WIRE COLOR SCHEME
BLACK — LINE VOLTAGE
RED — AC CONTROL
WHITE — AC GROUNDED
CIRCUIT CONDUCTOR
BLUE — DC CONTROL
GREEN — CHASSIS GROUND

TERMINAL IDENTIFCATION
X — DRIVE TERMINAL
⊗ — CUSTOMER TERMINAL

EARTH GROUND — GRN

INPUT POWER 3 PH, 480V, 60Hz

*CUSTOMER SUPPLIED FEEDER CIRCUIT PROTECTION (SEE NOTE 3)

L1
L2
L3

CB1 CIRCUIT BREAKER

EARTH GROUND — GRN

BLK 2L1
BLK 2L2
BLK 2L3

DS2 DRIVE DISCONNECT

3L1 (U1) (U2) 4L1 F16A 5L1
3L2 (V1) (V2) 4L2 F16B 5L2
3L3 (W1) (W2) 4L3 F16C 5L3

INPUT LINE REACTOR

DRIVE INPUT FUSES

EARTH GROUND — GRN

L1/R/91
L2/S/92
L3/T/93

VLT ADJUSTABLE FREQUENCY DRIVE (AFD)

EARTH GROUND — GRN

T1/U/96
T2/V/97
T3/W/98

M2   2T1   M4   OL1
4T1 (L1) (T1) (L1) (T1) 1T1 (L1)   T1   * AC MOTOR 1
4T2 (L2) (T2) 2T2 (L2) (T2) 1T2 (L2) T2   T1 T2 T3
4T3 (L3) (T3) 2T3 (L3) (T3) 1T3 (L3) T3

M3   M5   OL2
(L1) (T1) (L1) (T1) 3T1 (L1)   T1   * AC MOTOR 2
(L2) (T2) (L2) (T2) 3T2 (L2)   T2   T1 T2 T3
(L3) (T3) (L3) (T3) 3T3 (L3)   T3

EARTH GROUND — GRN

F13A 600V   F13B

160 H1 H3 H2 H4 T6

91   F12 250V   163 RED X2   GRN   100 WHT
X1
115VAC T2

3 TB2
164   CR6 165   HEATER (SET: 65° F)
(12)(11) (12)(4)
TS1

166   CR6 167   1 TB2   2 FAN 1 (SET: 80° F)
(23)(24) (9)(5)   TB2
TS1

FAN 2

TO SHEET 2   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.

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:
   5.1. HIGHER SWITCHING FREQUENCY THAN DRIVE DEFAULT
   5.2. HIGHER THAN PANEL LISTED AMBIENT TEMPERATURES
   5.3. ELEVATION ABOVE 3300 FEET (1000 METERS)
   5.4. LONG MOTOR LEAD LENGTHS

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

REV	ECN	DATE
B		
A	SP10119	11/10
DR	SP10076	09/10

DRN DTM
APR DTM

NAME NEMA 3R,480V,2C ,MAIN CB, DRIVE DISC, DRIVE FUSE ,3MB1,IR,CONTACT MOTOR SELECT,2 FAN

MODEL VLT   PAGE 1 OF 2   SIZE A   DWG NO. 185B1361

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WIRE COLOR SCHEME

BLACK – LINE VOLTAGE
RED – AC CONTROL
WHITE – AC GROUNDED
        CIRCUIT CONDUCTOR
BLUE – DC CONTROL
GREEN – CHASSIS GROUND

TERMINAL IDENTIFCATION

| X | – DRIVE TERMINAL |
| (X) | – CUSTOMER TERMINAL |

CUSTOMER DRY CONTACT RATINGS
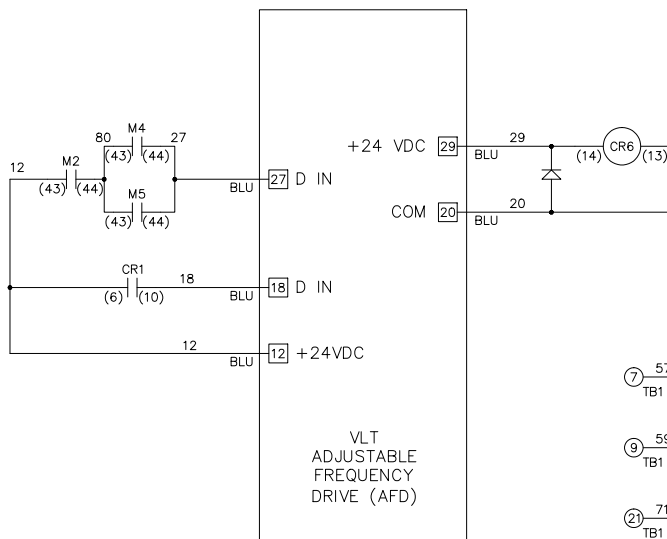
RELAY	CONTACT RATING
CR1, CR6	5A @ 120VAC 1/10 HP @ 120VAC
M2, M3, M4, M5	10A @ 120/240VAC

CONTACT SEQUENCE CHART FOR S1
X INDICATES CONTACT CLOSED

CONTACT \ POSITION	DRIVE	OFF	BYPASS
13–14			X
23–24	X		

CONTACT SEQUENCE CHART FOR S2
X INDICATES CONTACT CLOSED

CONTACT \ POSITION	MOTOR 1	AUTO	MOTOR 2
11–12	X	X	
13–14			X
21–22		X	X
23–24	X		

FROM SHEET 1

FROM SHEET 1

91 RED

100 WHT

* START/STOP

TB1 5 —— 6 TB1 —— 56 —— (13) CR1 (14) COMMON START/STOP

CUSTOMER'S
SAFETY
INTERLOCK
(SEE NOTE 4)

'J1'

TB1 4

1 S1 (13)(14) 30 CR1 (5)(9) 31 M2 (21)(22) 33 (R) MOTOR ON BYPASS
M3 (A1)(A2) BYPASS CONTACTOR

1 S1 (23)(24) 35 M3 (21)(22) 36 (G) MOTOR ON DRIVE
M2 (A1)(A2) DRIVE OUTPUT CONTACTOR

S2 (23)(24) 68B 18 TB1 68A OL1 (95)(96) 81 M5 (21)(22) 82 M4 (A1)(A2) MOTOR 1 CONTACTOR

* MOTOR 1 CONTACT

1 S2 (11)(12) 86 S2 (21)(22) 69 19 TB1
* MOTOR 2 CONTACT

1 S2 (13)(14) 70B 20 TB1 70A OL2 (95)(96) 83 M4 (21)(22) 84 M5 (A1)(A2) MOTOR 2 CONTACTOR

12 M2 (43)(44) 80 M4 (43)(44) 27
M5 (43)(44)
BLU 27 D IN

+24 VDC 29 BLU 29 20 BLU 20 (14) CR6 (13)
COM 20 BLU 20

CR1 (6)(10) 18 BLU 18 D IN

12 BLU 12 +24VDC

VLT
ADJUSTABLE
FREQUENCY
DRIVE (AFD)

(7) 57 TB1 (33) M2 (34) 58 (8) TB1 } MOTOR ON DRIVE

(9) 59 TB1 (33) M3 (34) 60 (10) TB1 } MOTOR ON BYPASS

(21) 71 TB1 (33) M4 (34) 72 (22) TB1 } MOTOR 1 SELECTED

(23) 73 TB1 (33) M5 (34) 74 (24) TB1 } MOTOR 2 SELECTED

(2) 52 TB1 (10) CR6 (6) 53 (3) TB1
(10) CR6 (2) 51 (1) TB1 } DRIVE RUN

REV	ECN	DATE
B		
A	SP10119	11/10
DR	SP10076	09/10

DRN DTM

APR DTM

NAME NEMA 3R,480V,2C
,MAIN CB, DRIVE DISC, DRIVE FUSE
,3MB1,IR,CONTACT MOTOR SELECT,2 FAN

MODEL VLT

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