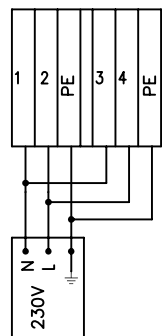


ALT. S12
L14R

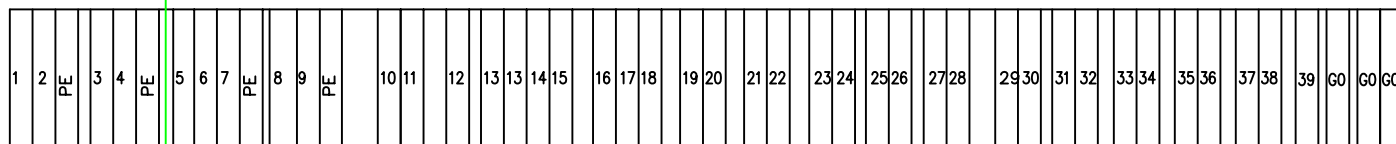


SUPPLY
230V F1

230V

POT.FRI

0/24V



SUPPLY
230V F1

SUPPLY
230V F2

DAMPER MOTOR
230V

PUMP MOTOR
WATERHEATER
ON/OFF

THERMOSTAT F11,F20
PRESSURE GUAR. FAN P3

COOLING DX
STEP 1

COOLING DX
STEP 2

A-ALARM
B-ALARM

SUPPLY
24VAC

0-10V
HEATING

TEMP SENSOR
SUPPLY B1

TEMP SENSOR
EXHAUST B3/ROOM B2

TEMP SENSOR
OUTSIDE AIR B4

EXTERNAL
SMOKE/FIRE DETECTOR

FORCED OPERATION
SPEED 3

EXTERNAL FAN CONTROL
EXHAUST

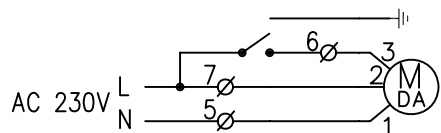
EXTERNAL FAN CONTROL
SUPPLY

0-10V
COOLING

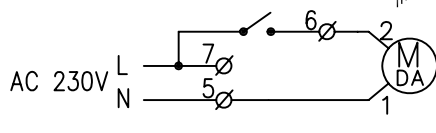
CONNECTION

CONNECTION DAMPER

ALT. 1



ALT. 2

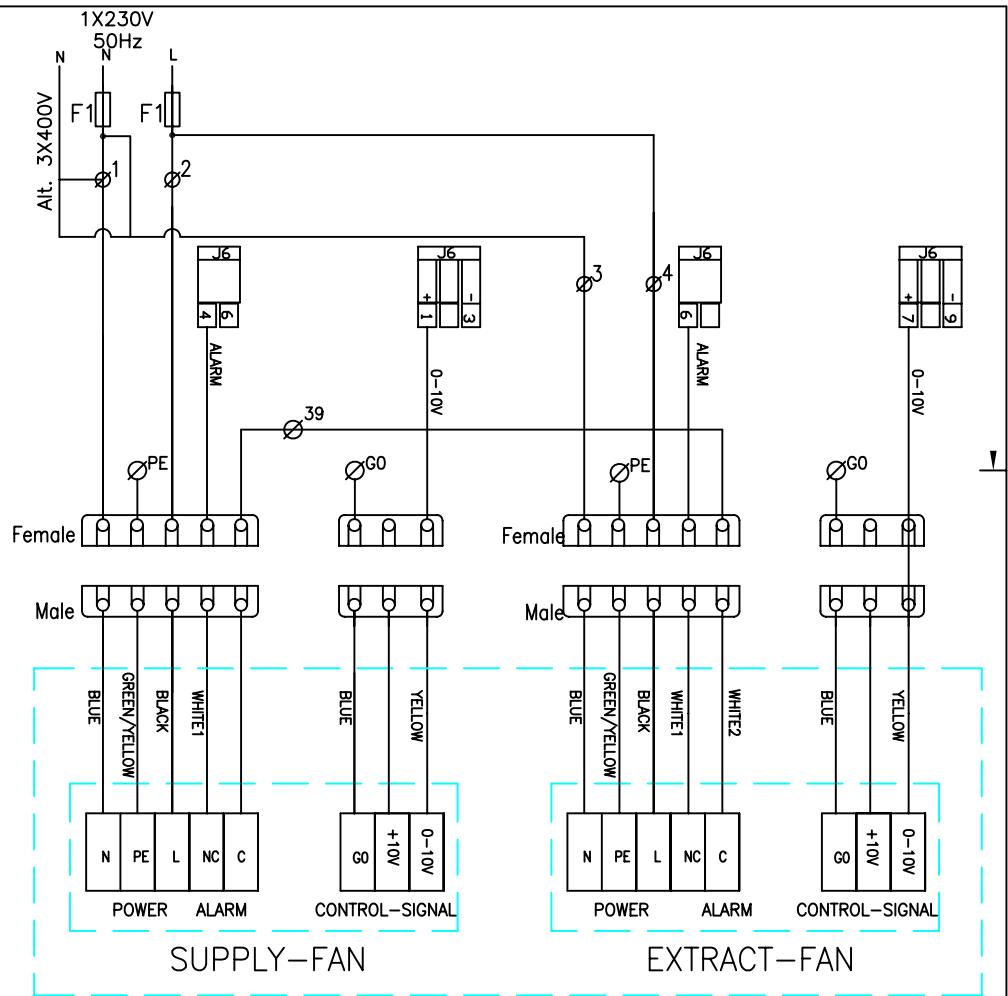
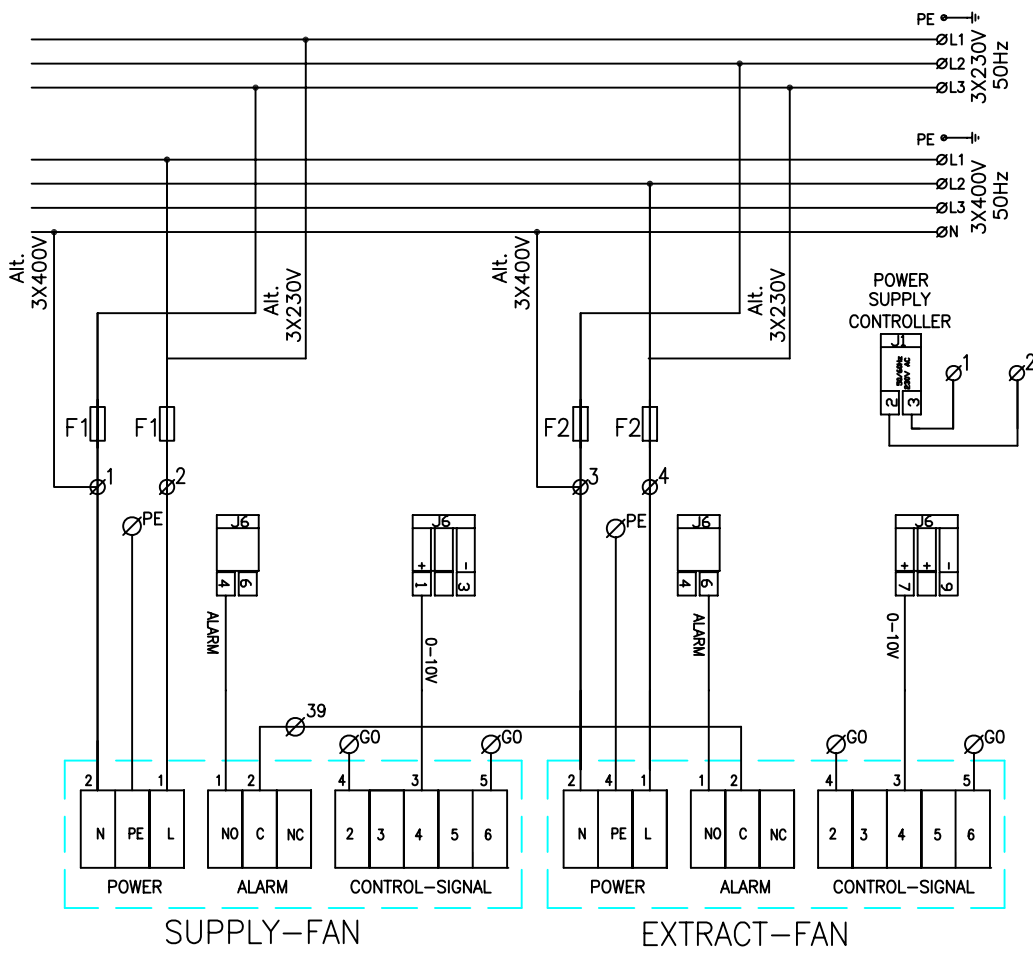


1 TEGMING ENDRET 2007-10-25/LA
Symb. Changes Date/Sign.

No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.
Date	22.02.07	Drawn	Projection	Scale	
Checked		T. I. Engen	Appr.		
CONNECTOR DIAGRAM CS 500					Replaces:
ART.NO.: 100020					Replaced by:
					Side:

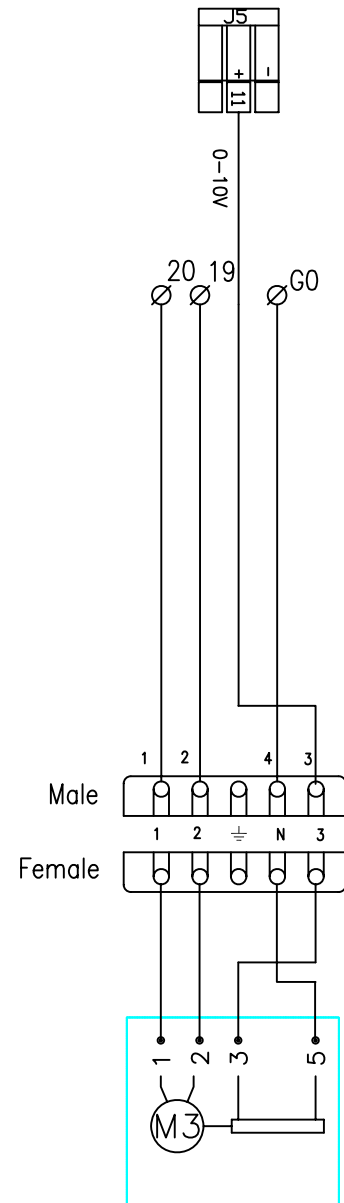


342150



COMPONENT_DIMENSION_REF.:93529

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



Date / Sign.													
	No. Unit.		Pos. No.		Name, type, dim.			Drawing no. Standard		Art. No.		Matr. Spec.	
	Date		Drawn		Projection			Scale					
	22.02.07		T. I. Engen										
Changes	Checked		Appr.							Replaces:			
	CONNECTIONS BY-PASS								Replaced by:				
	230V/400v												
	ART.NR.:100036								342155		Side:		
Dy. n. b.													

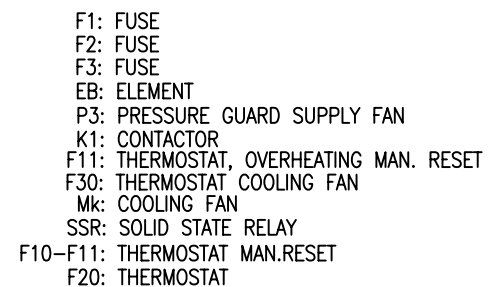
PE 

L1 

L2 

L3 

N 



Changes	Date/Sign.									
	No. Unit	Pos. No.	Name, type, dim.			Drawing no. Standard		Art. No.		Matr. Spec.
	Date	Drawn	Projection		Scale					
	22.02.07	T. I. Engen								
Checked	Appr.									
Symb.	CONNECTIONS ELECTRIC HEATER 400V						Replaces:		Replaced by:	
	1 STEP -3 ELEMENTS									
	ART.NR.:100044									
							342163		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 censor, supply air	Analogue (0 - 10 V)	J4 (Pin 14,G0)	X:35, 36
J4	External pressure censor, extract air	Analogue (0 - 10 V)	J4(Pin 16,G0)	X:33, 34
J5				
J5	Supply air temperature censor	NTC	J5 (Pin 1,G0)	X:23, X:24
J5	Frost/ice censor water battery	NTC	J5(Pin3,4)	Temperature censor 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	Analog (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	Analog (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 -					

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							