

Softstart

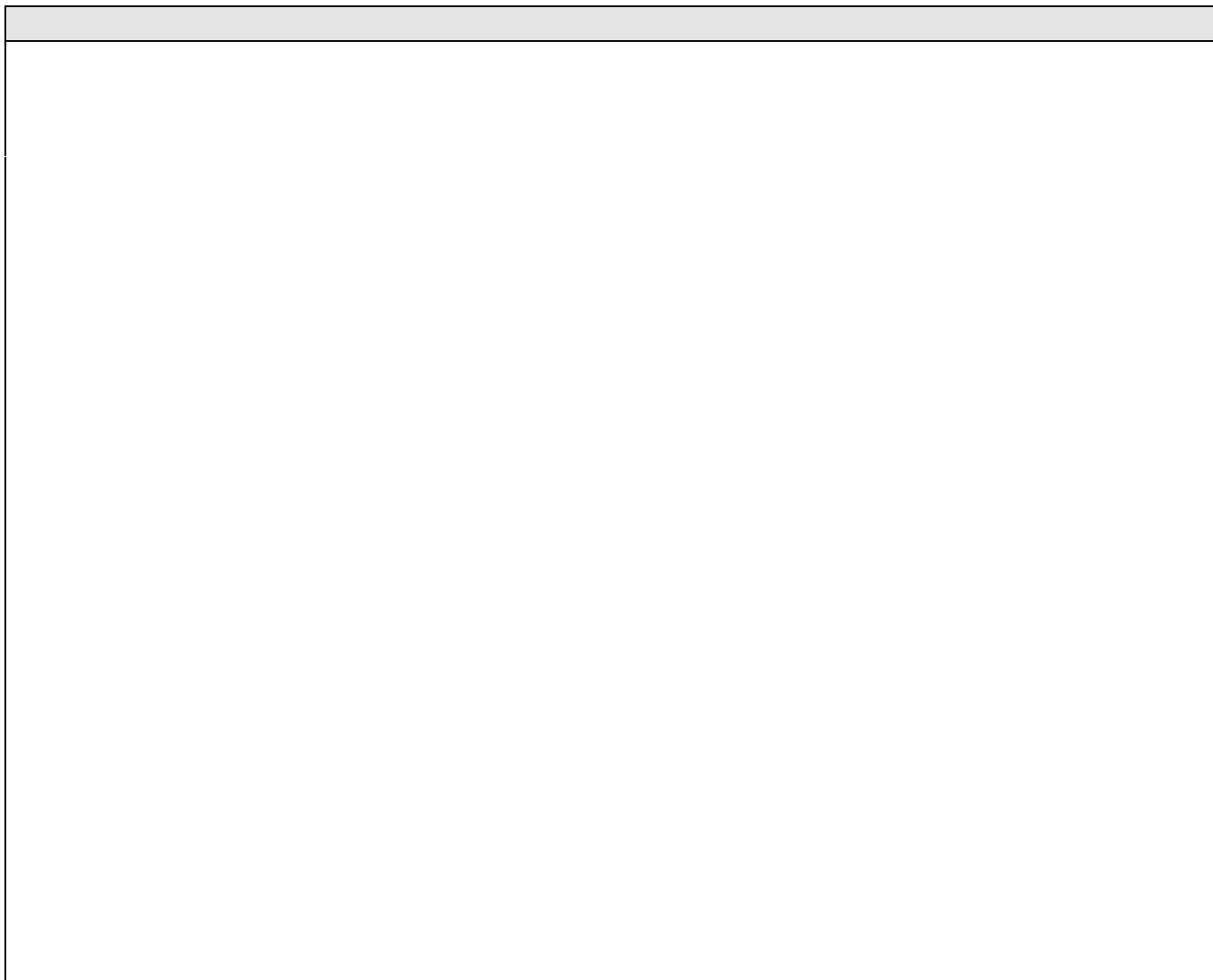
Diagram for softstarters

PS A18...60

PS D75...840

PS DH30...720

5309 698-1 Edition 4 Dec-01 (English)



STANDARD DIAGRAM

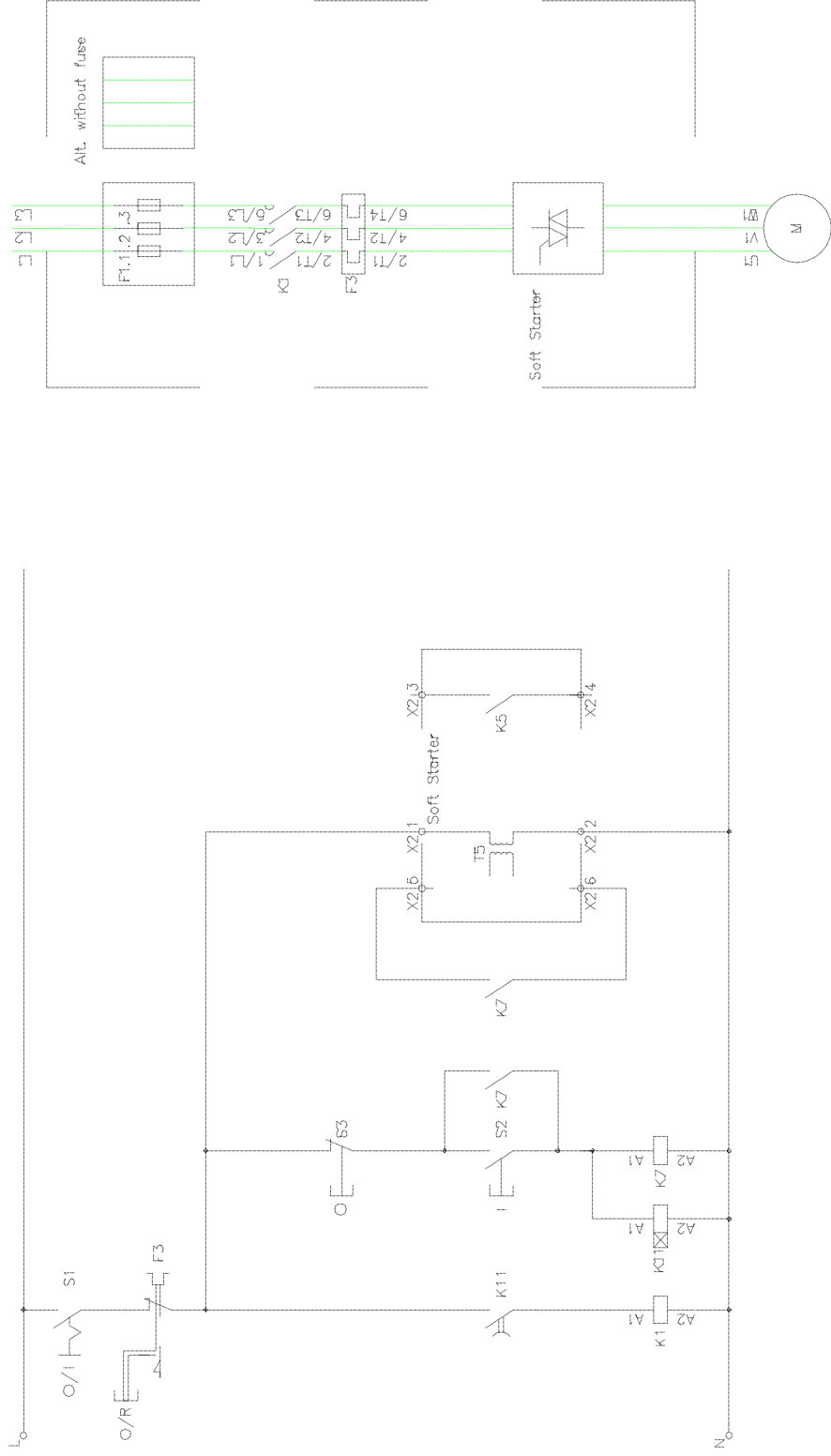
5366 104-1	PS A18...60	Standard.
5366 104-2	PS D75...840	Standard.
5366 104-3	PS D75...840	Standard.
	PS DH30...720	

APPLICATION DIAGRAM

5366 105-1	PS A18...60	With motor protection and softstop.
5366 105-2	PS D75...300	With motor protection and softstop.
5366 105-3	PS D370...840	With motor protection and softstop.
5366 105-4	PS D75...300	With motor protection and softstop.
	PS DH30...250	
5366 105-5	PS D370...840	With motor protection and softstop.
	PS DH300...720	
5366 105-6	PS A18...60	With softstop and By-pass.
5366 105-7	PS D75...300	With softstop and By-pass.
5366 105-8	PS D370...840	With softstop and By-pass.
5366 105-9	PS D75...145	With softstop and By-pass.
	PS DH30...110	
5366 105-10	PS D175...300	With softstop and By-pass.
	PS DH145...250	The internal overload relay is working also together with By-pass.
5366 105-11	PS D370...840	With softstop and By-pass.
	PS DH300...720	The internal overload relay is working also together with By-pass.
5366 105-12	PS A18...60	With motor protection, softstop and By-pass.
5366 105-13	PS D75...300	With motor protection, softstop and By-pass.
5366 105-14	PS D370...840	With motor protection, softstop and By-pass.
5366 105-15	PS D75...145	With motor protection, softstop and By-pass.
	PS DH30...110	
5366 105-16	PS D175...300	With motor protection, softstop and By-pass.
	PS DH145...250	The internal overload relay is working also together with By-pass.
5366 105-17	PS D370...840	With motor protection, softstop and By-pass.
	PS DH300...720	The internal overload relay is working also together with By-pass.
5366 105-18	PS A18...60	With reversing and softstop.
5366 105-19	PS D75...300	With reversing and softstop.
5366 105-20	PS D370...840	With reversing and softstop.
5366 105-21	PS D75...840	With reversing and softstop.
	PS DH30...720	
5366 105-22	PS A18...60	With reversing, By-pass and softstop.
5366 105-23	PS D75...300	With reversing, By-pass and softstop.
5366 105-24	PS D370...840	With reversing, By-pass and softstop.
5366 105-25	PS D75...145	With reversing, By-pass and softstop.
	PS DH30...110	
5366 105-26	PS D175...300	With reversing, By-pass and softstop.
	PS DH145...250	The internal overload relay is working also together with By-pass.
5366 105-27	PS D370...840	With reversing, By-pass and softstop.
	PS DH300...720	The internal overload relay is working also together with By-pass.

5366 105-28	PS A18...60	With pole-changing and softstop. For motor with two winding.
5366 105-29	PS D75...300	With pole-changing and softstop. For motor with two winding.
5366 105-30	PS D370...840	With pole-changing and softstop. For motor with two winding.
5366 105-31	PS A18...60	With pole-changing, By-pass and softstop. For motor with two winding.
5366 105-32	PS D75...300	With pole-changing, By-pass and softstop. For motor with two winding.
5366 105-33	PS D370...840	With pole-changing, By-pass and softstop. For motor with two winding.
5366 105-34	PS A18...60	With pole-changing and softstop.
5366 105-35	PS D75...300	For motor with one winding (Dallander). With pole-changing and softstop.
5366 105-36	PS D370...840	For motor with one winding (Dallander). With pole-changing and softstop.
5366 105-37	PS A18...60	For motor with one winding (Dallander). With pole-changing, By-pass and softstop.
5366 105-38	PS D75...300	For motor with one winding (Dallander). With pole-changing, By-pass and softstop.
5366 105-39	PS D370...840	For motor with one winding (Dallander). With pole-changing, By-pass and softstop.

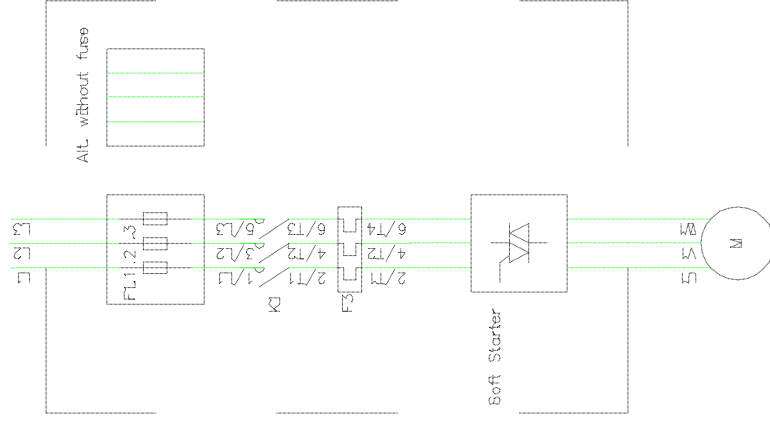
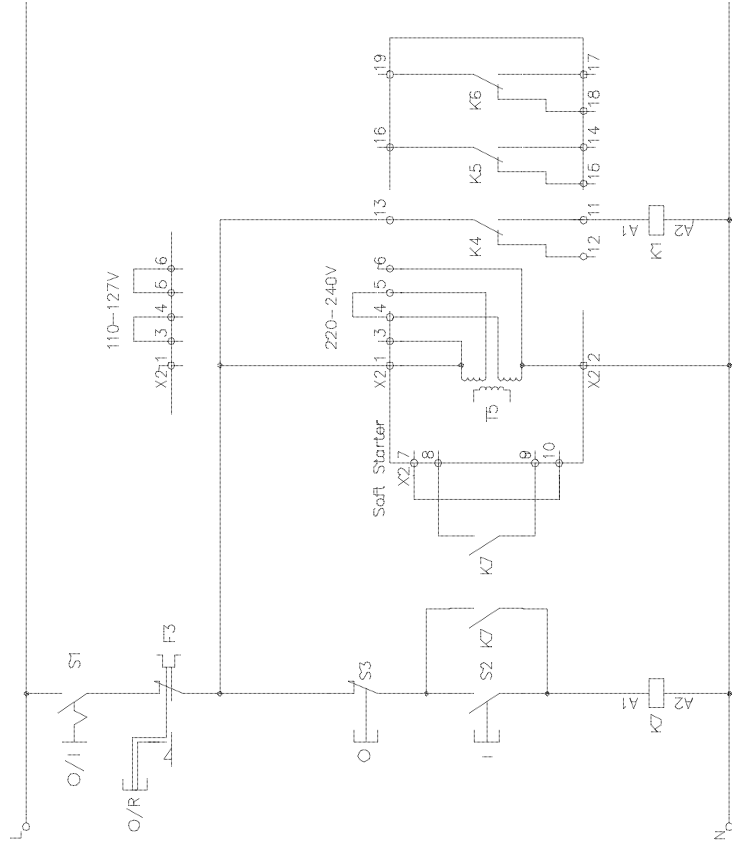
Soft Starter PS A18...60 with motor protection and softstop.
 Main contactor open during pause



A105-1

APPLICATION DIAGRAM		ISSUED	
Soft Starter		5366 105-1	
Mjukstare		1	
TP		82	
T. Persson		1	
T. Persson		1	
TP		1	
SECUR/B00		B6 B5	
Bov int		Bov int	
TP: 06 40		TP: 06 40	
App: 06 40		App: 06 40	
Rev: 06 40		Rev: 06 40	

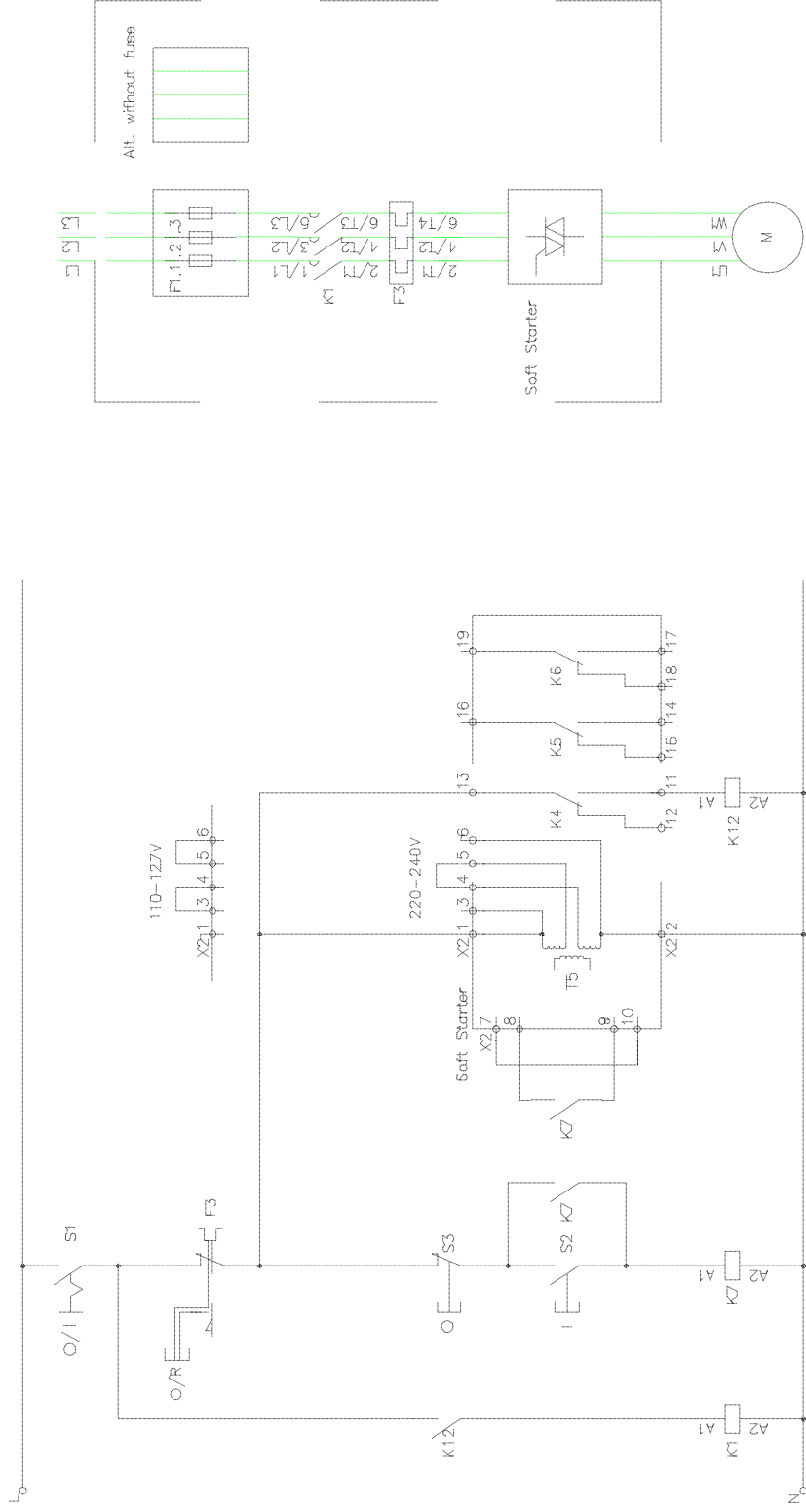
Soft Starter PS D75...300 with motor protection and softstop.
 Main contactor open during pause



A105-2

Design checked by T. PERSSON		APPLICATION DIAGRAM Soft Starter Mjokstartare		Rev. no. Sheet 82 1	
Drawing checked by T. PERSSON		ABB ABB Control		Long Sheet Rev. no. Cont. 1 1	
Drawn by TP		Iss. by Dept. SECUR/BB		Year Week 05 05	
K1 and fuses moved TP: 06 40 Appl Year Week		5366 105-2		ISSUED	

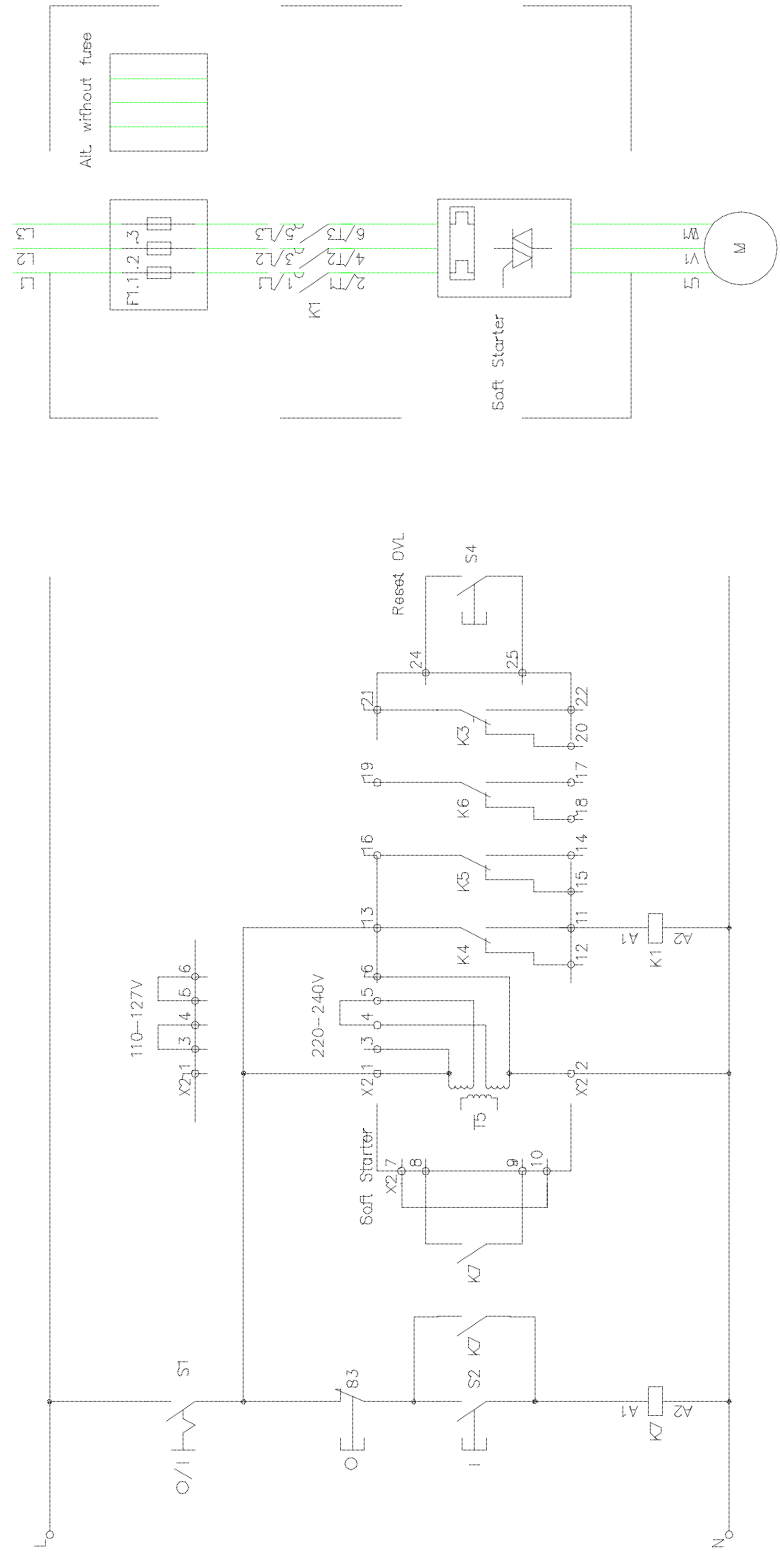
Soft Starter PS D370...840 with motor protection and softstop.
 Main contactor onen during pause



AI05-3

REV. NO		1	K12 Inset and Fuse moved	TP	06	40
APPD		TP				
YEAR						
ISSUED		1				
SECUR./B0		B6	B5			
APPLICATION DIAGRAM		Soft Starter Mjakstartare				
T Perissaa						
T Perissaa						
TP						
5366 105-3						
82						
1						

Soft Starter PS D75...300, PS DH30...250 with motor protection and softstop.
 Main contactor open during pause



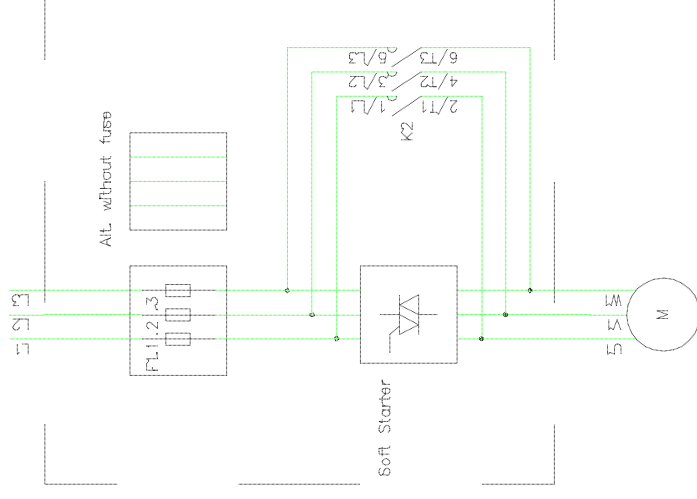
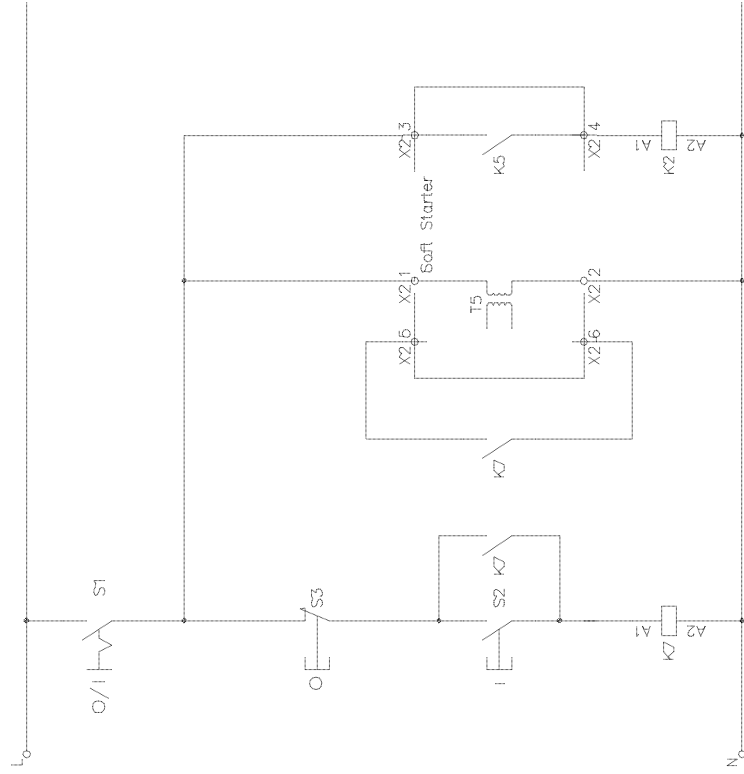
AI05-4

Design checked by T. Persson		APPLICATION DIAGRAM		Rev. no.	Sheet
Drawing checked by T. Persson		Soft Starter Mjukstarkare		Long	Sheet
Drawn by TP		ABB ABB Control		82	1
Iss. by Dept.	Year	Week	ISSUED	2	...
SECUR/BB	06	05			

5366 105-4

2	K1 and fuses moved	TP	06	40
1	Adjusted	TP	06	09
		Appd	Year	Week

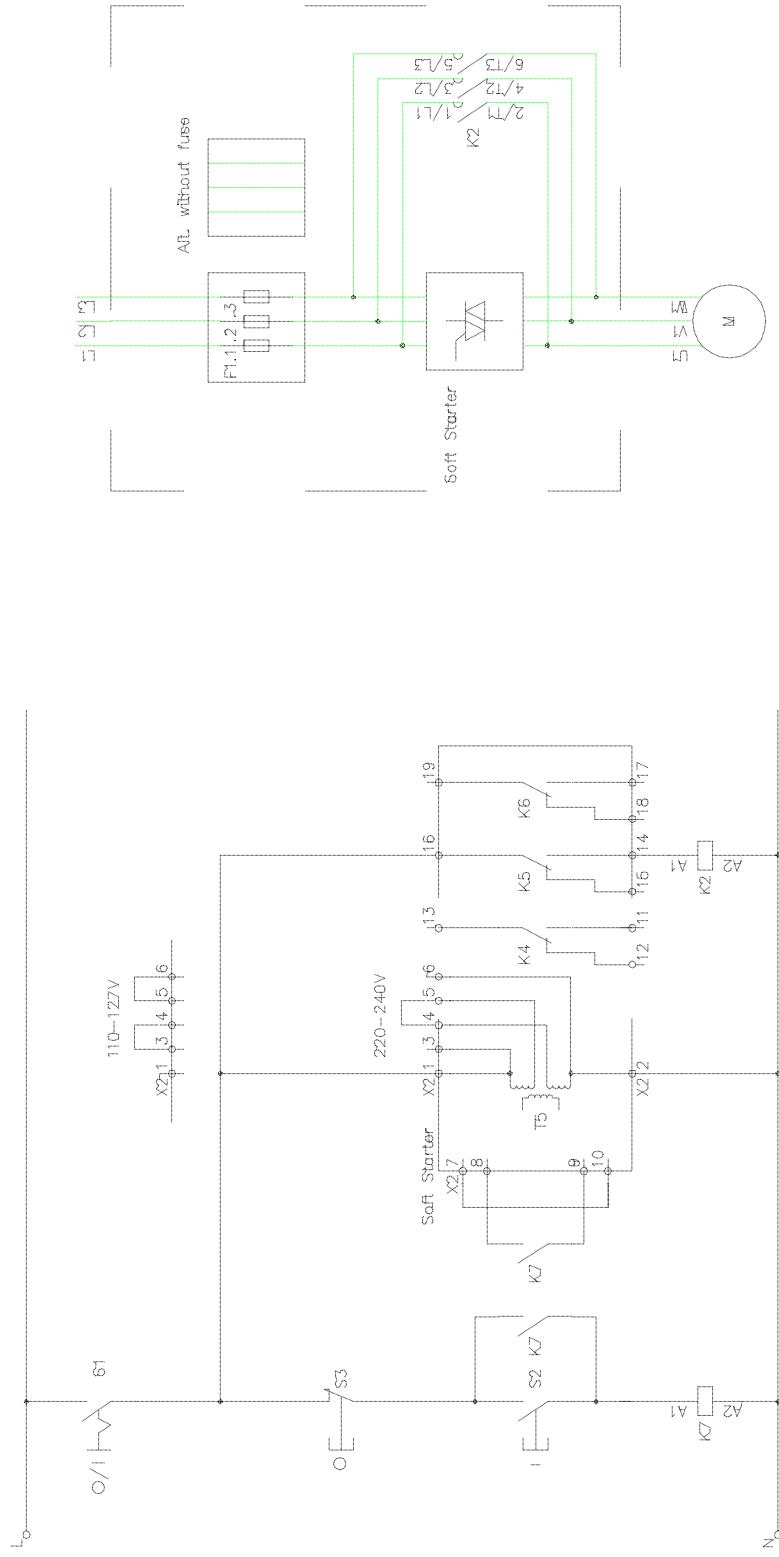
Soft Starter PS A18...60 with softstop and By-pass.



A105-6

APPLICATION DIAGRAM		SECUR/80 06 05		ISSUED	
Soft Starter		Mjuketartare		5366 105-6	
I Perissoa		I Perissoa		82	
I Perissoa		I Perissoa		1	
TP		TP		1	
1 Fuses moved		TP 86 40		1	
Rev int		Appt Xor 10xk		1	

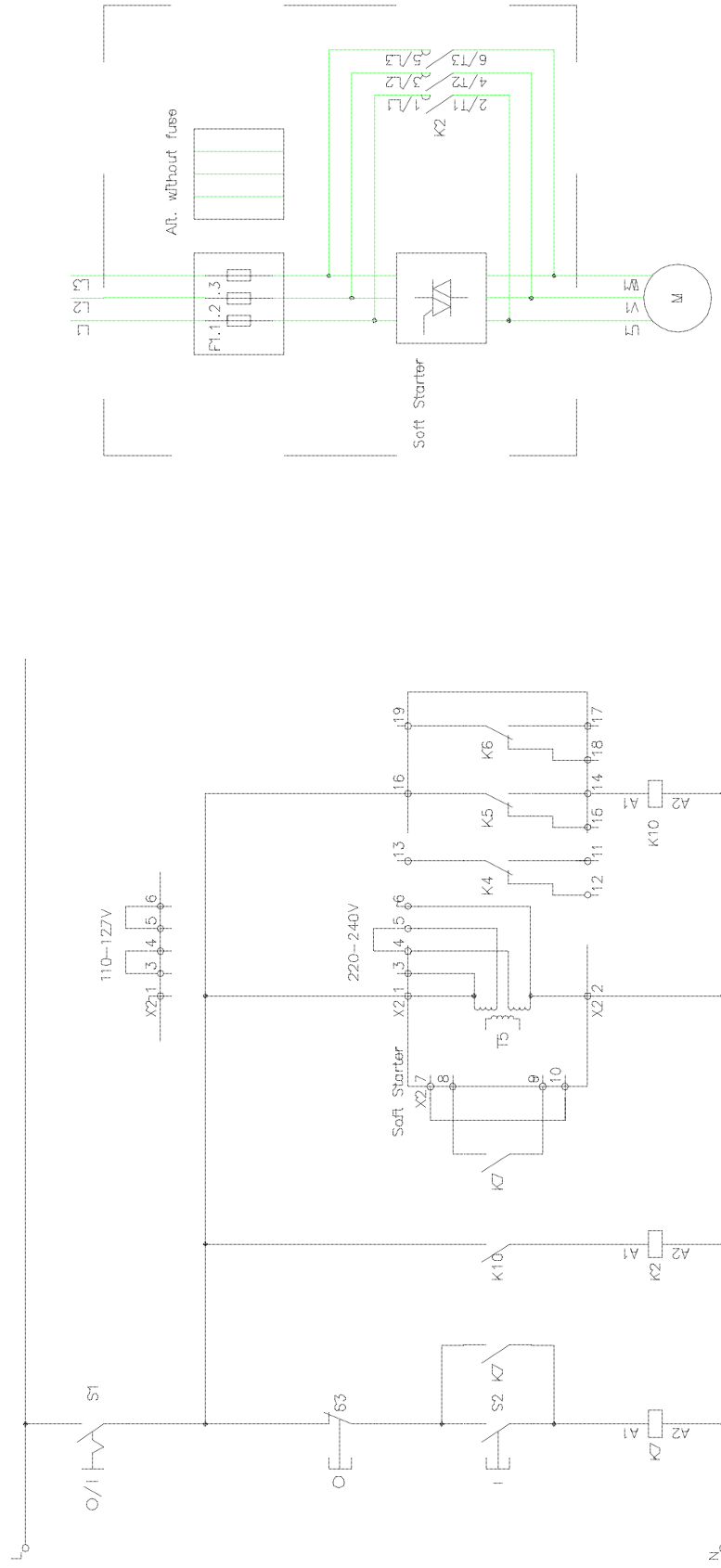
Soft Starter PS D75...300 with softstop and By-pass.



A105-7

APPLICATION DIAGRAM		SECUR/80 06 05	
Soft Starter		ISSUED	
Mjpkstartare		1	
I Pensjon		82	
I Pensjon		1	
TP		---	
1 Fuses moved			
TP 86 40			
Rev int		Xor Work	

Soft Starter PS D370...840 with softstop and By-pass.



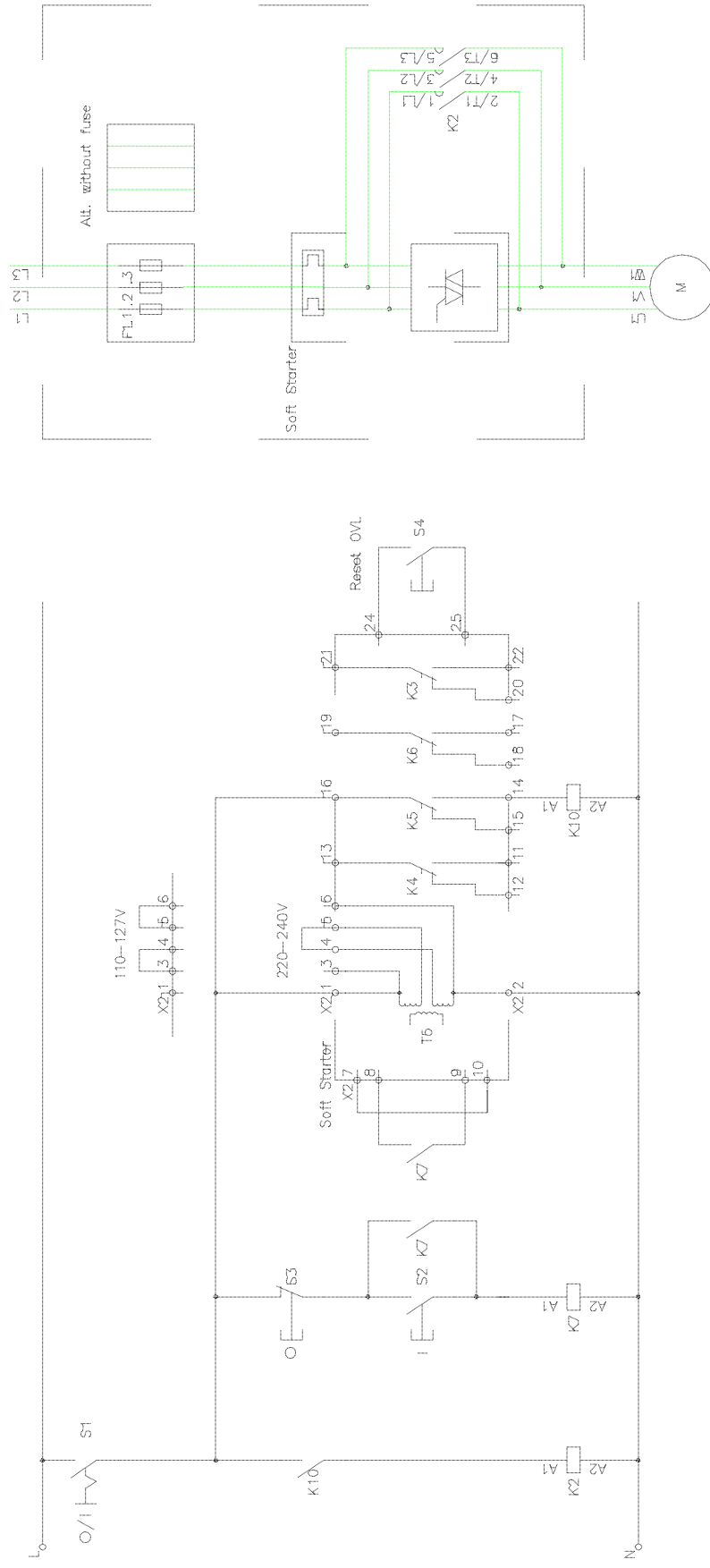
A105-8

APPLICATION DIAGRAM		SECUR/80 06 05	
I Perissoa	Soft Starter	82	1
I Perissoa	Mjakstartare	5366 105-8	1
TP		ISSUED	1

1 Fuses moved
Rev int

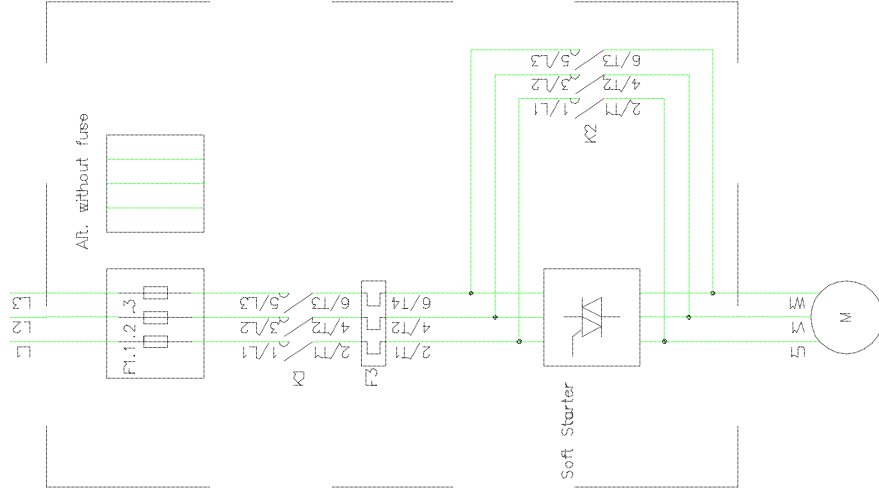
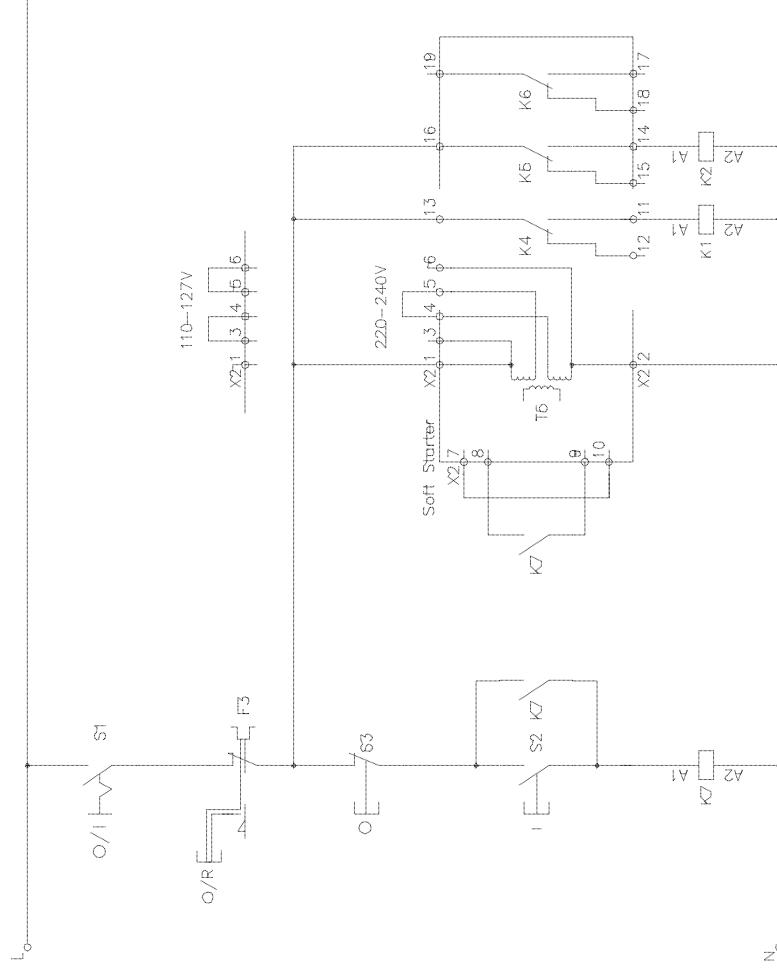
TP 86 40
Appl Year Week

Soft Starter PS D370...840, PS DH300...720 with softstop and By-pass.
 The internal overload relay is working also together with By-pass.



2		Revised	TP	86	40
1		Adjusted	TP	86	08
Rev. no.		Appd.	Year	Week	
5366 105-11		ABB Control		ISSUED	
A105-11		Design checked by I. Persson		APPLICATION DIAGRAM	
Rev. no.		Drawn checked by I. Persson		Soft Starter	
2		Drawn by TP		Mjukstartare	
Rev. no.		Iss. by Dept.		Year Week	
1		SECUR/80		86 05	
82		Long		Sheet	
1		Sheet		1	
2		Rev. no.		Cont.	
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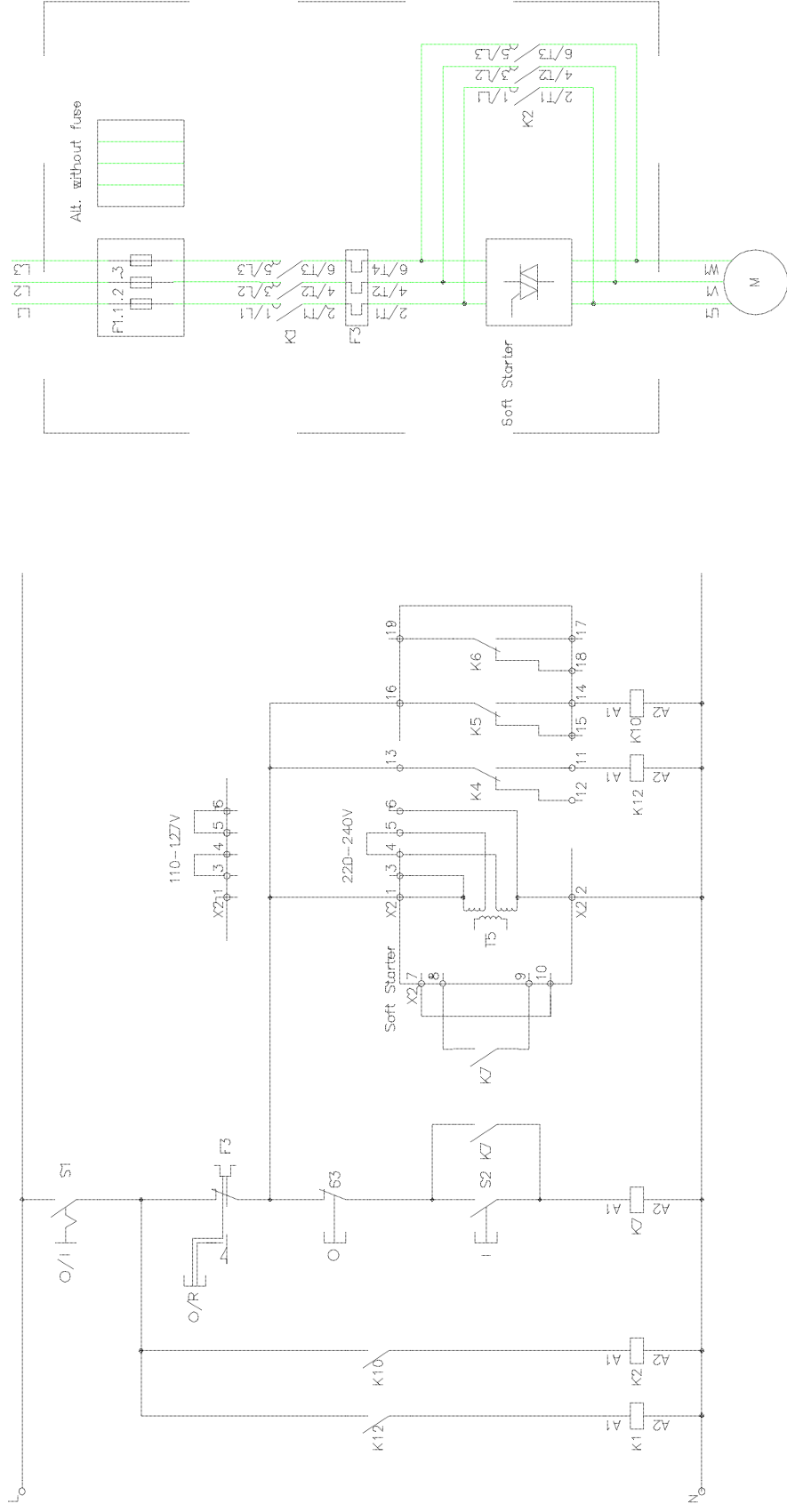
Soft Starter PS D75...300 with motor protection, softstart and By-pass.
 Main contactor open during pause



AJ05-13

I Persson		APPLICATION DIAGRAM		ISSUED	
I Persson		Soft Starter		82	
TP		Mjukstartare		1	
1 K10 removed, K1, K2 and fuses moved		SECUR/80 06 05		5366 105-13	
Rev int	Appd	Year	Week		
	TP	06	40		

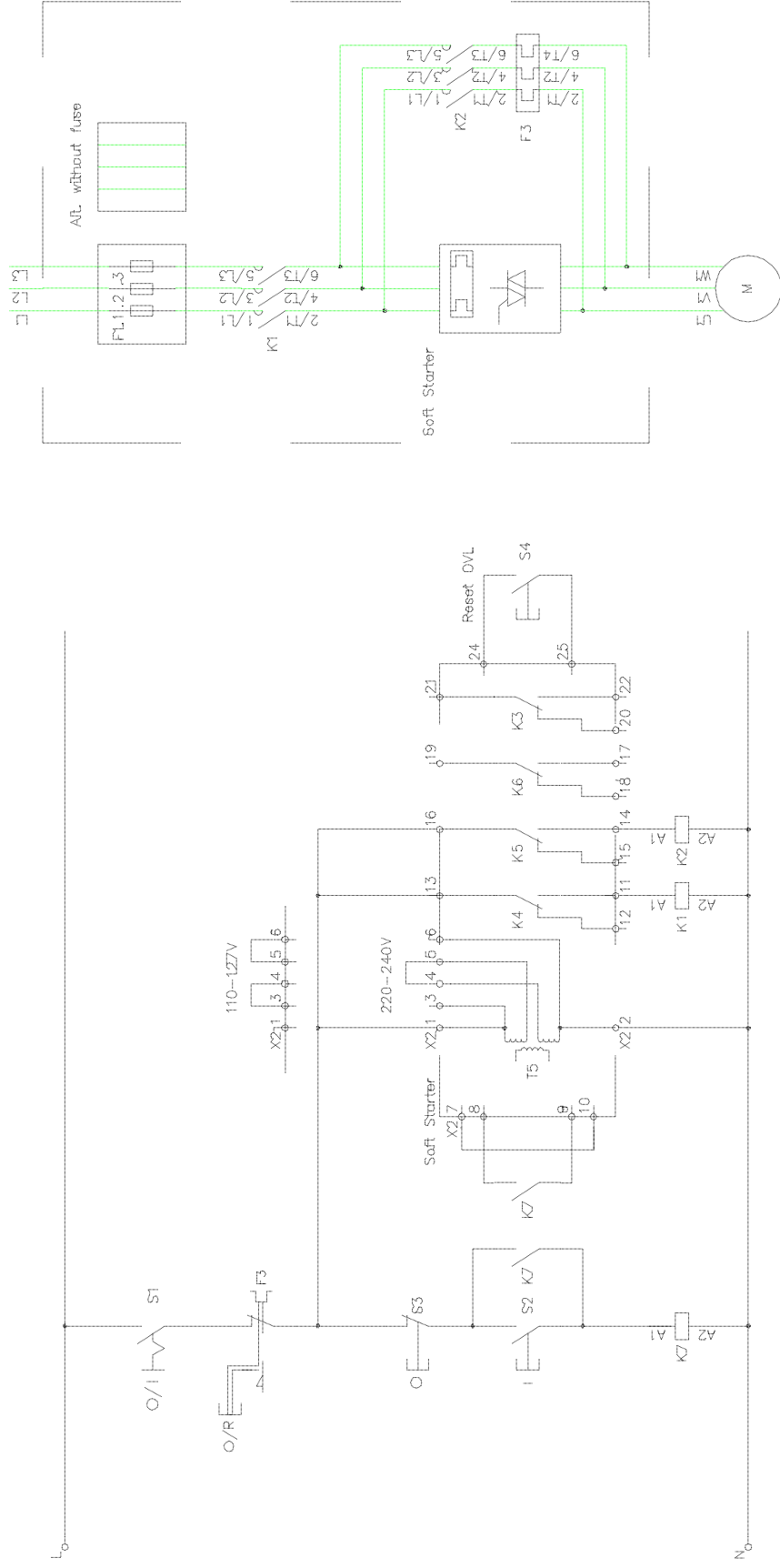
Soft Starter PS D370...840 with motor protection, softstop and By-pass.
 Main contactor open during pause



A105-14

Rev. no.		Appd.	Year	Issue	APPLICATION DIAGRAM	
1	K12 Insert, and fuses moved	TP	86	40	T. Penisson T. Penisson TP	Soft Starter Mjpkstartare
					SECUR/80	86 05
					5366 105-14	
					1	ISSUED
					82	1

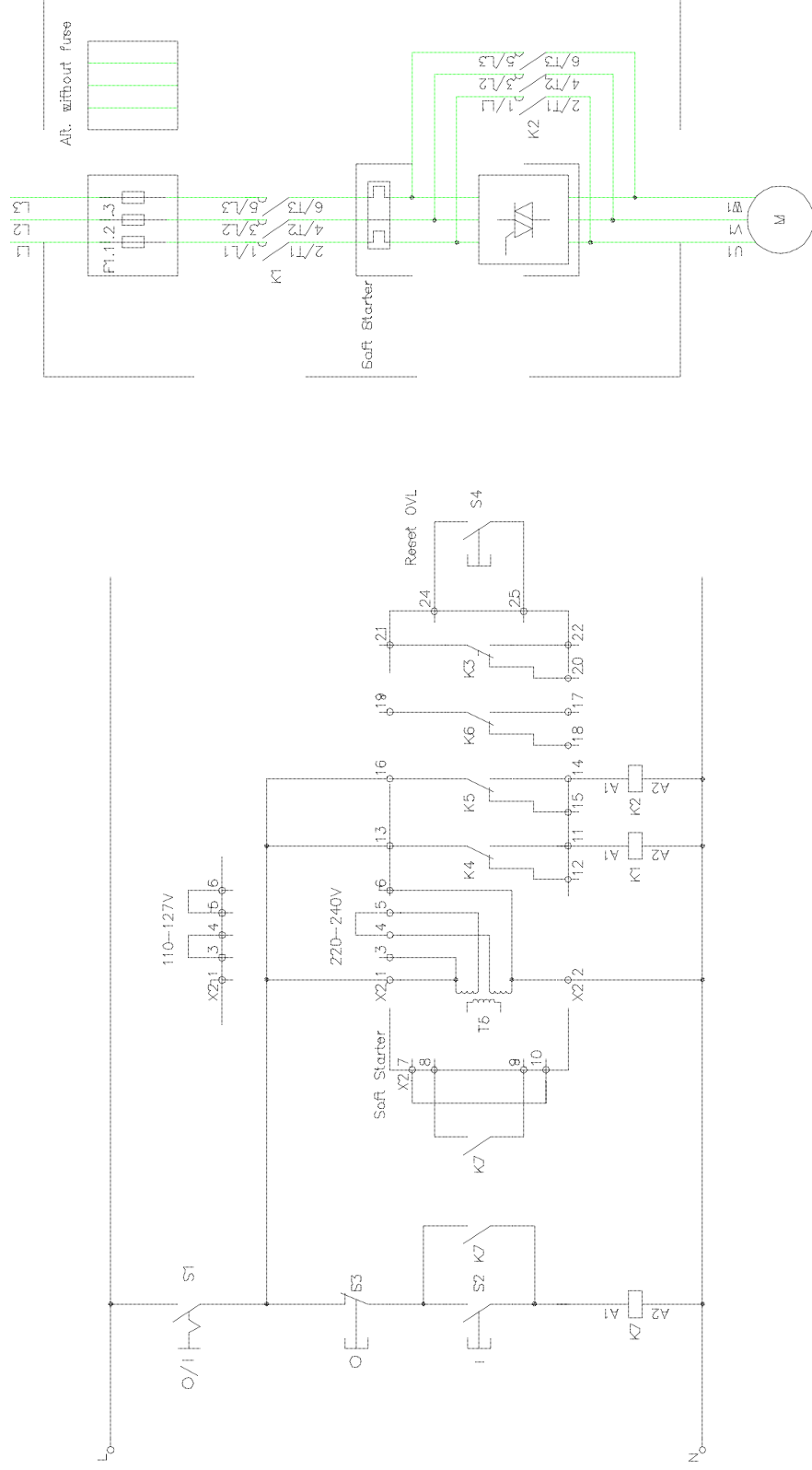
Soft Starter PS D75...145, PS DH30...110 with motor protection, softstop and By-pass.
 Main contactor open during pause



A105-15

Rev int		Sheet		Rev int		Sheet	
2	K1 and fuses moved	TP	86 40	2	82	1	1
1	Adjusted	TP	86 08	1	82	1	1
Rev int	Appl	Year	Week	Issued	Year	Week	Cont.
				ISSUED			2
5366 105-15				ISSUED			
APPLICATION DIAGRAM				Rev int Sheet			
Soft Starter				Long Sheet			
Mjukstartare				Rev int Cont.			
ABB Control				...			
Design checked by I. Persson				Iss by Dept. Year Week			
Drawing checked by I. Persson				SECUR/80 06 05			
Drawn by TP							

Soft Starter PS D175...300, PS DH145...250 with motor protection, softstop and By-pass.
 The internal overload relay is working also together with By-pass.
 Main contactor open during pause



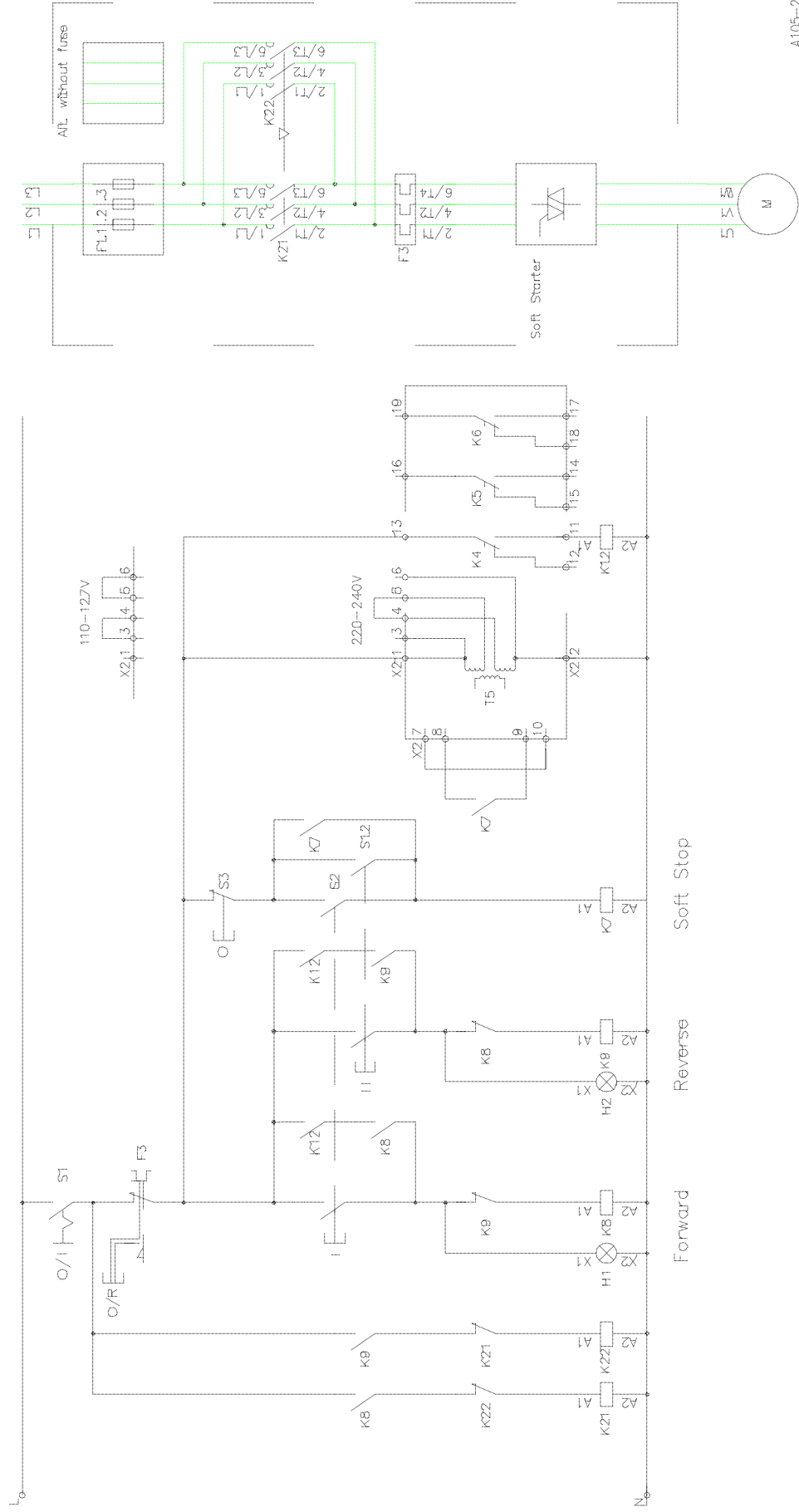
Rev. no.		Date		Description	
2	1	TP	96	40	F3K8 removed, K12 inserted, fuses moved
1	1	TP	96	09	Adjusted
Rev. no.	Appr.	Year	Week		
Design checked by		APPLICATION DIAGRAM			
I. Pefrsson		Soft Starter			
Drawing checked by		Mjaktstartare			
I. Pefrsson		ABB Control			
Drawn by		TP			
Issued by		ISSUED			
Issued date		2005-05-05			
Rev. no.		Sheet		Total	
5366 105-16		82		1	
A105-16		2		...	

Soft Starter PS D370...840 with reversing and softstop.

To be stopped before reversing.

Start at optional direction.

If softstop is not needed set the time for softstop to 0.5.



A105-20

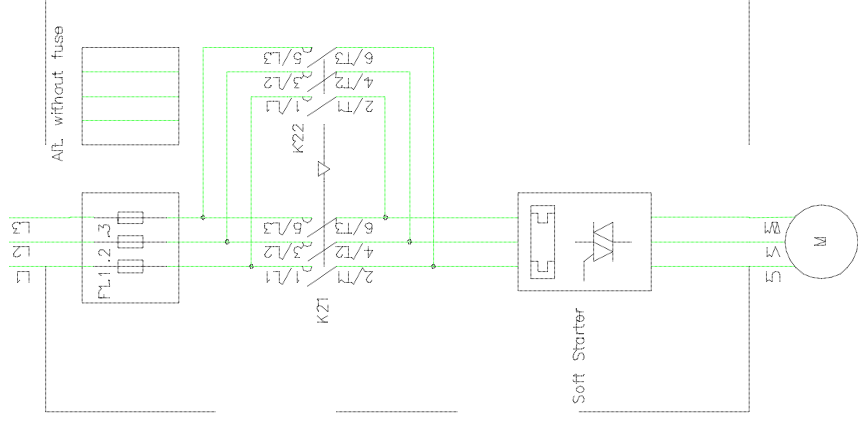
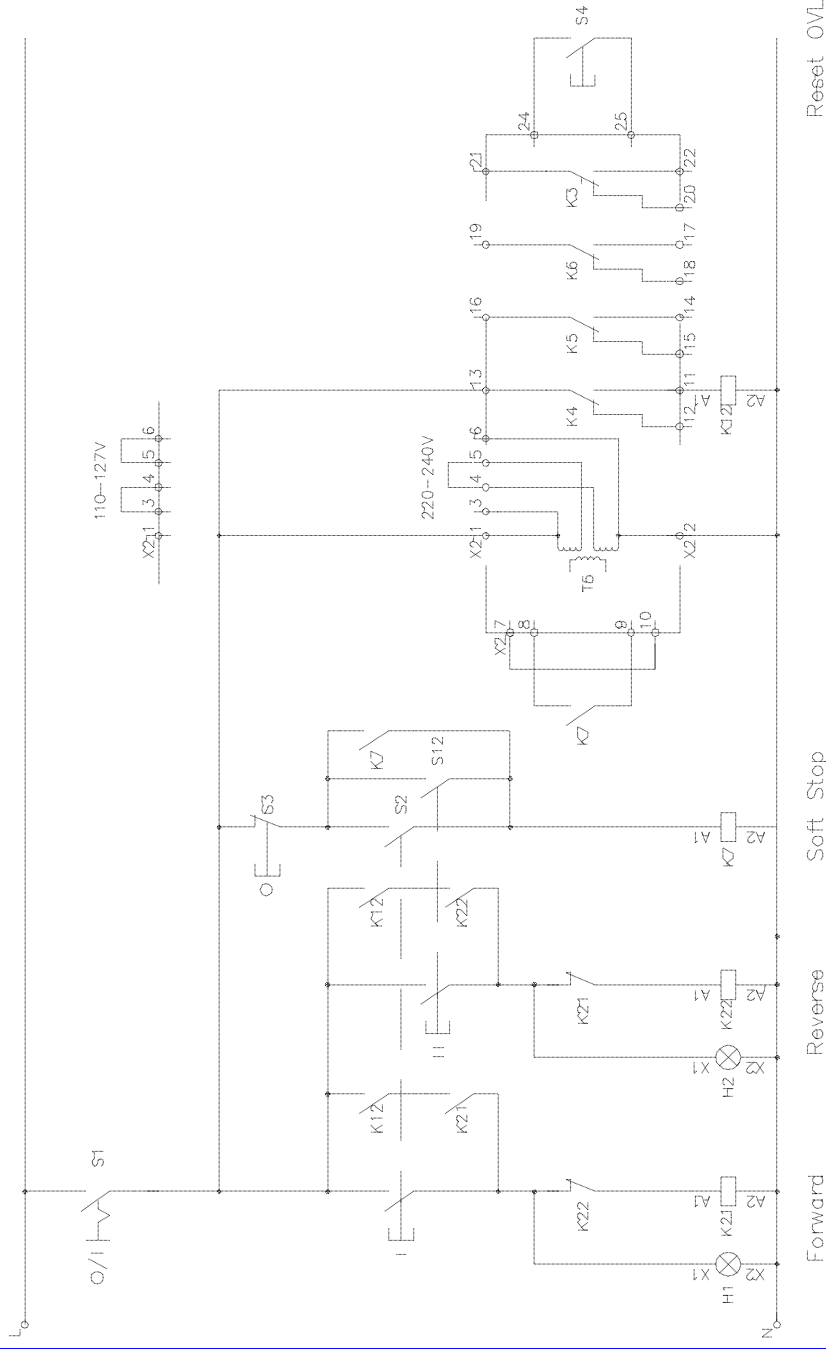
Rev. no.	1	Appd.	86	42	Year	1986
1	Redrawing	TP	86	42	Year	1986
Design checked by I. Persson Drawing checked by I. Persson Drawn by TP						
APPLICATION DIAGRAM Soft Starter Mjukstartare						
ABB Control						
Issued by: STCRL/80 06 05						
5366	105-20					
Rev. no.	1	Rev. no.	1	Sheet	82	Long Sheet
ABB						

Soft Starter PS D75...840, PS DH30...720 with reversing and softstop.

To be stopped before reversing.

Start at optional direction.

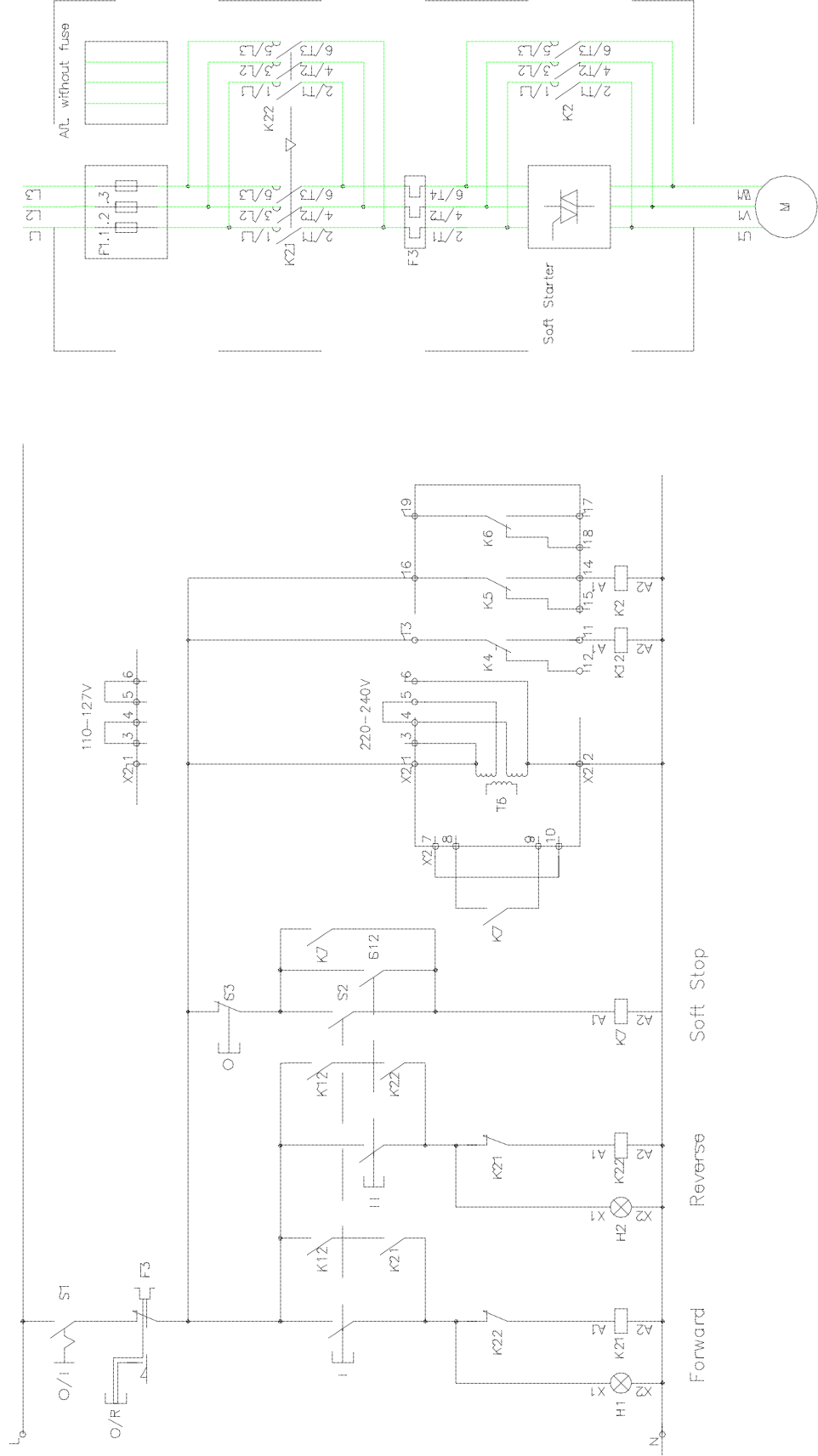
If softstop is not needed set the time for softstop to 0.5.



A105-21

1		Redrawn	TP	96	42	Appd	Yor	Issued	1	---	
Rev. no.											
I Persson			APPLICATION DIAGRAM			SECUR/80		06		05	
I Persson			Soft Starter							5366 105-21	
TP			Mjukstartare								

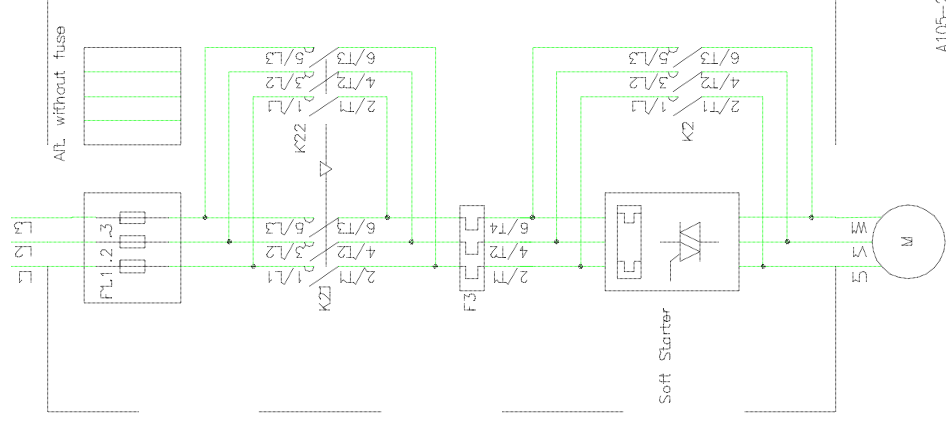
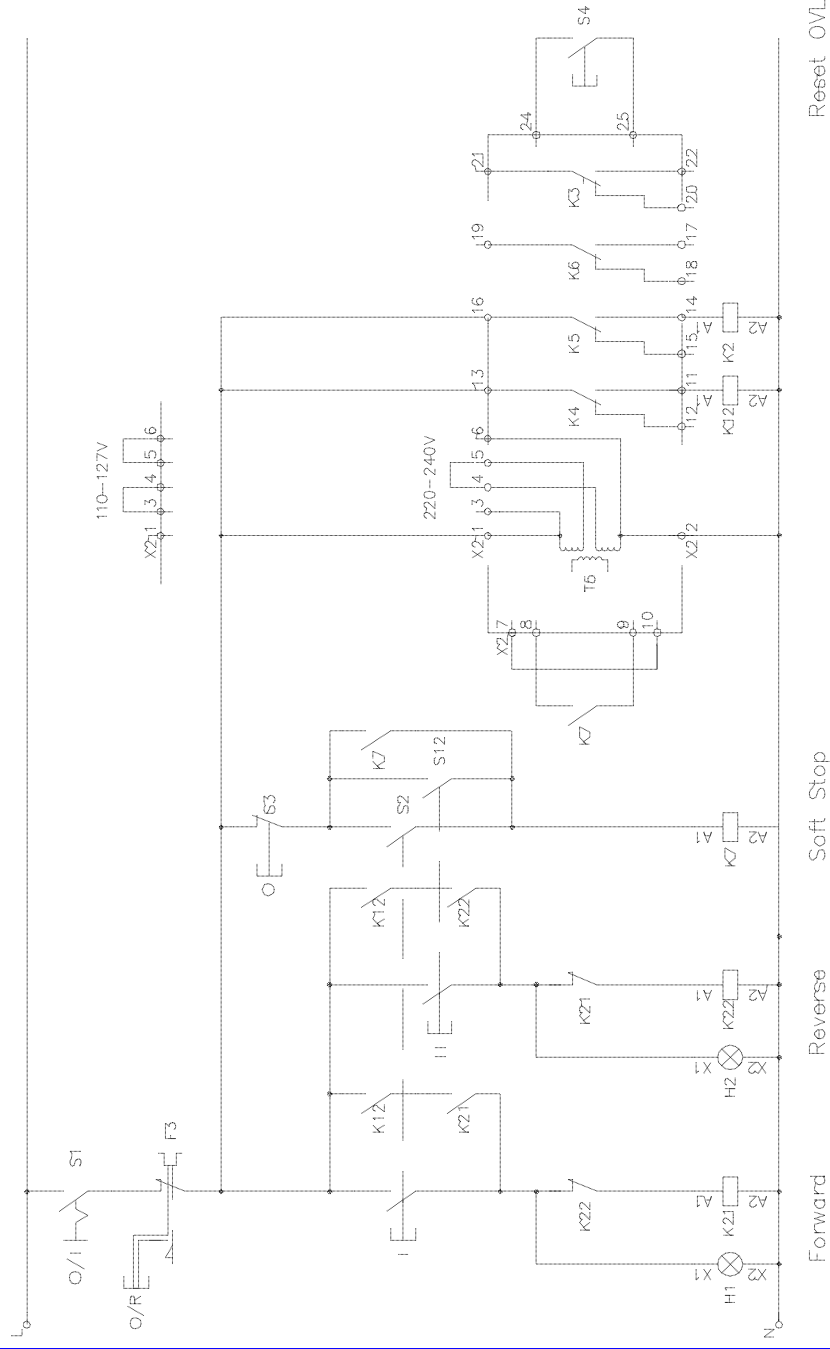
Soft Starter PS D75...300 with reversing, By-pass and softstop.
 To be stopped before reversing.
 Start at optional direction.
 If softstop is not needed set the time for softstop to 0.5.



AJ05-23

APPLICATION DIAGRAM		Soft Starter		Mjakstartare	
I Perissaa		I Perissaa		TP	
1		TP		96 42	
Rev int		Appt		Year	
5366 105-23		SECUR/80 06 05		ISSUED	
82		1		...	

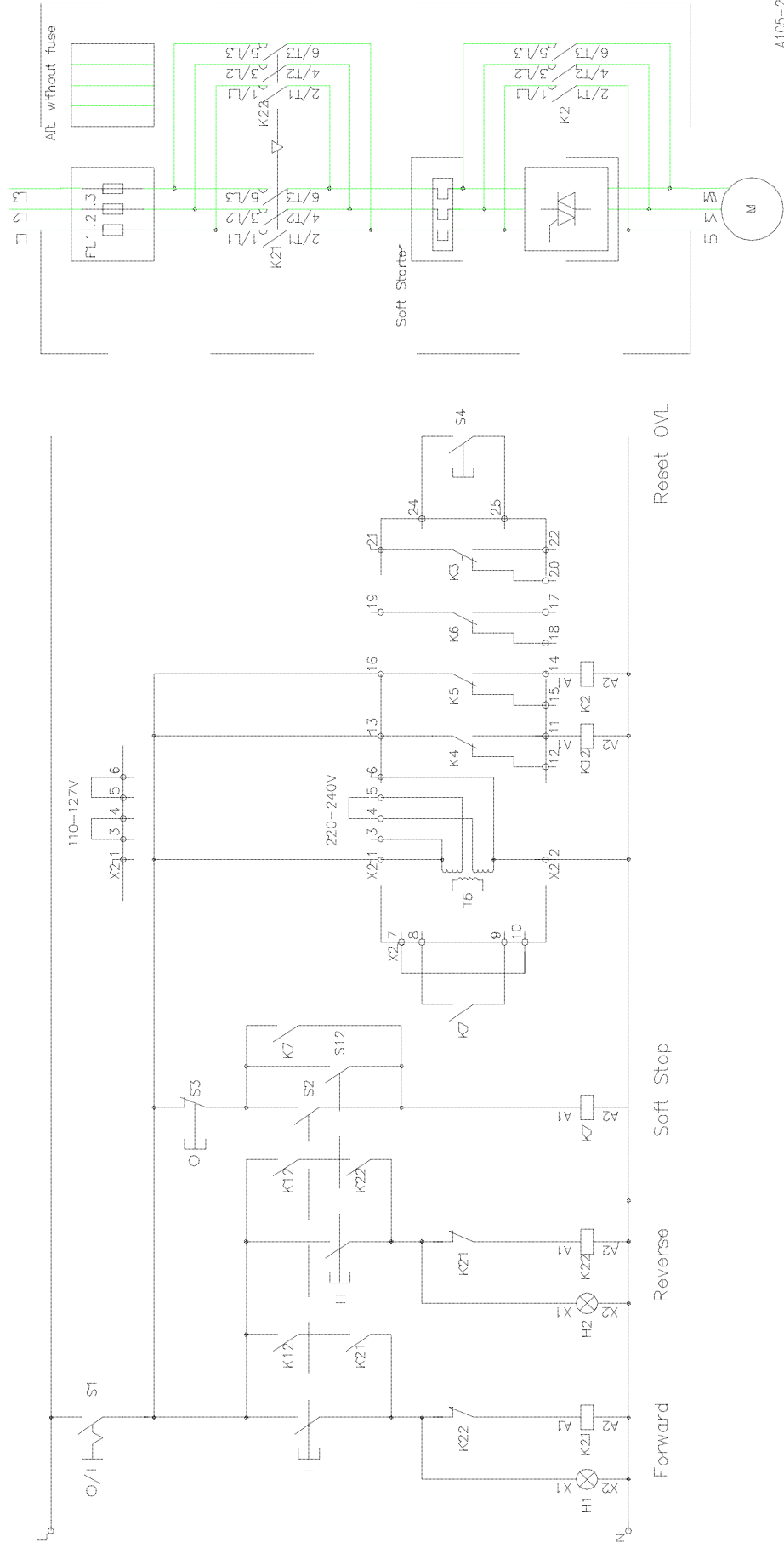
Soft Starter PS D75...145, PS DH30...110 with reversing, By-pass and softstop.
 To be stopped before reversing.
 Start at optional direction.
 If softstop is not needed set the time for softstop to 0.5.



AJ05-26

1		Revised	TP	96	42	Appd	Yor	Issued	SECUR/80 06 05	5366 105-25		82	1
Rev int												ISSUED	
APPLICATION DIAGRAM										Soft Starter			
I Perissos										Mjakstartare			
I Perissos													
TP													

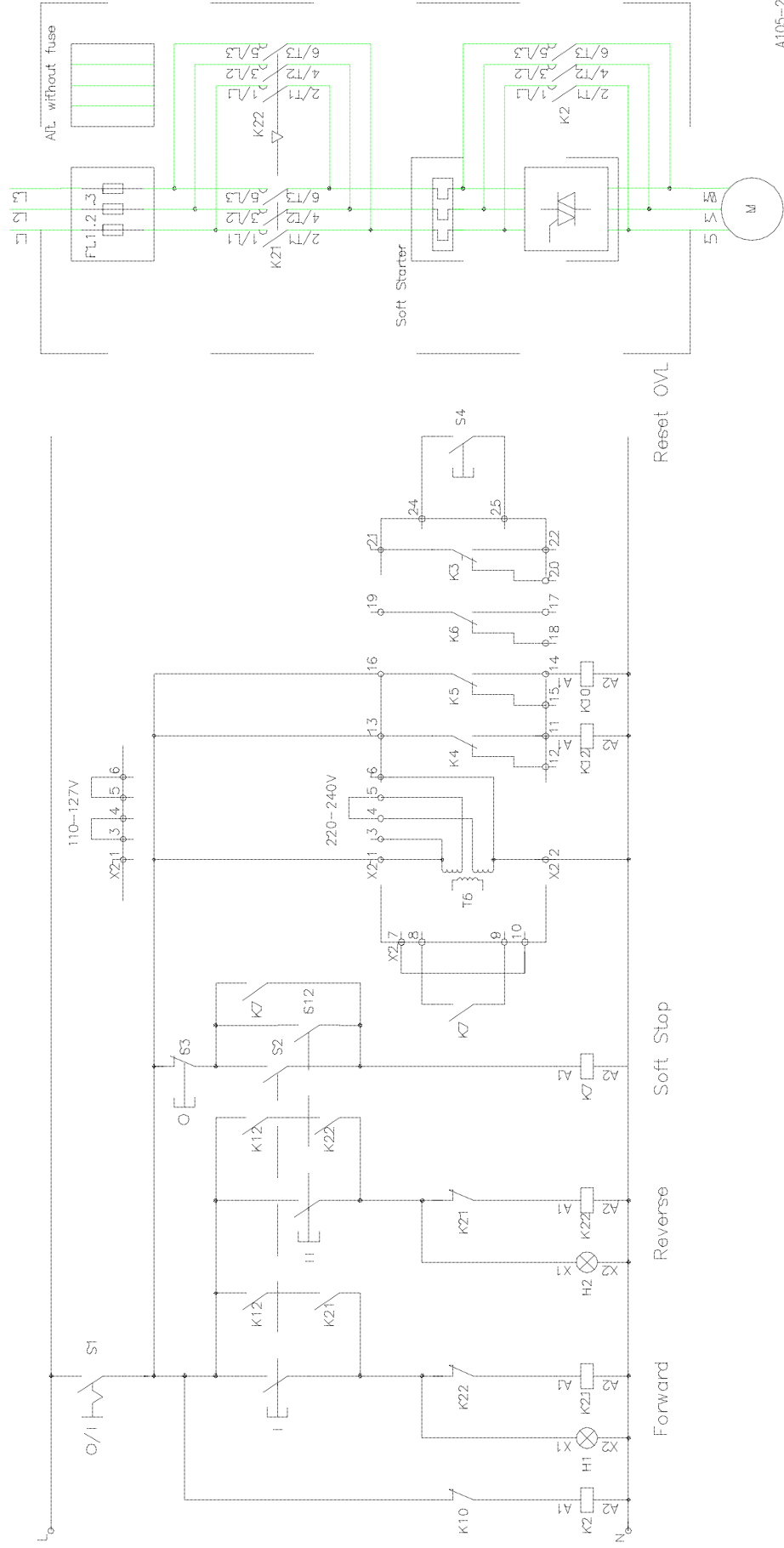
Soft Starter PS D175...300, PS DH145...250 with reversing, By-pass and softstop.
 To be stopped before reversing.
 Start at optional direction.
 If softstop is not needed set the time for softstop to 0.5.
 The internal overload relay is working also together with By-pass.



A105-26

APPLICATION DIAGRAM		I Perisson		I Perisson		I Perisson		TP	
Soft Starter		Soft Starter		Soft Starter		Soft Starter		Soft Starter	
Mjuketartare		Mjuketartare		Mjuketartare		Mjuketartare		Mjuketartare	
Rev. nr	1	Rev. nr	96_42	Rev. nr	96_42	Rev. nr	96_42	Rev. nr	96_42
5366	105-26	5366	105-26	5366	105-26	5366	105-26	5366	105-26
ISSUED	1	ISSUED	1	ISSUED	1	ISSUED	1	ISSUED	1
SECUR/80	06	SECUR/80	06	SECUR/80	06	SECUR/80	06	SECUR/80	06

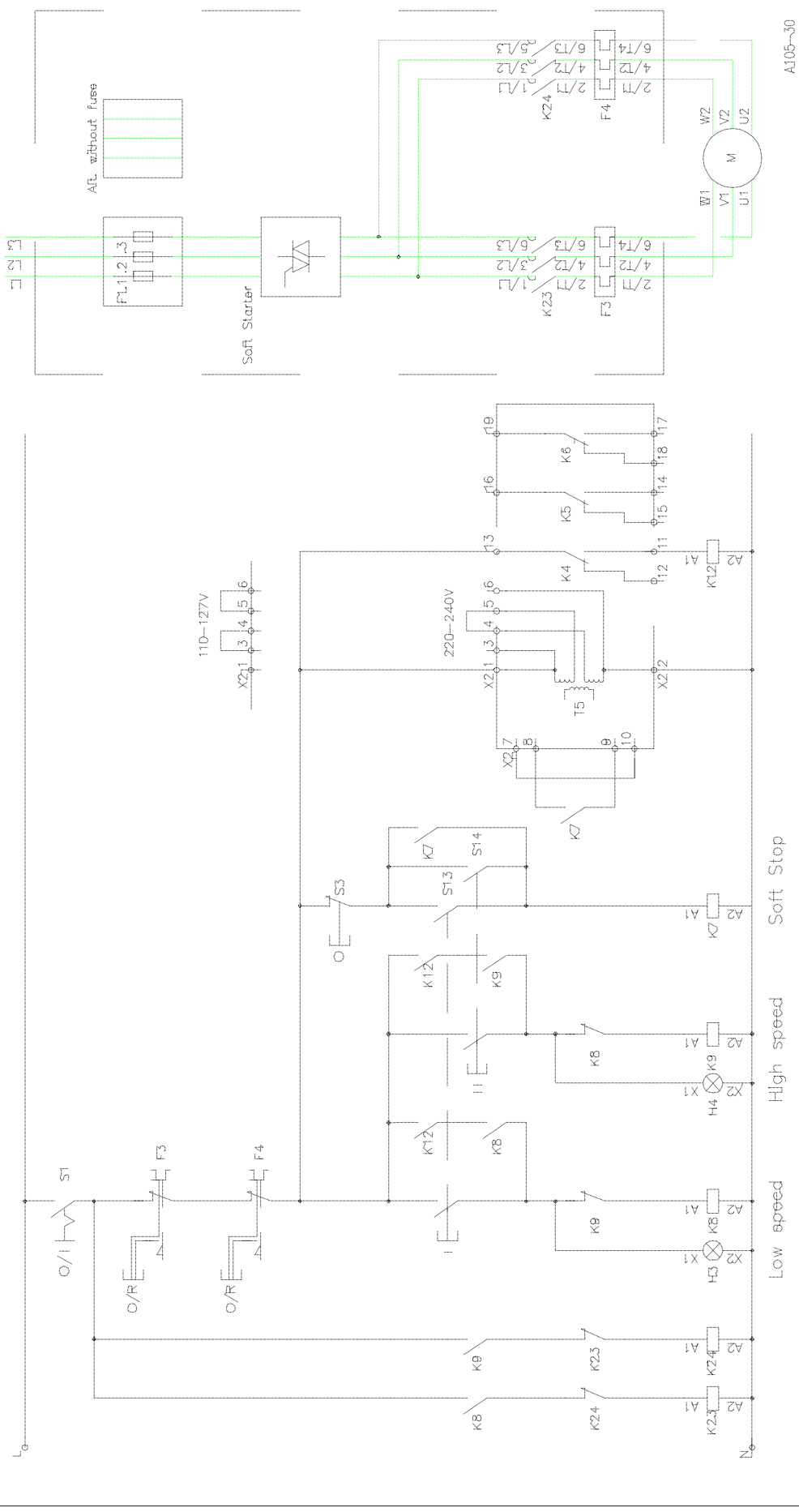
Soft Starter PS D370...840, PS DH300...720 with reversing, By-pass and softstop.
 To be stopped before reversing.
 Start at optional direction.
 If softstop is not needed set the time for softstop to 0.5.
 The internal overload relay is working also together with By-pass.



A105-27

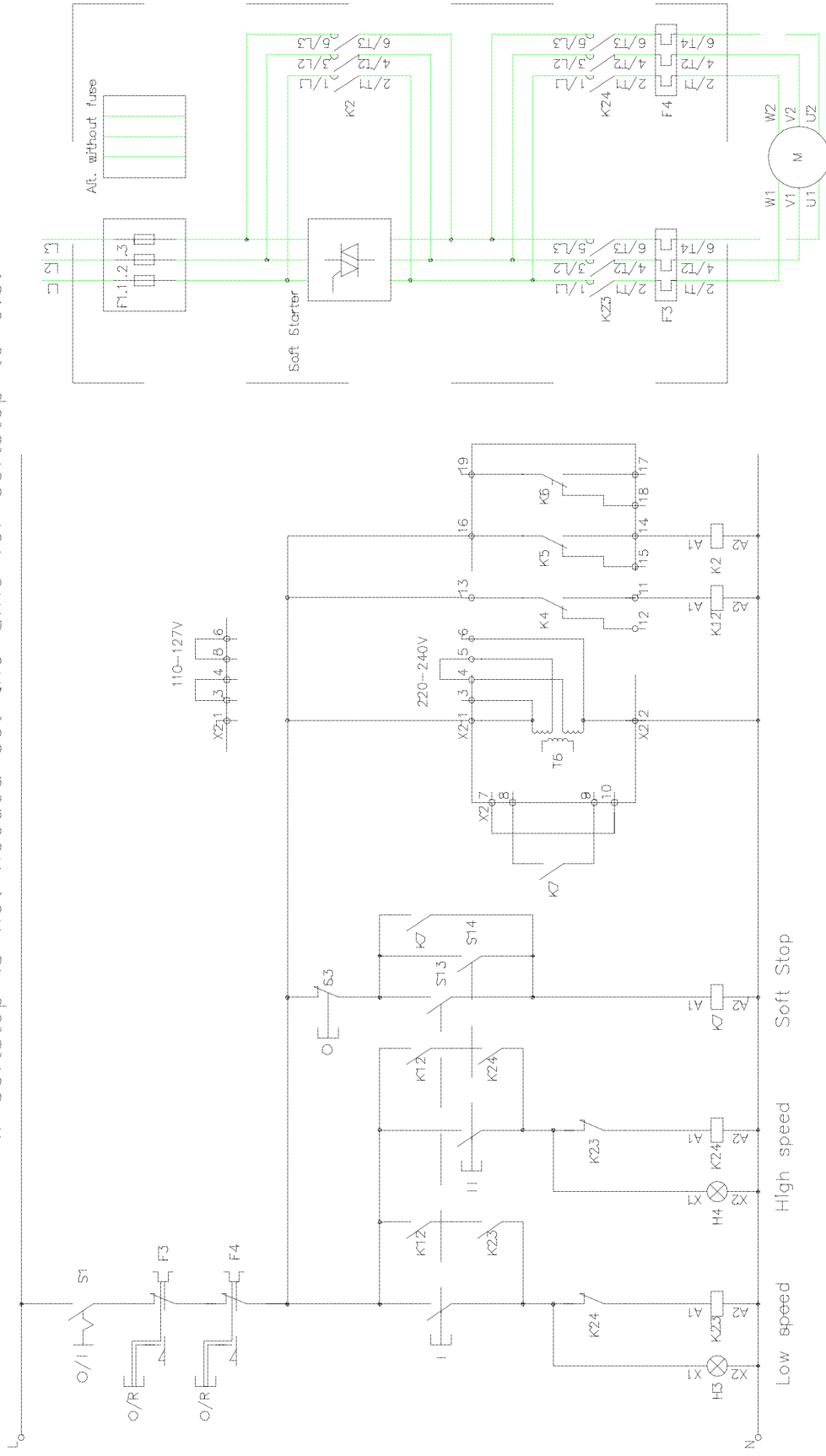
I Perissos		APPLICATION DIAGRAM	
I Perissos		Soft Starter	
TP		Mjpkstartare	
1	Redrawn	5366 105-27	ISSUED
Rev	Ver	Appd	Yor
			100ok
		SECUR/80 06 05	1
			82
			1

Soft Starter PS D370...840 with pole-changing and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with two winding.
 If softstop is not needed set the time for softstop to 0.5.



Rev. int.	Appl.	Year	Issue	SECUR/80 06 42	ISSUED	82	1	...
						5366 105-30		
				APPLICATION DIAGRAM				
				Soft Starter				
				Mjakstartare				
				I Perissos				
				I Perissos				
				IP				

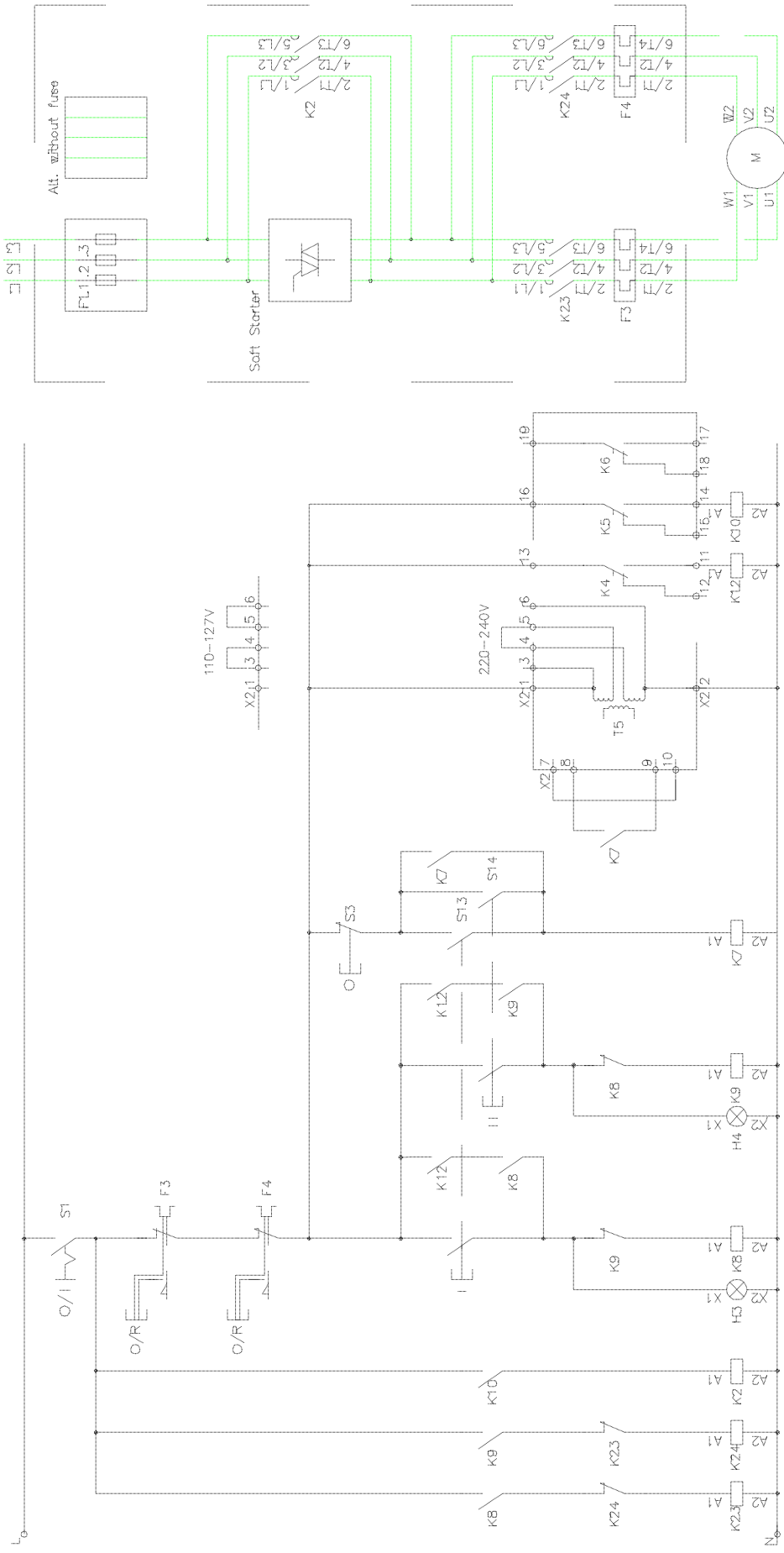
Soft Starter PS D75...300 with pole-changing, By-pass and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with two winding.
 If softstop is not needed set the time for softstop to 0.5.



A105-32

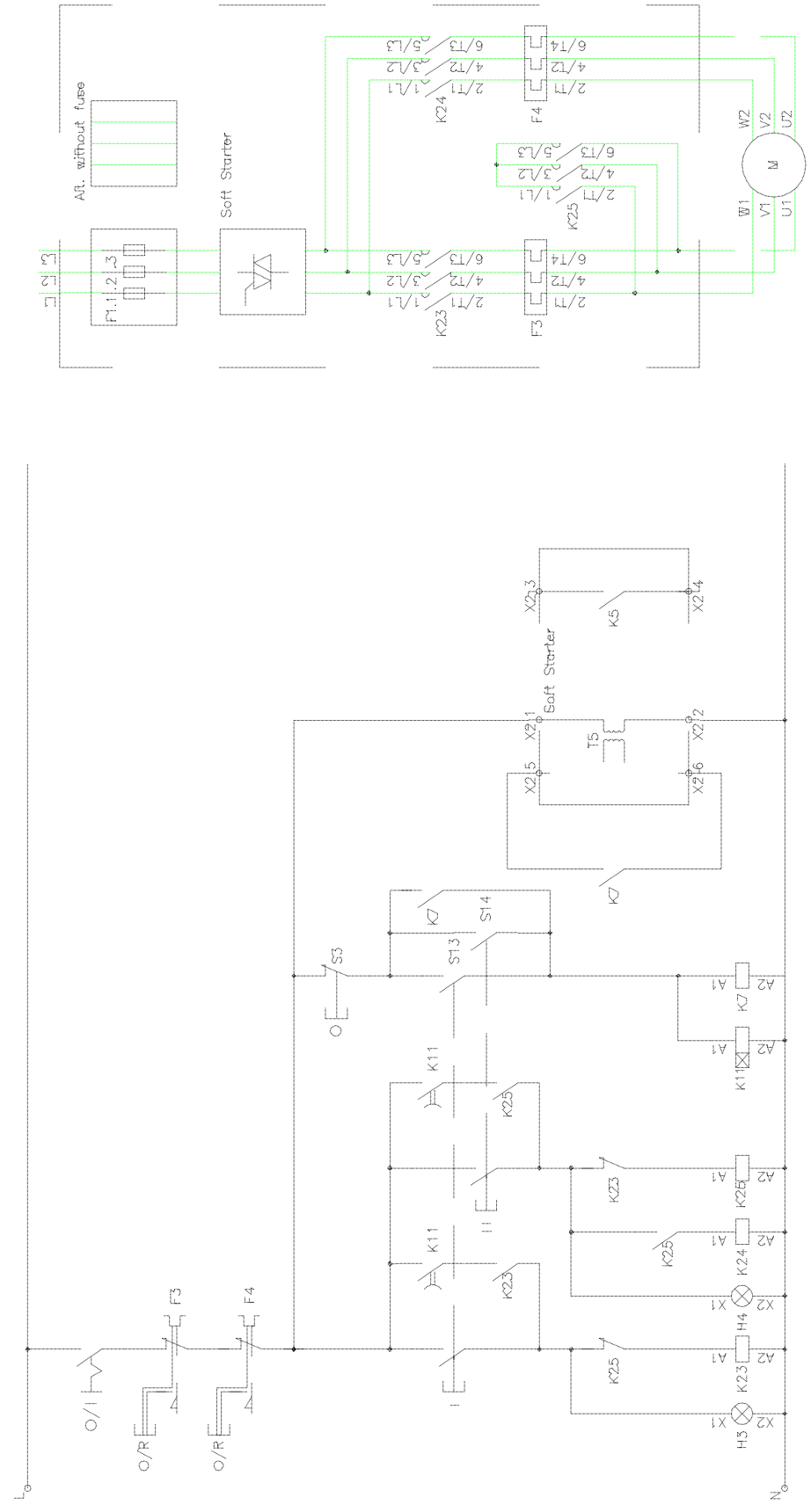
Rev. no.	Sheet	Rev. no.	Sheet
5366	105-32	ISSUED	...
des. by	year	year	week
SECUR/BO	06	02	
APPLICATION DIAGRAM		ABB Control	
Design checked by		I. Pefssod	
Drawing checked by		I. Pefssod	
Executed by		I. P.	
Appd.	Year	Week	

Soft Starter PS D370...840 with pole-changing, By-pass and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with two winding.
 If softstop is not needed set the time for softstop to 0.5.



A105-33		ISSUED		1	
5366 105-33		SECUR/80 06 42		...	
APPLICATION DIAGRAM		T Perisosa		Soft Starter	
		T Perisosa		Mjakstartare	
		TP			
Rev	ver	Appl	Year	Issue	

Soft Starter PS A18...60 with pole-changing and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with one winding (Dahlander).
 If softstop is not needed set the time for softstop to 0.5.

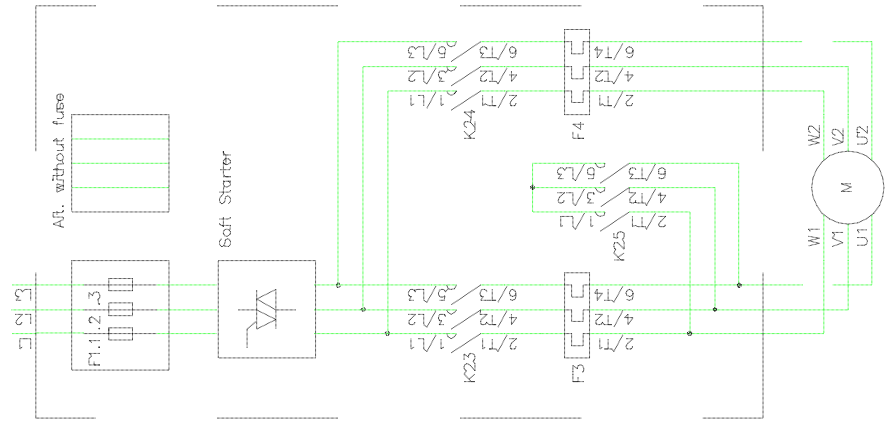
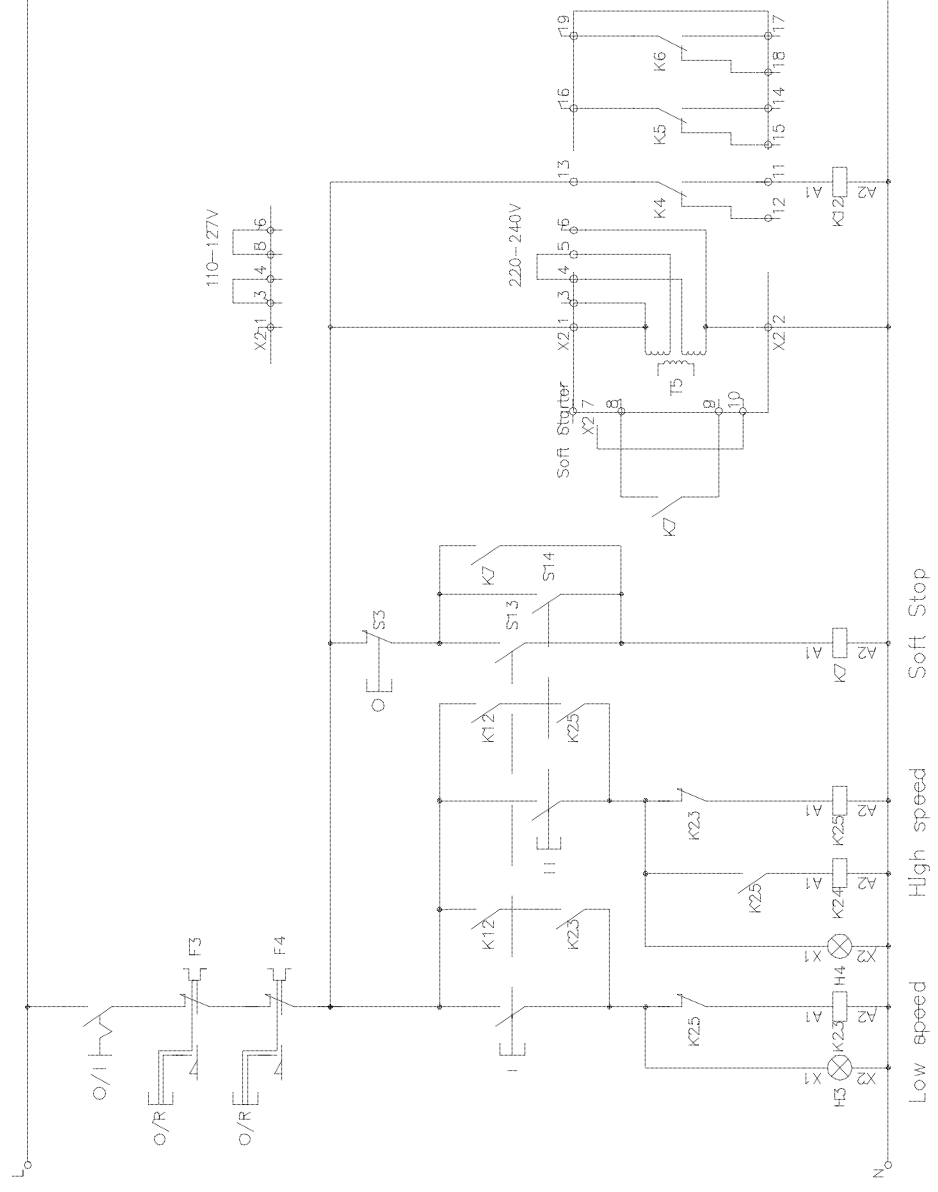


Low speed High speed Soft Stop

A105-34

Rev. int.	Appt.	Year	Week	ISSUED	82	1
5366 105-34				SECUR/80 06 42		
APPLICATION DIAGRAM Soft Starter Mjukstartare				I Persson I Persson TP		

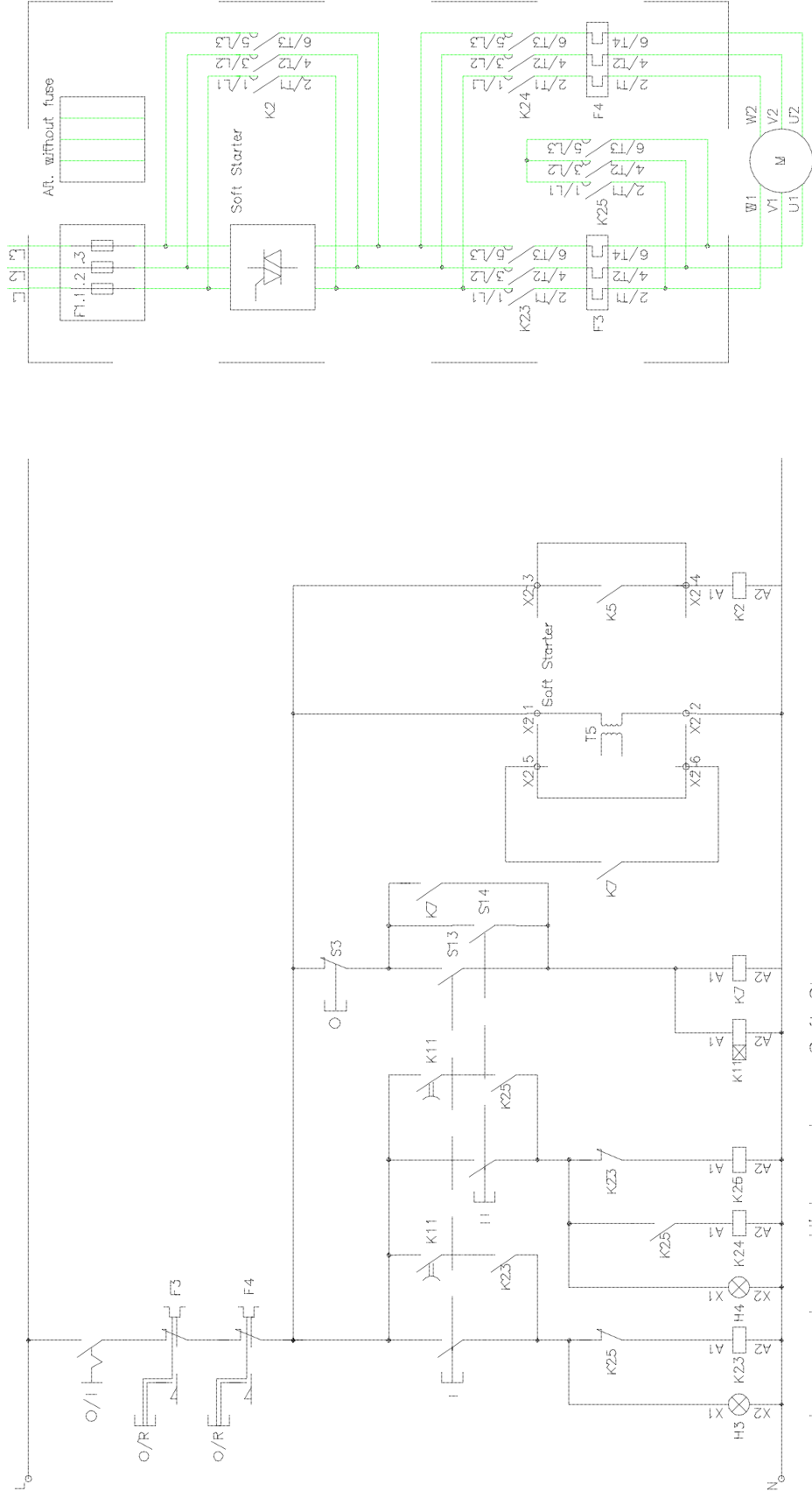
Soft Starter PS D75...300 with pole-changing and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with one winding (Dahlander).
 If softstop is not needed set the time for softstop to 0.5.



AJ05-35

Rev. int.	Appt.	Year	Week	ISSUED	82	1	...
				SECUR/80 06 42	5366 105-35		
				APPLICATION DIAGRAM			
				Soft Starter			
				Mjukstartare			
				I Persson			
				I Persson			
				TP			

Soft Starter PS A18...60 with pole-changing, By-pass and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with one winding (Dahlander).
 If softstop is not needed set the time for softstop to 0.5.

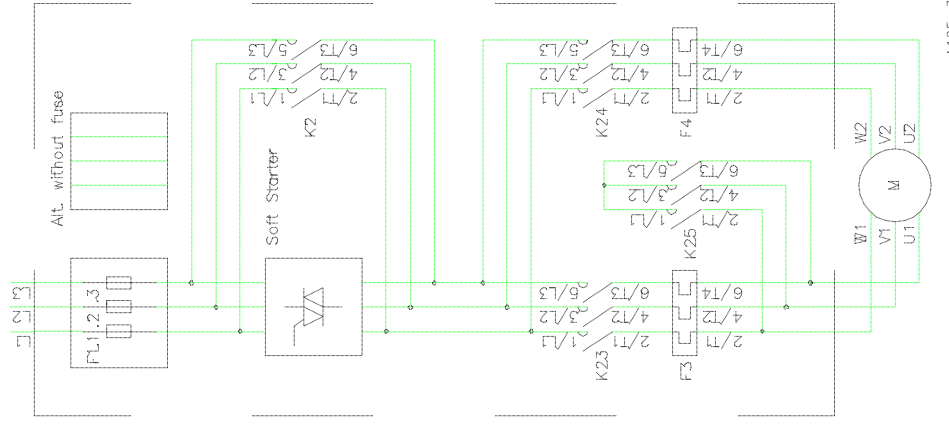
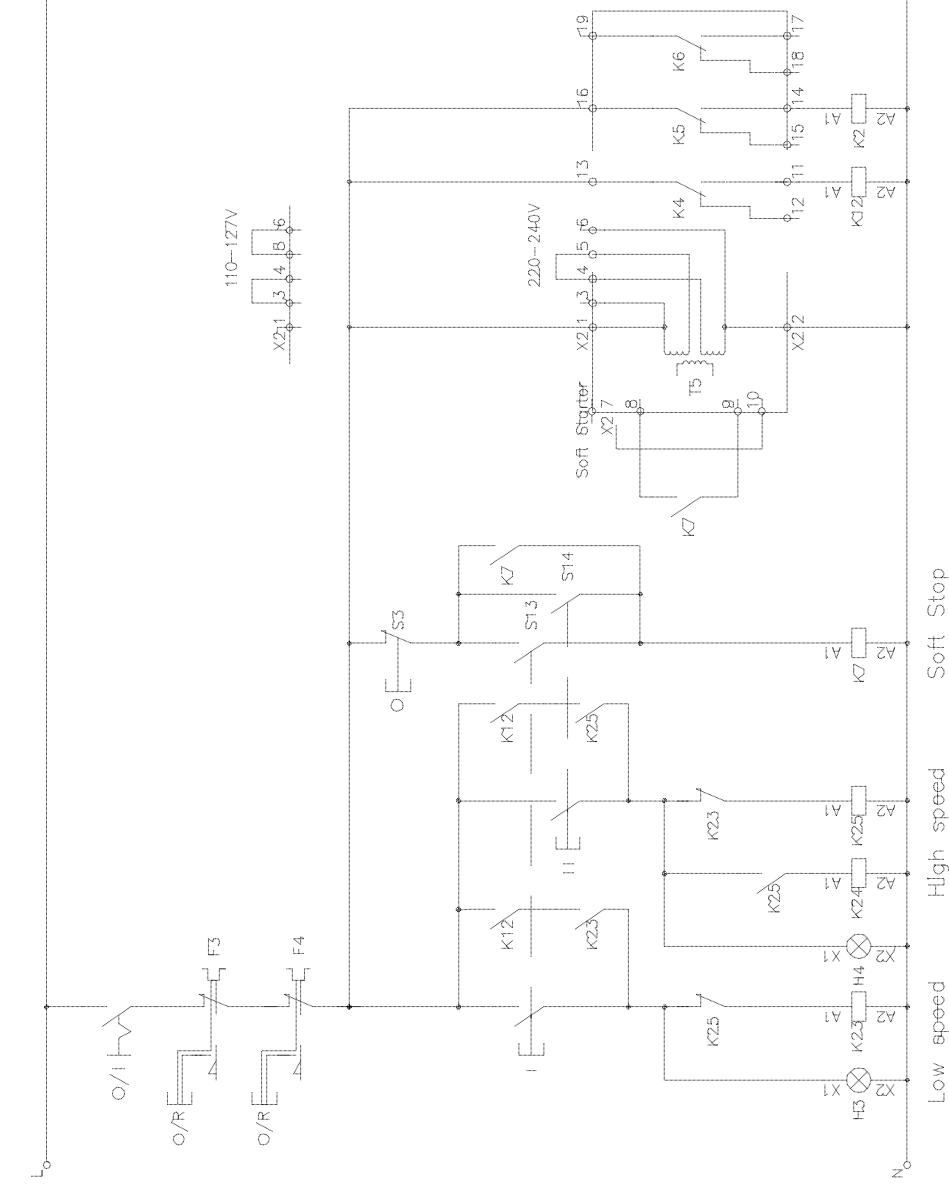


Low speed High speed Soft Stop

AJ05-37

Rev. int.	Appl.	Year	Issue	ISSUED	82	1
				SECUR/80 06 42	5366 105-37	...
I Persson			APPLICATION DIAGRAM			
I Persson			Soft Starter			
TP			Mjukstartare			

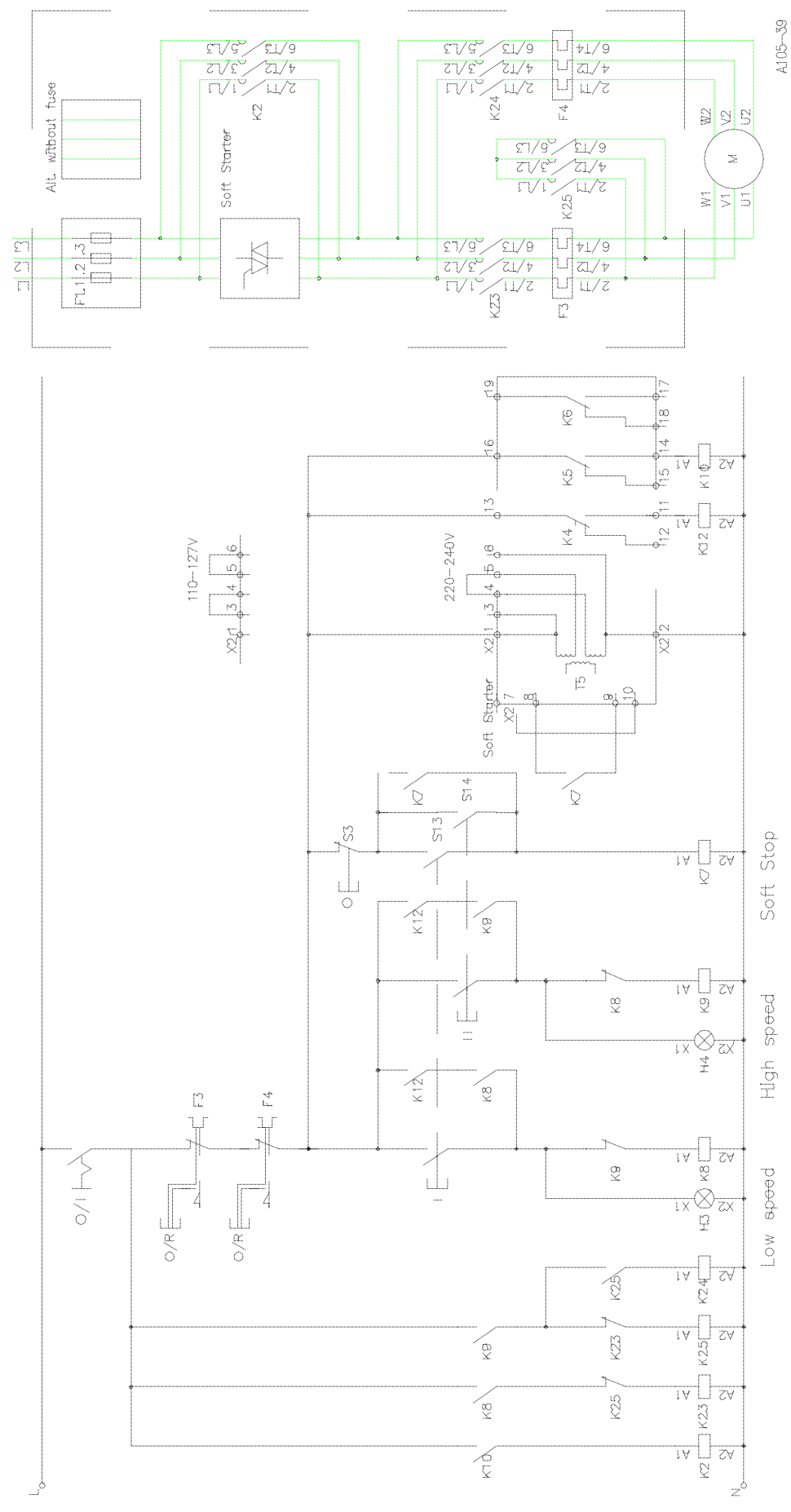
Soft Starter PS D75...300 with pole-changing, By-pass and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with one winding (Dahlander).
 If softstop is not needed set the time for softstop to 0.5.



AJ05-38

Rev. int.	Appl.	Year	Issue	SECUR/80 06 42	ISSUED	5366 105-38	82	1	...
				APPLICATION DIAGRAM					
				I Perisosa		Soft Starter			
				I Perisosa		Mjukstartare			
				IP					

Soft Starter PS D370...840 with pole-changing and softstop.
 To be stopped before change of speed.
 Start at optional speed.
 For motor with one winding (Dahlander).
 If softstop is not needed set the time for softstop to 0.5.



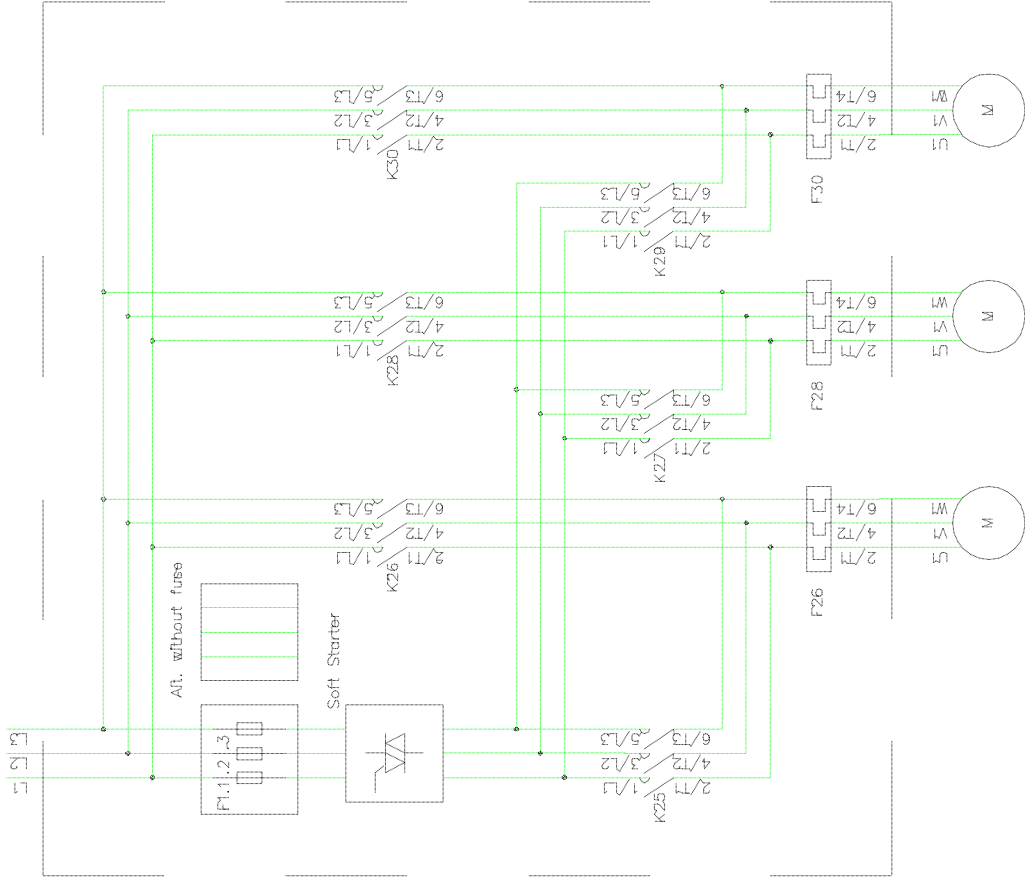
Rev. int.	Appl.	Year	Issue	SECUR/80 06 42	ISSUED	5366 105-39	82	1	...
				APPLICATION DIAGRAM					
				Soft Starter					
				Mjpkstartare					
				I Persson					
				I Persson					
				TP					

A105-39

SPECIAL APPLICATION DIAGRAM

5366 106-1	PS D75...840	Sequential start for 3 motors.
5366 106-2	PS D75...300	Start of 2 motors.

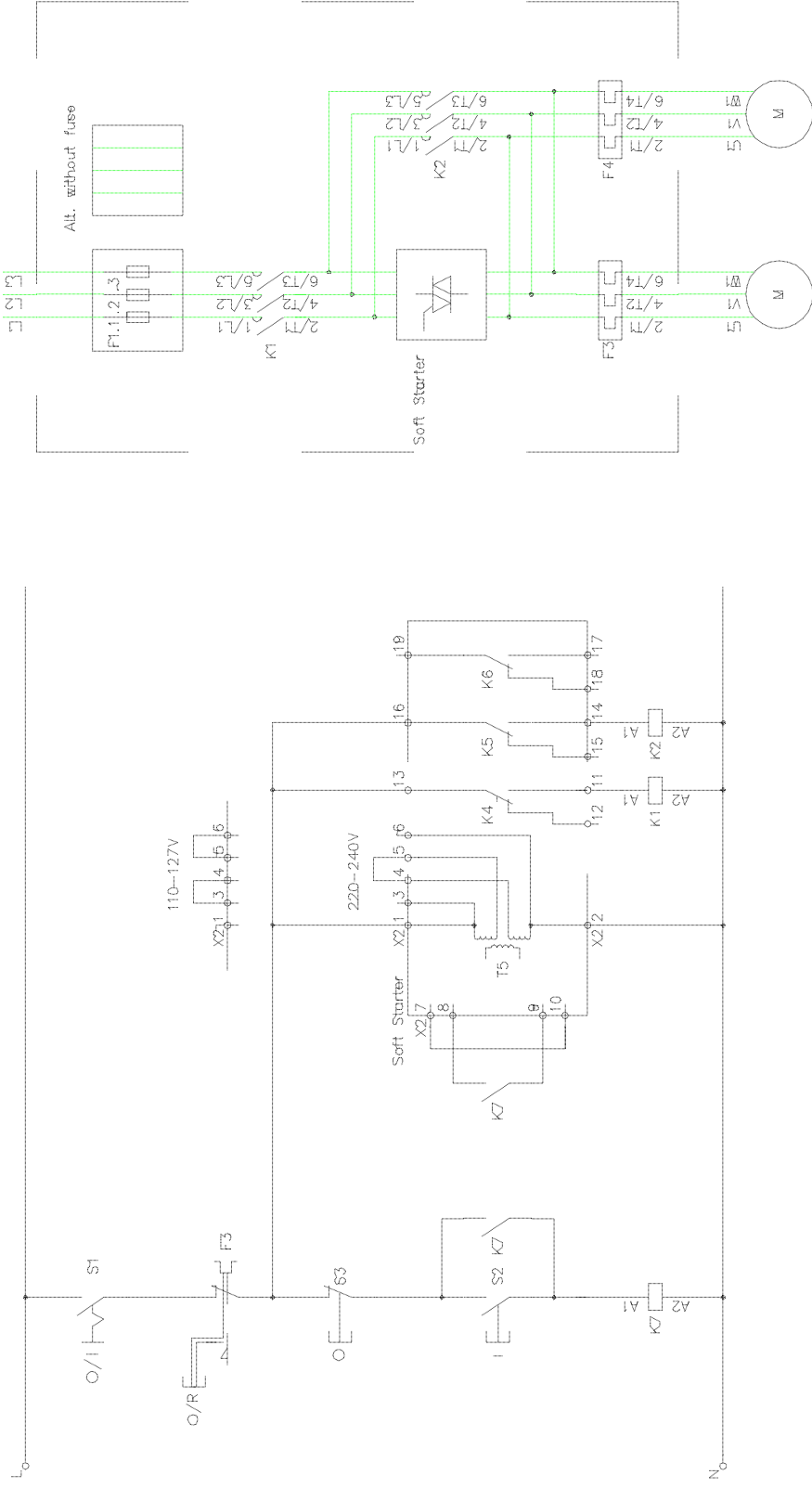
Sequential start for 3 motors.
 Soft Starter PS D75...300 with motor protection without softstop.
 Start of optional motor.



A106-1A

Rev. nr	Appr.	Year	Week	TP	T. Persson	APPLICATION DIAGRAM		STORL/BO 06 07	ISSUED	2	2
2	Uutetred	TP	06	43	T. Persson	Soft Starter				82	1
1	Fuses moved.	TP	05	09	T. Persson	Mjpkstartare				5366 106--1	
					TP						

Start of 2 motors.
 Soft Starter PS D75...300 with motor protection, softstart and By-pass.
 Main contactor open during pause



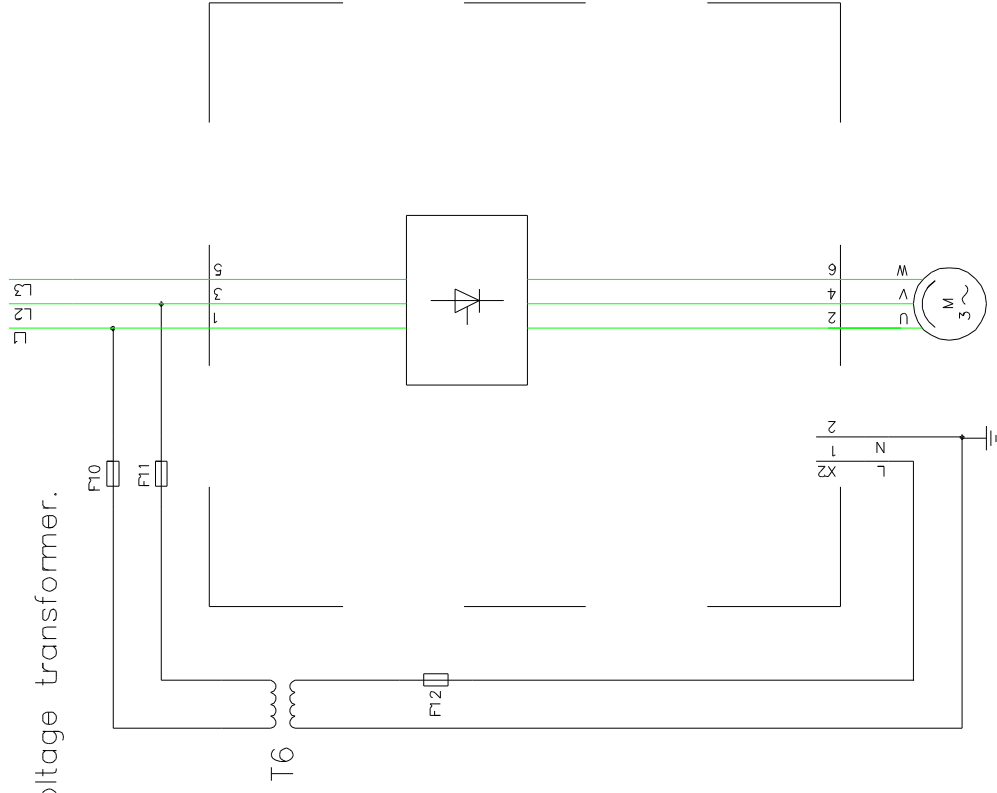
A106-2

Rev. nr	Appl.	Year	Week	APPLICATION DIAGRAM		ISSUED	82	1
				I Persson	Soft Starter			
				I Persson	Mjukstartare	SECUR/80 06 43	5366 106-2	...

SPECIAL DIAGRAM

5366 107-1	PS A, PS D(H)	Connection of control voltage transformer.
5366 107-2	PS A, PS D(H)	Connection of control voltage between phase and neutral wire.

Connection of control voltage transformer.



A107-1

Rev	Ind	Sheet	5366	107-1	ISSUED	Rev	Ind	Sheet	—
Logg	82	1				Rev	Ind	Cont	—
Designed by T PERSSON			Diagram SOFT STARTERS			Rev			Ind
Drawing checked by T PERSSON			MÅDKSTARTARE			Rev			Ind
Drawn by P			ABB Control			Rev			Ind
			Logg By Logg			Rev			Ind
			SCUR/LBM			Rev			Ind
			96			Rev			Ind
			07			Rev			Ind
			Week			Rev			Ind
			Year			Rev			Ind
			Month			Rev			Ind



ABB Automation Technology Products AB, Control
S-721 61 Västerås, SWEDEN

Telephone +46 21 32 07 00
TELEFAX +46 21 12 60 01

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