



Fecha : 16-ene-18

Proyecto : Mabe Saltillo

Maquina: Negri Bossi NB720 M36

MAPA DE ENTRADAS

	Entrada	Descripcion	Ane	NC	N	CABLE	CLEMA	COM (+)	Volts
								2	
1769 L24ERQ QBFC1B  DI0 Local 1	0	20LS/21LS Safety Front Gate Closed				27	3	12	24V
	1	24LS Nozzle Safety Guard				25	4		
	2	F.O. Oil Filter				36	5		
	3	LIV Tank Oil Level				40	6		
	4	60LS Mould Daylight Increasing				53	7		
	5	61LS Mould Daylight Decreasing				54	8		
	6					35	9		
	7	10 PS Lube Pressure Switch				37	10		
	8	26PS Front Pneum. Gate Press. Switch					11		
	9	81 Ls Moulds safety				33	12		
	10	12LS Core 1 Set				31	13		
	11	13LS Core 1 Pulled				32	14		
	12	14LS Core 2 Set				46	15		
	13	15LS Core 2 Pulled				47	16		
	14	LS Expulsor Auxiliar Adelante				133	17		
15	LS Ejector Retacted Verified				134	18			
1769 IQ32 DI1 Local	0	ROBOT PERMITS CLAMP CLOSE					19	XB1/Blanco	24V
	1	ROBOT IS NONOPERACIONAL					20		
	2	ROBOT PERMITS EJECTOR RETRACT					21		
	3	ROBOT PERMITS EJECTOR FORWARD					22		
	4	ROBOT PERMITS CORE PULL					directo		
	5	ROBOT PERMITS CORE SET					directo		
	6	ROBOT PERMITS CLAMP MOTION					directo		
	7						directo		
	8	22Ls-23Ls Rear Safety Gate Closed				201/204	directo		
	9	BOTONERA E0				XB1/Rojo	directo		
	10	BOTONERA E1				XB1/Blanco-Verde	directo		
	11	BOTONERA E2				XB1/Negro	directo		
	12	BOTONERA E3				XB1/Café-Verde	directo		
	13	BOTONERA E4				XB1/Morado	directo		
	14	BOTONERA E5				XB1/Gris-Rosa	directo		
	15	pin11- Paro Emergencia				XB1/Amarillo	directo		
	16	PIN12- PB Abrir Puerta				XB1/Verde	directo		
	17	PIN13- PB Cerrar Puerta				XB1/Café	directo		
	18					XB1/Blanco-Amarillo	directo		
	19	Motor M1 Encendido				XB1/Azul	directo		
	20						12		
	21	27PS Neum Gate Press Switch				52	12		
	22	62LS				43	3		
	23	34LS Injection Unit Swing				44			
	24								
	25	TEMPERATURA ACEITE							
	26	LS CORE 3 PULLED							
	27	LS CORE 3 SETED							
	28								
	29								
	30								
31									

RELE	FUS
R1	1 CPU
R2	2 COMUN DE ENTRADAS
R3	3 CAJA BOTONERA PANEL + BM20.02
	4 Transduc Presion



Fecha : 16-ene-18

Proyecto : Mabe Saltillo  
 Maquina: Negri Bossi NB720 M36

**MAPA DE SALIDAS**

	SALIDA	Descripcion	Anex	Actuador	Cable	Clema	COM	Volts
							1/29/210	
1769 L24ERQ QBFC1B <b>DO-0</b> Local 1	0	5F PUMP 3	R3	SSR30	103	30	177	24V
	1	4E CORE 2 SET		SSR31	118	31	177	
	2	4F CORE 2 PULL		SSR32	119	32		
	3	2A Injection		SSR33	106	33	-9	
	4	2B Screw Suck Back		SSR34	107	34		
	5	2C Screw Rotation		SSR35	108	35	7	
	6	3A Carriage Fwd		SSR36	109	36		
	7	3B Carriage Rev		SSR37	110	37	10	
	8	4A Ejection FW		SSR38	111	38		
	9	4B Ejection Retract		SSR39	112	39	1	
	10	5A Pump 1		SSR40	113	40		
	11	5B Pump 2		SSR41	114	41		
	12	5G P2 Pump Selection for indep. Circuit		SSR42	120/32	42		
	13	7B Switch Over To Closed Loop		SSR43	115	43		
	14	4C CORE 1 SET		SSR44	116	44		
15	4D CORE 1 PULL		SSR45	117	45			
1769 OB32 <b>DO-1</b>	0	2P		SSR46	104	46		24V
	1	10A Neumatic Gate Closing		SSR47	122	47	3	
	2	10B Neumatic Gate Opening		SSR48	123	48		
	3	10C NEUMATIC GATE Press		SSR49	2	49	100A	
	4	1E Displacement Increase		SSR50	100	50	101A	
	5	1F Displacement Decrease		SSR51	101	51		
	6	5C Pump 3		SSR52	130	52	12A	
	7	5D Pump 4		SSR53	131	53		
	8	5H P4 Selection		SSR54	128	54	2	
	9	Motor started M1		R2				
	10	Heat Zone 1-Nozzle			UA	70	28	
	11	Heat Zone 2 - Front			UB	71		
	12	Heat Zone 3			UC	72		
	13	Heat Zone 4			UD	73		
	14	Heat Zone 5			UA1	74		
	15	Heat Zone 6			UB1	directo		
	16	Heat Zone 7 Rear			UC1	directo		
	17	Led Temperaturas			XB1/Rosa	directo		
	18	Alarmas			XB1/rojo azul	directo		
	19	CL Lube Accesory case			151			
	20	CIERRE PRENSA		R4	R4			
	21	SALIDA VALVE GATE		R5				
	22	SIGNALROBOTTHATMOLDFULLYOPEN		K1	156			
	23	SIGNALROBOTTHATEJECTORFULLYFW.		K3	158			
	24	SIGNALROBOTTHATCORESETED		K4	IR/1			
	25	SIGNALROBOTTHATCOREFULLYPULLED		K5	IR/2			
	26	SIGNALROBOTTHATREJECT		K6	160			
	27	SIGNALROBOTAUTO		K7	13			
	28	SIG.ROB.THAT.MOLDFULLYCLOSED		K8	157			
	29	SIG.ROB.THAT.EJECTORRETRACT		K2	159			
	30	SIG.ROBOTTHATNOPARTAVAILABLE		K9	IR/3			
31	SIG.ROBOTTHATMOVABLEGATEAND GUARDSCLOSED		K10	26				



Fecha : 16-ene-18

<b>Mabe Saltillo</b>	
Negri Bossi NB720	M36

<b>Mòdulo</b>	1769-L24ERQBF1B		
<b>Canal</b>	<b>Descripcion</b>	<b>Direccion</b>	<b>SENSOR</b>
<b>Vin 0+</b>	Termocoples Z6 REAR		
<b>Vin 1+</b>	Posicion Unidad Inyeccion		
<b>Vin 2+</b>	ACEITE		
<b>Vin 3+</b>	RPM		

<b>Mòdulo</b>	1769-IF4XOF2		
<b>Canal</b>	<b>Descripcion</b>	<b>Direccion</b>	<b>SENSOR</b>
<b>Vin 0+</b>	Posicion Prensa		
<b>Vin 1+</b>	Posicion Botador		
<b>Vin 2+</b>	Posicion Inyección		
<b>Vin 3+</b>			

<b>Canal</b>	<b>Mòdulo 1769-IT6</b>	<b>Direc</b>	
<b>In 0+</b>	ZONA NARIZ		
<b>In 1+</b>	ZONA 1 FRONT		
<b>In 2+</b>	ZONA 2		
<b>In 3+</b>	ZONA 3 REAR		
<b>In 4+</b>	ZONA 4		
<b>In 5+</b>	Zona 5		



Fecha : 

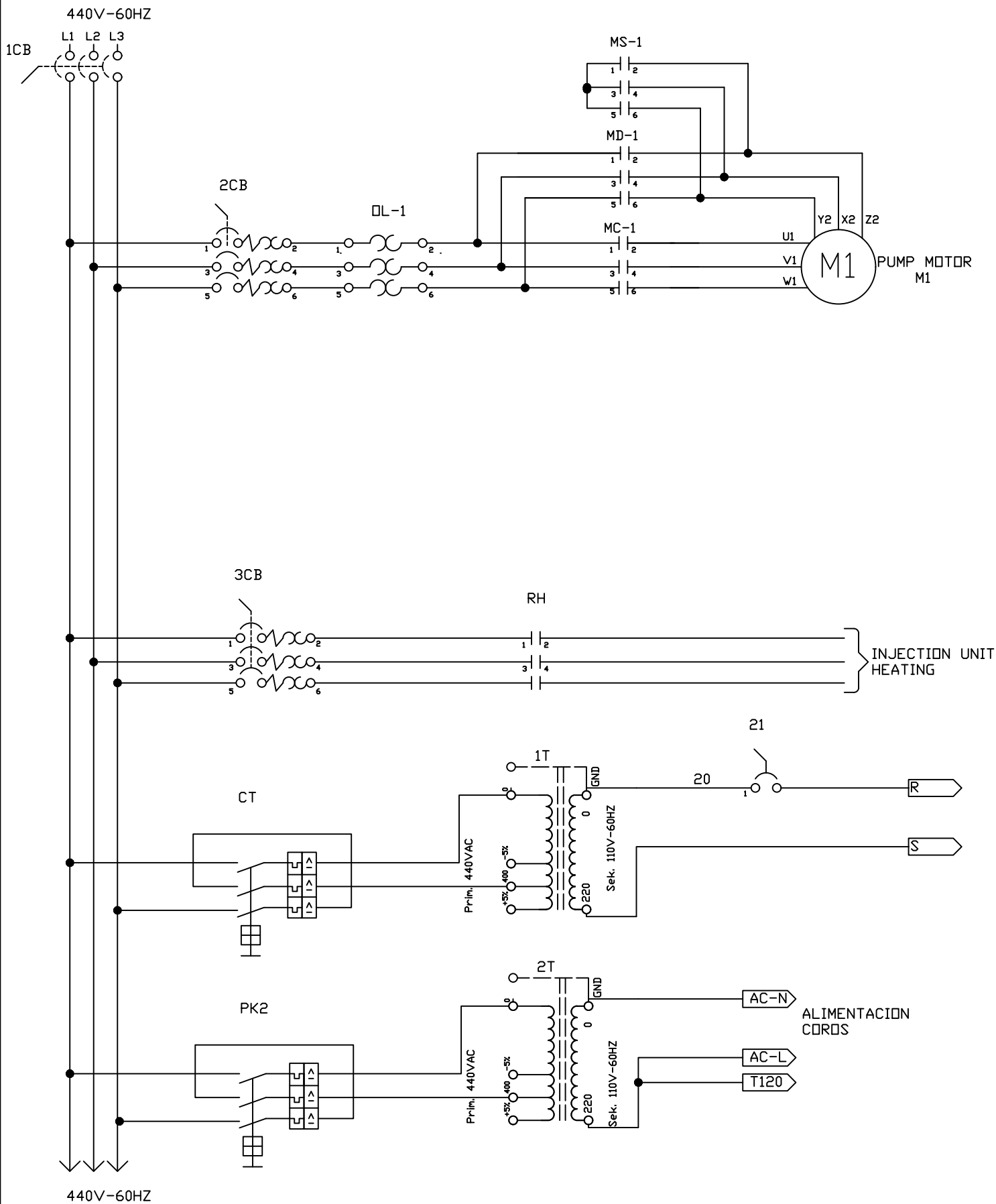
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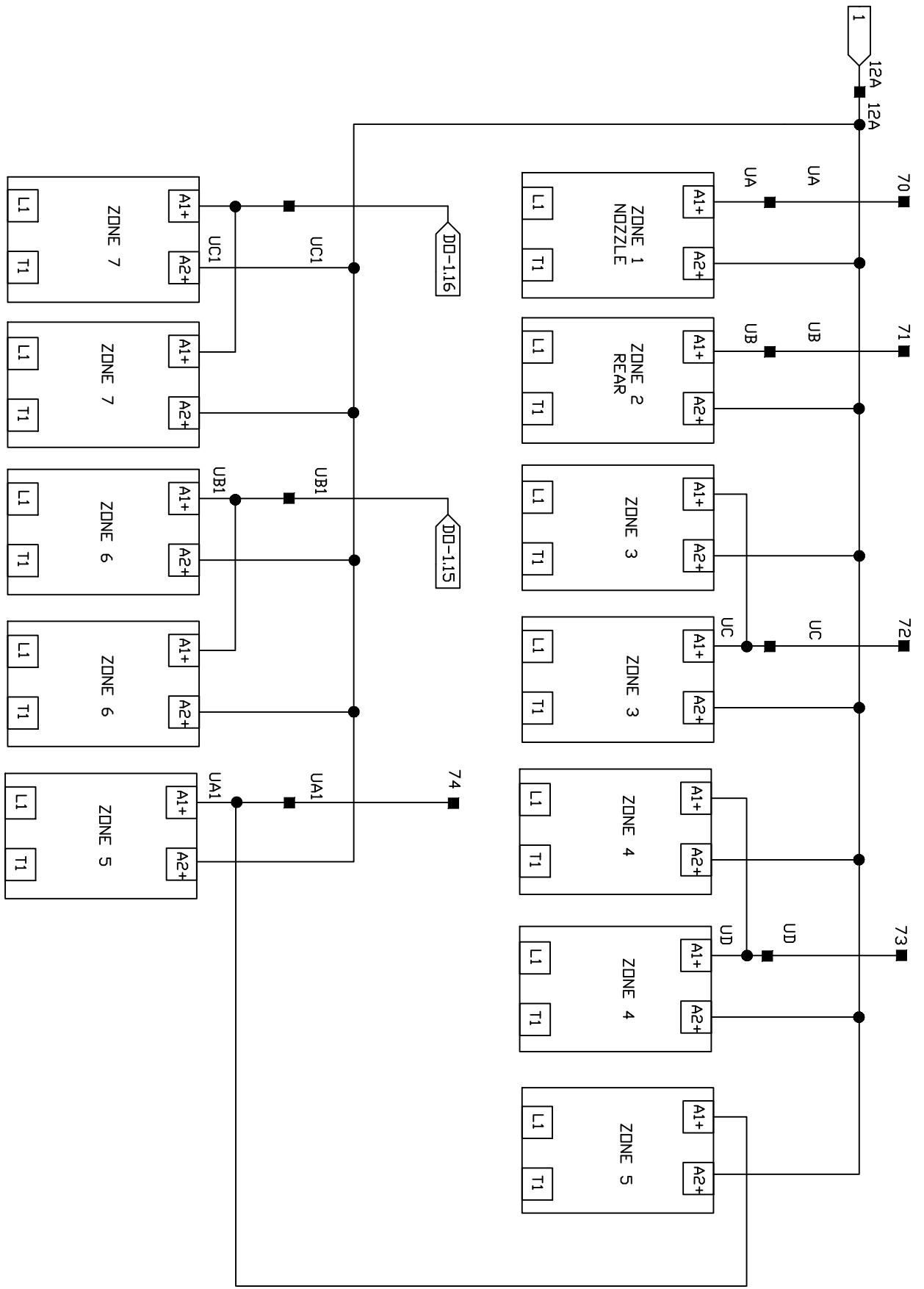
<b>Mabe Saltillo</b>	
<b>Negri Bossi NB720</b>	<b>M36</b>

**SALIDAS ANALOGICAS**

	Módulo	1769-L24ERQBF1B	S+    S-			Tarjeta Controladora
	Canal	Descripcion	Direc	V	M	
<b>Local 2</b>	OUT 0	6A Main Flow Clontrol				VEA250
	Out 1	1A/1B VELOCIDAD PRENSA				axiomatic

	Módulo	1769-IF4XOF2	S+    S-			Tarjeta Controladora
	Canal	Descripcion	Direc	V	M	
<b>Local Remoto</b>	V out 0+	7A Pressure Control				VEA250
	V out 1+	7P PRESION ADICIONAL				VEA250





MAQUINA: MABE NEGRI BOSSI NB720

Maq Ref: M36

CONTROL TEMPERATURA

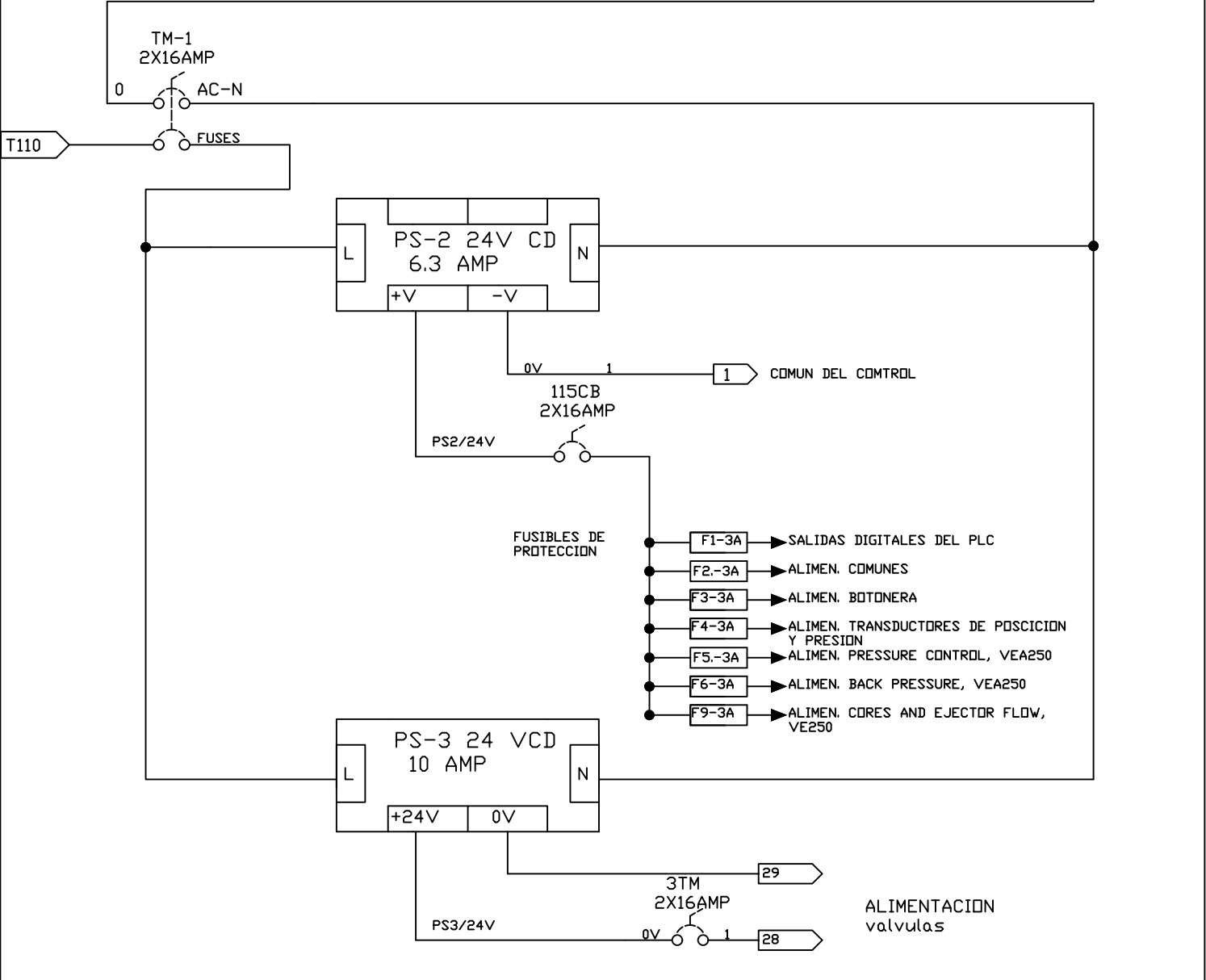
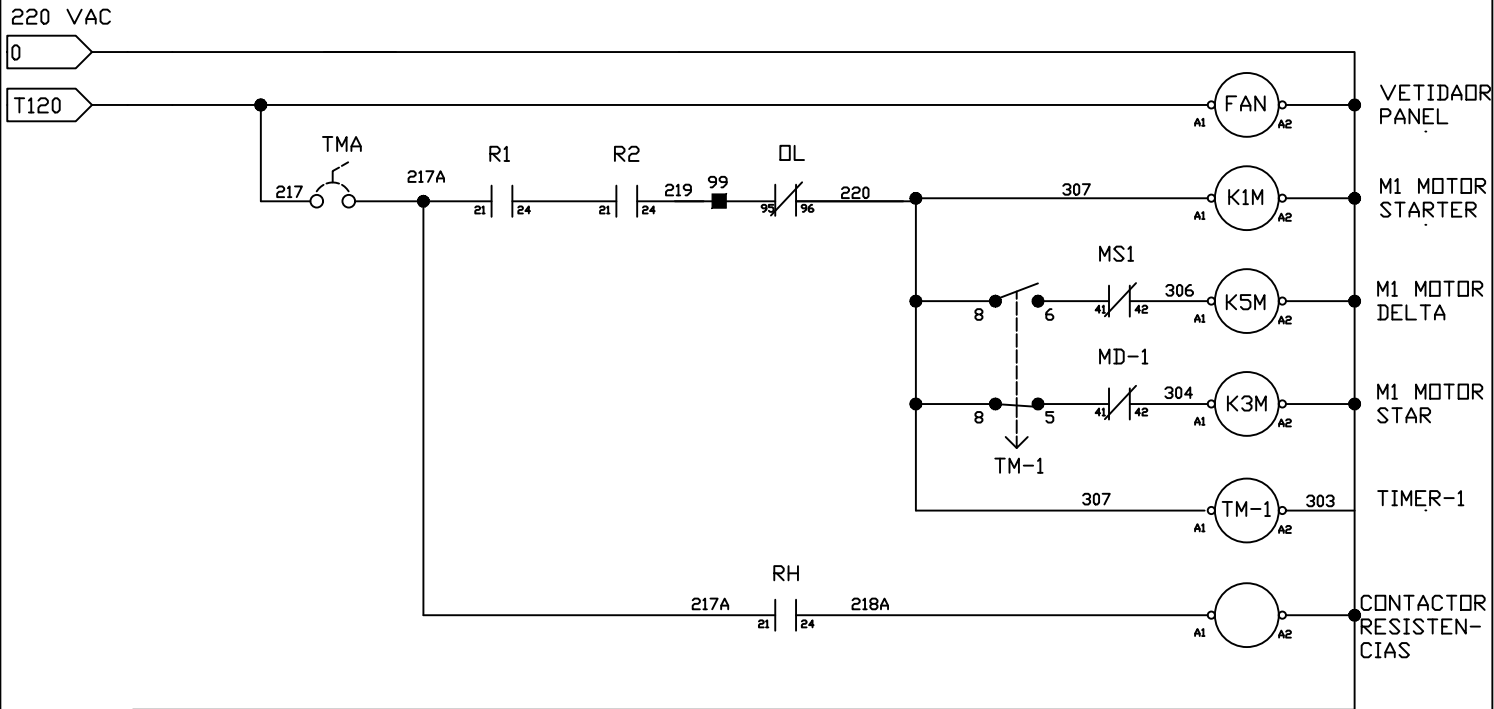
Mabe Saltillo

DIAGRAMA ELECTRICO

ELABORO: ROBERTO GEA

FECHA: 16/01/2018

HOJA No. 2



MAQUINA: MABE NEGRI BOSSI NB720 M36

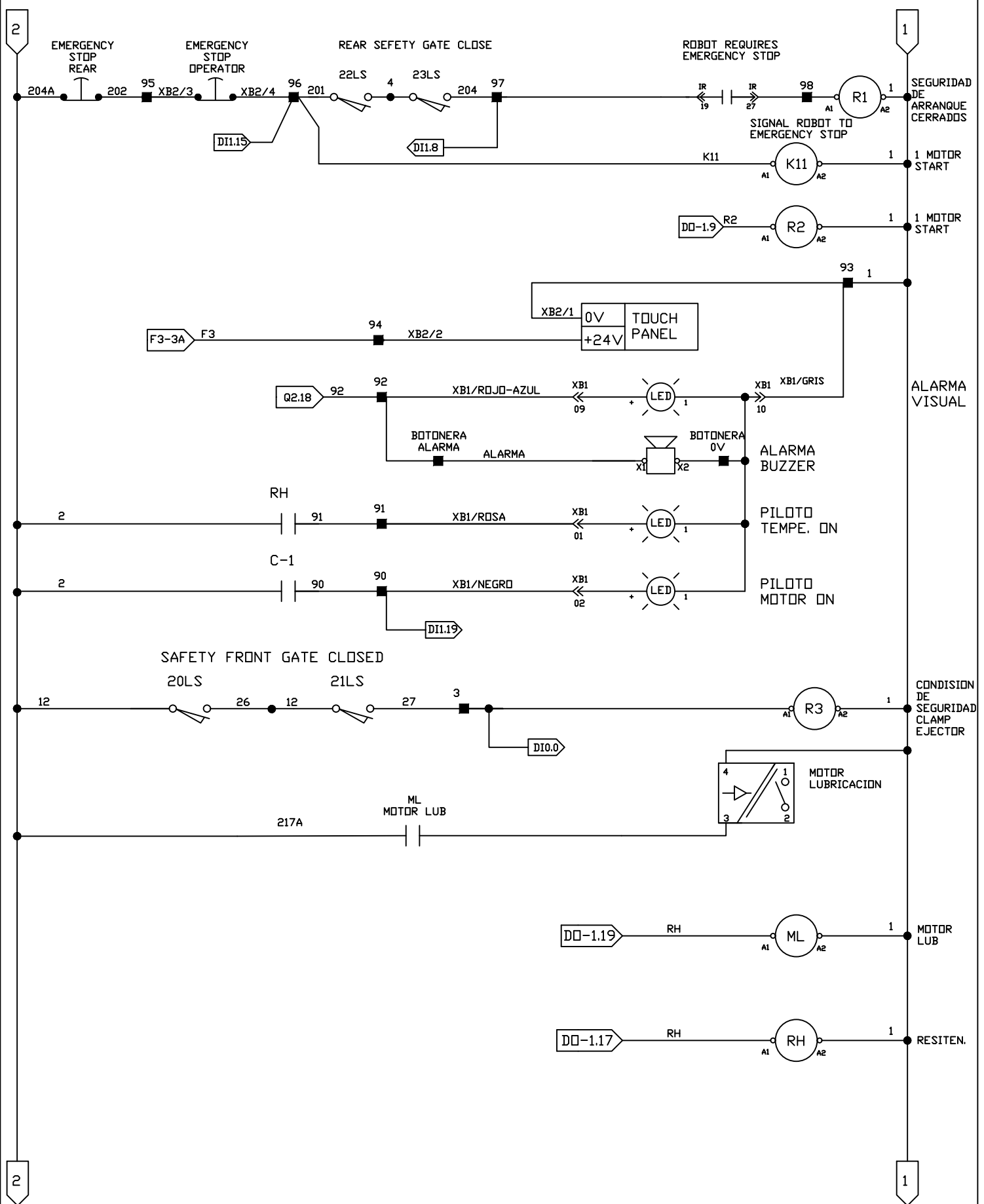
MABE SALTILLO DIAGRAMA ELECTRICO

ELABORO: ROBERTO GEA

FUENTES DE ALIMENTACION

FECHA: 16/01/2018

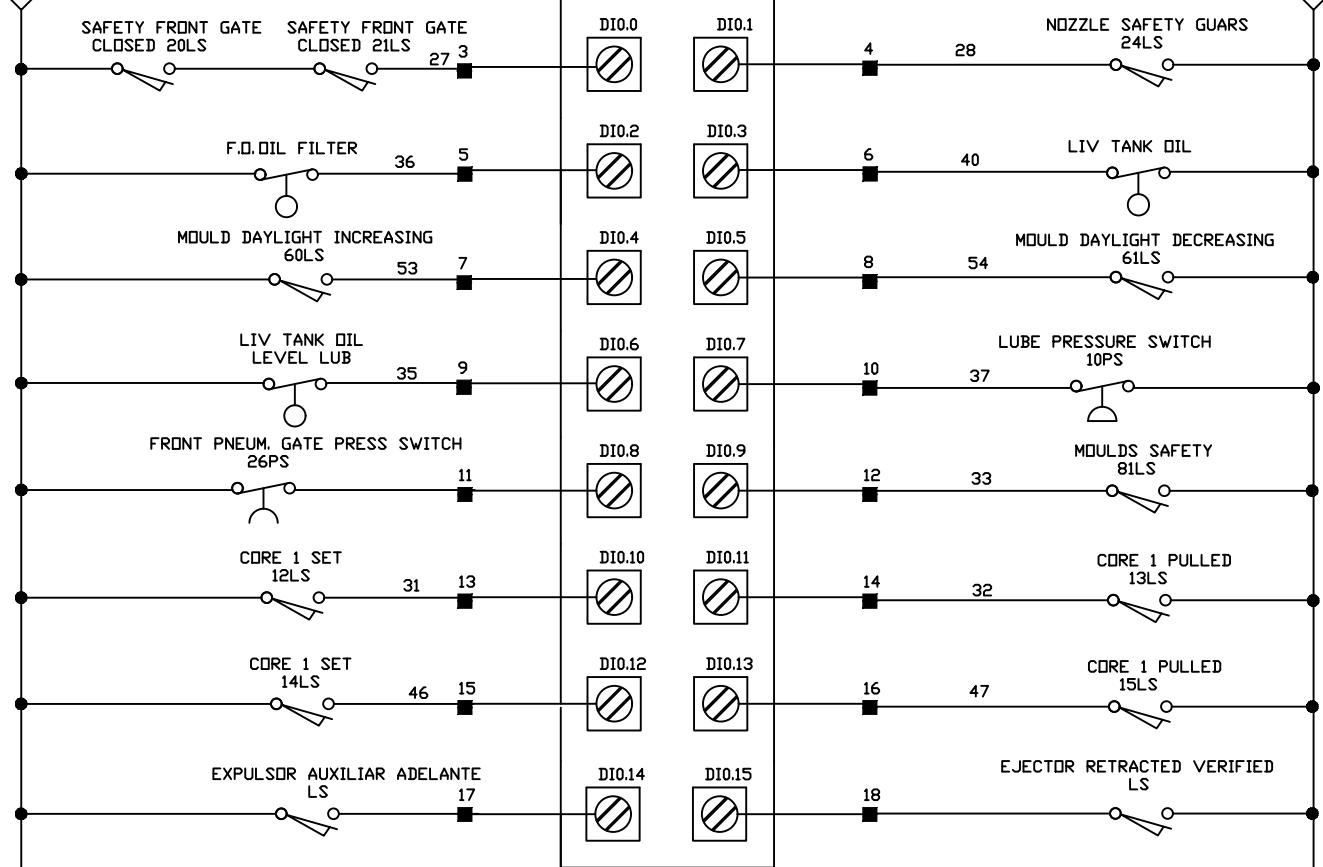
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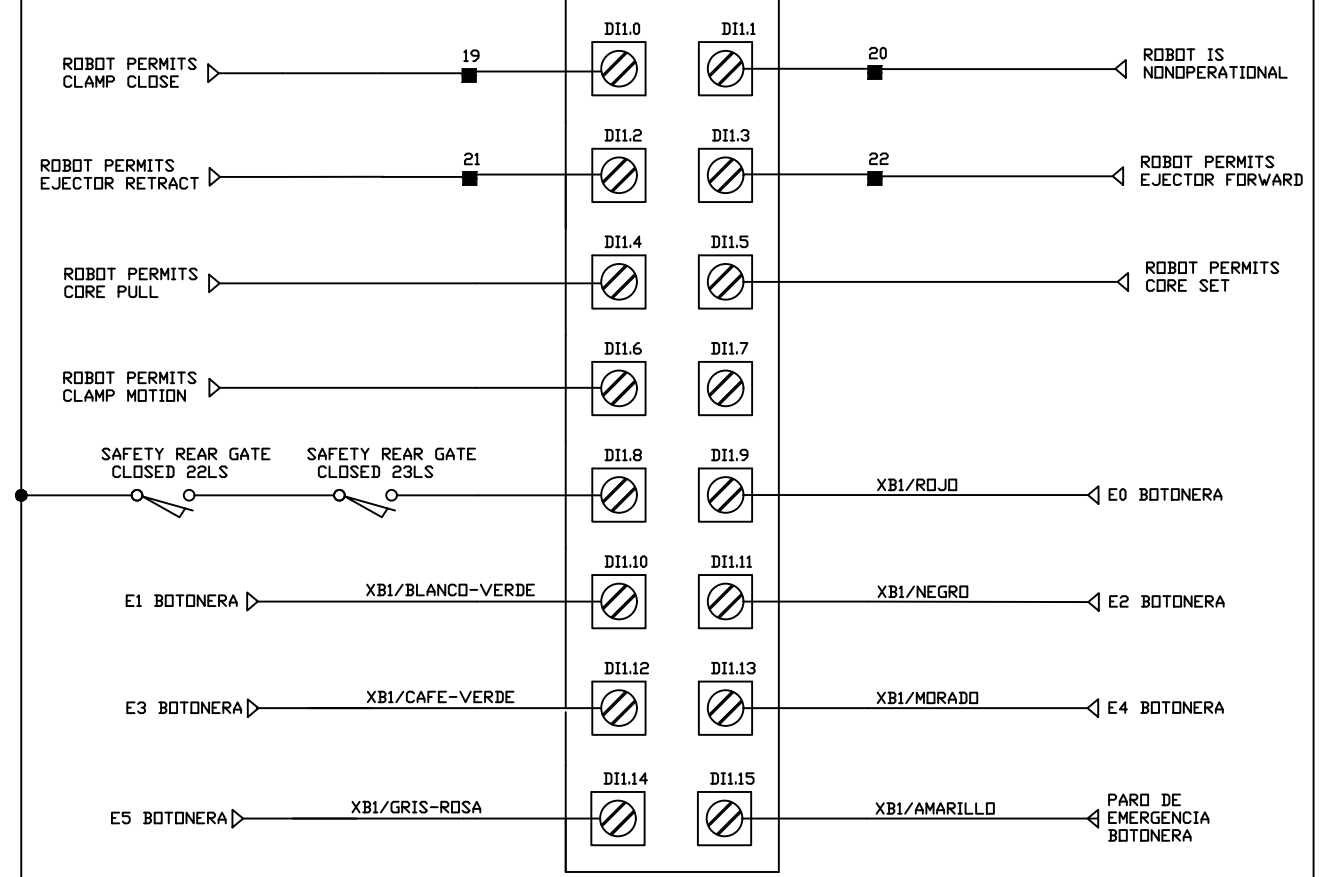


CPU QBFC1B

2 1



IQ32 MODULE



1 2

2 1



MAQUINA: MABE NEGRI BOSSI NB720

Maq Ref: M36

ENTRADAS DIGITALES

Mabe Saitillo

DIAGRAMA ELECTRICO

ELABORO: ROBERTO GEA

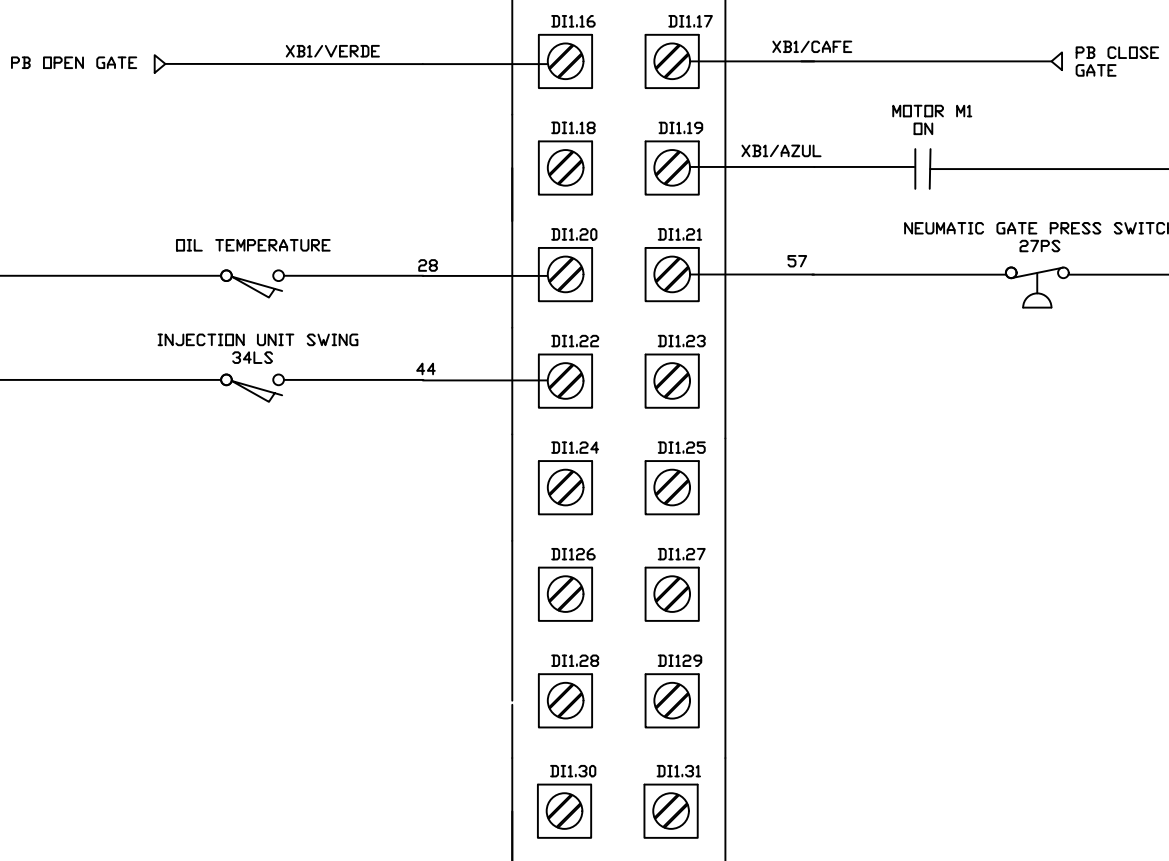
FECHA: 16/01/2018

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IQ32 MODULE

1 2

2 1



1 2

2 1



MAQUINA: MABE NEGRI BOSSI NB720

Maq Ref: 36

ENTRADAS DIGITALES

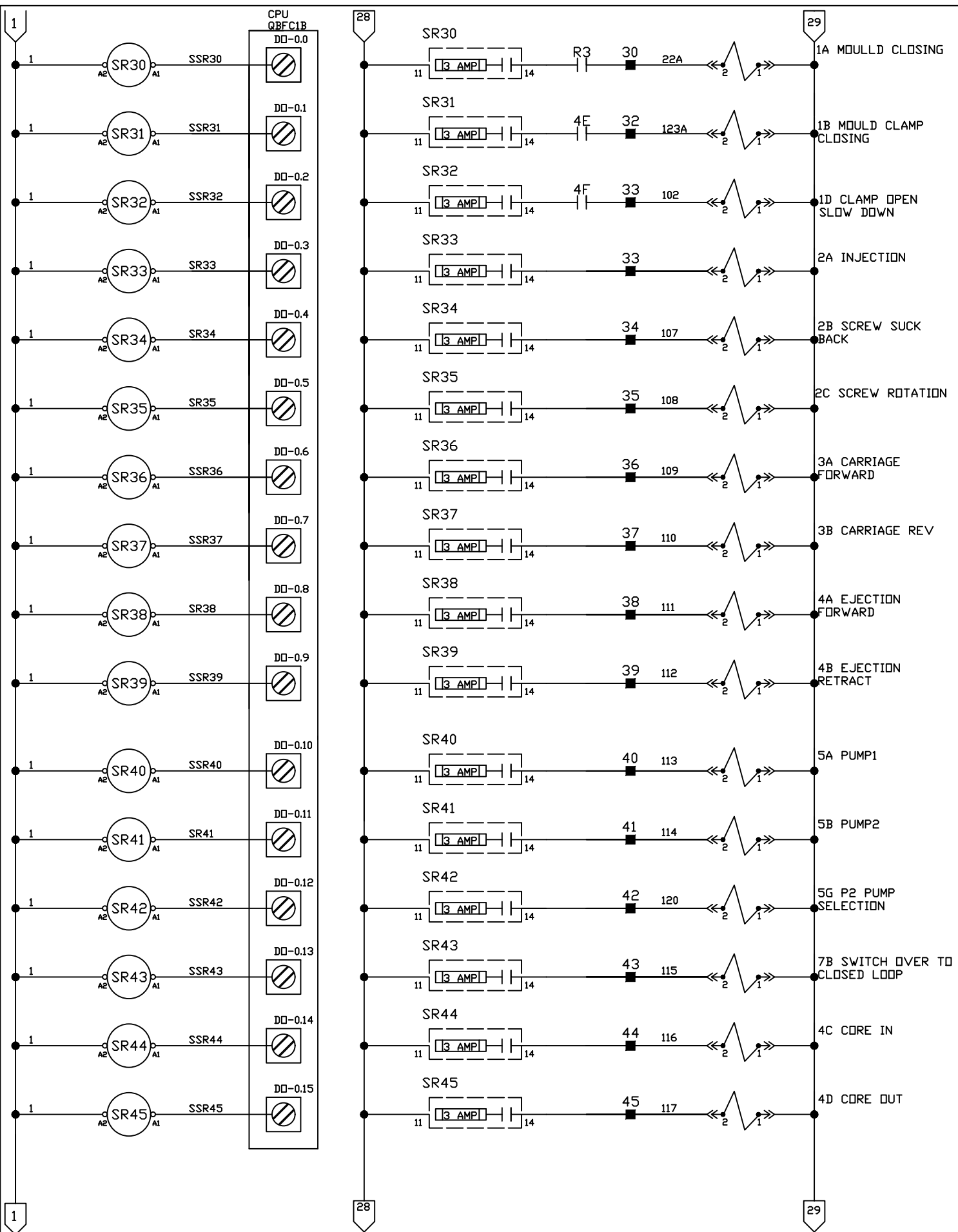
Mabe Saltillo

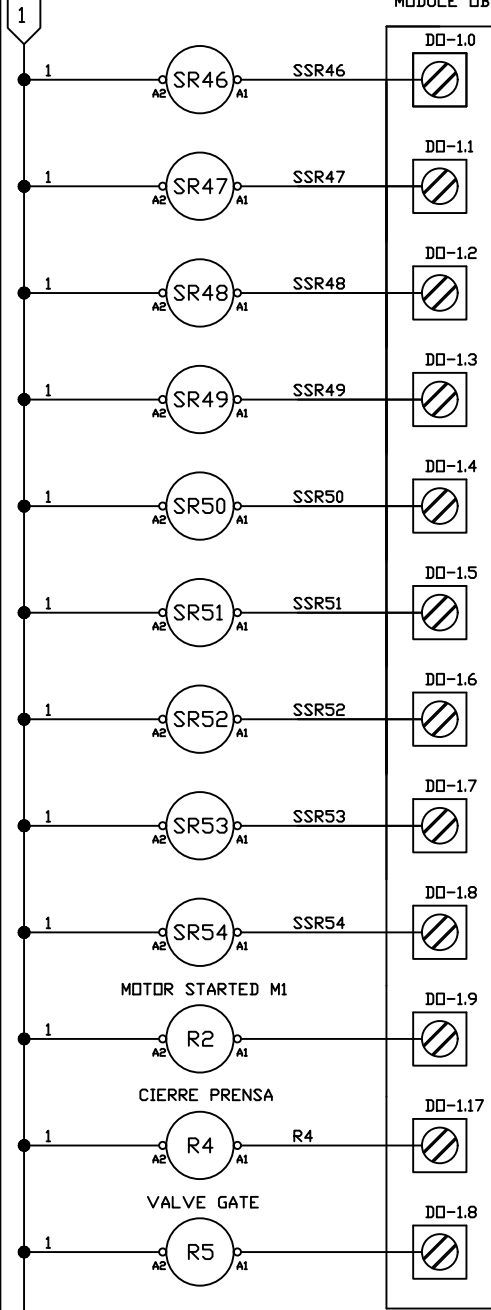
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ELABORO: ROBERTO GEA

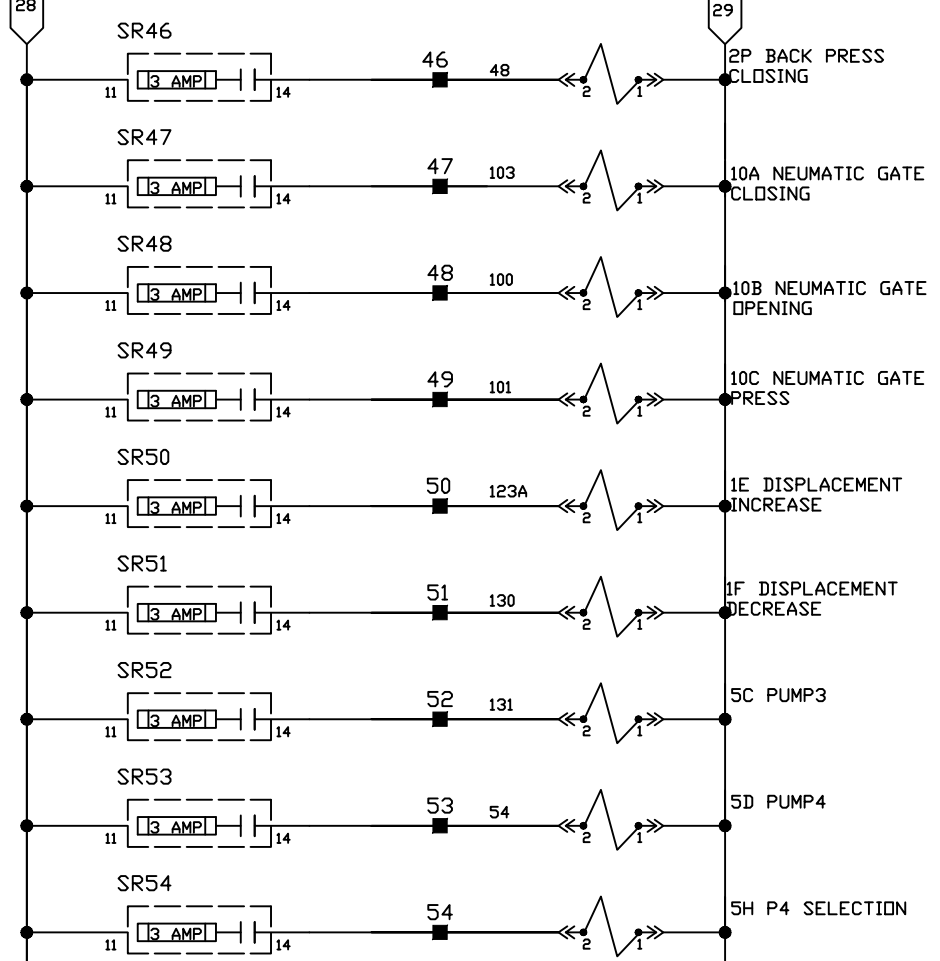
FECHA: 16/01/2018

HOJA: 6



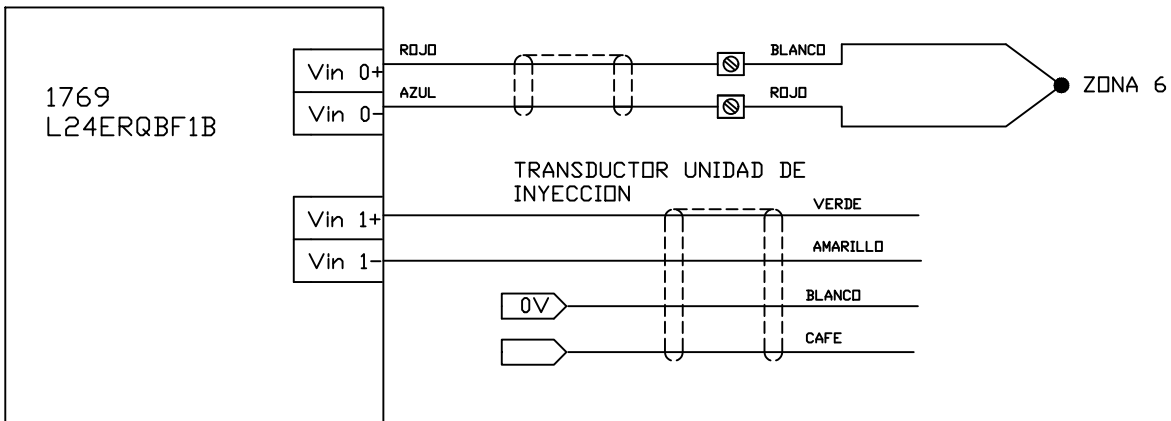
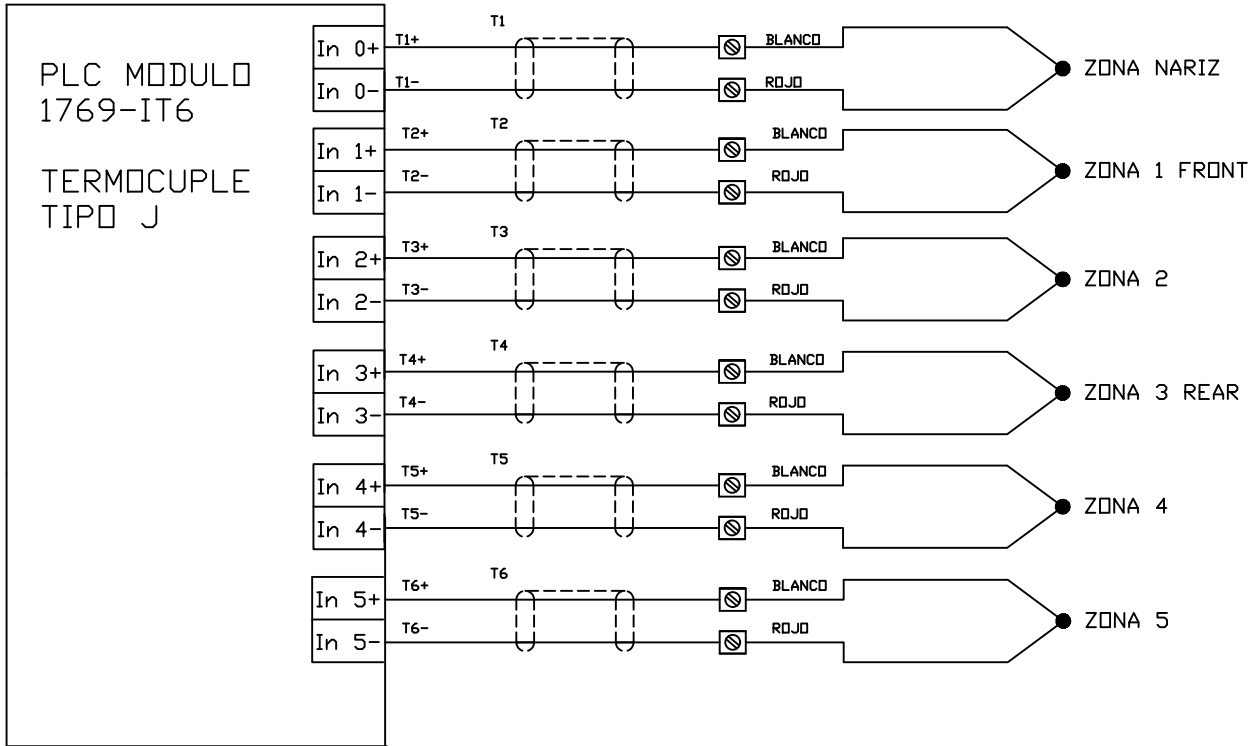


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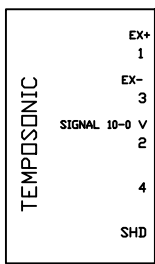


LIBRE

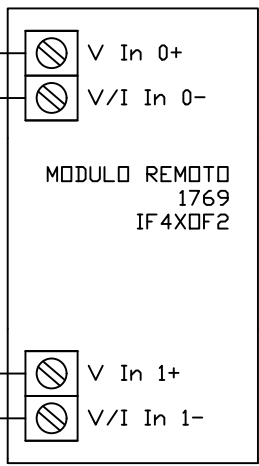
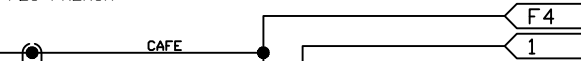




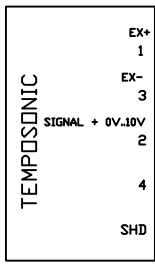
TRANSDUCTOR DE POSICION PRENSA



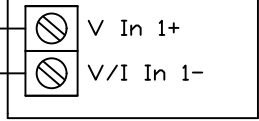
POS PRENSA



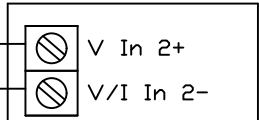
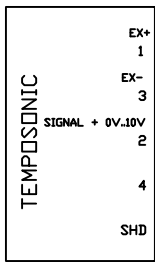
TRANSDUCTOR DE POSICION BOTADOR



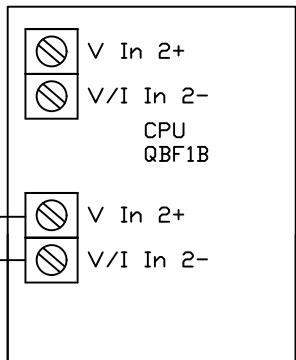
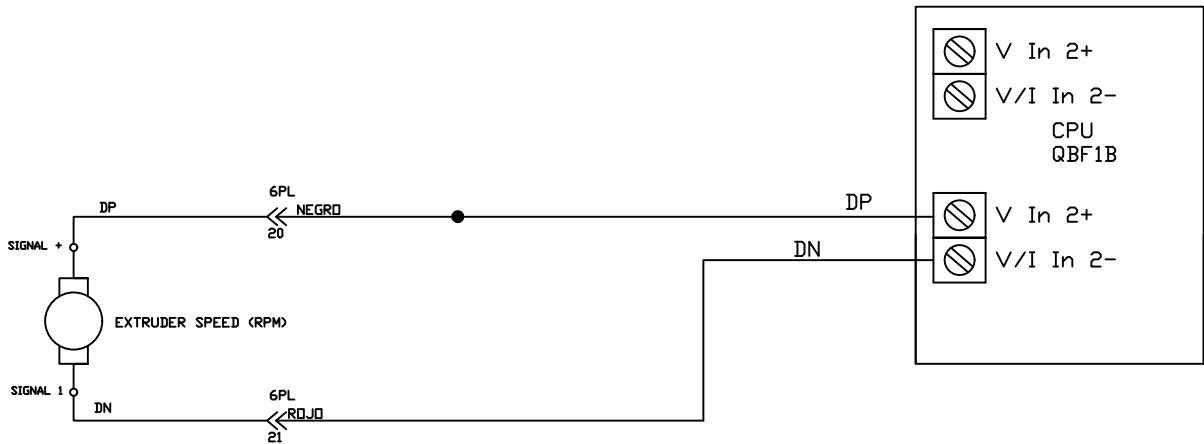
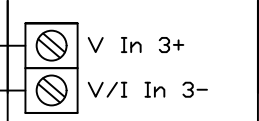
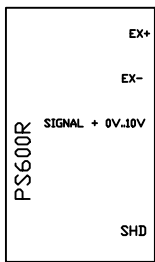
POS BOTADOR



TRANSDUCTOR DE POSICION INY



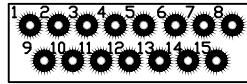
TRANSDUCTOR DE PRESION INYECCION



MAQUINA: MABE NEGRI BOSSI NB720	Maq Ref: M4	ENTRADAS ANALOGICAS
Mabe Saltillo	DIAGRAMA ELECTRICO	
ELABORO: ROBERTO GEA	FECHA: 01/08/2017	HOJA: 10

# CONFIGURACION DEL CABLE XB1 DE LA BOTONERA

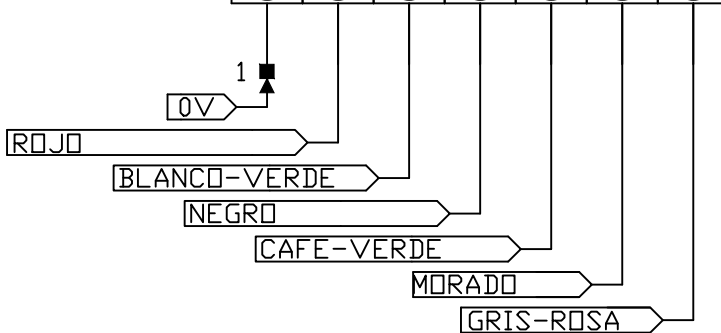
## PLUG DB15 HEMBRA



DESCRIPCION	NUMERO DE PIN DEL SUB-DB15	CABLE CONTROL DE 16 HILOS	MODULO CPU IQ32
LED CALEFACCION	1	XB1/ROSA	DI1.17
LED MOTOBOMBA	2	XB1/AZUL	DI1.17
COD. BOTONERA	3	XB1/ROJO	DI1.9
COD. BOTONERA	4	XB1/BLANCO-VERDE	DI1.10
COD. BOTONERA	5	XB1/NEGRO	DI1.11
COD. BOTONERA	6	XB1/CAFE-VERDE	DI1.12
COD. BOTONERA	7	XB1/MORADO	DI1.13
COD. BOTONERA	8	XB1/GRIS-ROSA	DI1.14
LED AVISOS	9	XB1/ROJO-AZUL	DI1.18
0V	10	XB1/GRIS	1
PIN 11	11	XB1/AMARILLO	DI1.15
PIN 12	12	XB/VERDE	DI1.16
PIN 13	13	XB1/CAFE	DI1.17
PIN 14	14	XB1/BLANCO-AMARILLO	DI1.18
+24V	15	XB1/BLANCO	F4

### CODIGO BOTONERA

IQ32	DI1	LOCAL	4			
	9	10	11	12	13	14



MAQUINA: MABE NEGRI BOSSI NB720

Maq Ref: 36

BOTONERA BM20.02

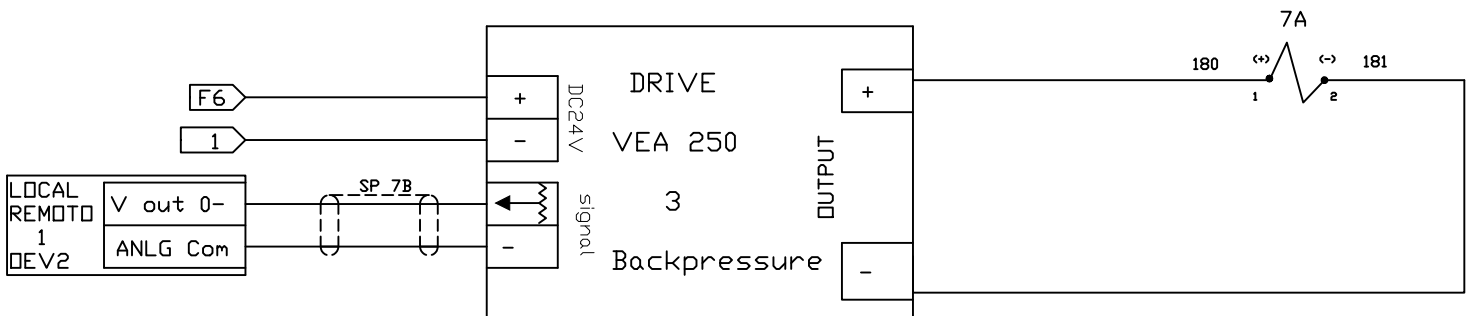
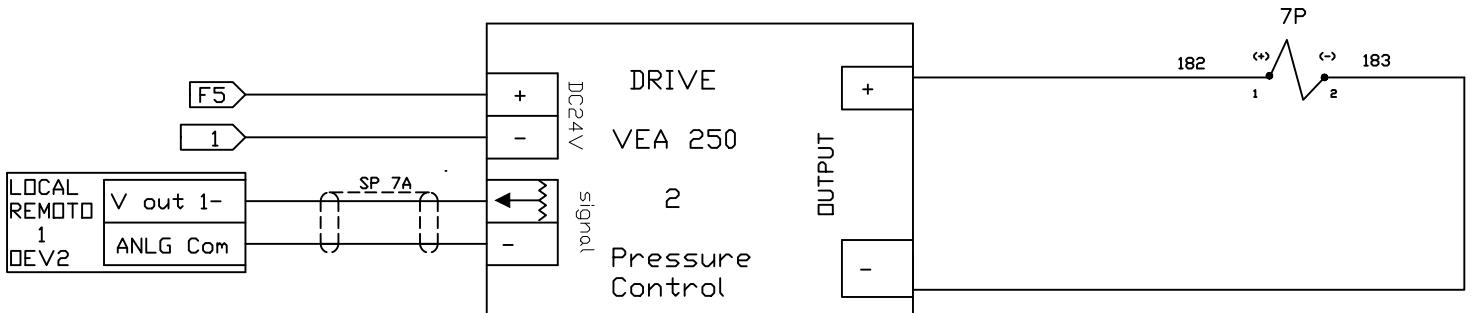
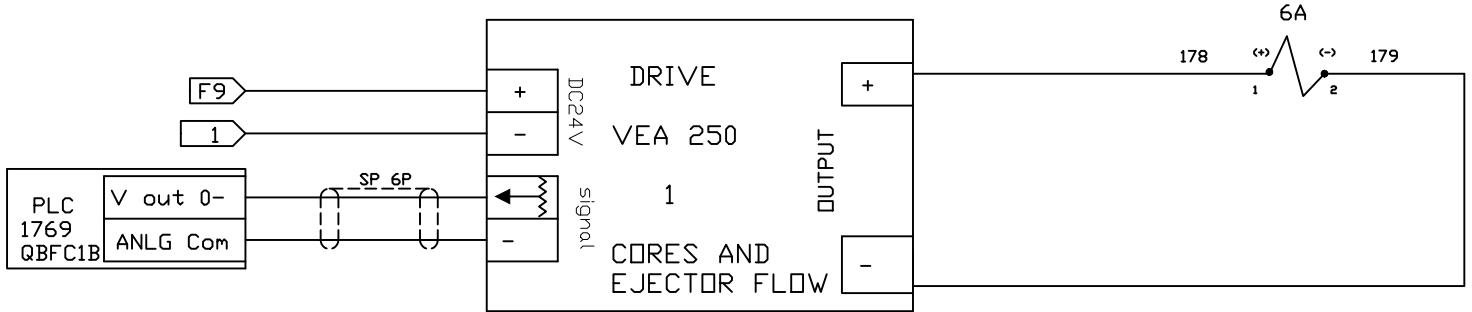
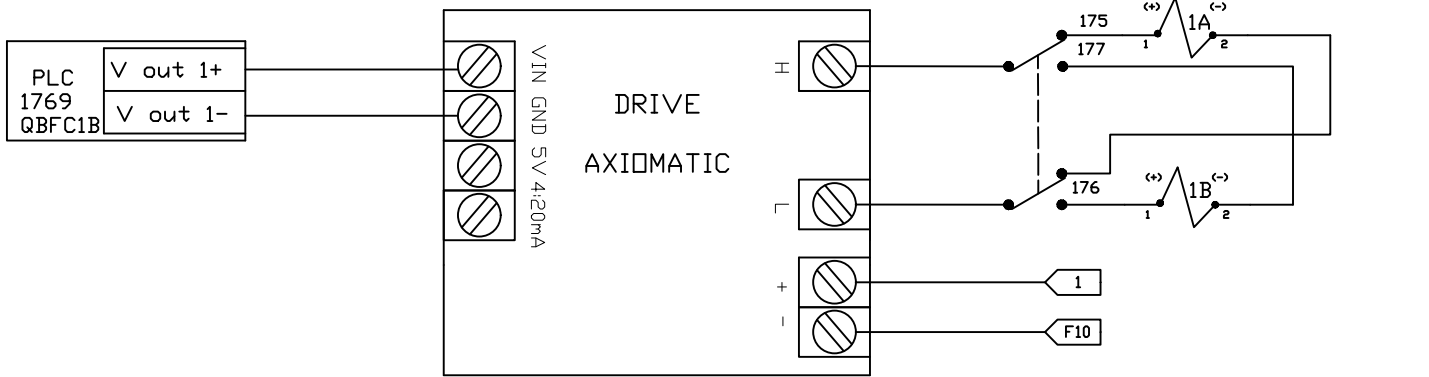
Mabe Saltillo

DIAGRAMA ELECTRICO

ELABORO: ROBERTO GEA

FECHA: 16/01/2018

HOJA: 11



MAQUINA: MABE NEGRI BOSSI NB720 Maq Ref: 36

Mabe Saltillo

DIAGRAMA ELECTRICO

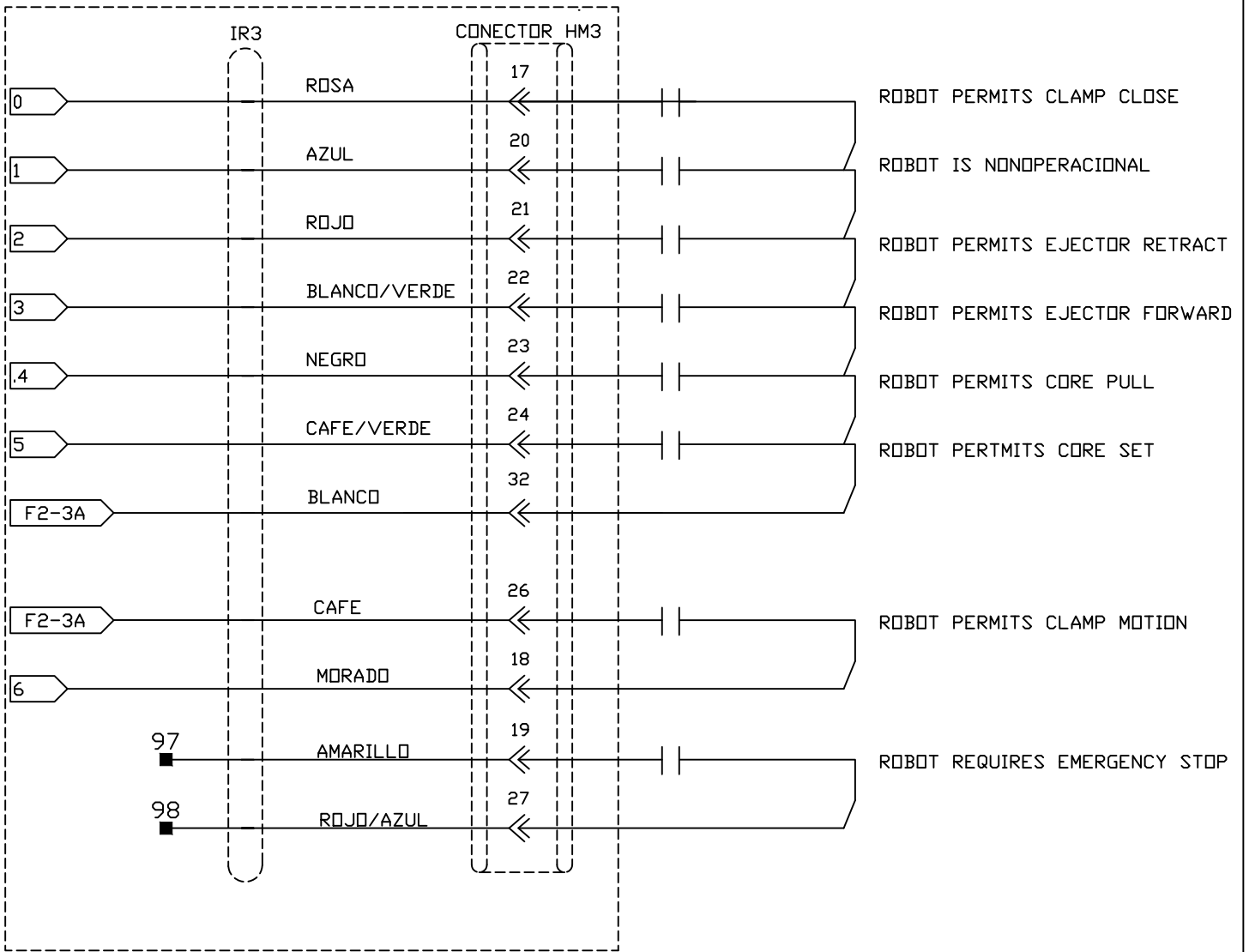
SALIDAS ANALOGICAS

ELABORO: ROBERTO GEA

FECHA: 16/01/2018

HOJA No. 12





MAQUINA: MABE NEGRI BOSSI NB720

Maq Ref: 36

Mabe Saltillo

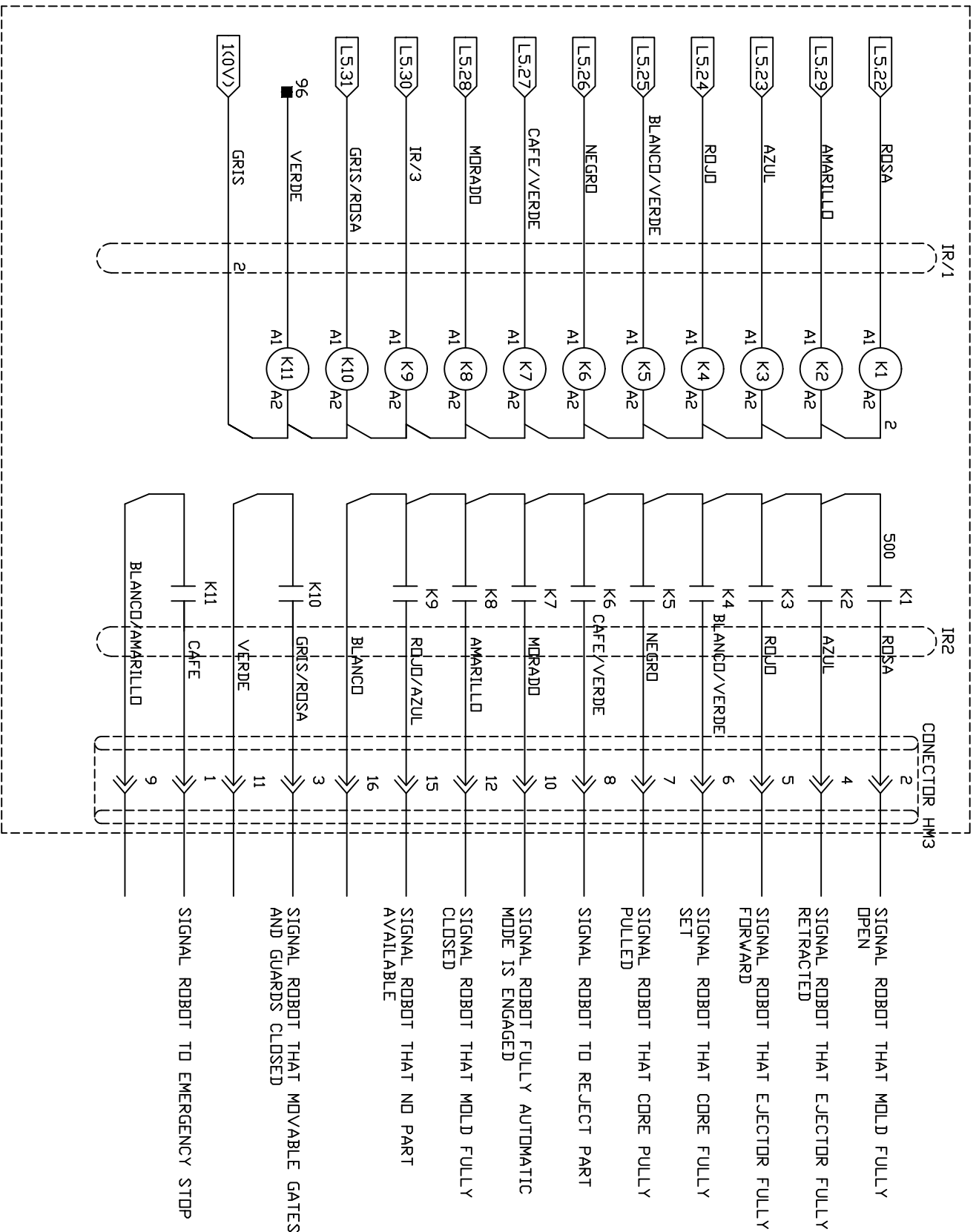
DIAGRAMA ELECTRICO

ENTRADAS  
INTERFACE ROBOT

ELABORO: ROBERTO GEA

FECHA: 16/01/2018

HOJA No. 13



MAQUINA: MABE NEGRI BOSSI NB720

Maq Ref: 36

Mabe Saltillo

DIAGRAMA ELECTRICO

SALIDAS  
INTERFACE ROBOT

ELABORO: ROBERTO GEA

FECHA: 16/01/2018

HOJA No. 14



Fecha : 16-ene-18

Proyecto : Mabe Saltillo

Maquina: Negri Bossi NB720 M36

MAPA DE ENTRADAS

	Entrada	Descripcion	Ane	NC	N	CABLE	CLEMA	COM (+)	Volts
								2	
1769 L24ERQ QBFC1B  DI0 Local 1	0	20LS/21LS Safety Front Gate Closed				27	3	12	24V
	1	24LS Nozzle Safety Guard				25	4		
	2	F.O. Oil Filter				36	5		
	3	LIV Tank Oil Level				40	6		
	4	60LS Mould Daylight Increasing				53	7		
	5	61LS Mould Daylight Decreasing				54	8		
	6					35	9		
	7	10 PS Lube Pressure Switch				37	10		
	8	26PS Front Pneum. Gate Press. Switch					11		
	9	81 Ls Moulds safety				33	12		
	10	12LS Core 1 Set				31	13		
	11	13LS Core 1 Pulled				32	14		
	12	14LS Core 2 Set				46	15		
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	14	LS Expulsor Auxiliar Adelante				133	17		
15	LS Ejector Retacted Verified				134	18			
1769 IQ32 DI1 Local	0	ROBOT PERMITS CLAMP CLOSE					19	XB1/Blanco	24V
	1	ROBOT IS NONOPERACIONAL					20		
	2	ROBOT PERMITS EJECTOR RETRACT					21		
	3	ROBOT PERMITS EJECTOR FORWARD					22		
	4	ROBOT PERMITS CORE PULL					directo		
	5	ROBOT PERMITS CORE SET					directo		
	6	ROBOT PERMITS CLAMP MOTION					directo		
	7						directo		
	8	22Ls-23Ls Rear Safety Gate Closed				201/204	directo		
	9	BOTONERA E0				XB1/Rojo	directo		
	10	BOTONERA E1				XB1/Blanco-Verde	directo		
	11	BOTONERA E2				XB1/Negro	directo		
	12	BOTONERA E3				XB1/Café-Verde	directo		
	13	BOTONERA E4				XB1/Morado	directo		
	14	BOTONERA E5				XB1/Gris-Rosa	directo		
	15	pin11- Paro Emergencia				XB1/Amarillo	directo		
	16	PIN12- PB Abrir Puerta				XB1/Verde	directo		
	17	PIN13- PB Cerrar Puerta				XB1/Café	directo		
	18					XB1/Blanco-Amarillo	directo		
	19	Motor M1 Encendido				XB1/Azul	directo		
	20						12		
	21	27PS Neum Gate Press Switch				52	12		
	22	62LS				43	3		
	23	34LS Injection Unit Swing				44			
	24								
	25	TEMPERATURA ACEITE							
	26	LS CORE 3 PULLED							
	27	LS CORE 3 SETED							
	28								
	29								
	30								
31									

RELE	FUS
R1	1 CPU
R2	2 COMUN DE ENTRADAS
R3	3 CAJA BOTONERA PANEL + BM20.02
	4 Transduc Presion



Fecha : 16-ene-18

Proyecto : Mabe Saltillo  
 Maquina: Negri Bossi NB720 M36

**MAPA DE SALIDAS**

	SALIDA	Descripcion	Anex	Actuador	Cable	Clema	COM	Volts
							1/29/210	
1769 L24ERQ QBFC1B <b>DO-0</b> Local 1	0	5F PUMP 3	R3	SSR30	103	30	177	24V
	1	4E CORE 2 SET		SSR31	118	31	177	
	2	4F CORE 2 PULL		SSR32	119	32		
	3	2A Injection		SSR33	106	33	-9	
	4	2B Screw Suck Back		SSR34	107	34		
	5	2C Screw Rotation		SSR35	108	35	7	
	6	3A Carriage Fwd		SSR36	109	36		
	7	3B Carriage Rev		SSR37	110	37	10	
	8	4A Ejection FW		SSR38	111	38		
	9	4B Ejection Retract		SSR39	112	39	1	
	10	5A Pump 1		SSR40	113	40		
	11	5B Pump 2		SSR41	114	41		
	12	5G P2 Pump Selection for indep. Circuit		SSR42	120/32	42		
	13	7B Switch Over To Closed Loop		SSR43	115	43		
	14	4C CORE 1 SET		SSR44	116	44		
15	4D CORE 1 PULL		SSR45	117	45			
1769 OB32 <b>DO-1</b>	0	2P		SSR46	104	46		24V
	1	10A Neumatic Gate Closing		SSR47	122	47	3	
	2	10B Neumatic Gate Opening		SSR48	123	48		
	3	10C NEUMATIC GATE Press		SSR49	2	49	100A	
	4	1E Displacement Increase		SSR50	100	50	101A	
	5	1F Displacement Decrease		SSR51	101	51		
	6	5C Pump 3		SSR52	130	52	12A	
	7	5D Pump 4		SSR53	131	53		
	8	5H P4 Selection		SSR54	128	54	2	
	9	Motor started M1		R2				
	10	Heat Zone 1-Nozzle			UA	70	28	
	11	Heat Zone 2 - Front			UB	71		
	12	Heat Zone 3			UC	72		
	13	Heat Zone 4			UD	73		
	14	Heat Zone 5			UA1	74		
	15	Heat Zone 6			UB1	directo		
	16	Heat Zone 7 Rear			UC1	directo		
	17	Led Temperaturas			XB1/Rosa	directo		
	18	Alarmas			XB1/rojo azul	directo		
	19	CL Lube Accesory case			151			
	20	CIERRE PRENSA		R4	R4			
	21	SALIDA VALVE GATE		R5				
	22	SIGNALROBOTTHATMOLDFULLYOPEN		K1	156			
	23	SIGNALROBOTTHATEJECTORFULLYFW.		K3	158			
	24	SIGNALROBOTTHATCORESETED		K4	IR/1			
	25	SIGNALROBOTTHATCOREFULLYPULLED		K5	IR/2			
	26	SIGNALROBOTTHATREJECT		K6	160			
	27	SIGNALROBOTAUTO		K7	13			
	28	SIG.ROB.THAT.MOLDFULLYCLOSED		K8	157			
	29	SIG.ROB.THAT.EJECTORRETRACT		K2	159			
	30	SIG.ROBOTTHATNOPARTAVAILABLE		K9	IR/3			
31	SIG.ROBOTTHATMOVABLEGATEAND GUARDSCLOSED		K10	26				



Fecha : 16-ene-18

<b>Mabe Saltillo</b>	
Negri Bossi NB720	M36

<b>Mòdulo</b>	1769-L24ERQBF1B		
<b>Canal</b>	<b>Descripcion</b>	<b>Direccion</b>	<b>SENSOR</b>
<b>Vin 0+</b>	Termocoples Z6 REAR		
<b>Vin 1+</b>	Posicion Unidad Inyeccion		
<b>Vin 2+</b>	ACEITE		
<b>Vin 3+</b>	RPM		

<b>Mòdulo</b>	1769-IF4XOF2		
<b>Canal</b>	<b>Descripcion</b>	<b>Direccion</b>	<b>SENSOR</b>
<b>Vin 0+</b>	Posicion Prensa		
<b>Vin 1+</b>	Posicion Botador		
<b>Vin 2+</b>	Posicion Inyección		
<b>Vin 3+</b>			

<b>Canal</b>	<b>Mòdulo 1769-IT6</b>	<b>Direc</b>	
<b>In 0+</b>	ZONA NARIZ		
<b>In 1+</b>	ZONA 1 FRONT		
<b>In 2+</b>	ZONA 2		
<b>In 3+</b>	ZONA 3 REAR		
<b>In 4+</b>	ZONA 4		
<b>In 5+</b>	Zona 5		



Fecha : 

16-ene-18
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<b>Mabe Saltillo</b>	
<b>Negri Bossi NB720</b>	<b>M36</b>

**SALIDAS ANALOGICAS**

<b>Local 2</b>	<b>Módulo</b>	1769-L24ERQBF1B	S+    S-			<b>Tarjeta Controladora</b>		
	<b>Canal</b>	<b>Descripcion</b>	<b>Direc</b>	<b>V</b>	<b>M</b>			
	<b>OUT 0</b>	6A Main Flow Clontrol						VEA250
	<b>Out 1</b>	1A/1B VELOCIDAD PRENSA						axiomatic

<b>Local Remoto</b>	<b>Módulo</b>	1769-IF4XOF2	S+    S-			<b>Tarjeta Controladora</b>		
	<b>Canal</b>	<b>Descripcion</b>	<b>Direc</b>	<b>V</b>	<b>M</b>			
	<b>V out 0+</b>	7A Pressure Control						VEA250
	<b>V out 1+</b>	7P PRESION ADICIONAL						VEA250