



WIRING SCHEMATICS

MDL 1600 / MDL 1800

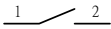
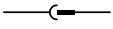
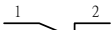
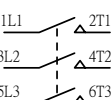
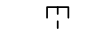
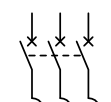
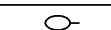
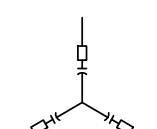
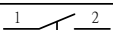
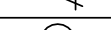
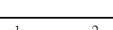
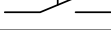
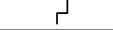
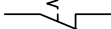
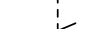
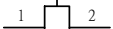
CNC Flat Bed Lathe



Wiring Schematics CE

1		2		3		4		5		6	
A											A
B	MACHINE TYPE : TF410/480 4T CONTROLLER TYPE : EV355 PROJECT NAME : TF480_355 VERSION : A										B
C											C
D											D
APPROVED		CHECKED		DRAWN		MACH Machine Tools Ltd		Title COVER SHEET			
				Mark				NO CNC LATHE MACHINE		Model MDL 1600/1800	
						Edit A		Page 1/1		DWG NO. TF480_355_CEO	
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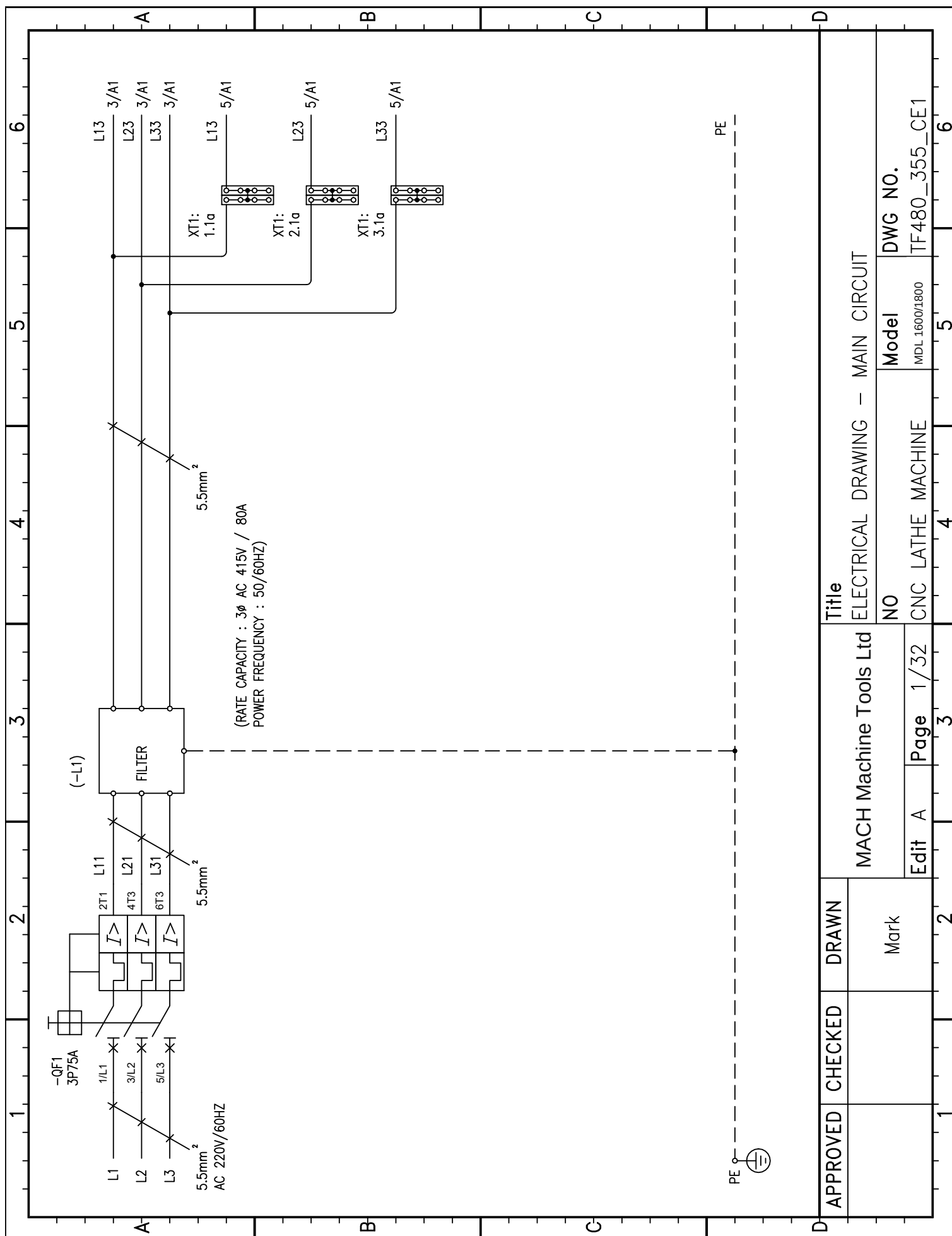
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	TF480_355_CE1	MAIN POWER CIRCUIT			主電源迴路		TF480_355_CE21	PANEL INPUT CIRCUIT			PLC控制迴路						
	TF480_355_CE1.1	MAIN POWER CIRCUIT			主電源迴路		TF480_355_CE22	SAFETY CONTROLLER			安全模組迴路						
	TF480_355_CE2	INVERTER POWER			變頻器迴路		TF480_355_CE23	SAFETY CONTROLLER			安全模組迴路						
	TF480_355_CE2.1	INVERTER POWER			變頻器迴路		TF480_355_CE24	SAFETY CONTROLLER			安全模組迴路						
	TF480_355_CE3(3.1)	X SERVO POWER			伺服迴路		TF480_355_CE25	SAFETY CONTROLLER			安全模組迴路						
	TF480_355_CE4(4.1)	Z SERVO POWER			伺服迴路		TF480_355_CE26	EMERGENCY STRING			緊急停止迴路						
	TF480_355_CE5(5.1)	MILL SERVO POWER			伺服迴路		TF480_355_CE27	SYSTEM BLOCK			系統方塊圖						
	TF480_355_CE6	SUB POWER SYSTEM			副動力電源迴路		TF480_355_CE29	LOCATION DIAGRAM(TF480)			元件布置圖						
	TF480_355_CE6.1	SUB POWER SYSTEM			副動力電源迴路		TF480_355_CE29.1	LOCATION DIAGRAM(TF410)			元件布置圖						
	TF480_355_CE6.2	SUB POWER SYSTEM			副動力電源迴路		TF480_355_CE30	LOCATION DIAGRAM(RELAY BOARD AP1)			元件布置圖						
	TF480_355_CE7	DC POWER & SUB POWER SYSTEM			直流電源迴路		TF480_355_CE31	LOCATION DIAGRAM(RELAY BOARD AP2)			元件布置圖						
	TF480_355_CE8	CONTACTOR CIRCUIT			電磁接觸器迴路		TF480_355_CE32	LOCATION DIAGRAM(CIRCUIT BREAKER)			元件布置圖						
	TF480_355_CE9	PLC INPUTS CIRCUIT			電磁接觸器迴路		TF480_355_CE33	LOCATION DIAGRAM(SAFETY CONTROLLER)			元件布置圖						
	TF480_355_CE10	PLC INPUTS CIRCUIT			PLC控制迴路		TF480_355_CE34	LOCATION DIAGRAM(RELAYS&DC POWER)			元件布置圖						
	TF480_355_CE11	PLC INPUTS CIRCUIT			PLC控制迴路		TF480_355_CE35	LOCATION DIAGRAM(TERMINAL)			元件布置圖						
	TF480_355_CE12	PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE36	LOCATION DIAGRAM(CONTACTOR)			元件布置圖						
	B	TF480_355_CE13	PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE37	LOCATION DIAGRAM(GROUNG BLOCK)			元件布置圖					
		TF480_355_CE14	PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE38	LOCATION DIAGRAM(RELAY BOARD AP3)			元件布置圖					
TF480_355_CE15		PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE39	LOCATION DIAGRAM(TERMINAL)			元件布置圖						
TF480_355_CE16		PLC INPUTS CIRCUIT			PLC控制迴路		TF480_355_CE40	LOCATION DIAGRAM(TRANSFORMER TC2)			元件布置圖						
TF480_355_CE17		PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE41	LOCATION DIAGRAM(INVERTER)			元件布置圖						
TF480_355_CE18		PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE42	LOCATION DIAGRAM(SERVO DRIVER TF480)			元件布置圖						
TF480_355_CE19		PLC OUTPUTS CIRCUIT			PLC控制迴路		TF480_355_CE42.1	LOCATION DIAGRAM(SERVO DRIVER TF410)			元件布置圖						
TF480_355_CE20		MPG CONTROL CIRCUIT			手輪迴路												
C																	
D	APPROVED	CHECKED	DRAWN	MACH Machine Tools Ltd			Title										
			Mark				TABLE OF CONTENTS										
				Edit A	Page 1/1	NO			Model	DWG NO.							
						CNC LATHE MACHINE			MDL 1600/1800	TF480_355_CEO.1							
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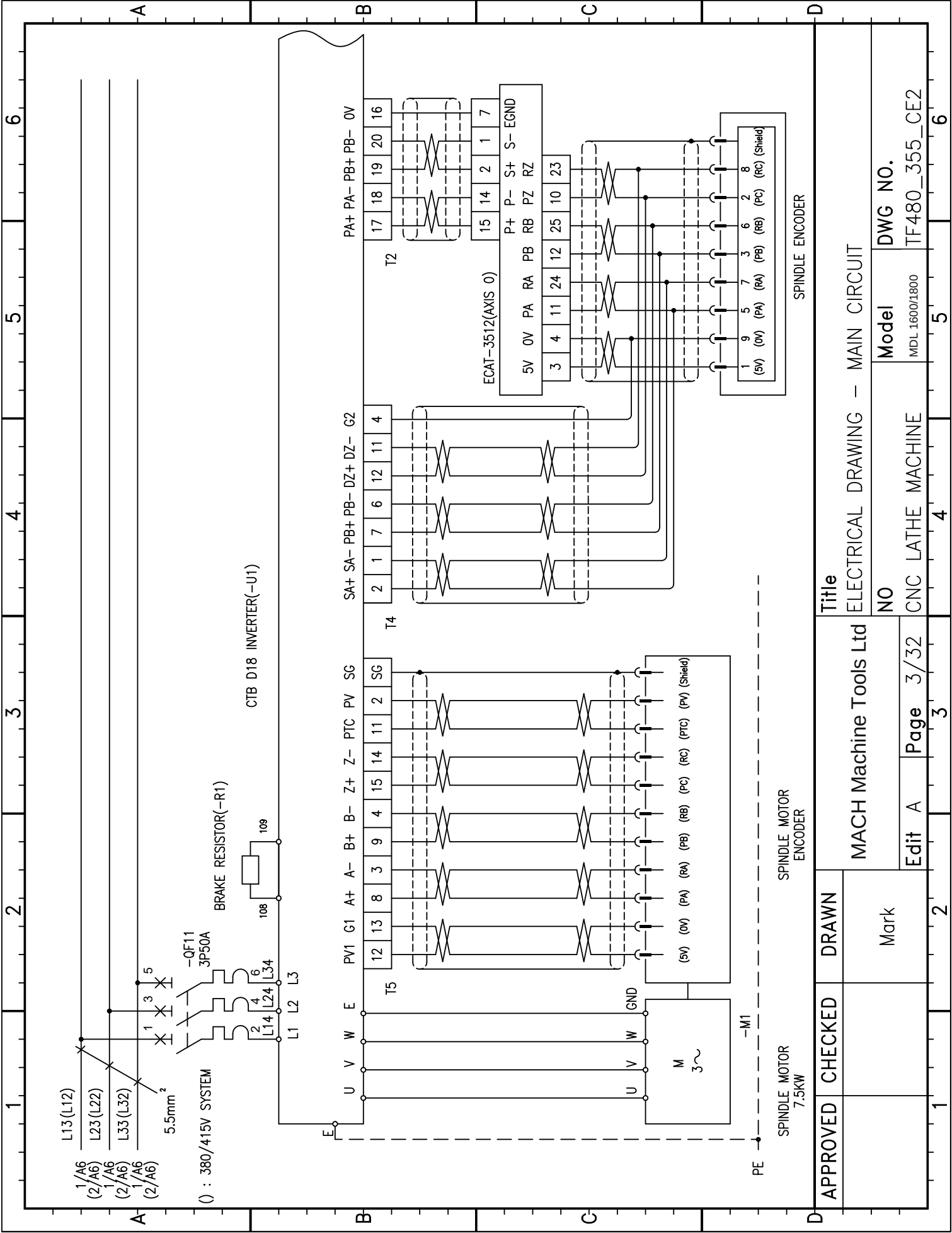
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			LIMIT SWITCH (MAKE CONTACT)				TERNIMAL BLOCK NO.				RELAY, MAGNETIC SWITCH CONTACT (MAKE CONTACT)	
			LIMIT SWITCH (BREAK CONTACT)				CONNECTOR NO. & PIN NO.				RELAY, MAGNETIC SWITCH CONTACT (BREAK CONTACT)	
			PUSH BUTTON (MAKE CONTACT)				PROXIMITY SWITCH (MAKE CONTACT) (2-LINES)				CONTACTOR	
			PUSH BUTTON (BREAK CONTACT)				PROXIMITY SWITCH (BREAK CONTACT) (2-LINES)					
			PRESSURE SWITCH (MAKE CONTACT)				PROXIMITY SWITCH (MAKE CONTACT) (3-LINES)				CIRCUIT BREAKER	
			PRESSURE SWITCH (BREAK CONTACT)				PROXIMITY SWITCH (BREAK CONTACT) (3-LINES)					
			FLOAT SWITCH (MAKE CONTACT)				LAMP				SPARK KILLER (3 PHASE)	
			FLOAT SWITCH (BREAK CONTACT)				THERMAL SWITCH (MAKE CONTACT)					
			EMERGENCY STOP (MAKE CONTACT)				THERMAL SWITCH (BREAK CONTACT)					
			EMERGENCY STOP (BREAK CONTACT)				THERMAL RELAY					
			KEY SWITCH (MAKE CONTACT)				SOLENOID					
			KEY SWITCH (BREAK CONTACT)				CONTACTOR, RELAY				GROUND	
B												
C												
D												
1		2		3		4		5		6		

APPROVED	CHECKED	DRAWN	MACH Machine Tools Ltd		Title	
		Mark			DIAGRAM SYMBLE	
			Edit	A	Page	1/1
					CNC LATHE MACHINE	

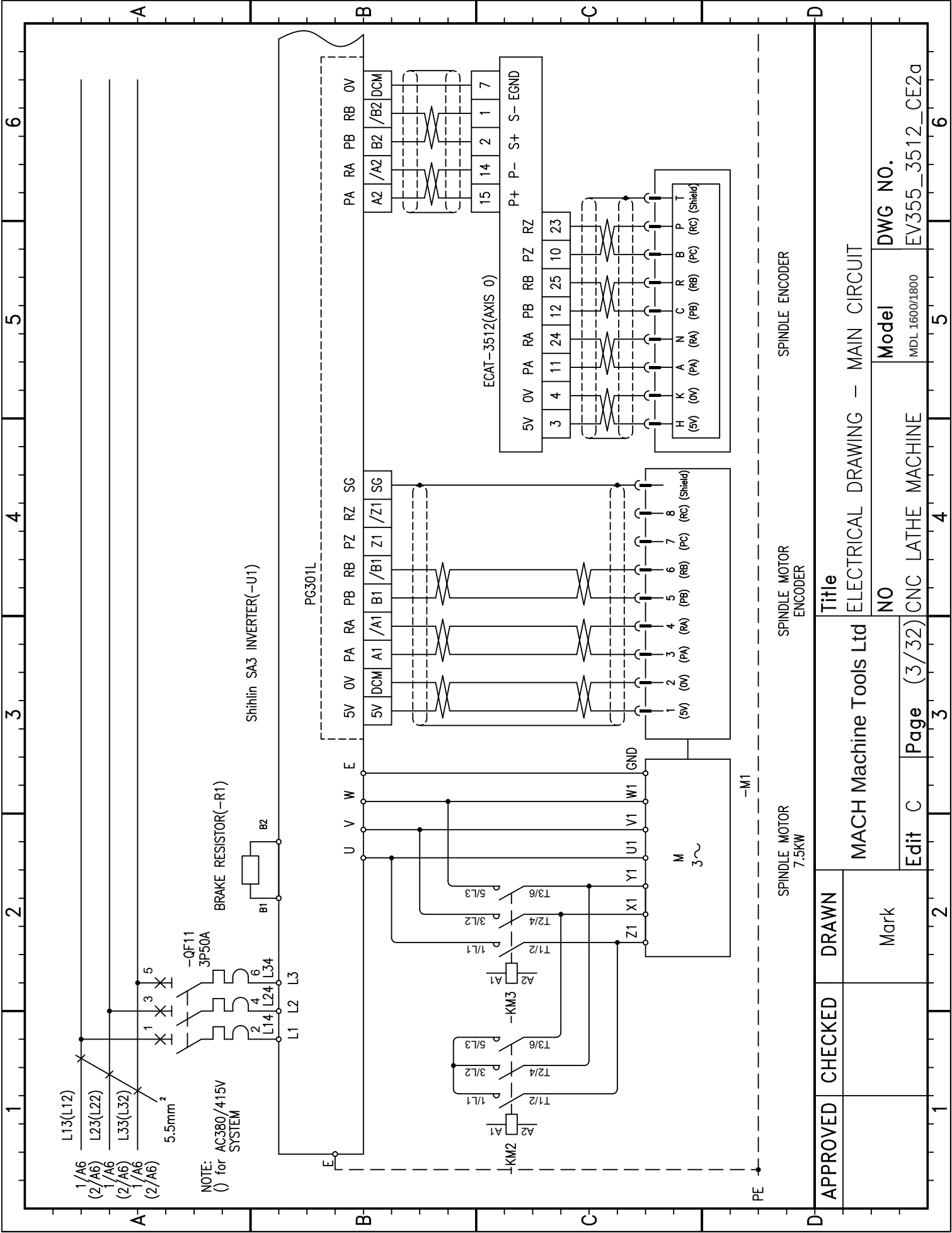
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MDL 1600/1800	TF480_355_CE0.2

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Title

ELECTRICAL DRAWING – MAIN CIRCUIT

NO

DWG NO.

MACH Machine Tools Ltd

Model
MDL 1600/1800

Edit C Page (3/32)

CNC LATHE MACHINE

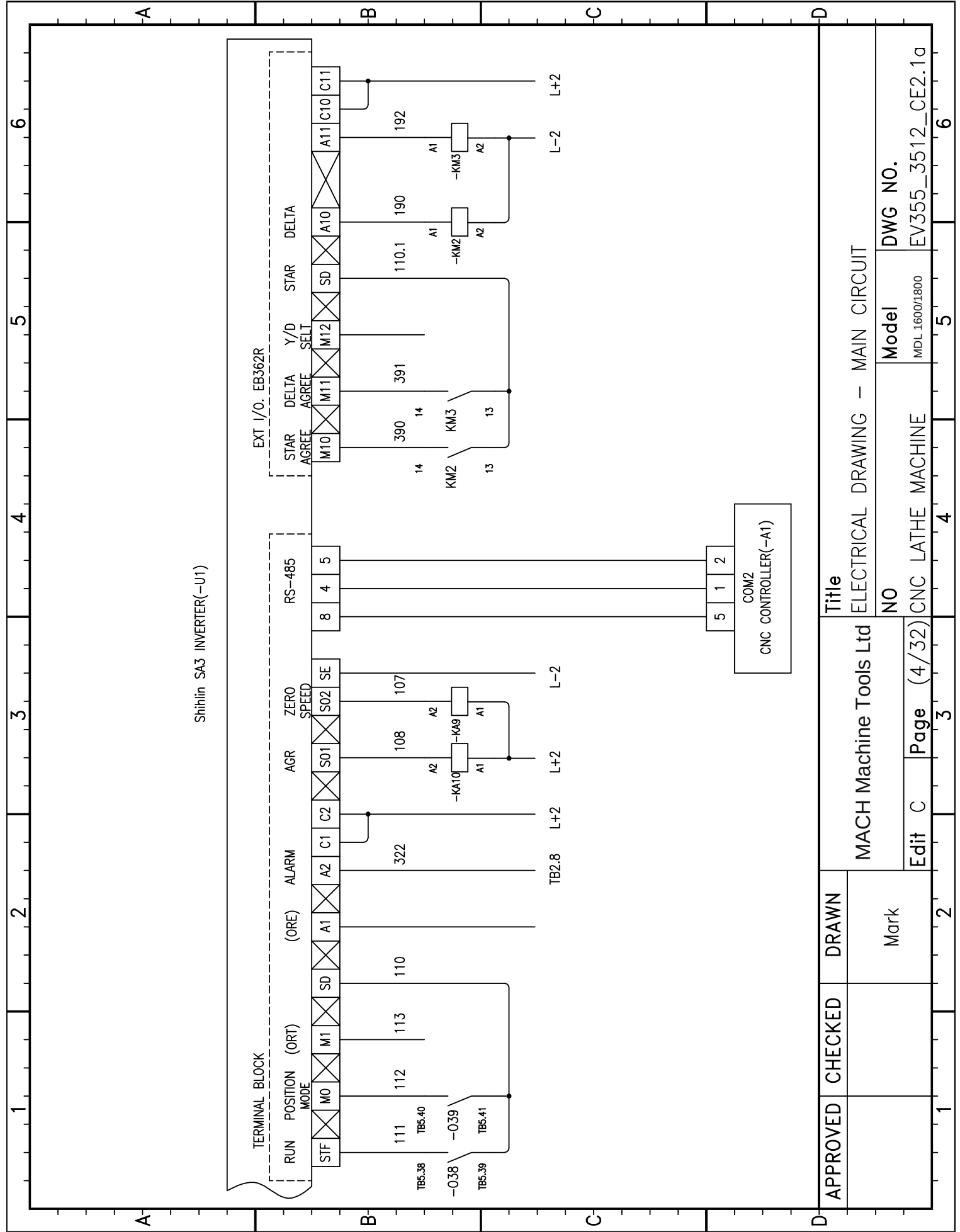
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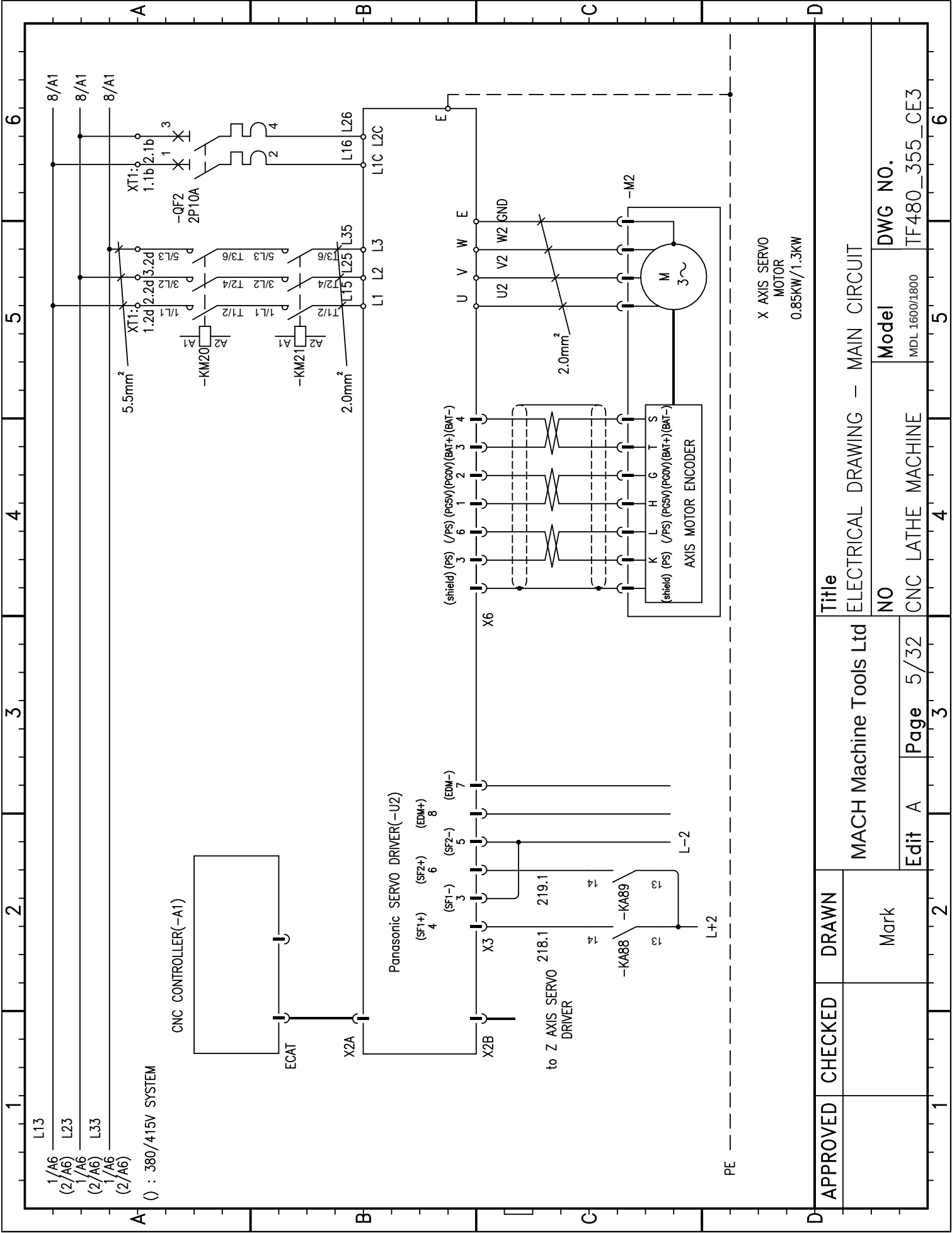
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – MAIN CIRCUIT

NO

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3

CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

TF480_355_CE3

DRAWN

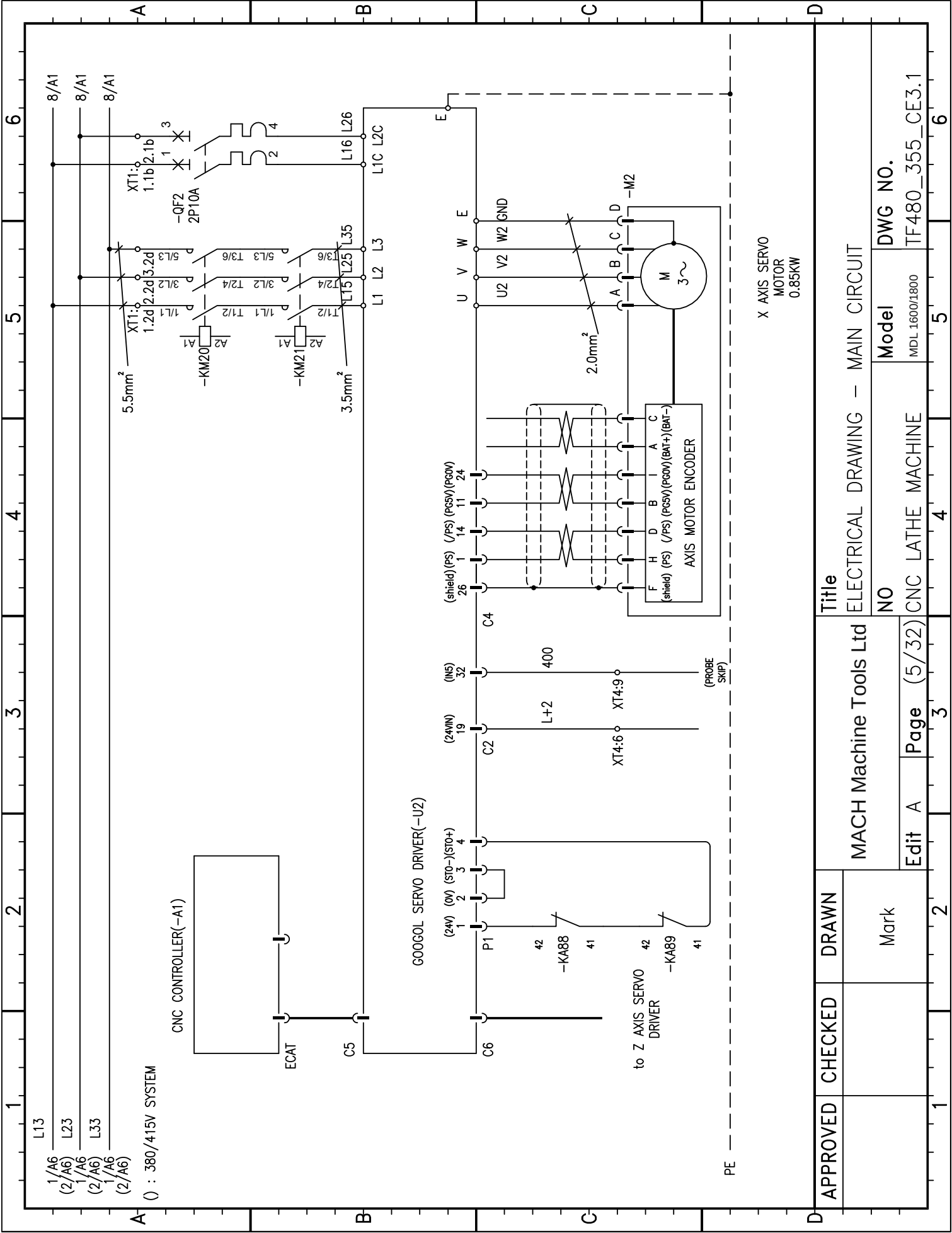
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – MAIN CIRCUIT

NO

Page (5/32)

CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

TF480_355_CE3.1

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DRAWN

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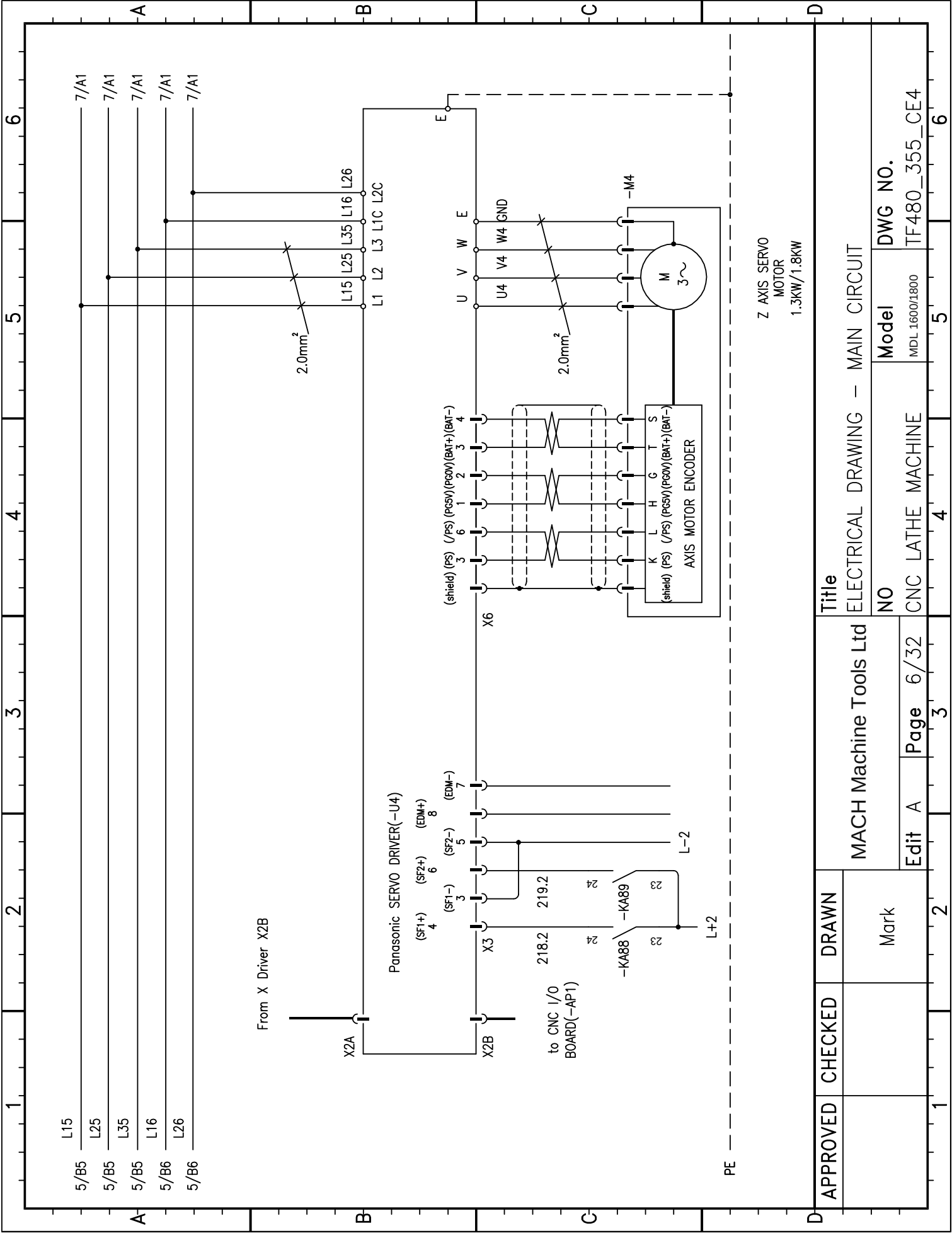
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – MAIN CIRCUIT

NO

CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

TF480_355_CE4

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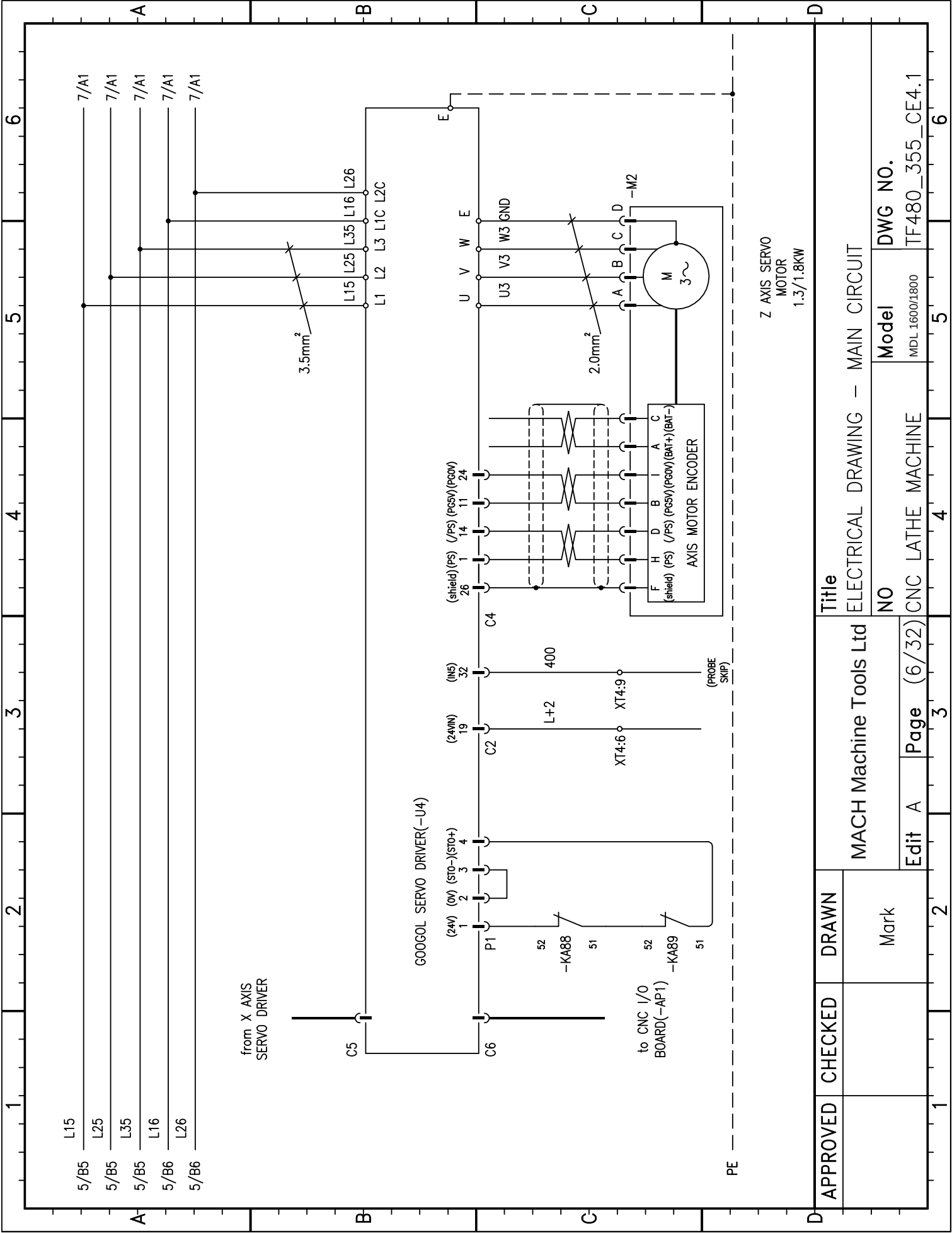
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – MAIN CIRCUIT

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CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

TF480_355_CE4.1

DRAWN

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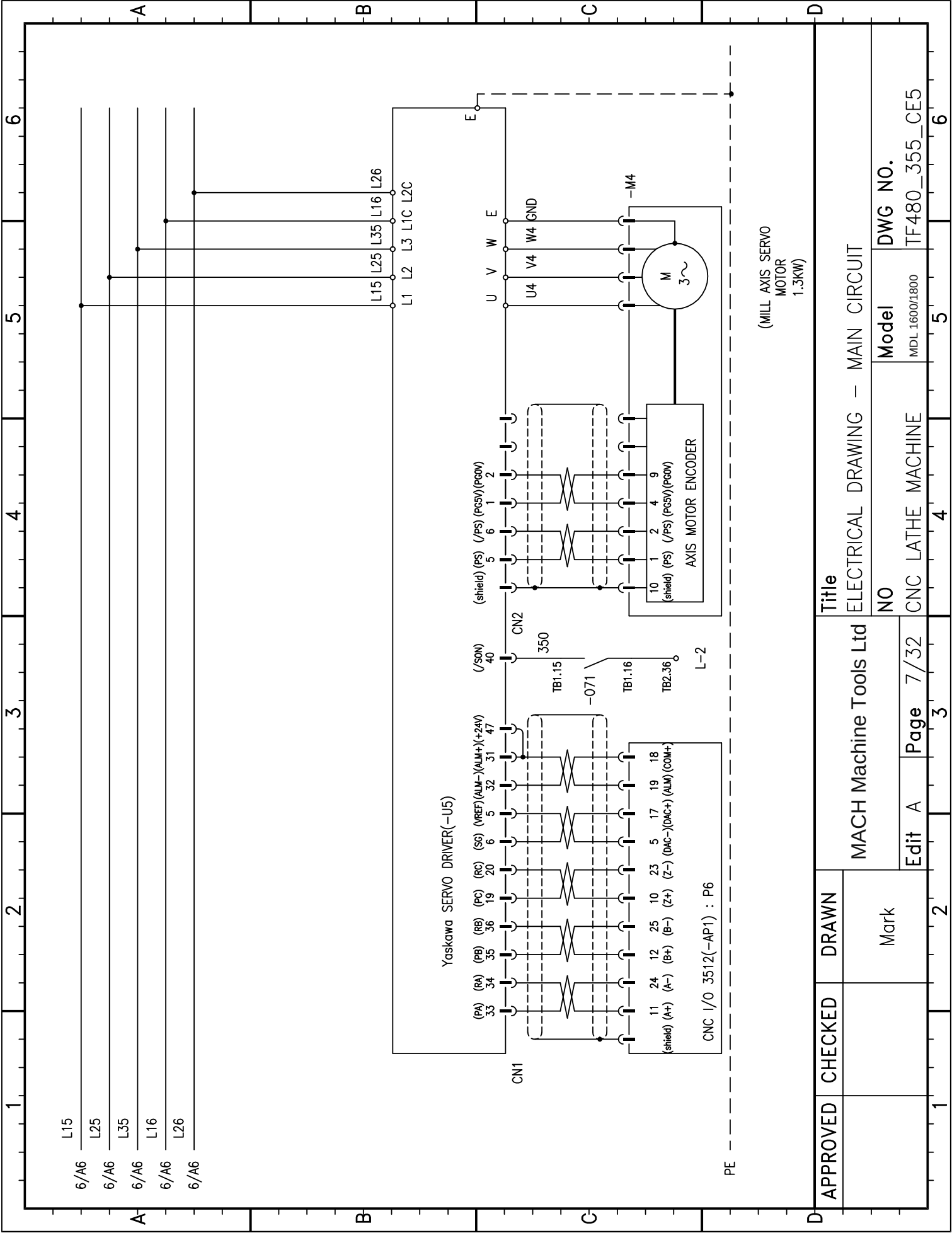
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – MAIN CIRCUIT

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CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

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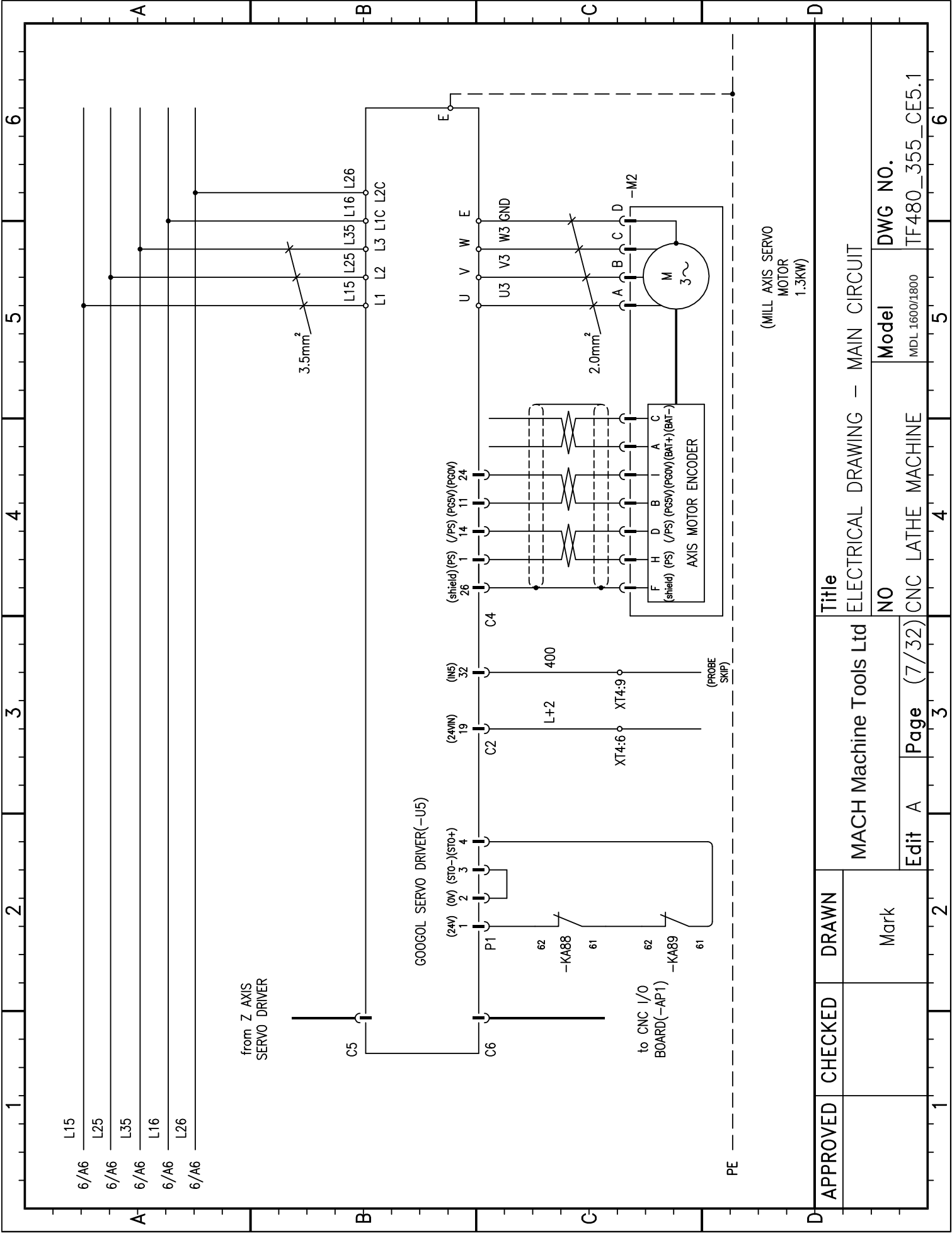
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – MAIN CIRCUIT

NO

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CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

TF480_355_CE5.1

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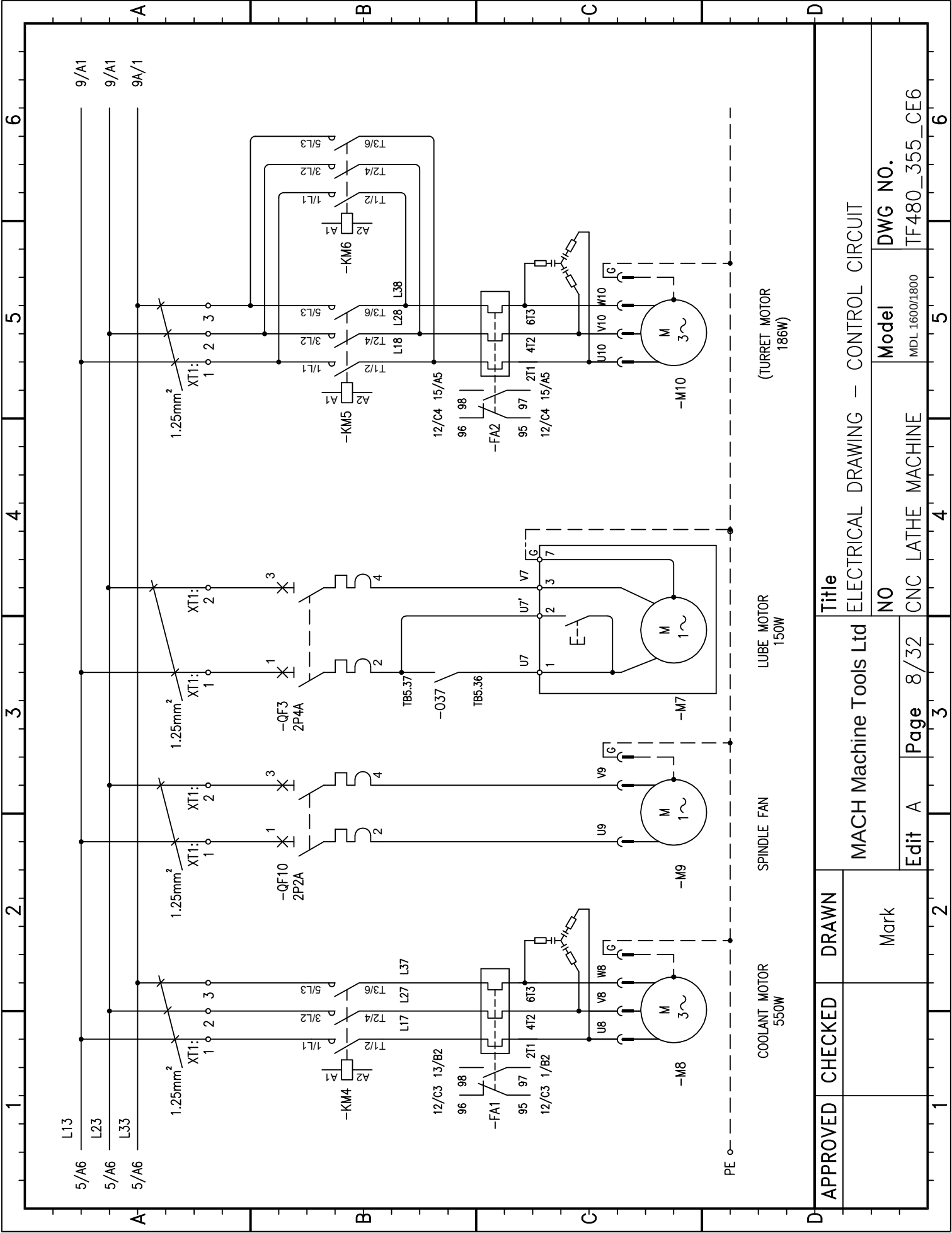
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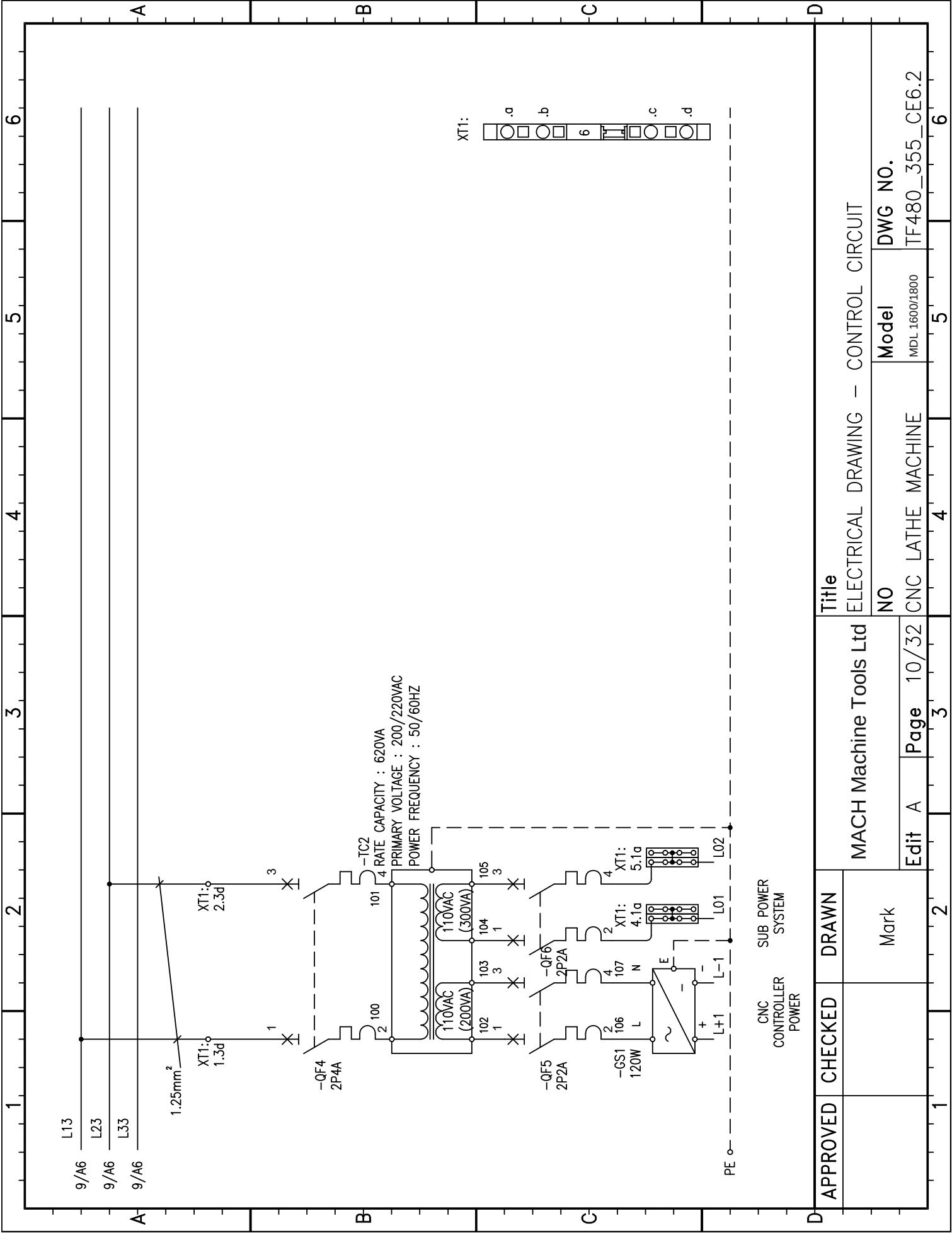
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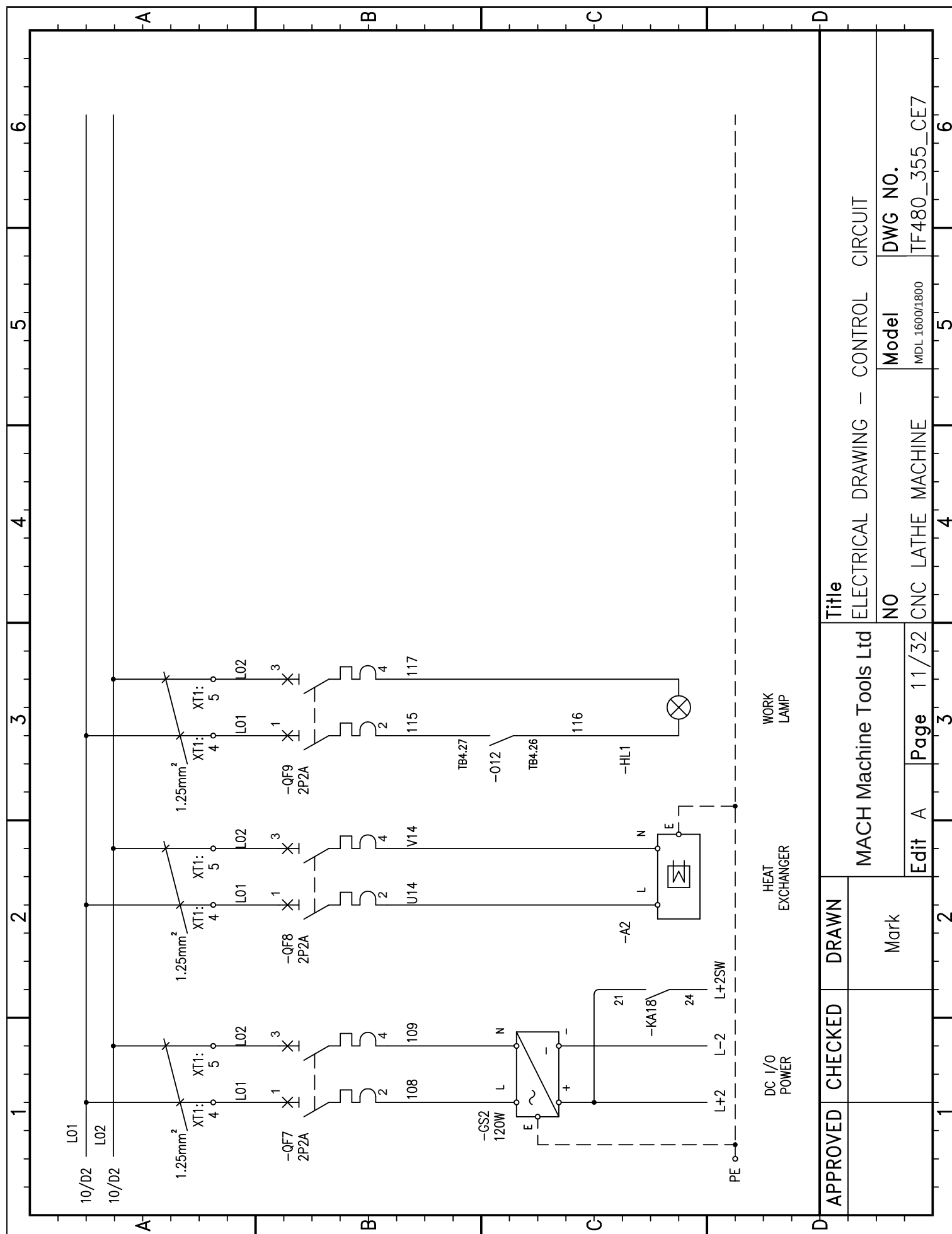
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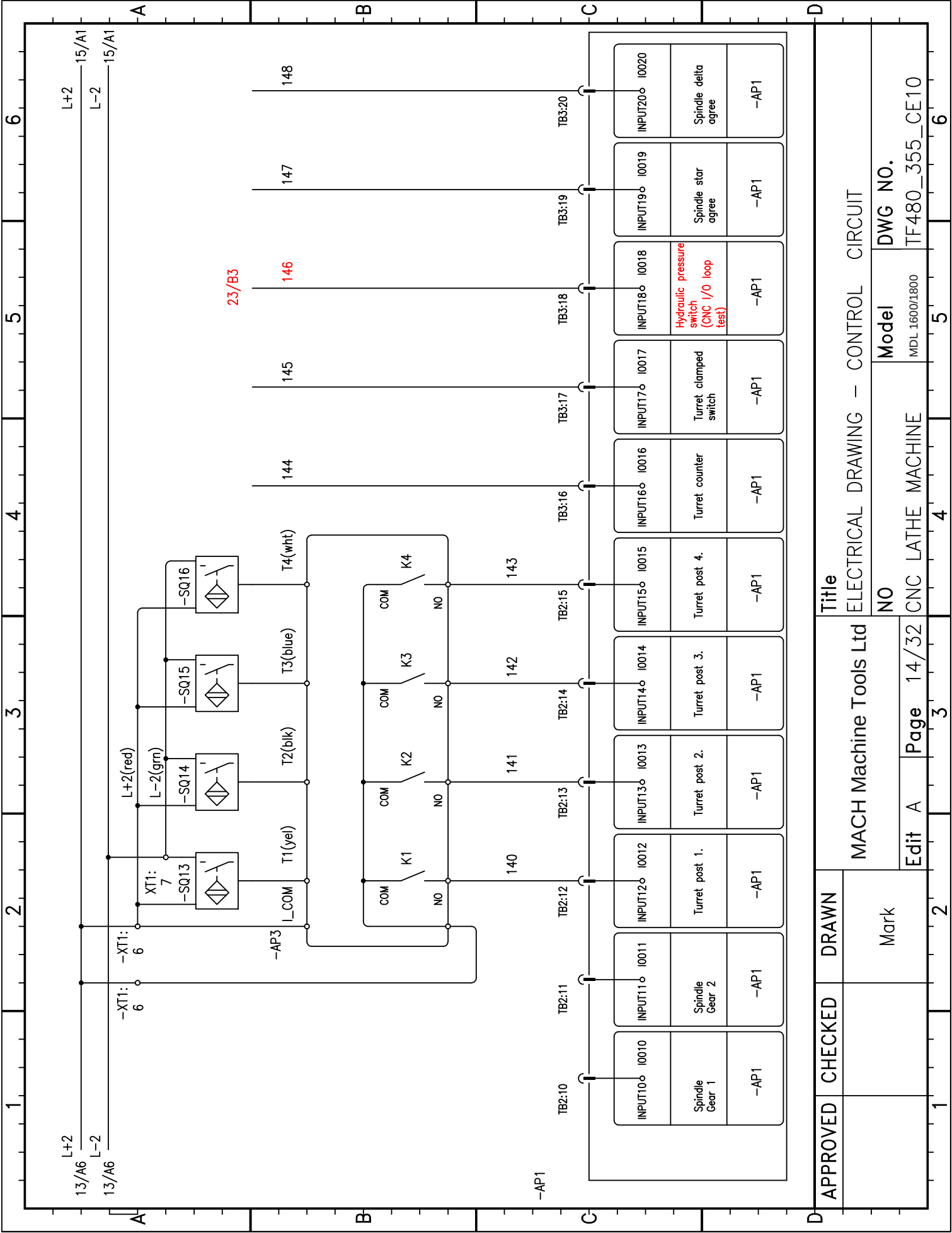
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			Edit A			Page 8/32			MDL 1600/1800		







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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – CONTROL CIRCUIT

NO

CNC LATHE MACHINE

DWG NO.

Model

MDL 1600/1800

TF480_355_CE10

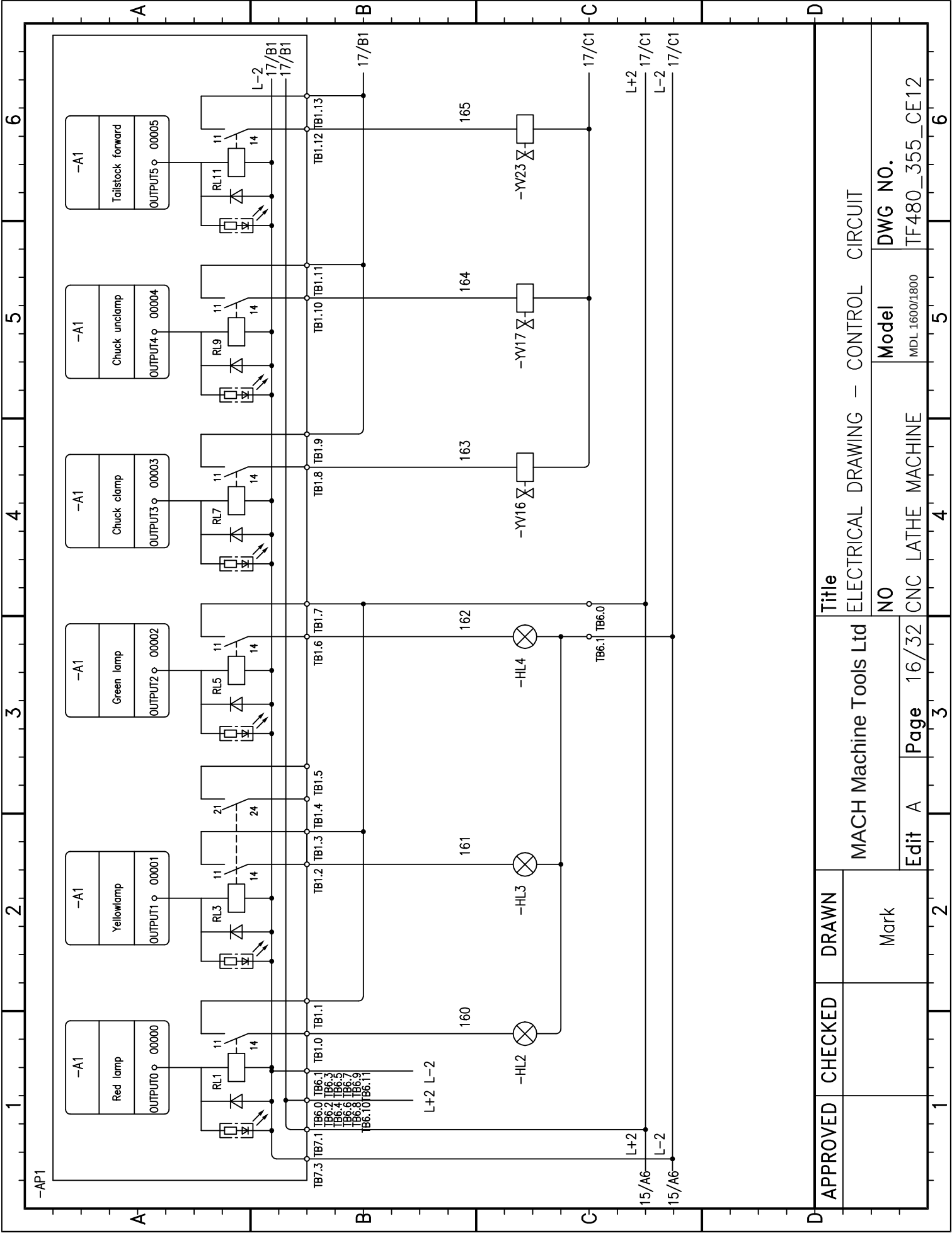
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Title

MACH Machine Tools Ltd

ELECTRICAL DRAWING – CONTROL CIRCUIT

NO

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CNC LATHE MACHINE

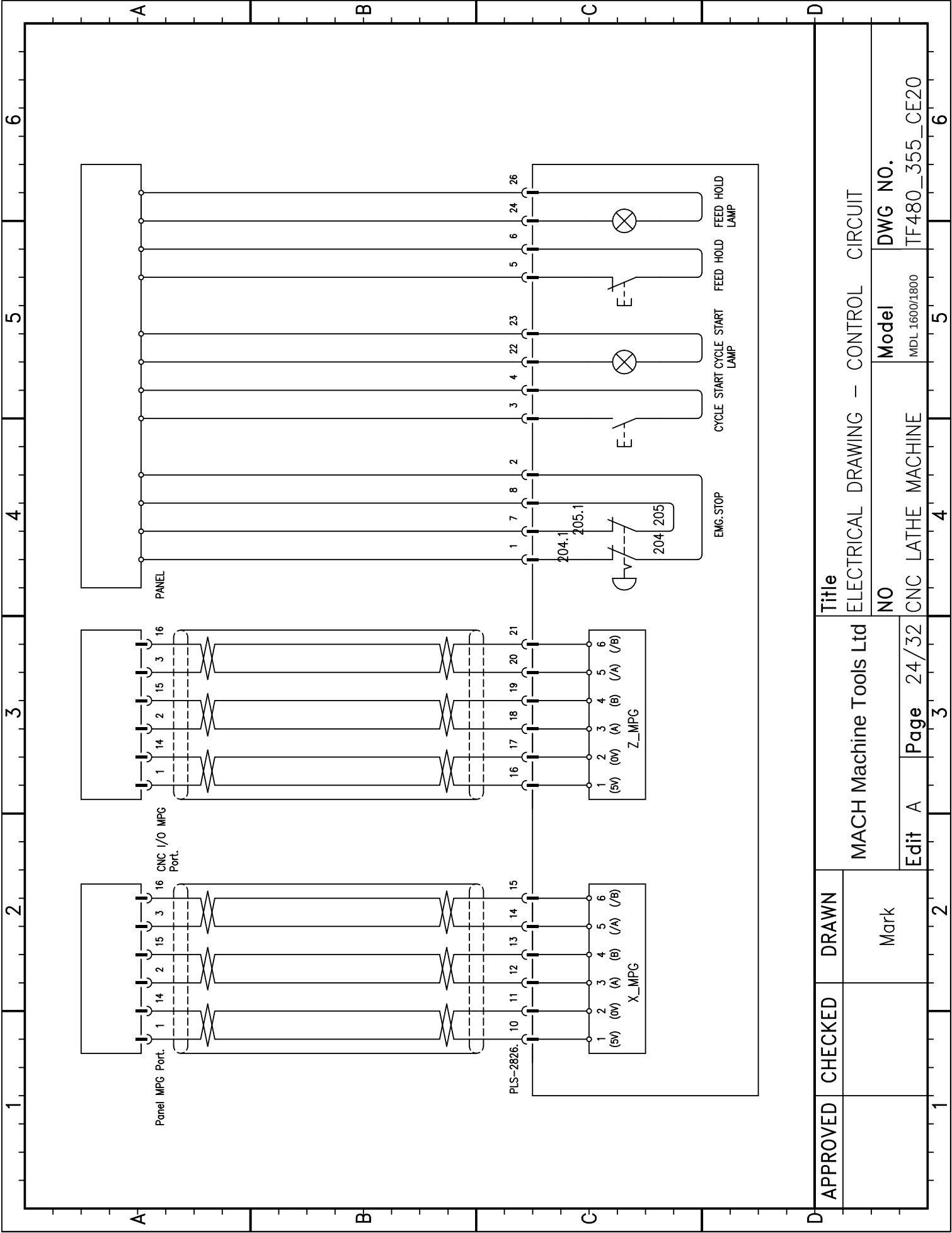
Model
MDL 1600/1800

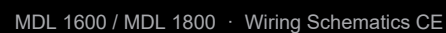
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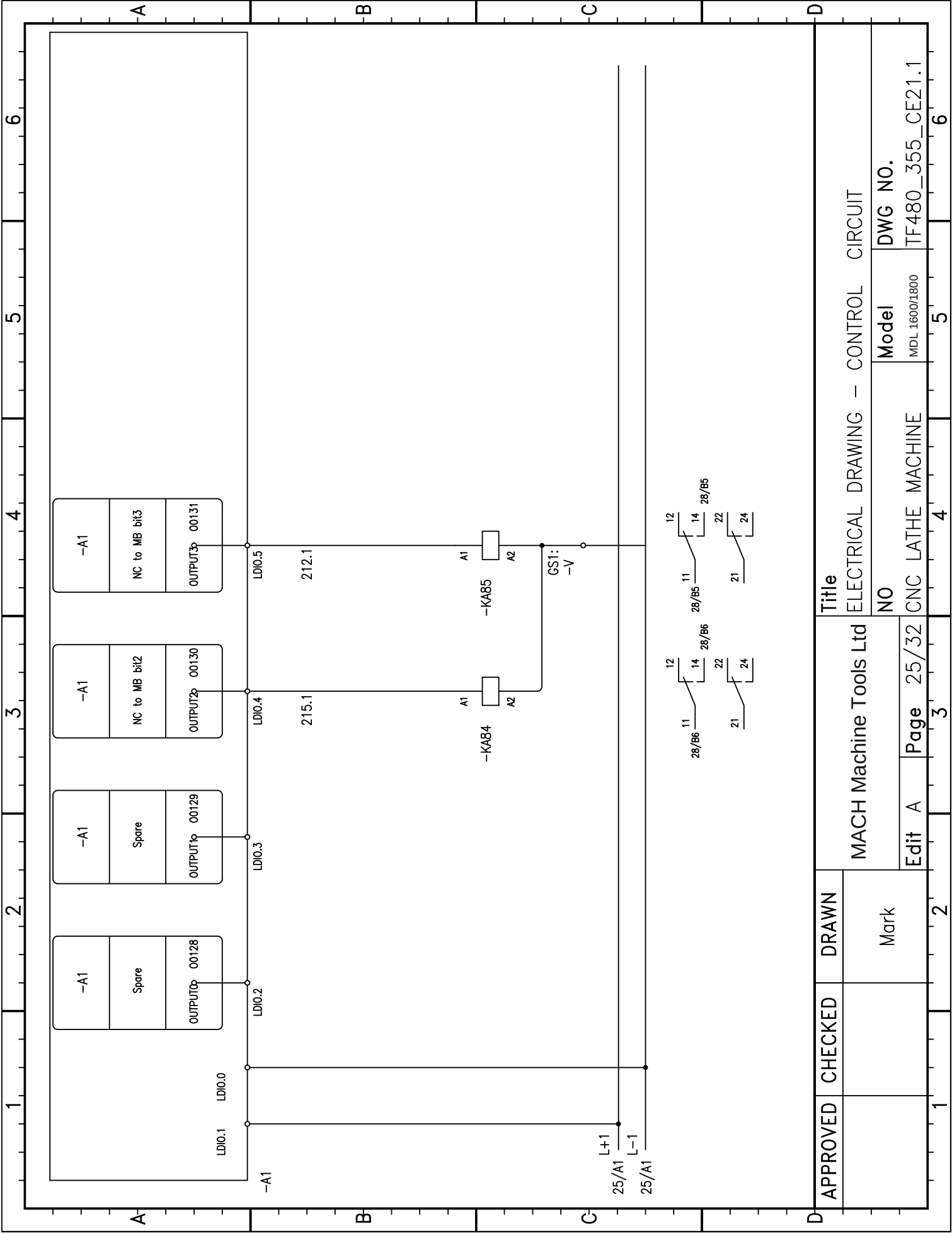
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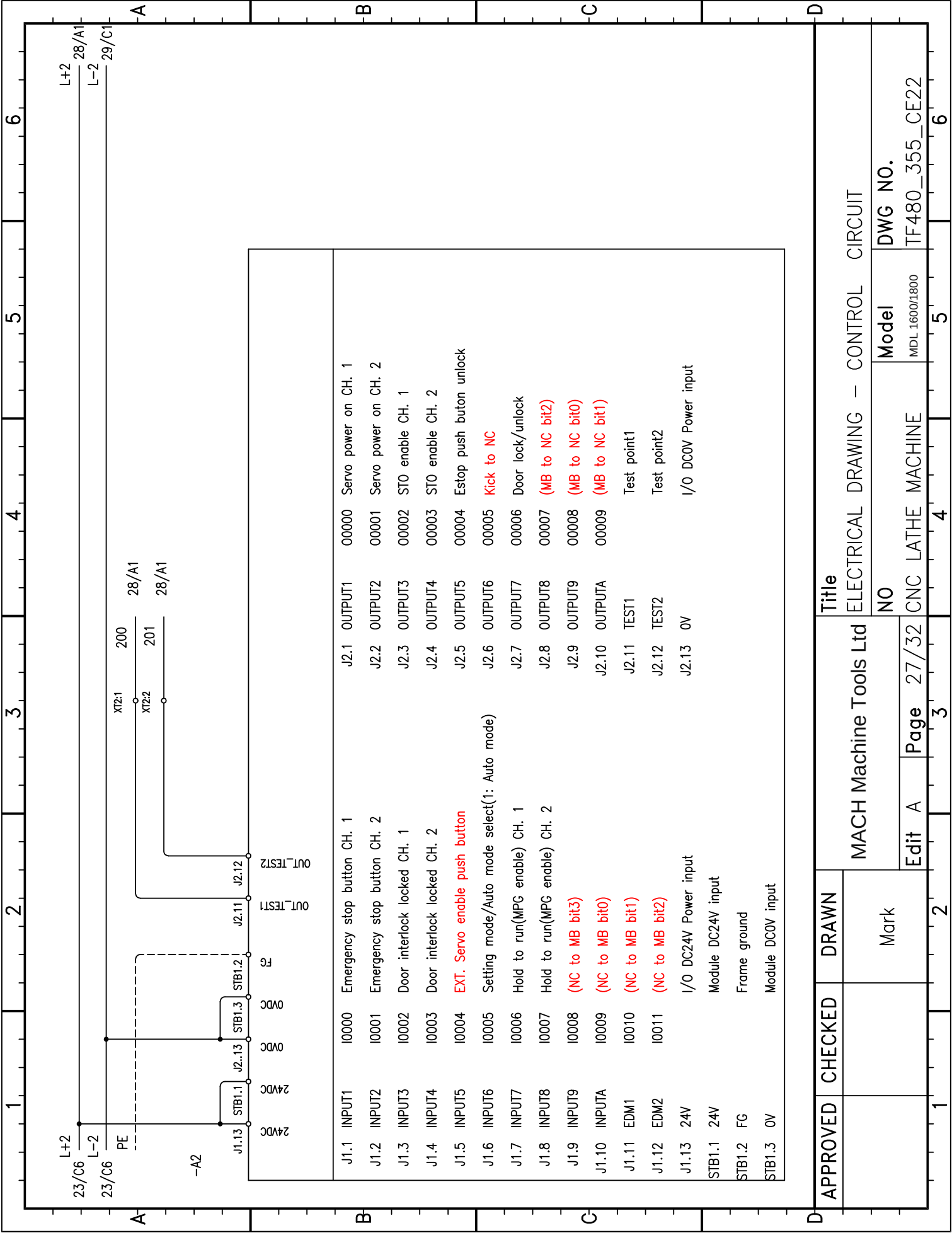
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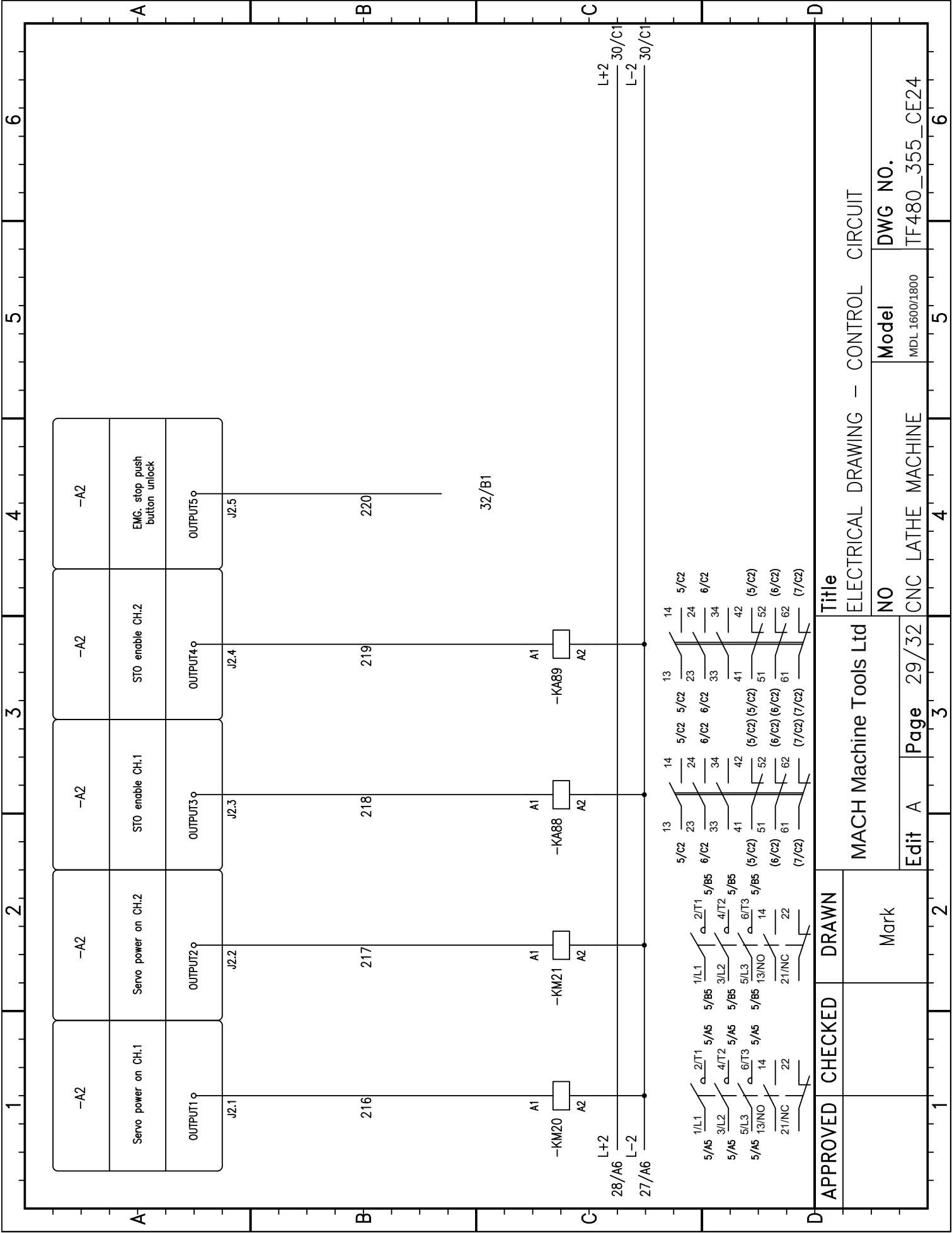


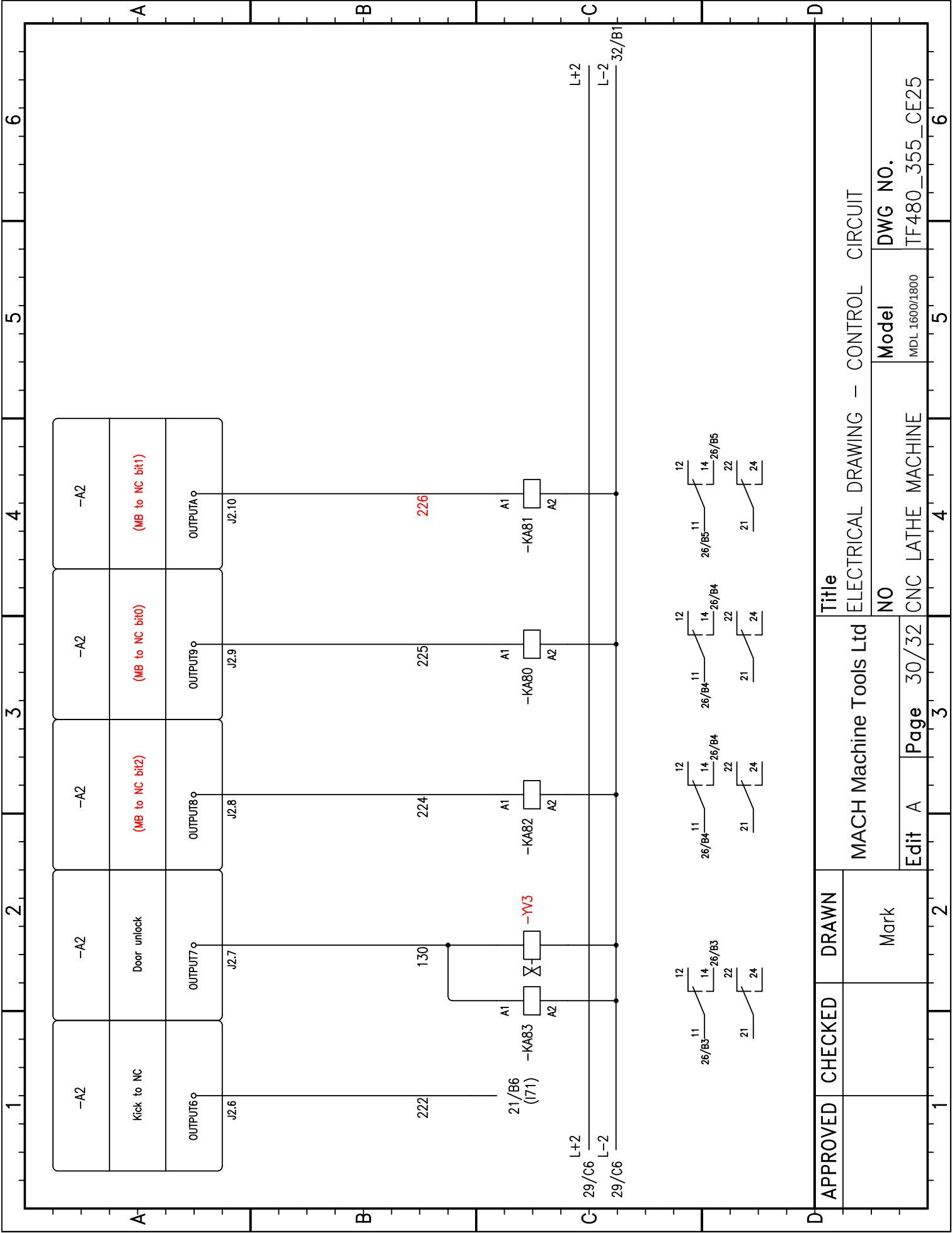






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			NO	Model	DWG NO.
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Title

MACH Machine Tools Ltd

NO

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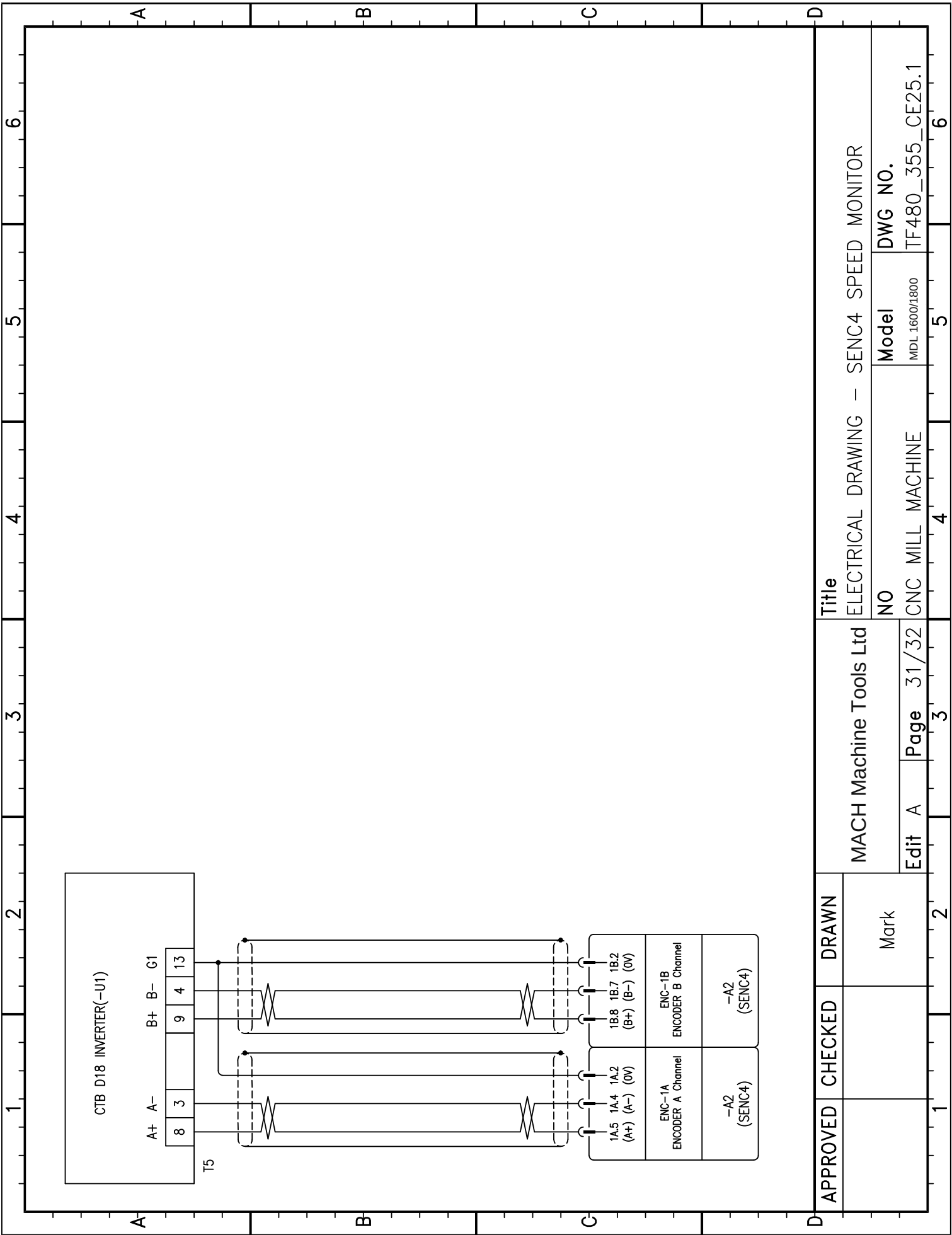
ELECTRICAL DRAWING – CONTROL CIRCUIT

Model

MDL 1600/1800

DWG NO.

TF480_355_CE25



1 2 3 4 5 6

A B C D

CTB D18 INVERTER(-U1)

A+ A- B+ B- G1

8 3 9 4 13

T5

1A.5 1A.4 1A.2 (A+) (A-) (0V)

1B.8 1B.7 1B.2 (B+) (B-) (0V)

ENC-1A
ENCODER A Channel

-A2
(SENC4)

ENC-1B
ENCODER B Channel

-A2
(SENC4)

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DRAWN

Mark

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MACH Machine Tools Ltd

Title

ELECTRICAL DRAWING - SENC4 SPEED MONITOR

NO

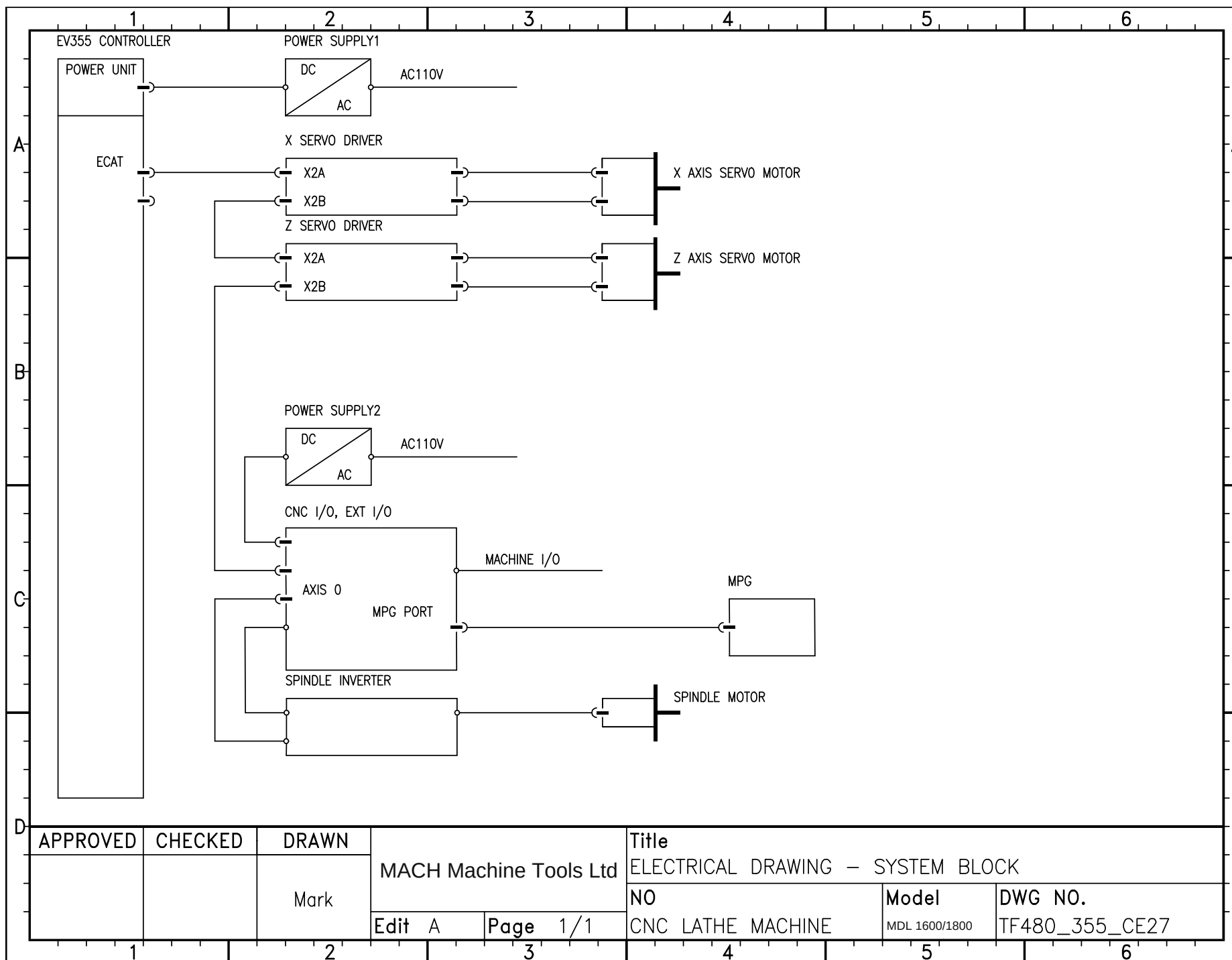
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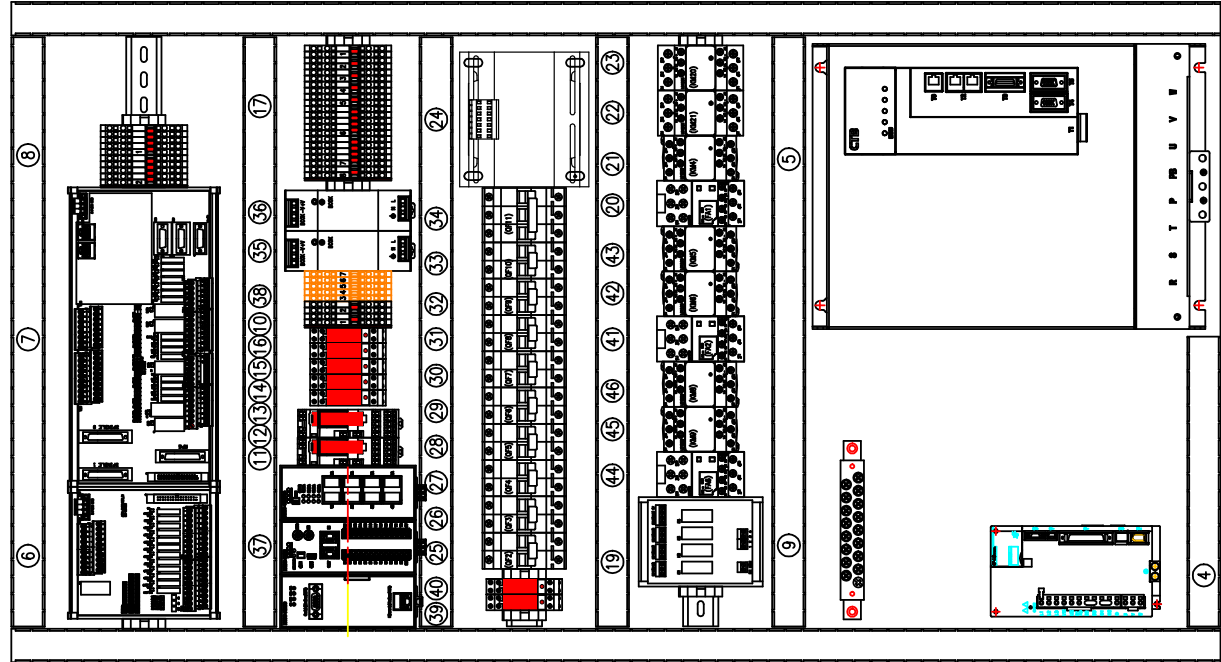
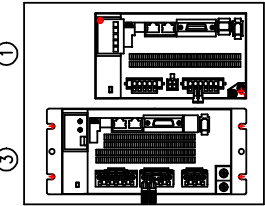
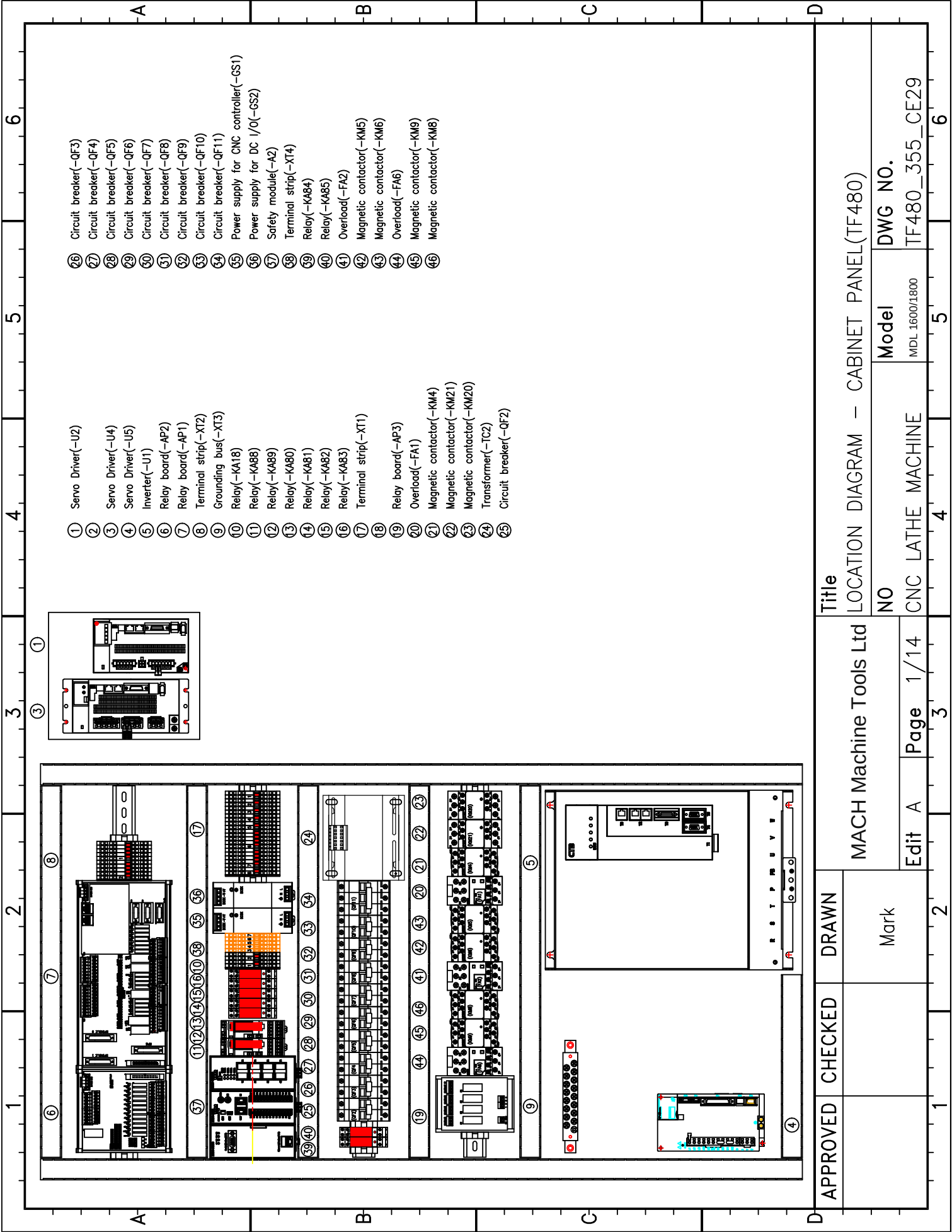
MDL 1600/1800

DWG NO.

TF480_355_CE25.1

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Title

LOCATION DIAGRAM – CABINET PANEL(TF480)

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CNC LATHE MACHINE

Model
MDL 1600/1800

DWG NO.

TF480_355_CE29

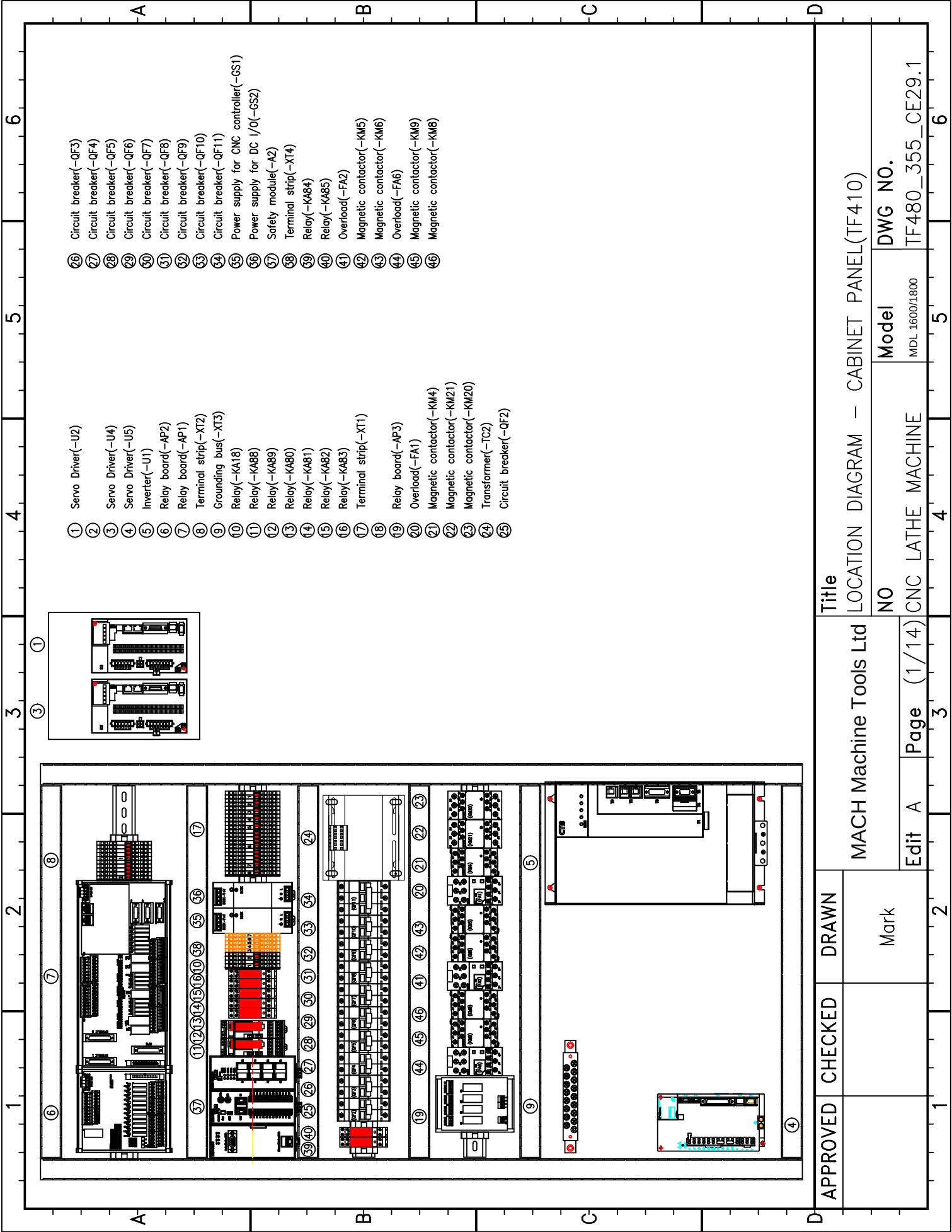
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Mark

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MACH Machine Tools Ltd

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Title

LOCATION DIAGRAM - CABINET PANEL(TF410)

NO

Model

MDL 1600/1800

DWG NO.

TF480_355_CE29.1

MACH Machine Tools Ltd

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Edit A

CNC LATHE MACHINE

3

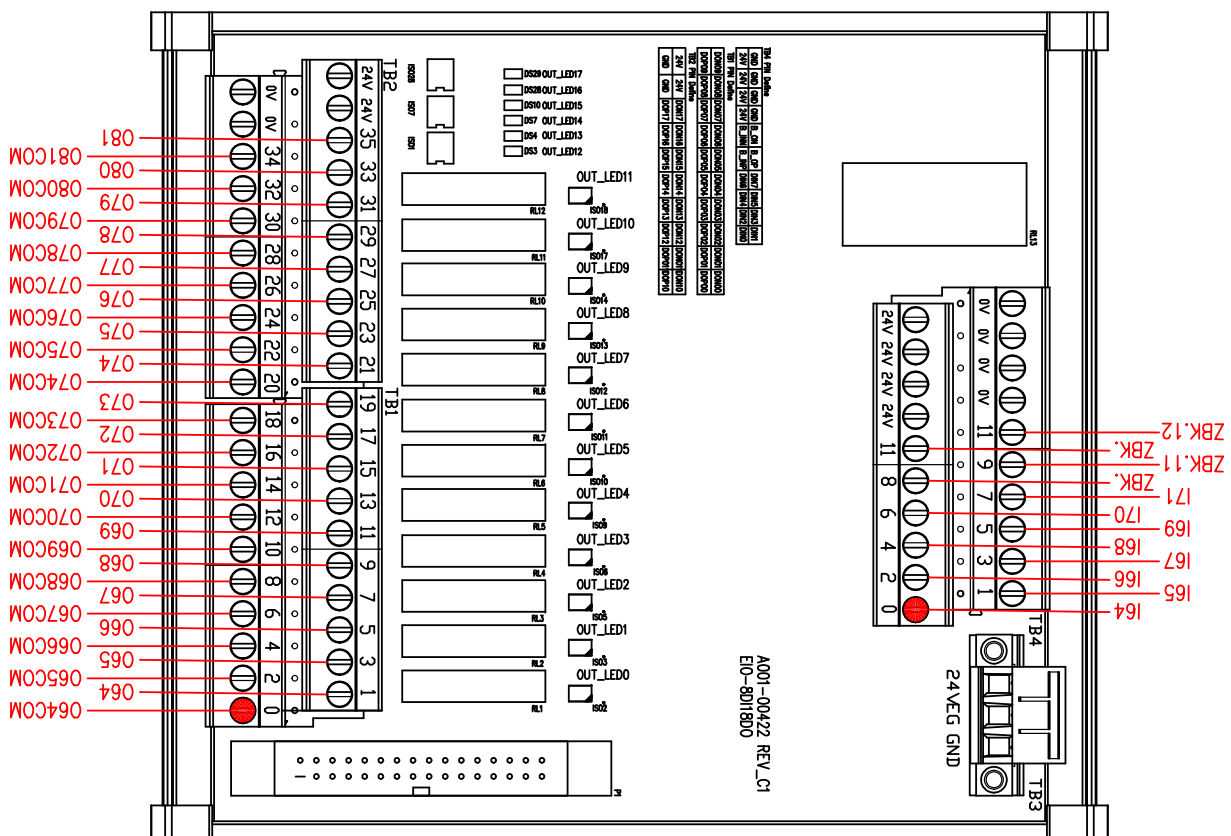
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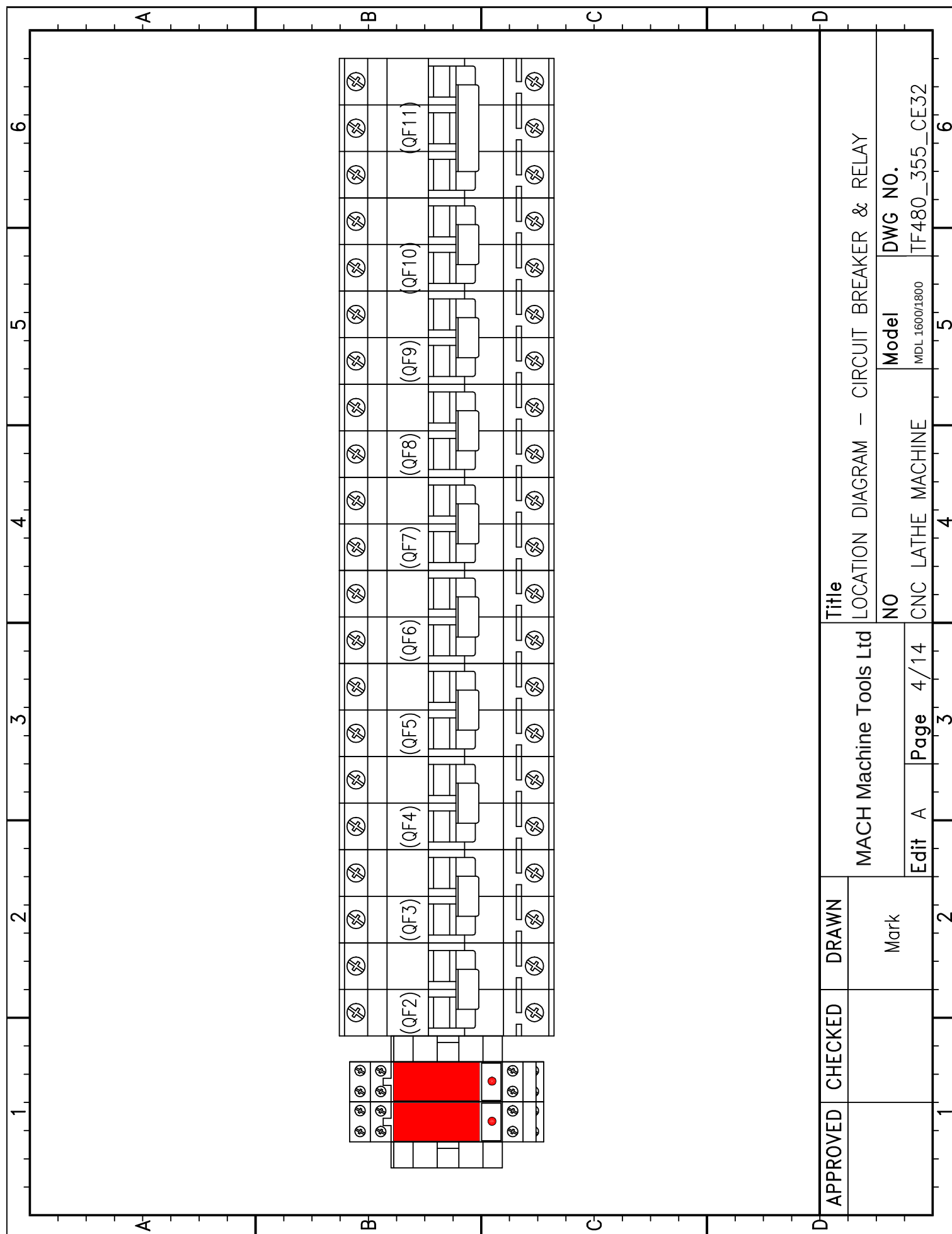
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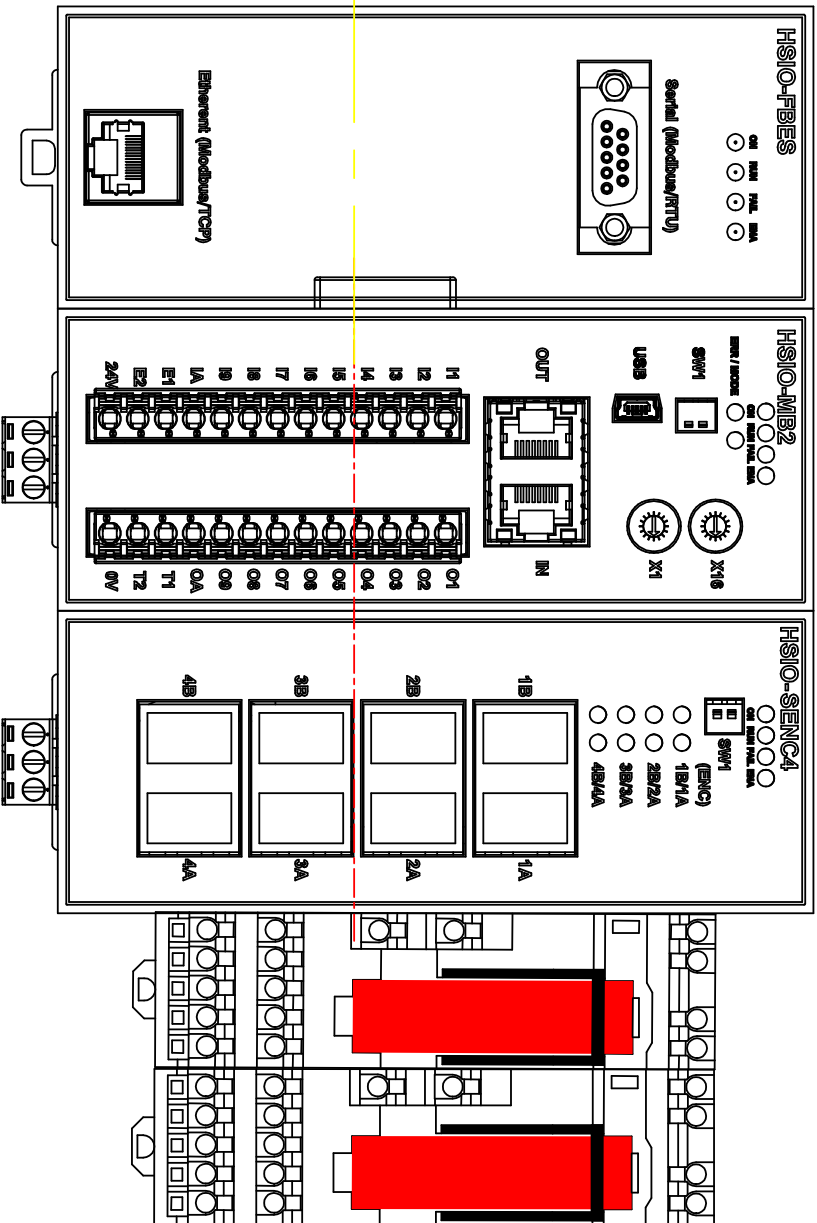
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APPROVED	CHECKED	DRAWN	Title LOCATION DIAGRAM – RELAY BOARD(–AP2)		
		Mark			
MACH Machine Tools Ltd			NO	Model	DWG NO.
Edit	A	Page 3/14			
CNC LATHE MACHINE			MDL 1600/1800	TF480_355_CE31	





APPROVED CHECKED DRAWN

MACH Machine Tools Ltd

Title

LOCATION DIAGRAM – SAFETY CONTROLLER

NO

CNC LATHE MACHINE

Model

MDL 1600/1800

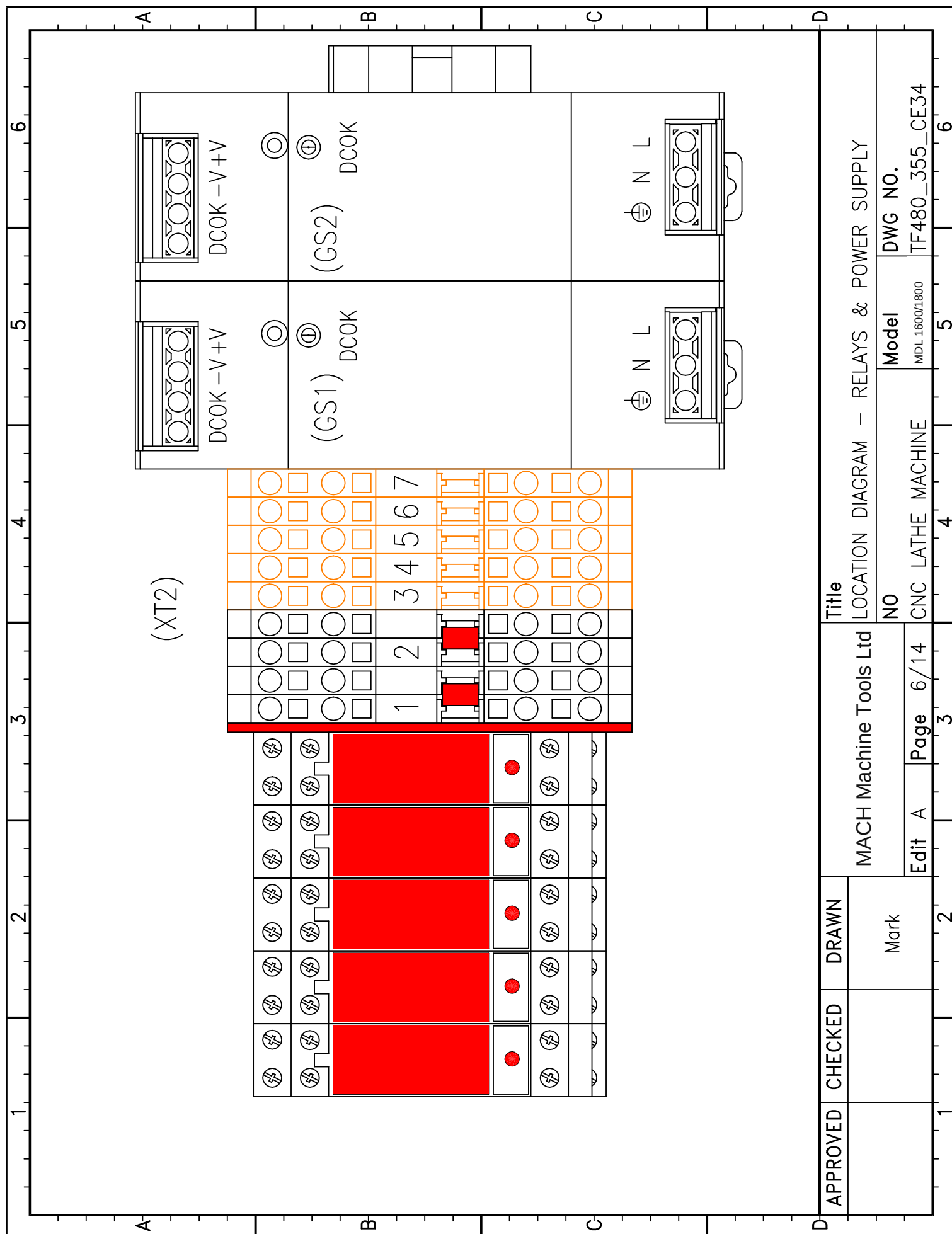
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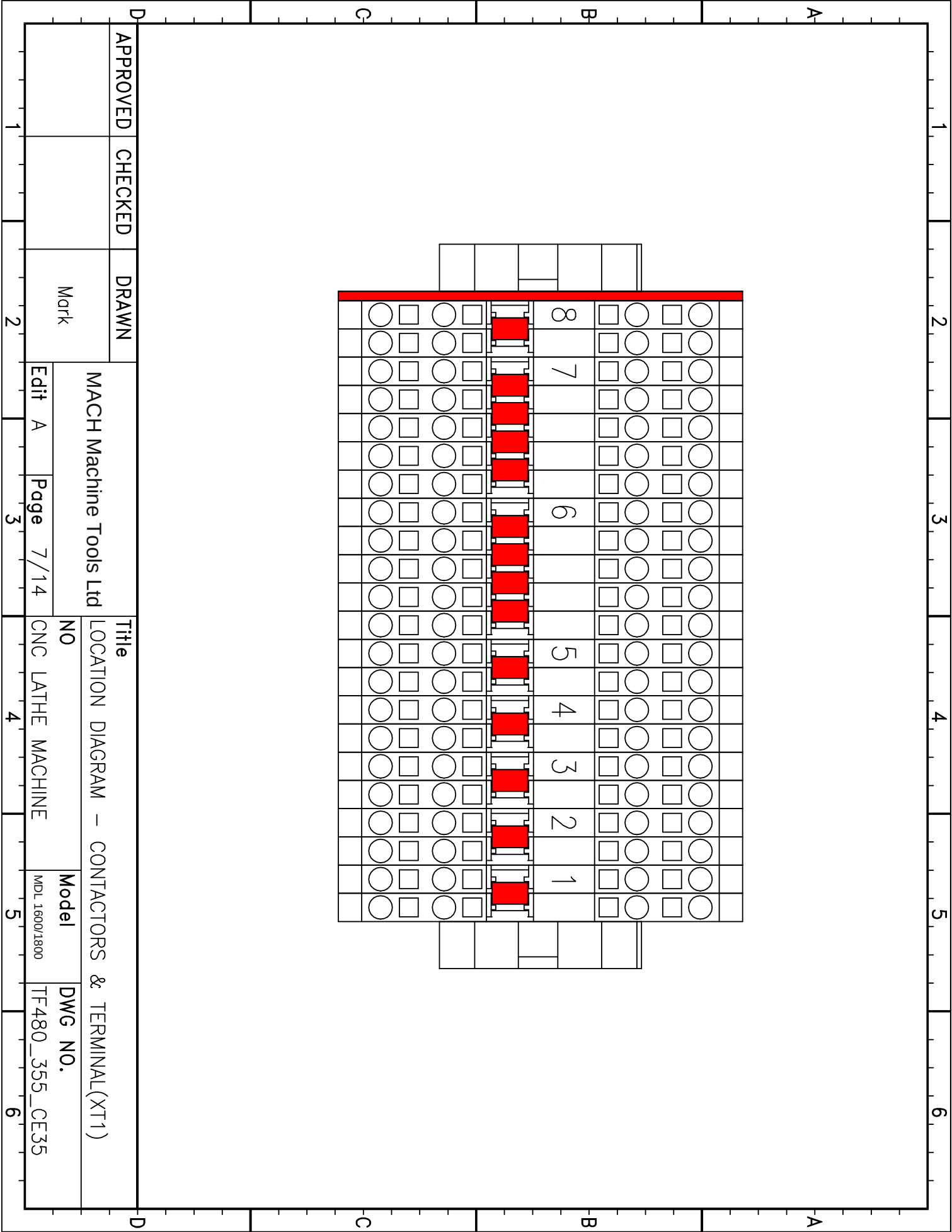
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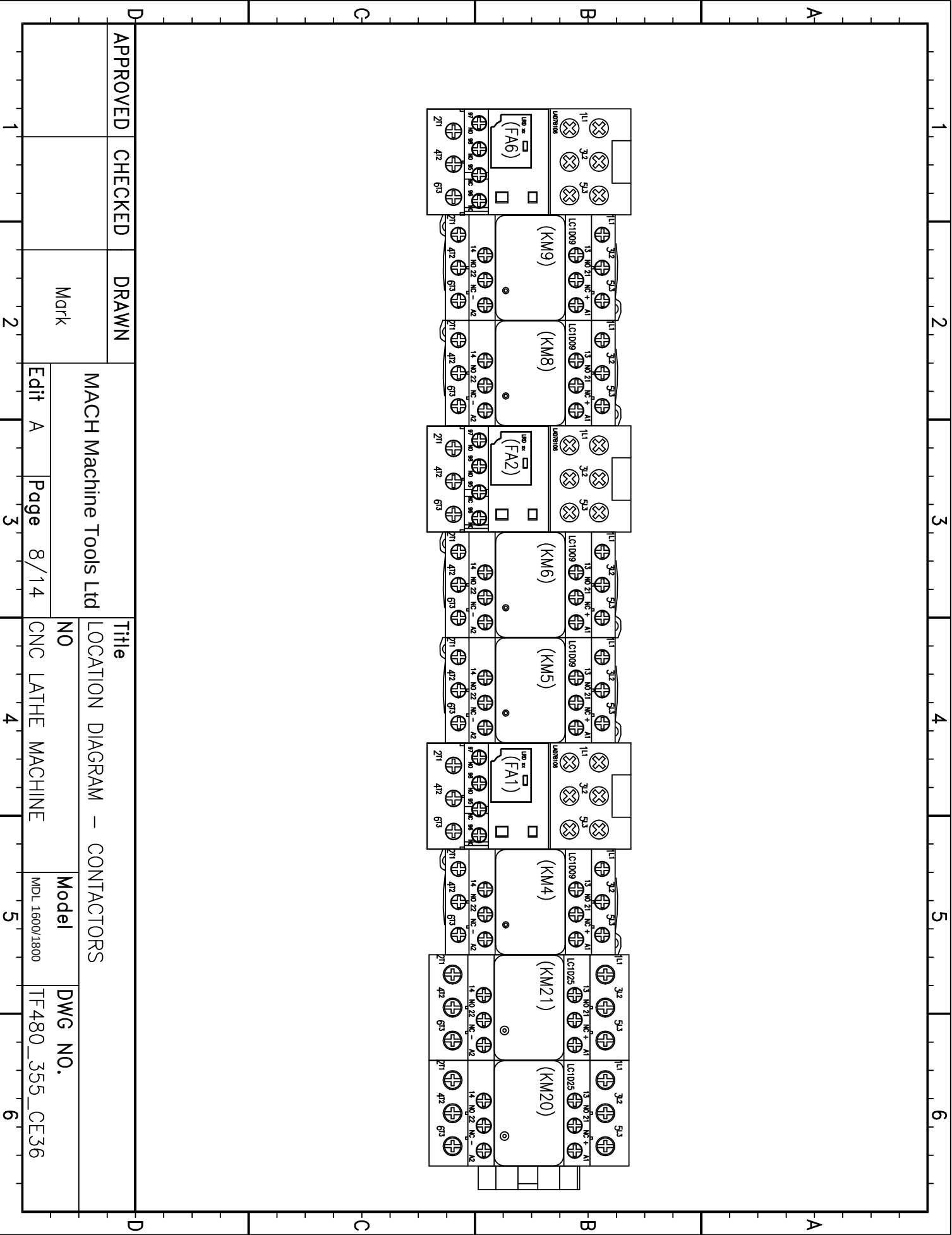
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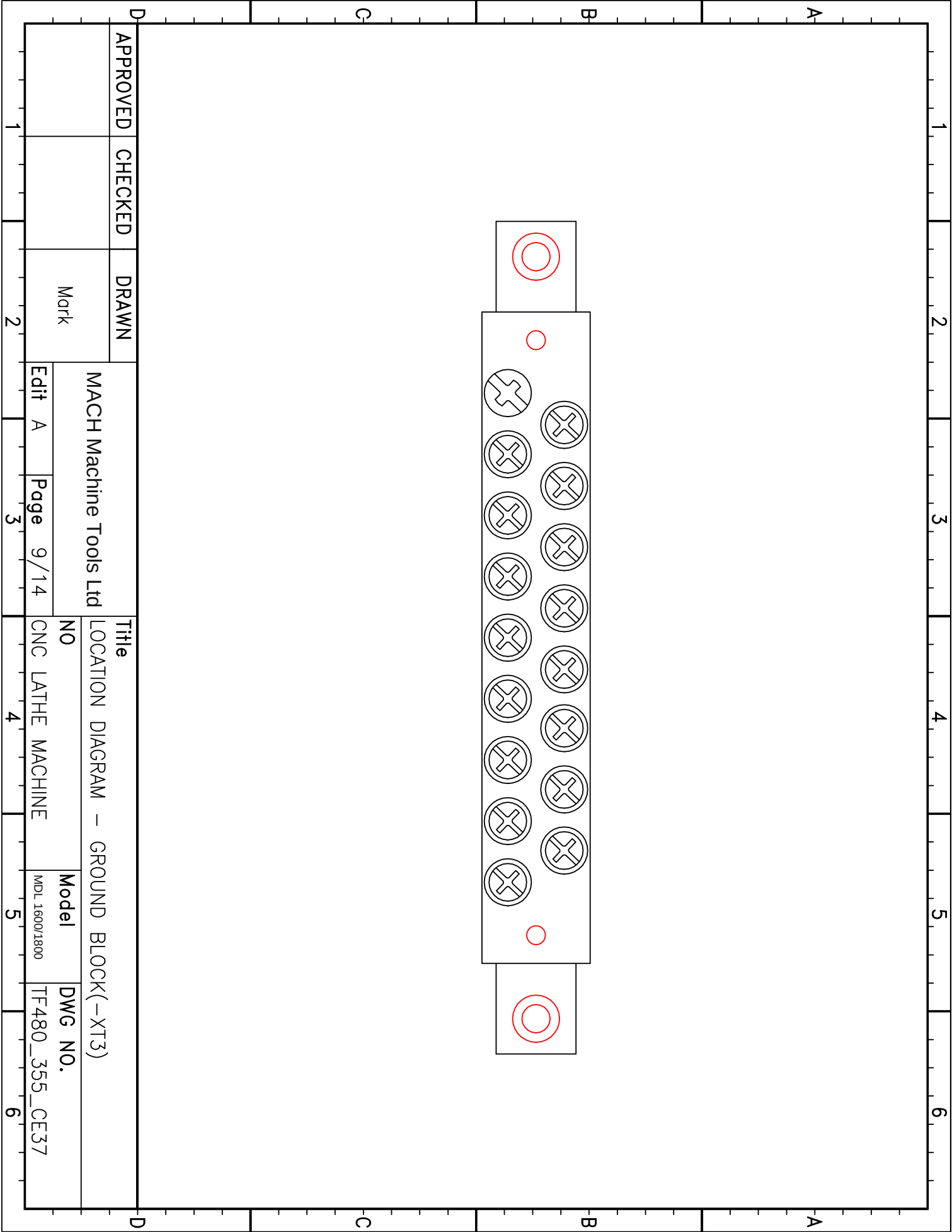
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MACH Machine Tools Ltd

Edit A Page 9/14

Title

LOCATION DIAGRAM – GROUND BLOCK(–XT3)

NO

CNC LATHE MACHINE

Model

MDL 1600/1800

DWG NO.

TF480_355_CE37

1		2		3		4		5		6	
A											
B											
C											
D											
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				Mark		Edit A Page 10/14					
1		2		3		4		5		6	
Title											
LOCATION DIAGRAM – RELAY BOARD(–AP3)											
NO		CNC LATHE MACHINE		Model		DWG NO.					
				MDL 1600/1800		TF480_355_CE38					

NC COM NO

NC COM NO

NC COM NO

NC COM NO 0V

K1

K2

K3

K4

DC COM

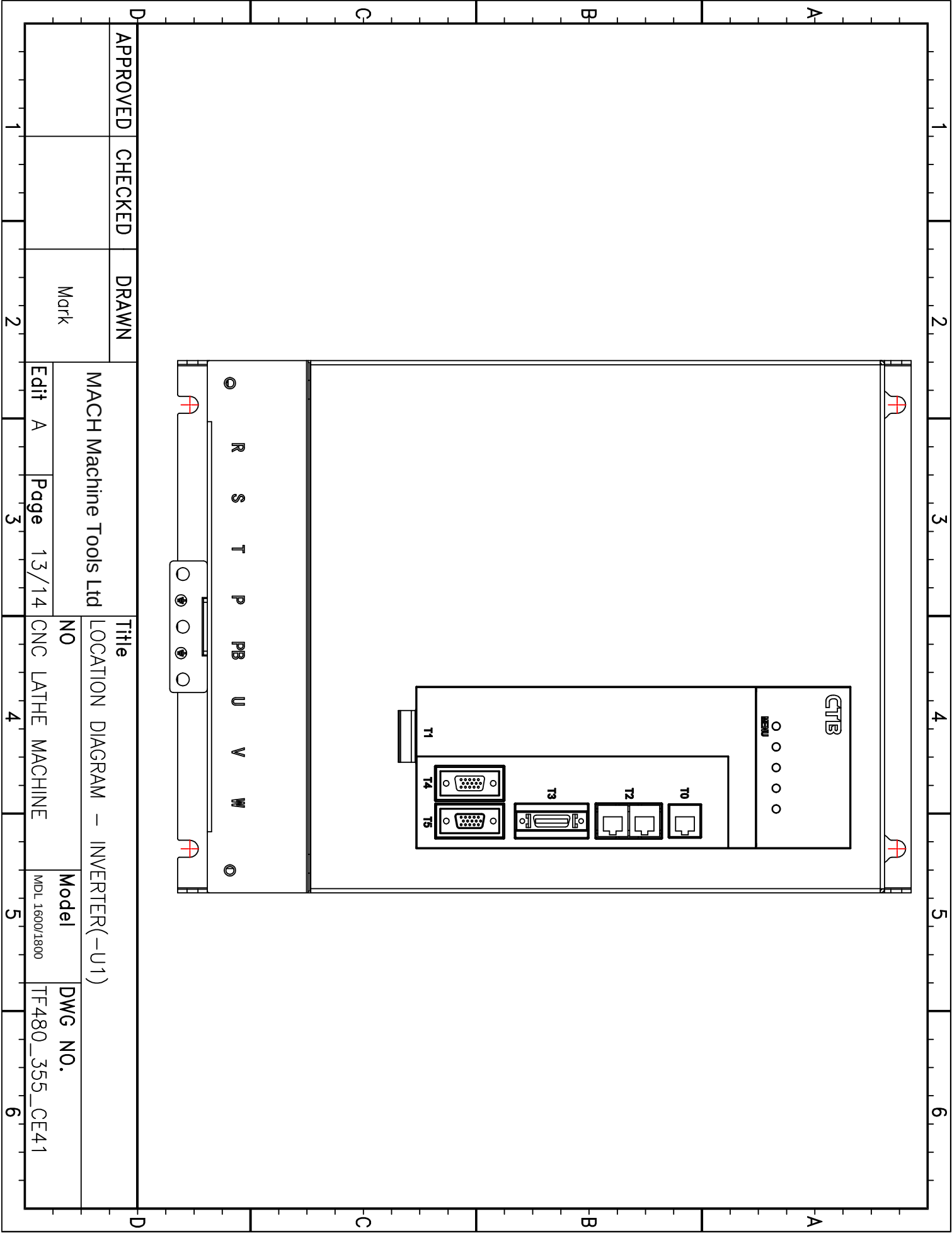
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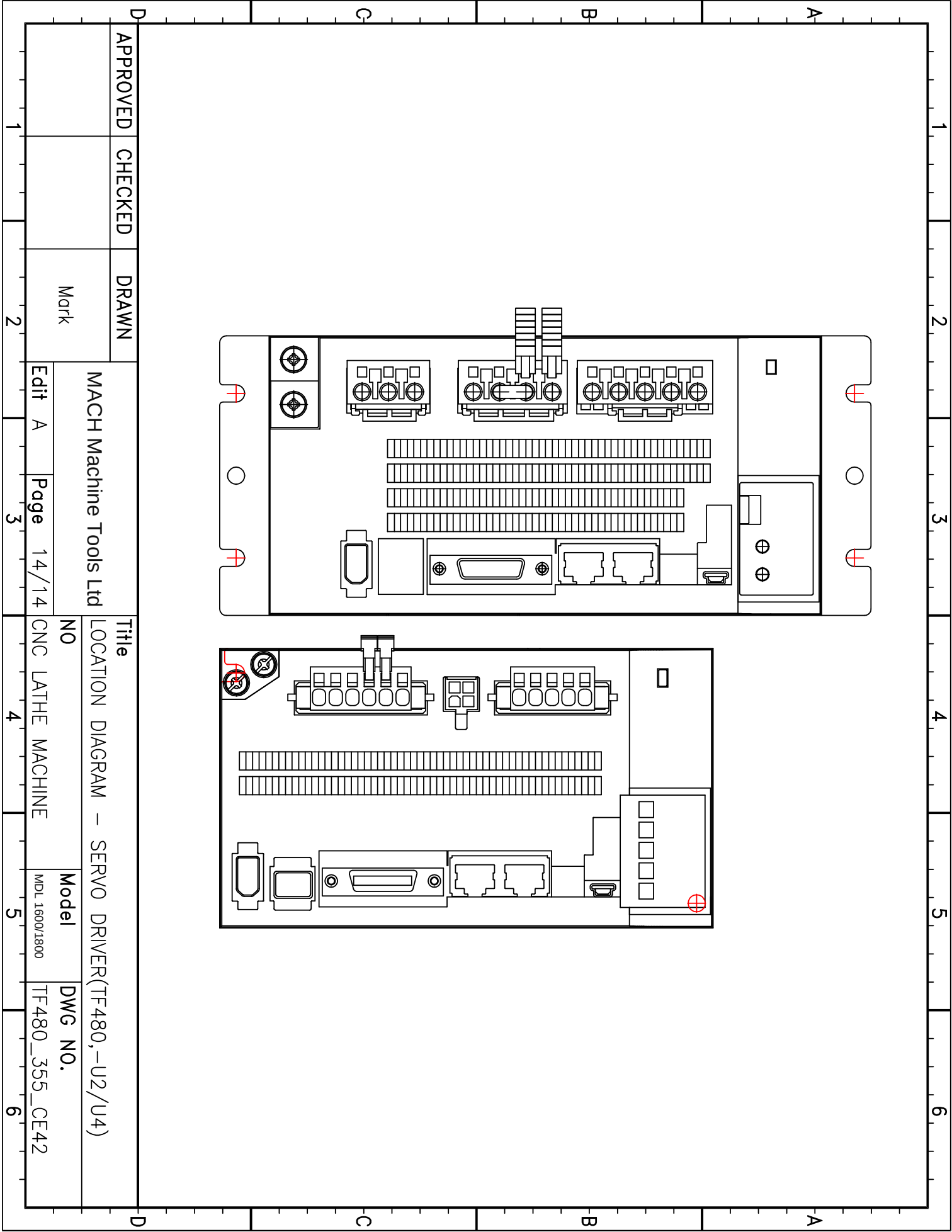
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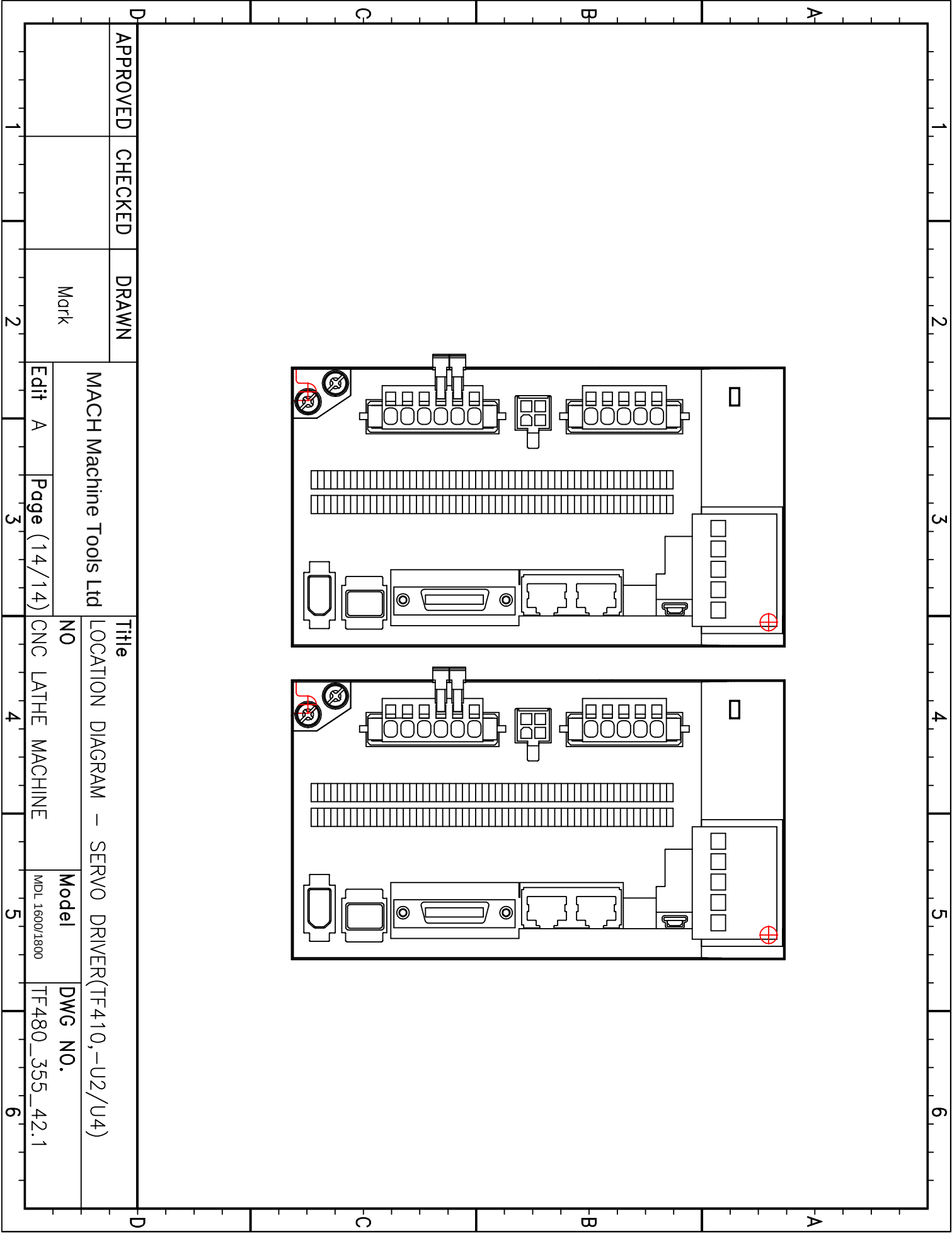
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4

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				Mark		Edit A		Page 12/14		Title	
						NO		CNC LATHE MACHINE		LOCATION DIAGRAM – TRANSFORMER(–TC2)	
						Model		MDL 1600/1800		DWG NO.	
								TF480_355_CE40			
1		2		3		4		5		6	









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