Production

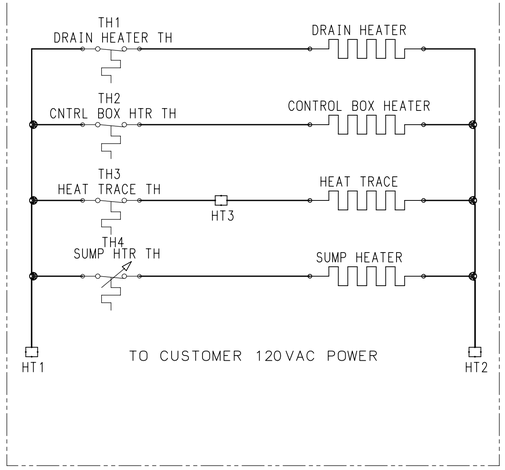
SUBJECT TO EAR, ECCN EAR99 AND
RELATED EXPORT CONTROL RESTRICTIONS

REVISIONS						
SHEET	ZONE	REV	ECO NO	DESCRIPTION	DATE	REV BY
-	-	00	604624	PRODUCTION RELEASE	2023-07-31	MJM
3	-	01	605643	UPDATED TITLE BLOCK TO MATCH SH1 AND SH2.	2023-11-13	MJM
1	B6 E4	02	609212	ADDED TB2 TABLE. REMOVED FAN MOTOR OPTIONS.	2025-02-17	MJM
2	C7 A7			WT-22 WAS BN-22 ND BN-22 WAS WT-22. UPDATED FAN MOTOR 2M.		
3	E6 D6 D5 B7			MMP1 WAS OL2. ADDED CN22 CONNECTION DATA, ETHERNET PORT SYMBOL, AND 5-D SH3 203-16-BL.		

NOTES:

1. CUSTOMER TO FURNISH FUSED OR CIRCUIT BREAKER DISCONNECT PER LOCAL CODES.
2. REMOVE JUMPER FOR AUXILIARY E-STOP STRING DEVICES.
3. BELDEN TYPE 9842 4 CONDUCTOR 2 TWISTED PAIR W/ SHIELD OR EQUIVALENT TO MATCHING TERMINALS ON NEXT COMPRESSOR FOR SEQUENCING.
4. SEE TRANSFORMER CONNECTION TABLE FOR PROPER VOLTAGE CONNECTION. TRANSFORMER FUSING ON CLIPS LOCATED ON TRANSFORMER X1/XF INTERNALLY JUMPERED. SEE TRANSFORMER FUSE CHART FOR SIZING.
5. REFER TO SEQUENCING AND PROTOCOL MANUAL.
6. SEE WIRING CHART FOR POWER AND MOTOR WIRING SIZE.
7. FAN OPTIONAL: NOT FURNISHED ON WATER COOLED WITHOUT CANOPY.
8. JUMPERS INSTALLED N J41, J44, AND J47. REFER TO SEQUENCING AND PROTOCAL MANUAL FOR REMOVAL CRITERIA.
9. REMOVE JUMPER WHEN REMOTE START INSTALLED

HEATER OPTIONS



02250083-190 TRANSFORMER CONNECTIONS				
PRIMARY		SECONDARY VOLTS		
VOLTS	TAPS	XF-X2	XF-X3	XF-X4
208	H1-H2	85	100	110
220	H1-H2	91	110	120
230	H1-H2	95	115	125
240	H1-H2	99	120	130
380	H1-H3	91	110	120
400	H1-H3	95	115	125
416	H1-H3	99	120	130
440	H1-H4	91	110	120
460	H1-H4	95	115	125
480	H1-H4	99	120	130
500	H1-H5	85	100	110
550	H1-H5	91	110	120
575	H1-H5	95	115	125
600	H1-H5	99	120	130

02250022502 61-689 TRANSFORMER CONNECTIONS			
PRIMARY			
VOLTS	SUPPLIED JUMPERS	SUPPLY LINES	INSTALL FUSE TO
220-240	NONE	2,6	UNFUSED
440-480	NONE	2,4	UNFUSED
550-600	NONE	2,3	UNFUSED
220-240	8-6	1,5	2-7, 5-8
440-480	4-8	1,5	2-7, 5-8
550-600	3-8	1,5	2-7, 5-8
SECONDARY			
VOLTS	SUPPLIED JUMPERS	SUPPLY LINES	INSTALL FUSE TO
110-120	NONE	2,4	UNFUSED
90-100	NONE	2,3	UNFUSED
110-120	NONE	1,4	2-7
90-100	NONE	1,3	2-7

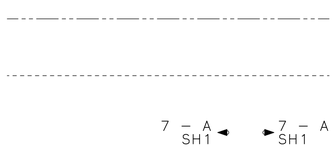
COLOR ABBREVIATIONS	
BLACK	BK
BLUE	BL
BROWN	BN
GREEN	GN
GREY	GY
ORANGE	OR
PINK	PK
RED	RD
VIOLET	VT
WHITE	WT
YELLOW	YL
GREEN/YELLOW	G/Y

TB1
601
601
602
602

TB2
DIN 15
DIN 16

POWER TERMINATIONS TORQUE (LB. -IN.)	
USE 75C COPPER CONDUCTORS ONLY TORQUE POWER TERMINALS PER TABLE	
14 - 10 AWG	35 LB.-IN.
8 AWG	40 LB.-IN.
6 - 2 AWG	45 LB.-IN.
1 - 3/0 AWG	50 LB.-IN.
460V 165A VSD	159-204 LB.-IN.
460V 208A VSD	159-204 LB.-IN.
575V 145A VSD	159-204 LB.-IN.
575V 192A VSD	283-354 LB.-IN.

TRANSFORMER FUSE CHART		
VOLTAGE	PRIMARY FUSES	SECONDARY FUSE
460	2A	5A
575	2A	5A



WIRE CALLOUT = WIRE NUMBER - GAUGE SIZE - WIRE COLOR
GAUGE SIZE/WIRE COLOR NOT ON WIRE TAG

MOTOR WIRING CHART (GGC CABLE)		
MACHINE (HP)	460V	575V
LS90 (125HP)	2/0	1/0
LS110 (150HP)	3/0	2/0
LS160 (200HP)	1/0 PARALLEL	1/0 PARALLEL

SULLAIR
A Hitachi Group Company

DESIGNED	M.MICHEL
DRAWN	M.MICHEL
ENGINEER	A.SATHEESAN
STANDARDS	-
SUPERVISOR	-
MANAGER	-
DATE	2023-07-31

MATERIAL	
FINISH SPEC	
WEIGHT	
PROD CODE	
SHEET	1 OF 3

WD,
VSD 460/575V IIY LS90-160

DWG NO 1003-9614 REV 02

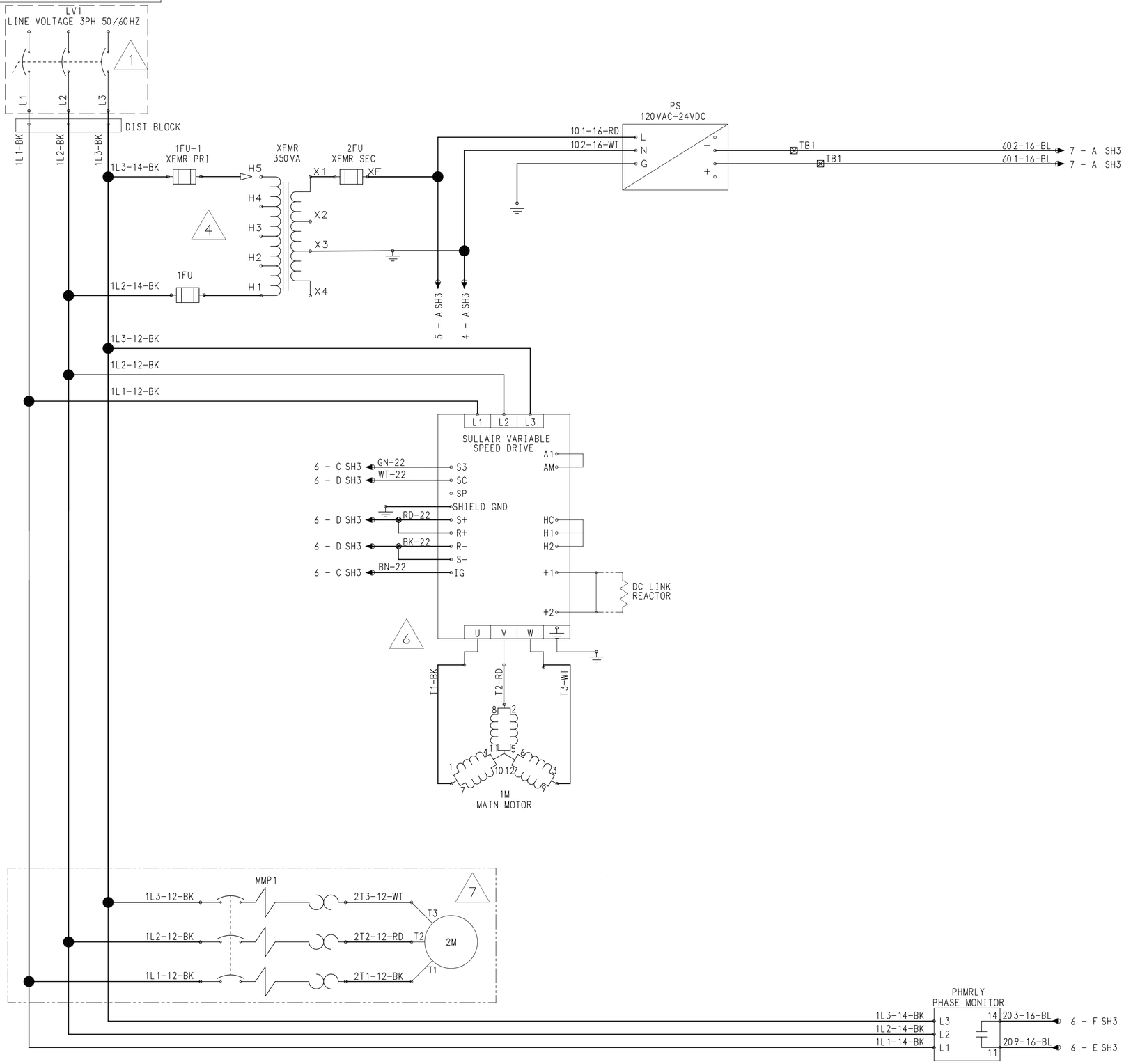
THIS DOCUMENT IS THE PROPERTY OF SULLAIR. YOU MAY NOT POSSESS, USE, COPY OR DISCLOSE THIS DOCUMENT OR ANY INFORMATION IN IT FOR ANY PURPOSE, INCLUDING WITHOUT LIMITATION THE DESIGN, MANUFACTURE, OR REPAIR OF PRODUCTS. NO RIGHTS ARE GRANTED BY DISCLOSURE OR DELIVERY OF THIS DOCUMENT IN ANY FORM, WITHOUT SULLAIR'S PRIOR WRITTEN APPROVAL. YOU MAY NOT ALTER OR REMOVE THIS DOCUMENTATION NOTICE FROM ANY FORM OF THIS DOCUMENT OR ANY FORM OF ANY COPY OR ADAPTATION. NEITHER RECEIPT NOR POSSESSION OF THIS DOCUMENT, IN ANY FORM, GIVES YOU OR ANY THIRD PARTY ANY RIGHT TO DEVELOP OR OBTAIN ANY PRODUCT OR SERVICE BASED ON THIS DOCUMENT OR INFORMATION IN IT. EXPORT, DIVERSION OR DISCLOSURE CONTRARY TO APPLICABLE LAWS IS PROHIBITED. UNAUTHORIZED ACTION WITHOUT SULLAIR'S PRIOR WRITTEN PERMISSION IS NOT AUTHORIZED AND MAY RESULT IN CRIMINAL AND/OR CIVIL LIABILITY.

THIRD ANGLE PROJECTION

SIZE D

Production

SUBJECT TO EAR, ECCN EAR99 AND RELATED EXPORT CONTROL RESTRICTIONS



SULLAIR
A Hitachi Group Company

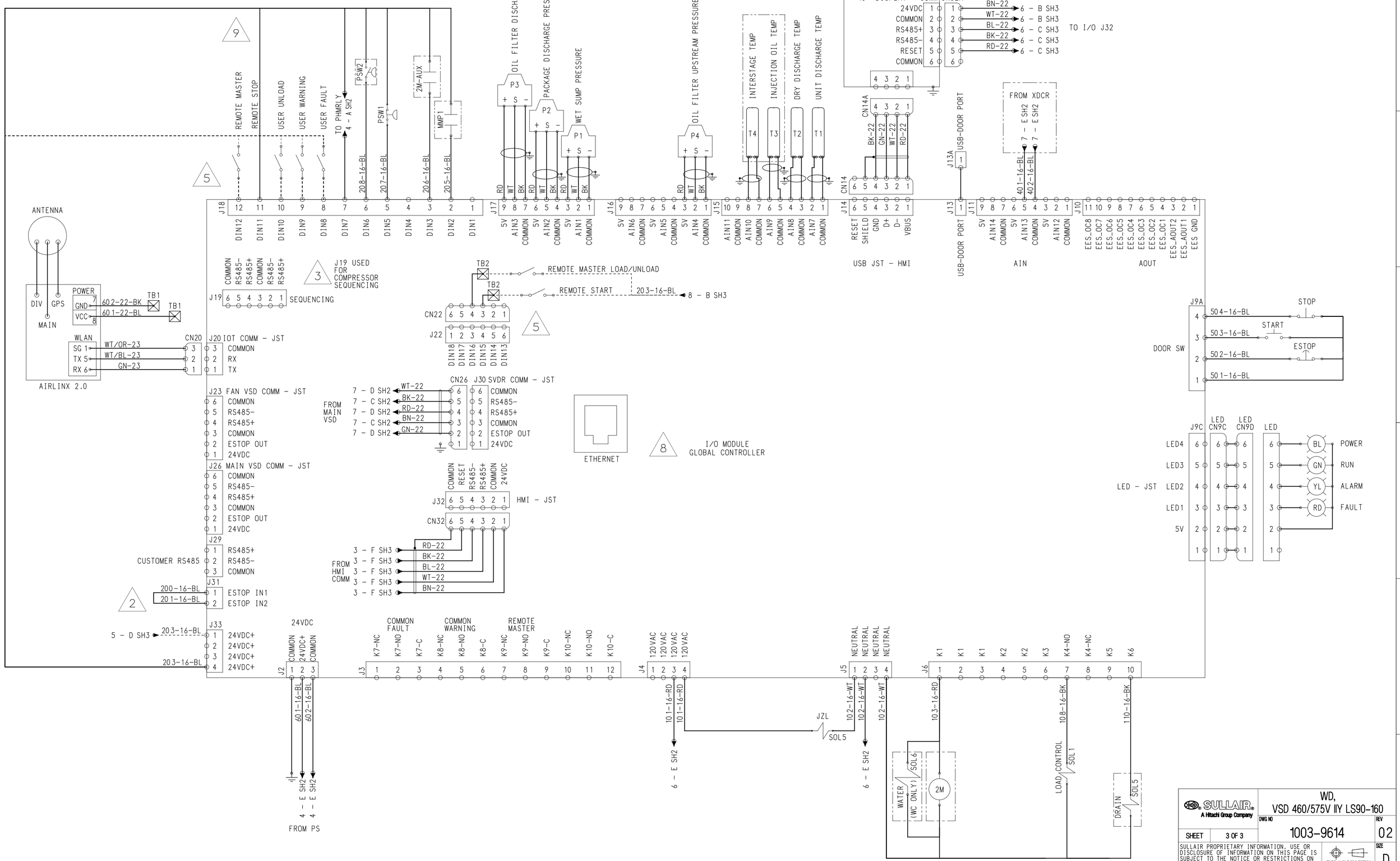
WD,
VSD 460/575V IIY LS90-160

SHEET	2 OF 3	DWG NO 1003-9614	REV 02

SULLAIR PROPRIETARY INFORMATION. USE OR DISCLOSURE OF INFORMATION ON THIS PAGE IS SUBJECT TO THE NOTICE OR RESTRICTIONS ON THIS DOCUMENT'S FIRST OR TITLE PAGE.

THIRD ANGLE PROJECTION

SIZE D

Production

SUBJECT TO EAR, ECCN EAR99 AND
RELATED EXPORT CONTROL RESTRICTIONS