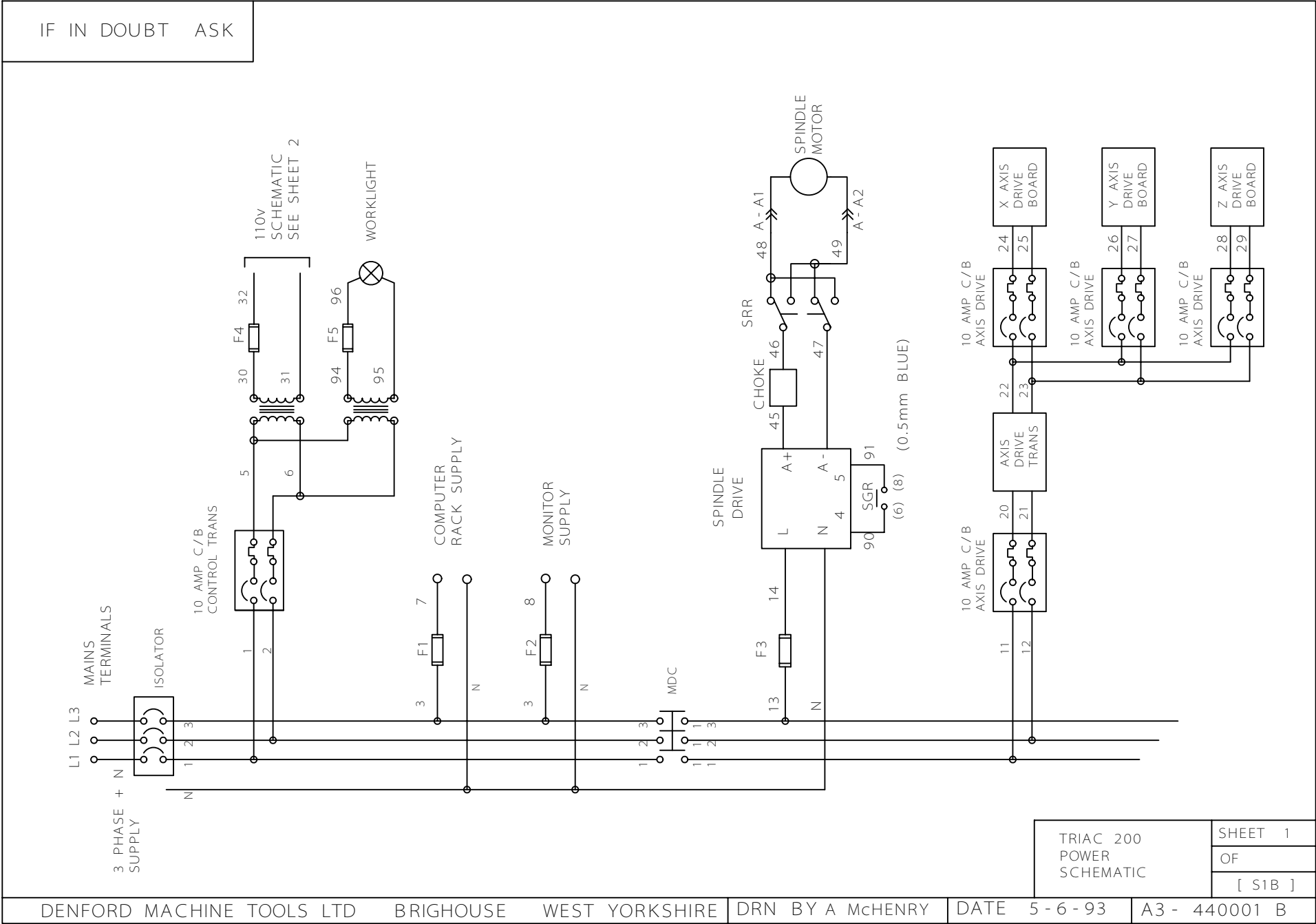
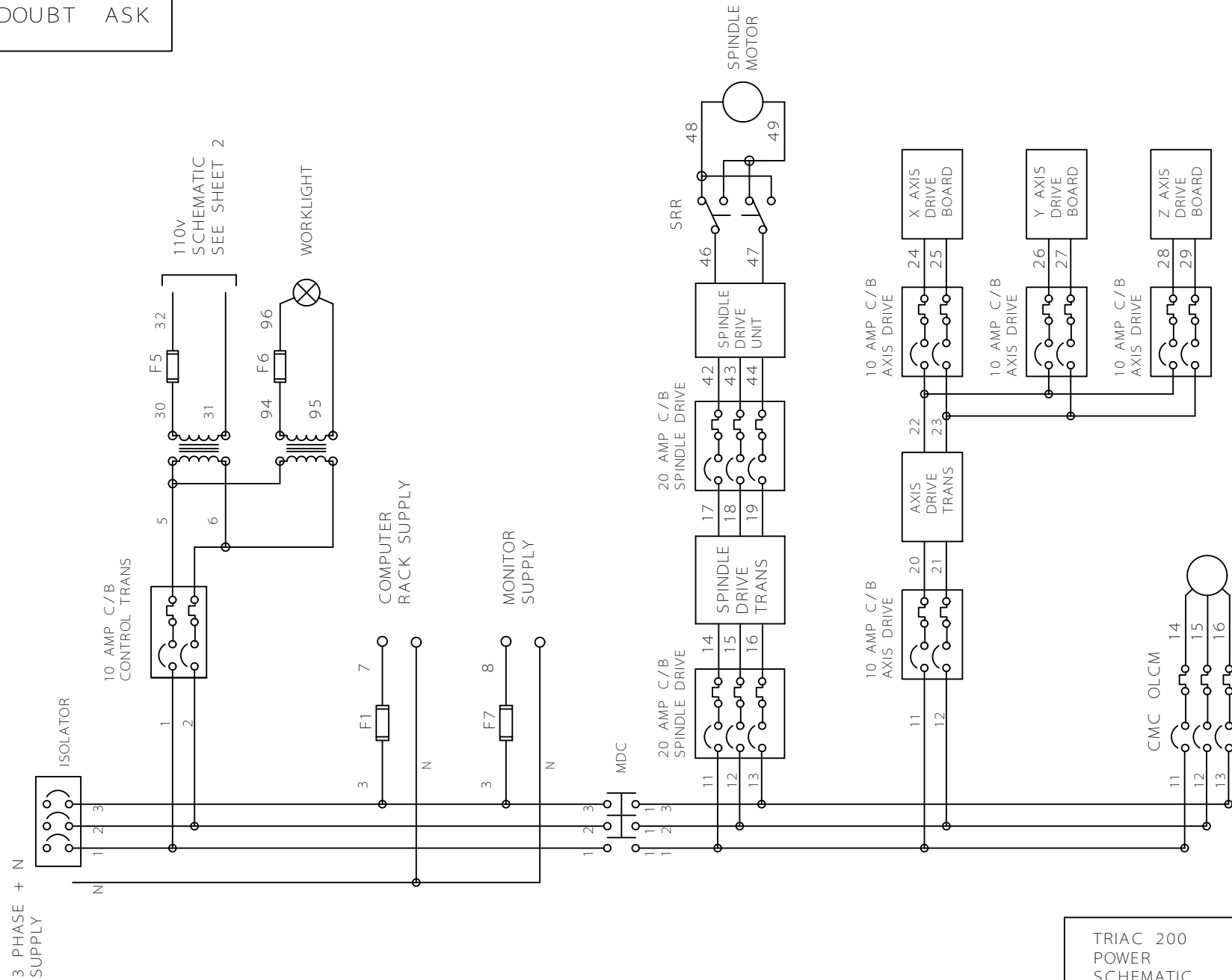


IF IN DOUBT ASK



IF IN DOUBT ASK



HARTING 24 WAY
SIDE ENTRY HOOD
FEMALE PINS

ALL CABLES 4m

PIN	COLOUR
1	BROWN
2	BLUE
3	EARTH
4	RED
5	BLUE
6	BLACK
7	BROWN
8	YELLOW
9	SCREEN
10	RED
11	GREEN
12	BLUE
13	YELLOW
14	MAUVE
15	SCREEN
16	RED
17	BLUE
18	YELLOW
19	RED
20	BLUE
21	YELLOW
22	GREEN
23	RED
24	BLUE

POWER TO MONITOR
1mm FLEX

SIGNALS TO KEYPAD
8 CORE SCREEN

SIGNALS TO MONITOR
8 CORE SCREEN

AXIS OVERRIDE
AND E-STOP P/B

4 CORE SCREEN

SPINDLE AND
FEEDRATE
OVERRIDE
POTS

4 CORE SCREEN

TOOL
RELEASE P/B

2 CORE SCREEN

SHEET 12

TRIAC 200
MONITOR HOUSING
CONNECTIONS

HARTING 24 WAY
SIDE ENTRY HOOD
FEMALE PINS

ALL CABLES 4m

PIN	COLOUR
1	BROWN
2	BLUE
3	EARTH
4	RED
5	BLUE
6	BLACK
7	BROWN
8	YELLOW
9	SCREEN
10	RED
11	GREEN
12	BLUE
13	YELLOW
14	MAUVE
15	SCREEN
16	RED
17	BLUE
18	YELLOW
19	RED
20	BLUE
21	YELLOW
22	GREEN
23	RED
24	BLUE

POWER TO MONITOR
1mm FLEX

SIGNALS TO KEYPAD
8 CORE SCREEN

SIGNALS TO MONITOR
8 CORE SCREEN

AXIS OVERRIDE
AND E-STOP P/B

4 CORE SCREEN

SPINDLE AND
FEEDRATE
OVERRIDE
POTS

4 CORE SCREEN

SPINDLE
LOCK P/B

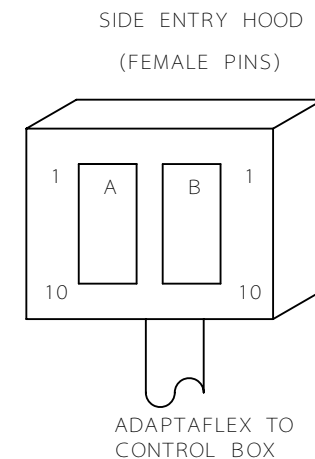
2 CORE SCREEN

SHEET 12

TRIAC 200
MONITOR HOUSING
CONNECTIONS

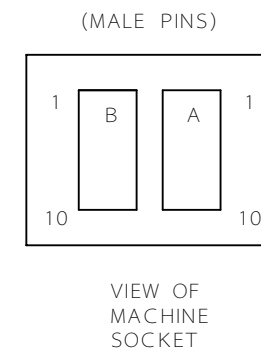
ROW A				PLUG 1 A			
PIN No	COLOUR	CABLE No	DESTINATION				
1	BROWN	20	SPINDLE MOTOR	4 CORE SCREEN 1.5mm			
2	BLUE	21					
3	EARTH						
4	SCREEN						
5	RED		SPINDLE THERMAL	2 CORE SCREEN			
6	BLUE						
7	RED		TACHO	2 CORE SCREEN			
8	BLUE						
9	SCREEN						
10							

ROW B							
PIN No	COLOUR	CABLE No	DESTINATION				
1	YELLOW		X AXIS MOTOR	1.5mm SEPARATES			
2	WHITE						
3	GREY						
4	BROWN						
5	EARTH						
6							
7							
8							
9							
10							



ROW C							
PIN No	COLOUR	CABLE No	DESTINATION				
1	YELLOW		Y AXIS MOTOR	1.5mm SEPARATES			
2	WHITE						
3	GREY						
4	BROWN						
5	EARTH						
6							
7							
8							
9							
10							

ROW D							
PIN No	COLOUR	CABLE No	DESTINATION				
1	YELLOW		Z AXIS MOTOR	1.5mm SEPARATES			
2	WHITE						
3	GREY						
4	BROWN						
5	EARTH						
6							
7							
8							
9							
10							



TRIAC 200 PLUG 1 A SWITCHES AND MOTORS	SHEET 14
	OF
	[S14B]

ROW A

PLUG 1 B

PIN	COLOUR	CABLE	DESTINATION
1	RED	67	+Z LIMIT
2	BLUE	68	
3	RED	68	-Z LIMIT
4	BLUE	69	
5	RED	88	X DATUM
6	BLUE	60	
7	RED	89	Y DATUM
8	BLUE	60	
9	RED	90	Z DATUM
10	BLUE	60	

ROW C

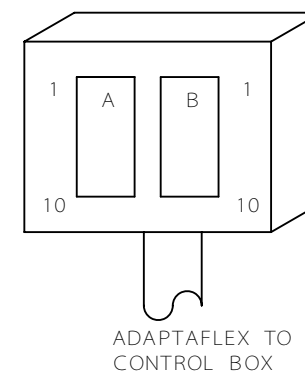
PIN	COLOUR	CABLE	DESTINATION
1	BLACK	31	DRAWBAR SOLENOID
2	BLACK	36	
3	EARTH		
4			
5	BLACK	31	LUBE PUMP
6	BLACK	50	
7	EARTH		
8			
9	BLUE	76	LUBE FLOAT SWITCH
10	BLUE	60	

ROW B

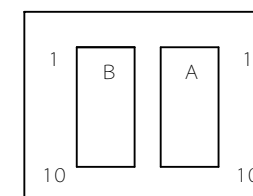
PIN	COLOUR	CABLE	DESTINATION
1	RED	95	LO - VO LIGHT
2	RED	96	
3	EARTH		
4			
5	RED	112	AIR PRESSURE SWITCH
6	BLUE	60	
7			GUARD SWITCH
8	RED	77	
9	BLUE	60	
10			

ROW D

PIN	COLOUR	CABLE	DESTINATION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

SIDE ENTRY HOOD
(FEMALE PINS)

(MALE PINS)

VIEW OF
MACHINE
SOCKET

TRIAC 200
PLUG 1 B
SWITCHES AND
MOTORS

SHEET 15
OF
[S15B]

ROW A

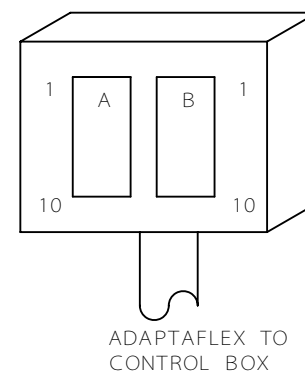
PLUG 2 A

ROW B

PIN	COLOUR	DESTINATION
1	SCREEN	(1)
2	BLACK	(2)
3	BROWN	(3)
4	RED	(6)
5	ORANGE	(7)
6	YELLOW	(8)
7	GREEN	(9)
8	BLUE	(10)
9	VIOLET	(11)
10	GREY	(12)

X AXIS
ENCODER

PIN	COLOUR	DESTINATION
1	WHITE	(13)
2	PINK	(18)
3	TURQUOISE	(19)
4	RED/BLUE	(20)
5	GREEN/RED	(21)
6	YELLOW/RED	(22)
7	WHITE/RED	(23)
8	RED/BLACK	(24)
9	YELLOW/BLUE	(25)
10		

X AXIS
ENCODERTOP ENTRY HOOD
(FEMALE PINS)NUMBERS IN BRACKETS
REFER TO 25 WAY
D TYPE CONNECTORS
ON AXIS DRIVES

ROW C

PIN	COLOUR	DESTINATION
1		
2		
3		
4		
5		
6	SCREEN	(1)
7	BLACK	(2)
8	BROWN	(3)
9	RED	(6)
10	ORANGE	(7)

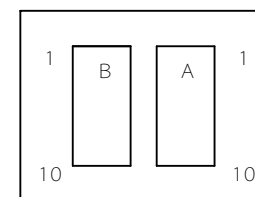
Y AXIS
ENCODER

ROW D

PIN	COLOUR	DESTINATION
1	YELLOW	(8)
2	GREEN	(9)
3	BLUE	(10)
4	VIOLET	(11)
5	GREY	(12)
6	WHITE	(13)
7	PINK	(18)
8	TURQUOISE	(19)
9	RED/BLUE	(20)
10	GREEN/RED	(21)

Y AXIS
ENCODER20 CORE SCREEN
CUT OUT
RED/BROWN
WHITE/BLUE

(MALE PINS)

VIEW OF
MACHINE
SOCKETTRIAC 200
PLUG 2 A
AXIS MOTOR
ENCODERSSHEET 16
OF
[S16B]

ROW A

PLUG 2 B

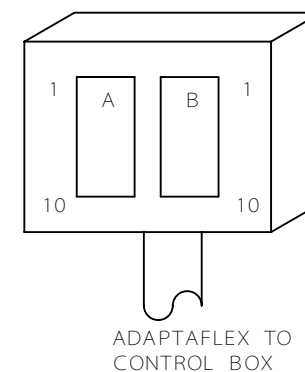
ROW B

PIN	COLOUR	DESTINATION
1	YELLOW/RED	(22)
2	WHITE/RED	(23)
3	RED/BLACK	(24)
4	YELLOW/BLUE	(25)
5		
6		
7		
8		
9		
10		

Y AXIS ENCODER

PIN	COLOUR	DESTINATION
1	SCREEN	(1)
2	BLACK	(2)
3	BROWN	(3)
4	RED	(6)
5	ORANGE	(7)
6	YELLOW	(8)
7	GREEN	(9)
8	BLUE	(10)
9	VIOLET	(11)
10	GREY	(12)

Z AXIS ENCODER

TOP ENTRY HOOD
(FEMALE PINS)

NUMBERS IN BRACKETS
REFER TO 25 WAY
D TYPE CONNECTORS
ON AXIS DRIVES

ROW C

PIN	COLOUR	DESTINATION
1	WHITE	(13)
2	PINK	(18)
3	TURQUOISE	(19)
4	RED/BLUE	(20)
5	GREEN/RED	(21)
6	YELLOW/RED	(22)
7	WHITE/RED	(23)
8	RED/BLACK	(24)
9	YELLOW/BLUE	(25)
10		

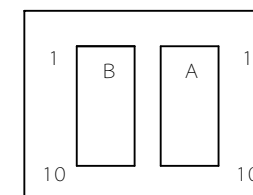
Z AXIS ENCODER

ROW D

PIN	COLOUR	DESTINATION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

20 CORE SCREEN
CUT OUT
RED/BROWN
WHITE/BLUE

(MALE PINS)



VIEW OF
MACHINE
SOCKET

TRIAC 200
PLUG 2 B
AXIS MOTOR
ENCODERS

SHEET 17
OF
[S17B]

IF IN DOUBT ASK

2 2 1 1
0 6 0 6 6 1 6 1
0 0 1 0 1 0 1 1

A1	A2	A1	A2	A1	A2	A1	A2
I	R	I	R	O	R	O	R
1		2		1		2	
13	14	13	14	13	14	13	14

1 1 2 2 2 2
0 6 0 6 0 0 0 0
8 0 9 0 2 3 4 5

CABLE FROM CABINET TO INDEXING HEAD

19 WAY QM 4 PIN DIN

A RED 1
C BLUE 2
G YELLOW 3
H GREEN 4

IR1 INPUT RELAY 1
IR2 INPUT RELAY 2
OR1 OUTPUT RELAY 1
OR2 OUTPUT RELAY 2

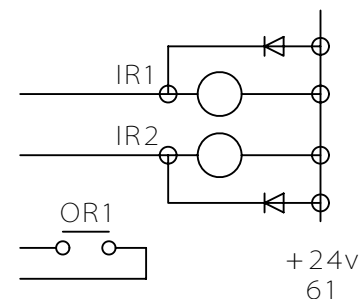
19 WAY QM CONNECTOR FOR AUXILIARIES

A 24v 61
C INPUT 1 200
E INPUT 2 201
G] OUTPUT 1 202
H] 203

K] OUTPUT 2 204
L] 205

V EARTH

0.5mm BLUE
0.5mm EARTH

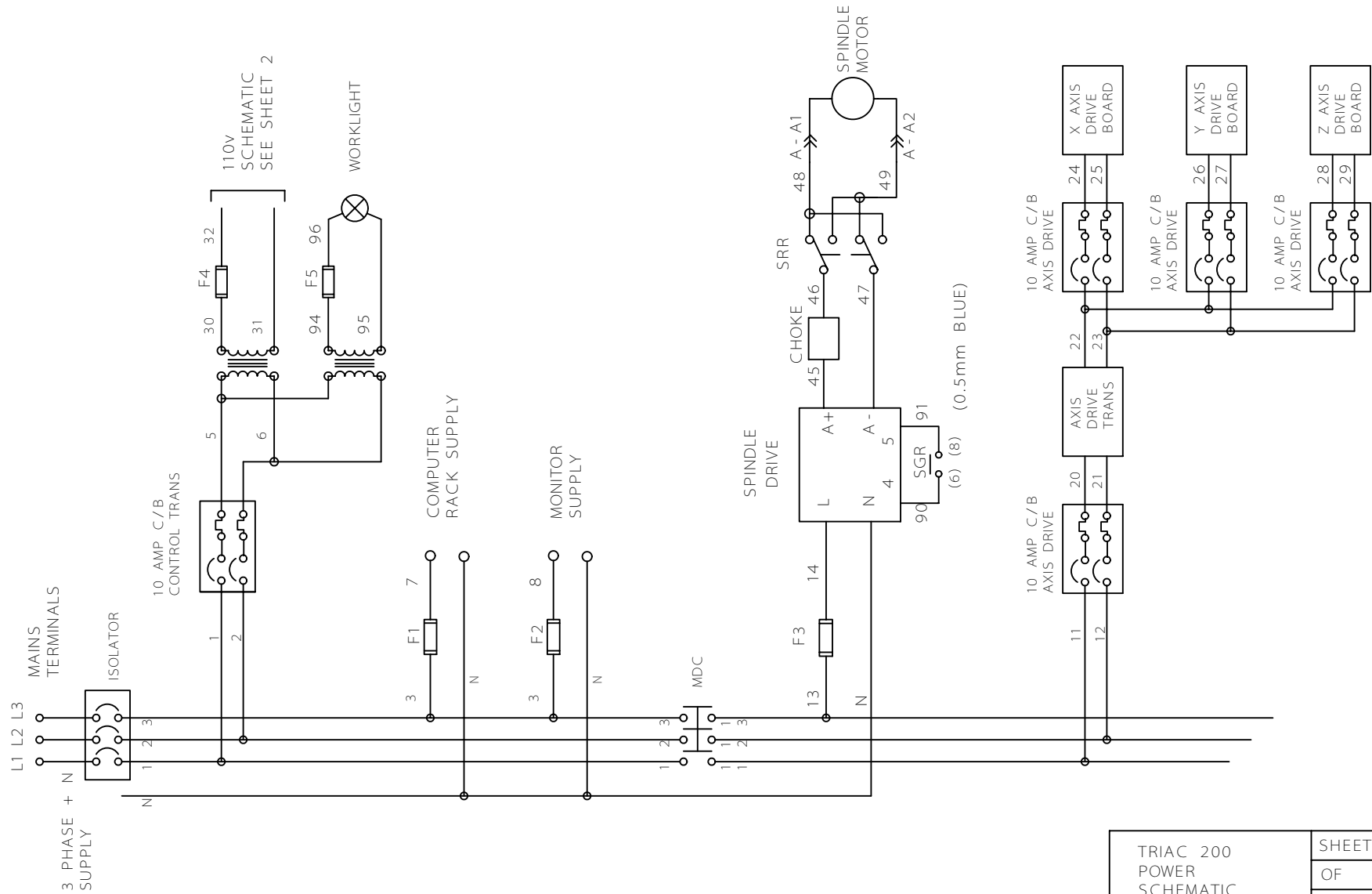


SHEET 18

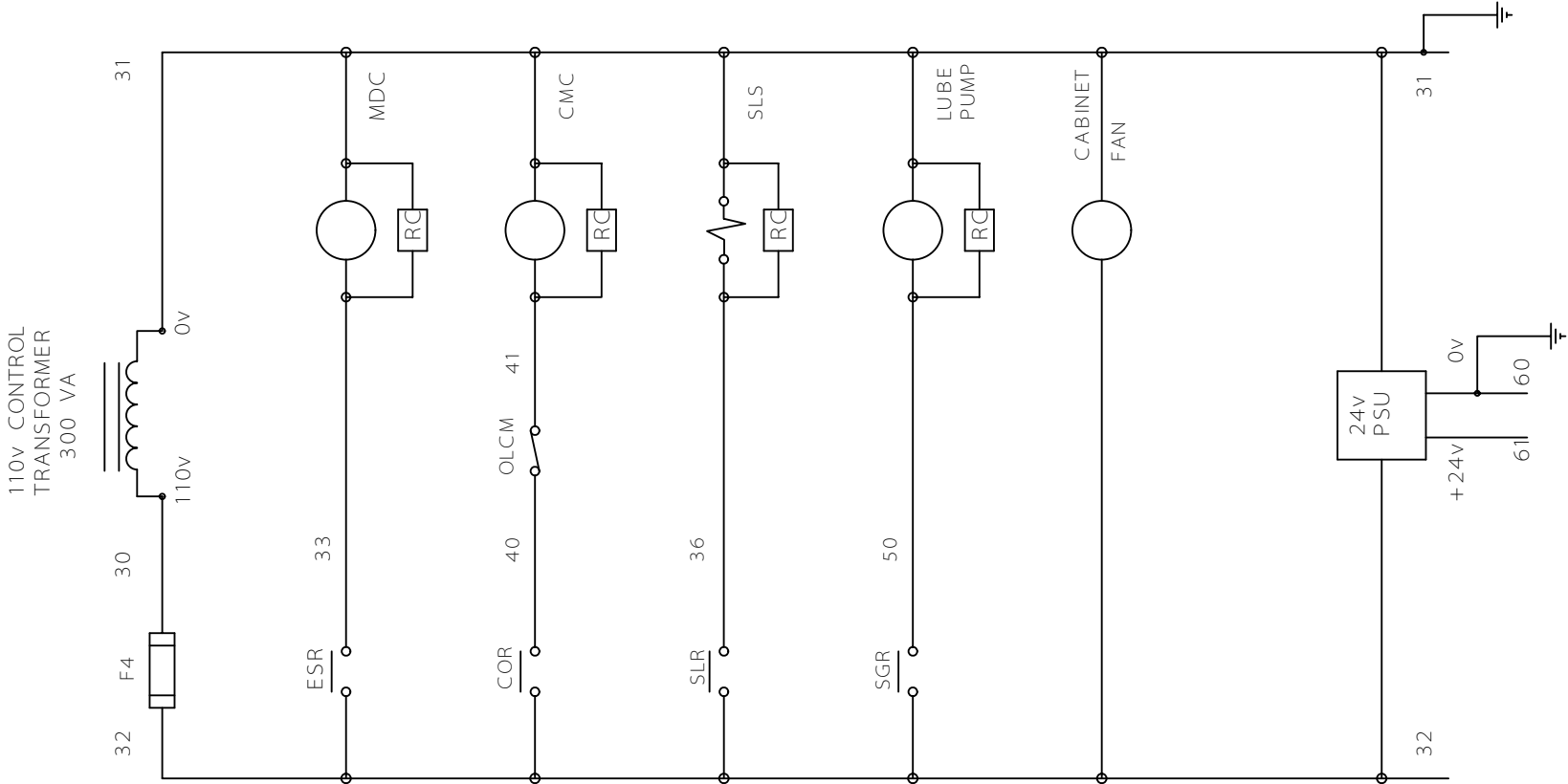
TRIAC 200
AUXILIARIES
FOR INDEXING HEAD

[TRIAC200 S18B]

IF IN DOUBT ASK

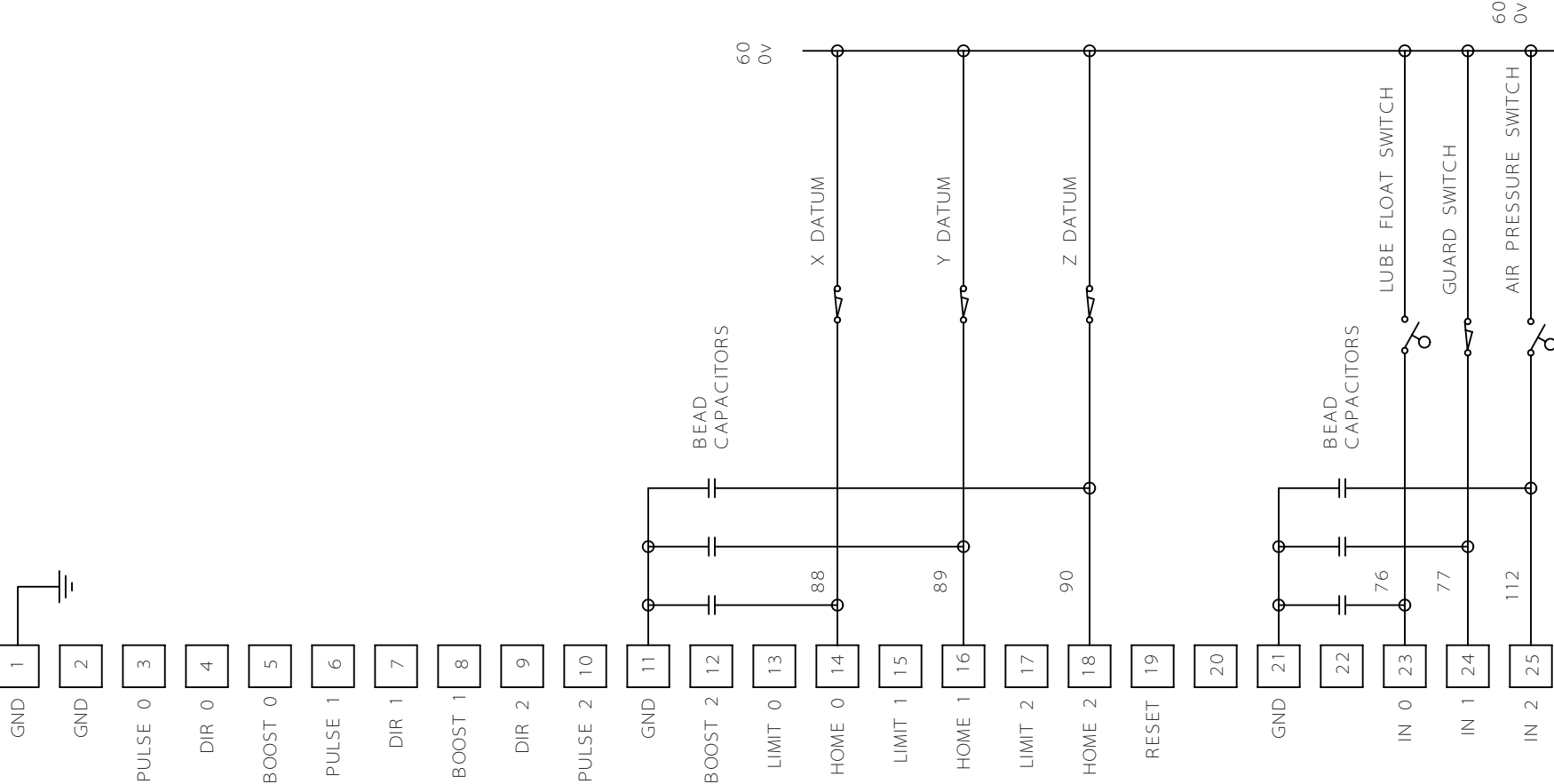


IF IN DOUBT ASK



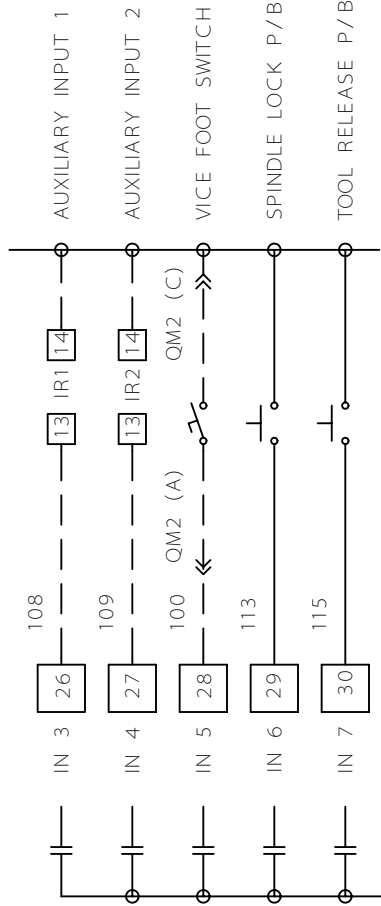
TRIAC 200 SERVO MOTORS 110v SCHEMATIC	SHEET 2
	OF
	[S2C]

IF IN DOUBT ASK

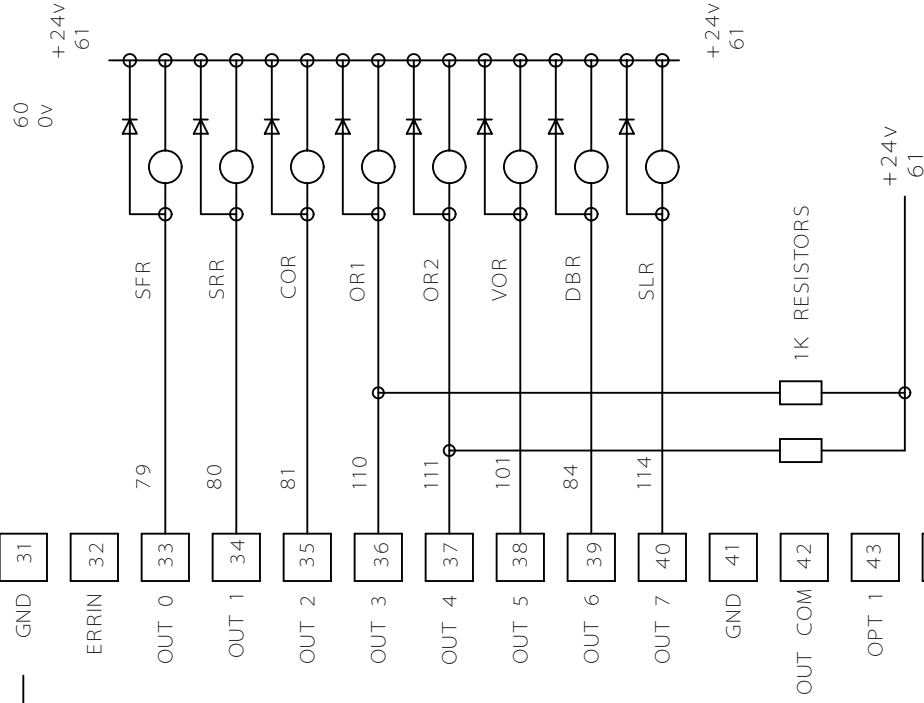


TRIAC 200 SERVO MOTORS CUSTOM I/O PINS 1-25	SHEET 3
	OF
	[S3B]

IF IN DOUBT ASK



BEAD CAPACITORS



QM1 = 19 WAY ROUND QM
CONNECTOR FOR
AUXILIARIES

SEE SHEET 18

QM2 = 8 WAY ROUND QM
CONNECTOR FOR
FOOTSWITCH

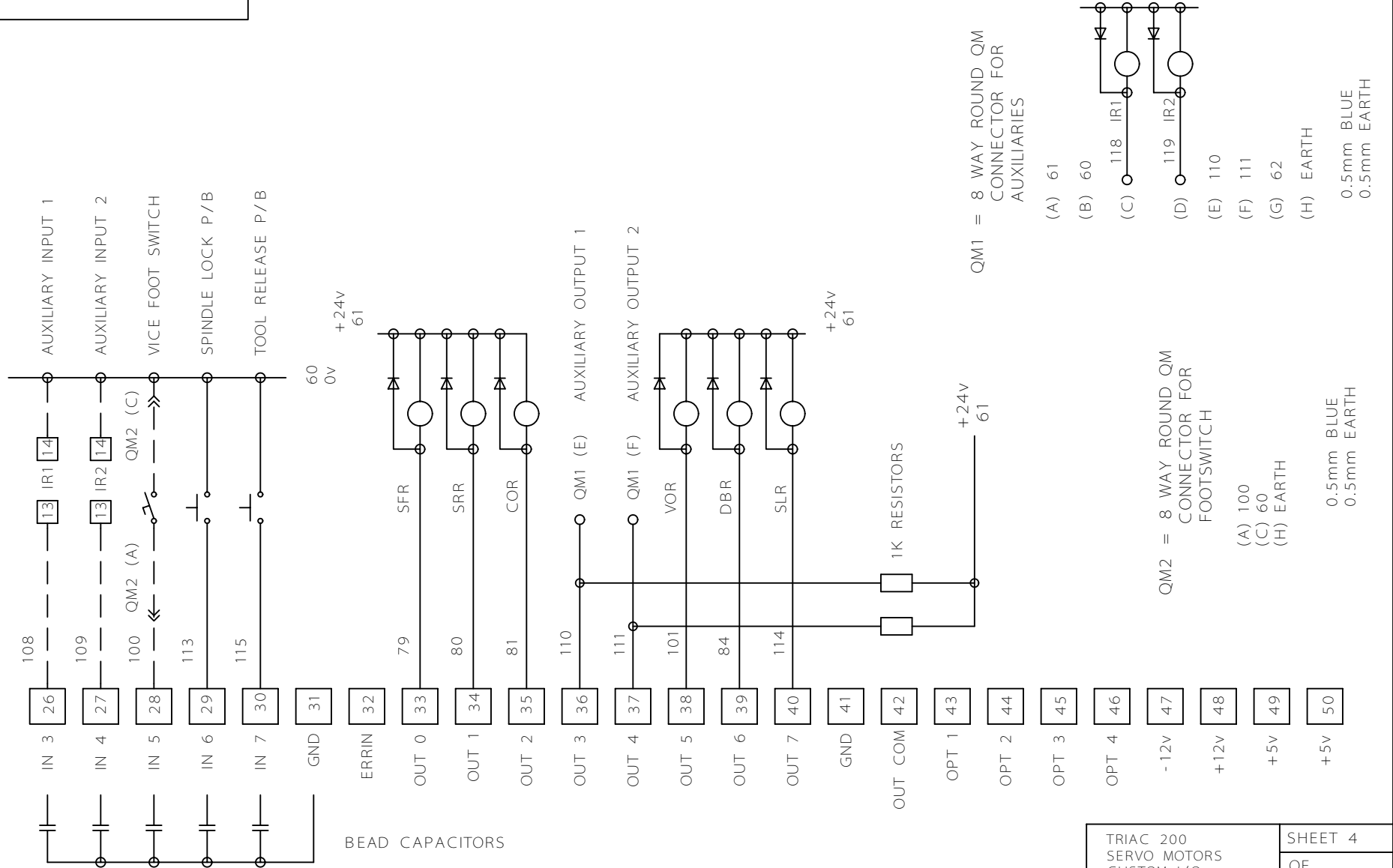
(A) 100
(C) 60
(H) EARTH

0.5mm BLUE
0.5mm EARTH

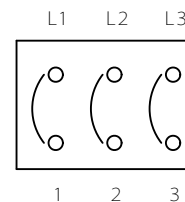
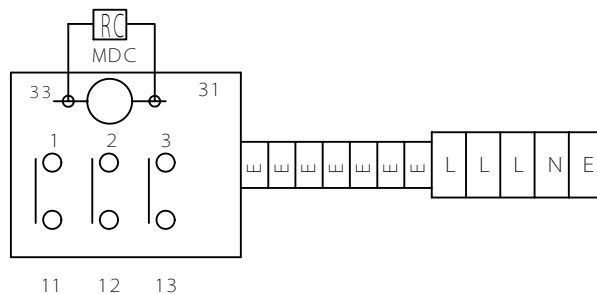
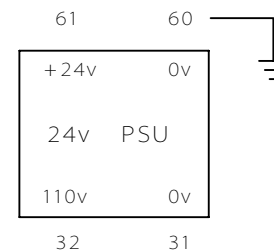
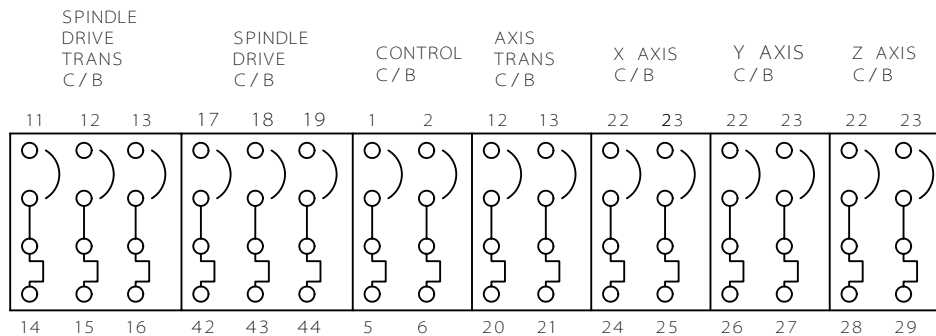
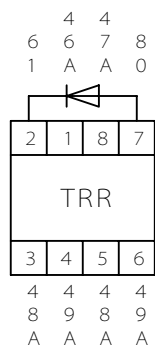
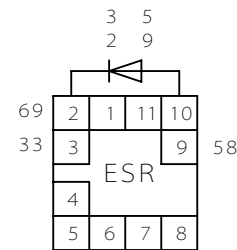
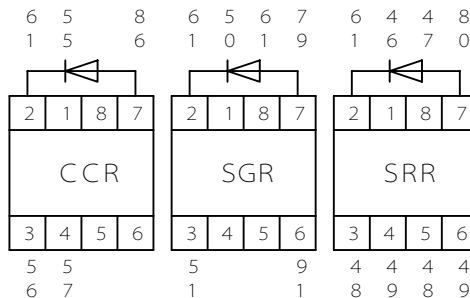
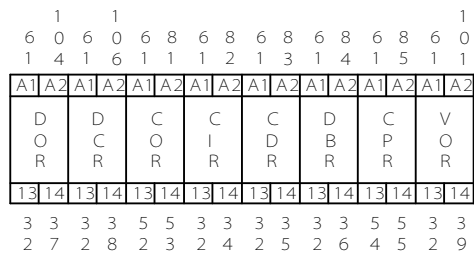
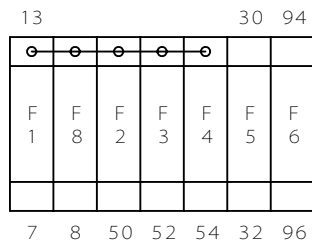
TRIAC 200
SERVO MOTORS
CUSTOM I/O
PINS 26 - 50

SHEET 4
OF
[S4B]

IF IN DOUBT ASK



IF IN DOUBT ASK

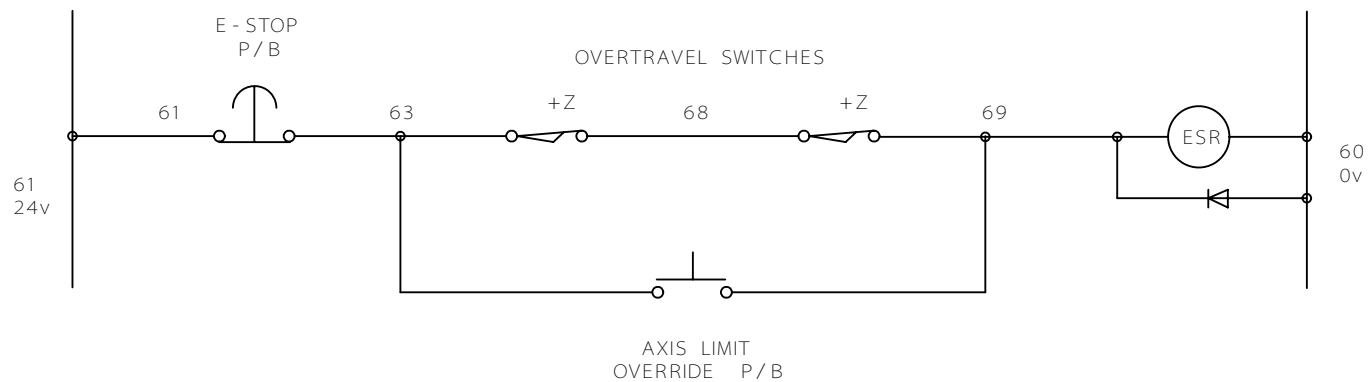


MAIN TERMINAL STRIP 37 TERMINALS AND 6 EARTHS

E	E	E	E	E	N	N	N	N	7	31	31	31	31	32	32	32	32	60	60	60	60	60	60	61	61	61	61	62	62	64	65	66	67	68	68	69	70	70	70	70	95	96
---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TRIAC 200 RELAY CONNECTIONS	SHEET
	OF
	[SV 6]

IF IN DOUBT ASK

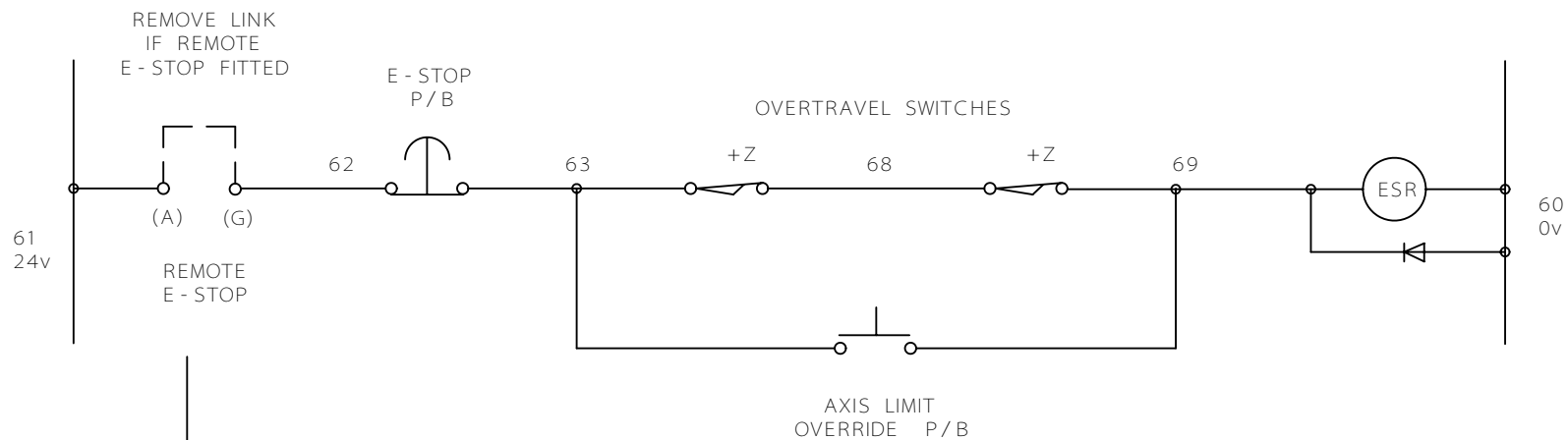


ESR EMERGENCY STOP RELAY

TRIAC 200
E - STOP
CIRCUIT

SHEET 7
OF
[S7B]

IF IN DOUBT ASK



Q1 = 8 WAY ROUND QM
CONNECTOR FOR
AUXILIARIES

(A) 61 (E) 110
(B) 60 (F) 111
(C) 118 (G) 62
(D) 119 (H) EARTH

0.5mm BLUE
0.5mm EARTH

ESR EMERGENCY STOP RELAY

TRIAC 200
E - STOP
CIRCUIT

SHEET 7
OF
[S7C]

IF IN DOUBT ASK

CONTROL TO AXIS DRIVE SIGNALS

1 ———— RED ———— 4
2 ———— BLUE ———— 2
4 ————

5 ———— RED ———— 5
9 ———— BLUE ———— 9

10 ———— BLACK ———— 10
11 ———— BROWN ———— 11
12 ———— RED ———— 12
13 ———— YELLOW ———— 13
14 ———— GREEN ———— 14
15 ———— BLUE ———— 15

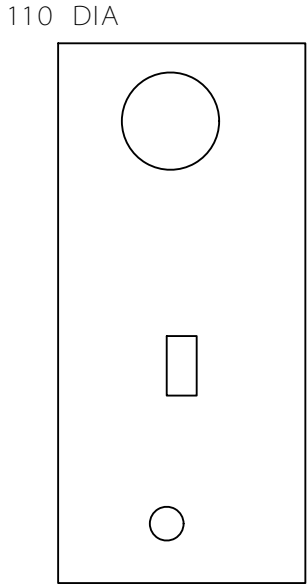
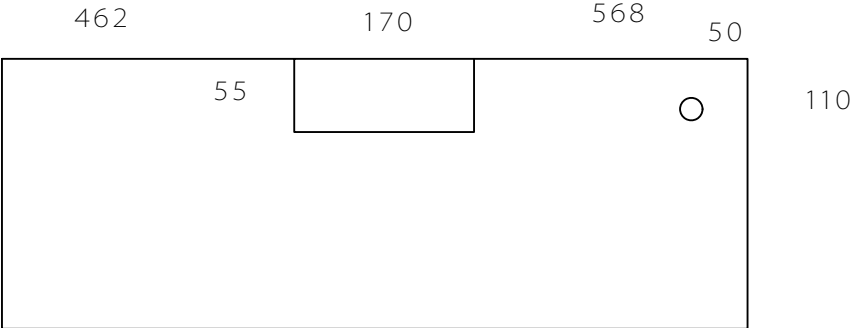
DRIVE
END

CONTROL
END

15 WAY
D TYPE
F/MALE ?

15 WAY
D TYPE
F/MALE ?

IF IN DOUBT ASK

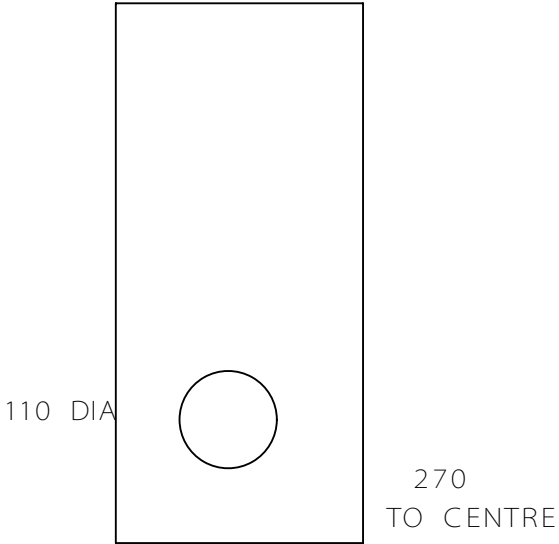


175

250

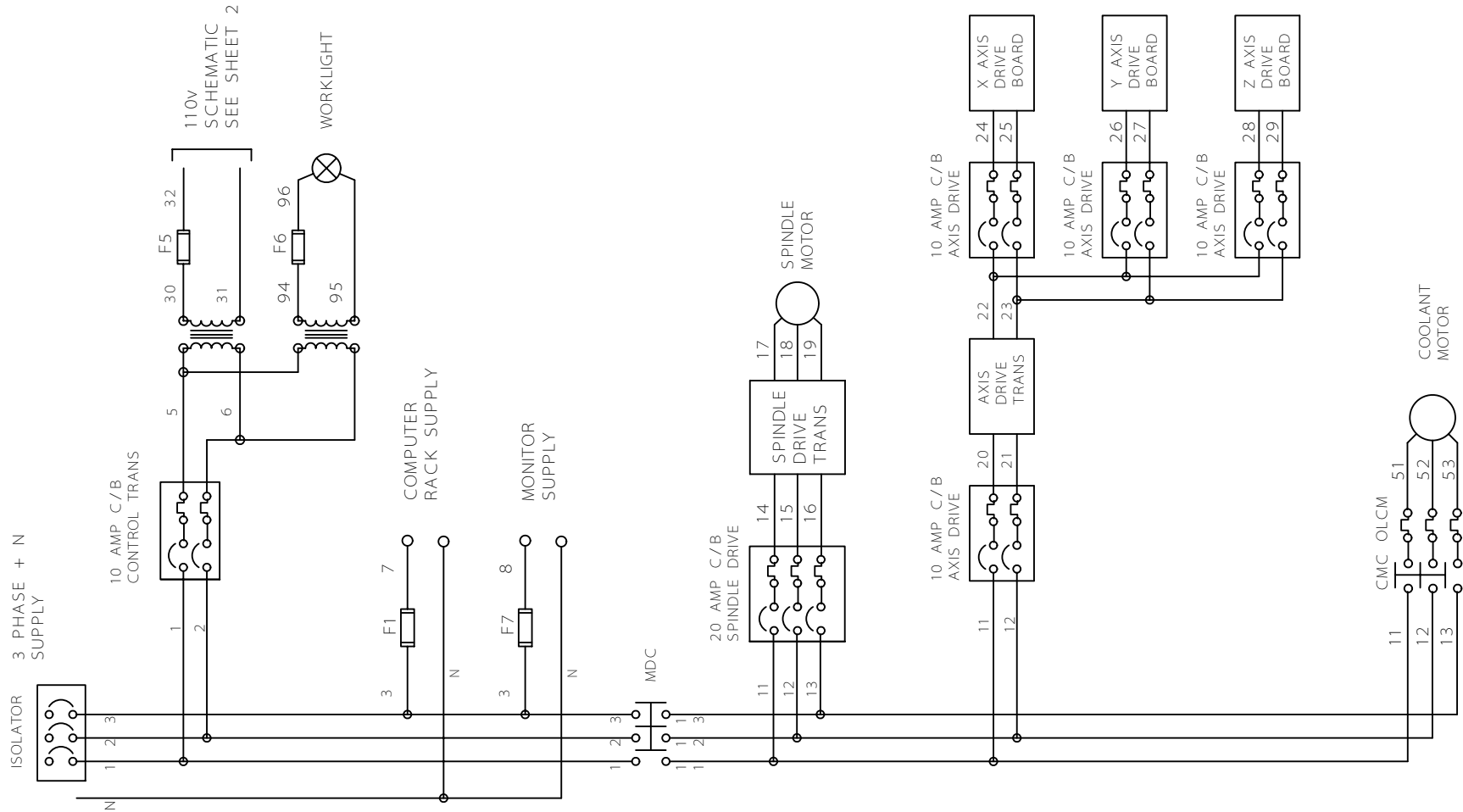
250

TRIAC 200
SAREL BOX
CUT OUTS



110 DIA

270
TO CENTRE



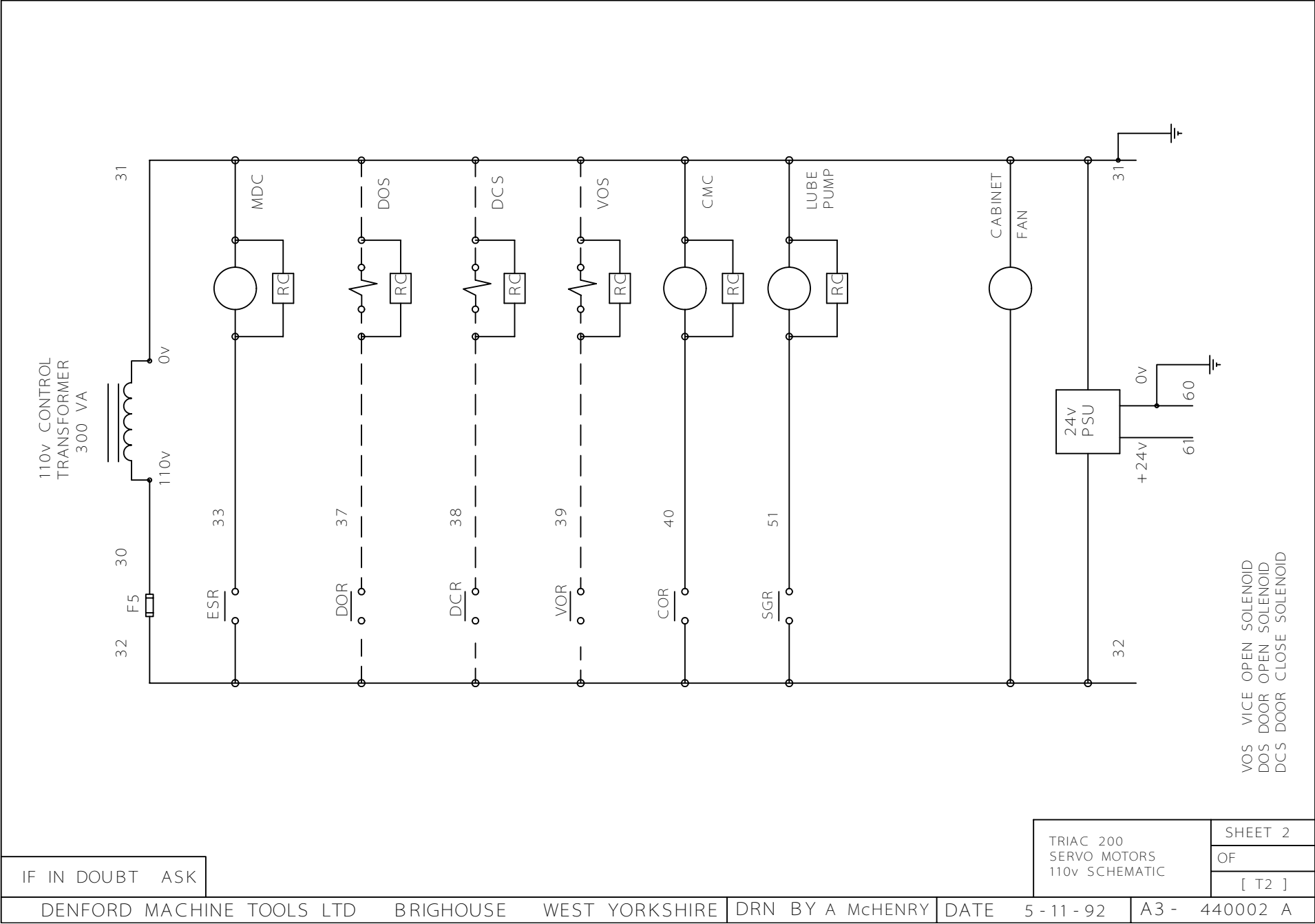
IF IN DOUBT ASK

TRIAC 200
SERVO MOTORS
POWER SCHEMATIC

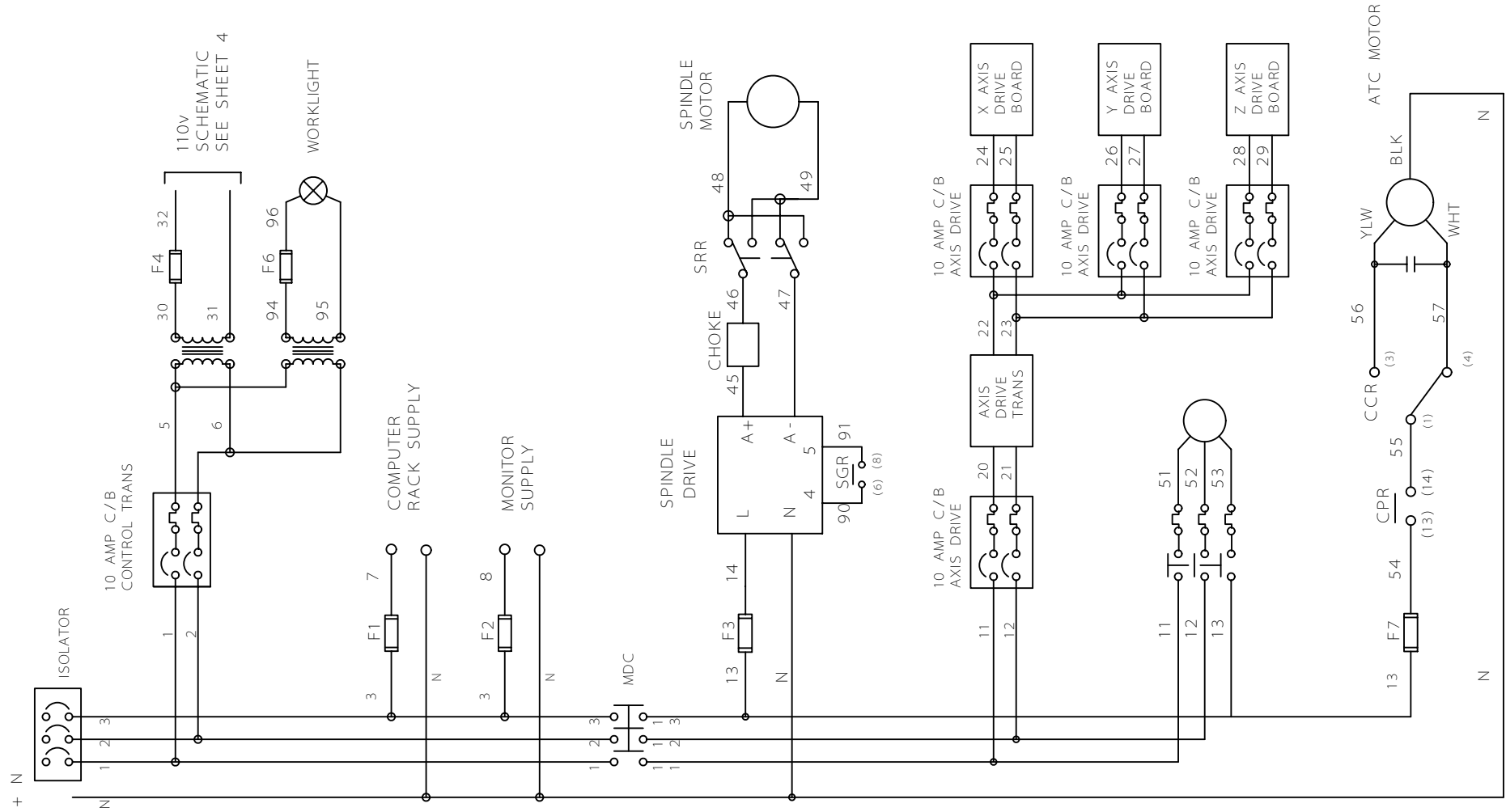
SHEET 1

OF

[T1]

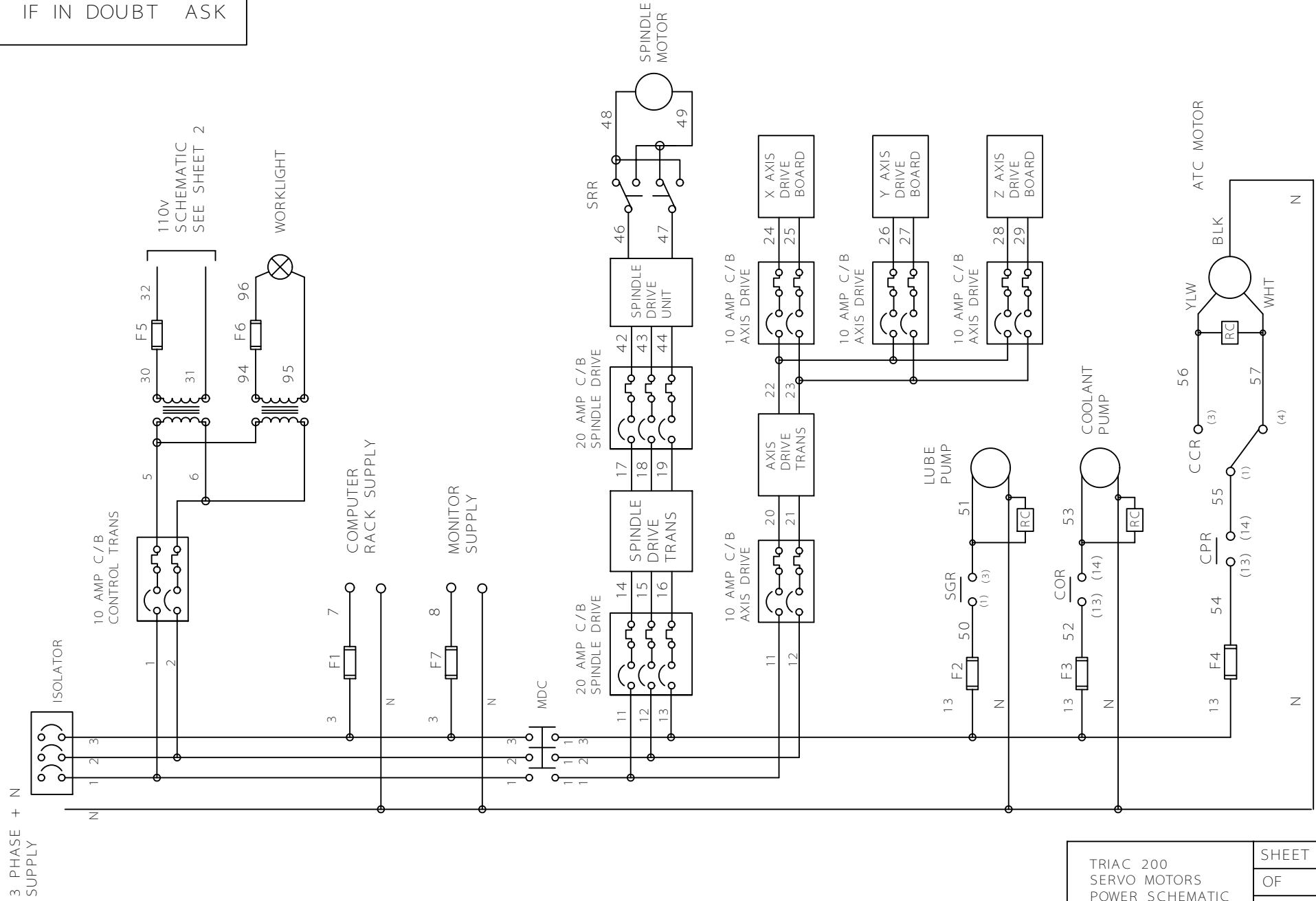


IF IN DOUBT ASK



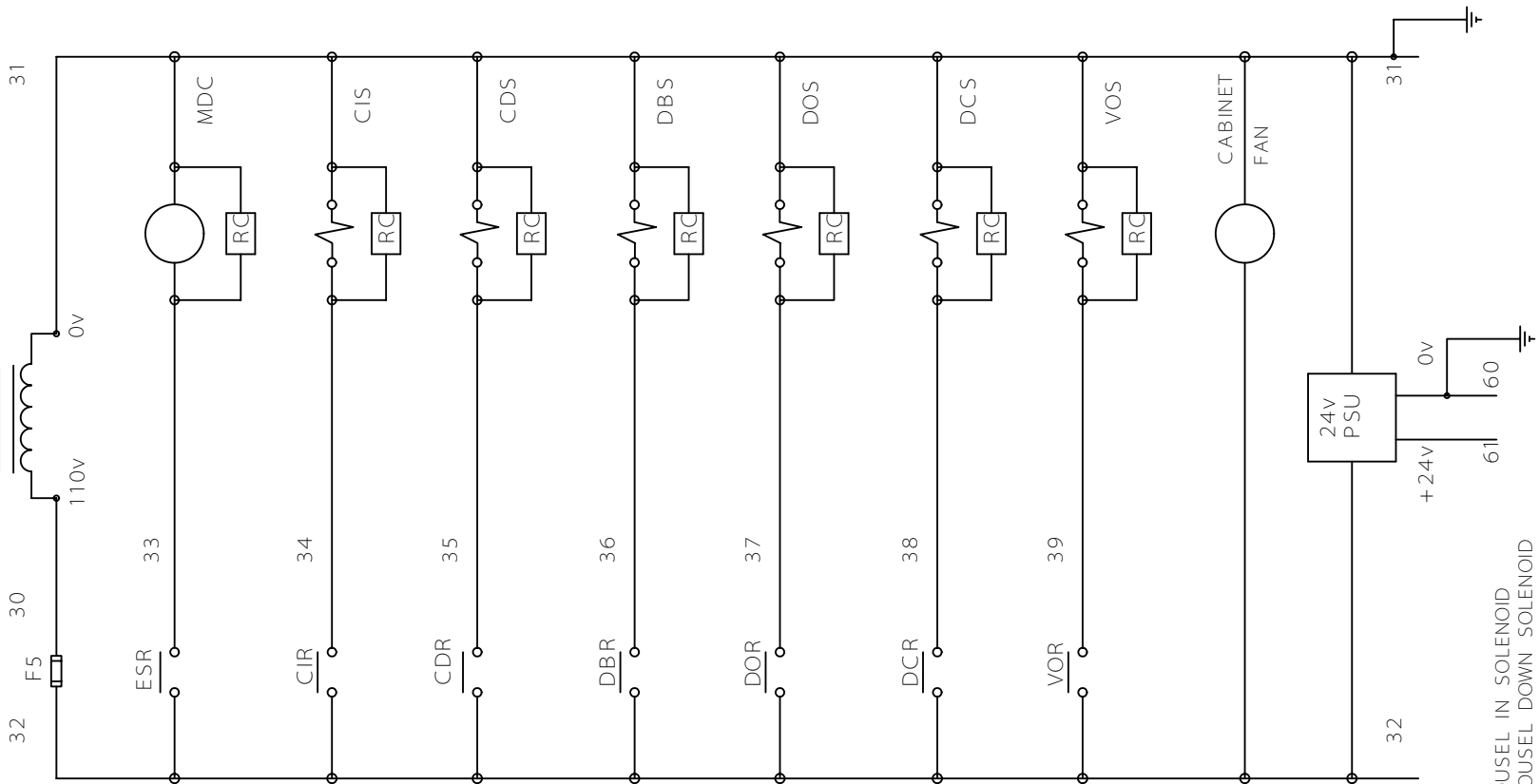
TRIAC VMC SERVO MOTORS POWER SCHEMATIC	SHEET 1
	[TRIAC200]
	[VSW1]

IF IN DOUBT ASK



IF IN DOUBT ASK

110v CONTROL
TRANSFORMER
300 VA



CIS CAROUSEL IN SOLENOID
CDS CAROUSEL DOWN SOLENOID
DBS DRAWBAR SOLENOID
VOS VICE OPEN SOLENOID
DOS DOOR OPEN SOLENOID
DCS DOOR CLOSE SOLENOID

TRIAC 200
SERVO MOTORS
110v SCHEMATIC

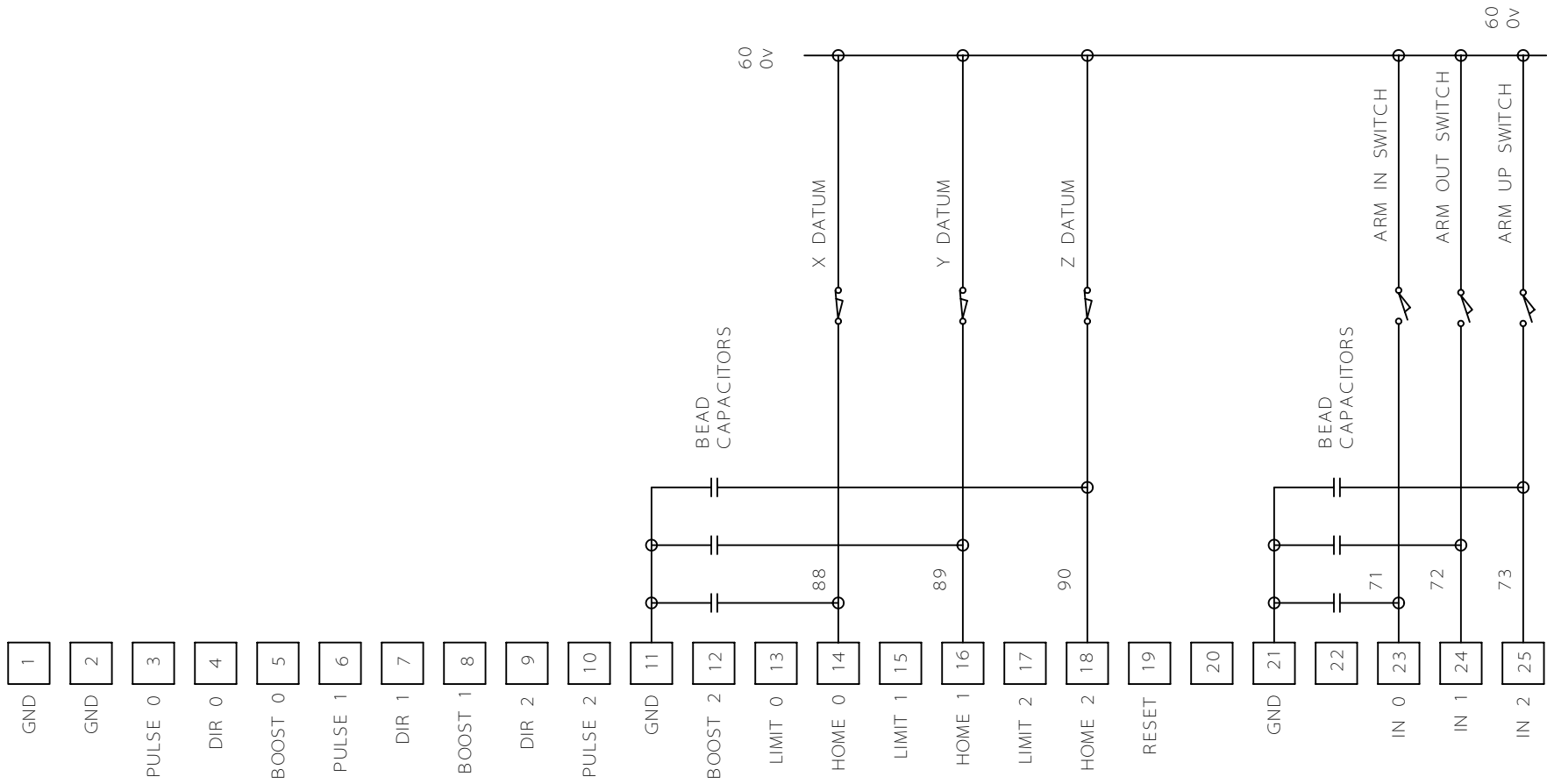
SHEET 2

OF

[SV2]

IF IN DOUBT ASK

CUSTOM I/O
SIGNALS



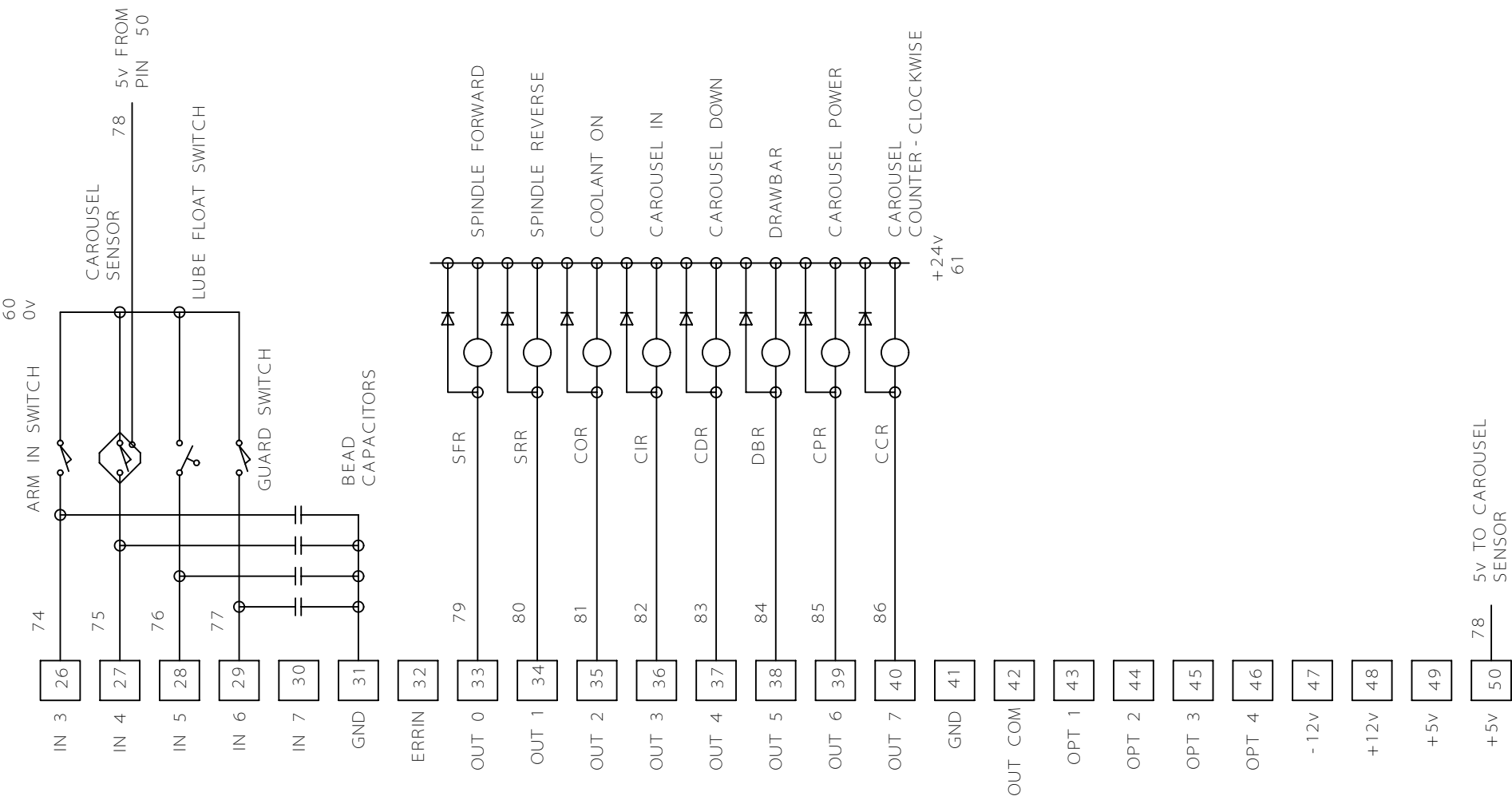
TRIAC 200
SERVO MOTORS
CUSTOM I/O
PINS 1 - 25

SHEET

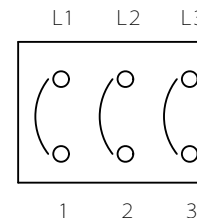
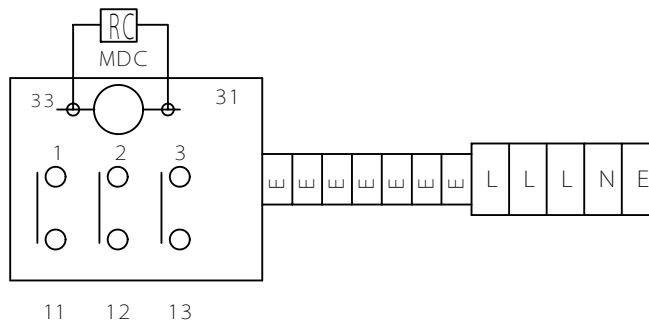
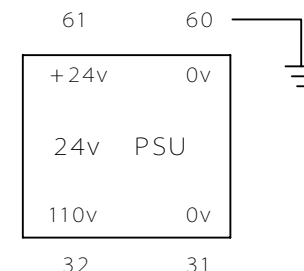
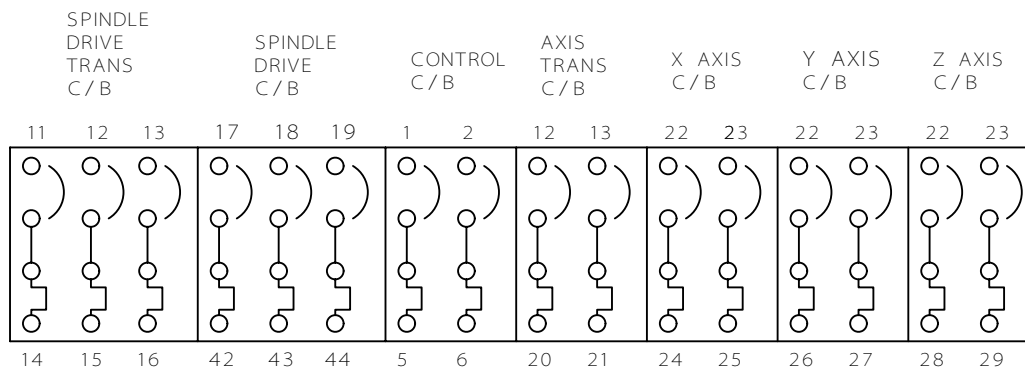
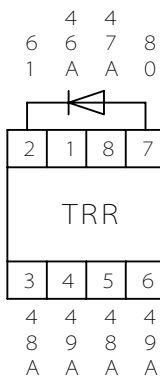
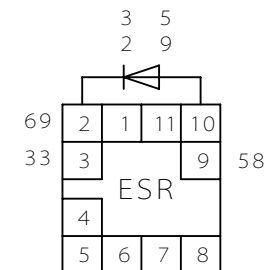
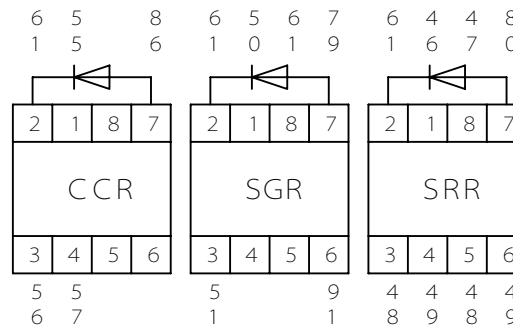
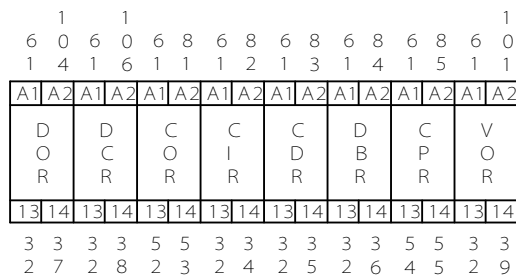
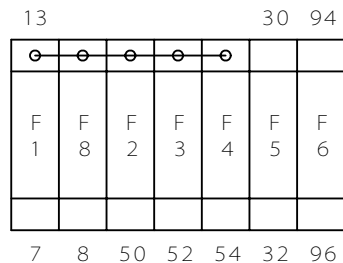
OF

[SV3]

IF IN DOUBT ASK



IF IN DOUBT ASK

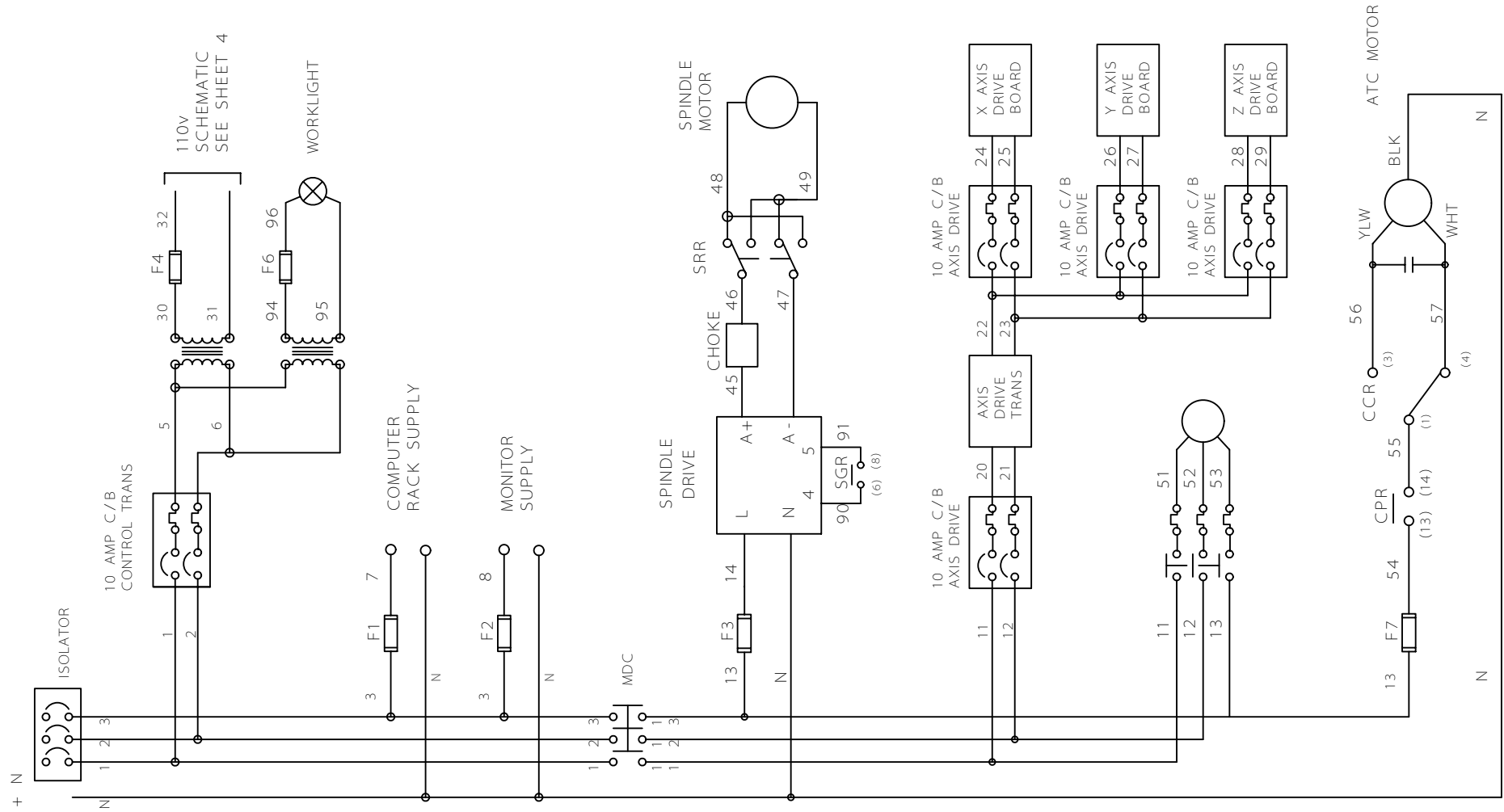


MAIN TERMINAL STRIP 37 TERMINALS AND 6 EARTHS

E	E	E	E	E	E	N	N	N	N	7	31	31	31	31	32	32	32	32	60	60	60	60	61	61	61	61	62	62	64	65	66	67	68	68	69	70	70	70	70	95	96
---	---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

TRIAC 200 RELAY CONNECTIONS	SHEET
	OF
	[SV 6]

IF IN DOUBT ASK



TRIAC VMC SERVO MOTORS POWER SCHEMATIC	SHEET 1
	[TRIAC200]
	[VSW1]