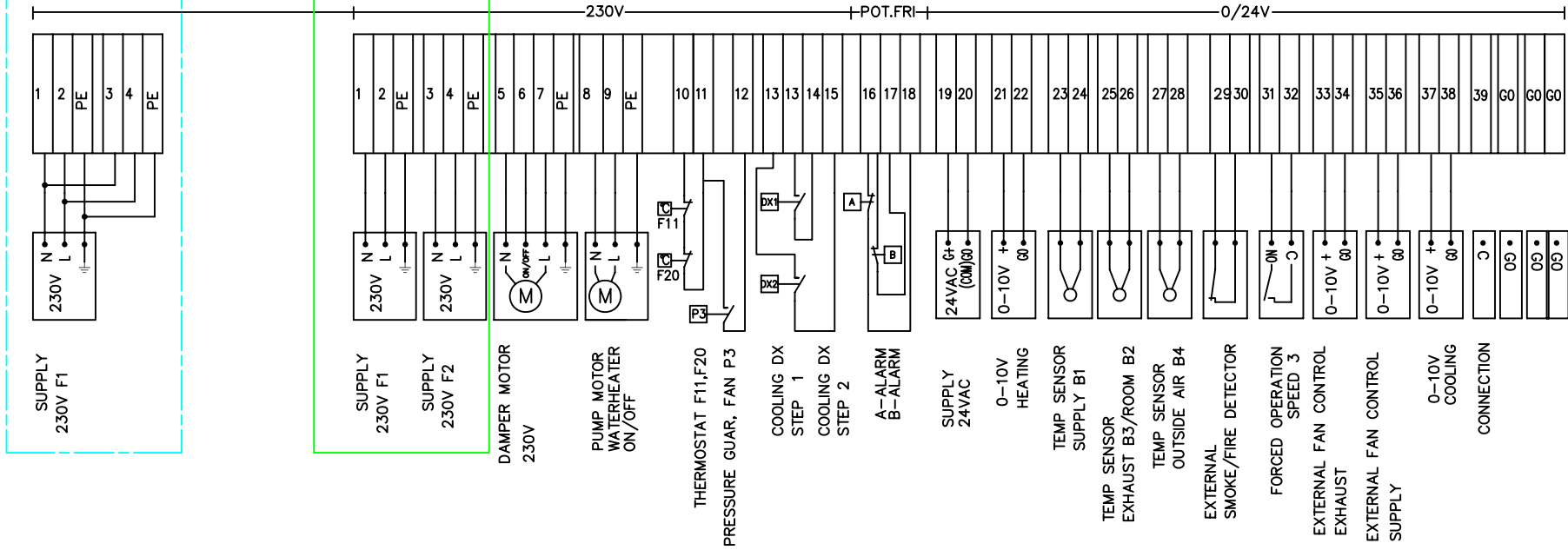
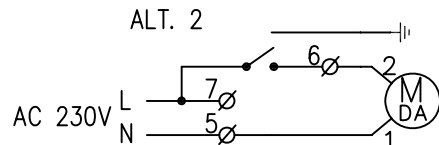
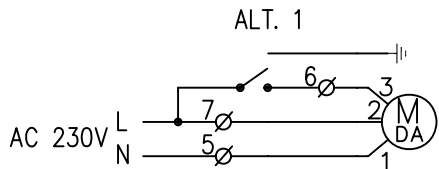


ALT. S12
L14R











CONNECTION DAMPER

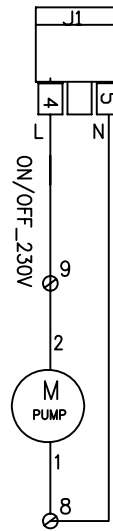
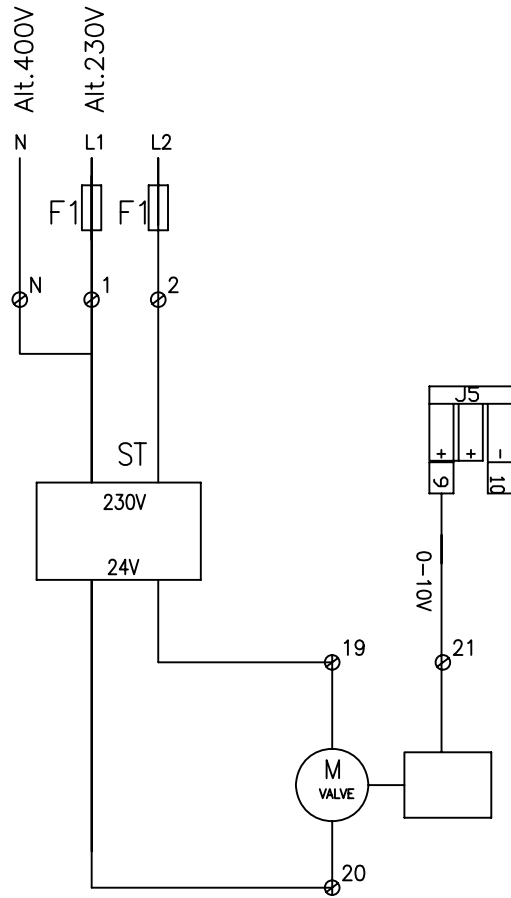


1		TEGMEG ENDRET 2007-10-25/LA		Date/Sign.	
Symb.:		Changes		Date/Sign.	
No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.
Date	22.02.07	Drawn	T. I. Engen	Projection	Scale
Checked		Appr.			
CONNECTOR DIAGRAM CS 500				Replaces:	Replaced by:
ART.NO.: 100020				342150	Side:

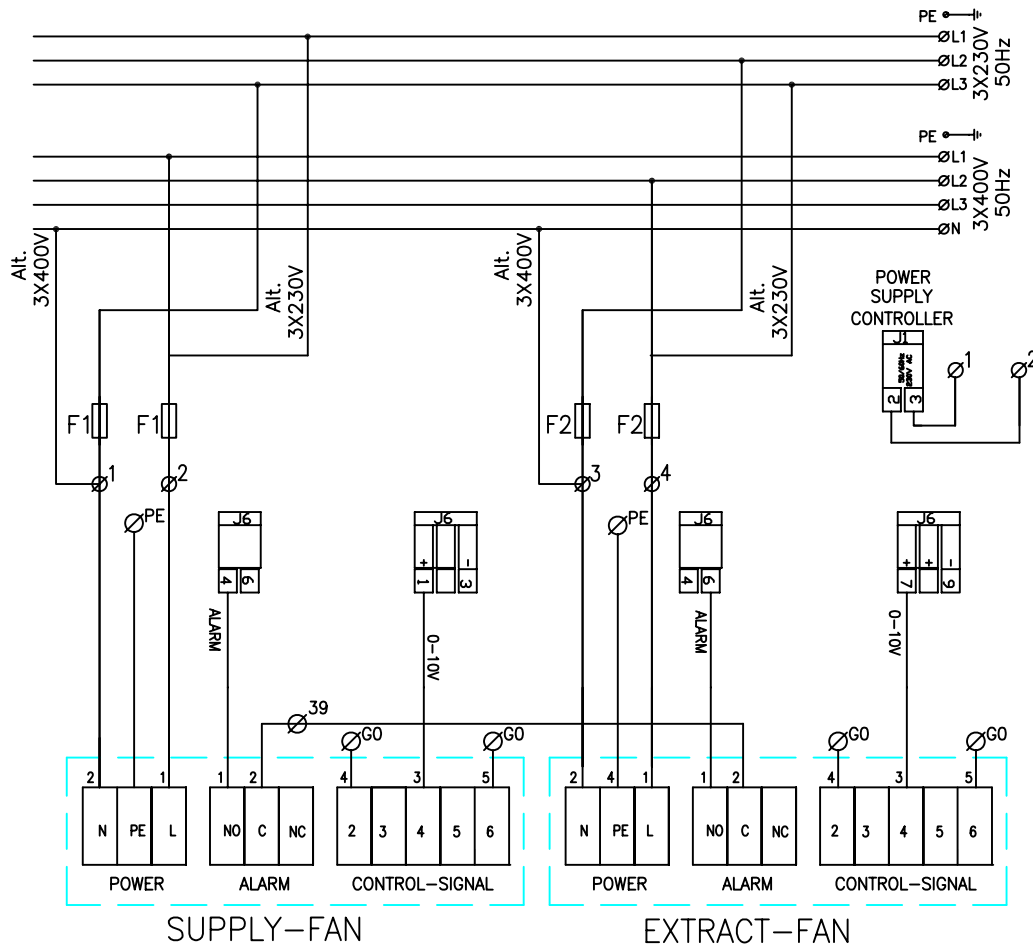
CONNECTION TERMINAL AND COMPONENTS

CS500 IO	Function	IO Type	Connection CS500	Connection components
J1				
J1	PE	Digital	J1(Pin1)	
J1	Mains supply	Digital (230V)	J1(Pin2,3)	
J1	Pump (water battery)/ Heating step 2 (el.battery)	Digital (230V 11A)	J1 (Pin 4,5)	X:9, X:8 (water battery only)
J1	Not in use	Digital	J1 (Pin 6,7)	
J1	Outside damper (Pin8=L ON/OFF Pin9=L Pin10=N)	Digital (230V 2A)	J1 (Pin 8,9,10)	X:6, X:7,X:5
J1	Not in use		J1 (Pin 11-16)	
J2				
J2	Not in use			
J3				
J3	Alarm exit priority A	Digital	J3 (Pin 1,4)	X:18, X:16
J3	Alarm exit priority B	Digital	J3 (Pin 2,4)	X:17, X:16
J3	Not in use		J3 (pin 5)	
J3	Cooling DX step1	Digital	J3 (Pin 6,8)	X:14, X:13
J3	Cooling DX step2	Digital	J3 (Pin 7,8)	X:15, X:13
J4				
J4	Speed 1	Digital	J4(Pin 1,G0)	
J4	Speed 2	Digital	J4(Pin 2,G0)	
J4	Alarm external, fire/smoke	Digital	J4 (Pin 3,G0)	X:29, X:30
J4	Heating OFF/ON. External signal	Digital	J4 (Pin 4,G0)	
J4	Temperature setting. External signal	Analogue (0 - 10V)	J4 (Pin 5,6)	
J4	Temperature reading, supply air	Analogue (0 - 10V)	J4 (Pin 7,G0)	
J4	Temperature reading, extract air	Analogue (0 - 10V)	J4 (Pin 8,G0)	
J4	Temperature reading, outdoor air	Analogue (0 - 10V)	J4 (Pin 9,G0)	
J4	Extract-/room temperature	NTC	J4 (Pin 11)	X:25, X:26
J4	Outdoor temperature	NTC	J4 (Pin 13)	X:27, X:28
J4	External pressure censored, supply air	Analogue (0 - 10 V)	J4 (Pin 14,G0)	X:35, 36
J4	External pressure censored, extract air	Analogue (0 - 10 V)	J4(Pin 16,G0)	X:33, 34
J5				
J5	Supply air temperature censored	NTC	J5 (Pin 1,G0)	X:23, X:24
J5	Frost/ice censored water battery	NTC	J5(Pin3,4)	Temperature censored B5
J5	Thermostat man. reset electrical battery	Digital	J5(Pin5,8)	Thermostat F10
J5	Not in use		J5(Pin 6,7)	
J5	Secondary heating, full range water battery	Analogue (0 - 10V)	J5(Pin 9)	X:21, X:22
J5	Rotor	Analogue (0 - 10 V)	J5(Pin 11)	P10X:33), G0
J5	Rotor: Rotor alarm	Digital	J5(Pin 13,14)	P10X:43,P10X:42
J5	External Start/Stop	Digital	J5(Pin 15,G0)	
J5	Forced operation, Speed 3	Digital	J5(Pin 16,G0)	X:31, X:32
J6				
J6	Supply air fan	Analogue (0 - 10 V)	J6 (Pin 1,3)	FanSupp X:4, G0
J6	Start/stop, supply air fan	Digital	J6 (Pin 2,G0)	
J6	Alarm fan supply/extract	Digital	J6 (Pin4,6)	FanExtrX:NO,FanSuppX:NO
J6	Power supply 12V	Analogue (12VDC)	J6(Pin5)	X:SSR1-2A1
J6	Extract air fan.	Analogue (0 - 10 V)	J6 (Pin 7)	FanExtrX:4, G0
J6	Start/stop, extract air fan	Digital	J6 (Pin 8,G0)	
J6	Pressure guard, supply air	Digital	J6(Pin 10,G0)	Pressure guard P1, G0
J6	Pressure guard, extract air	Digital	J6(Pin 12,G0)	Pressure guard P2, G0
J6	Pulse with modulation (ON/OFF)	Analogue	J6 (Pin 13)	X:SSR1-2 A1
J6	Cooling	Analogue (0 - 10V)	J6 (Pin 15,16)	X:37, X:38

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 -					

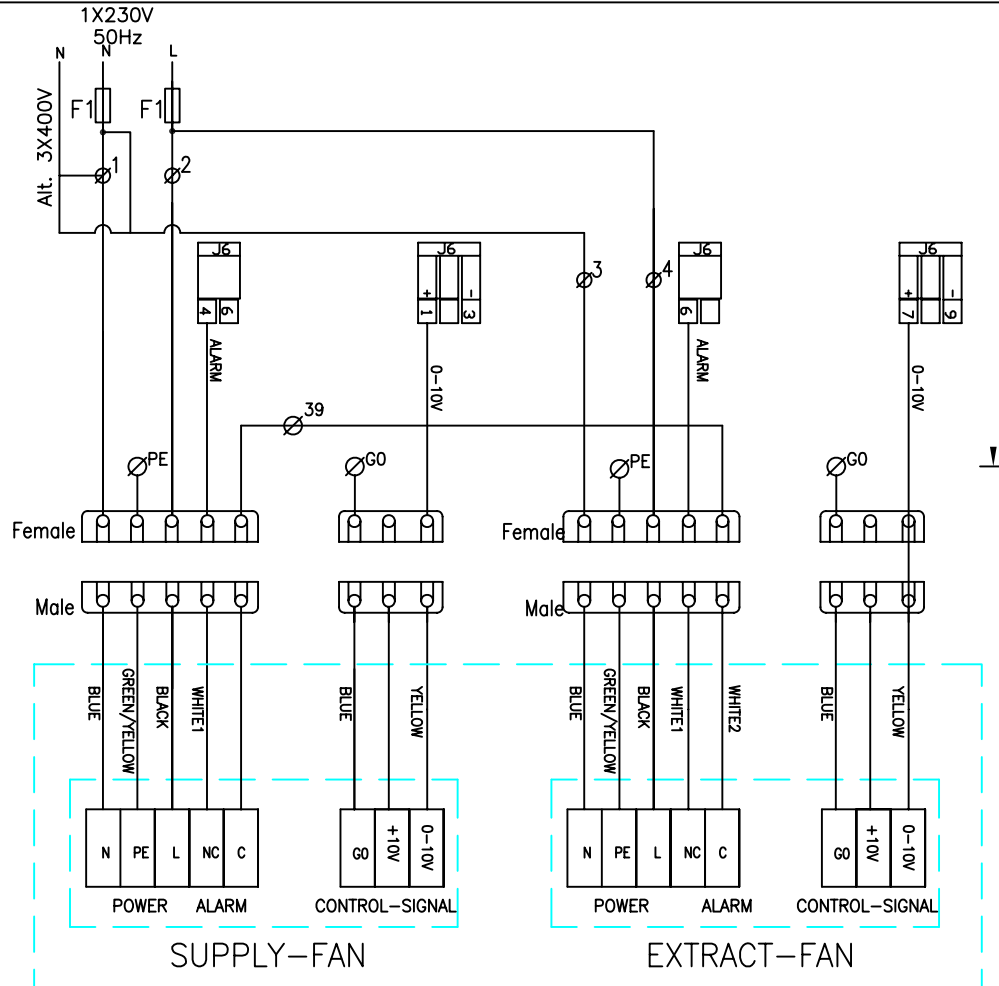


Changes		Date/Sign.		No. Unit		Pos. No.		Name, type, dim.		Drawing no. Standard		Art. No.		Matr. Spec.	
Date		08.05.07		Drawn		T. I. Engen		Projection		Scale		Replaces:		Replaced by:	
Checked				Appr.								342152		Side:	
CONNECTIONS WATER HEATER CS 500 230V/400V ART.NO.: 100033															



SUPPLY-FAN

EXTRACT-FAN

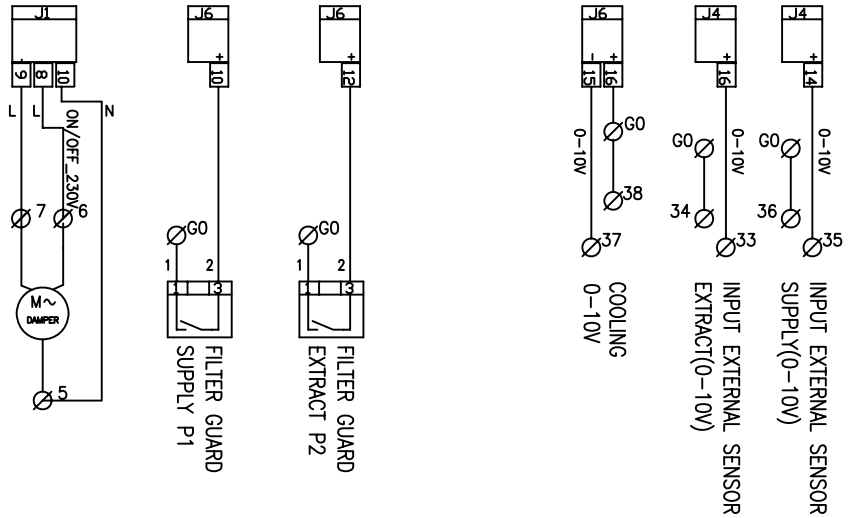


SUPPLY-FAN

EXTRACT-FAN

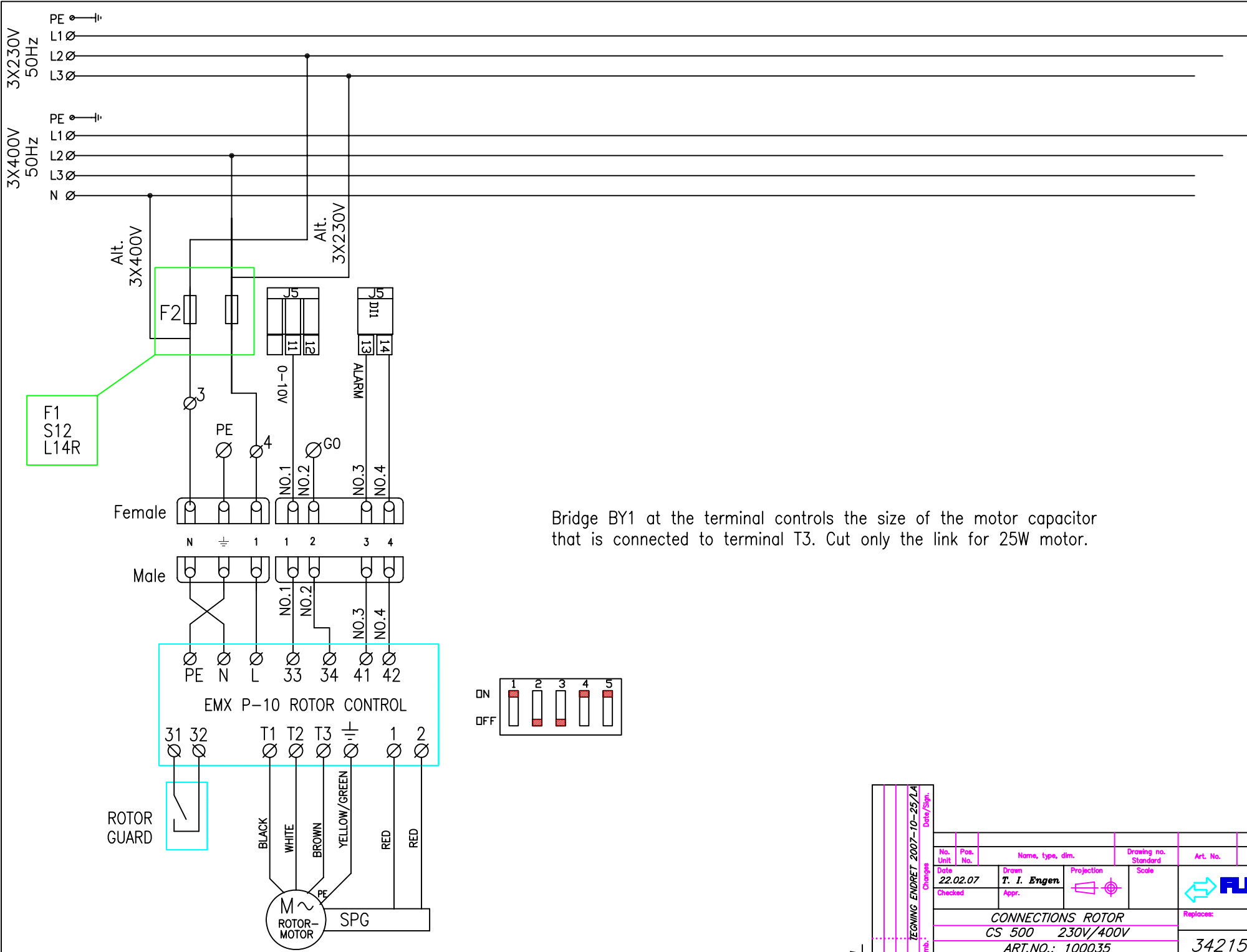
FAN_WITH_EC-MOTOR

COMPONENT_DIMENSION_REF.:93529



1. EC-motor added 03.10.2007 LA		Date/Sign.		Drawing no. Standard		Art. No.		Matr. Spec.	
No. Unit	Pos. No.	Name, type, dim.		Date		Drawn		Projection	
				22.02.07		T. I. Engen		Scale	
				Checked		Appr.		Side:	
INTERNAL CONNECTIONS						Replaces:		Replaced by:	
CS500 230V/400V									
ART.NO.: 100034						342153			

Exp-out Max/Min



Bridge BY1 at the terminal controls the size of the motor capacitor that is connected to terminal T3. Cut only the link for 25W motor.

1		TECHNICAL		2007-10-25/1A		Date/Sign.	
No. Unit	Pos. No.	Name, type, dim.		Drawing no. Standard		Art. No. Matr. Spec.	
Date	22.02.07	Drawn	T. I. Engen	Projection	Scale		
Checked		Appr.					
CONNECTIONS ROTOR						Replaces:	
CS 500 230V/400V						Replaced by:	
ART.NO.: 100035						342154	
						Side:	

Exp-out: Max/Min

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							