

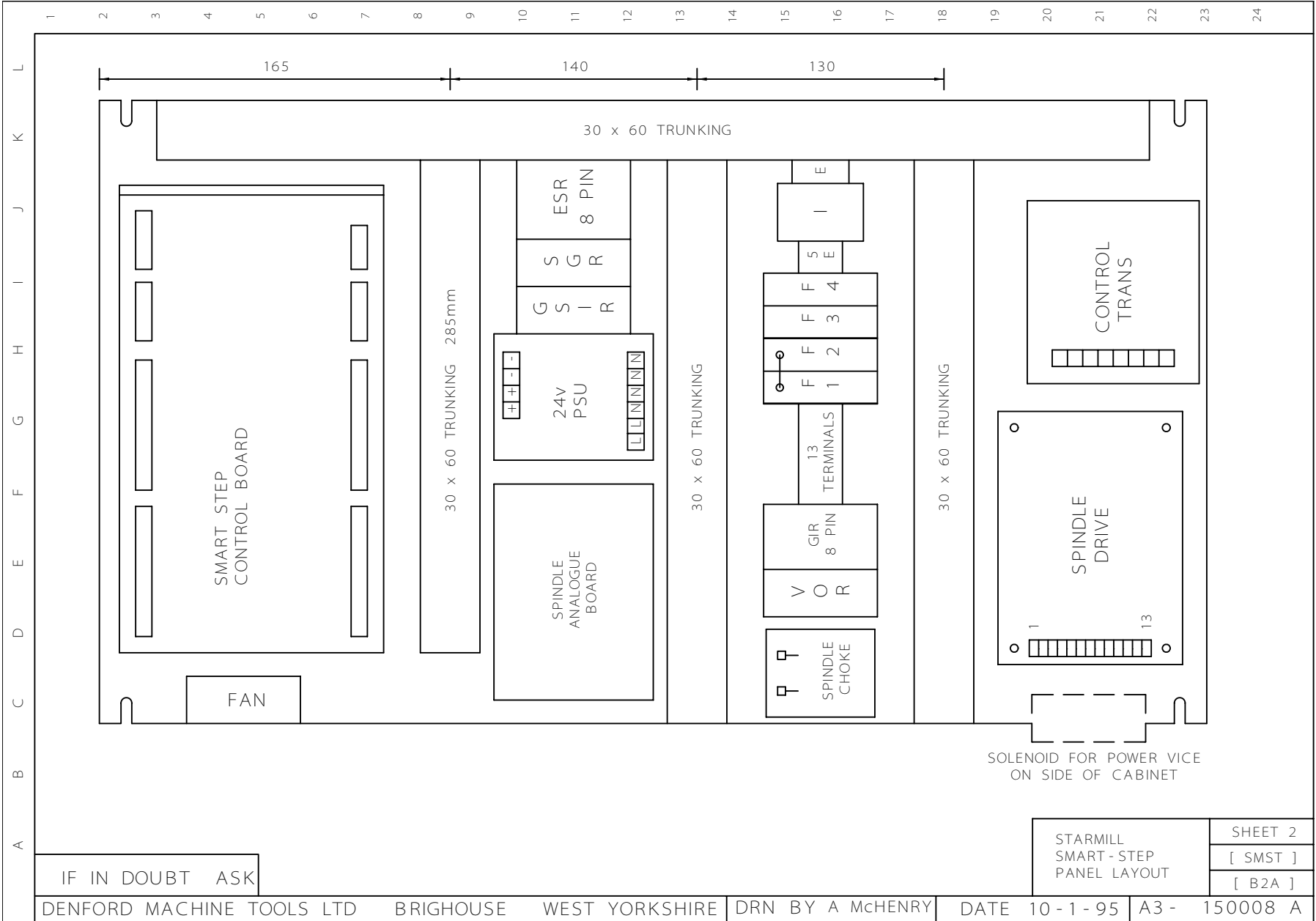
IF IN DOUBT ASK

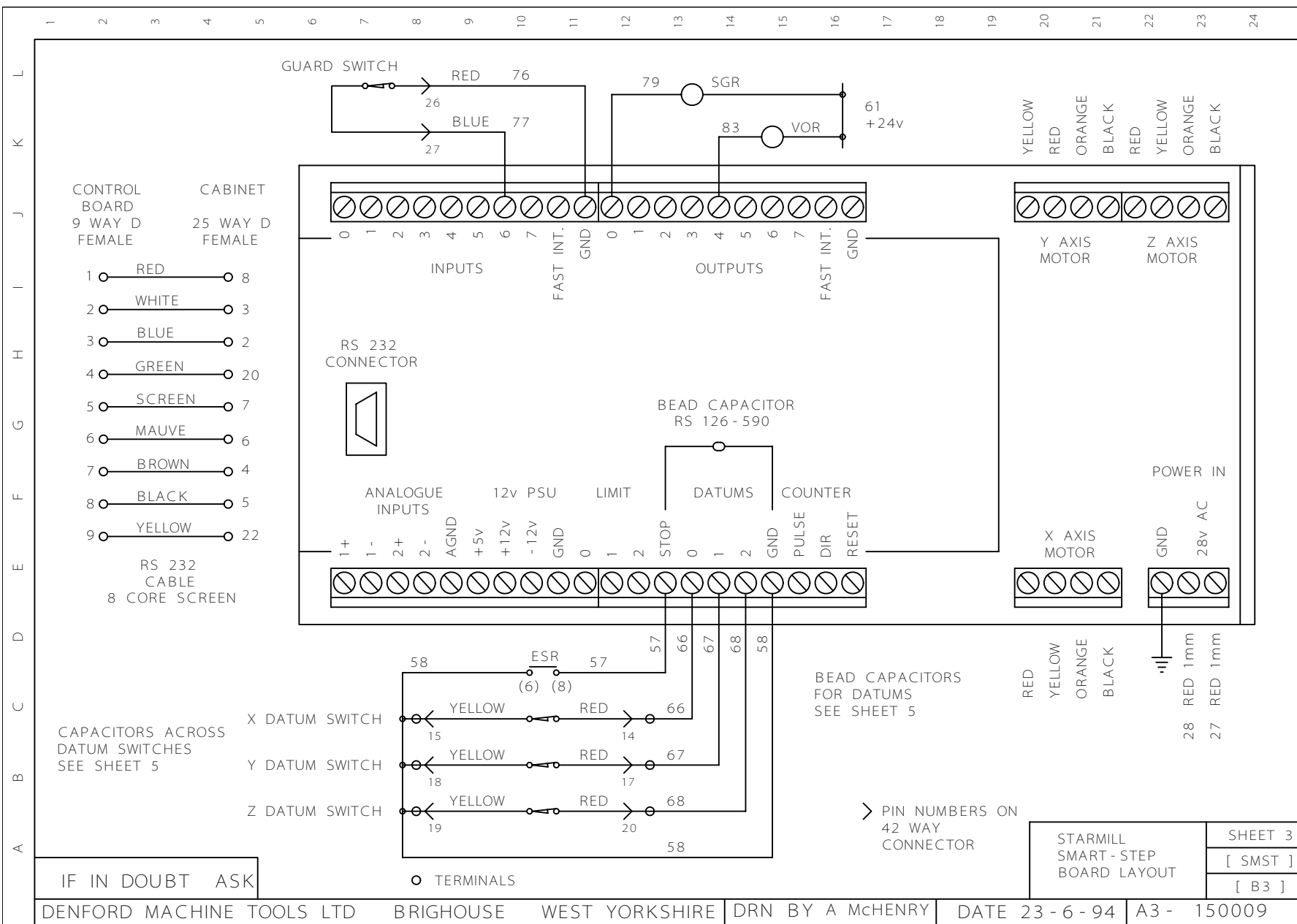
STARMILL
SMART - STEP
POWER SCHEMATIC

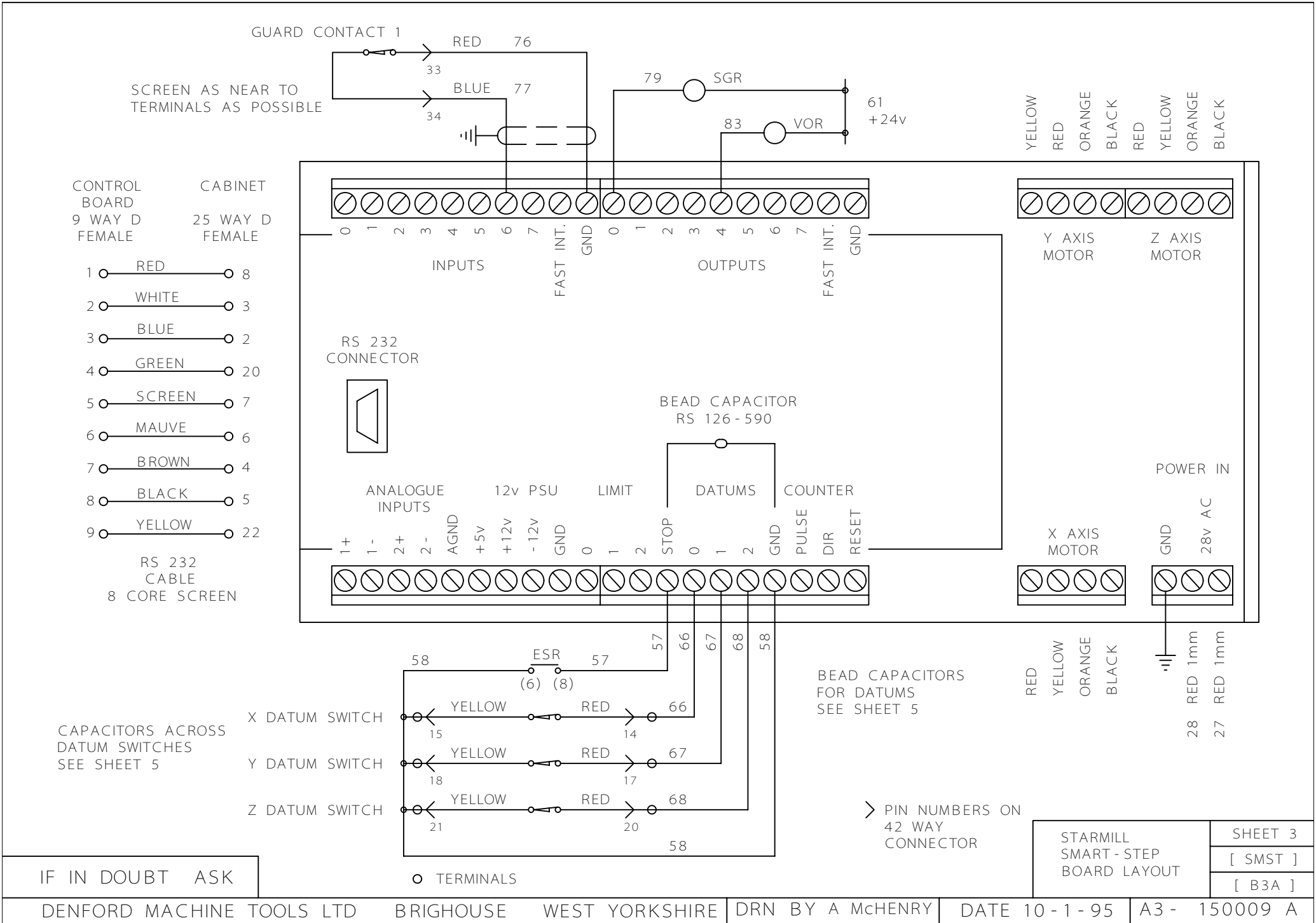
SHEET 1

[SMST]

[B1A]







PIN No	COLOUR	CABLE No
1	RED	1
2	RED	2
3	RED	3
4	RED	4
5	RED	5
6	RED	6
7	RED	7
8	RED	8
9	RED	9
10	RED	10
11	RED	11
12	RED	12
13	RED	13
14	RED	14
15	RED	15
16	RED	16
17	RED	17
18	RED	18
19	RED	19
20	RED	20
21	RED	21
22	RED	22
23	RED	23
24	RED	24
25	RED	25
26	RED	26
27	RED	27
28	RED	28
29	RED	29
30	RED	30
31	RED	31
32	RED	32
33	RED	33
34	RED	34
35	RED	35
36	RED	36
37	RED	37
38	RED	38
39	RED	39
40	RED	40
41	RED	41
42	RED	42
43	RED	43
44	RED	44
45	RED	45
46	RED	46
47	RED	47
48	RED	48
49	RED	49
50	RED	50
51	RED	51
52	RED	52
53	RED	53
54	RED	54
55	RED	55
56	RED	56
57	RED	57
58	RED	58
59	RED	59
60	RED	60
61	RED	61
62	RED	62
63	RED	63
64	RED	64
65	RED	65
66	RED	66
67	RED	67
68	RED	68
69	RED	69
70	RED	70
71	RED	71
72	RED	72
73	RED	73
74	RED	74
75	RED	75
76	RED	76
77	RED	77
78	RED	78
79	RED	79
80	RED	80
81	RED	81
82	RED	82
83	RED	83
84	RED	84
85	RED	85
86	RED	86
87	RED	87
88	RED	88
89	RED	89
90	RED	90
91	RED	91
92	RED	92
93	RED	93
94	RED	94
95	RED	95
96	RED	96
97	RED	97
98	RED	98
99	RED	99
100	RED	100

X AXIS
MOTOR

Y AXIS
MOTOR

Z AXIS
MOTOR

X DATUM
SWITCH

Y DATUM
SWITCHZ DATUM
SWITCH

PIN		CABLE
No	COLOUR	No

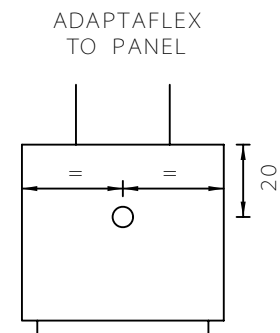
SPINDLE
MOTOR

GUARD
SWITCH

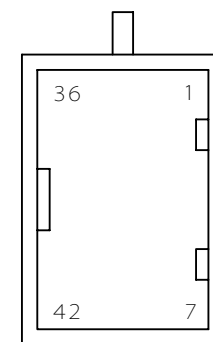
E - STOP

NOTE :
SPINDLE MOTOR WIRES
1mm 4 CORE SCREEN

REST OF WIRES
0.2mm SINGLES



4mm AIR PIPE
FOR POWER VICE
(OPTION)



ADAPTAFLEX
END
(FEMALE PINS)

42 WAY HOOD
BI 00357 Z
MALE INSERT
BI 00357 H

⊘ 4.0mm EARTH

IF IN DOUBT ASK

STARMILL
SMART - STEP
HARTING
CONNECTIONS

SHEET 4

[SMST]

[B4]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

[illegible]

Y AXIS
MOTOR

X DATU
SWITCHY DATU
SWITCHZ DATU
SWITCH

0.2mm
SINGLES

0.2mm
SINGLES

0.2mm
SINGLES

0.2mm
SINGLES

0.2mm
SINGLES

0.2mm
SINGLEFS

22	BROWN	20
23	BLUE	21
24	EARTH	E
25	SCREEN	5
26		
27		
28		
29	RED	48
30	BLUE	61
31	YELLOW	61
32	GREEN	89
33	RED	76
34	BLUE	77
35		
36		
37	RED	91
38	BLUE	61
39	YELLOW	90
40	GREEN	60
41		
42		

E - STOP
CONTACT

E - STOP
CONTACT

GUARD
CONTACT

GUARD
CONTACT

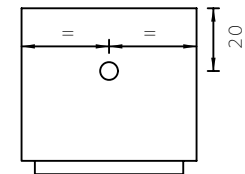
GUARD
SOLENOI

1.5mm
4 CORE
SCREEN

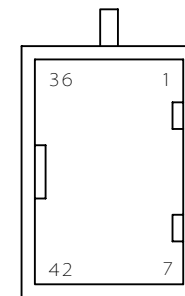
4 CORE
SCREEN

2 CORE
SCREEN

4 CORE
SCREEN



4mm AIR PIPE
FOR POWER VICE
(OPTION)



ADAPTAFLEX
END
(FEMALE PINS)

42 WAY HOOD
BI 00357 Z
MALE INSERT
BI 00357 H

4.0mm EARTH

IF IN DOUBT ASK

STARMILL
SMART - STEP
HARTING
CONNECTIONS

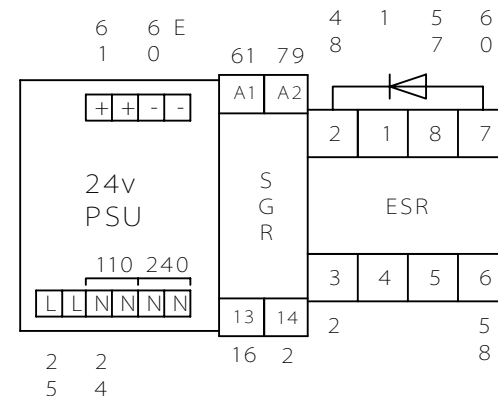
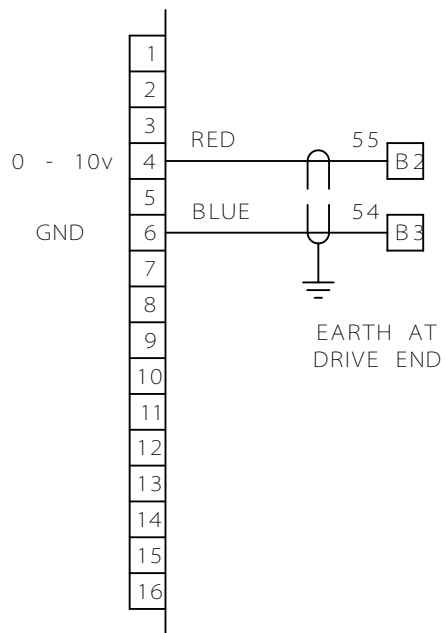
SHEET 4

[SMST]

[B4A]

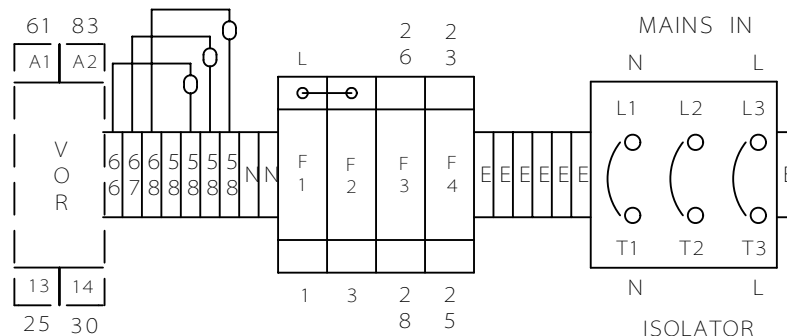
SGR SPINDLE GO RELAY
 ESR EMERGENCY STOP RELAY
 VOR VICE OPEN RELAY
 (OPTION)

SPINDLE ANALOGUE BOARD ROW A



- F1 SPINDLE DRIVE 6.3 AMP
- F2 CONTROL TRANS 6.3 AMP
- F3 SMARTSTEP 3.15 AMP
- F4 110v CIRCUIT 3.15 AMP

BEAD CAPACITORS RS 126 - 590



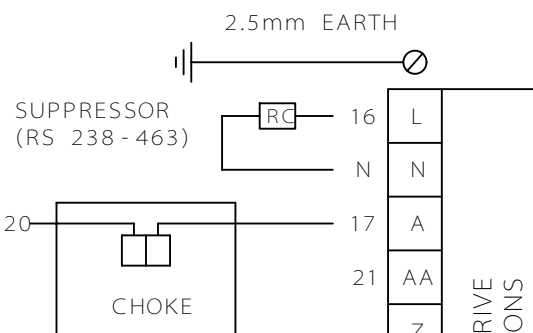
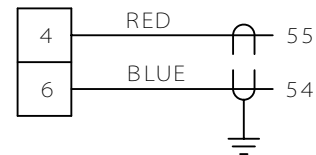
ES	E
0v	N
110v	
120v	
220v	
240v	3
28v	26
100 VA	27
110v	23
75 VA	24

CONTROL
 TRANS

2 CORE SCREEN
 EARTH AT DRIVE END

0 - 10v
 FROM
 SPINDLE
 ANALOGUE
 BOARD

ROW A



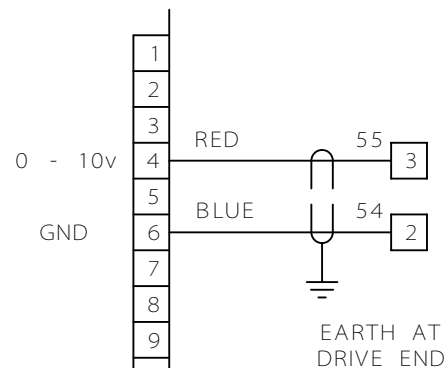
SPINDLE DRIVE
 CONNECTIONS

IF IN DOUBT ASK

STARMILL
 SMART - STEP
 RELAY WIRING

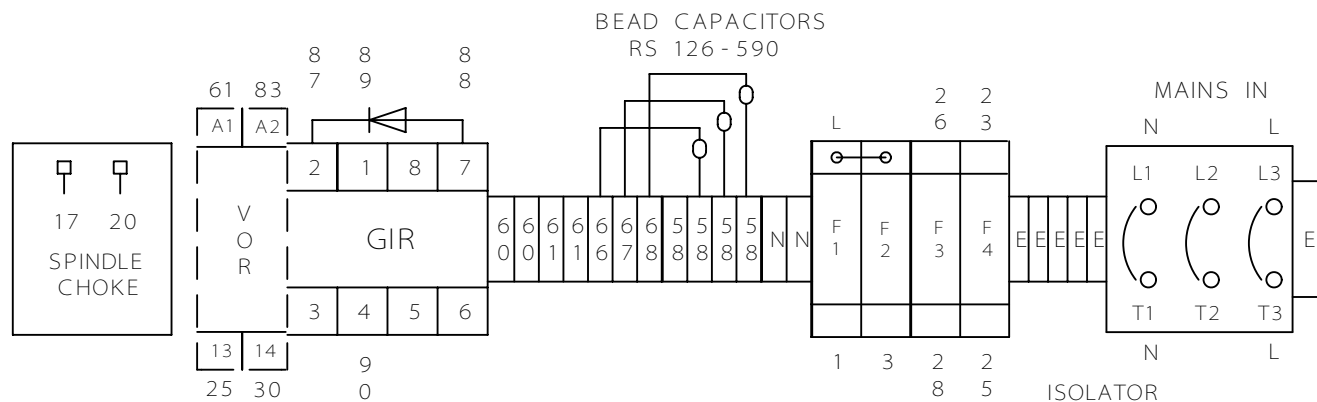
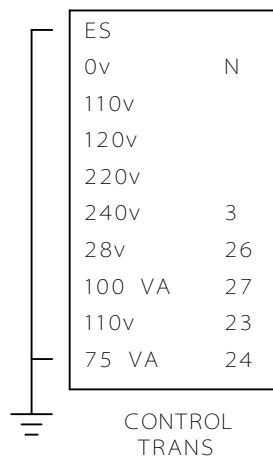
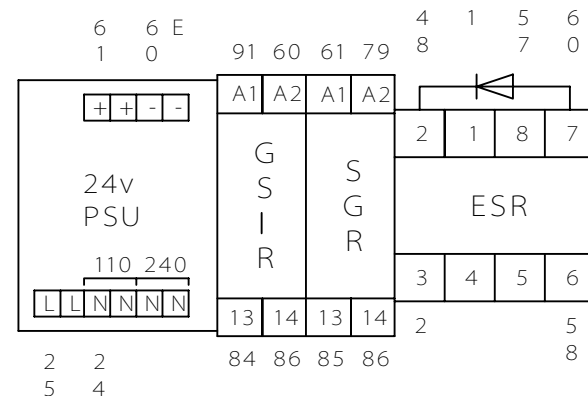
SHEET 5
 [SMST]
 [B5]

SPINDLE
ANALOGUE BOARD
ROW A



SGR SPINDLE GO RELAY
ESR EMERGENCY STOP RELAY
GIR GUARD INTERLOCK RELAY
GSIR GUARD/SPINDLE INTERLOCK RELAY
VOR VICE OPEN RELAY
(OPTION)

F1 SPINDLE DRIVE 6.3 AMP
F2 CONTROL TRANS 6.3 AMP
F3 SMARTSTEP 3.15 AMP
F4 110V CIRCUIT 3.15 AMP

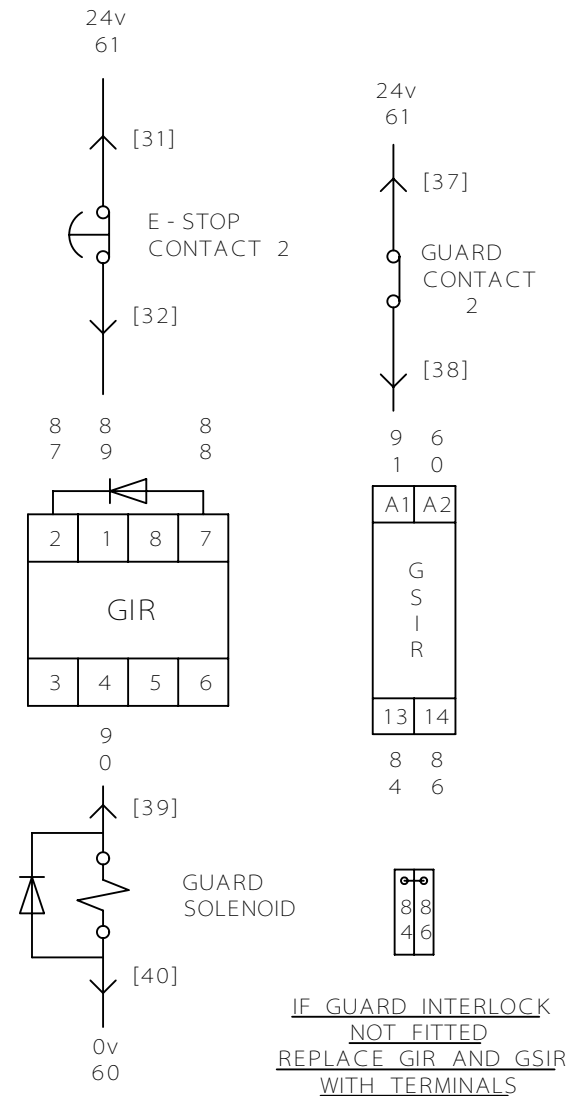
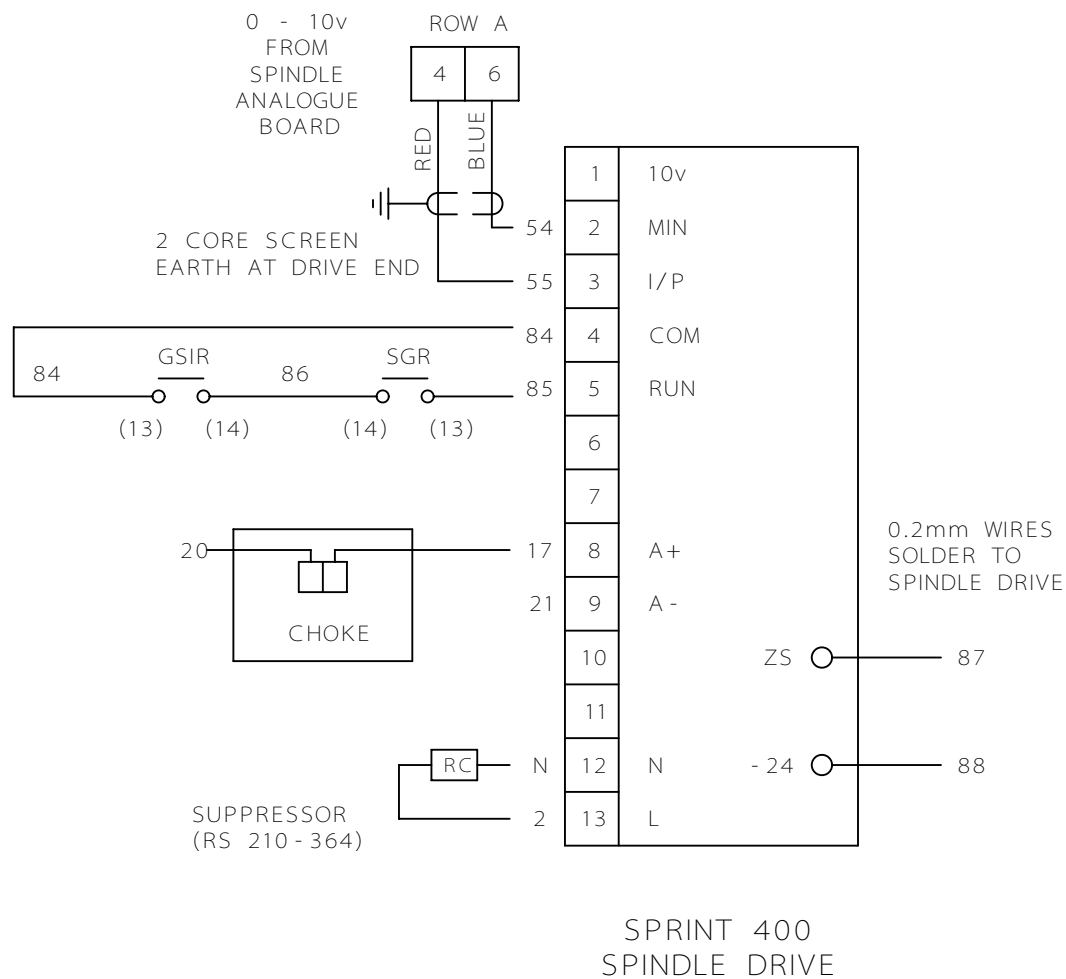


FOR SPINDLE DRIVE DETAILS
SEE SHEET 6

IF IN DOUBT ASK

STARMILL
SMART-STEP
RELAY WIRING

SHEET 5
[SMST]
[B5A]

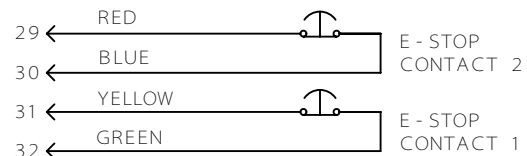
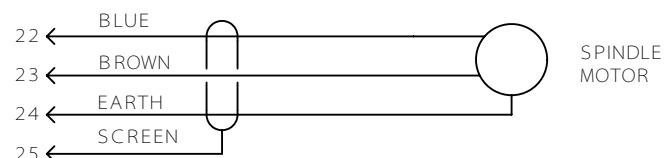
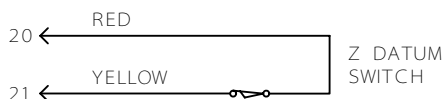
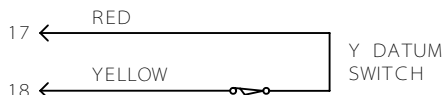
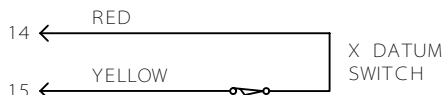


IF IN DOUBT ASK

IF IN DOUBT ASK

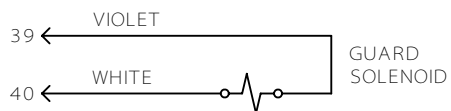
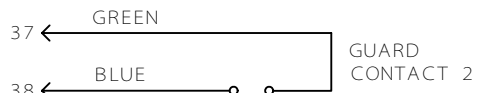
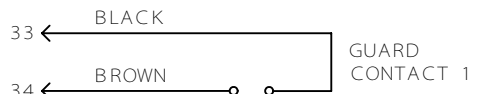
LINK

RED/WHITE + YELLOW/WHITE
BLACK/WHITE + ORANGE/WHITE

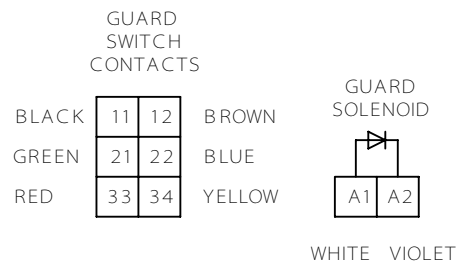


INTERLOCK GUARD SWITCH
WITH SOLENOID

(REMOVE LINK 12 - 41)

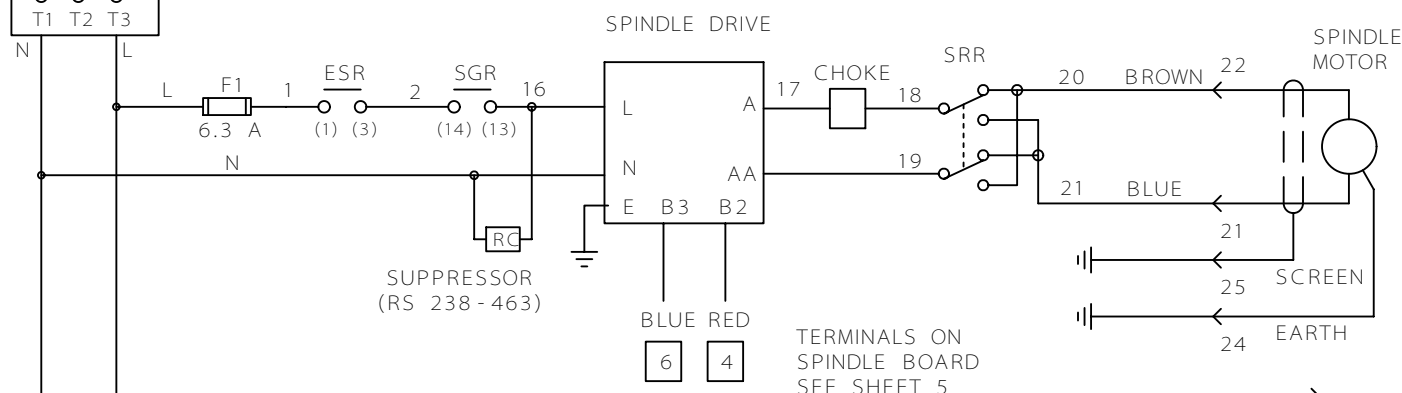
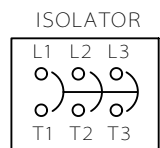


8 CORE SCREEN
FROM GUARD INTERLOCK



STARMILL
SMART - STEP
MOTOR AND SWITCH
WIRING

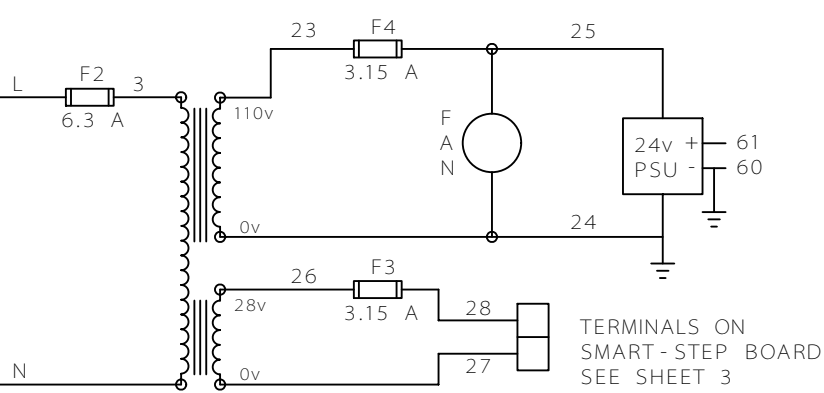
SHEET 7
[SMST]
[S7]



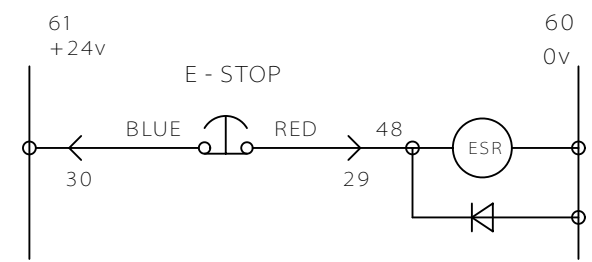
NUMBERS IN BRACKETS
REFER TO PIN NUMBERS
ON THE RELAYS

TERMINALS ON
SPINDLE BOARD
SEE SHEET 5

> PIN NUMBERS ON
42 WAY
CONNECTOR



TERMINALS ON
SMART-STEP BOARD
SEE SHEET 3

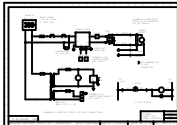


E-STOP CIRCUIT

NUMBERS IN BRACKETS REFER TO RELAY CONNECTIONS

IF IN DOUBT ASK

STARMILL SMART-STEP POWER SCHEMATIC	SHEET 1
	[SPC]
	[N1]

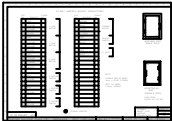


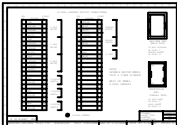


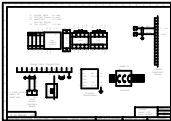




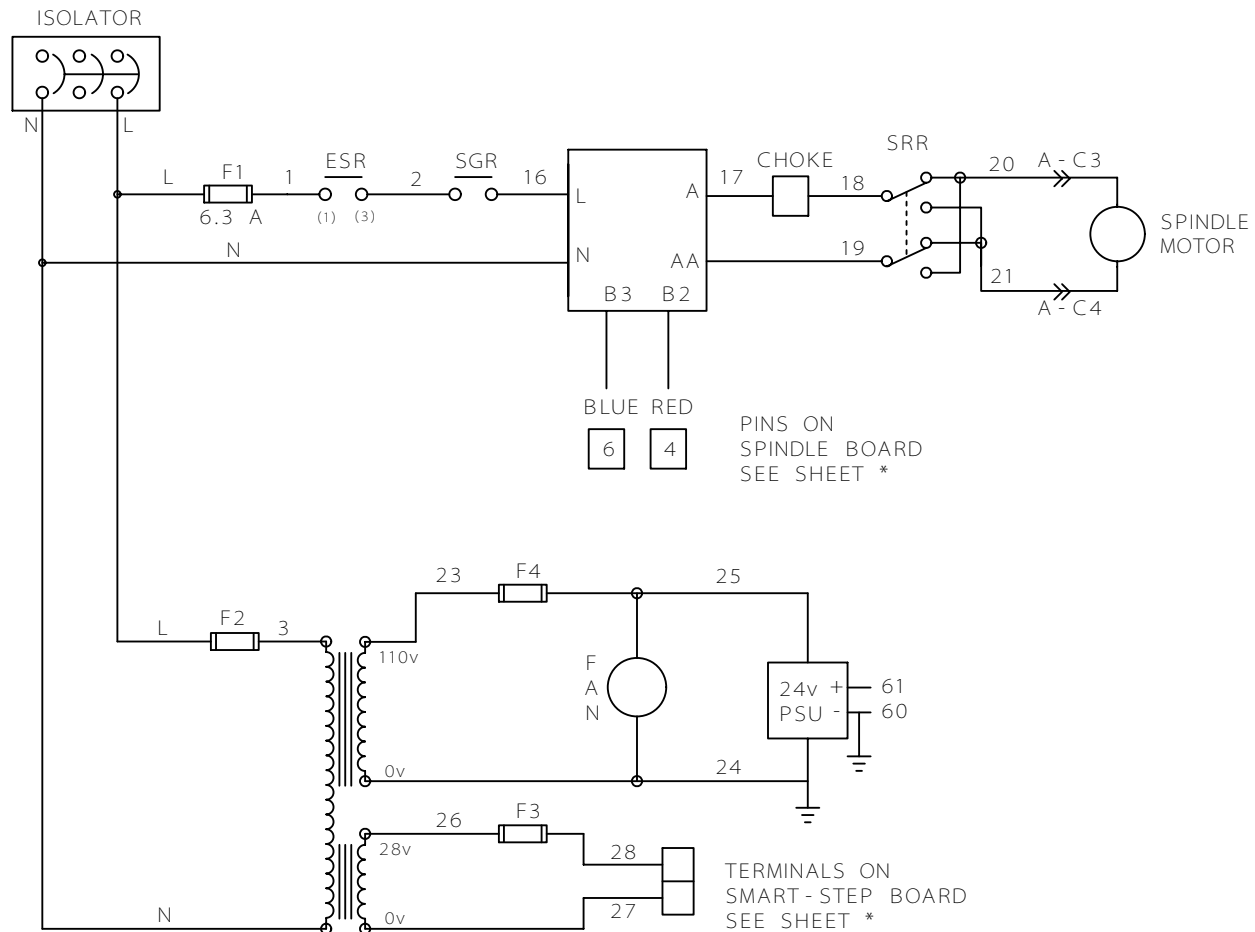






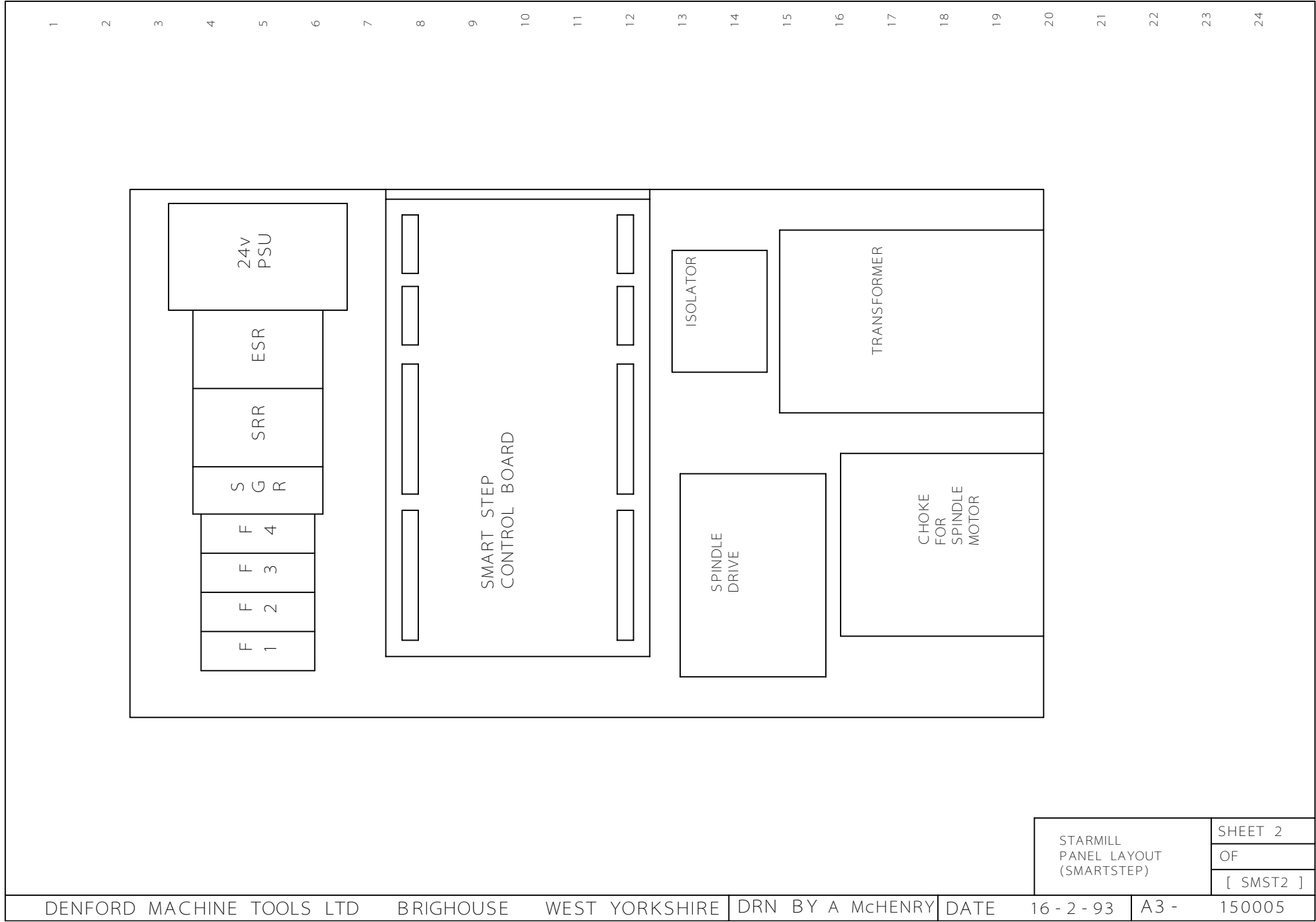




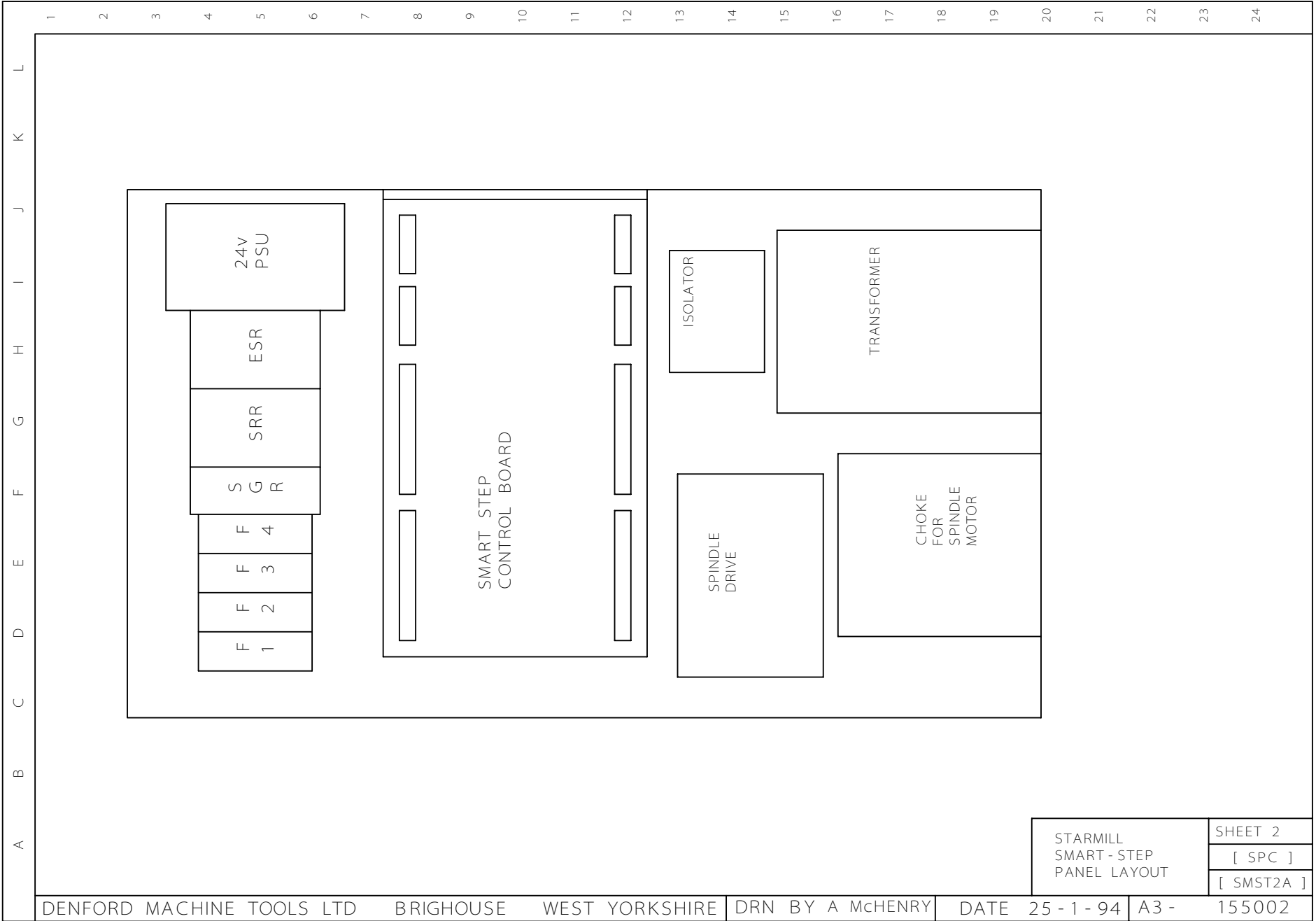


STARMILL
SMART-STEP
POWER SCHEMATIC

SHEET 1
[SPC]
[SMST1]



STARMILL PANEL LAYOUT (SMARTSTEP)	SHEET 2
	OF
	[SMST2]



STARMILL SMART-STEP PANEL LAYOUT	SHEET 2
	[SPC]
	[SMST2A]

