

	A	B	C	D	E	F	G	H	J	K	L	M	N	DR 0 A 08 CONTD. 902M102XR ELEMENTARY DIAGRAM			
01														01			
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35														35			
	A	B	C	D	E	F	G	H	J	K	L	M	N				
TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE	2-5-78							IDENT			
						TECHN.	ALLENWEST Simplex VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.							DR SH			
					ENG.	C.A.R.								GO NUMBER 738R00		ELEMENTARY DIAGRAM 902M102XR	
					APPD.	CONTD. OB								DR SH			

	A	B	C	D	E	F	G	H	J	K	L	M	N		
01	DRIVE OR SECTION	NAME OF DRIVE OR SECTION			SHEET/S									IF USED	01
02					A		TITLE SHEET							✓	02
					B		DIAGRAM INDEX							✓	
03					C		SINGLE LINE DIAGRAM								03
	0	GENERAL INFORMATION			D		GENERAL DESCRIPTION								
04					E		NOTES ON THE USE OF ELEMENTARY OR SCHEMATIC DIAGRAMS							✓	04
					F		ITEM IDENTIFICATION LETTER CODES AND SYMBOL LIST							✓	
05					G		ITEM IDENTIFICATION CODE LIST							✓	05
06															
	1	POWER SUPPLY			1A		MAIN SUPPLY TRANSFORMER								06
07															
					2A		CONVERTOR AC POWER CIRCUITS								07
08					2B		DC ARMATURE CIRCUITS								
	2	MAIN DRIVE			2C		MOTOR FIELD CONTROL AND CONVERTORS AUXILIARIES								08
09					2D		CONVERTOR FAULT AND SIGNAL RELAY LOGIC								09
					2E		DRIVER REGULATOR CONNECTIONS								
10					2F		DRIVER REGULATOR (PART 1)								10
					2G		DRIVER REGULATOR (PART 2)								
11					2H		TEST INTERLOCK SWITCH								11
					2K		RELAY AND CONTACTOR CIRCUITS								
12					2L		EARTH LEAKAGE RELAY CIRCUITS								12
					2M		MAIN POWER AND MOTOR INTERCONNECTIONS								
13					2N		CONTROL WIRING INTERCONNECTIONS								13
14					2P		COMPLETE SCHEMATIC (SPECIALLY PRODUCED ON AO SHEET)								14
15															15
16															16
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33															33
34															34
35															35

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ENG.

APPD.

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ENG.

APPD.

DATE 2-5-78

ALLENWEST

Simplex

VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.

DIAGRAM INDEX

GO NUMBER

902M102XR

ELEMENTARY DIAGRAM

902M102XR

CONTD.

OE

IDENT

DR SH

0 B

	A	B	C	D	E	F	G	H	J	K	L	M	N	DR	SH	CONTD.	ELEMENTARY DIAGRAM	
01														0	E	OF	902M102XR	
02	These diagrams have been drawn to IEC principles and standards wherever practical to do so. Exceptions to this are drawings of proprietary equipments.													01				
03	<u>Drive Numbering System</u>													02				
04	To break the schematic diagrams into easily recognised groups of drawings, the equipment is divided into a series of arbitrary drives (or sections). All items of any one such drive (or section) are not necessarily housed in the same enclosure. Each of these drives (or sections) is allocated an identifying number. Each schematic diagram sheet belonging to such a drive (or section) carries this number suffixed to an alphabetically ordered letter. These two elements comprise the diagram sheet number and is to be found in the bottom right corner and top right margin of each sheet. In the space adjoining this number is the sheet number on which the diagram sequence is continued. The final sheet has FL entered in this space. A list of the allocated drive numbers is to be found on sheet 0B.													03				
05	<u>Item Identification</u>													04				
06	Only the circuit identification reference of the discrete item identification is employed on these diagrams and in accordance with IEC the qualifying symbol can be, and is, omitted from the front of all such references.													05				
07	<u>Example of construction of circuit identification reference</u>													06				
08														07				
09	Reference letter indicating kind of item. A list of main references employed is given on Sheet OF, in this case K = relay or contactor													08				
10	Sheet number of diagram on which the symbol for the main element of the item is shown													09				
11	Reference of grid line which passes through the centre of the symbol of the main element													10				
12	Discrimination number for identical symbols appearing on the same grid number. Wherever possible these are allocated reading from left to right along the grid													11				
13														12				
14														13				
15	The item identification is to be found only above the symbol referred to. It will be found reading from left to right when viewed from bottom edge of drawing or when looking at drawing from left hand edge.													14				
16	<u>Item Location</u>													15				
17	Each physically identifiable separate piece of equipment, i.e. cubicle or desk or motor etc. is allocated an individual identification number. Wherever referred to, this number is always enclosed in a triangle. Wherever possible, the item physically carries this reference. This symbol when shown in the space above the sheet number of a schematic diagram indicates that every item whose symbol is shown on that sheet is physically part of that piece of equipment unless otherwise indicated. This is done by the identification triangle of the piece of equipment of which the item forms part, being entered above or to the left of the item reference. A list of identification numbers is to be found on sheet 0B.													16				
18	<u>Symbols</u>													17				
19	These are selected from IEC 117. A very simplified list of the symbols most commonly used on these diagrams is given on sheet OF.													18				
20	<u>Operational State</u>													19				
21	The apparatus is shown in the unoperated or de-energised condition unless specifically indicated by a special note adjacent to the symbol.													20				
22	<u>Brackets</u>													21				
23	[] This symbol encloses a mapping reference of a point of mechanical or electrical continuity. It is also used to enclose the mapping reference of relay or contactor contacts.													22				
24	() This symbol is used to enclose a terminal designation. Its particular use is to indicate a terminal designation which is different from the wire number.													23				
25	□ This symbol is used to enclose a reference on proprietary GE equipment													24				
26	Example													25				
27	Monitor Card ——— M-IE ——— Slot IE of S22 Driver/Reg.													26				
28	<u>Wire Numbering Scheme</u>													27				
29	(a) <u>Control Wires</u> Wire numbers are shown on each diagram sheet as two digit numbers except for wires originating on another sheet. In all cases the complete wire number (which is physically carried by the cables) consists of the number of the schematic sheet on which the wire first appears suffixed by the wire number allocated on that sheet. On the schematic diagrams wires originating on other sheets always quote the full wire number. The wire numbers always appear below the wire. Thus wire number 2A06 indicates wire number 06 originating on sheet 2A.													28				
30	(b) <u>Power Wires</u> The power cable numbers are generated in exactly the same way as the control wires except that the a.c. power cables have the letter 'T' and the d.c. power cables the letter 'P' inserted between the sheet number and the wire number. Thus wire 2BP08 indicates d.c. power cable 08 originating on sheet 2B.													29				
31	<u>Contact Location</u>													30				
32	To the right hand side of the symbol for the coil of a relay or contactor is given the mapping reference of every contact in use on that relay. If the reference is underlined then that contact is normally closed, if not, then it is normally open. If the reference is suffixed by † then the contact is timed.													31				
33														32				
34														33				
35														34				
	A	B	C	D	E	F	G	H	J	K	L	M	N	TECHN.	ENG.	APPD.	DATE 2-5-78	
																TECHN.	ENG.	APPD.
																ENG.	CAR	
																APPD.		
																VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.		
																GO NUMBER 738R00		
																ELEMENTARY DIAGRAM 902M102XR		
																CONTD. OF		
																IDENT		
																DR SH		
																0 E		

Allenwest

Simplex

VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.

NOTES ON THE USE OF ELEMENTARY OR SCHEMATIC DIAGRAMS

DR SH

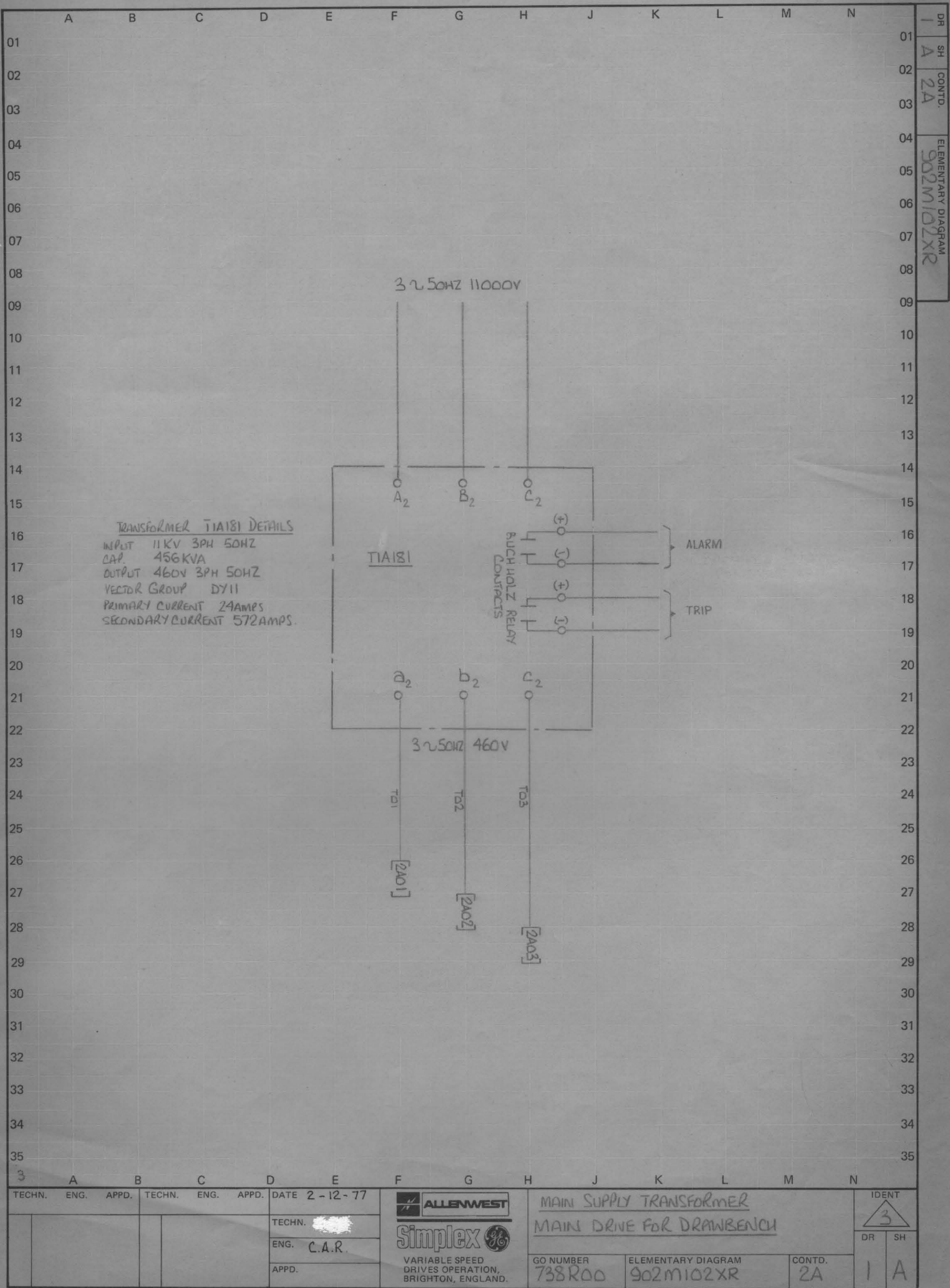
0 E

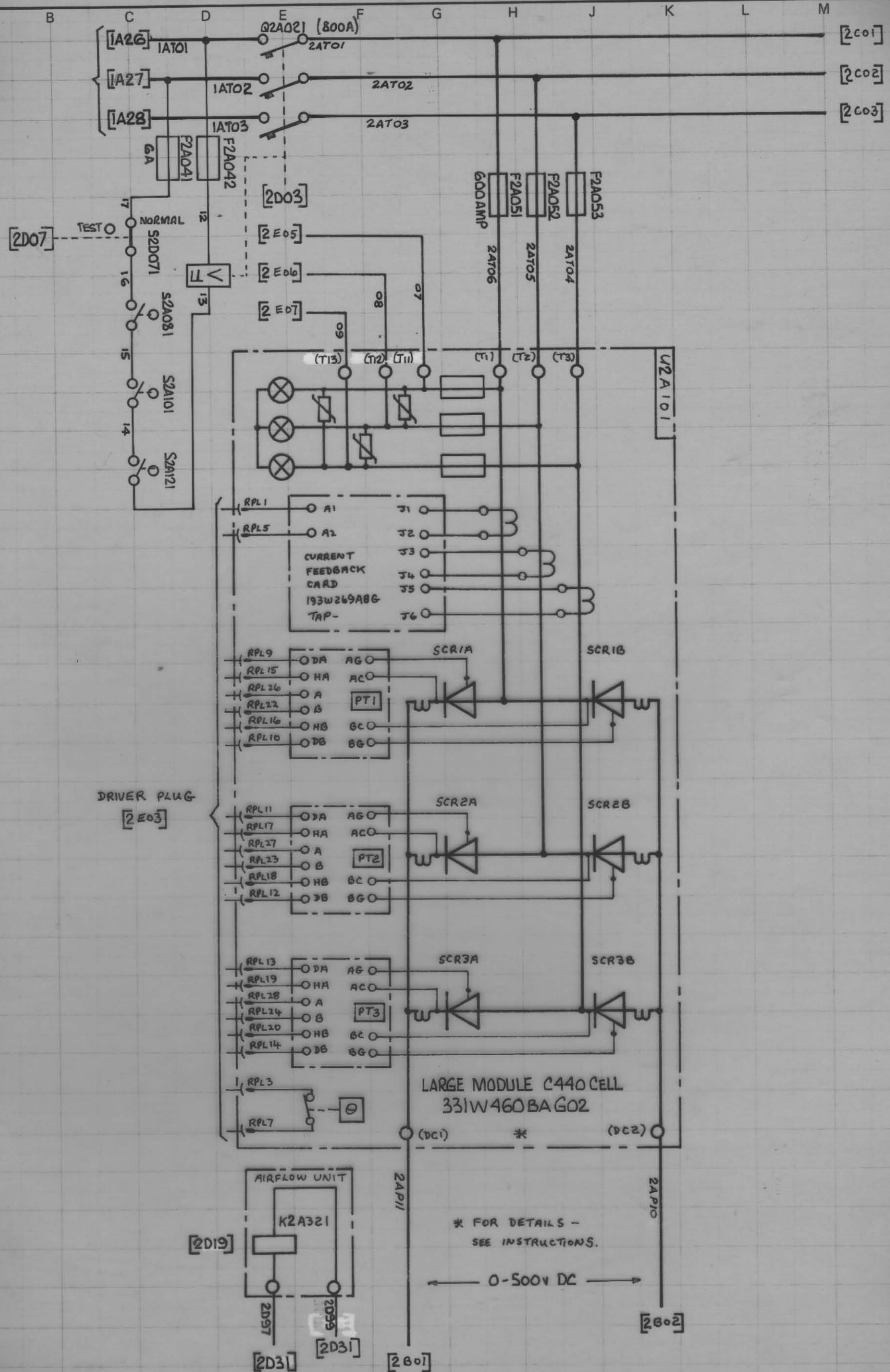
Disclaimer Statement The trade mark is the trade mark of General Electric Company of U.S.A., which is not connected with the English Company of a similar name.

01	A	B	C	D	E	F	G	H	J	K	L	M	N	01															
02	LETTER CODE FOR IDENTIFICATION OF KIND OF ITEM (Abbreviated List)													02															
03	LETTER	DESIGNATION				LETTER	DESIGNATION				03																		
04	A	Assemblies, Sub-Assemblies				P	Measuring Devices: Indicating and Recording Instruments				04																		
05	B	Transducers				Q	Mechanical Switching Devices for Power Circuits: Isolators, Circuit Breakers				05																		
06	C	Capacitors				R	Resistors				06																		
07	E	Miscellaneous: Lighting Devices, Heating Devices				S	Switches, Pushbuttons, Limit Switches				07																		
08	F	Protective Devices: Overloads, Fuses				T	Transformers				08																		
09	G	Rotating Generators, Supplies				U	Changers, Invertors, Convertors				09																		
10	H	Optical and Acoustical Indicators, Indicating Lamps				V	Semi-Conductors: Diodes, Transistors, Thyristors				10																		
11	K	Relays, Contactors				W	Busbars				11																		
12	L	Inductors				X	Terminals, Plugs, Sockets				12																		
13	M	Motors				Y	Electrically operated Mechanical Devices: Brakes, Clutches, Pneumatic Valves				13																		
14						Z	Filters				14																		
15	SYMBOLS (Abbreviated Table)													15															
16	SYMBOL	ITEM		SYMBOL	ITEM		SYMBOL	ITEM		16																			
17		Coil			Key operated			Fuse		17																			
18		Timer Coil			Manually operated			Resistor		18																			
19		Normally open contact			Mushroom Head			Capacitor		19																			
20		Normally closed contact			Mechanical link or tie			Transformer		20																			
21		Isolator			Non-automatic reset			A.C. Motor		21																			
22		On Load Isolator			Mechanical Interlock			D.C. Motor		22																			
23		Circuit Breaker			Linear motion			Permanent Magnet Type Generator		23																			
24		Pushbutton			Rotational motion			Link		24																			
25		Switch			Operates when characteristic quantity is higher than setting quantity			Plug and Socket		25																			
26		Contact with delay on opening			Operates when characteristic quantity is lower than setting quantity			Signal Lamp		26																			
27		Contact with delay on closing			Thermal effect of over current device			Annunciator Element		27																			
28		Roller operated switch			Electromagnetic effect of overcurrent device			Bell		28																			
29		Operated by physical effect. Box contains symbol. Example is p = pressure			Diode			Horn		29																			
30					Thyristor			Meter. Example shown is for ammeter		30																			
31					Screened Lead			Fused terminal		31																			
32										32																			
33										33																			
34										34																			
35										35																			
TECHN.		ENG.		APPD.		DATE		2-5-78		TECHN.		ENG.		APPD.		DATE		2-5-78		TECHN.		ENG.		APPD.		DATE		2-5-78	

	A	B	C	D	E	F	G	H	J	K	L	M	N		
01	IDENT NO.		DESIGNATION				SHEET NO.	OTHER REF.	MISCELLANEOUS					01	
02														02	
03	2		MAIN DRIVE CONVERTOR				02							03	
04	3		MAIN SUPPLY TRANSFORMER				03	F9555	TRANSFORMERS & RECTIFIERS LTD					04	
05	4		LOAD AMMETER				04		MOUNTED ON MAIN DESK					05	
06	5		SPEED INDICATOR				05		" " " "					06	
07	6 A&B		SET DOG AND DRAW SPEED CONTROLS				06		" " " "					07	
08	7		DYNAMIC BRAKING RESISTANCE CUBICLE				02							08	
09	8		MAIN MOTOR						NOT OF AWSGE SUPPLY					09	
10	9		AUXILIARY EQUIPMENT						NOT OF AWSGE MANUFACTURE					10	
11														11	
12														12	
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32														32	
33														33	
34														34	
35														35	
	A	B	C	D	E	F	G	H	J	K	L	M	N		
TECHN.		ENG.		APPD.		DATE 2-5-78		ITEM IDENTIFICATION CODE LIST						IDENT	
						TECHN.								DR SH	
						ENG. C.A.R								O G	
						APPD.									
						Allenwest									
						Simplex									
						VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.									
						GO NUMBER		ELEMENTARY DIAGRAM						CONTD.	
						738R00		902M102XR						1A	

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TECHN. ENG. APPD. DATE 2-12-72

TECHN. ENG. APPD. C.A.R.

ALLENWEST
Simplex
VARIABLE SPEED
DRIVES OPERATION,
BRIGHTON, ENGLAND.

DRAWBENCH MAIN DRIVE

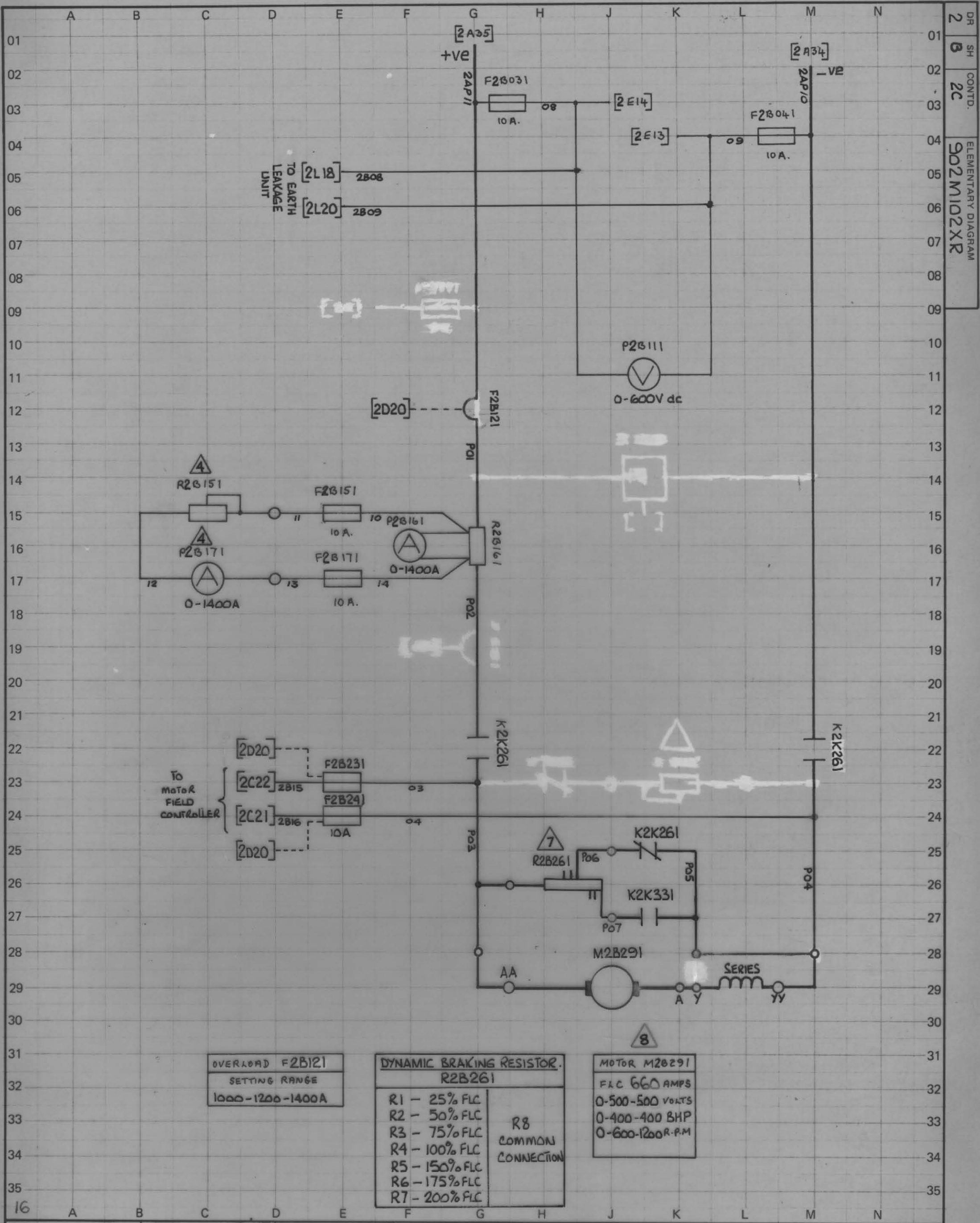
CONVERTER A.C. POWER CIRCUITS

GO NUMBER
738R00

ELEMENTARY DIAGRAM
902M102XR

CONTD.
2B

IDENT
2
DR SH
2 A



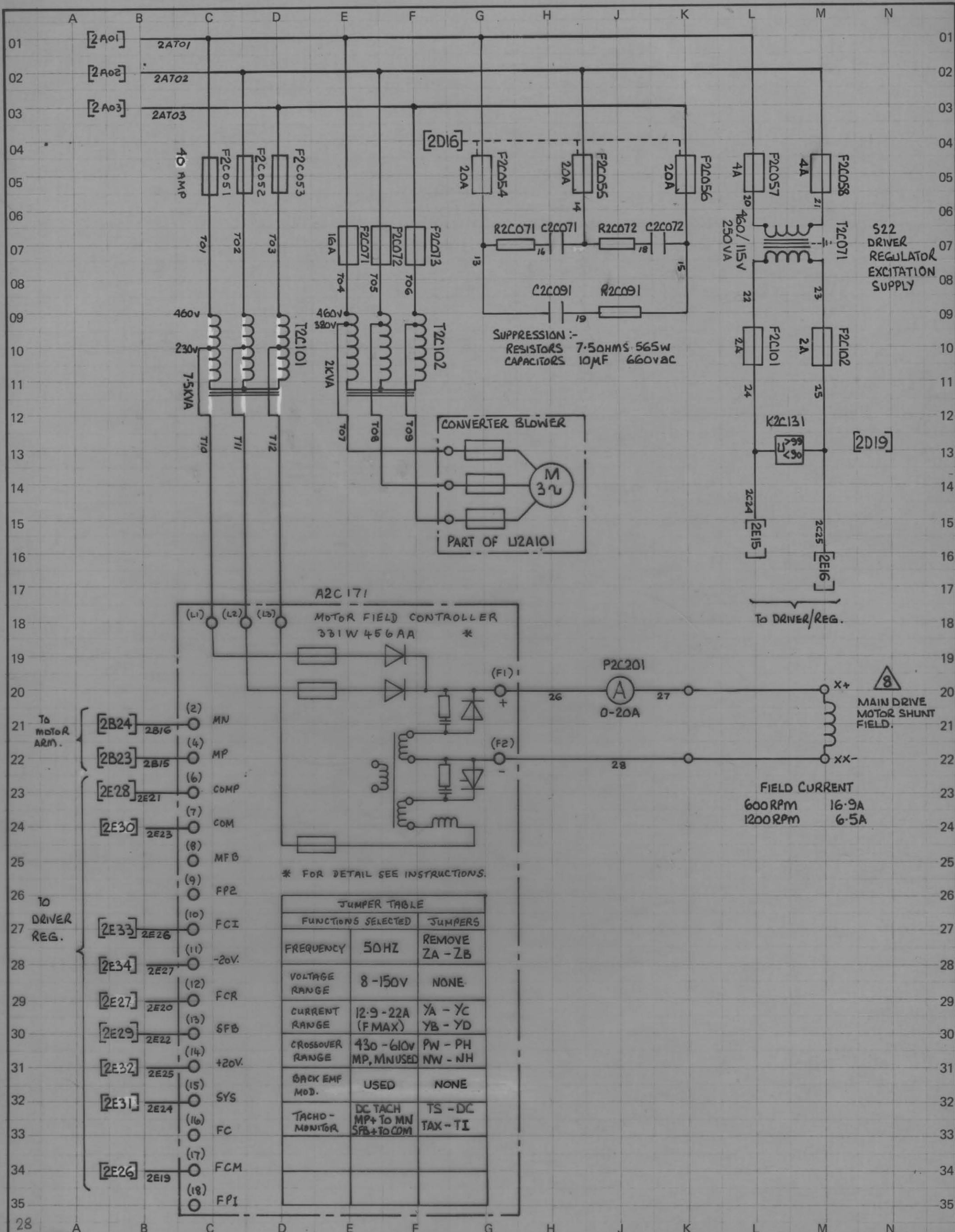
OVERLOAD F2B121
SETTING RANGE
1000-1200-1400A

DYNAMIC BRAKING RESISTOR.
R2B261

R1 - 25% FLC	R8 COMMON CONNECTION
R2 - 50% FLC	
R3 - 75% FLC	
R4 - 100% FLC	
R5 - 150% FLC	
R6 - 175% FLC	
R7 - 200% FLC	

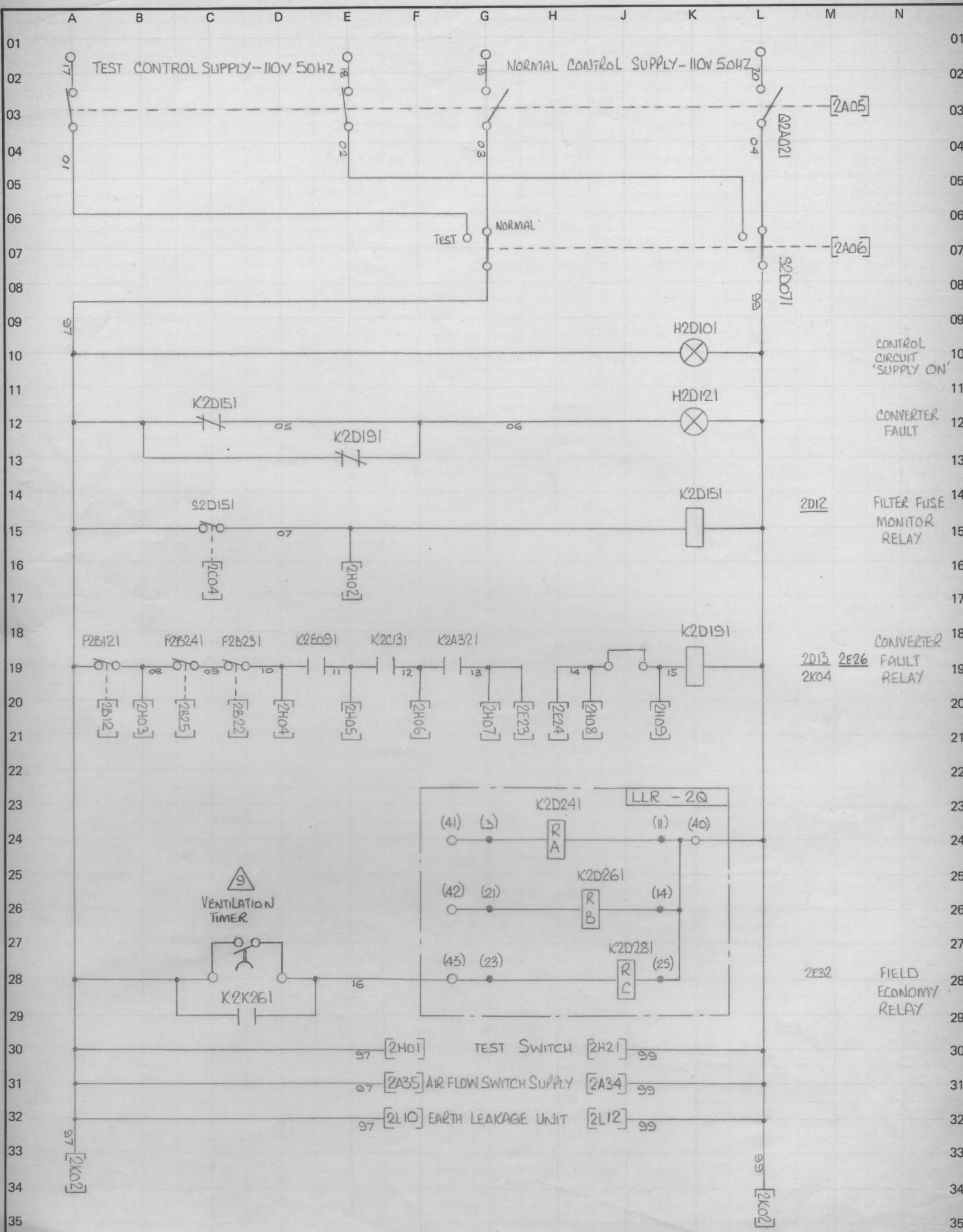
MOTOR M2B291
FLC 660 AMPS
0-500-500 VOLTS
0-400-400 BHP
0-600-1200 R.P.M.

TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 2-12-77	 Simplex VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.	DRAWBENCH MAIN DRIVE			IDENT 2	
						TECHN.		D.C. ARMATURE CIRCUITS			DR	SH
						ENG. C.A.R.		GO NUMBER 738R00	ELEMENTARY DIAGRAM 902M102XR	CONTD. 2C	2	B

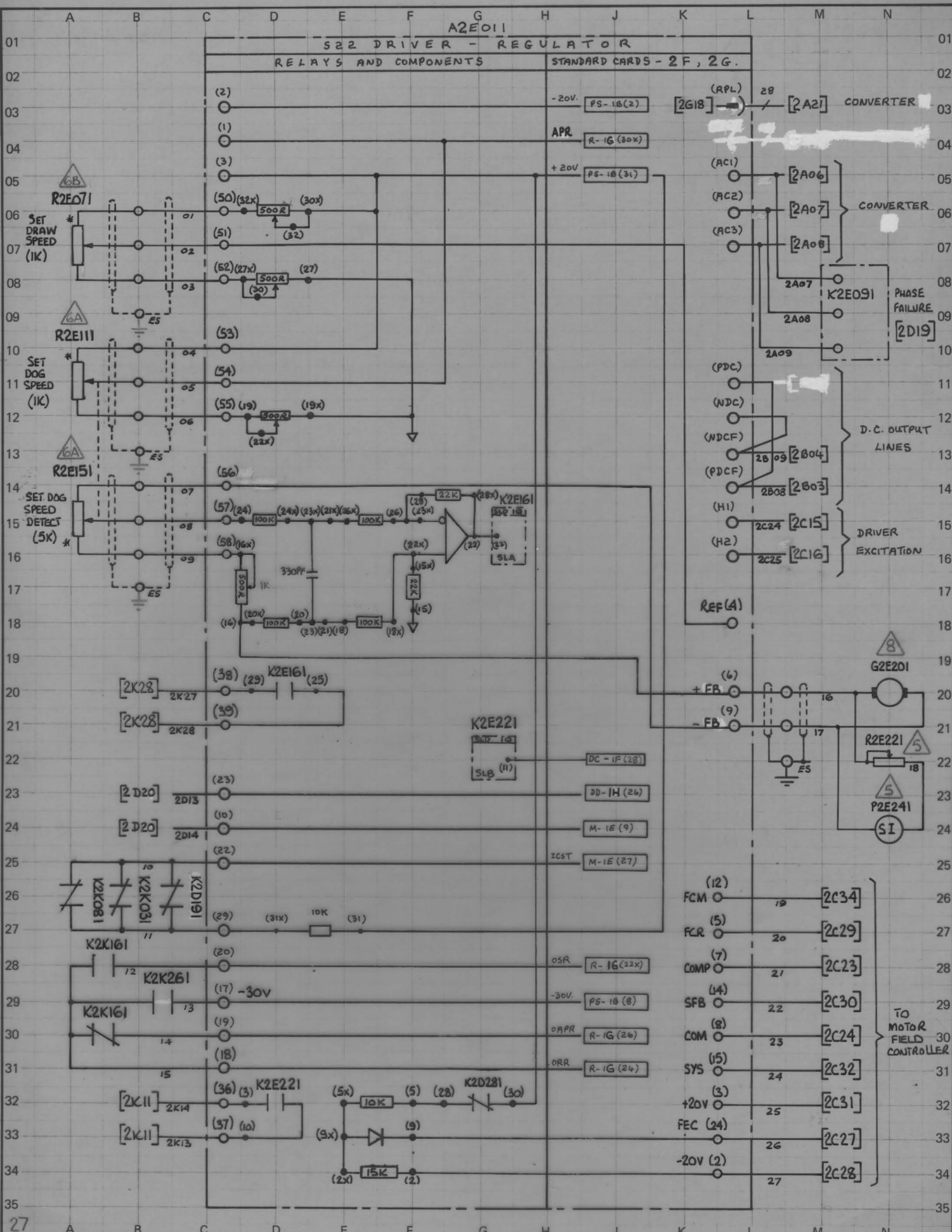


TECHN. ENG. APPD.	TECHN. ENG. APPD.	DATE 2-12-77	 VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.	DRAWBENCH MAIN DRIVE		IDENT 2
20-6-78 TACHO MONITOR LINKS CORRECTED		TECHN. C.A.R.		MOTOR FIELD CONTROL AND CONVERTER AUXILIARIES		DR 2 SH C
		APPD.	GO NUMBER 738R00	ELEMENTARY DIAGRAM 902 M 102XR	CONTD. 2D	

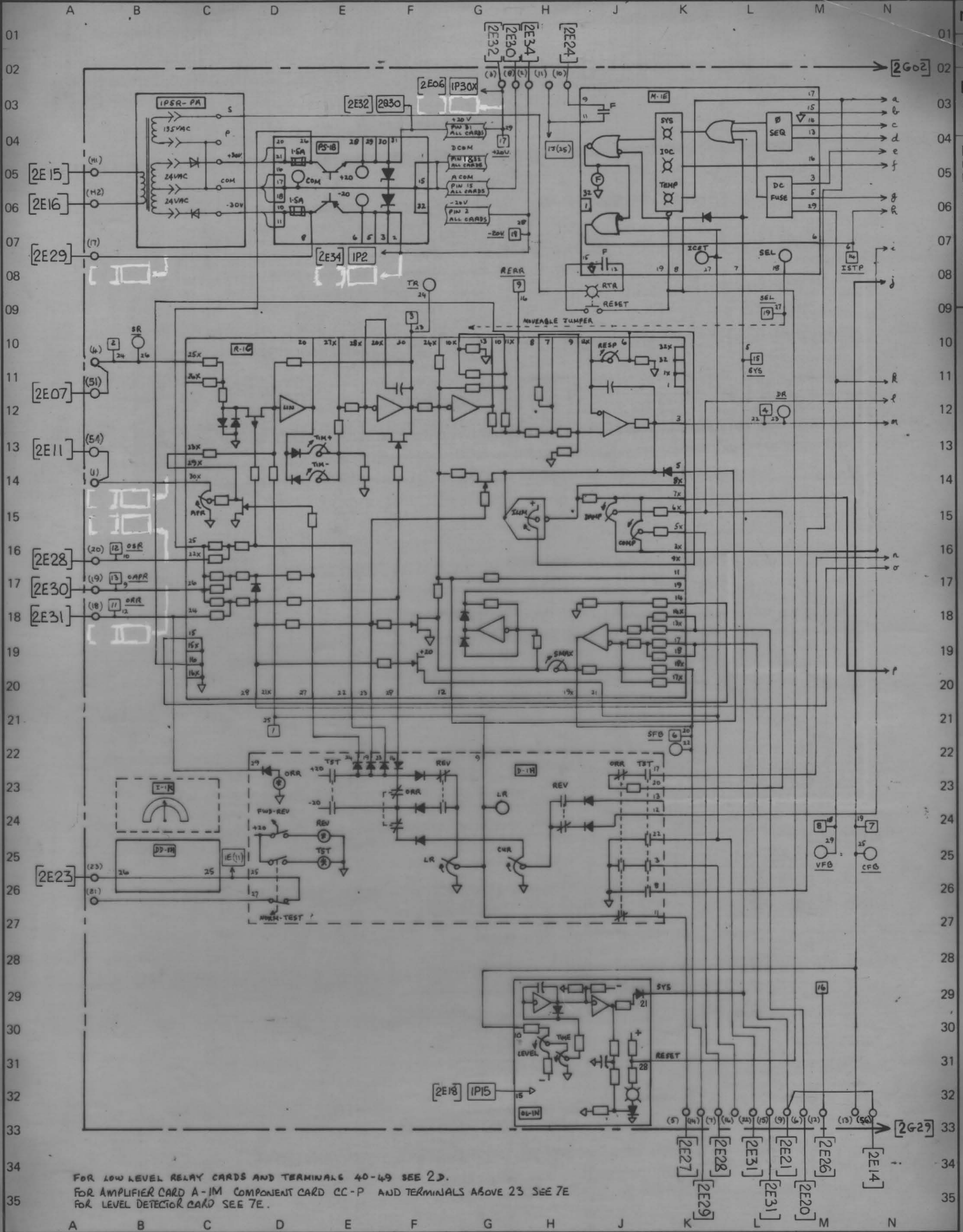
DR 2
SH D
CONT. 2E
ELEMENTARY DIAGRAM
902M 102XR



TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 12-12-77	DRAWBENCH MAIN DRIVE CONVERTER FAULT AND SIGNAL RELAY LOGIC		IDENT 2		
			CHANGE OF TEST SWITCH POSITIONS			TECHN. ENG. C.A.R. APPD.	GO NUMBER 738R00		ELEMENTARY DIAGRAM 902M102XR		
						VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.		CONTD. 2E		2 D	

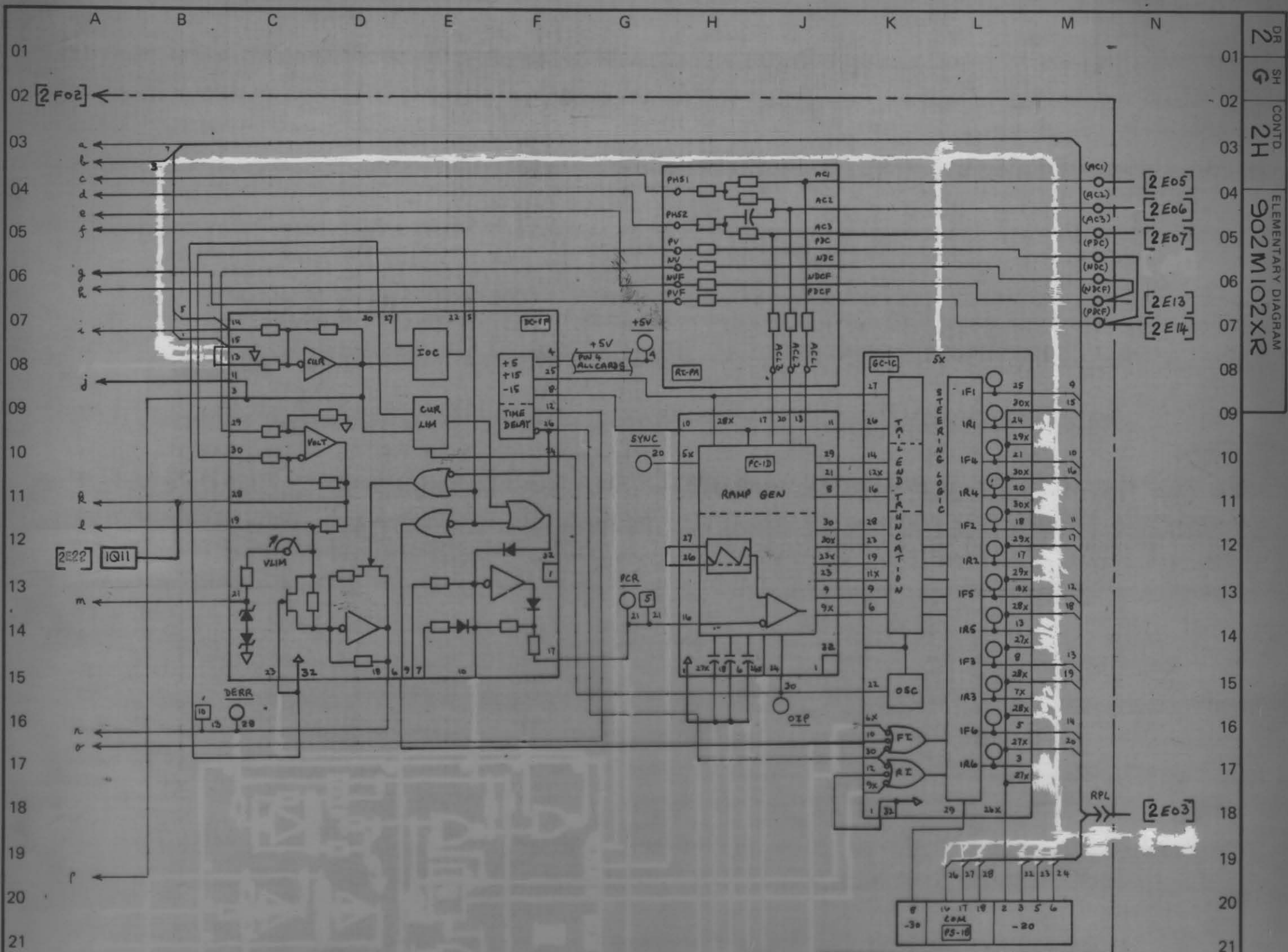


TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 2-12-77	MAIN DRIVE FOR DRAWBENCH DRIVER-REGULATOR CONNECTIONS GO NUMBER 738R00 ELEMENTARY DIAGRAM 902M102XR CONTD. 2F			IDENT 2
						TECHN.				DR SH
						ENG. C.A.R.				2 E
						APPD.				



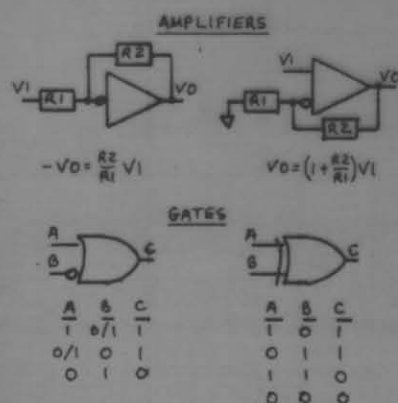
FOR LOW LEVEL RELAY CARDS AND TERMINALS 40-49 SEE 2D.
 FOR AMPLIFIER CARD A-1M COMPONENT CARD CC-P AND TERMINALS ABOVE 23 SEE 7E
 FOR LEVEL DETECTOR CARD SEE 7E.

TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 2-12-77	MAIN DRIVE FOR DRAWBENCH PART OF A E011 DRIVER-REGULATOR CARDS (1 OF 2)		IDENT
							GO NUMBER 738R00		ELEMENTARY DIAGRAM 902M102XR
							CONTO. 2 G		DR SH 2 F



JUMPER TABLE - FROM 901K		
FUNCTION		JUMPER
SUPPLY FREQUENCY	50HZ	1D26-1D27
STABILITY RESPONSE	NORMAL	1G6-1G16
CURRENT LIMIT	REQUIRED (REG) >75BHP	1F20-1F32
TOP/BASE SPEED	600/1200RPM 1.7-2.0	1G10X-1G11X 1G8-1G9
TACHO	REG 444 (DC) 60-115V DC	1G13X-1G14X 1G17-1G18 1G14-1G15 1G18X-1G19X
SR INPUT	20V FOR MAX SPEED	1G15-1G26X
AR INPUT	ALTERNATIVE SPEED REF	1G23X-1G29X 1G30X-1G31
LOAD COMP	NOT USED	NONE
RESISTANCE ISOLATOR	460V AC } 500V DC }	Go2
INHIBITION OF NEG DR	YES	1G5-1G12

SYMBOLS



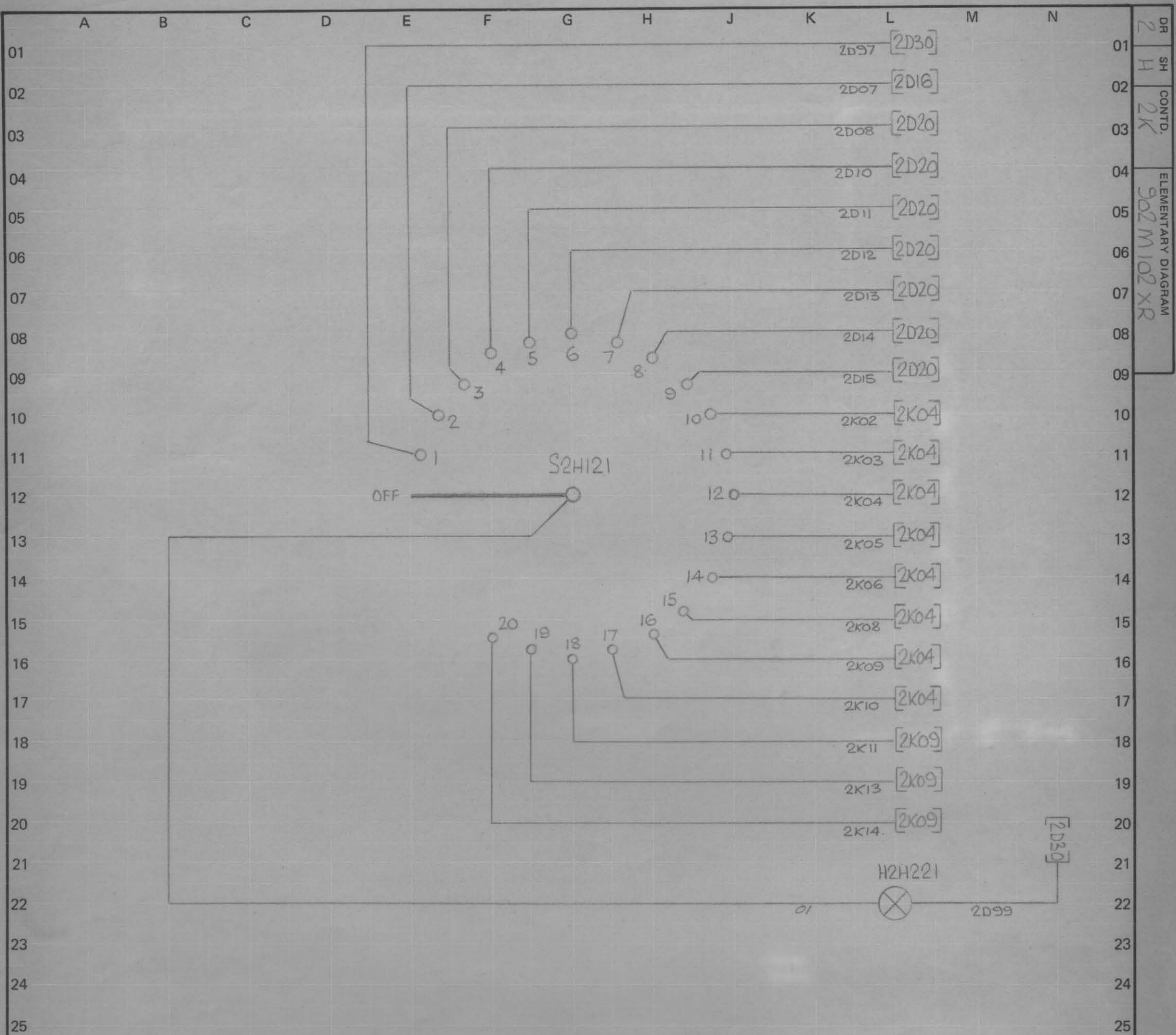
INSTRUMENT CARD RECEPTACLE (1-11) CONNECTION AT TAB19, DIAL POSITION 7. UNDERLINED NOMENCLATURE DEFINES SIGNAL TEST.

TEST POST LOCATED ON INDIVIDUAL CARD AND SHOWN WITHIN THAT CARD OUTLINE ABOVE.

TEST POST SHOWN OUTSIDE THE CARD OUTLINE ABOVE IS LOCATED ON THE MONITOR CARD (H-1E) AND WIRE CONNECTED AT TAB 19 THAT CARD. UNDERLINED NOMENCLATURE DEFINES SIGNAL TEST.

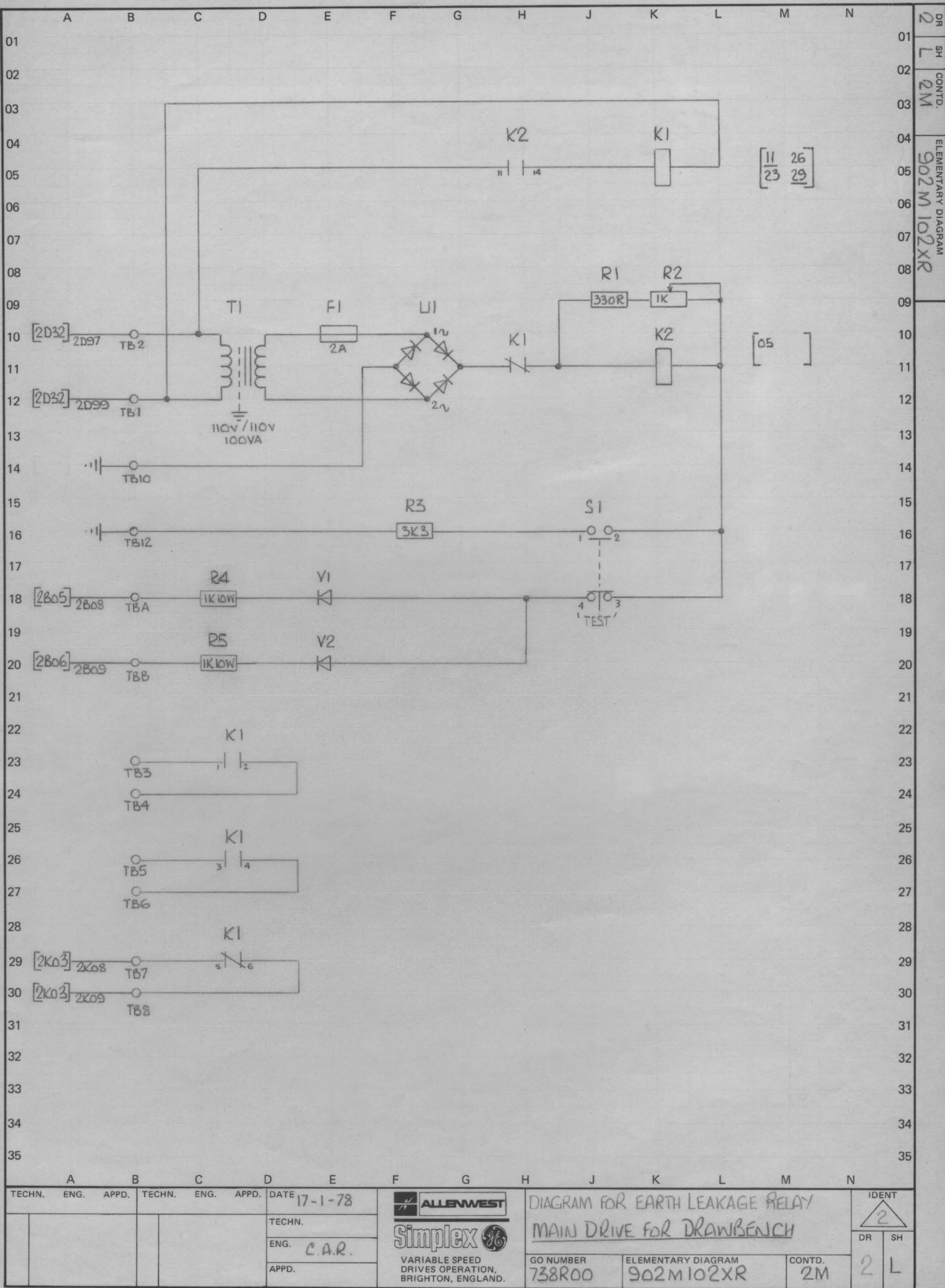
POTENTIOMETER ARROWS ON THE CARD ELEMENTARY DIAGRAMS INDICATE THE WIPER DIRECTION AS THE POTENTIOMETER SHAFT IS ROTATED CLOCKWISE TO INCREASE FUNCTION.

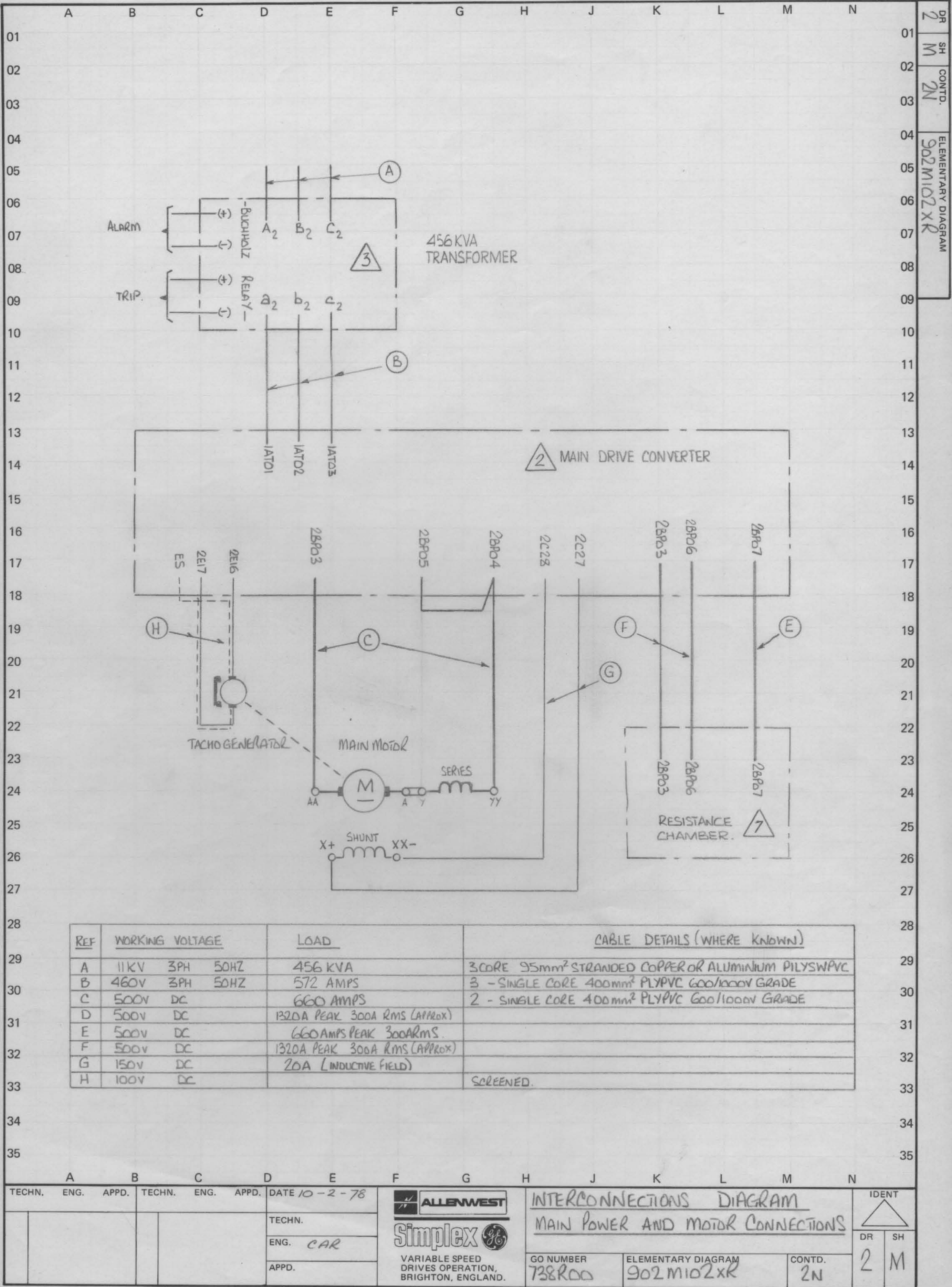
TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE	2-12-77			MAIN DRIVE FOR DRAWBENCH. PART OF A E011 DRIVER-REGULATOR CARDS (2 OF 2)		IDENT 2	
			SPL & INTERNAL CONS REMOVED 14-2-78			TECHN.				GO NUMBER		DR	
						ENG.		VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.		738R00		SH	
						APPD.				ELEMENTARY DIAGRAM		2 G	
										902M102XR		2 H	

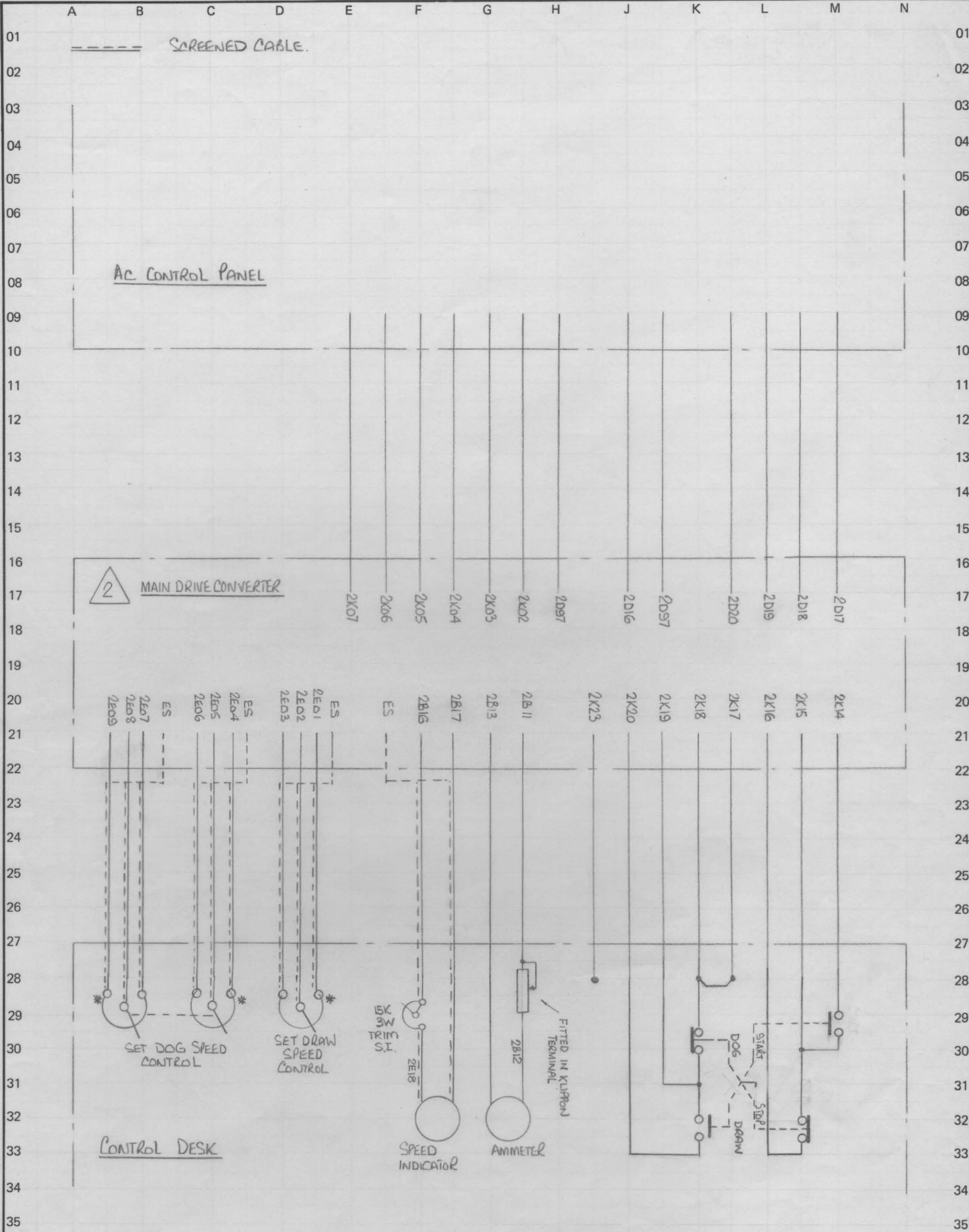


Pos	TEST FUNCTION	Pos	TEST FUNCTION
0	OFF	11	ULTIMATE FORWARD LIMIT SWITCH
1	TEST LAMP	12	GEARBOX LUBE PRESSURE SWITCH
2	SUPPRESSION FUSES HEALTHY	13	MOTOR VENTILATION CONTACTOR
3	ARMATURE OVERLOAD	14	BENCH RESET
4	MFC ARMATURE VOLTS FUSES HEALTHY	15	CONVERTER LOCK OUT SWITCH 'ON'
5	PHASE FAILURE	16	EARTH LEAKAGE RELAY
6	AC UNDERVOLTAGE RELAY	17	CONVERTER FAULT
7	STACK VENTILATION AIR FLOW	18	MASTER STOP RELAY
8	REGULATOR SYSTEM FAULT	19	BRKING CONTACTOR DE-ENERGISED
9		20	MIN ARMATURE VOLTS INTERLOCK
10	OVERSPEED SWITCH		

TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 12-12-77	DRAWBENCH MAIN DRIVE TEST INTERLOCK SWITCH			IDENT 2	
			REVISED POSITIONS.			TECHN.				DR	SH
						ENG. CAR.				2K	H
						APPD.					
							VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.				
							GO NUMBER 738R00		ELEMENTARY DIAGRAM 902M102XR		CONTD. 2K







TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 10-2-78	INTERCONNECTIONS DIAGRAM			IDENT	
							CONTROL WIRING			DR SH	
							GO NUMBER 738R00			2 N	
							ELEMENTARY DIAGRAM 902M102XR			CONTD. 2P	
							Allenwest				
							Simplex				
							VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.				

DR SH CONTD. ELEMENTARY DIAGRAM
2 P 2Q 902M102XR

A	B	C	D	E	F	G	H	J	K	L	M	N	
01	LIST OF RECOMMENDED SPARES												01
02													02
03	Driver Regulator		AWSGE		Card/Oct		Rec						03
	Item		Pattern		Ref.		Qty						
04	Power Supply Card		193W257AAG01		PS		1						04
	Power Assembly		331W102AAGO2		PA		1						
	Gate Control Card		193W262AAG01		GC		1						
05	Phase Control Card		193W259AAG01		PC		1						05
	Monitor Card		193W261ACG01		M		1						
06	Driver Co-ordination Card		193W260BAG01		DC		1						06
	Standard Reg. Card		193W267BAG01		R		1						
	Diagnostic Card		193W524AAG01		D		1						
07	Dummy Diagnostic Card		905N110CA001		DD		1						07
	Instrument Card		193W295AAG01		I		1						
08	Overload Card		356W106AG01		OL		1						08
	Amplifier Card		193W256AAG01		A		1						
09	Component Card		901K104YE007		CC		1						09
	Signal Level Det. Card		193W277AAG02		SLD		1						
10	Low Level Relay Card		193W279AAG03		LLR		1						10
11													11
12	Field Controller												12
	(MFC)												
13	Motor Field Controller (MFC) (Compl)		331W456AAG04				1						13
	MFC Input Fuse Cartridge 30A		104W109AD057 - 30A				3						
14	Thyristor Module												14
15	Cell Arm (2 cells)		36D877242ABG02				1						15
	Current Feedback Card		193W269ABG05				1						
16	Current Transformer (5000:1)		104W157AB013				1						16
	Pulse Transformer		193W255ACG02				1						
17	Thermal Switch		104W152AC050				1						17
	Blower Assembly						1						
18	FUB - Fuse Blower						3						18
	FUC - Fuse MOV						3						
19	Phase Failure Lamp		104W190DA014				1						19
20	Module Ancillaries												20
21	Air Flow Switch		738R00/002/07		K2A321		1						21
	A.C. Line Fuses		104W109AR029		F2A051-3		6						
22	Trip Fuse Cartridge 20A		738R00/002/B011		F2C054-6		6						22
	Filter Pad (Washable)		901K103AX001				1						
23													23
24	General												24
25	Trip Fuses 10A		738R00/002/B011		F2B231 & 41		4						25
26	A.C. Undervoltage Relay RN1BA		738R00/002/B020		K2C131		1						26
	Phase Failure Relay (HIPEX)		738R00/002/B05		K2E091		1						
27	Set Spares for E.N. Bray Contactor Type 2N3P		738R00/002/B01		K2K261		1 set						27
	Set Spares for E.N. Bray Contactor Type 2K2		738R00/002/B01		K2K331		1 set						
					K2K081								
28	E.N. Bray Type 8Y Relay		738R00/002/B01		K2K281		1						28
	Fuse Cartridge		T1A2				4						
29	Fuse Cartridge		T1A4				4						29
	" "		T1A6				4						
30	" "		T1A16				6						30
	" "		T1S40				6						
31	" "		T1A10				6						31
	Relay BCR 120		104W127AC001				2						
32	Adder Block		104W127DA001				4						32
	Test Switch		738R00/002/B010		S2H121		1						
33	Excitation Trans. 250VA		738R00/002/B06		T2C071		1						33
	Indicating Lamp (110v)		BCR2940UC212A2				1						
	Bulbs for above Lamp		6V2CP				4						
34	Potentiometer 1K 12W Colvern		909W138AA023				1						34
	Potentiometer 5K/1K 12W Colvern						1						
35													35

TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE 20-6-78	ALLENWEST	MAIN DRIVE FOR DRAWBENCH			IDENT	
						TECHN.	Simplex	LIST OF RECOMMENDED SPARES			DR	SH
						ENG. BAR	VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.	GO NUMBER 738R00	ELEMENTARY DIAGRAM 902M102XR	CONTD. 2Q	2	P
						APPD.						

	A	B	C	D	E	F	G	H	J	K	L	M	N	
01														01
02														02
03														03
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06														06
07														07
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34														34
35														35

VARIABLE SPEED DRIVES OPERATION - DRIVE MODEL LIST													
DRIVE DESCRIPTION - DRAWBENCH MAIN DRIVE													
Model Number: VSD400F77E43													
Order Number: 738ROO													
Order Item No.: 002													
PART NO.	DESCRIPTION				DIAGRAM REF.				DRAWING NO. OR CODE				
01	"S22" Driver Regulator Double Rack				A2E011				PL				
02	Large Conversion Module (BDC 3062)				U2A101				331X460BAG02				
03	Airflow Switch 12" Probe 500CFM 110v A.C.				K2A321				738ROO/002/B07				
05	A.C. Line Fuses 600 amp.				F2A051				104W109AR029				
	Carbon-Ferraz Type No. A060FD600H				F2A052								
					F2A053								
06	Trip Fuse Holder (TP) (Fuse PT.007)				F2C054				738ROO/002/B011				
	C-F Type No.55 III 22 + MCIII 5 22 1-5				F2C055								
					F2C056								
07	Trip Fuselink 20 amps.								738ROO/002/B011				
	C-F Type No. 521CPlg F22 20												
08	Trip Fuse Holder (Fuse PT.009)				F2B231				738ROO/002/B011				
	Carbon-Ferraz Type No. C27729				F2B241								
09	Trip Fuselink 10 amps.								738ROO/002/B011				
	C-F Type No. CC-651-CP-RB-2076-10												
011	E.E. Co. Fuseholder "RS30H" (Fuse PT.012)				F2C057				2320149				
	" " "				F2C058								
	(Fuse PT.013)				F2C101								
	" " "				F2C102								
012	E.E.G. Fuselink "T1A4"								2321311				
013	" " "T1A2"								2321310				
014	E.E. Co. Fuseholder "RS30H" (Fuse PT.015)				F2B031				2320149				
	" " "				F2B041								
	" " "				F2B151								
	" " "				F2B171								
015	E.E. Co. Fuselink "THA10"								2321357				
016	E.E. Co. Fuseholder "RS50H" (Fuse PT.017)				F2C071				2320149				
	" " "				F2C072								
	" " "				F2C073								
017	E. E. Co. Fuselink "T1A16A"								2321317				
018	E.E. Co. Fuseholder "RS30H" (Fuse PT.019)				F2A041				2320149				
	" " "				F2A042								
019	E.E. Co. Fuselink "T1A 6A"								2320152				
020	E.E. Co. Fuseholder "RS60H" (Fuse PT.021)				F20051				2320152				
	" " "				F20052								
	" " "				F2C053								
021	E. E. Co. Fuselink "T1S40"								2321317				
022	Type "M2C" Bar Primary O/L Relay				F2B121				ISR11936				
	Hand Reset, Instantaneous Trip												
	Suitable For FLC 898 Amps												
	Calibrated at 1000A, 1200A & 1400A												
023	Shunt 150 MV 924 Amps.				R2B161				738ROO/002/B04				
024	D.C. Ammeter (0-1400A)				P2B161				738ROO/002/B04				
025	D.C. Ammeter (0-20A)				P2C201				738ROO/002/B09				
026	D. C. Voltmeter (0-600v)				P2B111				738ROO/002/B04				
027	Undervoltage Relay Type "RN1-BA"				K2C131				738ROO/002/B020				
028	Phase Failure Detector "HIPEX" PFD				K2E091				738ROO/002/B05				
029	Filter - Capacitor 10uF 600v A.C.				C2C091				738ROO/002/B012				
					C2C072								
					C2C071								
031	Transformer 460/115v 250VA				T2C071				738ROO/002/B06				
032	" 1kVA				T2C102				738ROO/002/B02				
033	" 3.75kVA				T2C101				738ROO/002/B02				

TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE	20-6-78				MAIN DRIVE FOR DRAWBENCH				IDENT	
						TECHN.					DRIVE MODEL LIST				DR SH	
						ENG.	CAR				GO NUMBER				2 Q	
						APPD.					ELEMENTARY DIAGRAM				CONTD.	
							VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.				738ROO				902M102XR	
															2 R	

ALLENWEST

Simplex

VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.

902M102XR

2 R

A B C D E F G H J K L M N														DR
S H E E T - 2														SH
VARIABLE SPEED DRIVES OPERATION - DRIVE MODEL LIST														CONTD.
DRIVE DESCRIPTION - DRAWBENCH MAIN DRIVE														902M102XR
Model Number: VSD400F77E43														
Order Number: 738ROO														
Order Item No. 002														
PART NO.	DESCRIPTION								DIAGRAM REF.	DRAWING NO. OR CODE				
034	Motor Field Controllers								A2C171	331X456AAG04				
	DRG. 901K104YE (Showing Links)													
035	BCR 120 Relay 4-Pole								K2D151	104W127AC001				
									K2D191					
									K2K031					
									K2K161					
036	2-Pole Side Adder (For PT.035)									104W127DA001				
037	Relay MTG. Trough (152LG/For PT.035)									909W127AD001				
038	E.N. Bray T.P. Contactor Type "2N"								K2K261	738ROO/002/BO1				
	Main Poles 2-N/O & 1-N/C													
039	E.N. Bray SP. Contactor Type "2K2"								K2K331	738ROO"002/BO1				
	Main Pole N/O													
040	E.N. Bray Type "8Y" Relay								K2K081	738ROO/002/BO1				
									K2K281					
041	Test Switch 20-Posn & Off								S2H121	738ROO/002/BO10				
042	Indicating Lamp 110v 50Hz (White)								H2H221	BCR2940UC212A2				
	(Red)								H2D101					
043	Glass Colour Cap (Red) For PT No. 042									BCR2940U200DH				
044	" " " (White) " " " "									BCR2940U200DM				
046	P/B Operator Wl-Extended Push									BCR2940UJ200B				
047	Contact Block Single Circuit N/O									BCR2940U310A				
049	Simplex-GE Moulded Case A.C. T.P.								Q2A021	738ROO/002/BO3				
(A)	Circuit Breaker Type BTKMA836Y800													
(B)	Dummy Plug Type No. BTKM-AYT3													
(C)	Undervoltage Release													
(D)	Aux. Switch 4 C/O Type No. BTKM-AA5A6AB4													
(E)	Handle Mechanism Type "TDM"													
051	Circuit Breaker Terminal Shroud									902M104FB001				
052	Rear Screen for Terminal Shroud									901K11GXA001				
053	"U24" Filter Resistance Unit								R2C091	ISR17482				
	3 - Sections Each 7.5 ohms 565 Watts								R20072					
	In Common Drip-Proof Enclosure								R2C071					
	(To be mounted on top of canopy													
	on Regulator Section)													
A B C D E F G H J K L M N														IDENT
TECHN.	ENG.	APPD.	TECHN.	ENG.	APPD.	DATE	MAIN DRIVE FOR DRAWBENCH							DR
						TECHN.	DRIVE MODEL LIST							SH
						ENG.								
						APPD.								
VARIABLE SPEED DRIVES OPERATION, BRIGHTON, ENGLAND.							GO NUMBER	ELEMENTARY DIAGRAM				CONTD.		
							738ROO	902M102XR				FL		