



© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.

1															1
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---

BILL OF MATERIAL							
	DESCRIPTION	DEVICE ID	MANUFACTURER	PART NUMBER	OR EQUAL	QTY	SUPPLIED BY
1	ENCLOSURE, SINGLE DOOR, NEMA 4, HINGED COVER, 24" H X 30" W X 8" D		SAGINAW	SCE-24L3008LPLG	X	1	VENDOR
2	SUBPANEL		SAGINAW	SCE-30P24	X	1	VENDOR
3	PANEL MOUNTING FOOT KIT		SAGINAW	SCE-ELMFK4	X	1	VENDOR
4	MAIN BREAKER, THERMAL MAGNETIC, 15A, 2 POLE	CB1	SCHNEIDER ELECTRIC	BDL26015	X	1	VENDOR
5	OPERATING MECHANISM FOR BREAKER	CB1	SCHNEIDER ELECTRIC	9421LJ7	X	1	VENDOR
6	3" ROTARY HANDLE FOR BREAKER	CB1	SCHNEIDER ELECTRIC	9421LH3	X	1	VENDOR
7	SHAFT FOR ROTARY HANDLE	CB1	SCHNEIDER ELECTRIC	9421LS8	X	1	VENDOR
8	MANUAL STARTER AND PROTECTOR, THERMAL MAGNETIC, 4-6.3A	MCP1	SCHNEIDER ELECTRIC	GV2P10	X	1	VENDOR
9	MANUAL STARTER AND PROTECTOR, THERMAL MAGNETIC, 1.6-2.5A	MCP2	SCHNEIDER ELECTRIC	GV2P07	X	1	VENDOR
10	AUXILIARY BLOCK FOR MCP, 2 NO	MCP1,2	SCHNEIDER ELECTRIC	GVAE20	X	2	VENDOR
11	MOTOR CONTACTOR	CR1,2	SCHNEIDER ELECTRIC	LC1D09BD	X	2	VENDOR
12	LINK MODULE FOR MCP AND CR		SCHNEIDER ELECTRIC	GV2AF3	X	2	VENDOR
13	CIRCUIT BREAKER, 1 POLE, 3A	CB2	SCHNEIDER ELECTRIC	M9F43103			VENDOR
14	CIRCUIT BREAKER, 1 POLE, 10A	CB3	SCHNEIDER ELECTRIC	M9F43110	X	1	VENDOR
15	POWER SUPPLY, 120VAC, 24VDC, 10A	PS1	PHOENIX CONTACT	1159038	X	1	VENDOR
16	RELAY DPDT, 24VDC	RLY1-16	IDECK	RH2B-UL-DC24V	X	16	VENDOR
17	RELAY SOCKET	RLY1-16	IDECK	SH2B-05C	X	16	VENDOR
18	FUSED TERMINAL BLOCK W/LED, 5X20mm	FU1-7	PHOENIX CONTACT	3046090	X	7	VENDOR
19	FUSE, TIME DELAY, 1A	FU1-7	MERSEN	GDG1	X	7	VENDOR
20	TERMINAL BLOCK, PT 4	TB1	PHOENIX CONTACT	3211757	X	8	VENDOR
21	TERMINAL BLOCK END COVER, D-ST 4		PHOENIX CONTACT	3030420	X	3	VENDOR
22	GROUND TERMINAL BLOCK, PT 4-PE		PHOENIX CONTACT	3211766	X	4	VENDOR
23	TERMINAL PLUG-IN BRIDGE, 4 POSITION	TB1	PHOENIX CONTACT	3001595	X	2	VENDOR
24	TERMINAL BLOCK, PT 2.5-QUATTRO	TB2	PHOENIX CONTACT	3209578	X	29	VENDOR
25	END COVER, D-ST 2.5-QUATTRO	TB2	PHOENIX CONTACT	3030514	X	1	VENDOR
26	TERMINAL PLUG-IN BRIDGE, 10 POSITION	TB2	PHOENIX CONTACT	3030213	X	3	VENDOR
27	TERMINAL BLOCK, PT 2.5	TB2	PHOENIX CONTACT	3209510	X	33	VENDOR
28	GROUND TERMINAL BLOCK, PT 2.5-PE	TB2	PHOENIX CONTACT	3209536	X	1	VENDOR
29	END COVER, D-ST 2.5	TB2	PHOENIX CONTACT	3030417	X	1	VENDOR
30	END BRACKET		PHOENIX CONTACT	0800886	X	11	VENDOR

BILL OF MATERIAL							
	DESCRIPTION	DEVICE ID	MANUFACTURER	PART NUMBER	OR EQUAL	QTY	SUPPLIED BY
31	PILOT LIGHT, WHITE, 24V	LT1	SCHNEIDER ELECTRIC	XB4BVB1	X	1	VENDOR
32	SELECTOR SWITCH, 2 POSITION, 1 N.O. CONTACT	SS1	SCHNEIDER ELECTRIC	XB4BD21	X	1	VENDOR
33	ILLUMINATED PUSHBUTTON, MOMENTARY, GREEN	IPB1-9	SCHNEIDER ELECTRIC	ZB4BW333	X	9	VENDOR
34	MOUNTING COLLAR FOR PUSHBUTTON	IPB1-9	SCHNEIDER ELECTRIC	ZB4BZ009	X	9	VENDOR
35	LIGHT BLOCK, WHITE, 24V	IPB1-9	SCHNEIDER ELECTRIC	ZBVB1	X	9	VENDOR
36	CONTACT BLOCK, 1 N.O.	IPB1-9	SCHNEIDER ELECTRIC	ZBE101	X	10	VENDOR
37	PUSHBUTTON, MOMENTARY, RED, 1 N.C.	PB1-9	SCHNEIDER ELECTRIC	XB4BL42	X	9	VENDOR
38	22mm LABELS					20	VENDOR
39	EMERGENCY STOP PUSH BUTTON, 2 N.C.	E-STOP1	SCHNEIDER ELECTRIC	XB4BS8444	X	1	VENDOR
40	EMERGENCY STOP YELLOW LEGEND PLATE	E-STOP1	SCHNEIDER ELECTRIC	ZBY9320	X	1	VENDOR
41	GROUND LUG, 14-2AWG		THOMAS & BETTS	ADR2	X	1	VENDOR
42	WIREWAY, 1" X 3"		PANDUIT	F1X3LG6	X	AS REQ.	VENDOR
43	WIREWAY COVER, 1"		PANDUIT	C1LG6	X	AS REQ.	VENDOR
44	DIN RAIL, NS 35/7.5		PHOENIX CONTACT	0801733	X	AS REQ.	VENDOR
45	CABLE ENTRY, 9 KNOCKOUTS, 0.138"-0.413"		ROXTEC	RG M63/9	X	1	VENDOR
46	CABLE GLAND, BLACK, M20, 0.236"-0.512"		LAPP	53111220	X	4	VENDOR
47	LOCK NUT FOR CABLE GLAND, BLACK, M20		LAPP	53119120	X	4	VENDOR
48	DB25, MALE, D-SUB CONNECTOR, SOLDER CUP		L-COM	SD25P	X	1	VENDOR
49	JACK SCREW KIT, 4-40 D-SUB HARDWARE		L-COM	SDG250	X	1	VENDOR
50	DB25, FEMALE, D-SUB CONNECTOR, SOLDER CUP		L-COM	SD25S	X	1	VENDOR
51	DB25 HOOD KIT, METAL		L-COM	SDC25AG	X	1	VENDOR

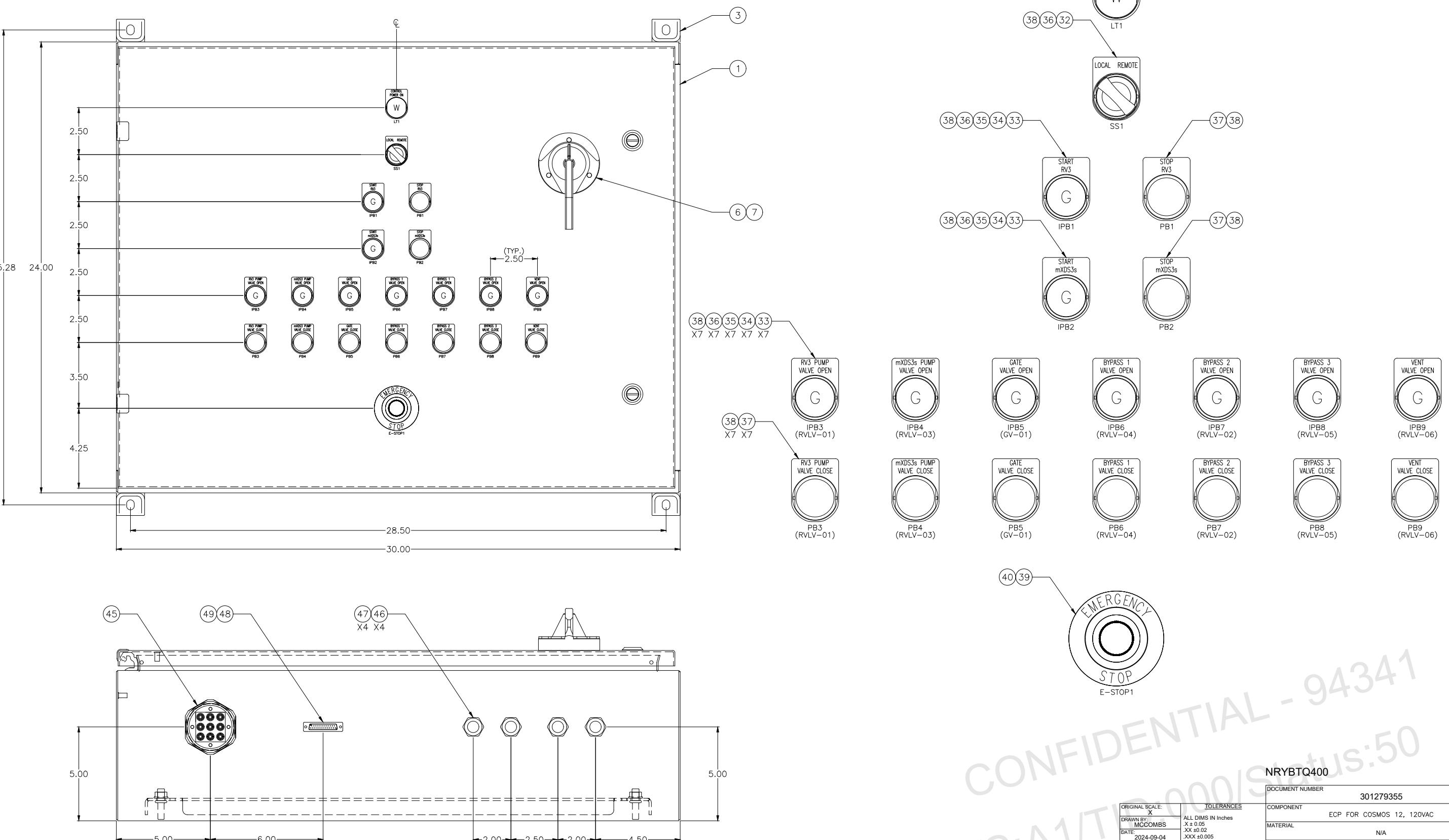
* * *

* SHIP LOOSE ITEMS TO CUSTOMER.

ORIGINAL SCALE: <input checked="" type="checkbox"/>	TOLERANCES	COMPONENT
DRAWN BY: MCCOMBS	ALL DIMS IN Inches XX ± 0.02 XXX ± 0.05 ANGLES ± 30° UNLESS OTHERWISE STATED	ECP FOR COSMOS 12, 120VAC
DATE: 2024-09-04	TECHNICAL:	MATERIAL N/A
APPROVED DATE:	MACHINED COMPONENTS	FINISH N/A
	SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.	SIZE DRAWING NUMBER SHEET No. ISSUE
	AUTOCAD DRAWING	D 6565942 1 of 10 AO

The logo for Edwards, featuring the word "EDWARDS" in a bold, red, sans-serif font. A stylized red "e" is positioned to the left of the word, with a black diagonal bar extending from its top-left corner towards the center of the letter "E".

© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION

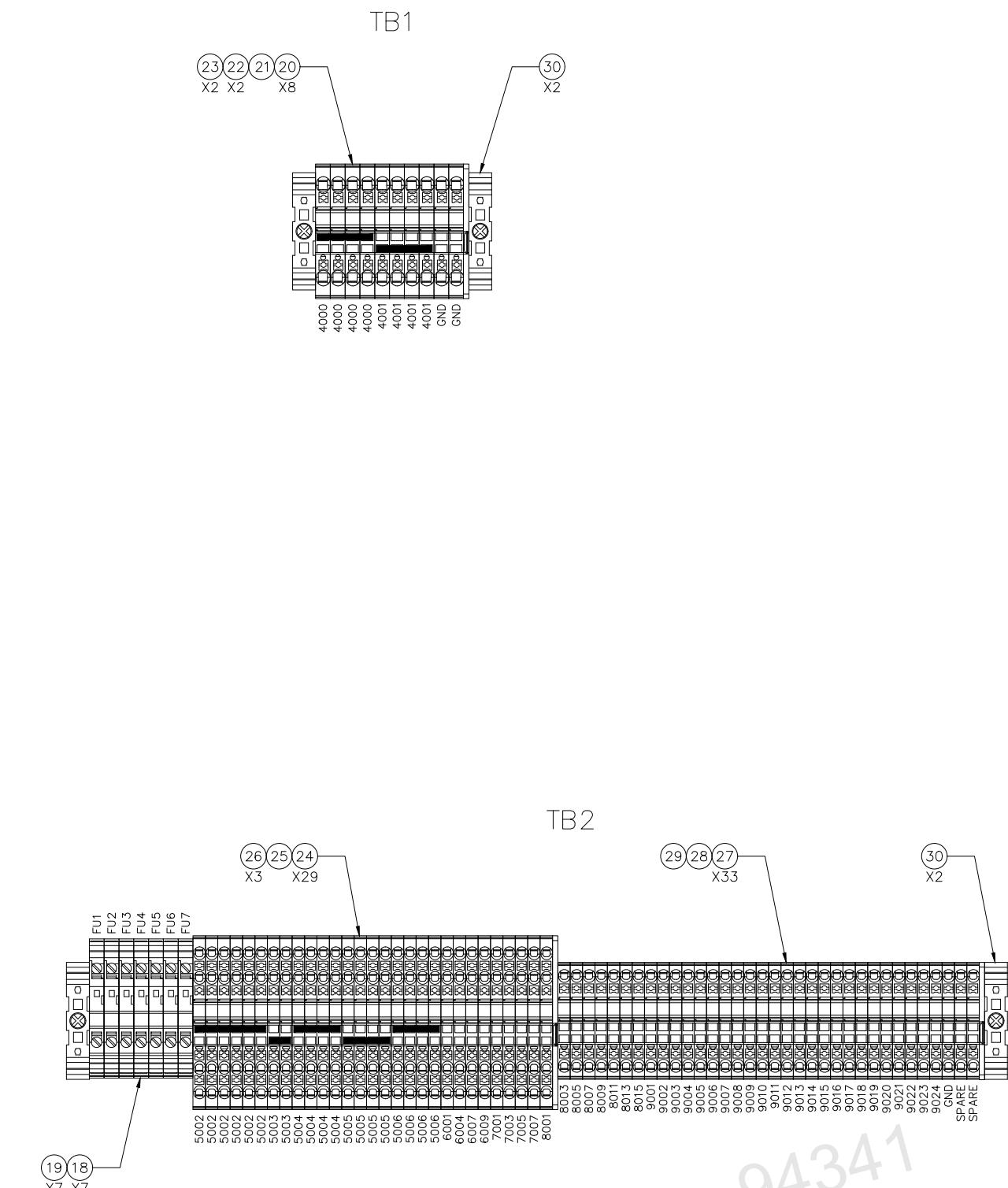
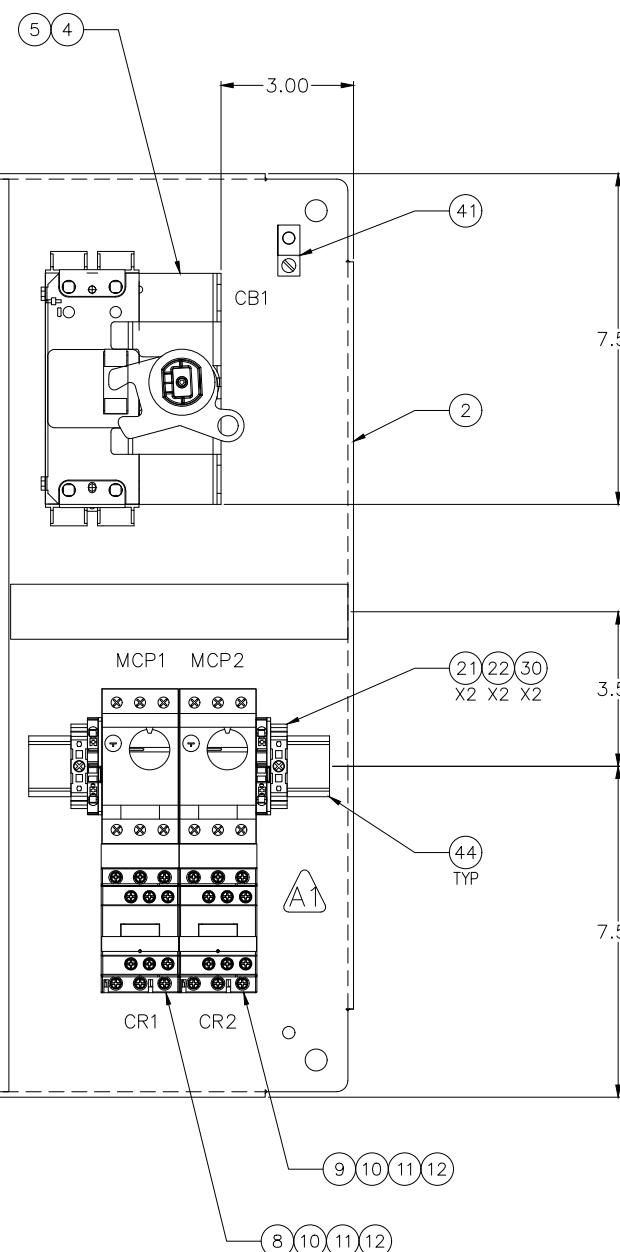
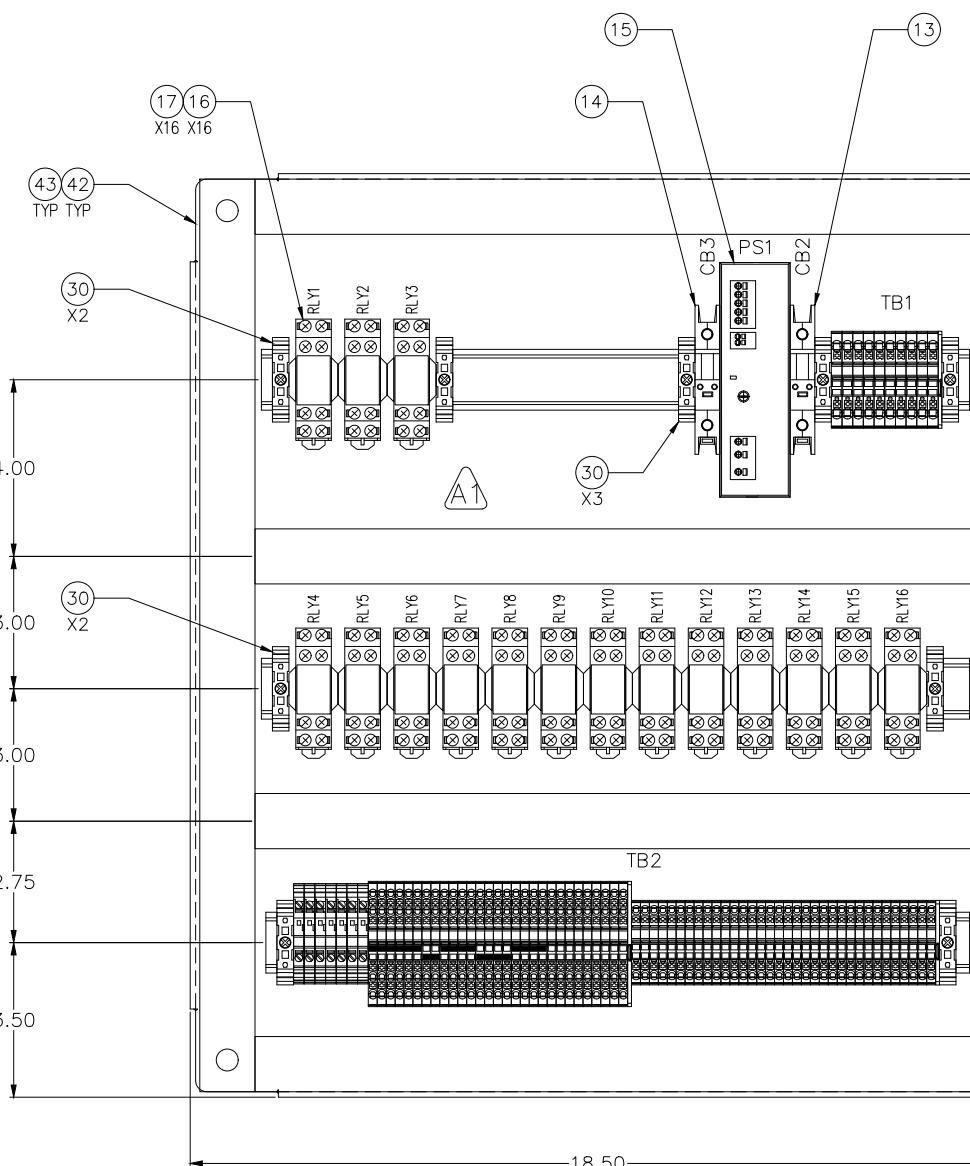


NRYBTQ400

		DOCUMENT NUMBER	
		301279355	
ORIGINAL SCALE: X	TOLERANCES	COMPONENT	
DRAWN BY: MCCOMBS	ALL DIMS IN Inches ± 0.05 ± 0.02	ECP FOR COSMOS 12, 120VAC	
DATE: 2024-09-04		MATERIAL	N/A
TECHNICAL: ---	ANGLES $\pm 30^\circ$ UNLESS OTHERWISE STATED.	FINISH	N/A
APPROVED DATE: ----	MACHINED COMPONENTS	SIZE	DRAWING NUMBER
	SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.	D	6565942
	AUTOCAD DRAWING		2 of 10
			REvised BY: REC NO.: DATE: 10

EDWARDS

© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.



ORIGINAL SCALE:		TOLERANCES		COMPONENT	
		X	ALL DIMS IN Inches	ECP FOR COSMOS 12, 120VAC	
DRAWN BY:	MCCOMBS	X ± 0.02	-XX ± 0.02	MATERIAL	N/A
DATE:	2024-09-04	-XXX ± 0.05	ANGLES ±0°-30° UNLESS OTHERWISE STATED	FINISH	N/A
TECHNICAL:	-	-	-	SIZE	DRAWING NUMBER
APPROVED DATE:	-	-	-	ISSUE	
MACHINED COMPONENTS		SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.			
AUTOCAD DRAWING		125 MAX UNLESS OTHERWISE STATED.			

NRYBTQ400

DOCUMENT NUMBER
301279355

xx xx

COMPONENT
ECP FOR COSMOS 12, 120VAC

xx xx

MATERIAL
N/A

xx xx

FINISH
N/A

xx xx

SHEET No.

xx xx

SIZE
D

xx xx

DRAWING NUMBER
6565942

xx xx

ISSUE
3 of 10 AO

xx xx

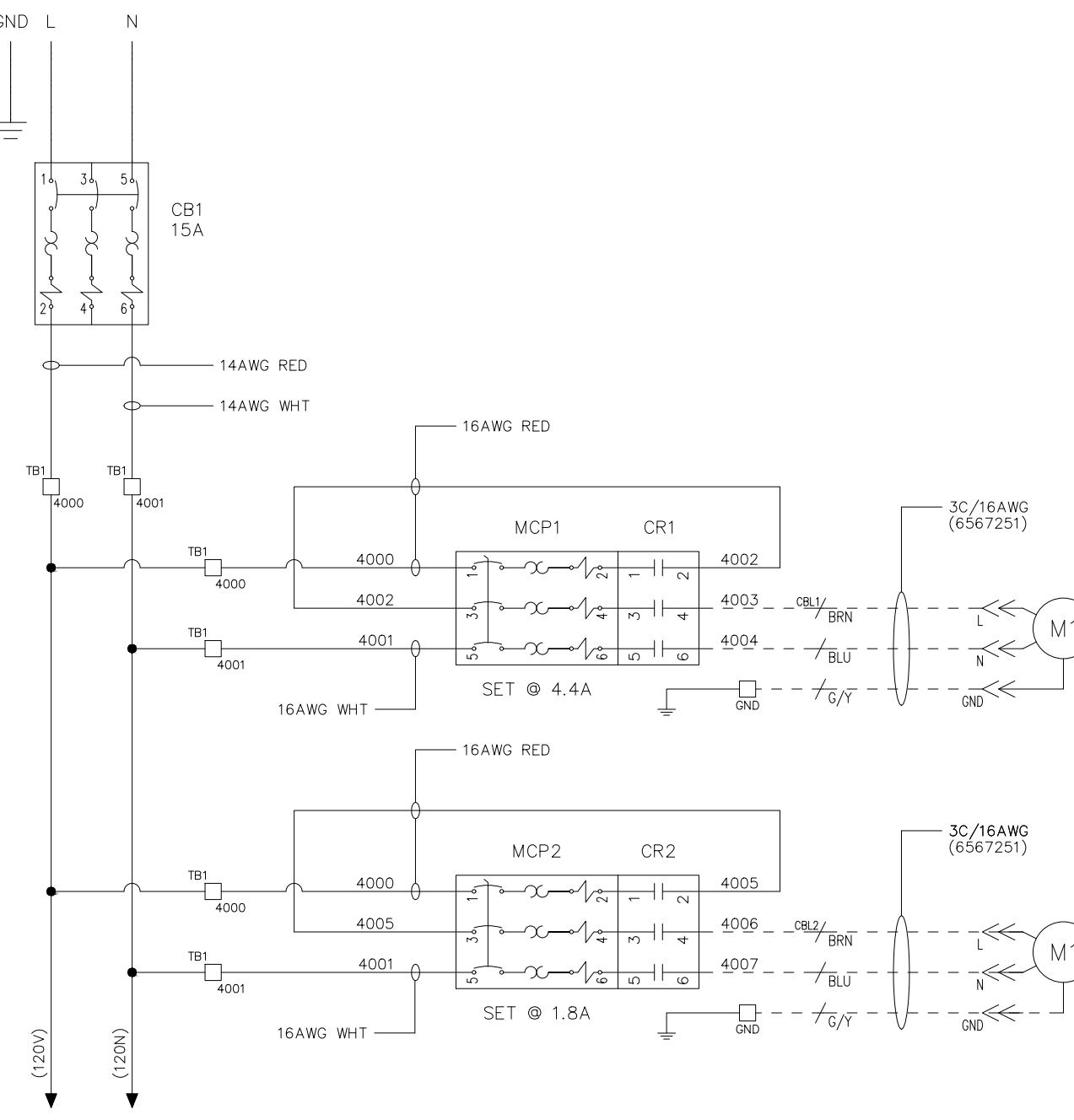
CONFIDENTIAL - 94341
VS:A1/TBQ400/Status:50

CONFIDENTIAL - 94341
VS:A1/TBQ400/Status:50



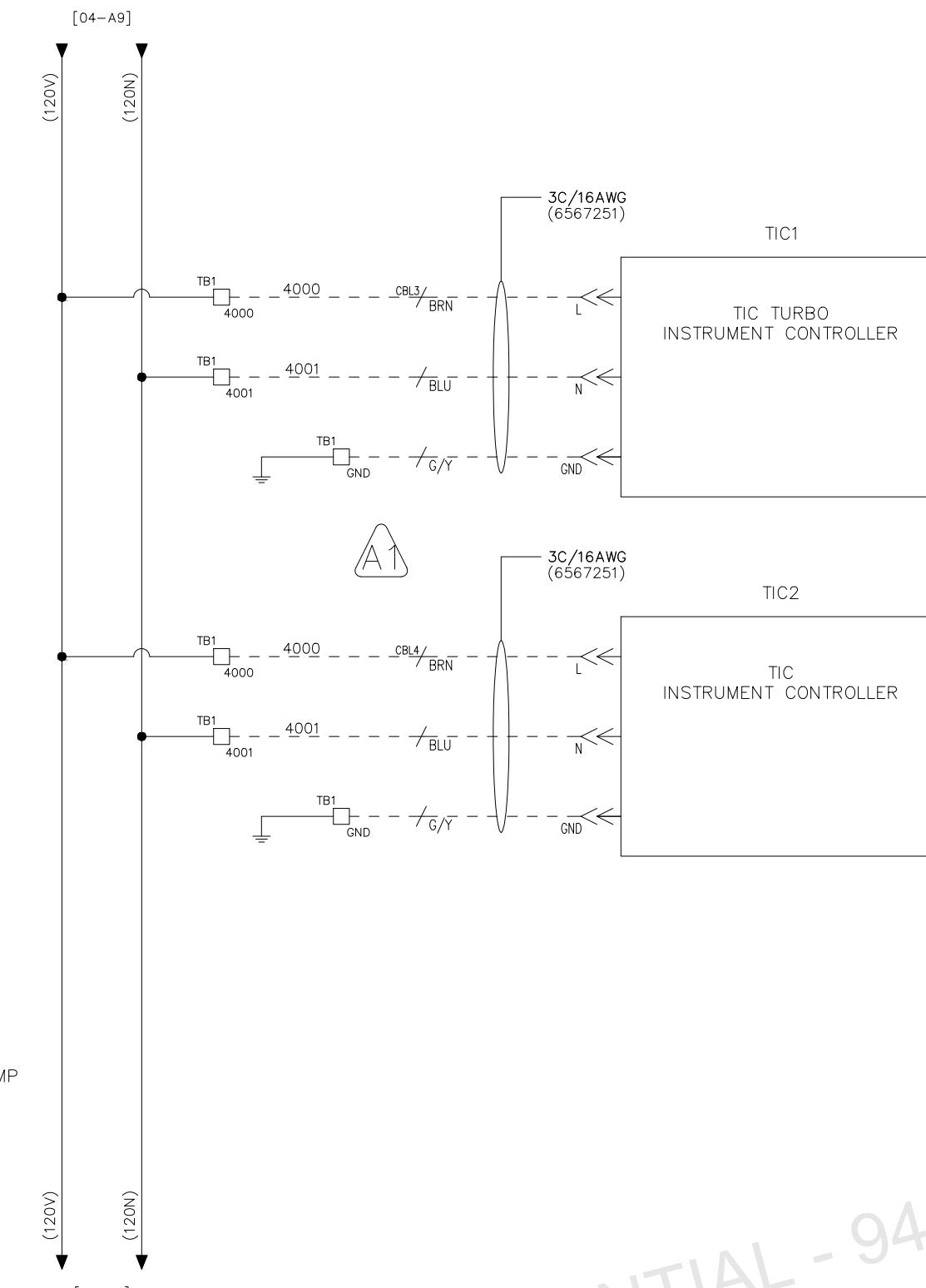
© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.

CUSTOMER SUPPLIED
115VAC/1PH/60Hz



- NOTE :
1. UNLESS INDICATED, ALL 24VDC WIRING IS TO BE 18AWG BLUE.
ALL OVDC (5002) WIRING IS TO BE 18AWG WHITE/BBLUE.
 2. IF DESIGNATED AS CUSTOMER OR FIELD WIRING, WIRING/CABLING WILL BE DESIGNED,
PROVIDED AND INSTALLED BY OTHERS.

SOLID LINES REPRESENT INTERNAL WIRING TO THE ENCLOSURE
DASHED LINES REPRESENT EXTERNAL TO THE ENCLOSURE NOT FIELD WIRING
PHANTOM LINES REPRESENT CUSTOMER EQUIPMENT/DEVICE BOUNDARY
CENTER LINE REPRESENTS CUSTOMER OR FIELD WIRING



ORIGINAL SCALE:		TOLERANCES		COMPONENT	DRAWN BY: MCCOMBS	DATE: 2024-09-04	TECHNICAL	APPROVED DATE:	MACHINED COMPONENTS	SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.	AUTOCAD DRAWING
SIZE	DRAWING NUMBER	SHEET No.	ISSUE								
D	6565942	4	of 10	A0							

CONFIDENTIAL - 94341
VS:A1/TW0001Status:50

NRYBTQ400

DOCUMENT NUMBER 301279355

COMPONENT ECP FOR COSMOS 12, 120VAC

MATERIAL N/A

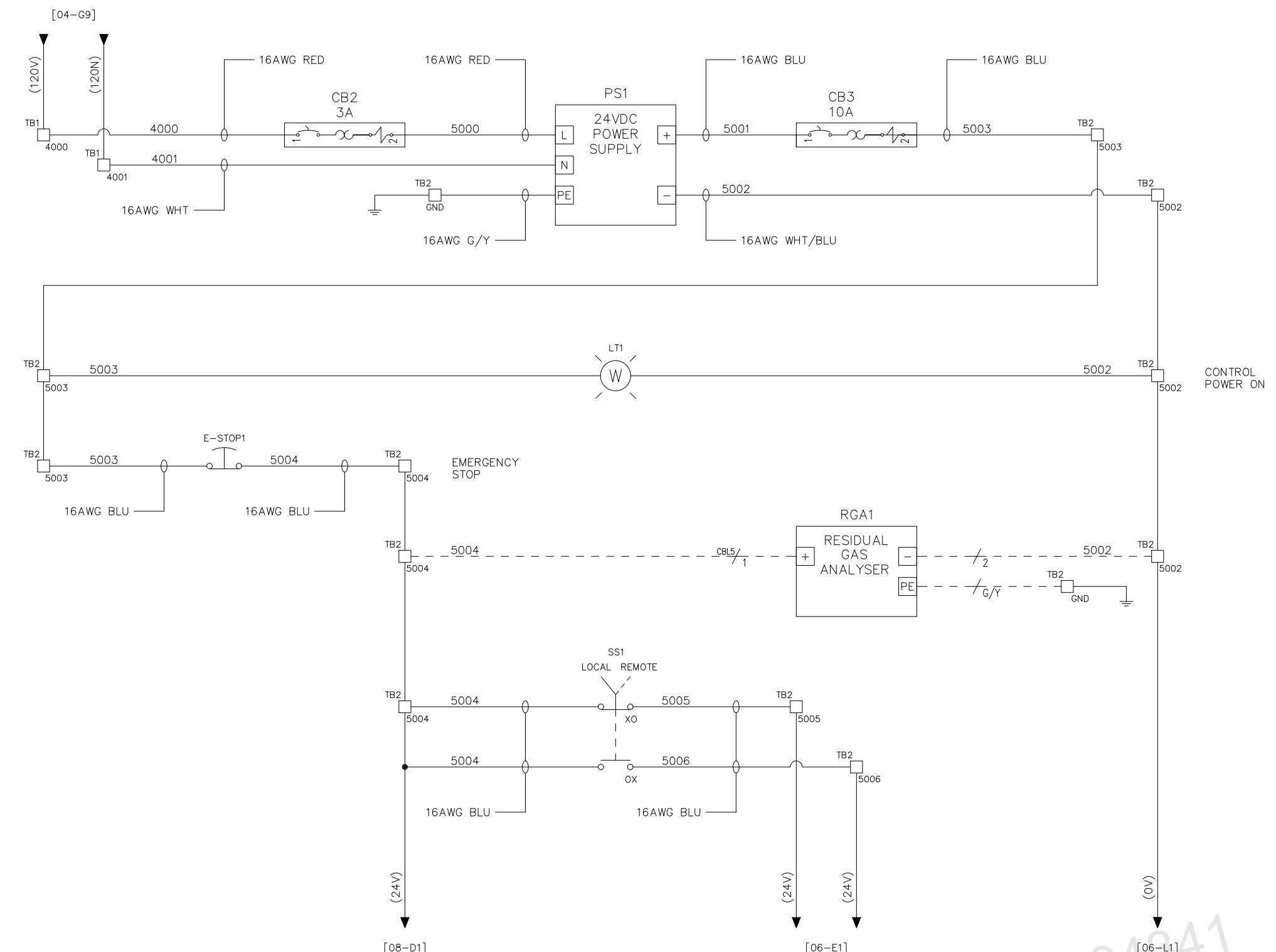
FINISH N/A

SIZE DRAWING NUMBER SHEET No. ISSUE

D 6565942 4 of 10 A0

EDWARDS

© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.



NOTE :
1. UNLESS INDICATED, ALL 24VDC WIRING IS TO BE 18AWG BLUE.
ALL OVDC (5002) WIRING IS TO BE 18AWG WHITE/BBLUE.

2. IF DESIGNATED AS CUSTOMER OR FIELD WIRING, WIRING/CABLING WILL BE DESIGNED,
PROVIDED AND INSTALLED BY OTHERS.

SOLID LINES REPRESENT INTERNAL WIRING TO THE ENCLOSURE
DASHED LINES REPRESENT EXTERNAL TO THE ENCLOSURE NOT FIELD WIRING
PHANTOM LINES REPRESENT CUSTOMER EQUIPMENT/DEVICE BOUNDARY
CENTER LINE REPRESENTS CUSTOMER OR FIELD WIRING

NRYBTQ400

DOCUMENT NUMBER
301279355

COMPONENT
ECP FOR COSMOS 12, 120VAC

MATERIAL
N/A

FINISH
N/A

SIZE
D

DRAWING NUMBER
6565942

SHEET No.
5 of 10

ISSUE
AO

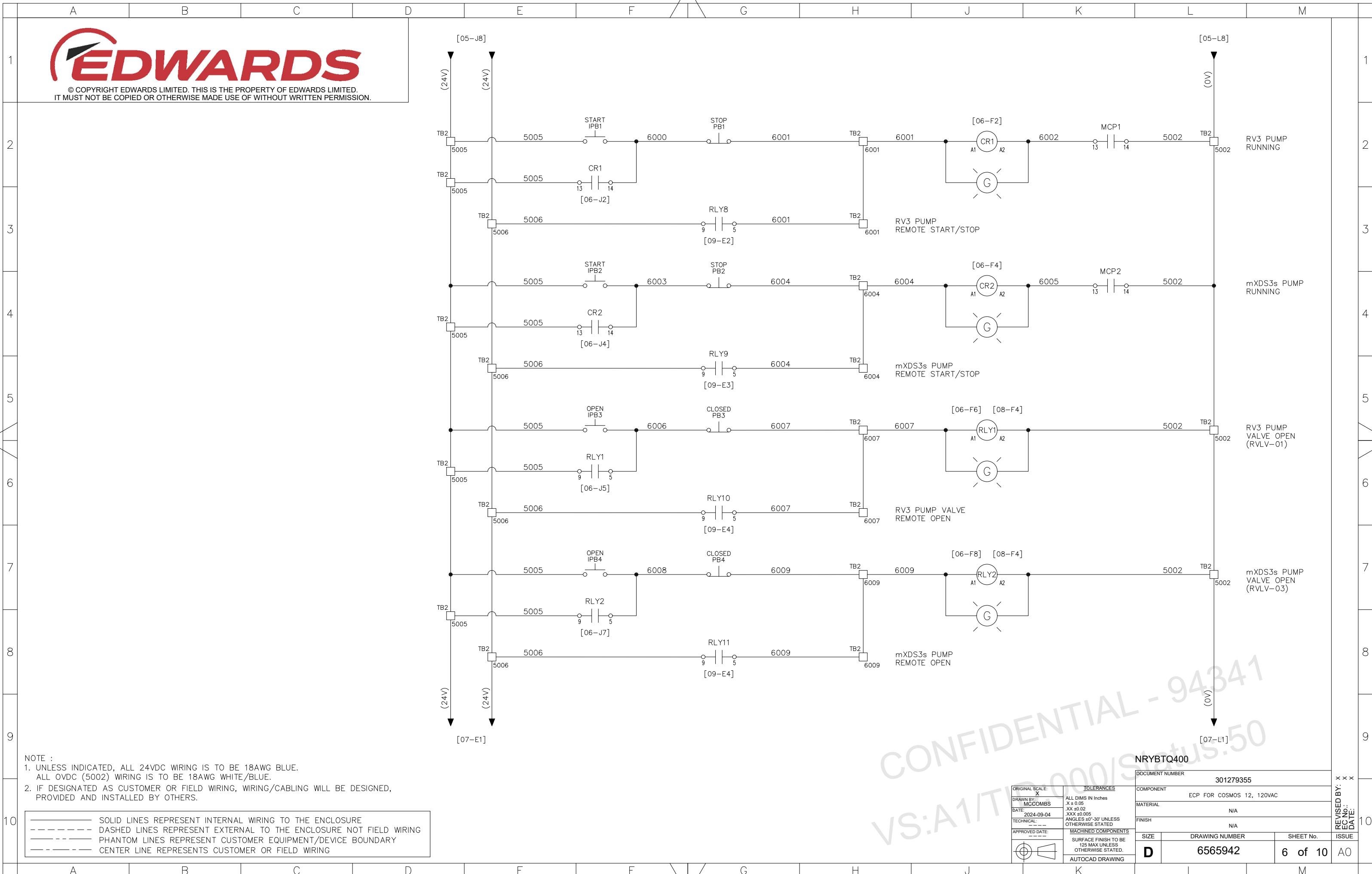
ORIGINAL SCALE:	TOLERANCES
X	ALL DIMS IN Inches
DRAWN BY: MCCOMBS	X ± 0.05
DATE: 2024-09-04	.XX ± 0.02
TECHNICAL:	.XXX ± 0.05
APPROVED DATE:	ANGLES 45°-30° UNLESS OTHERWISE STATED
MAINCRAFTED COMPONENTS	SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.
AUTOCAD DRAWING	

CONFIDENTIAL - 94941
VS:A1/T1/0001/Status:50

A B C D E F G H J K L M

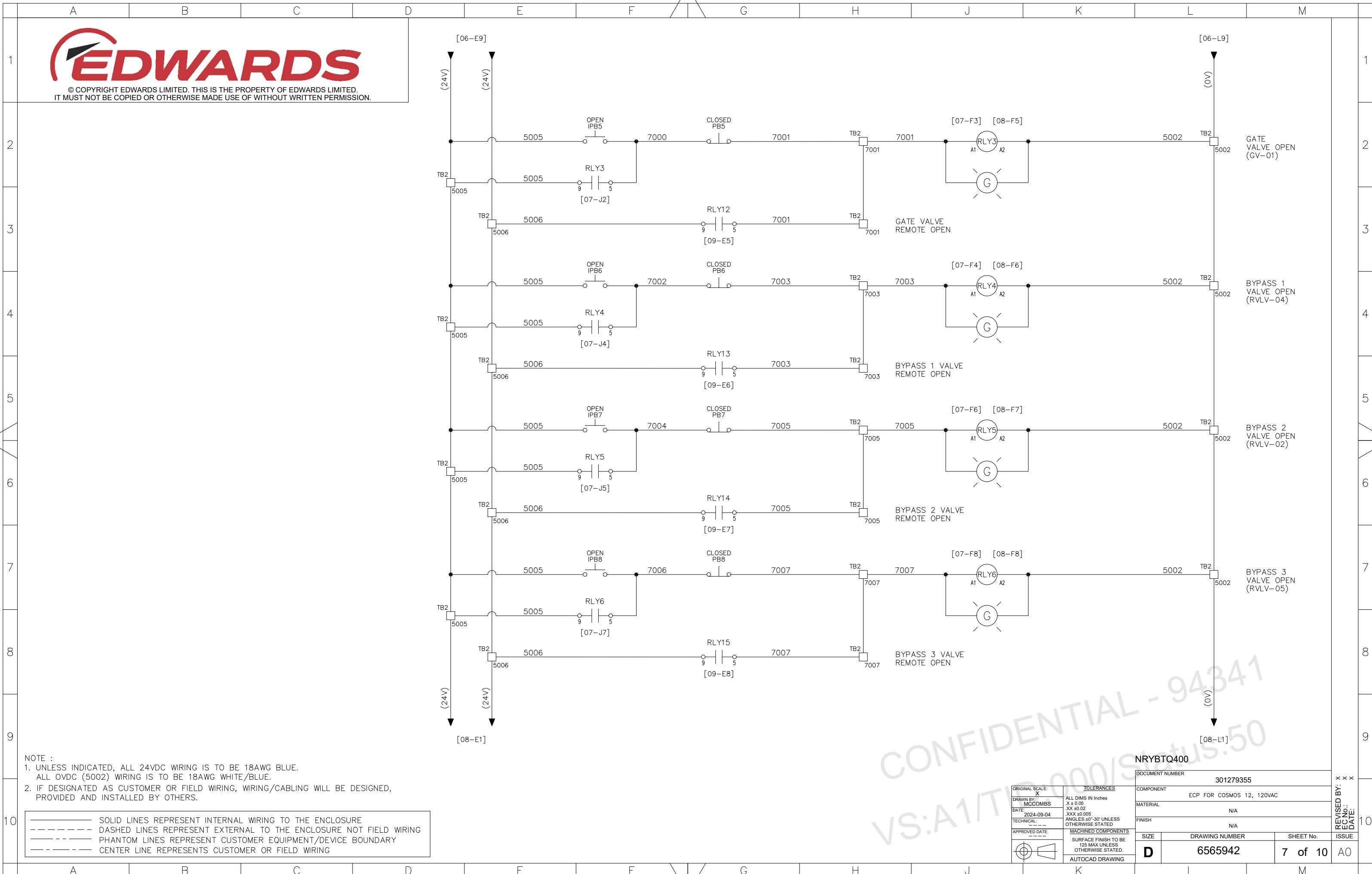


© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.



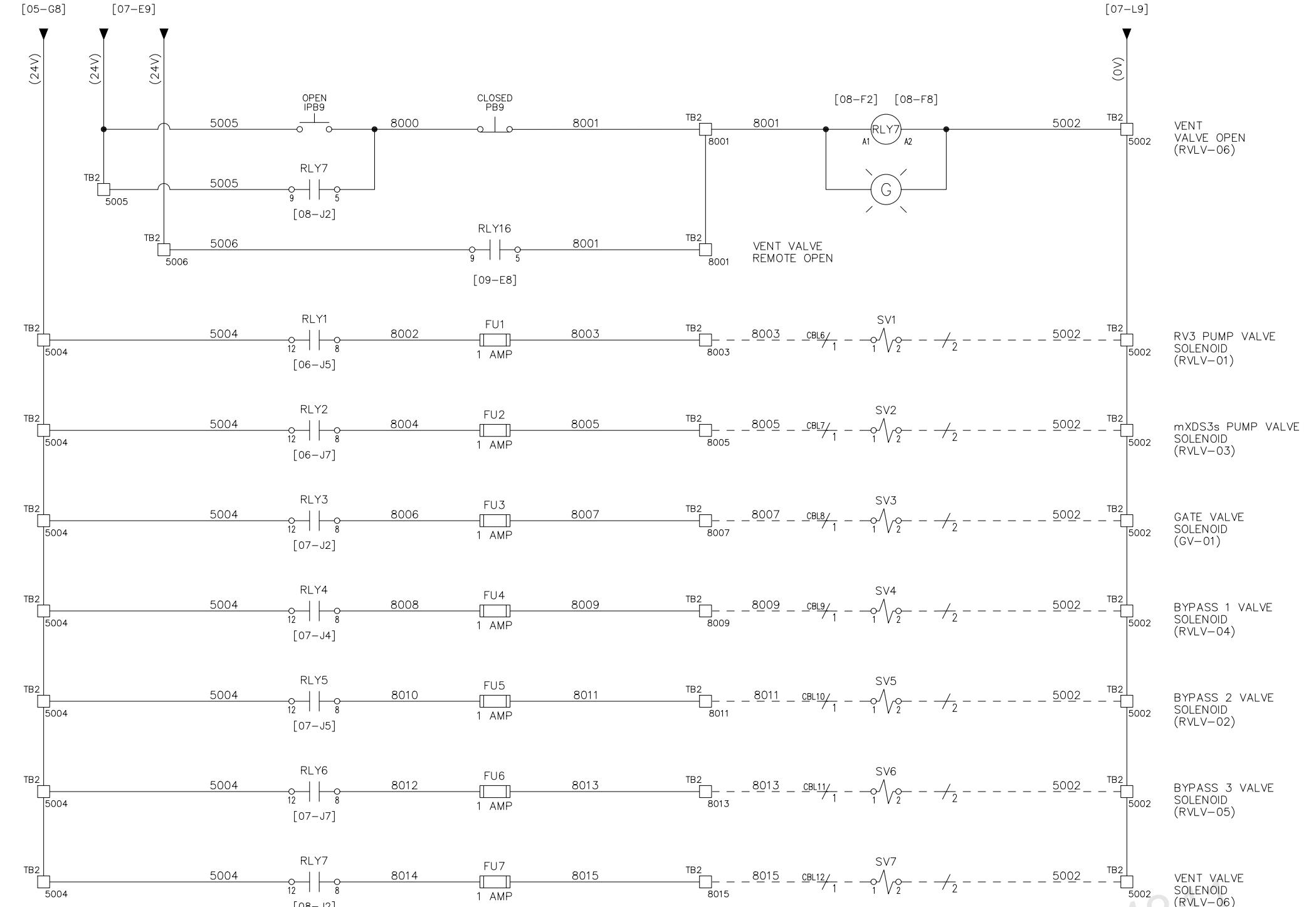


© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.



The logo for Edwards, featuring a stylized red 'E' with a black swoosh, followed by the word 'EDWARDS' in a bold, red, sans-serif font.

© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION



NOTE :

1. UNLESS INDICATED, ALL 24VDC WIRING IS TO BE 18AWG BLUE.
ALL OVDC (5002) WIRING IS TO BE 18AWG WHITE/BLUE.
2. IF DESIGNATED AS CUSTOMER OR FIELD WIRING, WIRING/CABLING WILL BE DESIGNATED
PROVIDED AND INSTALLED BY OTHERS.

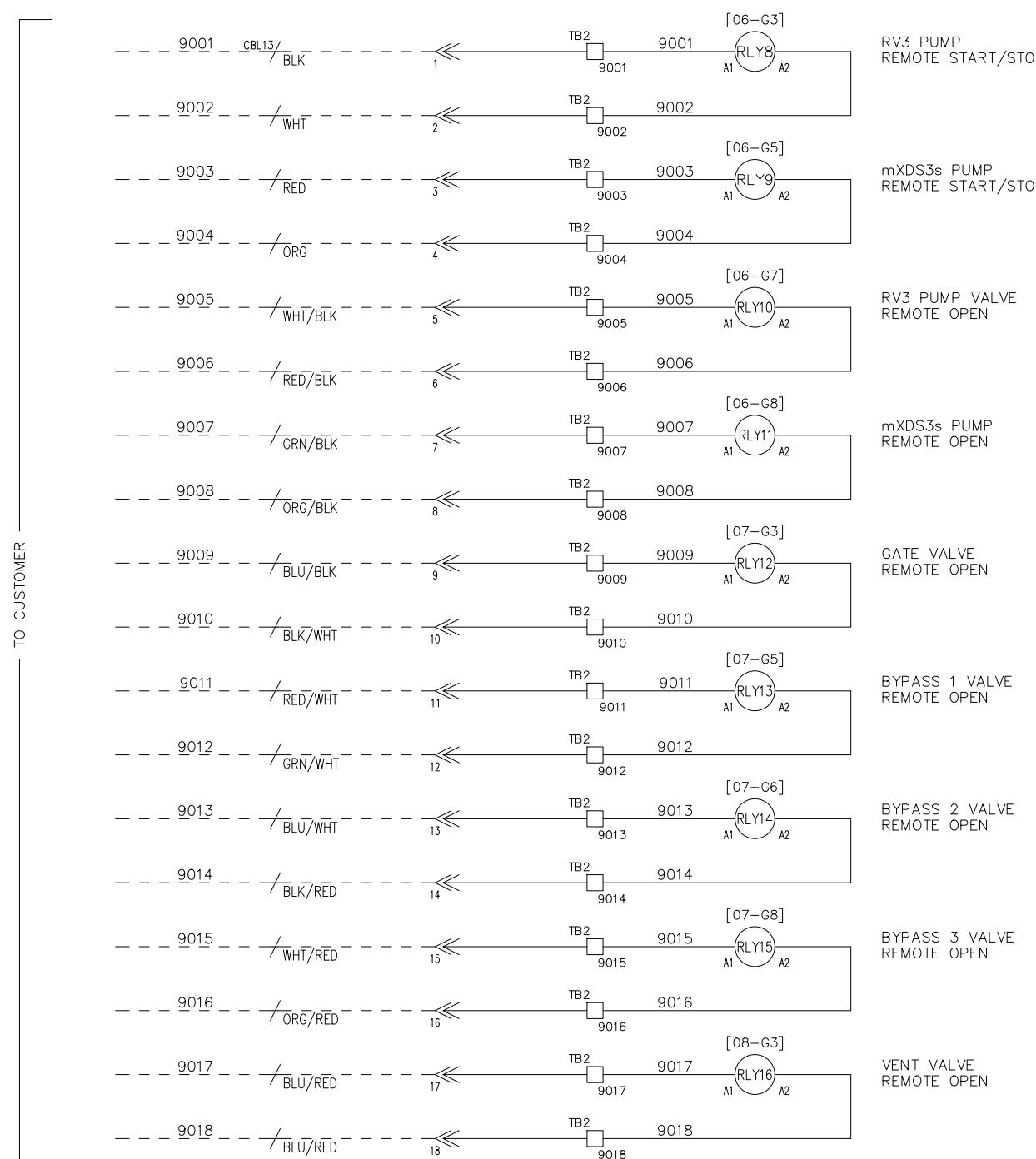
SOLID LINES REPRESENT INTERNAL WIRING TO THE ENCLOSURE
- - - - - DASHED LINES REPRESENT EXTERNAL TO THE ENCLOSURE NOT FIELD WIRING
— - - - - PHANTOM LINES REPRESENT CUSTOMER EQUIPMENT/DEVICE BOUNDARY
— - - - - CENTER LINE REPRESENTS CUSTOMER OR FIELD WIRING

DOCUMENT NUMBER		301279355	
COMPONENT		ECP FOR COSMOS 12, 120VAC	
MATERIAL		N/A	
FINISH		N/A	
SIZE	DRAWING NUMBER	SHEET No.	ISSUE
D	6565942	8 of 10	A0



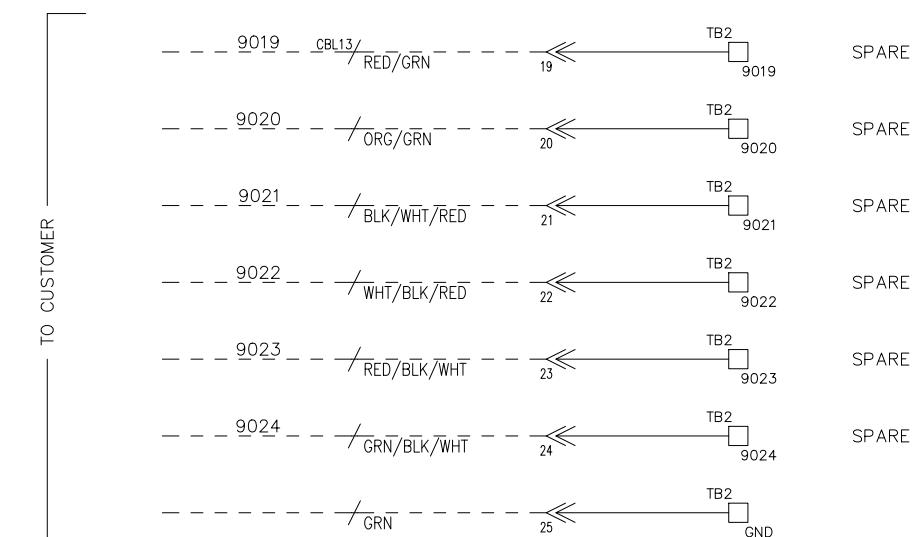
© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.

NOTE: CABLE 13 REFERENCE ONLY (BELDEN PN: 8459 22AWG/25 CONDUCTOR)

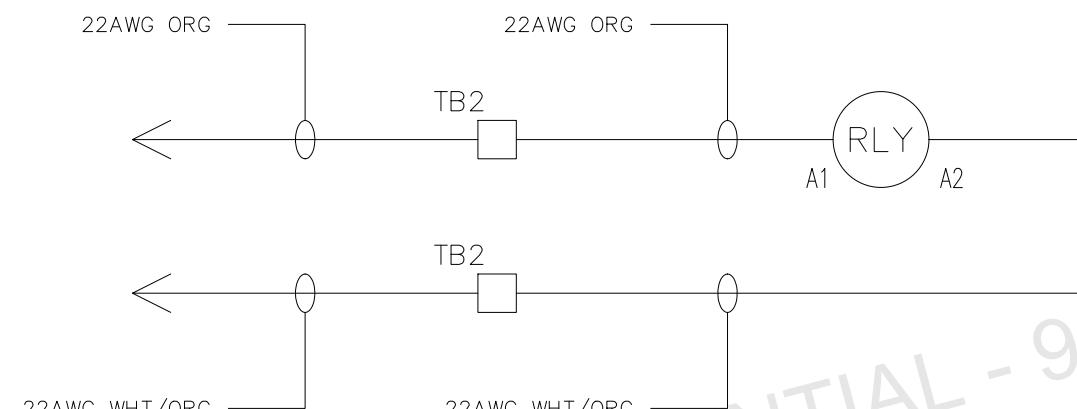


- NOTE :
 1. UNLESS INDICATED, ALL 24VDC WIRING IS TO BE 18AWG BLUE.
 ALL OVDC (5002) WIRING IS TO BE 18AWG WHITE/BLUE.
 2. IF DESIGNATED AS CUSTOMER OR FIELD WIRING, WIRING/CABLING WILL BE DESIGNED,
 PROVIDED AND INSTALLED BY OTHERS.

SOLID LINES REPRESENT INTERNAL WIRING TO THE ENCLOSURE
 DASHED LINES REPRESENT EXTERNAL TO THE ENCLOSURE NOT FIELD WIRING
 PHANTOM LINES REPRESENT CUSTOMER EQUIPMENT/DEVICE BOUNDARY
 CENTER LINE REPRESENTS CUSTOMER OR FIELD WIRING



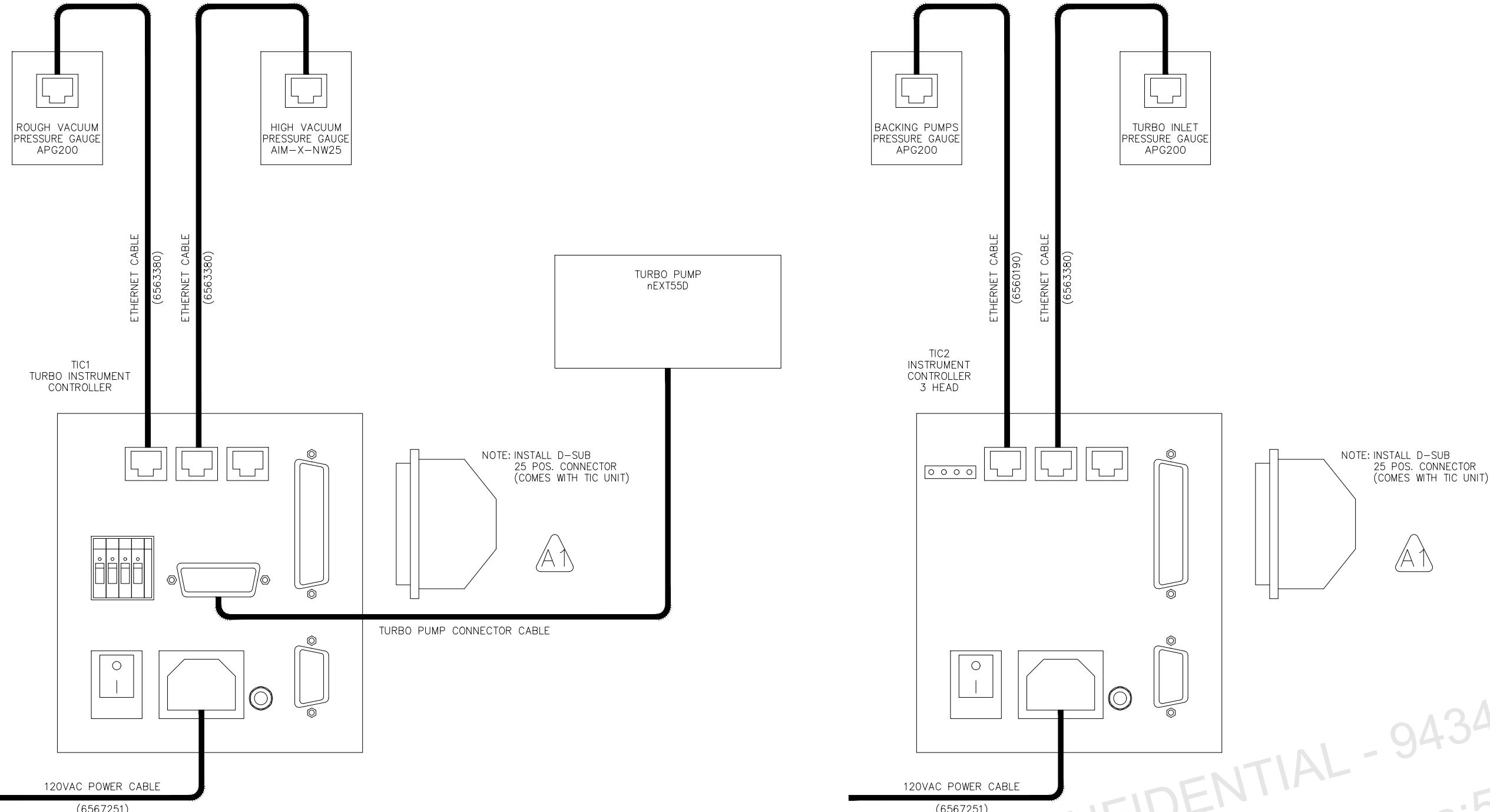
TYPICAL WIRE COLOR CODE AND WIRE GAUGE FOR REMOTE RELAYS



ORIGINAL SCALE:		TOLERANCES		COMPONENT	
DRAWN BY: MCCOMBS		ALL DIMS IN Inches		ECP FOR COSMOS 12, 120VAC	
DATE: 2024-09-04		X ± 0.05 XX ± 0.02 XXX ± 0.05		MATERIAL N/A	
TECHNICAL		FINISH N/A		SIZE DRAWING NUMBER SHEET No. ISSUE	
APPROVED DATE:		MACHINED COMPONENTS SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.		D 6565942	9 of 10 AO
AUTOCAD DRAWING					



© COPYRIGHT EDWARDS LIMITED. THIS IS THE PROPERTY OF EDWARDS LIMITED.
IT MUST NOT BE COPIED OR OTHERWISE MADE USE OF WITHOUT WRITTEN PERMISSION.



NRYBTQ400

DOCUMENT NUMBER
301279355

x x x

COMPONENT
ECP FOR COSMOS 12, 120VAC

REVISIED BY:

MATERIAL
N/A

REVISED NO.:
DATE:

FINISH
N/A

10

ORIGINAL SCALE:	TOLERANCES
X	ALL DIMS IN Inches
DRAWN BY: MCCOMBS	X ± 0.05
DATE: 2024-09-04	.XX ± 0.02
TECHNICAL:	.XXX ± 0.05
APPROVED DATE:	ANGLES ±0°-30° UNLESS OTHERWISE STATED
MACHINED COMPONENTS	SURFACE FINISH TO BE 125 MAX UNLESS OTHERWISE STATED.
AUTOCAD DRAWING	OTHERWISE STATED.

VS:A1/T/0001/Status:50

SHEET No. ISSUE

10

D 6565942 10 of 10 AO

A B C D E F G H J K L M

ISSUE	ECO #	REASON FOR MOD	DATE	INSTGATOR
A0	138706	INITIAL ISSUE	2024-09-04	MCCOMBS
A1	139818	PG 1: UPDATED BOM ITEMS 16, 17, 20 PG 3: UPDATED LAYOUT FOR RELAYS. MOVED GROUND TERMINALS AND AND REMOVED DINRAIL. PG 4: UPDATED 120VAC POWER CABLES. PG 5: UPDATED TERMINALS & DEVICE ID'S. PG 6: UPDATED TERMINALS & PUSH BUTTON DESCRIPTIONS. PG 7: UPDATED TERMINALS & PUSH BUTTON DESCRIPTIONS. PG 8: UPDATED TERMINALS & PUSH BUTTON DESCRIPTIONS. PG 10: REMOVED LOGIC INTERFACE CABLE. ADDED 25 POS. D-SUB CONNECTORS.	2025-02-13	MCCOMBS
N-CODE HISTORY SHEET				

CONFIDENTIAL - 94341
VS:A1/TID:000>Status:50