WIRE COLOR SCHEME TERMINAL IDENTIFICATION BLACK - LINE VOLTAGE RED - AC CONTROL X - DRIVE TERMINAL WHITE - AC GROUNDED - CUSTOMER TERMINAL CIRCUIT CONDUCTOR
BLUE - DC CONTROL GREEN - CHASSIS GROUND EARTH GROUND EARTH GROUND GRN /  $\neg$ \* AC MOTOR 1 4T1 (L1) M2 4T2 (L2) (T2) 2T1 \*CUSTOMER L1 (L1) (T1) 1L1 BLK (F15A) 2L1 5L1 L1/R/91 VLT (L1) (T1) 1T1 (L1) T1 INPUT SUPPLIED T1/U/96 [F16A] F16B 5L2 POWER ADJUSTABLE FREQUENCY (L2) (T2) 1T2 (L2) T2 L2 (L2) (T2) 1L2 BLK F15B 2L2 2T2 FEEDER 3L2 T2/V/97 3 PH, 600V, L2/S/92 DRIVE L3 (L3) (T3) 1L3 BLK ||F15C|| 2L3 |F16B| 5L3 | L2/3/92 | |F16C| 5L3 | L3/T/93 2T3 (L3) (T3) 1T3 (L3) T3 CIRCUIT 4T3 (L3) (T3) PROTECTION T3/W/98 (AFD) 60Hz (SEE NOTE 3) DRIVE INPUT FUSES DRIVE MAIN DISCONNECT DISCONNECT **FUSES** (L1) (T1) (L2) (T2) (L1) (T1) 3T1 (L1) T1 (L2) (T2) 3T2 (L2) T2 \*AC MOTOR 2 EARTH GROUND GRN (L3) (T3) (L3) (T3) 3T3 (L3) 163 RED 100 WHT -| F12 |-X2 X3 250V 115VAC T2 (12) 5 (11) TS1 HEATER (SET: 65° F) CR6 167 (9) (5) (2) FAN 1 (SET: 80° F) (23) (24) TB2 TS1

TO SHEET 2

# WARNING!

THE FOLLOWING TABLE LISTS THE PARAMETERS THAT ARE SET DIFFERENT FROM THE DRIVE DEFAULT SETTINGS. ADDITIONAL PARAMETER SETTINGS MAY BE REQUIRED FOR YOUR APPLICATION.

#### DRIVE PARAMETER SETTINGS

| PARAMETER # | NAME              | SETTING | VALUE                |
|-------------|-------------------|---------|----------------------|
| 0-02        | MOTOR SPEED UNIT  | 1       | HZ                   |
| 0-03        | REGIONAL SETTINGS | 1       | NORTH AMERICA        |
| 1-03        | TORQUE CHAR.      | 3       | AUTO ENERGY OPTIM VT |
| 5-02        | TERMINAL 29 TYPE  | 1       | OUTPUT               |
| 5-31        | TERMINAL 29       | 5       | RUNNING              |
| 14-20       | RESET MODE        | 13      | INFINITE AUTO REST   |
|             |                   |         |                      |
|             |                   |         |                      |

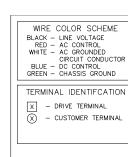
#### NOTES:

- 1. \* INDICATES COMPONENTS NOT SUPPLIED BY MANUFACTURER.
- 2. REFER TO THE INSTALLATION AND OPERATION MANUAL FOR DRIVE FUNCTIONS AND PARAMETER SETTINGS.
- 3. FEEDER CIRCUIT PROTECTION, INPUT POWER AND MOTOR WIRING MUST BE SELECTED IN ACCORDANCE WITH THE N.E.C., ANY APPLICATION LOCAL CODES AND THE LOAD CURRENT RATING.
- 4. REPLACE JUMPER 'J1' WITH NORMALLY CLOSED SAFETY INTERLOCK CONTACT AS NECESSARY. CONTACT MUST BE RATED 1/4 HP @ 120VAC MINIMUM.
- 5. PANEL MAY REQUIRE DERATING, CONSULT DRIVE MANUAL OR FACTORY FOR FOLLOWING CONDITIONS:

TO SHEET 2

- HIGHER SWITCHING FREQUENCY THAN DRIVE DEFAULT
- HIGHER THAN PANEL LISTED AMBIENT TEMPERATURES
- ELEVATION ABOVE 3300 FEET (1000 METERS)
- LONG MOTOR LEAD LENGTHS

| A SP10119 11/10  DR SP10076 09/10  REV ECN DATE  A SP10119 11/10  A SP10076 DATE  DA | В   |          |        | - NOTICE - THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF DANFOSS DRIVES.                          | DRN      | NAME  | NE            | EMA 3R,600V,2C            |         |       | - Lu                              |
|--|-----|----------|--------|---|----------|-------|---------------|---------------------------|---------|-------|-----------------------------------|
| DR SP100/6 09/10 IN ANY WAY PREJUDICIAL TO THE INTERESTS OF DANFOSS DRIVES, SHALL APR NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART, OR DISCLOSED TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES APR  | Α   | SP10119  | 11/10  | THE INFORMATION EMBODIED THEREIN SHALL BE USED ONLY FOR RECORD  | DIM      | , №   |               | ·                         |         |       | Janjoos                           |
| DEVISION IN DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES DATE TO ANYONE WRITTEN PERMISSION DATE TO ANYONE WRITTEN PERMISSION DATE TO ANYONE WRITTEN PERMISSION DATE TO ANY DAT | DR  | SP10076  | na /1n |   | ΔPR      |       | , SMB, CON 17 | ACT MOTOR SELI            | <u></u> | 411/  |                                   |
| DEV CON DATE TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES ///// PAGE OF Z 1 A NO 1 A NO 1   | DIX | 31 10070 | 03/10  | NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART, OR DISCLOSED   | $\cap T$ | MODEL |               |                           | SIZE A  | DWG 1 | $0 \square 0 \square 0 \square 1$ |
|  | REV | ECN      | DATE   | TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES AND SHALL BE RETURNED UPON REQUEST. | DIM      |       | VLT           | PAGE <u>1</u> OF <u>2</u> | A       | NÖ.   | 8380/94                           |



#### CUSTOMER DRY CONTACT RATINGS

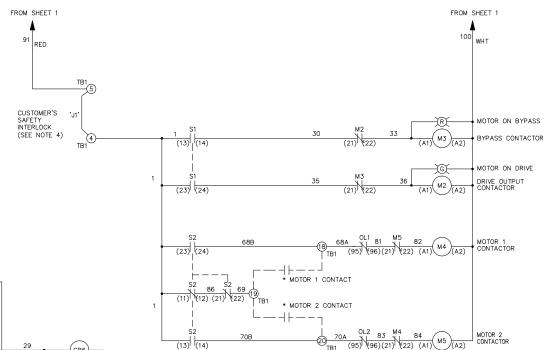
| RELAY             | CONTACT RATING                  |
|-------------------|---------------------------------|
| CR6               | 5A @ 120VAC<br>1/10 HP @ 120VAC |
| M2, M3,<br>M4, M5 | 10A @ 120/240VAC                |

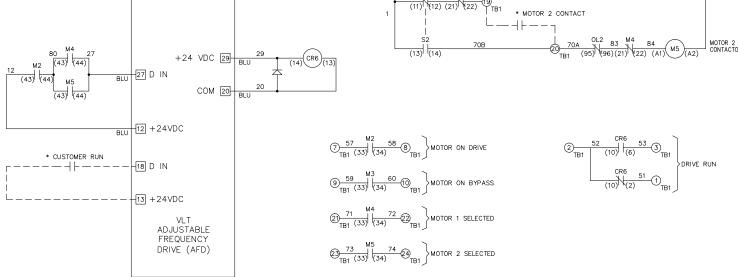
## CONTACT SEQUENCE CHART FOR S1

| X INDICAT | E2 CON | ACT CLC | SED    |
|-----------|--------|---------|--------|
| POSITION  |        |         |        |
| CONTACT   | DRIVE  | OFF     | BYPASS |
| 13-14     |        |         | Χ      |
| 23-24     | Χ      |         |        |

### CONTACT SEQUENCE CHART FOR S2

| X INDIC  | CATES CONT | ACT CLOSE     | D       |
|----------|------------|---------------|---------|
| POSITION |            |               |         |
| CONTACT  | MOTOR 1    | AUTO          | MOTOR 2 |
| 11-12    | X          | <del></del> X |         |
| 13-14    |            |               | Х       |
| 21-22    |            | X             | X       |
| 23-24    | Х          |               |         |





| В   |         |       |
|-----|---------|-------|
| Α   | SP10119 | 11/10 |
| DR  | SP10076 | 09/10 |
| REV | ECN     | DATE  |

| - NOTICE -   |
|--|
| THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF DANFOSS DRIVES.    |
| IT IS LOANED BY DANFOSS DRIVES SUBJECT TO THE CONDITIONS THAT IT AND |
| THE INFORMATION EMBODIED THEREIN SHALL BE USED ONLY FOR RECORD       |
| AND REFERENCE PURPOSES, SHALL NOT BE USED OR CAUSED TO BE USED       |
| IN ANY WAY PREJUDICIAL TO THE INTERESTS OF DANFOSS DRIVES, SHALL     |
| NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART, OR DISCLOSED        |
| TO ANYONE WITHOUT THE DIRECT WRITTEN PERMISSION OF DANFOSS DRIVES    |
| AND SHALL BE RETURNED UPON REQUEST.                                  |

| DRN   |      | NAME |        |     | NEN    | 1A       | ЗR, | 600  | V,2C |      |     |     |
|-------|------|------|--------|-----|--------|----------|-----|------|------|------|-----|-----|
|       | D TM | ,    | MAIN,  | &   | DRIVE  | DI       | SC, | MAII | N &  | DRIV | Ε   | FUS |
|       |      |      | マル/    | 0 ( | CONTAC | T        | MO  | TAD  | CELE | CT 1 |     | ΛИ  |
| A D D |      |      | , 0101 | υ,  | JONTAC | <i>,</i> | IVI | IOR  | JELI |      | I / | 414 |

| Danfoss |
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VLT PAGE 2 OF 2 SIZE A NO. 1858 MODEL

FUSE