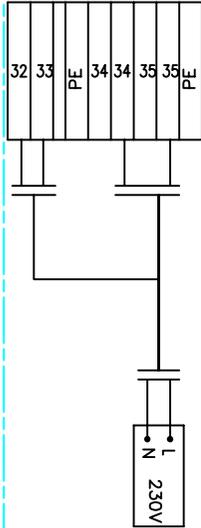
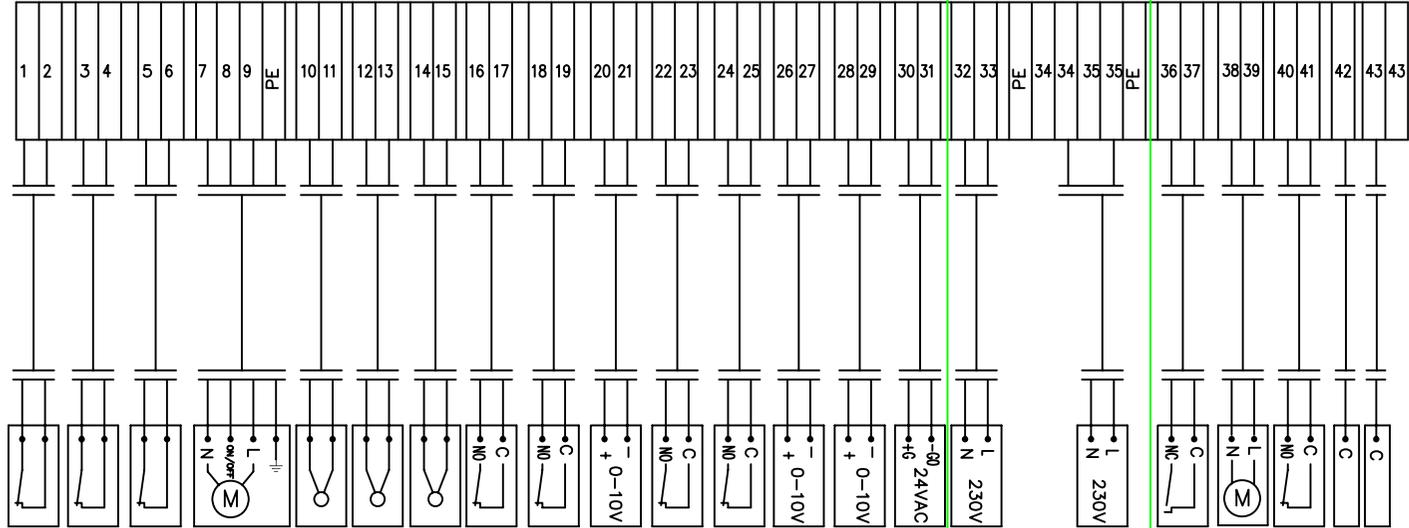


ALT. S12
L14R



FORSYNING
230V F2



EKSTERN
RØYK/BRANDEDEKTEKT.

FELLES
A-ALARM

FELLES
B-ALARM

SPJELDMOTOR
230V

TEMP FØLER
TILLUFT B1

TEMP FØLER
AVTREKK B3/ROM B2

TEMP FØLER
UTEFØLER B4

KJØLING DX
TRINN 1

KJØLING DX
TRINN 2

KJØLING
0 - 10V

FORSERT DRIFT

FORLENGET DRIFT

EKSTERN VIFTE REGULE.
AVTREKK

EKSTERN VIFTE REGULE.
TILLUFT

FORSYNING
24VAC

FORSYNING
230V F1

FORSYNING
230V F2

BRANNTERMOSTAT 2 F11

KJØLEVIFTE ELSKAP

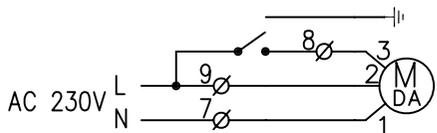
TRYKKVAKT P3
TILLUFTSVIFTE

SKJØT

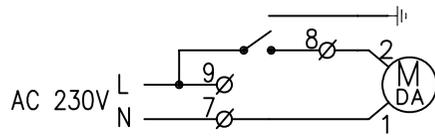
SKJØT

TILKOBLING SPJELD

ALT. 1



ALT. 2



2		TEGNING ENDRET 2007-10-25/LA	Changes Date/Sign.
1		TEGNING ENDRET 2005-08-23/LA	
Symb.:			

No. Unit No.	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.
Date	Checked	Drawn	Projection	Scale	
10.02.04		T. I. Engen			
REKKEKLEMMESKJEMA CS 1000				Replaces:	Replaced by:
EL.BATTERI					
ART.NR.:93510				342075	Side:



TILKOBLING TERMINAL OG KOMPONENTER

CS1000 Funksjon IO	IO Type	Tilkobling CS1000	Tilkobling komponenter
Rele utgang			
DO1	Pumpe (vannbatteri)/ Varme trinn 2 (el.batteri)	Digital	X3 (Pin 1,2) X:35, X:40 X:41, K2-A1
DO2	Varme trinn 3 (el.batteri)	Digital	X3 (Pin 4,5)
DO3	Vifte start/stopp-intern	Digital	X4 (Pin 1,2) X:43, G0*
DO4	Ute spjeld	Digital	X4 (Pin 4,5) X:8, X:35
DO5	Kjøling DX trinn1	Digital	X5 (Pin 1,2) X:16, X:17
DO6	Kjøling DX trinn2	Digital	X5 (Pin 4,5) X:18, X:19
DO7	Alarm utgang prioritert A	Digital	X6 (Pin 1,2) X:3, X:4
DO8	Alarm utgang prioritert B	Digital	X6 (Pin 4,5) X:5, X:6
Analog utgang			
AO1	Kjøling	Analog (0 - 10V)	X9 (Pin 1,3) X:20, G0
AO2	Ettervarme full range vannbatteri	Analog (0 - 10V)	X9 (Pin 2,3) X:36, G0
AO3	Puls med Modulering 0 eller 10V (ON/OFF)	Analog (0/10VDC)	X9 (Pin 4,6) X:SSR1-2 A1, G0
AO4	Rotor Vekslerspjeld	Analog (0 - 10 V)	X9 (Pin 5,6) SP1500(X:33), G0 Spjeld led.3, G0
AO5	Tilluftsvifte.	Analog (0 - 10 V)	X10 (Pin 1,3) VifteTil X:4, G0**
AO6	Avtrekksvifte.	Analog (0 - 10 V)	X10 (Pin 2,3) VifteAvtr X:4, G0**
AO7	Luftmengde indikering avtrekk	Analog (0 - 10 V)	X10 (Pin 4,6)
AO8	Luftmengde indikering tilluft	Analog (0 - 10 V)	X10 (Pin 5,6)
Binary inngang			
DI1	Plateveksler: Termostat (el.batteri) Rotor: Rotor alarm	Digital	X7 (Pin 1,2) Termostat F20 SP1500X:42,SP1500X:43
DI2	Alarm ekstern brann/røyk	Digital	X7 (Pin 3,4) X:1, X:2
DI3	Alarm vifte tilluft/avtrekk	Digital	X8 (Pin1,2) VifteAvtrX:NO,VifteTilX:NO***
DI4	Ekstern start/stopp	Digital	X8 (Pin 3,4)
Universal inngang			
UI1	Avtrekk/rom temperatur	Passive (Ni 1000)	X11 (Pin 1,2) X:12, X:13
UI2	Tilluftstemperature	Passive (Ni 1000)	X11 (Pin 3,4) X:10, X:11
UI3	Utetemperature	Passive (Ni 1000)	X11 (Pin 5,6) X14, X:15
UI4	Ekstern sensor Avtrekk (trykk eller CO2)	Analog (0 - 10 V)	X11 (Pin 7,8) X:26, G0
UI5	Ekstern sensor Tilluft (trykk eller CO2)	Analog (0 - 10 V)	X11 (Pin 9,10) X:28, G0
UI6	Plateveksler: Frost/is sensor Rotor: Termostat el.batteri	Analog	X11(Pin11,12) Termovakt Termostat F20
UI7	Tom		X11(Pin13,14)
UI8	Filtervakt tilluft	Analog (0 – 10 V)	X12(Pin 1,2) Filtervakt P1, G0
UI9	Filtervakt avtrekk	Analog (0 – 10 V)	X12(Pin 3,4) Filtervakt P2, G0
UI10	Intern sensor Tilluft (trykk/luftmengde)	Analog (0 – 10 V)	X12(Pin 5,6) Sensor P11, G0
UI11	Intern sensor Avtrekk (trykk/luftmengde)	Analog (0 – 10 V)	X12(Pin 7,8) Sensor P12, G0
UI12	Forsert drift	Digital	X12(Pin 9,10) X:22, X:23
UI13	Forlenget drift	Digital	X12(Pin11,12) X:24, X:25
UI14	Termostat el.batteri Frost/is sensor vannbatteri	Digital Passive (Ni 1000)	X12(Pin13,14) Thermostat F10 Temperatur sensor B5

* Ikke I bruk ved ekstern frekvensomformer (L50)

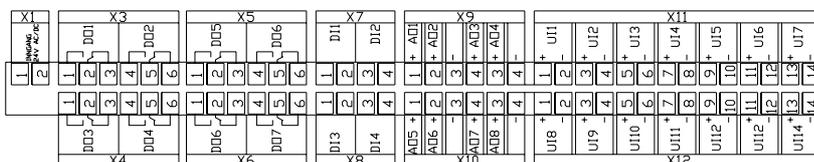
** Med ekstern frekvensomformer (L50) : X:10(Pin1,3) Tillufts-omformer AI2, G0

X:10(Pin2,3) Avtrekks-omformer AI2, G0

*** With external converter (L50):

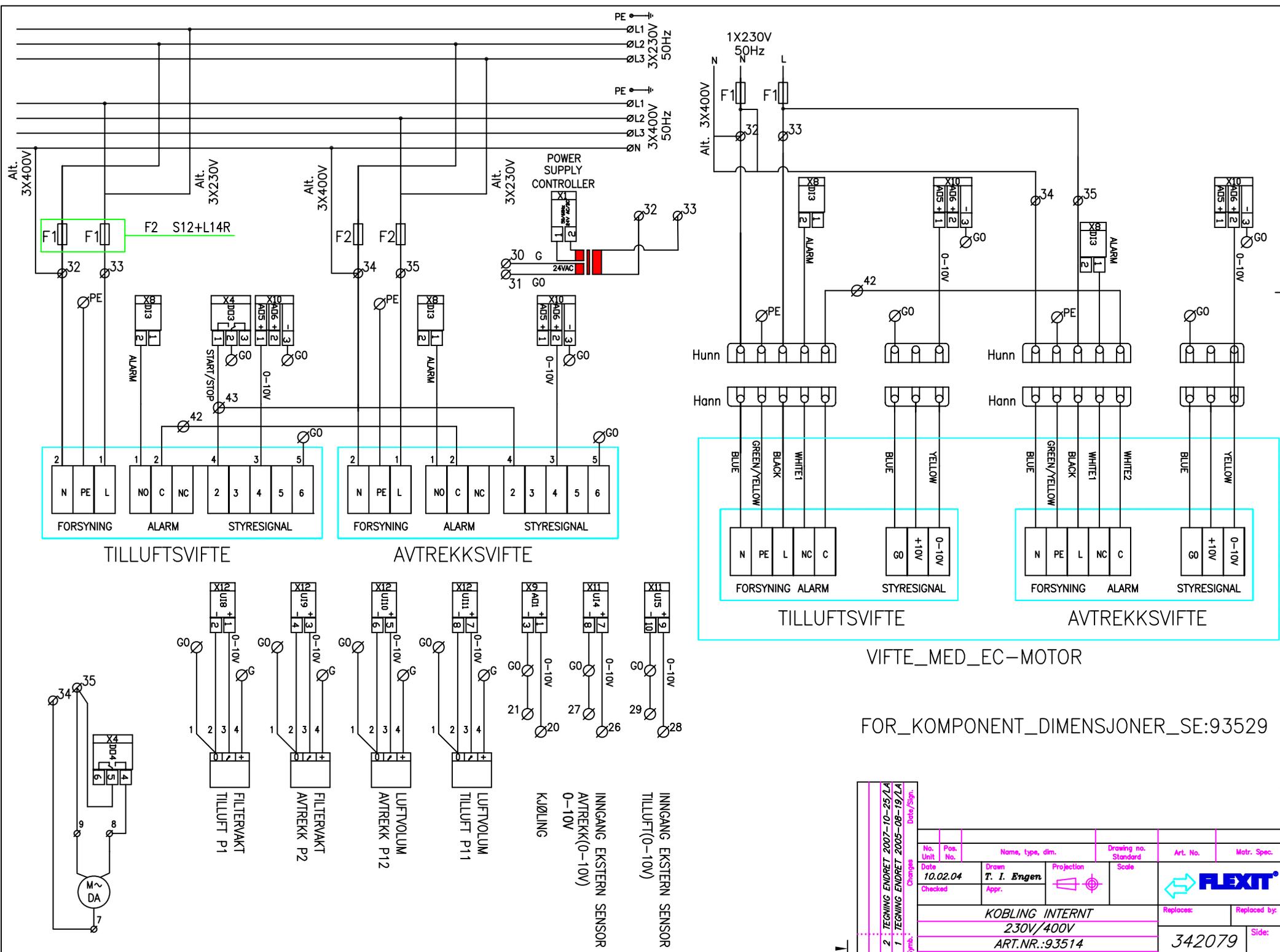
X8(Pin1,2) Avtrekks-omformer R1C, Tillufts-omformer R1C

Ark.nr:	2/6 - Norsk
Teg.nr:	342077
Art.nr:	93512
Dato:	10.03.04
Versjon:	1.1



Farge kode interne ledninger
 Colour code - Internal wiring

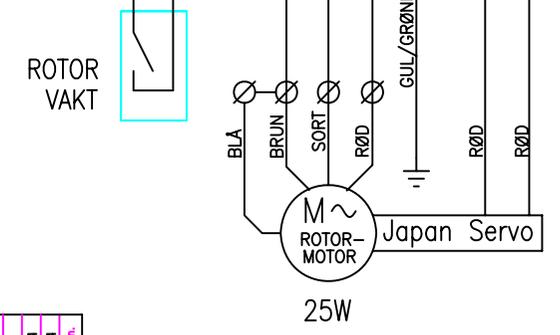
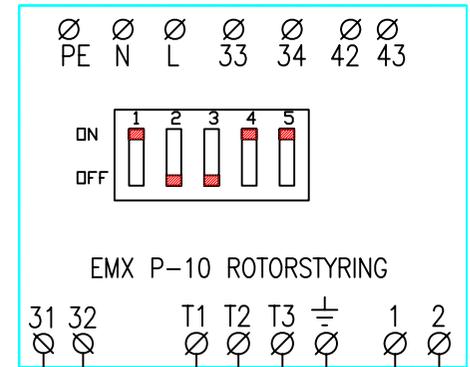
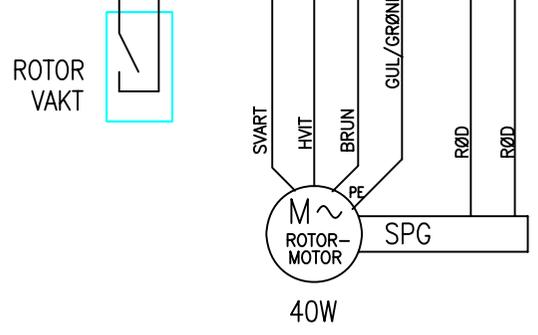
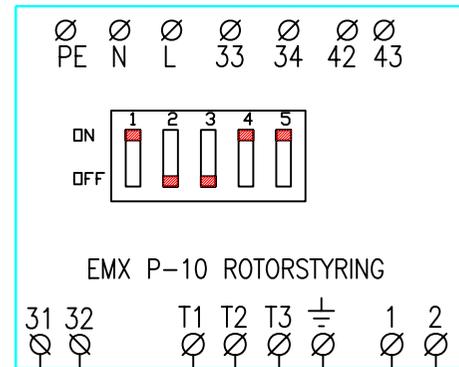
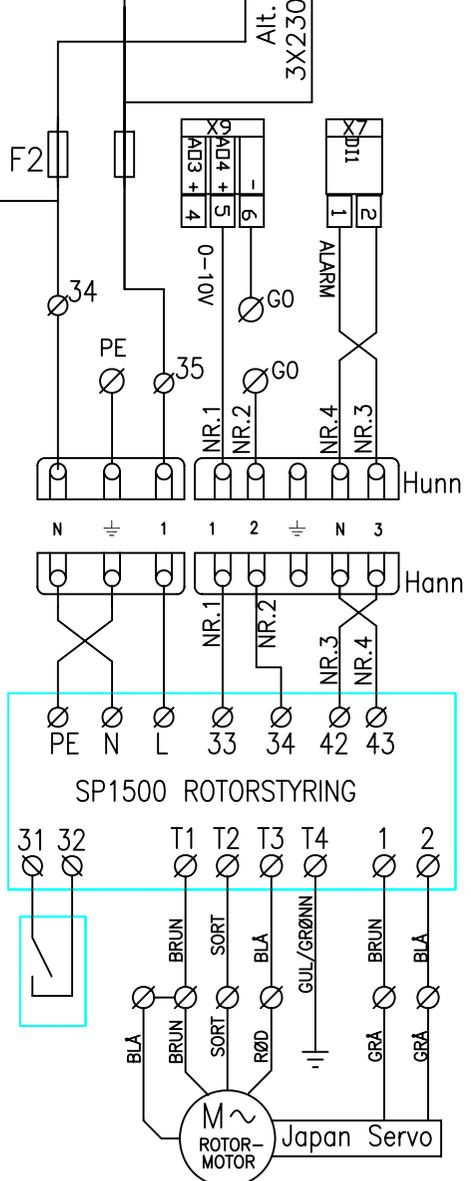
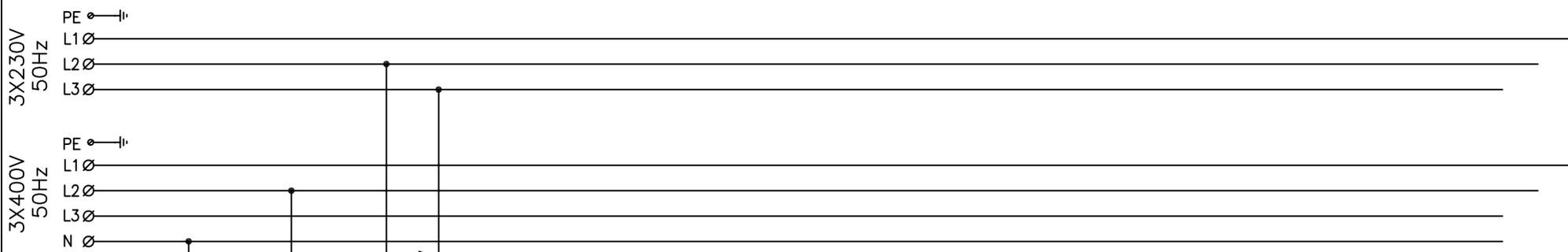
L1 1~ (N)	230V	Blå (lys)	Blue (light)	BU	
L2 1~	230V	Svart	Black	BK	
24V AC (G)	Led 1 +	Rød	Red	RD	
Zero (0-point) G0	Led 2 -	Hvit	White	WH	
24V DC	Led 1 +	Blå (mørk)	Blue (dark)	BU	
Zero (0-point) G0	Led 2 -	Hvit	White	WH	
0-10V DC		Grå	Grey	GY	
Pot.free signal		Grå	Grey	GY	
G0 (0-point) from	trafo 24V -				



VIFTE_MED_EC-MOTOR
 FOR_KOMPONENT_DIMENSJONER_SE:93529

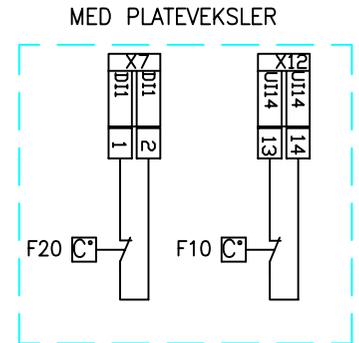
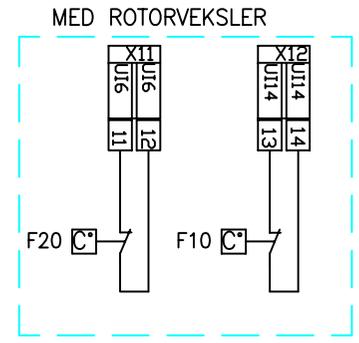
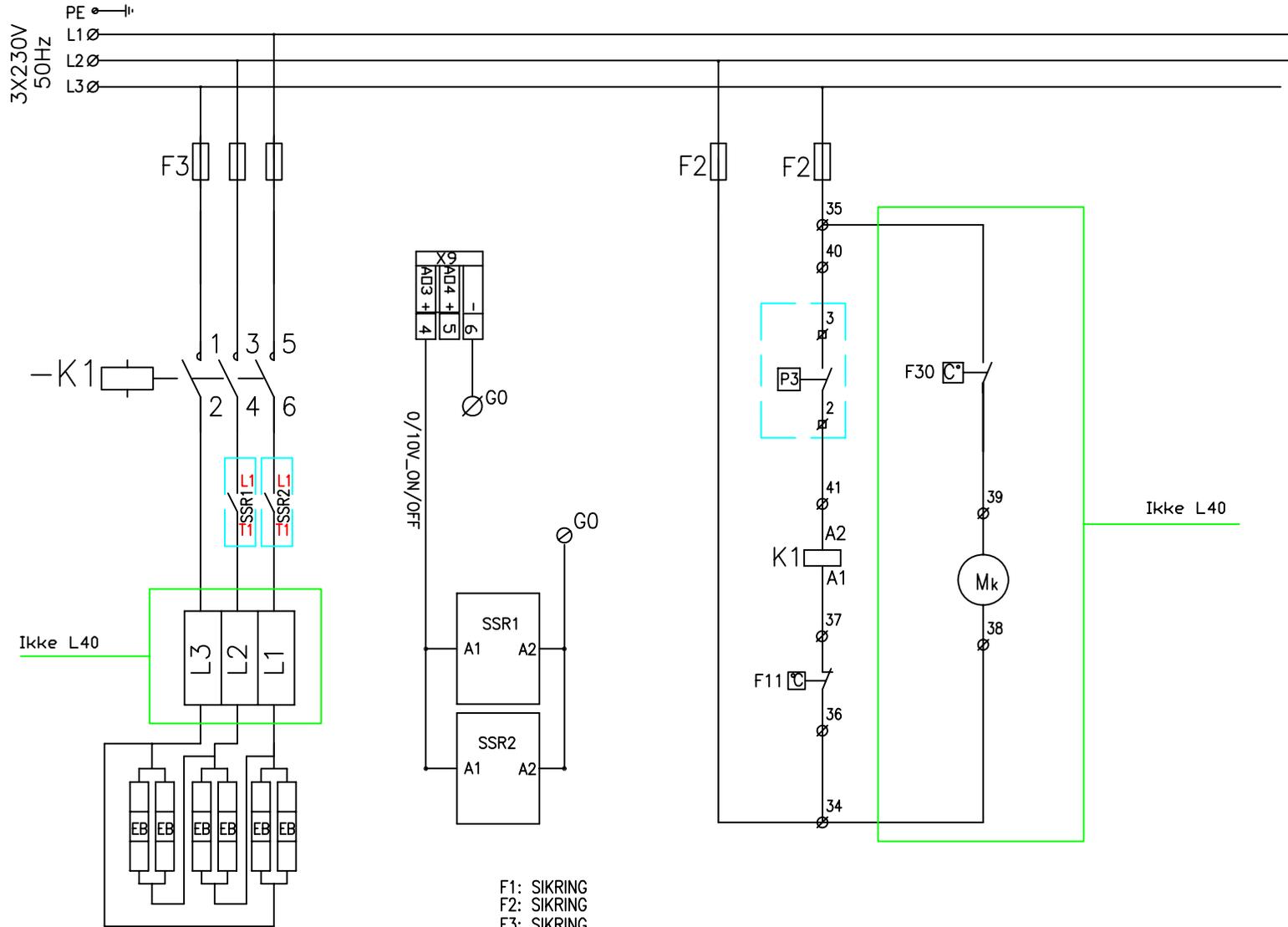
No. Unit		Pos. No.		Name, type, dim.		Drawing no. Standard		Art. No.		Metr. Spec.	
Date		10.02.04		Drawn		T. I. Engen		Projection		Scale	
Checked				Appr.							
KOBLING INTERNT 230V/400V ART.NR.:93514								Replaces:		Replaced by:	
								342079		Side:	

Lay-out: Marianne



2		TEGNING ENDRET 2006-04-18/LA		Drawing no.		Art. No.		Matr. Spec.	
1		TEGNING ENDRET 2005-08-23/LA		Date		Scale		Replaces:	
Symbol		Changes		Checked		Projection		Replaced by:	
				27.10.03		T. I. Engen		342080	
				Appr.		KOBLING ROTOR		Side:	
						230V/400V			
						ART.NR.:93515			

Lay-out: Marvath



Ikke L40

- F1: SIKRING
- F2: SIKRING
- F3: SIKRING
- EB: ELEMENT
- P3: TRYKKVAKT TILLUFT
- K1: KONTAKTOR
- F11: TERMOSTAT, OVERHETTING MAN. RESET
- F30: TERMOSTAT KJØLEVIFTE
- Mk: KJØLEVIFTE
- SSR: SOLID STATE RELÈ

FOR_KOMPONENT_DIMENSJONER_SE:93529

2 : TEGNING ENDRET 2006-03-02/LA		Date/Sign.					
1 : TEGNING ENDRET 2005-08-29/LA		Changes					
No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.		
Date	10.02.04	Drawn	T. I. Engen	Projection	Scale		
Checked		Appr.					
KOBLING ELEKTRISK BATTERI 230V				Replaces:		Replaced by:	
1 TRINN - 6 ELEMENTER							
ART.NR.:93517				342082		Side:	

Lay-out: Man/Man

Elkomponentoversikt CS1000

93529/2008-01

Type	F1	F2	F3	F4	K1	K2	SSR	EB/stk	Tot kW
L20 XE 230 V	2*16	2*16	3*50		3*45		50	2500W	15kW
L20 XE 400 V	2*16	3*25			3*25		50	2500W	15kW
L20 XW 230 V	2*10	2*10							
L30 XE 230 V	2*16	2*16	3*32	3*32	3*32	3*32	50	3333W	20kW
L30 XE 400 V	2*16	3*32			3*25	3*25	50	3333W	20kW
L30 XW 230 V	2*10	2*10							
S20/30 E 230 V	2*16	2*16	3*50		3*45		50	2000/2500W	12/15kW
S20/30 E 400 V	2*16	3*25			3*45		50	2000/2500W	12/15kW
S20/30 W 230 V	2*16	2*16							
S20/30 W 400 V	2*16								
L14 RE 230V	2*10		3*10		3*25		25	1200W	3,6kW
L14 RE 400V	1*10		3*10		3*25		25	1200W	3,6kW
L14 RE 230V	2*10		3*10		3*25		25	600W	1,8kW
L14 RE 400V	1*10		3*10		3*25		25	600W	1,8kW
L14 RW 230V	2*10								
L20 RE 230V	2*10	2*10	3*16		3*25		25	2000W	6kW
L20 RE 400V	2*10	3*16			3*25		25	2000W	6kW
L20 RE 230V	2*10	2*10	3*16		3*25		25	1000W	3kW
L20 RE 400V	2*10	3*16			3*25		25	1000W	3kW
L20 RW 230V	2*10	2*10							
L20 RW 400V	2*10								
L40/30 RE 230V	2*16	2*16	3*32		3*45		75	2000W	12kW
L40/30 RE 400V	2*16	3*25			3*45		75	2000W	12kW
L40/30 RE 230V	2*16	2*16	3*25		3*45		75	2000W	6kW
L40/30 RE 400V	2*16	3*16			3*45		75	2000W	6kW
L40/30 RW 230V	2*16	2*16							
L40/30 RW 400V	2*16								
L50XE 230V	3*32	2*10	external	external	3*45	3*45	50	2833W	34kW
L50XE 400V	2*25	1*10	external	external	3*45	3*45	50	2833W	34kW
L50XW 230V	3*32	2*10							
L50XW 400V	2*25	1*10							
L60RE 230V	3*16	3*16	3*50		3*45		75	2500W	15kW
L60RE 400V	3*16	3*16	3*25		3*45		75	2500W	15kW
L60RE 230V	3*16	3*16	3*25		3*45		75	2500W	7,5kW
L60RE 400V	3*16	3*16	3*16		3*45		75	2500W	7,5kW
L60RW 230V	3*16	3*16							
L60RW 400V	3*16	3*16							

Elkomponentoversikt CS500

Type	F1	F2	F3	F4	K1	K2	SSR	EB/stk	Tot kW
S12XE 230V	2*10		external		3*20		25	2000W	6kW
S12XE 400V	1*10		external		3*20		25	2000W	6kW
S12XW 230V	2*10								
S12RE 230V	2*10		external		3*20		25	2000W	6kW
S12RE 400V	1*10		external		3*20		25	2000W	6kW
S12RW 230V	2*10								
L14 RE 230V	2*10		3*10		3*25		25	1200W	3,6kW
L14 RE 400V	1*10		3*10		3*25		25	1200W	3,6kW
L14 RE 230V	2*10		3*10		3*25		25	600W	1,8kW
L14 RE 400V	1*10		3*10		3*25		25	600W	1,8kW
L14 RW 230V	2*10								
L20 RE 230V	2*10	2*10	3*16		3*25		25	2000W	6kW
L20 RE 400V	2*10		3*16		3*25		25	2000W	6kW
L20 RE 230V	2*10	2*10	3*16		3*25		25	1000W	3kW
L20 RE 400V	2*10		3*16		3*25		25	1000W	3kW
L20 RW 230V	2*10	2*10							
L20 RW 400V	2*10								
L40/30 RE 230V	2*16	2*16	3*32		3*45		75	2000W	12kW
L40/30 RE 400V	2*16		3*25		3*45		75	2000W	12kW
L40/30 RE 230V	2*16	2*16	3*25		3*45		75	2000W	6kW
L40/30 RE 400V	2*16		3*16		3*45		75	2000W	6kW
L40/30 RW 230V	2*16	2*16							
L40/30 RW 400V	2*16								
L60RE 230V	3*16	3*16	3*50		3*45		75	2500W	15kW
L60RE 400V	3*16	3*16	3*25		3*45		75	2500W	15kW
L60RE 230V	3*16	3*16	3*25		3*45		75	2500W	7,5kW
L60RE 400V	3*16	3*16	3*16		3*45		75	2500W	7,5kW
L60RW 230V	3*16	3*16							
L60RW 400V	3*16	3*16							