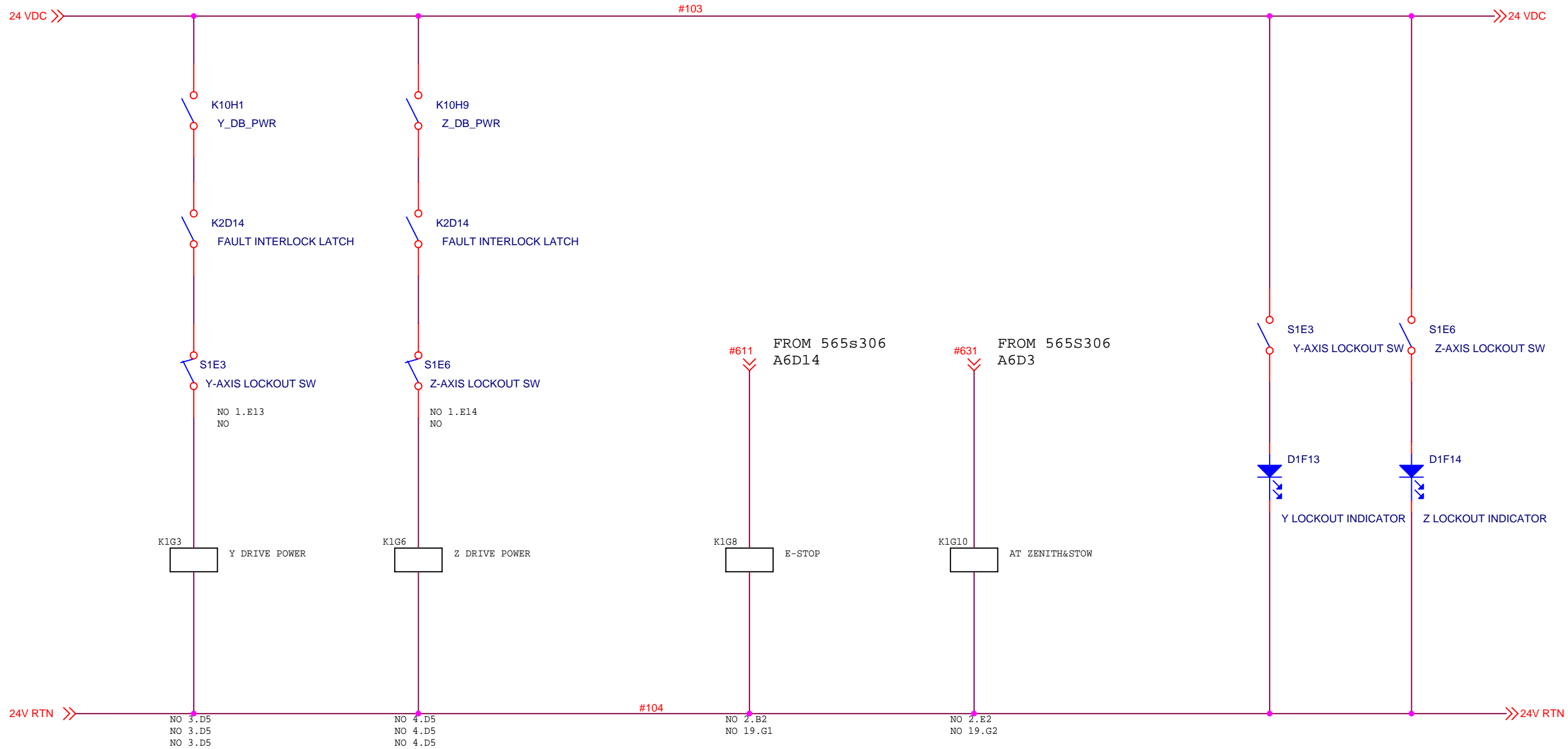
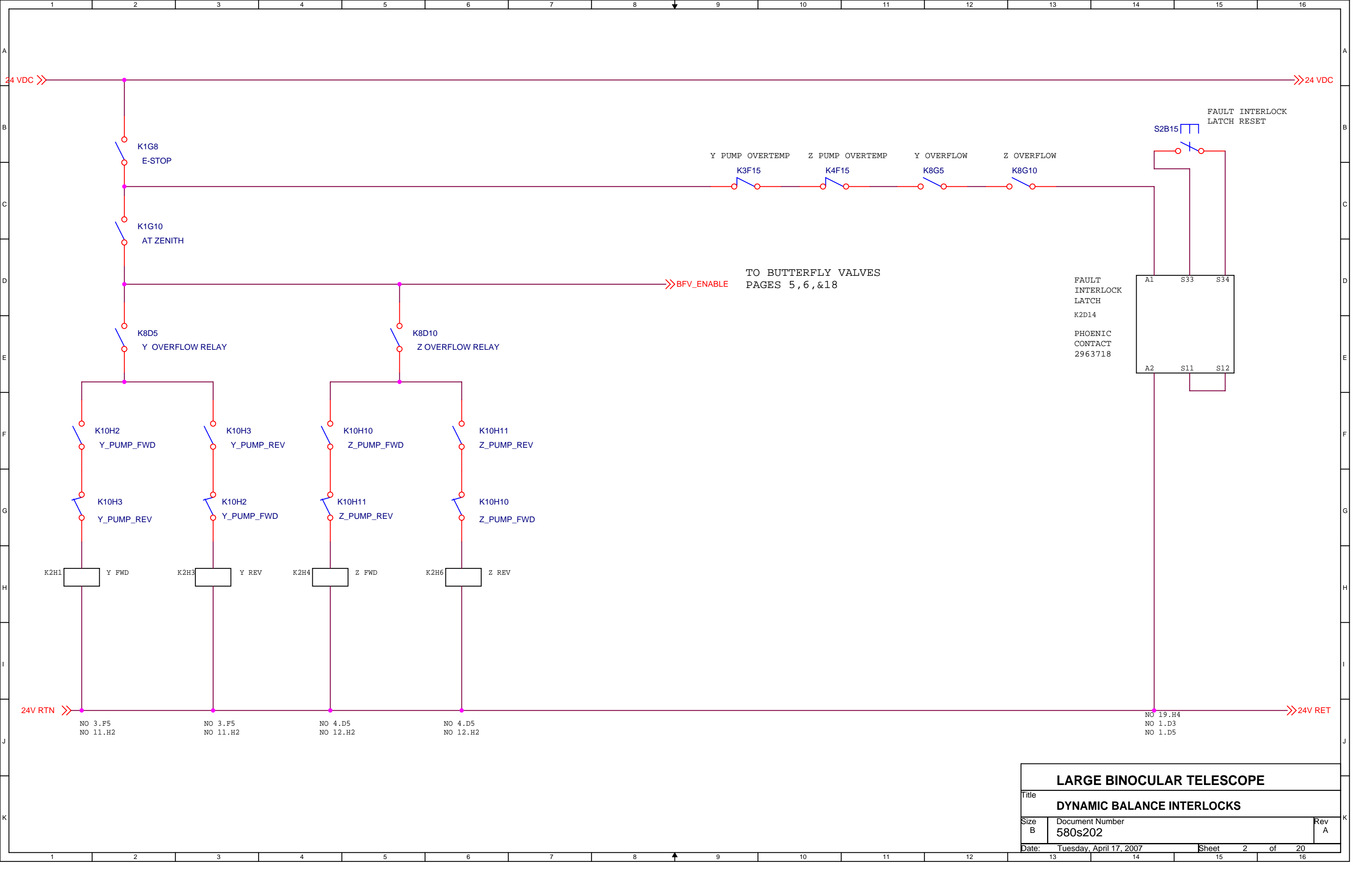


PAGE	CAN:	DATE/ST	DRAWING DESCRIPTION
0	580s200		DRAWING LIST
1	580s201		POWER CONTROL
2	580s202		INTERLOCKS
3	580s203		Y-AXIS PUMP DRIVE
4	580s204		Z-AXIS PUMP DRIVE
5	580s205		Y-AXIS BUTTERFLY VALVE
6	580s206		Z-AXIS BUTTERFLY VALVE #1
7	580s207		CORIOLIS FLOWMETERS
8	580s208		TANK OVERFLOW SENSORS
9	580s209		TANK LEVEL SENSORS
10	580s210		DIGITAL OUTPUTS
11	580s211		Y-AXIS DIGITAL INPUTS
12	580s212		Z-AXIS DIGITAL INPUTS
13	580s213		ANALOG OUTPUTS
14	580s214		Y-AXIS ANALOG INPUTS
15	580s215		Z-AXIS ANALOG INPUTS
16	580s216		I/O SIGNAL SUMMARY
17	580s217		RELAY SUMMARY
18	580s218		Z-AXIS BUTTERFLY VALVE #2
19	580s219		FAULT DIGITAL INPUTS
20	580s220		

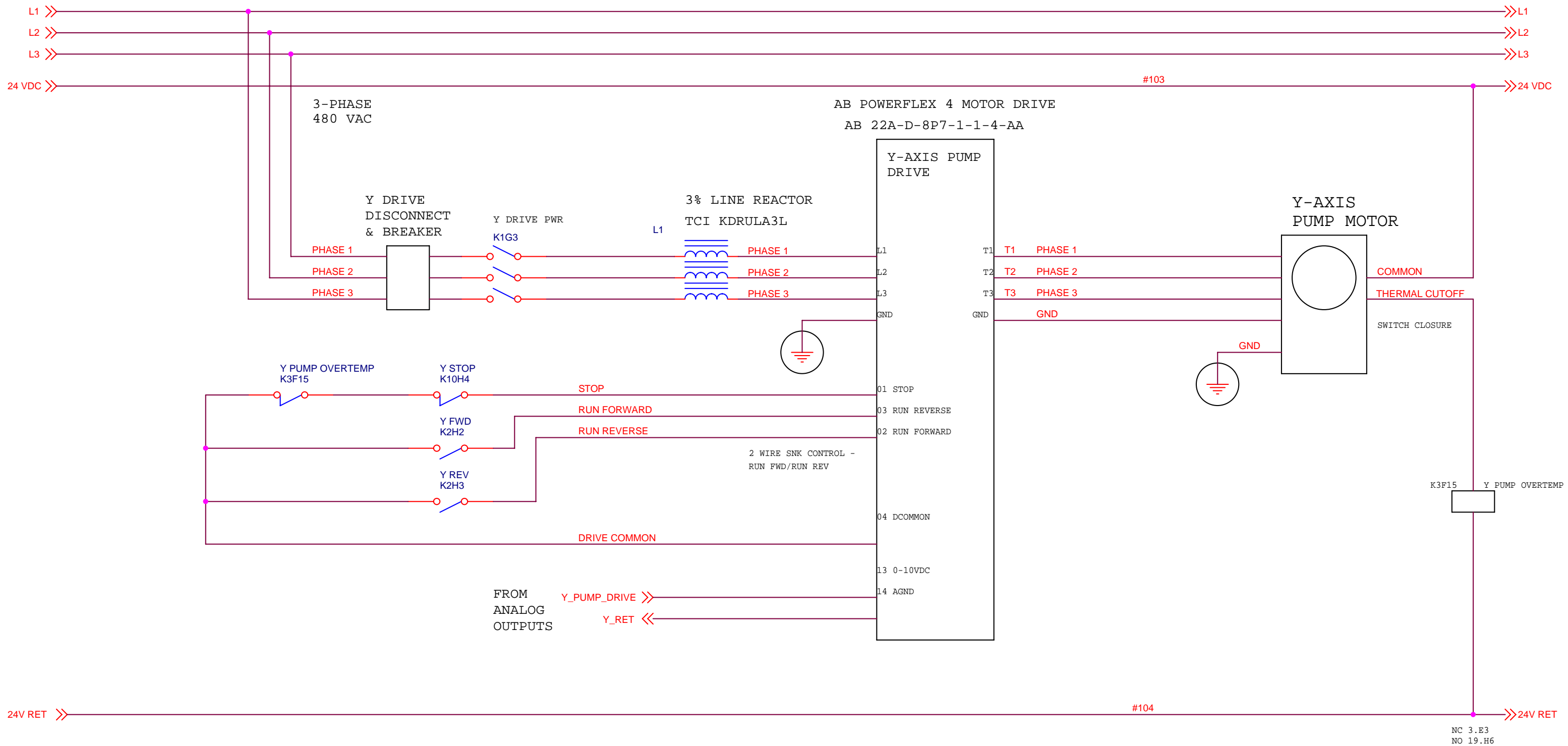
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Title		
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Size	Document Number	Rev
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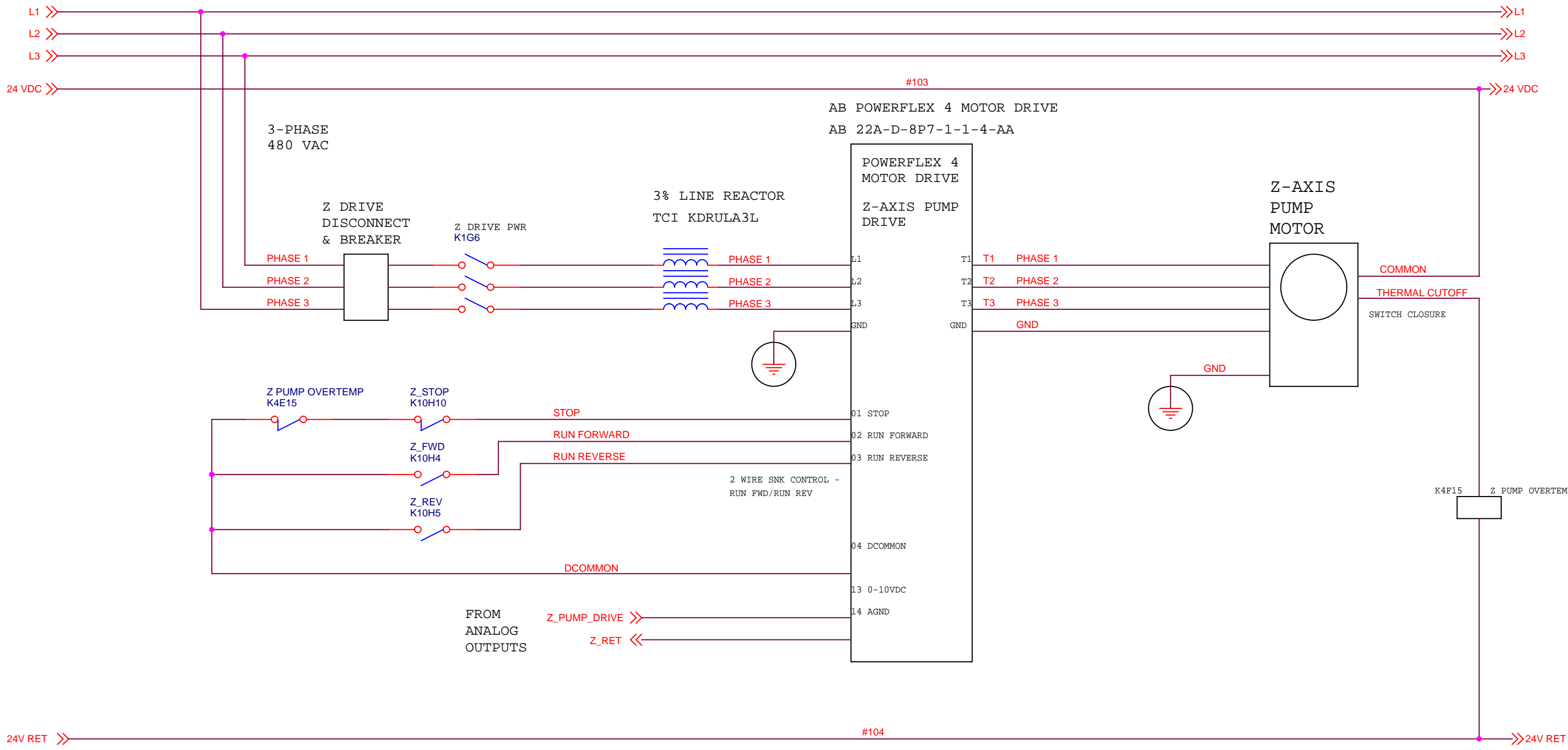
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Size	Document Number	Rev
B	580s201	A
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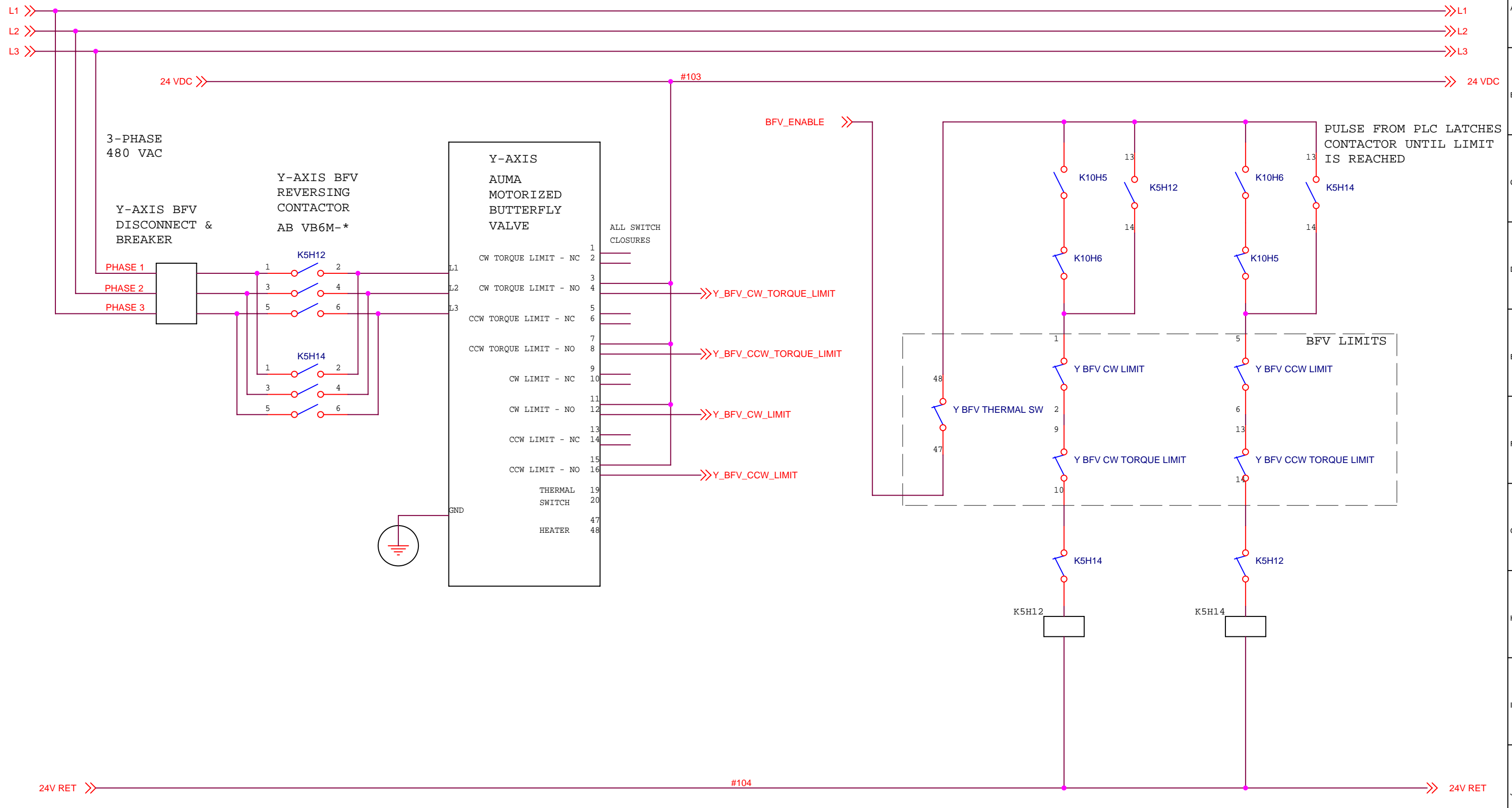
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Title		
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Size	Document Number	Rev
B	580s202	A
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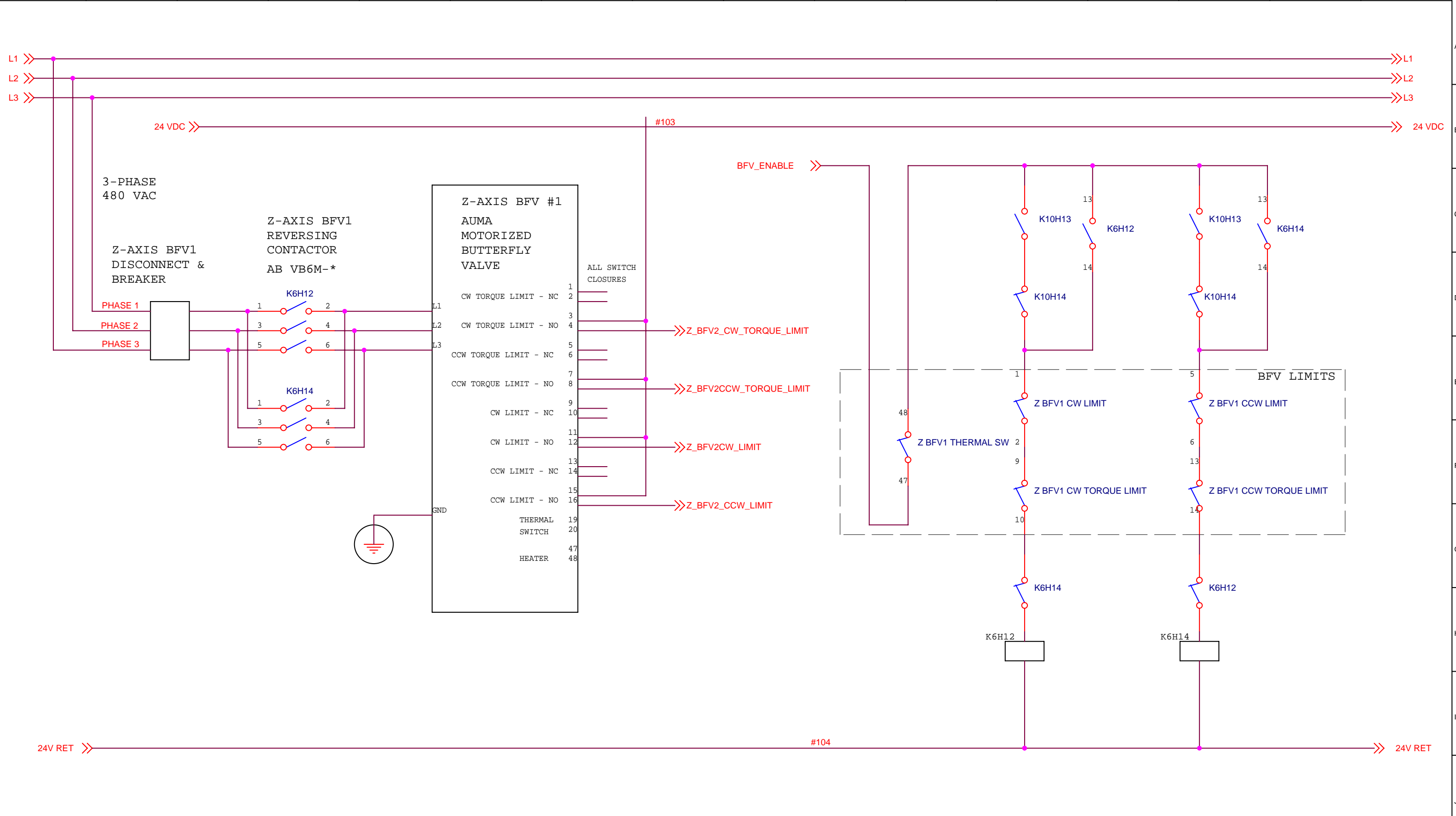
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Title		
<b>DYNAMIC BALANCE Y-AXIS PUMP DRIVE</b>		
Size	Document Number	Rev
B	580s203	A
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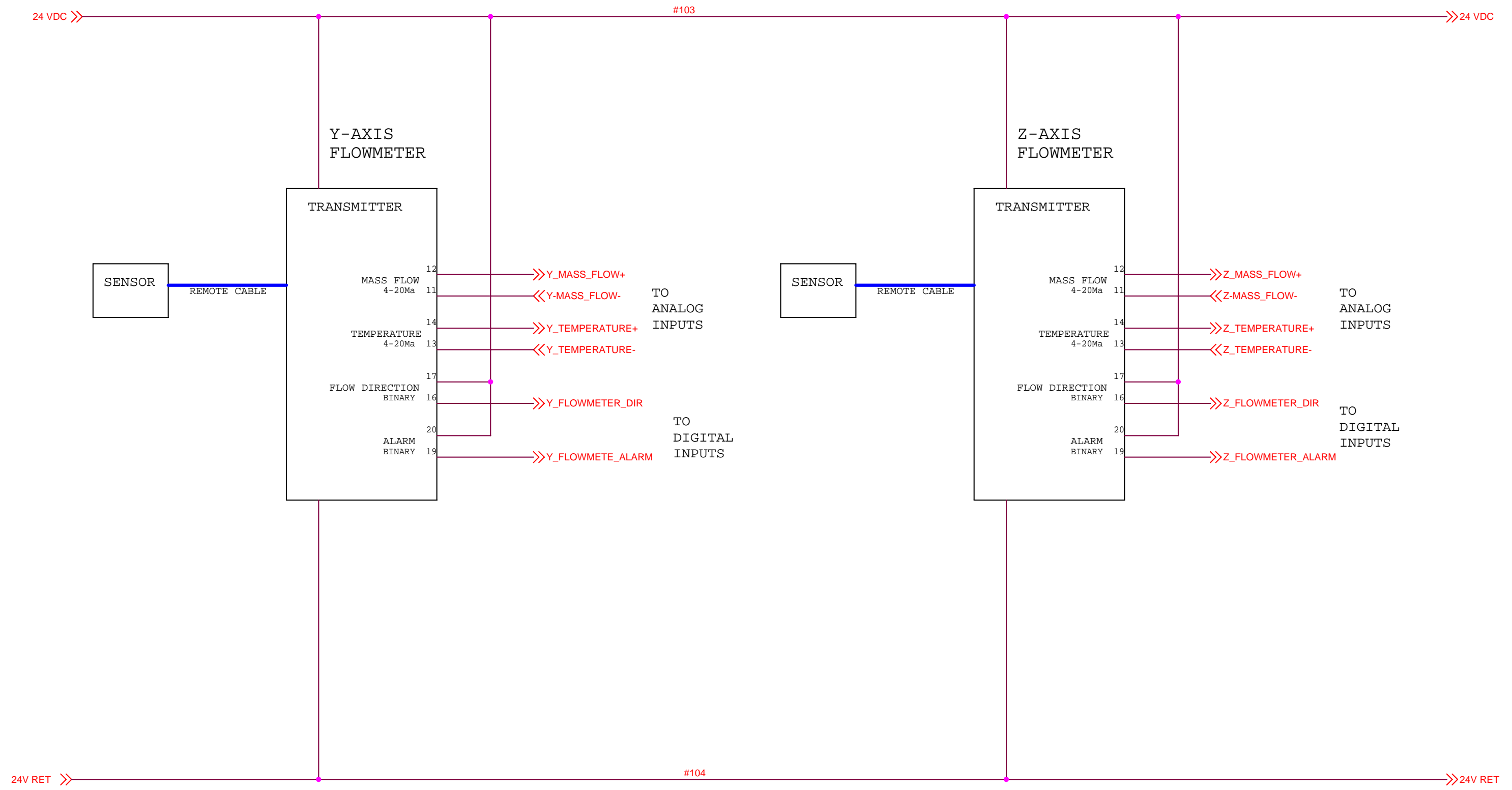
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<b>DYNAMIC BALANCE Z-AXIS PUMP DRIVE</b>		
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<b>LARGE BINOCULAR TELESCOPE</b>		
Title		
<b>DYNAMIC BALANCE Y-AXIS BUTTERFLY VALVE</b>		
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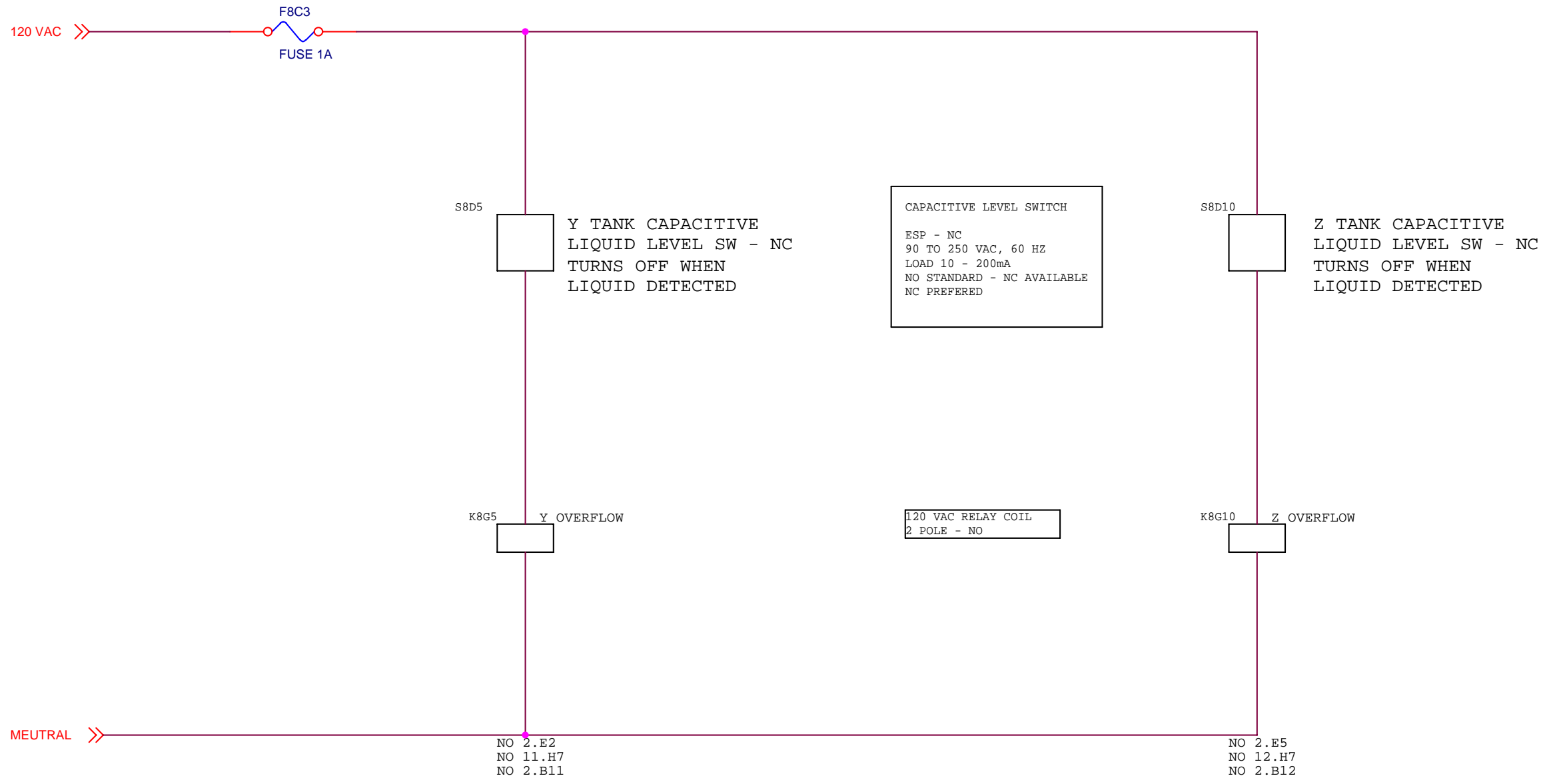


<b>LARGE BINOCULAR TELESCOPE</b>		
Title <b>DYNAMIC BALANCE Z-AXIS BUTTERFLY VALVE #1</b>		
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<b>LARGE BINOCULAR TELESCOPE</b>		
Title		
<b>DYNAMIC BALANCE CORIOLIS FLOWMETERS</b>		
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<b>LARGE BINOCULAR TELESCOPE</b>		
Title		
<b>DYNAMIC BALANCE TANK OVERFLOW SENSORS</b>		
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24 VDC >>> #103 >>> 24 VDC

Y-AXIS TANK  
LEVEL SENSOR #1

Y-AXIS TANK LEVEL  
SENSOR #2

Z-AXIS TANK LEVEL  
SENSOR #1

Z-AXIS TANK  
LEVEL SENSOR #2

Z-AXIS TANK LEVEL  
SENSOR #3

Z-AXIS TANK LEVEL  
SENSOR #4

4-20Ma

>>>Y\_LEVEL1

<<<Y\_LEVEL\_RET

4-20Ma

>>>Y\_LEVEL2

<<<Y\_LEVEL2\_RET

4-20Ma

>>>Z\_LEVEL1

<<<Z\_LEVEL1\_RET

4-20Ma

>>>Z\_LEVEL2

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4-20Ma

>>>Z\_LEVEL4

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24V RET >>>

#104

>>>24V RET

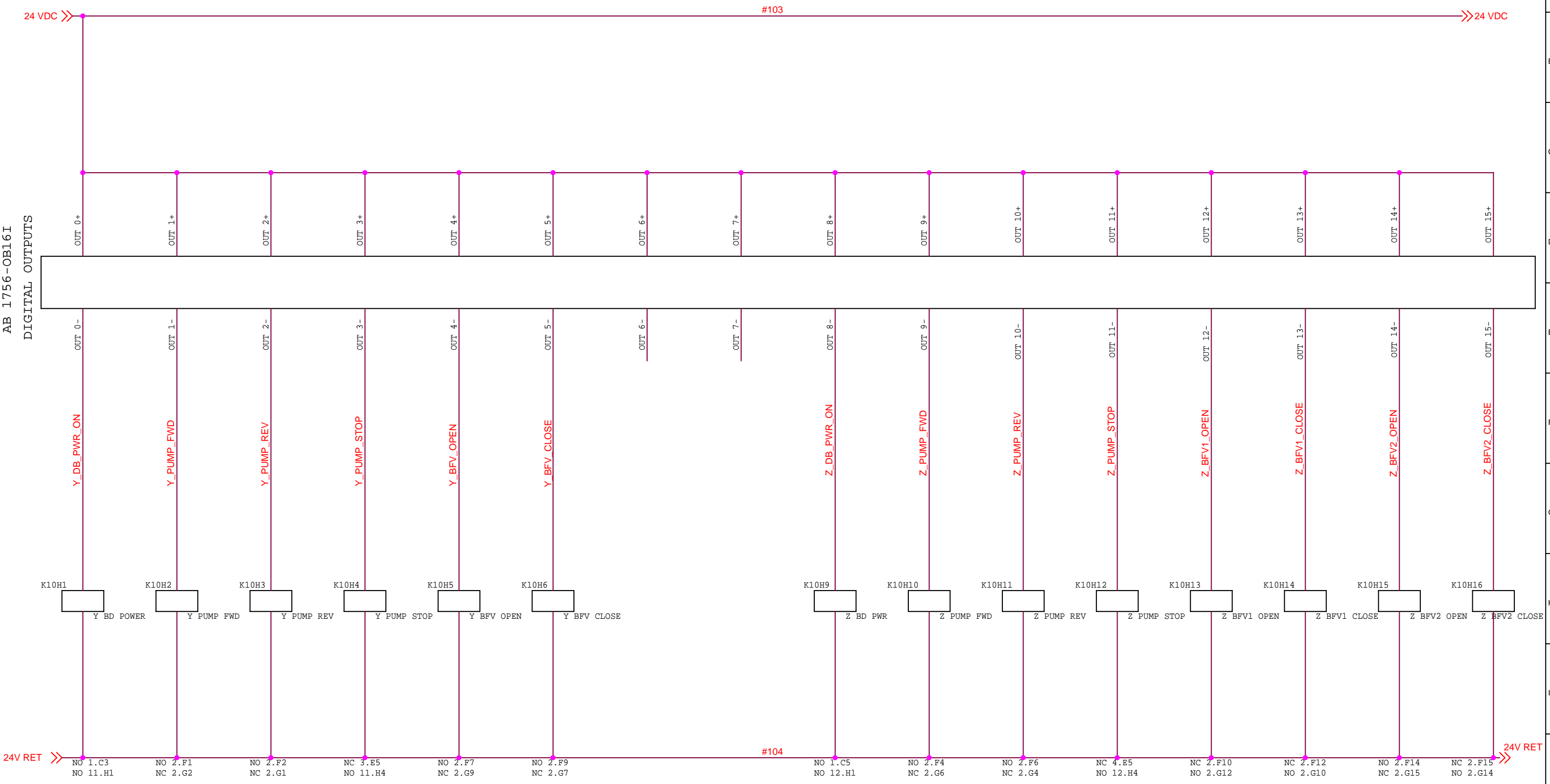
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Size B Document Number 580s209 Rev A

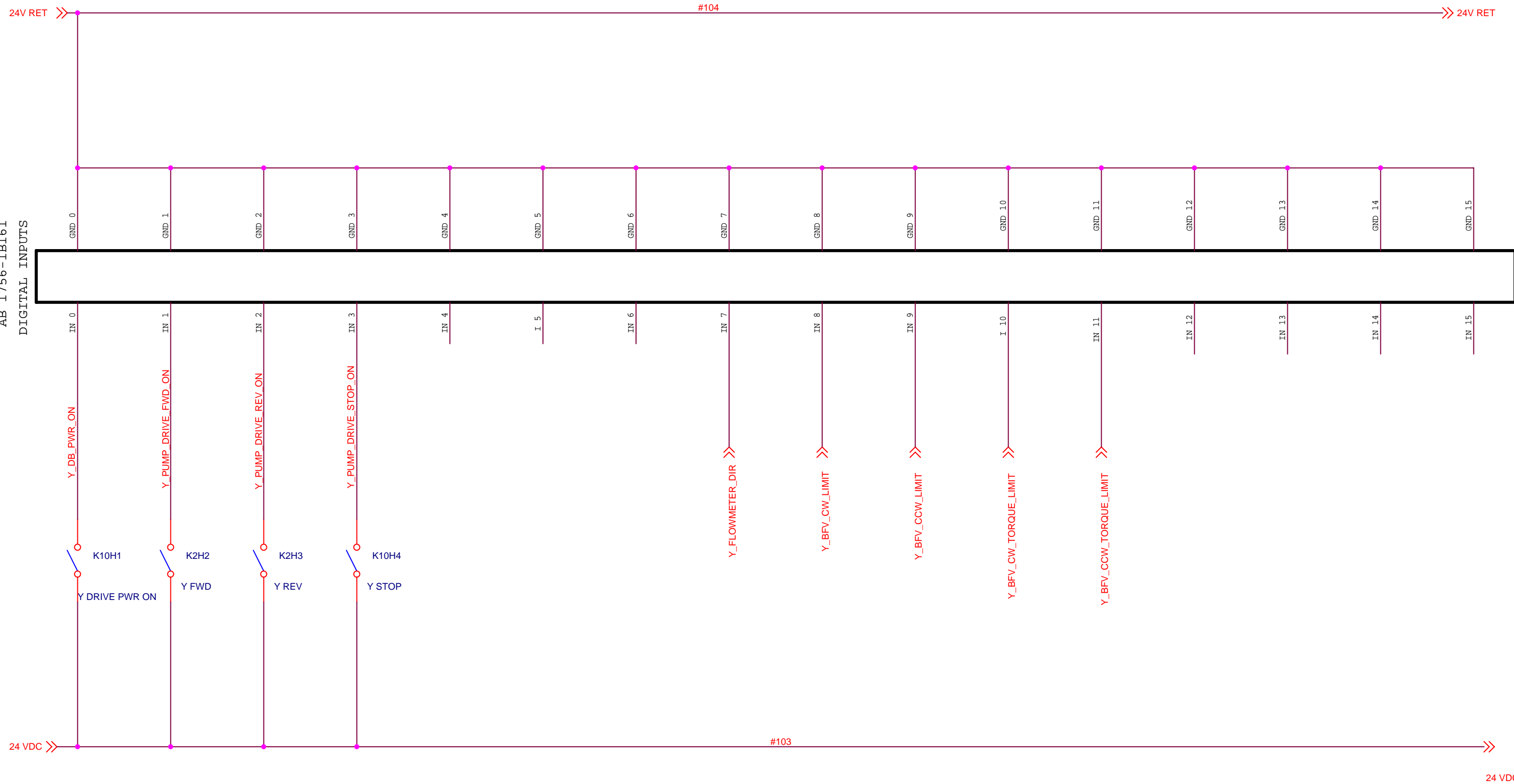
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AB 1756-OB16I  
DIGITAL OUTPUTS



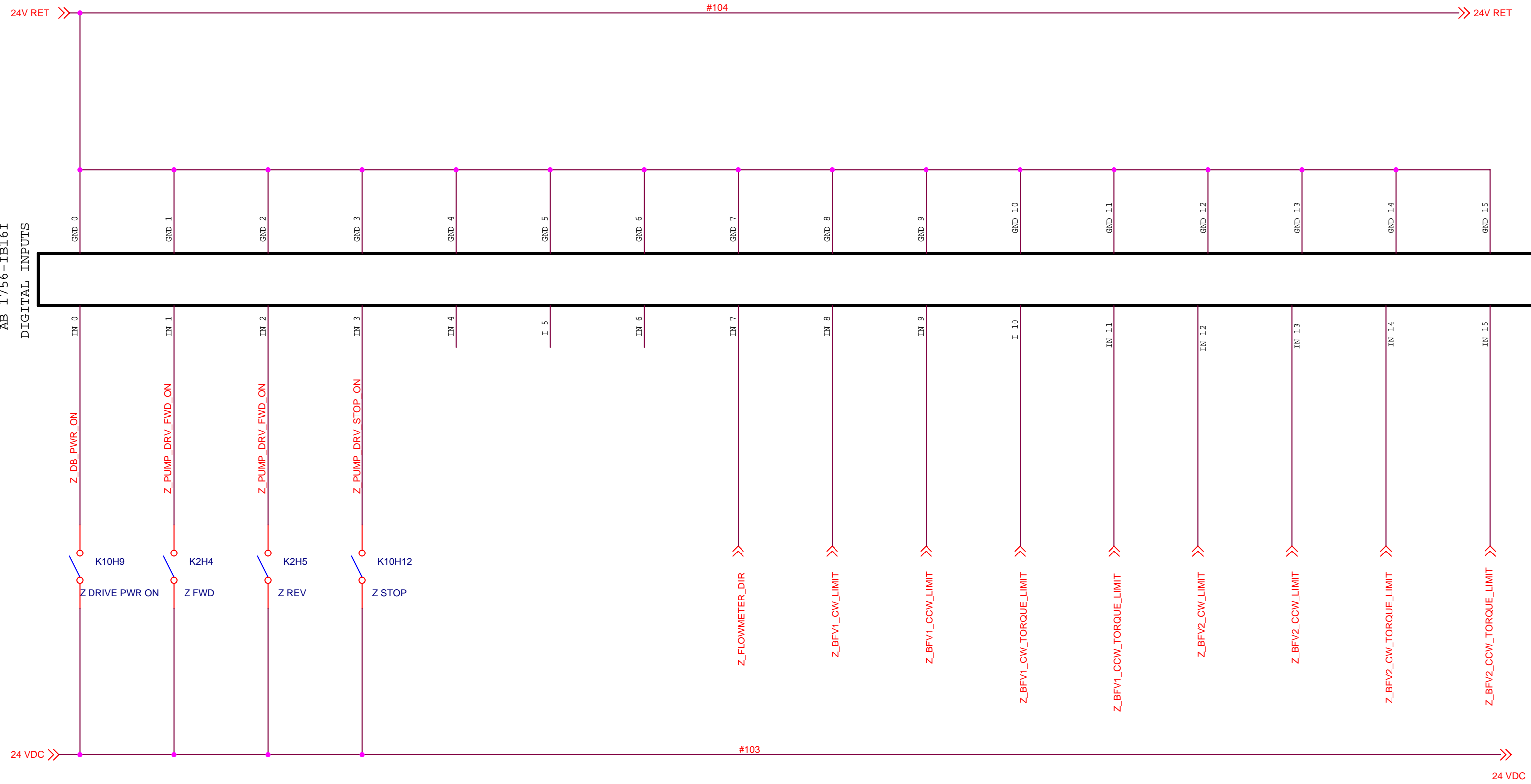
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Size	Document Number	Rev
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AB 1756-IB16I  
DIGITAL INPUTS



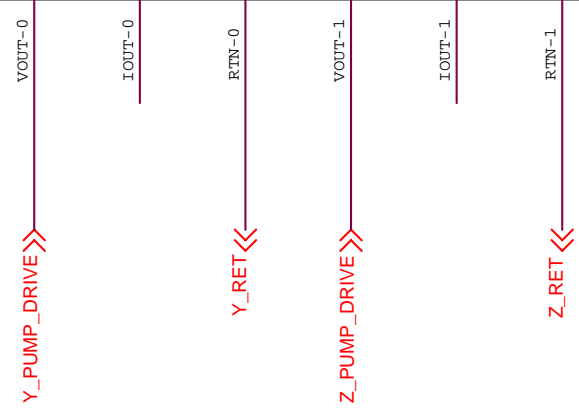
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AB 1756-IB16I  
DIGITAL INPUTS



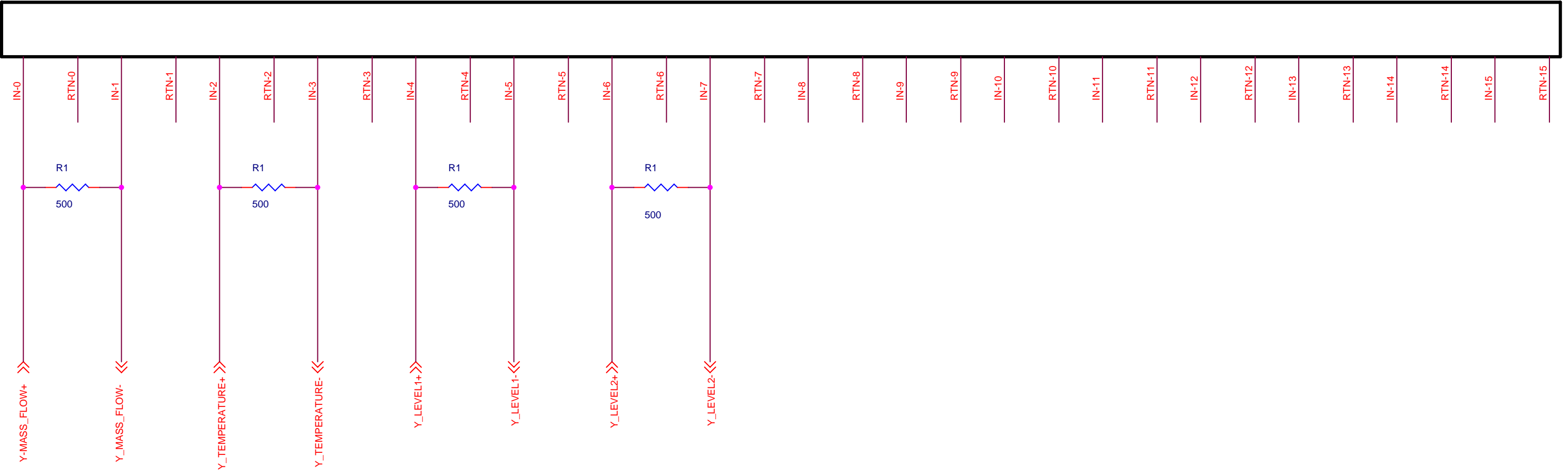
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Title <b>DYNAMIC BALANCE Z-AXIS DIGITAL INPUTS</b>		
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AB 1756-OF8  
ANALOG OUTPUTS



<b>LARGE BINOCULAR TELESCOPE</b>		
Title <b>DYNAMIC BALANCE ANALOG OUTPUTS</b>		
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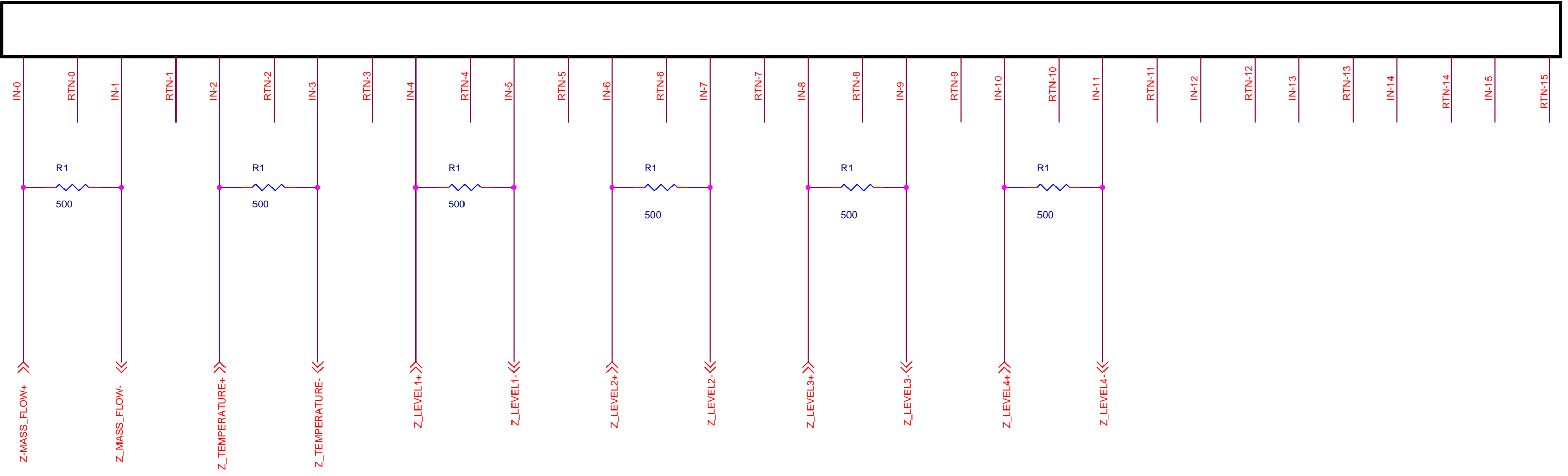
AB 1756-IF16  
ANALOG INPUTS



NOTE: 4 -2mA CURRENT LOOP  
TRANSLATES TO 2-10 VDC

<b>LARGE BINOCULAR TELESCOPE</b>		
Title <b>DYNAMIC BALANCE Y-AXIS ANALOG INPUTS</b>		
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AB 1756-IF16  
ANALOG INPUTS



NOTE: 4 -2mA CURRENT LOOP  
TRANSLATES TO 2-10 VDC

<b>LARGE BINOCULAR TELESCOPE</b>		
Title <b>DYNAMIC BALANCE Z-AXIS ANALOG INPUTS</b>		
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**DYNAMIC BALANCE I/O SIGNAL SUMMARY**

DIGITAL OUTPUTS	
BIT	SIGNAL
00	Y_DB_PWR_ON
01	Y_PUMP_FWD
02	Y_PUMP_REV
03	Y_PUMP_STOP
04	Y_BFV_OPEN
05	Y_BFV_CLOSE
06	
07	
08	Z_DB_PWR_ON
09	Z_PUMP_FWD
10	Z_PUMP_REV
11	Z_PUMP_STOP
12	Z_BFV1_OPEN
13	Z_BFV1_CLOSE
14	Z_BFV2_OPEN
15	Z_BFV2_CLOSE

Y-AXIS DIGITAL INPUTS	
BIT	SIGNAL
00	Y_DB_PWR_ON
01	Y_PUMP_DRIVE_FWD_ON
02	Y_PUMP_DRIVE_REV_ON
03	Y_PUMP_DRIVE_STOP_ON
04	
05	
06	
07	Y_FLOWMETER_DIR
08	Y_BFV_CW_LIMIT
09	Y_BFV_CCW_LIMIT
10	Y_BFV_CW_TORQUE_LIMIT
11	Y_BFV_CCW_TORQUE_LIMIT
12	
13	
14	
15	

Z-AXIS DIGITAL INPUTS	
BIT	SIGNAL
00	Z_DB_PWR_ON
01	Z_PUMP_DRIVE_FWD_ON
02	Z_PUMP_DRIVE_REV_ON
03	Z_PUMP_DRIVE_STOP_ON
04	
05	
06	
07	Z_FLOWMETER_DIR
08	Z_BFV1_CW_LIMIT
09	Z_BFV1_CCW_LIMIT
10	Z_BFV1_CW_TORQUE_LIMIT
11	Z_BFV1_CCW_TORQUE_LIMIT
12	Z_BFV2_CW_LIMIT
13	Z_BFV2_CCW_LIMIT
14	Z_BFV2_CW_TORQUE_LIMIT
15	Z_BFV2_CCW_TORQUE_LIMIT

FAULT DIGITAL INPUTS	
BIT	SIGNAL
00	ESTOP
01	/AT_ZENITH&STOW
02	FAULT INTERLOCK LATCH
03	
04	Y_LOCKOUT
05	Y_PUMP_OVERTEMP
06	Y_TANK_OVERFLOW
07	Y_FLOWMETER_ALARM
08	Y_BFV_THERMAL_SW
09	Z_LOCKOUT
10	Z_PUMP_OVERTEMP
11	Z_TANK_OVERFLOW
12	Z_FLOWMETER_ALARM
13	Z-BFV1_THERMAL_SW
14	Z_BFV2_THERMAL_SW
15	

ANALOG OUTPUTS	
BIT	SIGNAL
00	Y_PUMP_DRIVE
01	Z_PUMP_DRIVE
02	
03	
04	
05	
06	
07	

Y-AXIS ANALOG INPUTS	
BIT	SIGNAL
00	Y_MASS_FLOW+
01	Y_MASS_FLOW-
02	Y_TEMPERATURE+
03	Y_TEMPERATURE-
04	Y_LEVEL1+
05	Y_LEVEL1-
06	Y_LEVEL2+
07	Y_LEVEL2-
08	
09	
10	
11	
12	
13	
14	
15	

Z-AXIS ANALOG INPUTS	
BIT	SIGNAL
00	Z_MASS_FLOW+
01	Z_MASS_FLOW-
02	Z_TEMPERATURE+
03	Z_TEMPERATURE-
04	Z_LEVEL1+
05	Z_LEVEL1-
06	Z_LEVEL2+
07	Z_LEVEL2-
08	Z_LEVEL3+
09	Z_LEVEL3-
10	Z_LEVEL4+
11	Z_LEVEL4-
12	
13	
14	
15	

<b>LARGE BINOCULAR TELESCOPE</b>		
Title <b>DYNAMIC BALANCE I/O SIGNAL SUMMARY</b>		
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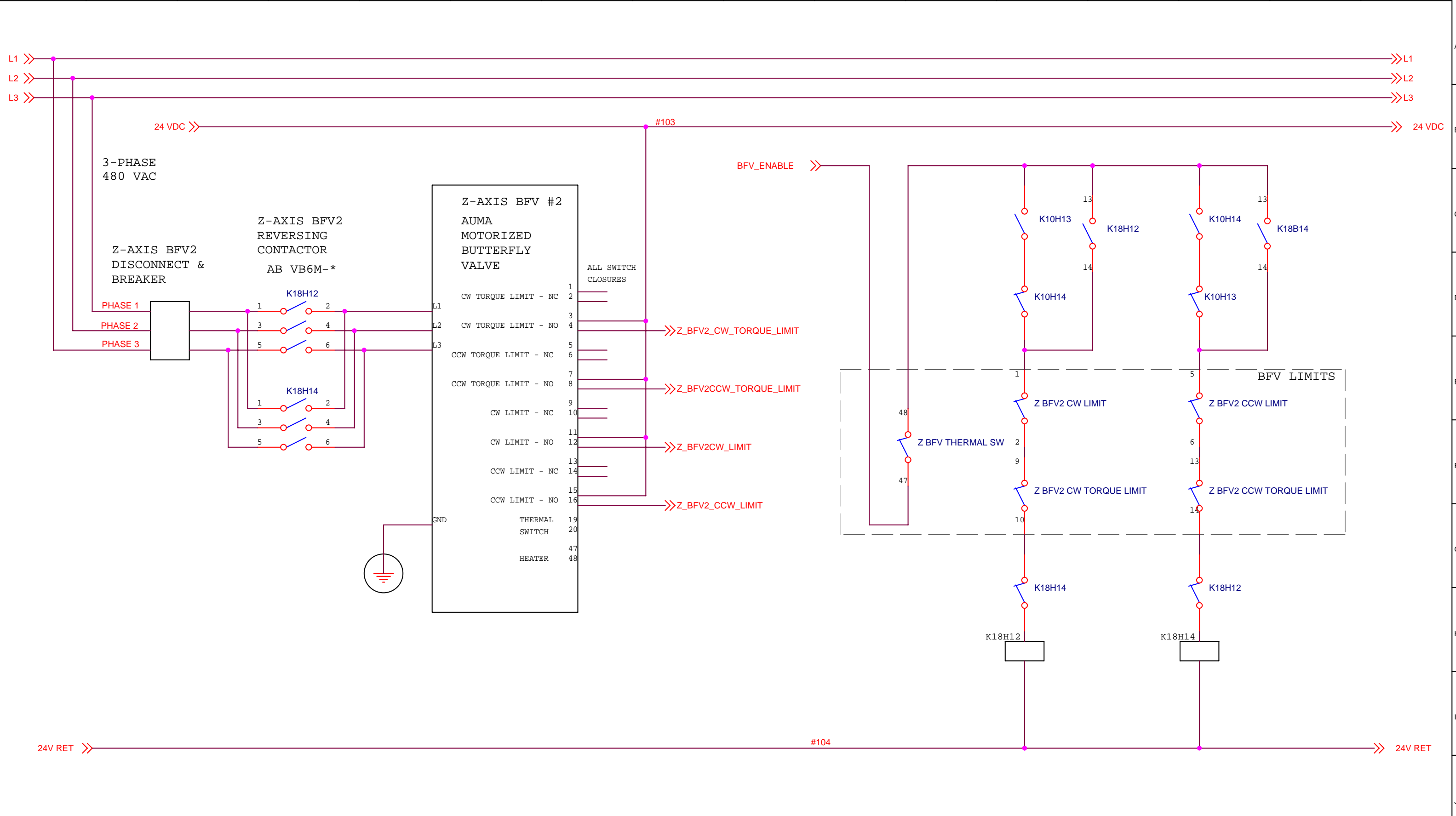
SWITCH NAME	LOCATOR
Y-AXIS LOCKOUT SW	S1E3
Z-AXIS LOCKOUT SW	S1E6
Y TANK OVERFLOW SW	S8D5
Z TANK OVERFLOW SW	S8D10
FAULT INTERLOCK LATCH	K2D14
FAULT I. L. RESET	S2B15
RELAY NAME	LOCATOR
Y DRIVE PWR	K1G3
Z DRIVE PWR	K1G6
E-STOP	K1G8
AT ZENITH&STOW	K1G10
Y FWD	K2H1
Y REV	K2H3
Z FWD	K2H4
Z REV	K2H6
Y BFV OPEN	K5H12
Y BFV CLOSE	K5H14
Y BFV1 OPEN	K6H12
Y BFV1 CLOSE	K6H14
Y BFV2 OPEN	K18H12
Y BFV2 CLOSE	K18H14
Y PUMP OVERTEMP	K3F15
Z PUMP OVERTEMP	K4F15
Y OVERFLOW	K8G5
Z OVERFLOW	K8G10
Y BD PWR	K10H1
Y PUMP FWD	K10H2
Y PUMP REV	K10H3
Y PUMP STOP	K10H4
Y BFV OPEN	K10H5
Y BFV CLOSE	K10H6
Z BD PWR	K10H9
Z PUMP FWD	K10H10
Z PUMP REV	K10H11
Z PUMP STOP	K10H12
Z BFV1 OPEN	K10H13
Z BFV1 CLOSE	K10H14
Z BFV2 OPEN	K10H15
Z BFV2 CLOSE	K10H16

## LARGE BINOCULAR TELESCOPE

Title **DYNAMIC BALANCE SWITCH & RELAY SUMMARY**

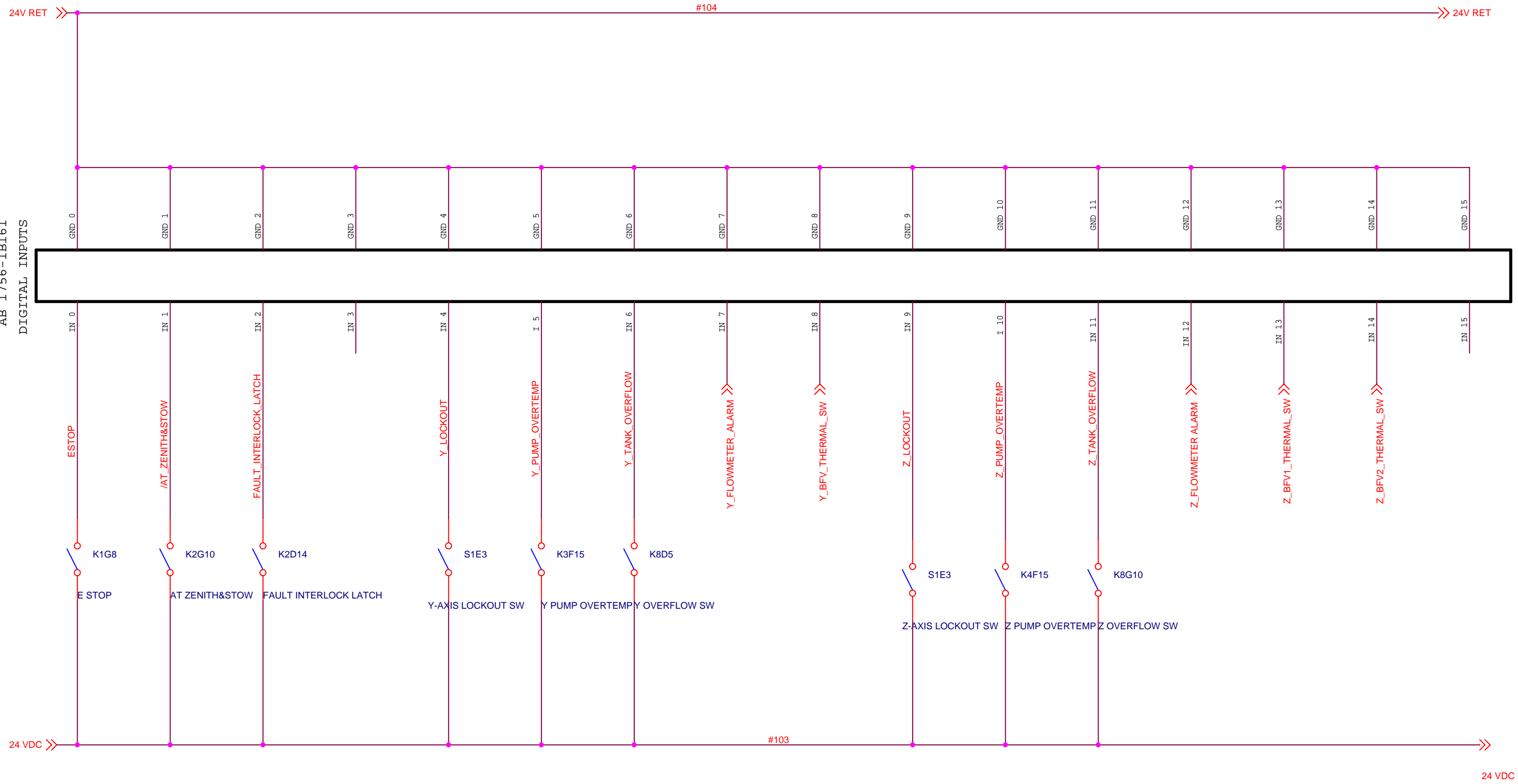
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<b>LARGE BINOCULAR TELESCOPE</b>		
Title		
<b>DYNAMIC BALANCE Z-AXIS BUTTERFLY VALVE #2</b>		
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AB 1756-IB16I  
DIGITAL INPUTS



<b>LARGE BINOCULAR TELESCOPE</b>		
Title		
<b>DYNAMIC BALANCE FAULT DIGITAL INPUTS</b>		
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B	580s219	A
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