

Master Document

INTERNAL USE ONLY

9000 Series Adjustable Frequency Drive Software

AF Drives, 9000 Series System Software	4
SV9000	4
Standard Software with SVReady Applications.....	4
Special Software with SVReady Applications	5
Special Software with SVReady Enhanced Applications	6
SVReady Enhanced Applications.....	6
Closed loop System Software with Fieldbus Applications.....	7
Closed loop with DeviceNet Applications	7
Regenerative Drive Unit Software	7
CP9000	8
Special Software with SVReady Applications	8
BP9000	9
Special Software with BPReady Applications	9
Beam Pump Applications	9
Submersible pump Applications	9
Progressive Cavity Pump Applications.....	10
HV9000 (Series B)	10
Standard Software with HVBasic Application.....	10
HVBasic Applications	11
HVBasic Applications with Johnson Controls N2 fieldbus communication	11
HVBasic Applications with Siemens FLN (P1) fieldbus communication	11
AF Drives, 9000 Series Option Board Software	12
Johnson Controls N2 fieldbus communication (Series A)	12
Johnson Controls N2 fieldbus communication (Series B)	12
Siemens FLN (P1) fieldbus communication (Series B)	13
DeviceNet	13
DeviceNet with Closed Loop	13
Modbus (small board).....	14
Modbus (big board)	14
AF Drives, 9000 Series PC Tools	15
SVDrive.....	15

4201 North 27th Street
Milwaukee, WI 53216

SVLoad 15

HVDrive 16

HVLoad 16

BPDive..... 17

BPLoad 17

System Software / Application SW Cross Reference List 18

SV9000 Standard Factory Software 18

SV9000 Standard software with 50 Hz default settings 21

SV9000 Special Software with SVReady Enhanced Applications 21

SV9000 Closed Loop Software 22

HV9000 Standard software (Series B) 23

CP9000 Standard Software (Clean Power)..... 23

Special Applications 24

AF Drives, 9000 Series System Software

SV9000

Standard Software with SVReady Applications

Software file / version	Display (n 18)	ECO	Used	Notes
sm00090x.bin	90.0x		Before 11-13-98	These are first Vaasa versions with 60 Hz defaults. C-H has used versions b - e. Software will support Graphical keypad only. This software version should not be used. Upgrade to latest sm00095x.bin highly recommended.
sm00095a.bin	95.00		11-13-98 – 01-21-99	Application selection list modified.
sm00095b.bin	95.01		01-21-99 – 05-06-99	Fixed software-downloading problem to option board.
sm00095c.bin	95.02		Not used in production.	
sm00095d.bin	95.03		05-06-99 – 11-03-99	Fixed motor nominal frequency setting (Basic application only)
sm00095e.bin	95.04		Not used in production.	
sm00095f.bin	95.05		11-03-99 – 03-24-00	Improved option board identification
sm00095g.bin	95.06		03-24-00 – 05-22-00	Added Overvoltage warning
sm00095h.bin	95.07		Not used in production.	
sm00095i.bin	95.08	1894	05-22-00 – 03-01-02	Added new languages Spanish and Portuguese.
sm00095j.bin – sm00095l.bin			Not used in production.	
sm00095m.bin	95.12	3454	03-01-02 - Current	Added 12 pole motor and NI drive support

This is standard software what is loaded into SV9000 drive in Vaasa manufacturing. Drives with older version software can be updated in field.

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

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Milwaukee, WI 53216

Special Software with SVReady Applications

Software file / version	Display (n 18)	ECO	Used	Notes
sm00112h.bin	112.07		Not used in production.	
sm00112i.bin	112.08	2118	05-22-00 – Current	Added new languages Spanish and Portuguese.

This is 50 Hz version system software. This was developed for C-H UK's market. This can be used wherever 50 Hz defaults are needed. This is a parallel version for sm00095x.bin software.

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

Special Software with SVReady Enhanced Applications

Software file / version	Display (n 18)	ECO	Used	Notes
sm00104a.bin	104.00		Not Released	
sm00104b.bin	104.01		Not Released	
sm00104c.bin	104.02		Not Released	
sm00104d.bin	104.03	2118	06-28-00 – Current	First released version.

This is branched version of standard software. All SVReady applications are modified and now called as “SVReady Enhanced” applications. This software must be used if any following feature is needed.

- Keypad STOP button always active.
- Single phase operation.
- 120V I/O option.
- “Out of box” keypad operation as default.
- Field bus support. (MultiPurpose application is replaced with MultiPurpose 2)

Individual applications are also available to be used with standard sm00095x.bin software as downloadable special to 0-memory slot.

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

SVReady Enhanced Applications

Application	Software files	ECO	Used	Notes
Basic	cha081ab.hex cha081a.ap2	2118	06-28-00 – Current	First released version.
Standard	cha082ab.hex cha082a.ap2	2118	06-28-00 – Current	First released version.
Local/Remote	cha083ab.hex cha083a.ap2	2118	06-28-00 – Current	First released version.
Multi-Step	cha084aa.hex cha084a.ap2	2118	06-28-00 – Current	First released version.
PI-Control	cha085ac.hex cha085a.ap2	2118	06-28-00 – 12-01-00	First released version.
	cha085bc.hex cha085b.ap2	2301	12-01-00 - Current	Corrected IO status display
Multi-Purpose	cha073ad.hex cha073a.ap2	2118	06-28-00 – Current	First released version.
Pump & Fan	cha087ab.hex cha087a.ap2	2118	06-28-00 – Current	First released version.

See previous comments.

Closed loop System Software with Fieldbus Applications

Software file / version	Display (n 18)	ECO	Used	Notes
*sm00099j.bin	99.09	2301	12-01-00 – Current	First released version.

***NOTE! THIS IS VAASA (VACON) SOFTWARE, NO CUTLER-HAMMER DOCUMENTATION AVAILABLE AT THIS TIME**

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

Closed loop with DeviceNet Applications

Application	Software files	ECO	Used	Notes
Closed Loop w/ DeviceNet	cha015aa.hex cha015a.ap2	2301	12-01-00 – Current	First released version.

This application can be used only with sm00099x.bin system software. This is modified Closed Loop Fieldbus Application where ProfiBus is replaced with DeviceNet.

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

Regenerative Drive Unit Software

Software file / version	Display (n 12)	ECO	Used	Notes
*smrb001d.bin	1.03	2301	12-01-00 – Current	First released version.

***NOTE! THIS IS VAASA (VACON) SOFTWARE, NO CUTLER-HAMMER DOCUMENTATION AVAILABLE AT THIS TIME**

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

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CP9000

Special Software with SVReady Applications

Software file / version	Display (n 18)	ECO	Used	Notes
sm00117a.bin	117.00	1894	07-12-00 – Current	Same as standard software sm00095i.bin. Except higher current limits. 500V drive will have 400V current ratings.

This software is used in Clean Power drives only. This is a parallel version for sm00095x.bin software.

NOTE! To download this software use SVLoad tool. (HVLoad can not be used).

BP9000

Special Software with BPReady Applications

Software file / version	Display (n 18)	ECO	Used	Notes
sm00131a.bin	131.00	3454	12-01-01 – 03-22-02	First released version.
sm00131b.bin	131.01			
sm00131c.bin	131.02	3459	03-22-02 – Current	Added Submersible Pump Application

This software is used in BP9000 drives only.

NOTE! This software supports ModBus protocol and small (CX211OPT) option boards.

NOTE! To download this software you must use BPLoad tool. .

Beam Pump Applications

Software files	ECO	Used	Notes
cha091d.hex cha091d.ap2	3454	12-01-01 – 03-22-02	First released version.
cha091f.hex cha091f.ap2	3459	03-22-02 – Current	Added French, Spanish and Portuguese languages

This application can be used only with sm00131x.bin system software.

NOTE! To download this software use BPLoad tool. .

Submersible pump Applications

Software files	ECO	Used	Notes
cha090a.hex cha090a.ap2	3454	12-01-01 – 03-22-02	First released version.
cha090f.hex cha090f.ap2	3459	03-22-02– Current	Added French, Spanish and Portuguese languages

This application can be used only with sm00131x.bin system software.

NOTE! To download this software use BPLoad tool.

Progressive Cavity Pump Applications

Software files	ECO	Used	Notes
cha092a.hex cha092a.ap2		Not Released	

This application can be used only with sm00131x.bin system software.

NOTE! To download this software use BPLoad tool.

HV9000 (Series B)**Standard Software with HVBasic Application.**

Software file / version	Display (n 18)	ECO	Used	Notes
sm00108a.bin	108.00		Not Released	
sm00108b.bin	108.01		Not Released	
sm00108c.bin	108.02		06-10-00 – 07-10-00	First released version.
sm00108d.bin	108.03		Not used in production.	
sm00108e.bin	108.04	1894	07-10-00 – 12-01-00	Modified supply voltage ranges
Sm00108f.bin	108.05	2299	12-01-00-04-20-01	New applications added
Sm00108g.bin	108.06	2755	04-20-01 - 06-30-01	Basic appl. corrected H-A-O logic.
Sm00108h.bin	108.07	2761	06-30-01-Current	Fixed current measurement display.

This software is used in HV9000 drives only. It supports H-O-A keypad.

NOTE! This software does not support any communication protocols, or any option boards.

NOTE! To download this software you must use HVLoad tool. (SVLoad can not be used).

HVBasic Applications

Software files	ECO	Used	Notes
hv0105g.hex hv0105g.ap2	2305	12-01-00 – 02-07-01	First released version.
hv0105h.hex hv0105h.ap2		07-07-01 – 06-30-01	Fixed control location saving to eeprom
hv0105i.hex hv0105i.ap2	2761	06-30-01 – Current	Actual current display corrected

This application can be used only with sm00108x.bin system software.

NOTE! To download this software use HVLoad tool. (SVLoad can not be used).

HVBasic Applications with Johnson Controls N2 fieldbus communication

Software files	ECO	Used	Notes
hvn201c.hex hvn201c.ap2	2301	12-01-00 – 06-30-01	First released version.
hvn201d.hex hvn201d.ap2	2761	06-30-01 – Current	Actual current display corrected

This application can be used only with sm00108x.bin system software.

NOTE! To download this software use HVLoad tool. (SVLoad can not be used).

HVBasic Applications with Siemens FLN (P1) fieldbus communication

Software files	ECO	Used	Notes
hvp101d.hex hvp101d.ap2	2301	12-01-00 – 06-30-01	First released version.
hvp101e.hex hvp101e.ap2	2761	06-30-01 – Current	Actual current display corrected

This application can be used only with sm00108x.bin system software.

NOTE! To download this software use HVLoad tool. (SVLoad can not be used).

AF Drives, 9000 Series Option Board Software

Software is needed only with option board with own microprocessor. All field-bus board has it. Standard IO expander board doesn't have processor so not software needed.

Option board software is already loaded into board's memory on the factory.

Johnson Controls N2 fieldbus communication (Series A)

Software file / version		ECO	Used	Notes
Smmmb004q.bin		2118	03-23-00– 12-01-00	First released version.
Smmmb004r.bin			Not Released	
Smmmb004s.bin		2301	12-01-00 - Current	Corrected motor output current calculation

This software is used with Series A drives. To use N2 protocol you need Standard SV9000 drive with sm00095x.bin system software and Multipurpose 2 application that supports this protocol.

NOTE! N2 software uses Modbus board hardware.

NOTE! To download this software you can use either SVLoad or HVLoad tool.

Johnson Controls N2 fieldbus communication (Series B)

Software file / version	Display V22 or O22	ECO	Used	Notes
Smmmb007j.bin	7.09	2301	12-01-00 - Current	First released version.

This software is used with Series B drives. To use N2 protocol you need HV9000 drive with sm00108x.bin system software and HVBasic w/N2 application.

NOTE! N2 software uses small (Compact NEMA) Modbus board hardware only.

NOTE! To download this software you can use either SVLoad or HVLoad tool.

Siemens FLN (P1) fieldbus communication (Series B)

Software file / version	Display V22 or O22	ECO	Used	Notes
Smmb100h.bin	1.07	2301	12-01-00 – 04-30-01	First released version.
Smmb100i.bin	1.08	2759	04-30-01 – Current	Siemens approved.

This software is used with Series B HV9000 drive. sm00108x.bin system software and HVBasic w/P1 application is needed.

NOTE! N2 software uses small (Compact NEMA) Modbus board hardware only.

NOTE! To download this software you can use either SVLoad or HVLoad tool.

DeviceNet

Software file / version		ECO	Used	Notes
Smbb005b.bin		2305	12-01-00 – Current	First released version.

NOTE! DeviceNet software uses small (Compact NEMA) board only SV9NCDN (CX208 OPT).

NOTE! To download this software you can use either SVLoad or HVLoad tool.

DeviceNet with Closed Loop

Software file / version		ECO	Used	Notes
Smbb020a.bin		2305	12-01-00 – Current	First released version.

NOTE! DeviceNet software uses small (Compact NEMA) board only SV9..... (CX206 OPT).

NOTE! To download this software you can use either SVLoad or HVLoad tool.

Modbus (small board)

Software file / version		ECO	Used	Notes
Smbb006e.bin		2757	04-01-01 – Current	First released version.

NOTE! This ModBus software uses small (Compact NEMA) board only SV9NCMB211 (CX211 OPT).

NOTE! To download this software you can use either SVLoad or HVLoad tool.

Modbus (big board)

Software file / version		ECO	Used	Notes
Smbb001o.bin		2763	04-01-01 – Current	First released version.

NOTE! This ModBus software uses big board only SV9NCMBCN (CX201 OPT).

NOTE! To download this software you can use either SVLoad or HVLoad tool.

AF Drives, 9000 Series PC Tools

SVDrive

Software file / version	Help (About)	ECO	Used	Notes
SVDrive2.0h	2.0h		01-18-99 – 05-21-99	First SVDrive release.
SVDrive2.0I	2.0I		05-21-99– 02-07-00	Added AS2 file selection capability.
SVDrive2.1a	2.1a		02-07-00– 06-26-00	Improved operation with Multi-Line keypad.
SVDrive2.1b	2.1b		06-26-00– 09-11-00	Added new languages Spanish and Portuguese.
SVDrive2.1c	2.1c	2118	09-11-00– 03-01-02	Improved reconnection with Keypad.
SVDrive3.0a	3.0a		Not Released	
SVDrive3.0b	3.0b	3454	03-01-02 - Current	32 bit version, will support Windows 2000 and NT. Added NI Drive support

SVDrive is parameterization and monitoring tool for SV9000 drive.
NOTE! HVDrive tool can not be used with SV9000.

SVLoad

Software file / version	Help (About)	ECO	Used	Notes
SVLoad2.0c	2.0c		10-22-98 – 03-19-99	First SVLoad release.
SVLoad2.0d	2.0d		03-19-99 – 05-19-99	Error message “Virhe” changed to “Error”
SVLoad2.0e	2.0e		05-19-99– 06-26-00	Updated loader software
SVLoad2.0f	2.0f		Not Released.	
SVLoad2.0g	2.0g	2118	06-26-00 – 03-01-02	Removed bin files.
SVLoad2.0h	2.0h		Not Released.	
SVLoad2.0i	2.0i	3454	03-01-02 – Current	Added NI Drive selection

SVLoad is software loading tool for SV9000 drive.
NOTE! HVLoad tool can not be used with SV9000.

4201 North 27th Street
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HVDrive

Software file / version	Help (About)	ECO	Used	Notes
HVDrive2.1a	2.1a		03-31-00– 06-26-00	First HVDrive release.
HVDrive2.1b	2.1b	2118	06-30-00– 04-20-01	New ap2 file added
HVDrive2.1c	2.1c		Not Used	
HVDrive2.1d	2.1d	2577	04-20-01– 06-30-01	New ap2 files added
HVDrive2.1d	2.1d	2761	06-30-01– 03-01-02	New ap2 files added
HVDrive3.0a	3.0a		Not Released	
HVDrive3.0b	3.0b	3454	03-01-02 – Current	32 bit version, will support Windows 2000 and NT. Added NI Drive support

HVDrive is parameterization and monitoring tool for HV9000 drive.
NOTE! SVDive tool can not be used with HV9000.

HVLoad

Software file / version	Help (About)	ECO	Used	Notes
HVLoad2.0a	2.0a	2118	02-28-00 – 04-20-01	First HVLoad release.
HVLoad2.0b	2.0b	2577	04-20-01 – 03-01-02	New selection in type code field
HVLoad2.0c	2.0c	3454	03-01-02 – Current	Added NI Drive selection

HVLoad is software loading tool for HV9000 drive.
NOTE! SVLoad tool can not be used with HV9000.

4201 North 27th Street
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BPDrive

Software file / version	Help (About)	ECO	Used	Notes
BPDrive3.0a	3.0a		12-01-01 - 03-01-02	First BPDrive release.
BPDrive3.0b	3.0b	3454	03-01-02 – Current	Added NI Drive support

BPDrive is parameterization and monitoring tool for BP9000 drive.
NOTE! SVDriver tool can not be used with BP9000.

BPLoad

Software file / version	Help (About)	ECO	Used	Notes
BPLoad 2.0h	2.0h	3454	12-01-01 – 03-01-02	First BPLoad release.
BPLoad 2.0I	2.0I	3454	03-01-02 – Current	Added NI Drive selection

BPLoad is software loading tool for BP9000 drive.
NOTE! SVLoad tool can not be used with BP9000.

System Software / Application SW Cross Reference List

SV9000 Standard Factory Software

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00090b	90.01	sm00094a	smfa052a smfa053c smfa054a smfa057a smfa055b smfa056b smfa045a	smfa052 smfa053 smfa054 smfa057 smfa055 smfa056 smfa045	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00090c	90.02	sm00094a	smfa052a smfa053c smfa054a smfa057a smfa055b smfa056b smfa045a	smfa052 smfa053 smfa054 smfa057 smfa055 smfa056 smfa045	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00090e	90.04	sm00094a	smfa067a smfa068a smfa069a smfa071a smfa070a smfa072a smfa045a	smfa067 smfa068 smfa069 smfa071 smfa070 smfa072 smfa045	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00095a	95.00	sm00094b	smfa067a smfa068a smfa069a smfa072a smfa070a smfa071a smfa045a	smfa067 smfa068 smfa069 smfa072 smfa070 smfa071 smfa045	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00095b	95.01	sm00094b	smf081aa smf082ab smf083aa smf084aa smf085aa smf086aa smf087aa	smf081a smf082a smf083a smf084a smf085a smf086a smf087a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00095c	95.02	Not Used			
sm00095d	95.03	sm00093b	smf081ab smf082ab smf083ab smf084aa smf085ac smf086aa smf087ab	smf081a smf082a smf083a smf084a smf085a smf086a smf087a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00095e	95.04	Not Used			
sm00095f	95.05	sm00093b	smf081ac smf082ab smf083ac smf084aa smf085ad smf086ab smf087ab	smf081a smf082a smf083a smf084a smf085a smf086a smf087a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00095g	95.06	sm00093b	smf081bb smf082bd smf083bc smf084bc smf085bc smf086bb smf087bc	smf081b smf082b smf083b smf084b smf085bc smf086b smf087b	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00095h	95.07	sm00111a	Smf111aa Smf112aa Smf113aa Smf114aa Smf115aa Smf116aa Smf117aa	Smf111a Smf112a Smf113a Smf114a Smf115a Smf116a Smf117a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan

4201 North 27th Street
Milwaukee, WI 53216

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00095i	95.08	sm00111a	Smf111aa Smf112aa Smf113aa Smf114aa Smf115aa Smf116aa Smf117aa	Smf111a Smf112a Smf113a Smf114a Smf115a Smf116a Smf117a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00095m	95.12	sm00111a	Smf111aa Smf112aa Smf113aa Smf114aa Smf115aa Smf116aa Smf117aa	Smf111a Smf112a Smf113a Smf114a Smf115a Smf116a Smf117a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan

SV9000 Standard software with 50 Hz default settings

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00112h	112.07	sm00113a	Smf111aa Smf112aa Smf113aa Smf114aa Smf115aa Smf116aa Smf117aa	Smf111a Smf112a Smf113a Smf114a Smf115a Smf116a Smf117a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan
sm00112i	112.08	sm00113a	Smf111aa Smf112aa Smf113aa Smf114aa Smf115aa Smf116aa Smf117aa	Smf111a Smf112a Smf113a Smf114a Smf115a Smf116a Smf117a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan

SV9000 Special Software with SVReady Enhanced Applications

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00104a	104.00	Not Used			
sm00104b	104.01	Not Used			
sm00104c	104.02	Not Used			
sm00104d	104.03	sm00106d	smf081ab smf082ab smf083ab smf084aa smf085ac smf073ad smf087ab	smf081a smf082a smf083a smf084a smf085a smf073a smf087a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose ("2") Pump & Fan

4201 North 27th Street
Milwaukee, WI 53216

SV9000 Closed Loop Software

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00099j	99.09	sm00102g			Fieldbus

HV9000 Standard software (Series B)

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00108a	108.00	Not Used			
sm00108b	108.01	Not Used			
sm00108c	108.02	sm00094g	hv0105b	hv0105b	Basic
sm00108d	108.03	sm00094g	hv0105c	hv0105c	Basic
sm00108e	108.04	sm00094g	hv0105f	hv0105f	Basic
Sm00108f	108.05	Sm00094g	hv0105g hvn201c hvp101d	Hv0105g hvn201c hvp101d	Basic Basic with N2 Johnson Basic with Siemens P1

CP9000 Standard Software (Clean Power)

System Software	ID at panel	System data file	Application file	Application data file	Explanation
(.bin)	(n 18)	(.as2)	(.hex)	(.ap2)	Application
sm00117a	117.00	sm00111a	Smf111aa Smf112aa Smf113aa Smf114aa Smf115aa Smf116aa Smf117aa	Smf111a Smf112a Smf113a Smf114a Smf115a Smf116a Smf117a	Basic Standard Local/Remote Multi-Step PI-Control Multi-Purpose Pump & Fan

Special Applications

Status	Technical Area	Designer	Application Number	SVDrive .ap2 file revision	Application revision	File extension	Application name	Date	Notes
1	sm	a	001	x	x	.hex	Omax	03/01/99	Special application made for Omax Corp.
1	sm	a	002	x	x	.hex	Demo new keypad functions	08/09/99	Modified multipurpose application. Made to test and demonstrate new H-O-A keypad.
1	sm	a	003	x	x	.hex	Mayville Engineering	09/23/99	Modified Multipurpose application. Reference can be set as Strokes/min. Also added new monitoring display. Reference and Actual value can be scaled with 2 new parameters.
1	ch	a	004	x	x	.hex	High Speed Grinder	09/23/99	Modified multipurpose application, 1000Hz output freq
1	ch	a	005	x	x	.hex	Torque testing program for Lab	10/21/99	Modified multipurpose II w/fieldbus. Special application made for IT soft-starter testing.
1	ch	a	006	x	x	.hex	Elevator Program		Modified Vaasa lift w/positioning application. Added speed supervision.
1	ch	a	007	x	x	.hex	Closed loop w/ speed supervision	10/23/99	Modified multipurpose II w/fieldbus. Added speed supervision
1	ch	a	008	x	x	.hex	Landis-Gardner	10/26/99	Modified Multi-step. Direct setting for AI custom limits and voltage input ref.supervision added.
1	ch	a	009	x	x	.hex	Golf Course Irrigation Services	11/23/99	Modified P&F application (Line-Editor version) Special software for GCIS Inc. use only

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Page 25/26

1	ch	a	010	x	x	.hex	Crippen MFG	02/24/00	Modified Standard application. Scalable rpm display.
1	ch	a	011	x	x	.hex	Eaton Transmissions	04/17/00	Modified close-loop application - Removed reverse capability
1	ch	a	012	x	x	.hex	Standard w/ scalable display	04/18/00	Standard application with scalable rpm display. 3 new scaling parameters added.
1	ch	a	013	x	x	.hex	Multipurpose application w/1900Hz output frequency	04/25/00	Modified multipurpose application. Output Frequency limits can be set up to 1900 Hz
1	ch	a	014	x	x	.hex	A.G. Braun Washer	05/17/00	Modified Standard Application. Added 2-Max. freq. select and accel/decel select
1	ch	a	015	x	x	.hex	Closed Loop w/ DeviceNet	07/06/00	Modified base application smf091led to include DeviceNet logic from smf073cm.
1	ch	a	016	x	x	.hex	Golf Course Irrigation Services	07/30/00	Modified P&F application (IEC tool version) Special software for GCIS Inc. use only
1	ch	a	017	x	x	.hex	Enhanced Motor/Pump Protection	11/10/00	Modified Multipurpose Control Application II (Protel version)
	ch	a	018	x	x	.hex	Landis-Gardner	11/15/00	Modified Multi-Step application. Run enabled will stop drive always with coast stop. In low frequencies <1Hz application changes motor control mode to V/Hz if Open Loop Speed is selected.
1	ch	a	019	x	x	.hex	Alpine	03/15/01	Modified MPII Password Protection
1	ch	a	020	x	x	.hex	Underload Restart	04/02/01	Modified Local Remote for Underload Restart
1	ch	a	021	x	x	.hex	Multiple External Inputs	04/03/01	Modified Standard Application for additional external faults
1	ch	a	022	x	x	.hex	PI Regulator Set Point Selection	04/23/01	Modified Pump & Fan application.
1	ch	a	023	x	x	.hex	Local-Remote w/Modbus and Underload restart	04/30/01	Modified Local Remote for oil industry
1	ch	a	024	x	x	.hex	SVReadeE Loc/Rem with voltage stab. parameters	06/29/01	Modified SVReadeE Local/Remote
1	ch	a	025	x	x	.hex	Closed Loop Fieldbus Gordon Darby	07/24/01	Modified Closed Loop Fieldbus smf091gf Disabled reverse motor rotation
1	ch	a	026	x	x	.hex	Oil Well Screw Pump	08/01/01	Modified MPII for displaying torque & speed with gear reducer
1	ch	a	027	x	x	.hex	Cavotec	10/29/01	Modified Closedloop withj fielbus
1	ch	a	028	x	x	.hex	Vacon Americas	11/06/01	Special software made by Vacon Americas (Boima Morray)
1	ch	a	029	x	x	.hex			
1	ch	a	030	x	x	.hex			

Cutler-Hammer

March 22, 2002

4201 North 27th Street
Milwaukee, WI 53216

INTERNAL USE ONLY

Page 26/26

1	ch	a	046	x	x	.hex	Multipurpose II	03/16/99	Cutler-Hammer Multipurpose II
1	ch	a	073	x	x	.hex	Multipurpose II (Fieldbus)	01/10/00	Cutler-Hammer Multipurpose II (Fieldbus)
1	ch	a	081	x	x	.hex	Basic	02/18/99	Cutler-Hammer Basic
1	ch	a	082	x	x	.hex	Standard	02/26/99	Cutler-Hammer standard
1	ch	a	083	x	x	.hex	Local-Remote	03/05/99	Cutler-Hammer LocRem
1	ch	a	084	x	x	.hex	Multi-Step	02/25/99	Cutler-Hammer Multistep
1	ch	a	085	x	x	.hex	PI-control	03/08/99	Cutler-Hammer PI-Control
1	ch	a	086	x	x	.hex	Multi-Purpose	02/24/99	Cutler-Hammer Multipurpose
1	ch	a	087	x	x	.hex	PFC Control		Does not exist in Graphical (only line editor version)
1	ch	a	104	x	x	hex	PFC Control	2000-07-11	PFC application IEC format