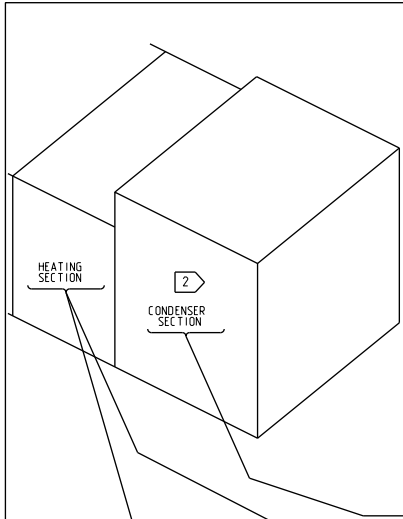




| DANFOSS VARIABLE FREQUENCY DRIVE PROGRAMMING PARAMETERS |           |                              |                                                            |
|---------------------------------------------------------|-----------|------------------------------|------------------------------------------------------------|
| MENU                                                    | PARAMETER | DESCRIPTION                  | SETTING                                                    |
| LOAD/MOTOR                                              | 1-21      | MOTOR POWER                  | SET ONLY FOR APPLICATIONS USING 3HP HIGH EFFICIENCY MOTORS |
|                                                         | 1-22      | MOTOR VOLTAGE                | SET ONLY FOR 200/230V 60HZ 380/415V 50HZ APPLICATIONS      |
|                                                         | 1-24      | MOTOR CURRENT                | SET BASED ON MOTOR NAMEPLATE                               |
|                                                         | 1-25      | MOTOR NOMINAL SPEED          | 1800 RPM                                                   |
|                                                         | 1-73      | FLYING START                 | ENABLED                                                    |
|                                                         | 2-01      | DC BRAKE CURRENT             | 0%                                                         |
| REFERENCE / RAMP                                        | 3-15      | REFERENCE 1 SOURCE           | ANALOG INPUT 53                                            |
|                                                         | 3-41      | RAMP 1 RAMP UP TIME          | 30 SECONDS                                                 |
|                                                         | 3-42      | RAMP 1 RAMP DOWN TIME        | 30 SECONDS                                                 |
| LIMITS / WARNINGS                                       | 4-12      | MOTOR SPEED LOW LIMIT        | 22HZ                                                       |
|                                                         | 4-18      | CURRENT LIMIT                | 100% RATED CURRENT                                         |
| DIGITAL IN/OUT                                          | 5-40(0)   | FUNCTION RELAY 1             | NO ALARM                                                   |
|                                                         | 5-40(1)   | FUNCTION RELAY 2             | RUNNING                                                    |
| SPECIAL FUNCTIONS                                       | 14-01     | SWITCHING FREQUENCY          | 4.5KHZ                                                     |
|                                                         | 14-12     | FUNCTION AT MAINS IMBALANCE  | DERATE                                                     |
|                                                         | 14-20     | RESET MODE                   | AUTOMATIC RESET X 3                                        |
|                                                         | 14-60     | FUNCTION AT OVER TEMPERATURE | DERATE                                                     |

| FUSE REPLACEMENT TABLE                                                                   |              |                              |                  |                  |                  |                 |                 |       |       |       |       |       |       |
|------------------------------------------------------------------------------------------|--------------|------------------------------|------------------|------------------|------------------|-----------------|-----------------|-------|-------|-------|-------|-------|-------|
| CONDENSER FAN FUSE<br>1F1 THRU 1F6 CLASS RK5                                             | UNIT VOLTAGE | 200                          | 230              | 380              | 415              | 460             | 575             |       |       |       |       |       |       |
|                                                                                          | TIME DELAY   | 25A                          | 25A              | 15A              | 15A              | 15A             | 15A             |       |       |       |       |       |       |
| CONTROL POWER FUSE                                                                       |              |                              |                  |                  |                  |                 |                 |       |       |       |       |       |       |
| CONTROL (1T1) TRANSFORMER RATING<br><br>1F7<br>TYPE S                                    |              | 0.25<br>KVA                  | 0.30<br>KVA      | 0.50<br>KVA      | 0.75<br>KVA      | 1.00<br>KVA     | 1.50<br>KVA     |       |       |       |       |       |       |
|                                                                                          | 20-30 TON    | 6.25A                        | 6.25A            | --               | 10A              | --              | --              |       |       |       |       |       |       |
|                                                                                          | 40 TON       | 15A                          | 20A              | --               | 20A              | --              | --              |       |       |       |       |       |       |
|                                                                                          | 50-60 TON    | --                           | --               | 15A              | --               | 20A             | --              |       |       |       |       |       |       |
|                                                                                          | 70-130 TON   | --                           | --               | --               | --               | 15A             | 20A             |       |       |       |       |       |       |
| ELECTRIC HEAT FUSE                                                                       |              | 4F19 THRU 4F36, 4F46, 47, 48 |                  |                  |                  | CLASS K5        |                 | 60A   |       |       |       |       |       |
| COMPRESSOR PROTECTION FUSE                                                               |              | 1F44 & 1F45                  |                  |                  |                  | TYPE MTH        |                 | 6A    |       |       |       |       |       |
| TRANSFORMER CIRCUIT FUSE                                                                 |              | 1F72 THRU 1F74               |                  |                  |                  | TYPE FLQ        |                 | 15A   |       |       |       |       |       |
| VFD PROTECTION FUSES                                                                     |              | STANDARD MOTORS              |                  |                  |                  |                 |                 |       |       |       |       |       |       |
| OPTIONAL EXHAUST/RETURN FAN<br><br>20 THRU 130 TON<br>1F63-1F65<br><br>(CLASS "T" FUSES) |              | UNIT<br>VOLTAGE              | FUSE<br>RATING   | 1.5 HP           | 3 HP             | 5 HP            | 7.5 HP          | 10 HP | 15 HP | 20 HP | 25 HP | 30 HP | 40 HP |
|                                                                                          |              | 200V/60/3                    | 600V             | 15A              | 35A              | 45A             | 70A             | 100A  | 150A  | 175A  | 225A  | 225A  | 400A  |
|                                                                                          |              | 230V/60/3                    | 600V             | 15A              | 25A              | 45A             | 70A             | 80A   | 125A  | 150A  | 200A  | 225A  | 350A  |
|                                                                                          |              | 380V/50/3                    | 600V             | 10A              | 15A              | 30A             | 50A             | 60A   | 90A   | 110A  | 125A  | 125A  | N/A   |
|                                                                                          |              | 415V/50/3                    | 600V             | 10A              | 15A              | 30A             | 45A             | 50A   | 90A   | 100A  | 125A  | 125A  | N/A   |
|                                                                                          |              | 460V/60/3                    | 600V             | 10A              | 15A              | 25A             | 35A             | 40A   | 70A   | 80A   | 100A  | 125A  | 175A  |
|                                                                                          |              | 575V/60/3                    | 600V             | 10A              | 15A              | 15A             | 25A             | 30A   | 40A   | 50A   | 60A   | 90A   | 100A  |
|                                                                                          |              |                              |                  |                  |                  |                 |                 |       |       |       |       |       |       |
|                                                                                          |              | HIGH EFFICIENCY MOTORS       |                  |                  |                  |                 |                 |       |       |       |       |       |       |
|                                                                                          |              | UNIT<br>VOLTAGE              | FUSE<br>RATING   | 1.5 HP           | 3 HP             | 5 HP            | 7.5 HP          | 10 HP | 15 HP | 20 HP | 25 HP | 30 HP | 40 HP |
|                                                                                          |              | 200V/60/3                    | 600V             | N/A              | 40A              | 45A             | 80A             | 100A  | 125A  | 175A  | 225A  | 225A  | 350A  |
|                                                                                          |              | 230V/60/3                    | 600V             | N/A              | 25A              | 45A             | 60A             | 90A   | 125A  | 150A  | 175A  | 225A  | 300A  |
|                                                                                          |              | 460V/60/3                    | 600V             | N/A              | 15A              | 25A             | 35A             | 45A   | 60A   | 90A   | 110A  | 125A  | 150A  |
|                                                                                          |              | 575V/60/3                    | 600V             | 10A              | 15A              | 15A             | 25A             | 30A   | 40A   | 50A   | 60A   | 90A   | 100A  |
|                                                                                          |              |                              |                  |                  |                  |                 |                 |       |       |       |       |       |       |
| OPTIONAL CONVENIENCE OUTLET FUSE<br>1F55 AND 1F56 (TIME DELAY TYPE FUSE)                 |              | 200V/60/3<br>12A             | 230V/60/3<br>10A | 380V/50/3<br>N/A | 415V/50/3<br>N/A | 460V/60/3<br>5A | 575V/60/3<br>4A |       |       |       |       |       |       |

| CUSTOMER CONNECTION WIRE RANGE                      |           |                      |                                                        |            |                      |
|-----------------------------------------------------|-----------|----------------------|--------------------------------------------------------|------------|----------------------|
| UNITS WITH MAIN POWER TERMINAL BLOCK (ALL VOLTAGES) |           |                      | UNITS WITH MAIN POWER DISCONNECT SWITCH (ALL VOLTAGES) |            |                      |
| BLOCK SIZE                                          | WIRE QTY. | CONNECTOR WIRE RANGE | DISCONNECT SIZE                                        | WIRE QTY.  | CONNECTOR WIRE RANGE |
| 335 AMP                                             | (1)       | #6 - 350 MCM         | 100 AMP                                                | (1)        | #14 - 1/0            |
| 760 AMP                                             | (2)       | #4 - 500 MCM         | 250 AMP                                                | (1) OR (2) | #4 - 350 kcmil       |
| 840 AMP                                             | (2)       | #2 - 600 MCM         | 400 AMP                                                | (1) OR (2) | #1 - 600 kcmil       |
|                                                     |           |                      | 600 AMP                                                | (2)        | #1 - 250 kcmil       |
|                                                     |           |                      | 1000 AMP                                               | (3)        | 250-500 MCM          |
|                                                     |           |                      |                                                        |            | 3/0 - 500 kcmil      |

#### NOTES

A. BLOCK SIZE & DISCONNECT SIZE ARE CALCULATED BY SELECTING THE SIZE GREATER THAN OR EQUAL TO 1.25 X (SUM OF UNIT LOADS). SEE UNIT LITERATURE FOR UNIT LOAD VALUES.

#### WARNING

HAZARDOUS VOLTAGE!  
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS, AND FOLLOW LOCK OUT AND TAG PROCEDURES BEFORE SERVICING. INSURE THAT ALL MOTOR CAPACITORS HAVE DISCHARGED STORED VOLTAGE. UNITS WITH VARIABLE SPEED DRIVE. REFER TO DRIVE INSTRUCTIONS FOR CAPACITOR DISCHARGE.

FAILURE TO DO THE ABOVE BEFORE SERVICING COULD RESULT IN DEATH OR SERIOUS INJURY.

#### AVERTISSEMENT

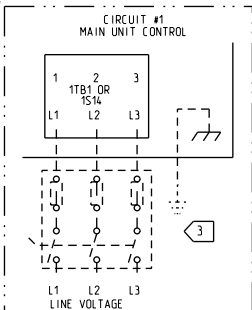
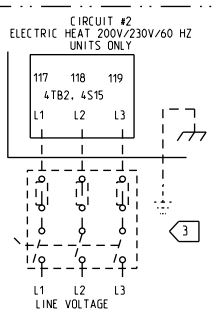
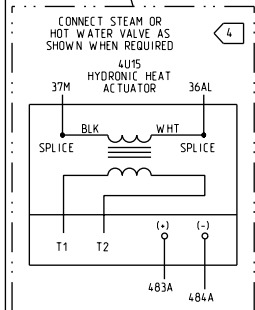
TENSION DANGEREUSE!  
COUPER TOUTES LES TENSIONS ET OUVRIRE LES SECTIONNEURS A DISTANCE. PUIS SUIVRE LES PROCEDURES DE VERROUILLAGE ET DES ETIQUETTES AVANT TOUTE INTERVENTION. VERIFIER QUE TOUTS LES CONDENSATEURS DES MOTEURS SONT DECHARGES. DANS LE CAS D'UNITES COMPORTANT DES ENTRAÎNEMENTS A VITESSE VARIABLE, SE REPORTER AUX INSTRUCTIONS DE L'ENTRAÎNEMENT POUR DECHARGER LES CONDENSATEURS.

NE PAS RESPECTER CES MESURES DE PRECAUTION PEUT ENTRAÎNER DES BLESSURES GRAVES POUVANT ETRE MORTELLES.

#### ADVERTENCIA

¡VOLTAJE PELIGROSO!  
DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUIDO LAS DESCONEXIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CIERRE Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEGÚRESE DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON EJE DE DIRECCIÓN DE VELOCIDAD VARIABLE, CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR.

EL NO REALIZAR LO ANTERIORMENTE INDICADO, PODRÍA OCASIONAR LA MUERTE O SERIAS LESIONES PERSONALES.



| AREA | LOCATION                      |
|------|-------------------------------|
| 1    | INSIDE UNIT CONTROL BOX       |
| 2    | CONDENSER SECTION             |
| 3    | AIR HANDLER SECTION           |
| 4    | HEATING SECTION               |
| 5    | EXTERNAL FIELD MOUNTED DEVICE |

#### CAUTION

USE COPPER CONDUCTORS ONLY!

UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

#### PRECAUCIÓN

N'UTILISER QUE DES CONDUCTEURS EN CUIVRE!

LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.

L'UTILISATION DE TOUT AUTRE CONDUCTEUR PEUT ENDOMMAGER L'EQUIPEMENT.

#### ATTENTION

UTILISER UNICAMENTE CONDUCTORES DE COBRE!

LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.

SI NO LO HACE, PUEDE OCASIONAR DAÑO AL EQUIPO.

**IMPORTANT!**  
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

