26	2nd Freq Limit	35.00	35.00	Hz	
P 2.4.27	Gen.Powed.Limit 1	100.0	100.0	%	
P 2.4.28	Gen.Powed.Limit 2	50.0	50.0	%	
P 2.4.29	AdvancedOptions1	128	0		
P 2.4.30	AdvancedOptions2	8192	0		
P 2.4.31	AdvancedOptions4	0	0		
P 2.4.32	Zero Freq Limit	1.00	1.00	Hz	
P 2.4.33	Sini Filter Used	0 / No	0 / No		
P 2.4.34	DC Voltage Filter	0.0	0.0	Hz	
P 2.4.35	Modulator Type	1 / Software 1	0 / ASIC		
P 2.4.36	ControlOptions2	0	0		
P 2.4.37	TorqLimPamprRate	100	100	%/s	
P 2.4.38	TorqueFall Hyste	10.0	10.0	%	