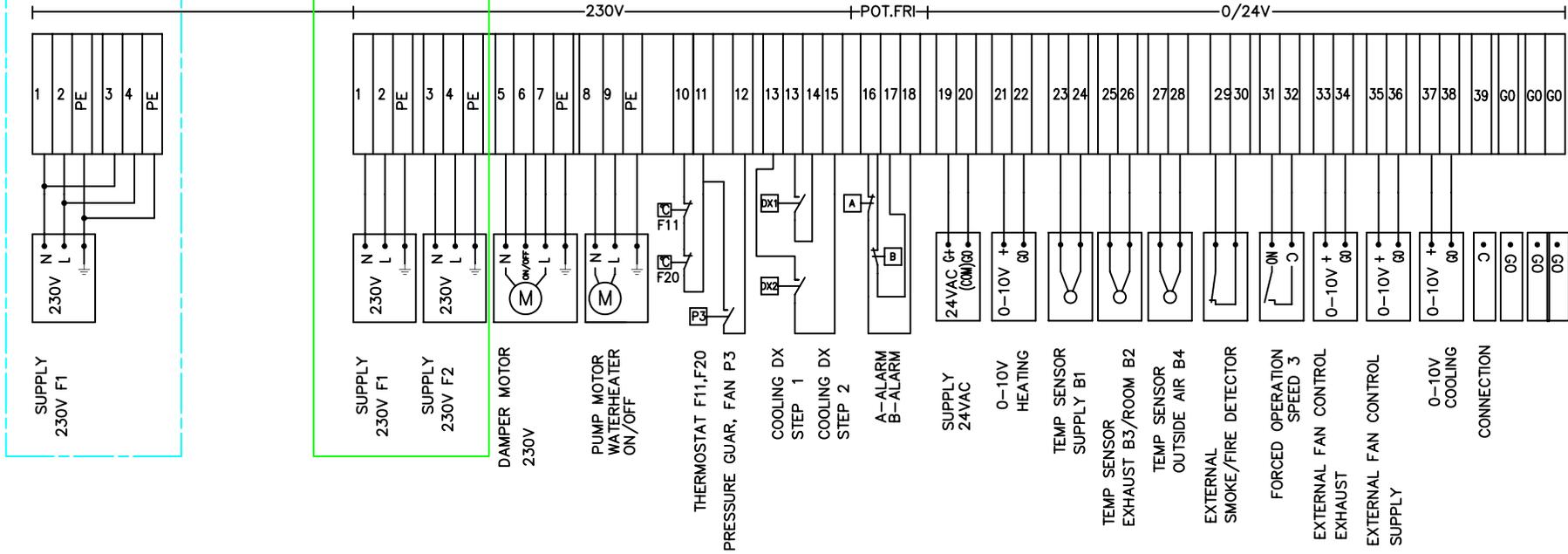
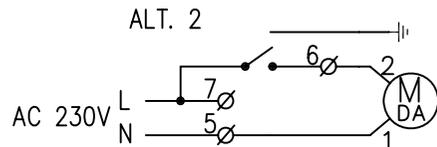
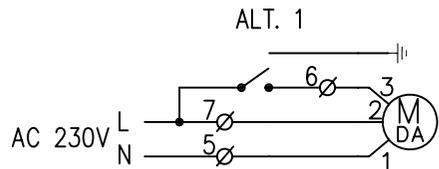


ALT. S12  
L14R



CONNECTION DAMPER



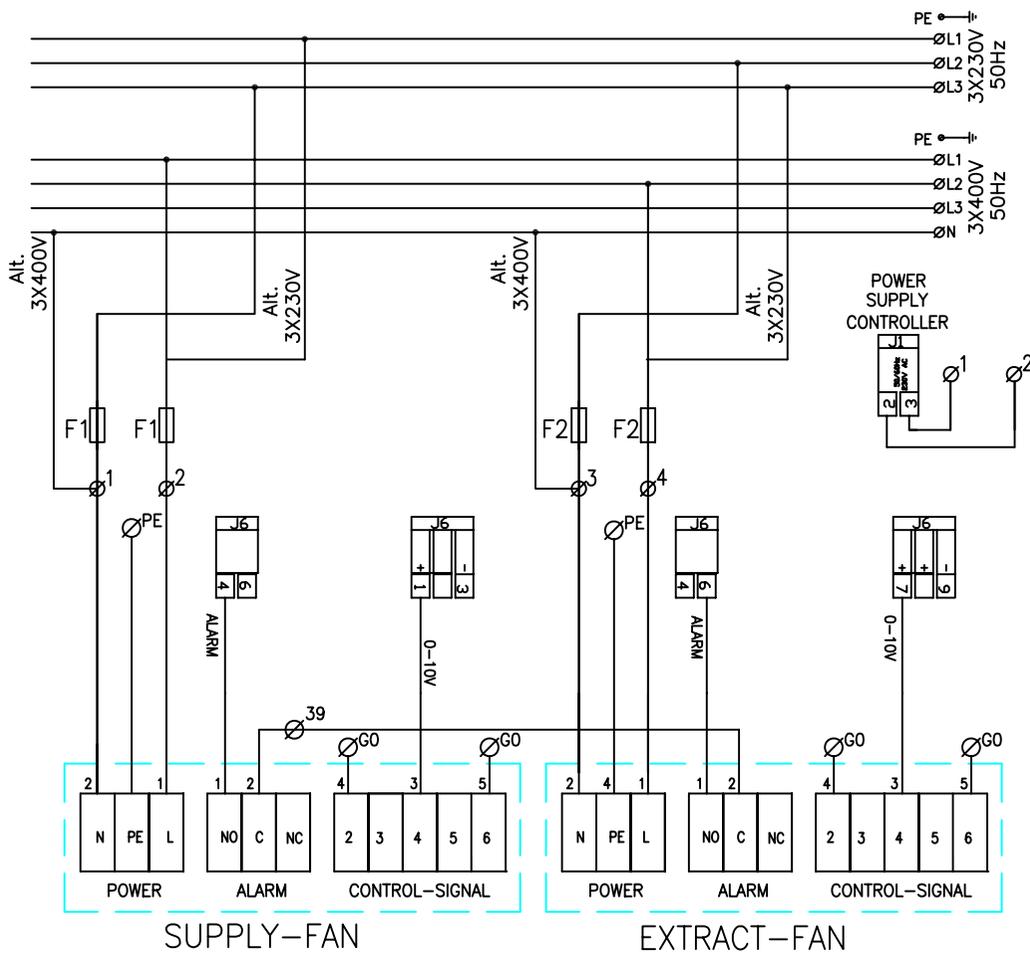
|                          |          |                             |                      |            |              |
|--------------------------|----------|-----------------------------|----------------------|------------|--------------|
| 1                        |          | TEGMEG ENDRET 2007-10-25/LA |                      | 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

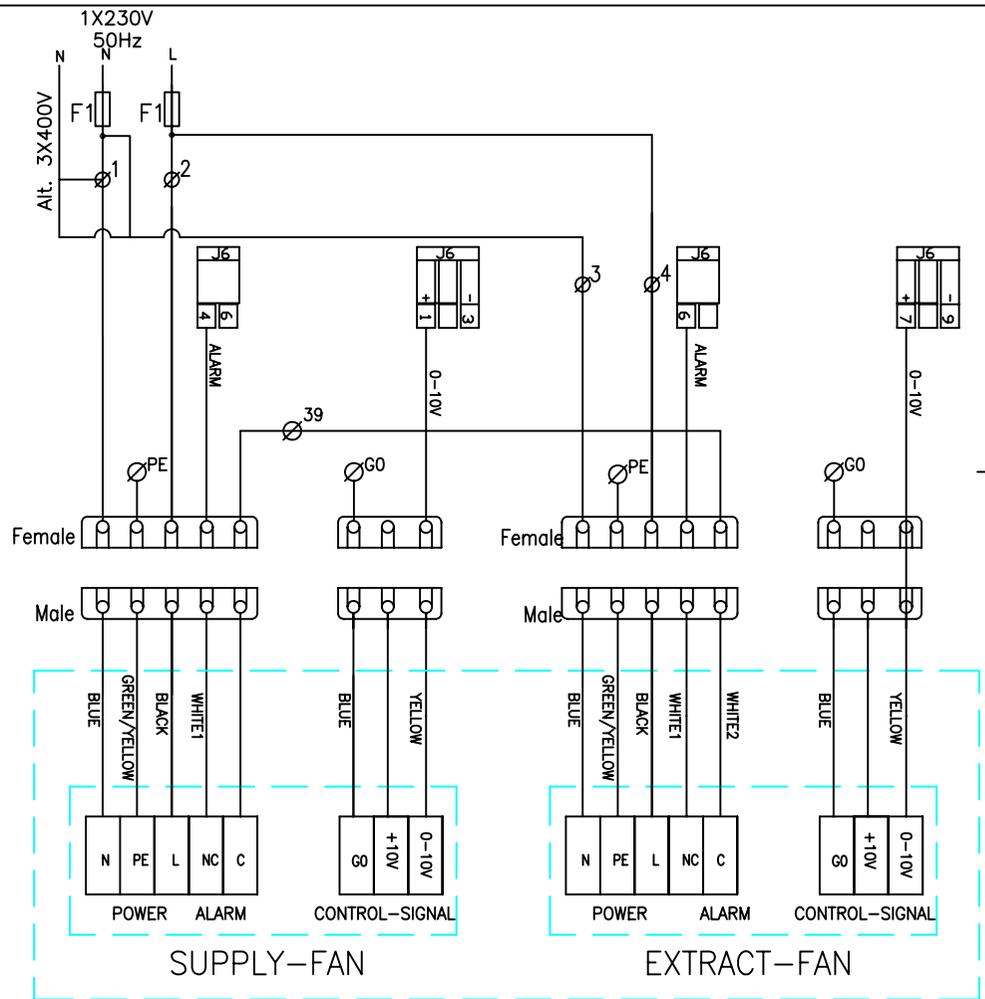
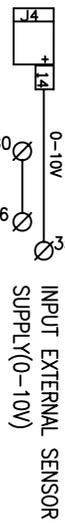
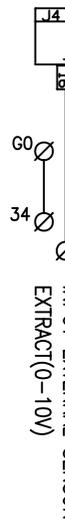
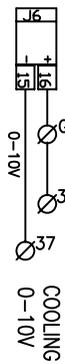
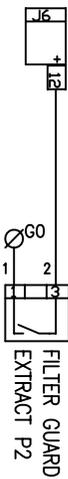
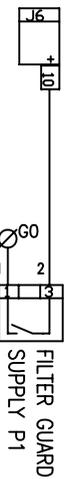
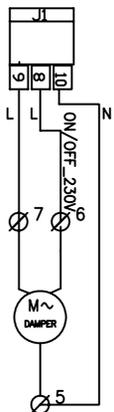
| CS500 IO  | Function   | IO Type             | Connection CS500 | Connection components         |
|-----------|--|---------------------|------------------|-------------------------------|
| <b>J1</b> |  |                     |                  |                               |
| J1        | PE   | Digital             | J1(Pin1)         |                               |
| J1        | Mains supply   | Digiital (230V)     | J1(Pin2,3        |                               |
| J1        | Pump (water battery)/<br>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<br>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)   |                               |
| <b>J2</b> |  |                     |                  |                               |
| J2        | Not in use   |                     |                  |                               |
| <b>J3</b> |  |                     |                  |                               |
| 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                    |
| <b>J4</b> |  |                     |                  |                               |
| 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                      |
| <b>J5</b> |  |                     |                  |                               |
| 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                    |
| <b>J6</b> |  |                     |                  |                               |
| 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<br>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 -                                 |         |            |              |    |   |



SUPPLY-FAN

EXTRACT-FAN



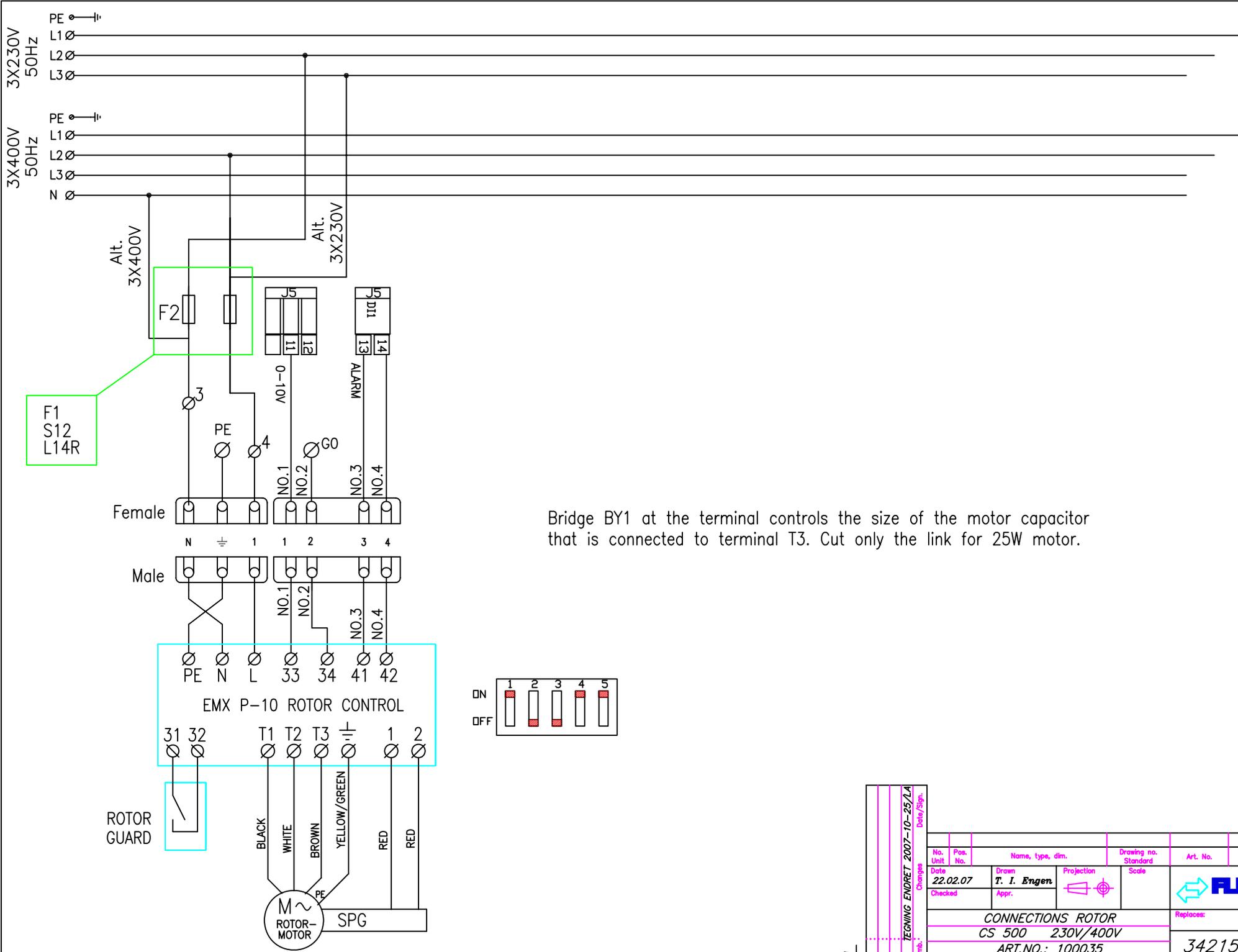
SUPPLY-FAN

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.       |  | Scale        |  |
| INTERNAL CONNECTIONS            |          |                  |  |                      |  | Replaces:   |  | Replaced by: |  |
| CS500 230V/400V                 |          |                  |  |                      |  |             |  |              |  |
| ART.NO.: 100034                 |          |                  |  |                      |  | 342153      |  | Side:        |  |



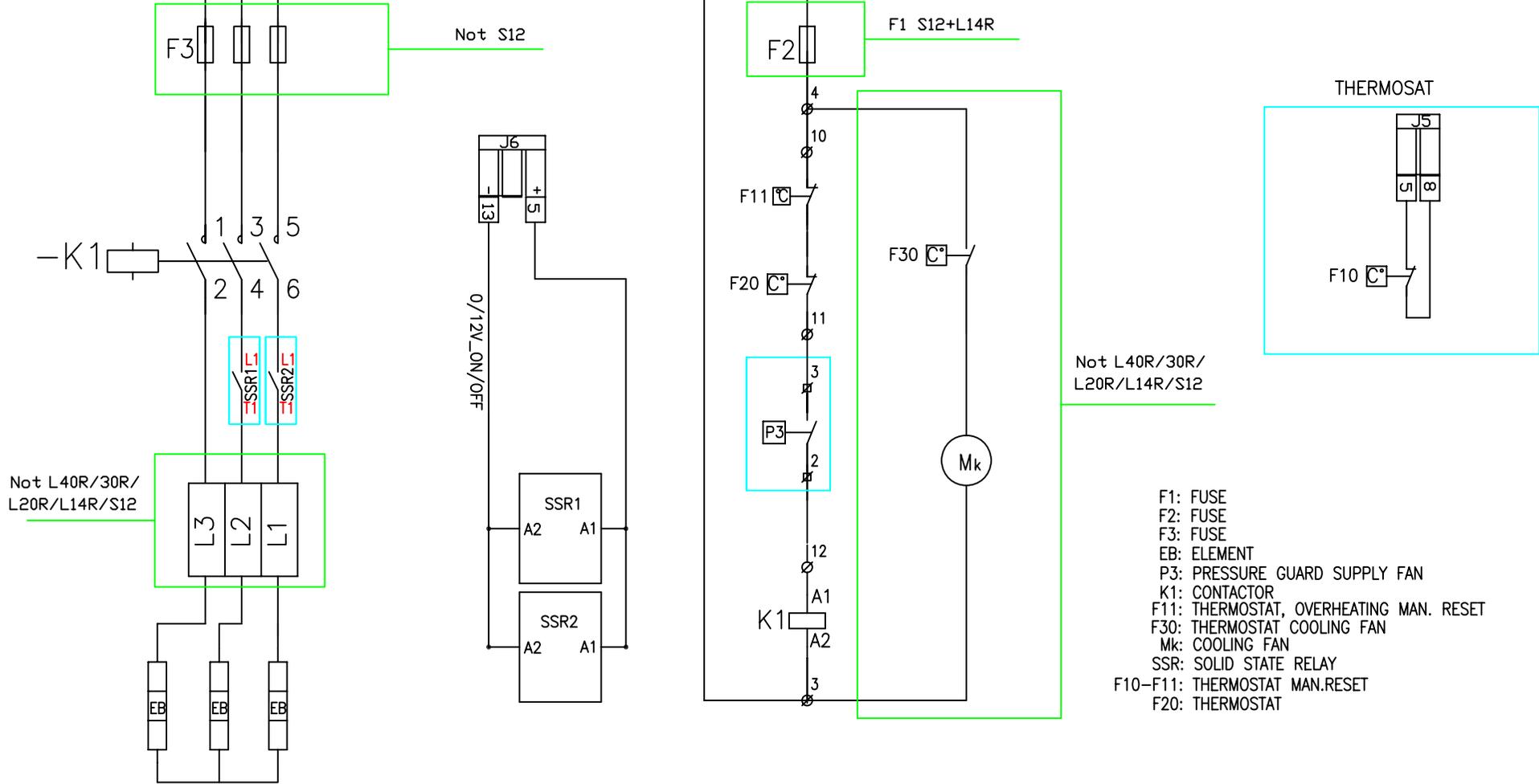
Bridge BY1 at the terminal controls the size of the motor capacitor that is connected to terminal T3. Cut only the link for 25W motor.

|                   |          |                  |             |                      |       |                      |  |
|-------------------|----------|------------------|-------------|----------------------|-------|----------------------|--|
| 1                 |          | TECHNICAL        |             | 2007-10-25/LA        |       | 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 |          |                  |             |                      |       |                      |  |
| CS 500 230V/400V  |          |                  |             | 342154               |       | Side:                |  |
| ART.NO.: 100035   |          |                  |             |                      |       |                      |  |

Exp-out: Max: 10mm

3X400V  
50HZ

PE  
L1  
L2  
L3  
N



Not L40R/30R/  
L20R/L14R/S12

Not S12

F1 S12+L14R

Not L40R/30R/  
L20R/L14R/S12

- F1: FUSE
- F2: FUSE
- F3: FUSE
- EB: ELEMENT
- P3: PRESSURE GUARD SUPPLY FAN
- K1: CONTACTOR
- F11: THERMOSTAT, OVERHEATING MAN. RESET
- F30: THERMOSTAT COOLING FAN
- Mk: COOLING FAN
- SSR: SOLID STATE RELAY
- F10-F11: THERMOSTAT MAN.RESET
- F20: THERMOSTAT

COMPONENT\_DIMENSION\_REF.:93529

| No. Unit                         |          | Pos. No. |             | Name, type, dim. |  | Drawing no. Standard |  | Art. No. |  | Matr. Spec.            |  |
|----------------------------------|----------|----------|-------------|------------------|--|----------------------|--|----------|--|------------------------|--|
| Date                             | 22.02.07 | Drawn    | T. I. Engen | Projection       |  |                      |  |          |  | Replaces: Replaced by: |  |
| Checked                          |          | Appr.    |             |                  |  |                      |  |          |  |                        |  |
| CONNECTIONS ELECTRIC HEATER 400V |          |          |             |                  |  |                      |  | 342163   |  | Side:                  |  |
| 1 STEP -3 ELEMENTS               |          |          |             |                  |  |                      |  |          |  |                        |  |
| ART.NR.:100044                   |          |          |             |                  |  |                      |  |          |  |                        |  |

Exp-out: Max: 10mm

# 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 |          |    |      |    |     |        |        |