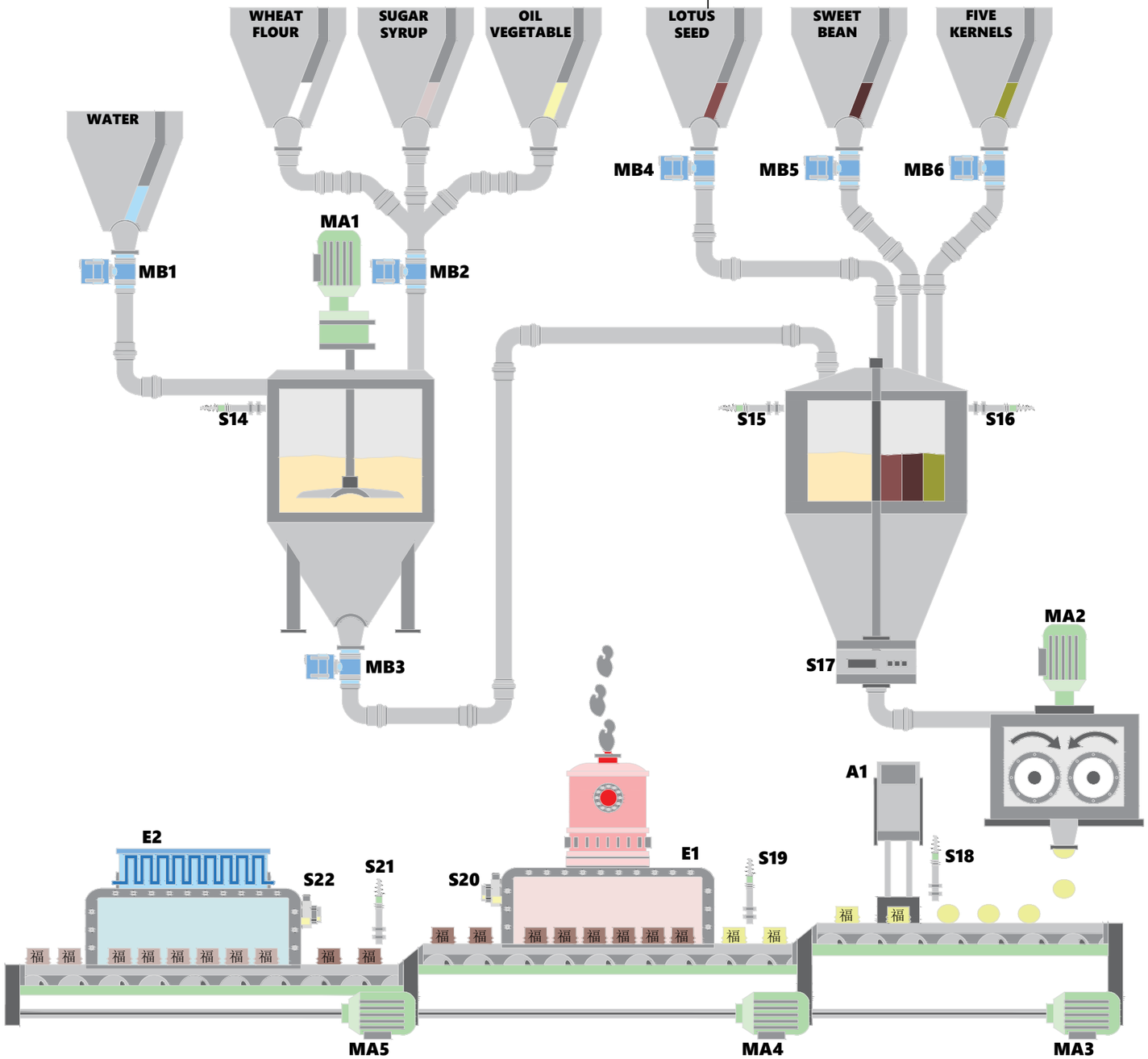
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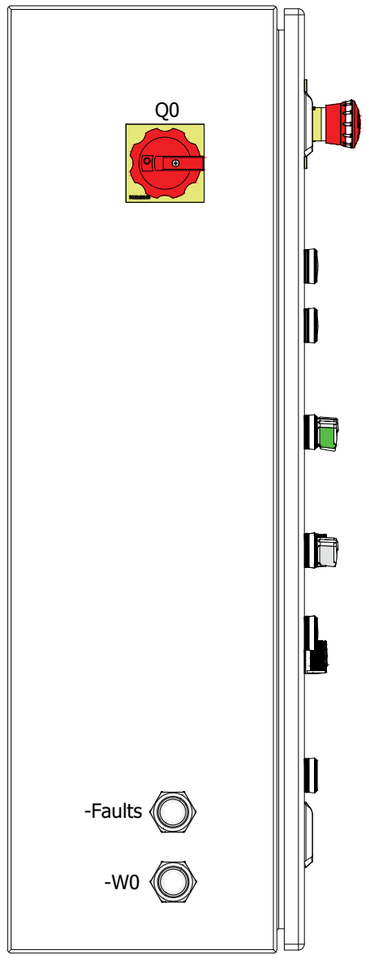
Skill: Skill 19 Industrial Control				
Design by: Rodolfo Neves, SCM				
Last Update: 22.06.2026	Scale: N/A	Paper: A3	Page: 01 of 13	
File Name: WSC2026_TP19_MD_fault_finding_en				Rev: V2
Description: Module D - Fault Finding				Projection:
Extra Info 1		Extra Info 2		

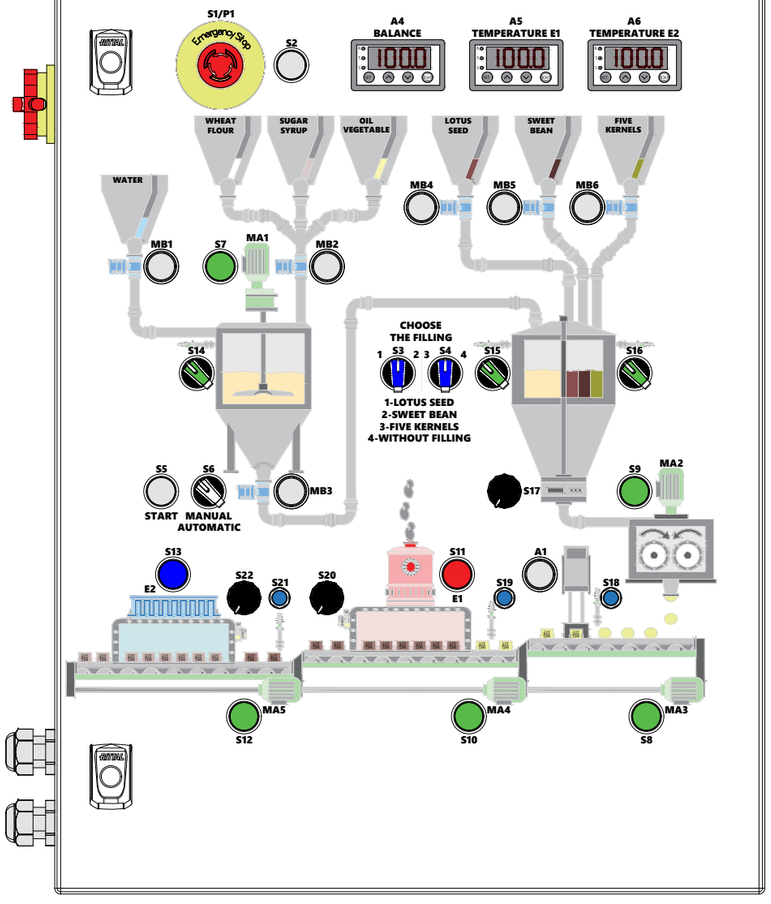


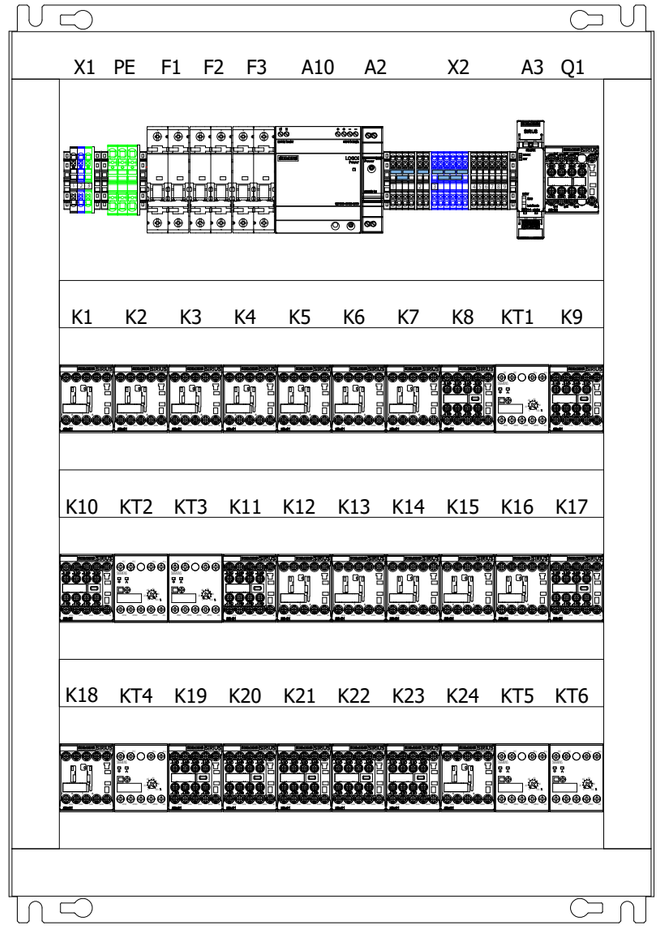
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Design by: Rodolfo Neves, SCM				
Last Update: 22.06.2026	Scale: N/A	Paper: A3	Page: 02 of 13	
File Name: WSC2026_TP19_MD_fault_finding_en				Rev: V2
Description: Synoptic				Projection:
Extra Info 1		Extra Info 2		



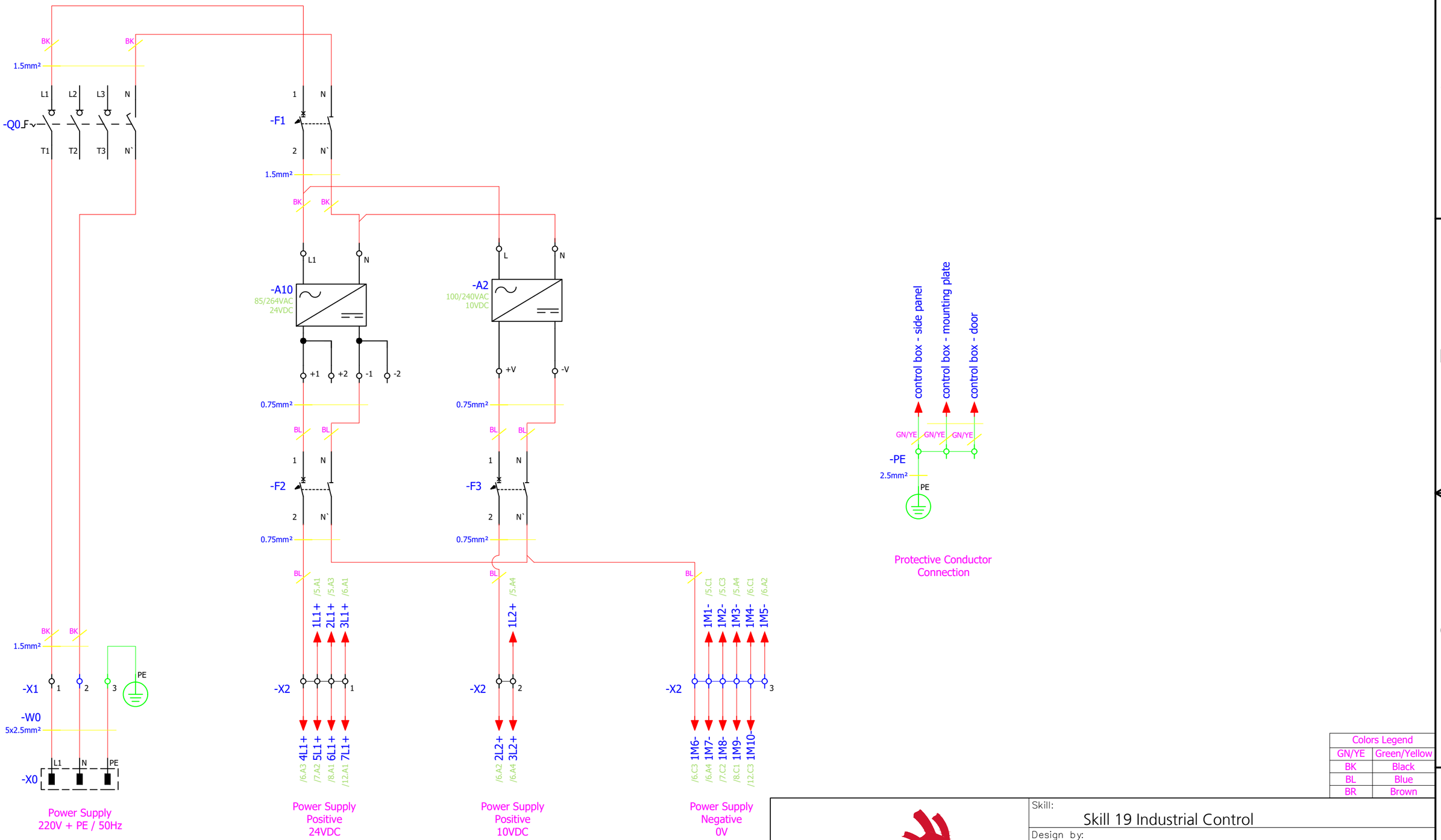




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Last Update: 22.06.2026	Scale: N/A	Paper: A3	Page: 03 of 13
File Name: WSC2026_TP19_MD_fault_finding_en			Rev: V2
Description: Control Box			Projection:
Extra Info 1	Extra Info 2		



Colors Legend	
GN/YE	Green/Yellow
BK	Black
BL	Blue
BR	Brown

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Skill: Skill 19 Industrial Control

Design by: Rodolfo Neves, SCM

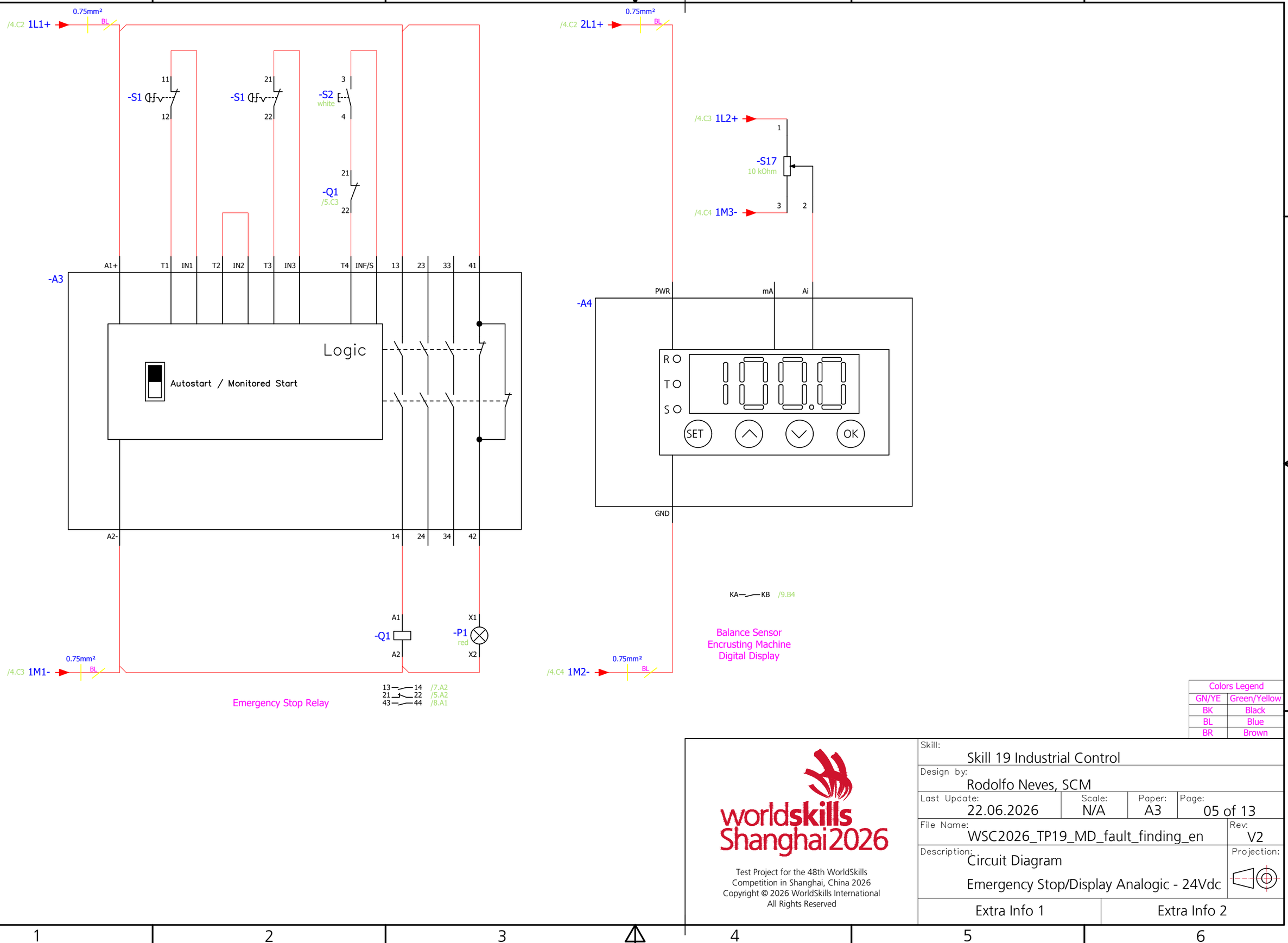
Last Update:	Scale:	Paper:	Page:
22.06.2026	N/A	A3	04 of 13

File Name: WSC2026_TP19_MD_fault_finding_en — Rev: V2

Description: Circuit Diagram
Power supply 220V+PE / 50Hz

Projection:

Extra Info 1 | Extra Info 2



Colors Legend	
GN/YE	Green/Yellow
BK	Black
BL	Blue
BR	Brown

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Skill: Skill 19 Industrial Control

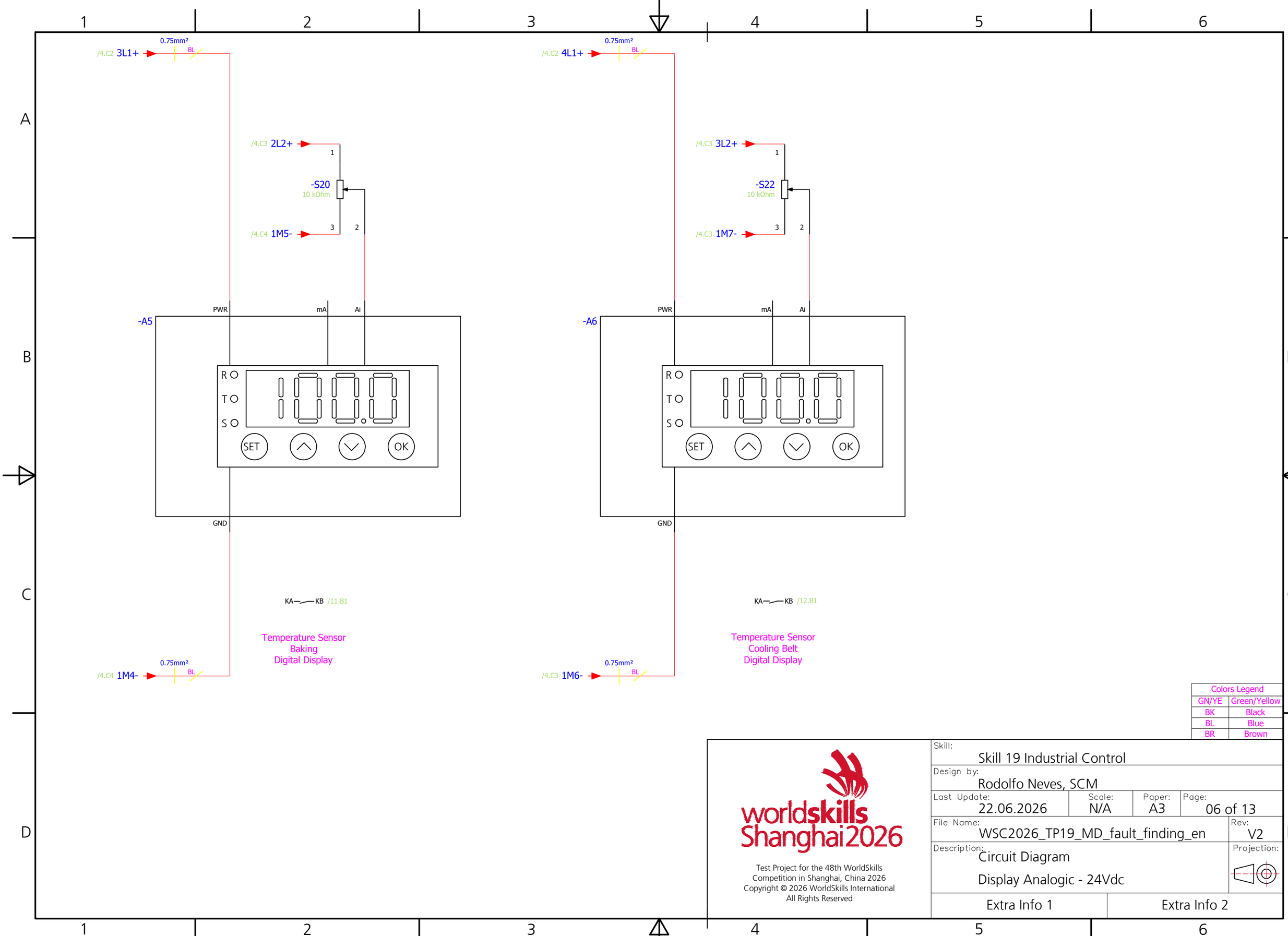
Design by: Rodolfo Neves, SCM

Last Update:	Scale:	Paper:	Page:
22.06.2026	N/A	A3	05 of 13

File Name: WSC2026_TP19_MD_fault_finding_en — Rev: V2

Description: Circuit Diagram
Emergency Stop/Display Analogic - 24Vdc — Projection:

Extra Info 1 | Extra Info 2



Colors Legend	
GN/YE	Green/Yellow
BK	Black
BL	Blue
BR	Brown

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22.06.2026	N/A	A3	06 of 13

File Name: WSC2026_TP19_MD_fault_finding_en

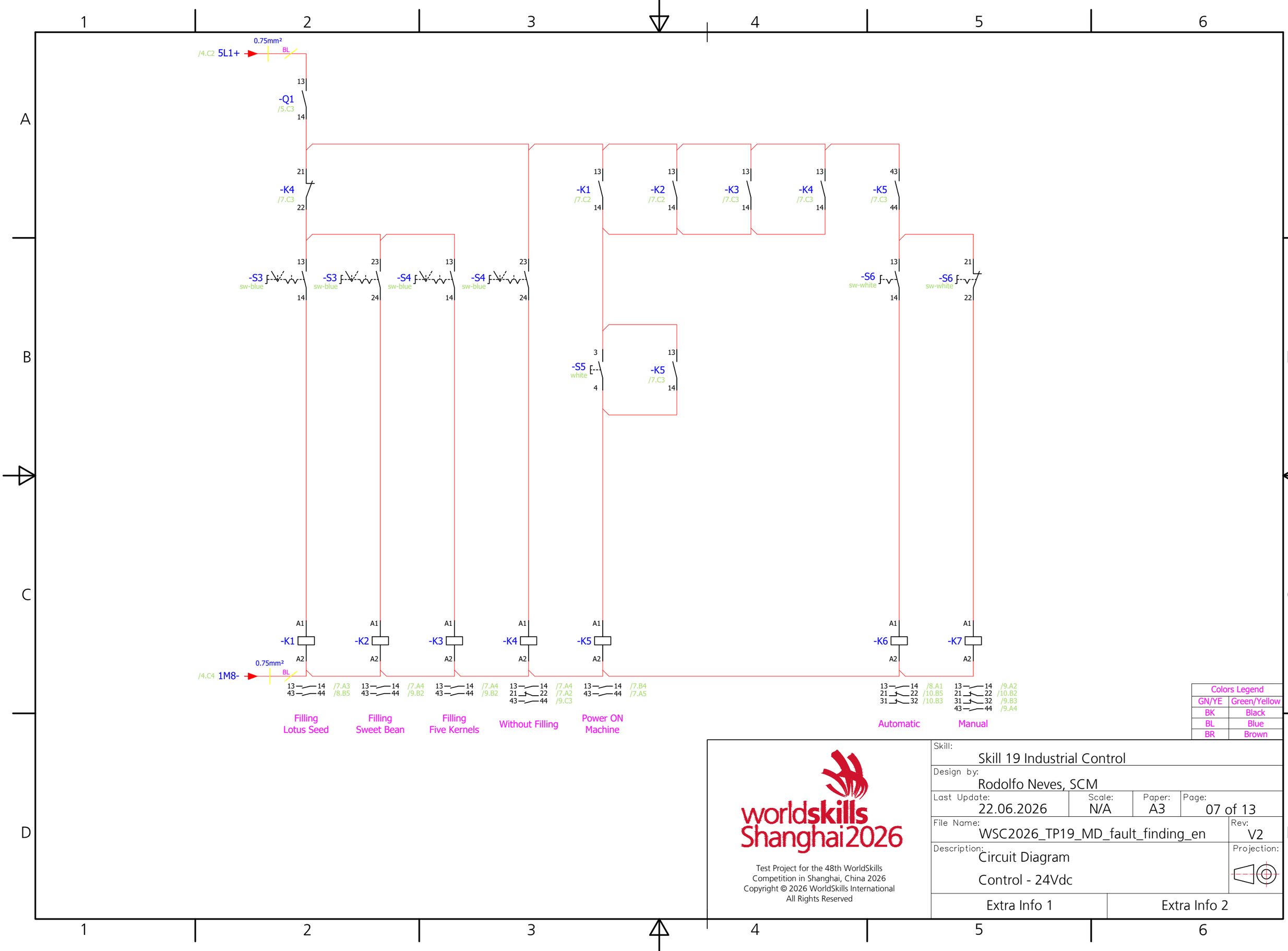
Rev: V2

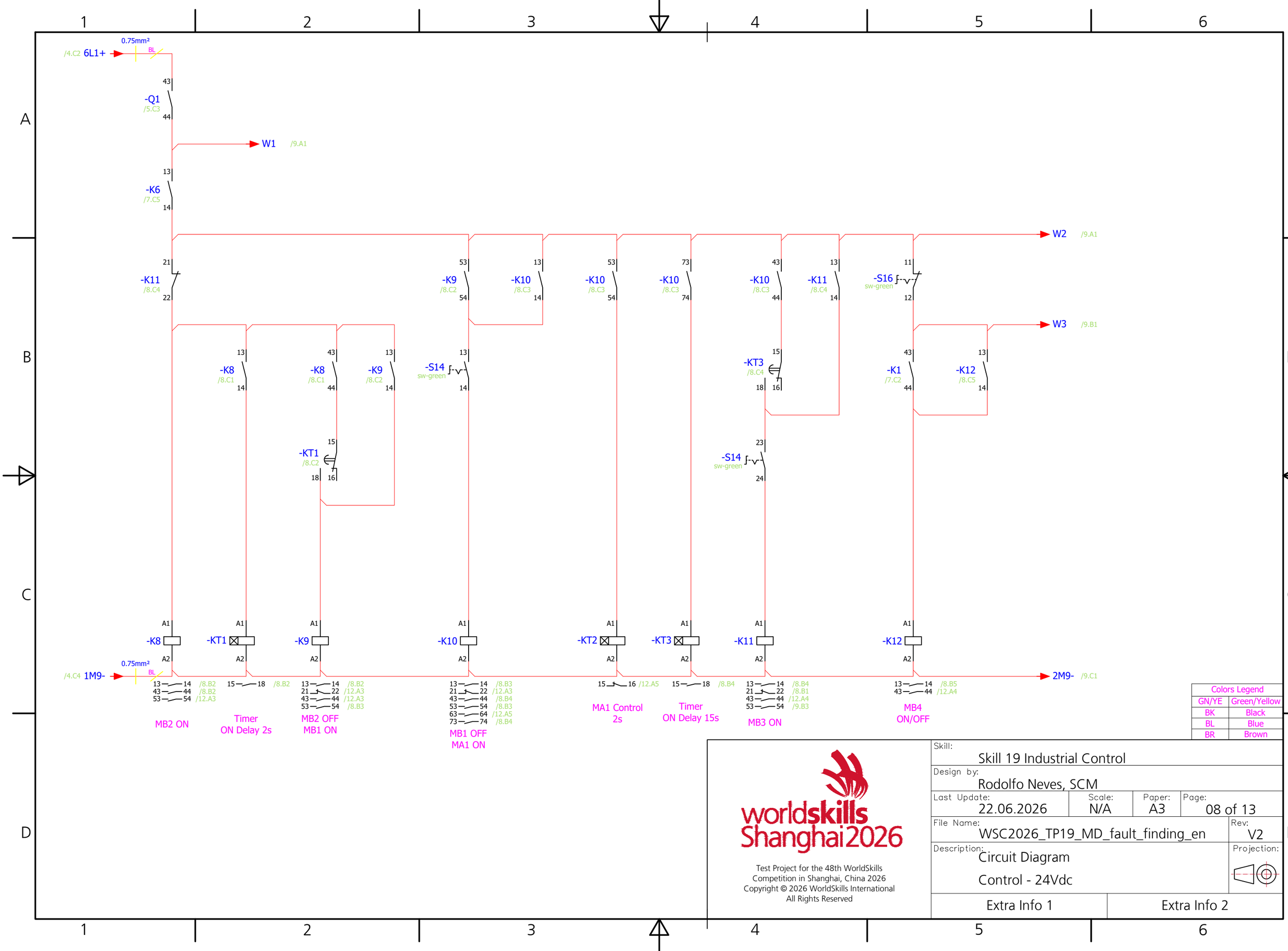
Description: Circuit Diagram
Display Analogic - 24Vdc

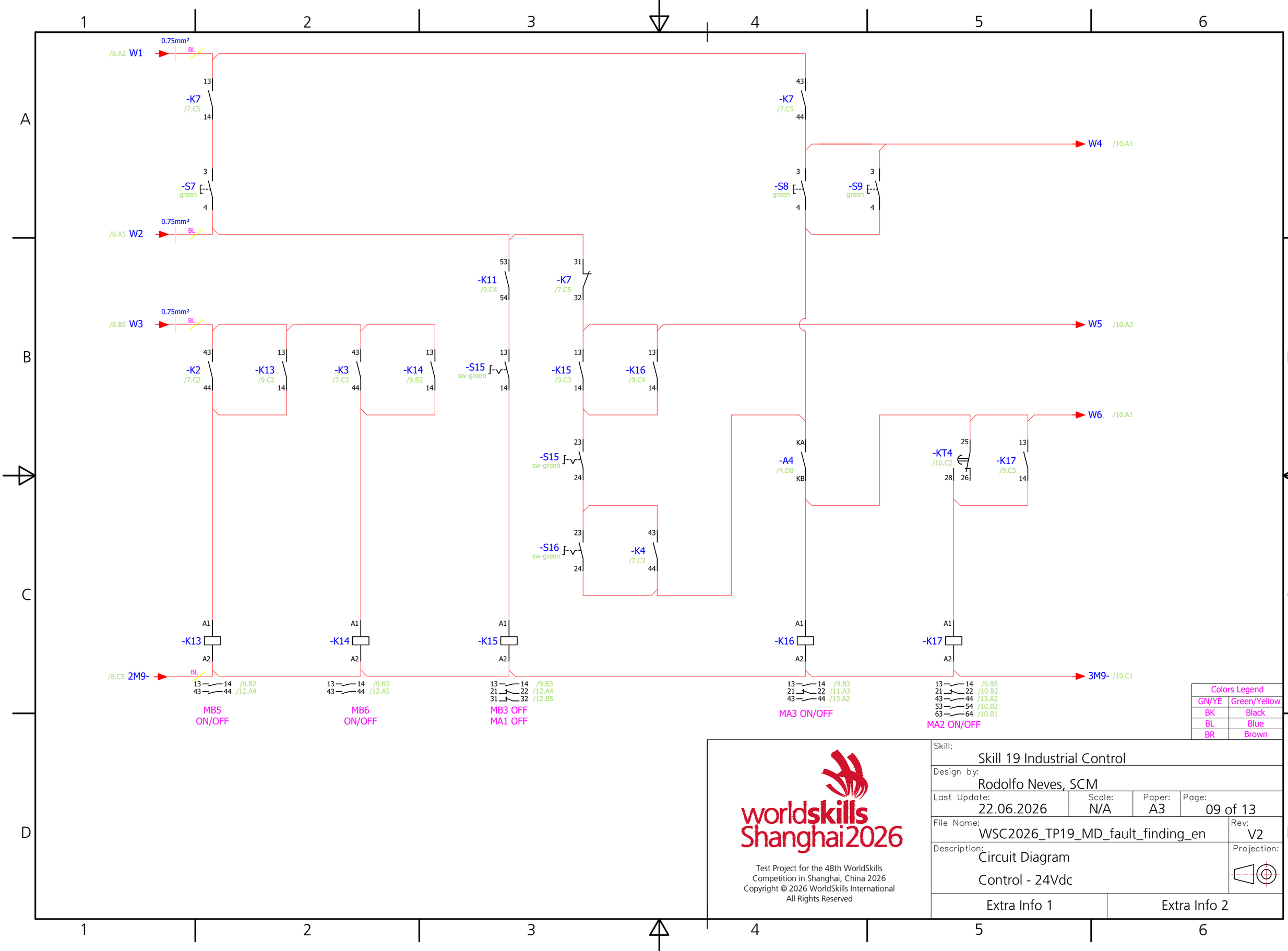
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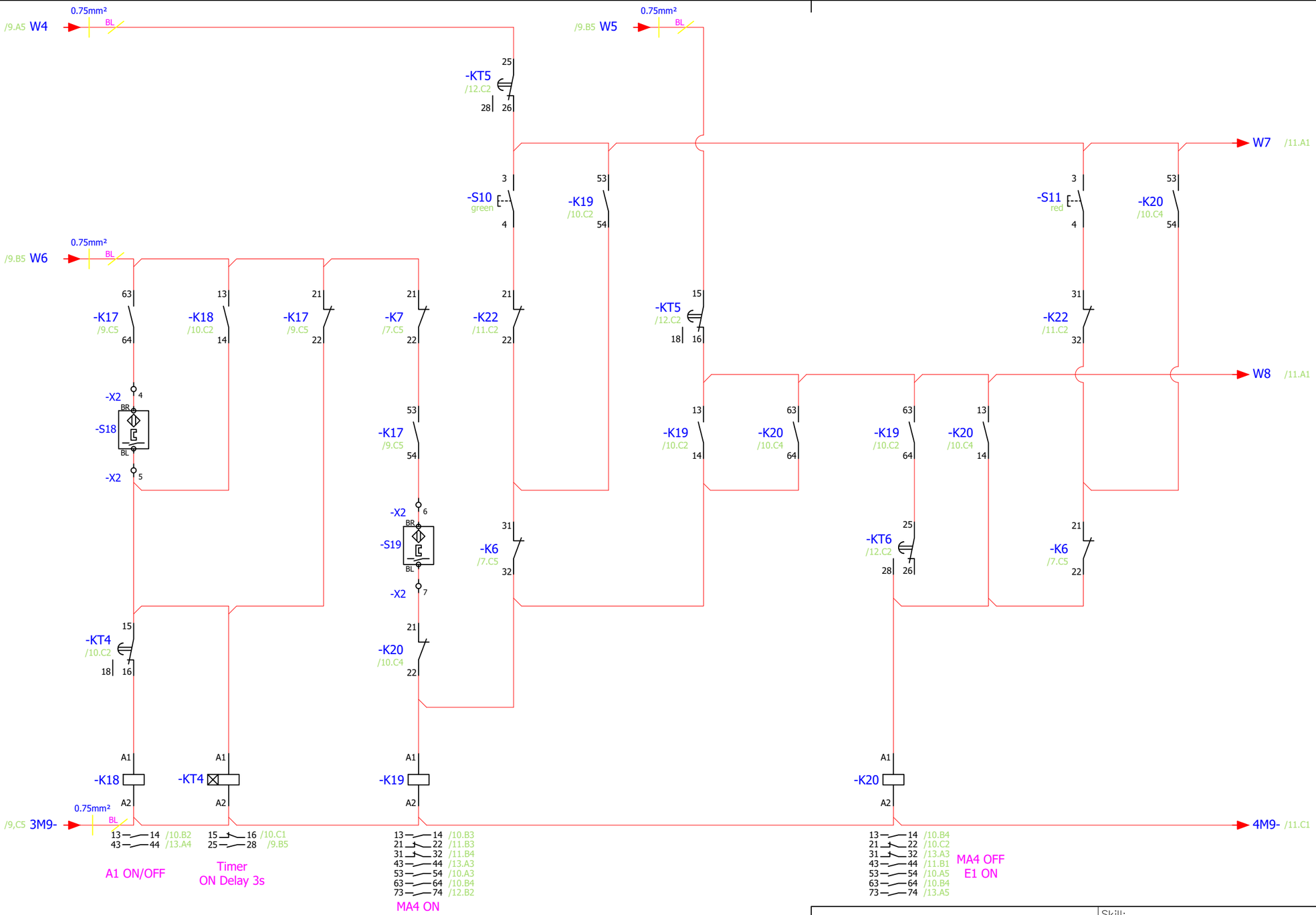
Extra Info 1

Extra Info 2


1
2
3
4
5
6
A
B
C
D
0.75mm²
/4.C2 5L1+
BL
-Q1
/5.C3
-K4
/7.C3
-S3
sw-blue
-S4
sw-blue
-K1
/7.C2
-K2
/7.C2
-K3
/7.C3
-K4
/7.C3
-K5
/7.C3
-S6
sw-white
-S5
white
-K5
/7.C3
-K1
-K2
-K3
-K4
-K5
-K6
-K7
A1
A2
0.75mm²
/4.C4 1M8-
BL
/7.A3 /8.B5
/7.A4 /9.B2
/7.A4 /9.B2
/7.A4 /7.A2 /9.C3
/7.B4 /7.A5
/8.A1 /10.B5 /10.B3
/9.A2 /10.B2 /9.B3 /9.A4
Filling Lotus Seed
Filling Sweet Bean
Filling Five Kernels
Without Filling
Power ON Machine
Automatic
Manual
Colors Legend
GN/YE Green/Yellow
BK Black
BL Blue
BR Brown
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Scale: N/A
Paper: A3
Page: 07 of 13
File Name: WSC2026_TP19_MD_fault_finding_en
Rev: V2
Description: Circuit Diagram
Control - 24Vdc
Projection:
Extra Info 1
Extra Info 2


1
2
3
4
5
6
A
B
C
D
0.75mm²
/4.C2 6L1+
BL
-Q1
/5.C3
43
44
W1
/9.A1
-K6
/7.C5
13
14
21
22
-K11
/8.C4
W2
/9.A1
-K9
/8.C2
53
54
-K10
/8.C3
13
14
-K10
/8.C3
53
54
-K10
/8.C3
73
74
-K10
/8.C3
43
44
-K11
/8.C4
13
14
-S16
sw-green
11
12
W3
/9.B1
-K8
/8.C1
13
14
-K8
/8.C1
43
44
-K9
/8.C2
13
14
-S14
sw-green
13
14
-KT3
/8.C4
15
18
16
-K1
/7.C2
43
44
-K12
/8.C5
13
14
-KT1
/8.C2
15
18
16
-S14
sw-green
23
24
A1
A2
-K8
-KT1
-K9
-K10
-KT2
-KT3
-K11
-K12
0.75mm²
/4.C4 1M9-
BL
2M9-
/9.C1
13 14 /8.B2
43 44 /8.B2
53 54 /12.A3
MB2 ON
15 18 /8.B2
Timer
ON Delay 2s
13 14 /8.B2
21 22 /12.A3
43 44 /12.A3
53 54 /8.B3
MB2 OFF
MB1 ON
13 14 /8.B3
21 22 /12.A3
43 44 /8.B4
53 54 /8.B3
63 64 /12.A5
73 74 /8.B4
MB1 OFF
MA1 ON
15 16 /12.A5
MA1 Control
2s
15 18 /8.B4
Timer
ON Delay 15s
13 14 /8.B4
21 22 /8.B1
43 44 /12.A4
53 54 /9.B3
MB3 ON
13 14 /8.B5
43 44 /12.A4
MB4
ON/OFF
Colors Legend
GN/YE Green/Yellow
BK Black
BL Blue
BR Brown
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Skill 19 Industrial Control
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22.06.2026
Scale:
N/A
Paper:
A3
Page:
08 of 13
File Name:
WSC2026_TP19_MD_fault_finding_en
Rev:
V2
Description:
Circuit Diagram
Control - 24Vdc
Projection:
Extra Info 1
Extra Info 2


0.75mm²
/8.A2 W1
BL
-K7
/7.C5
-S7
green
0.75mm²
/8.A5 W2
BL
0.75mm²
/8.B5 W3
BL
-K2
/7.C2
-K13
/9.C2
-K3
/7.C3
-K14
/9.B2
-K11
/9.C4
-S15
sw-green
-K7
/7.C5
-K15
/9.C3
-K16
/9.C4
-S15
sw-green
-S16
sw-green
-K4
/7.C3
-K7
/7.C5
-S8
green
-S9
green
W4 /10.A1
W5 /10.A3
W6 /10.A1
-A4
/4.D8
-KT4
/10.C2
-K17
/9.C5
-K13
-K14
-K15
-K16
-K17
/8.C5 2M9-
BL
3M9- /10.C1
/9.B2 /12.A4
MB5
ON/OFF
/9.B3 /12.A5
MB6
ON/OFF
/9.B3 /12.A4 /12.B5
MB3 OFF
MA1 OFF
/9.B3 /11.A3 /13.A2
MA3 ON/OFF
/9.B5 /10.B2 /13.A2 /10.B2 /10.B1
MA2 ON/OFF
Colors Legend
GN/YE Green/Yellow
BK Black
BL Blue
BR Brown
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Scale: N/A
Paper: A3
Page: 09 of 13
File Name: WSC2026_TP19_MD_fault_finding_en
Rev: V2
Description: Circuit Diagram
Control - 24Vdc
Projection:
Extra Info 1
Extra Info 2



Colors Legend	
GN/YE	Green/Yellow
BK	Black
BL	Blue
BR	Brown

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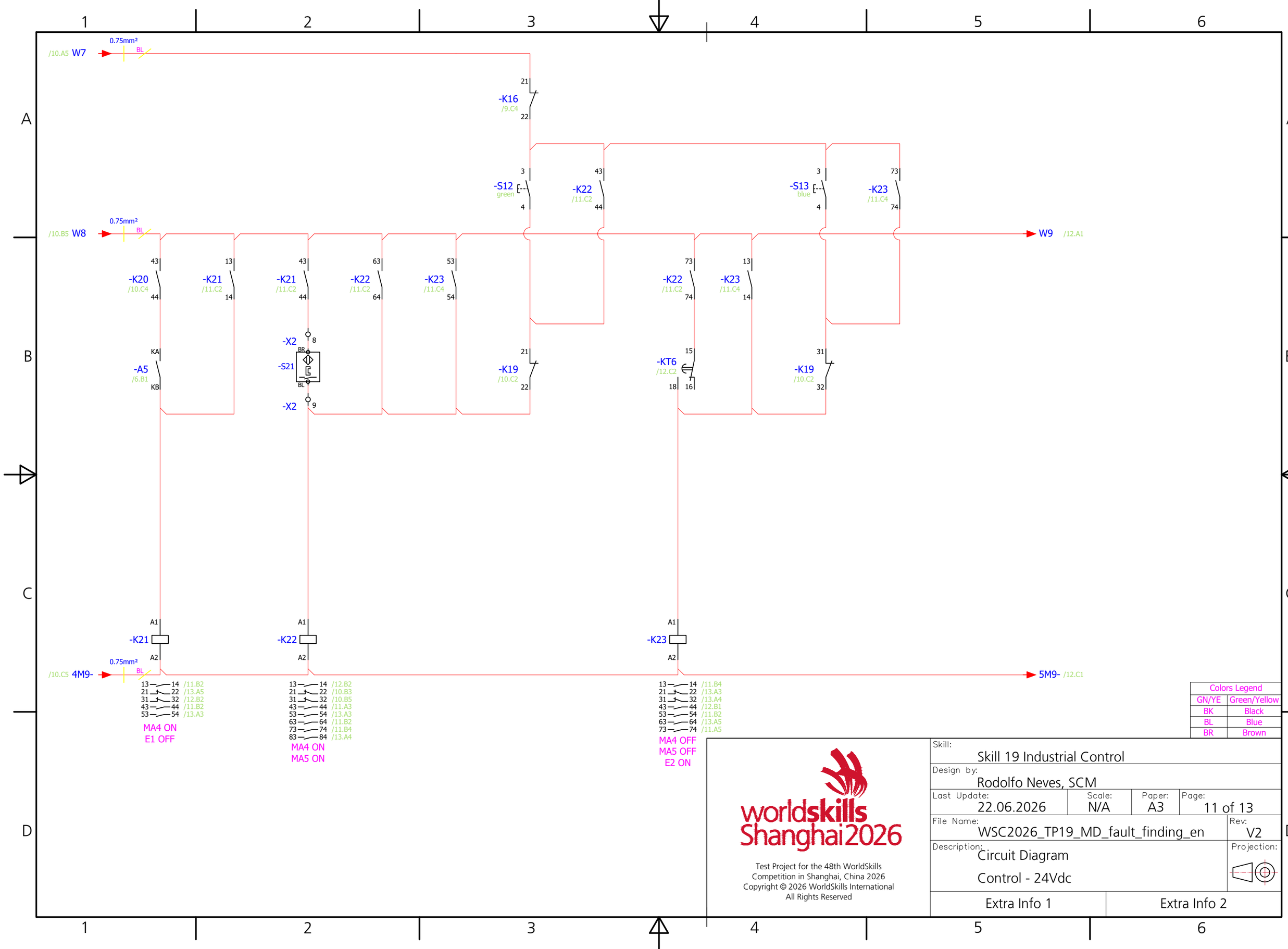
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22.06.2026	N/A	A3	10 of 13

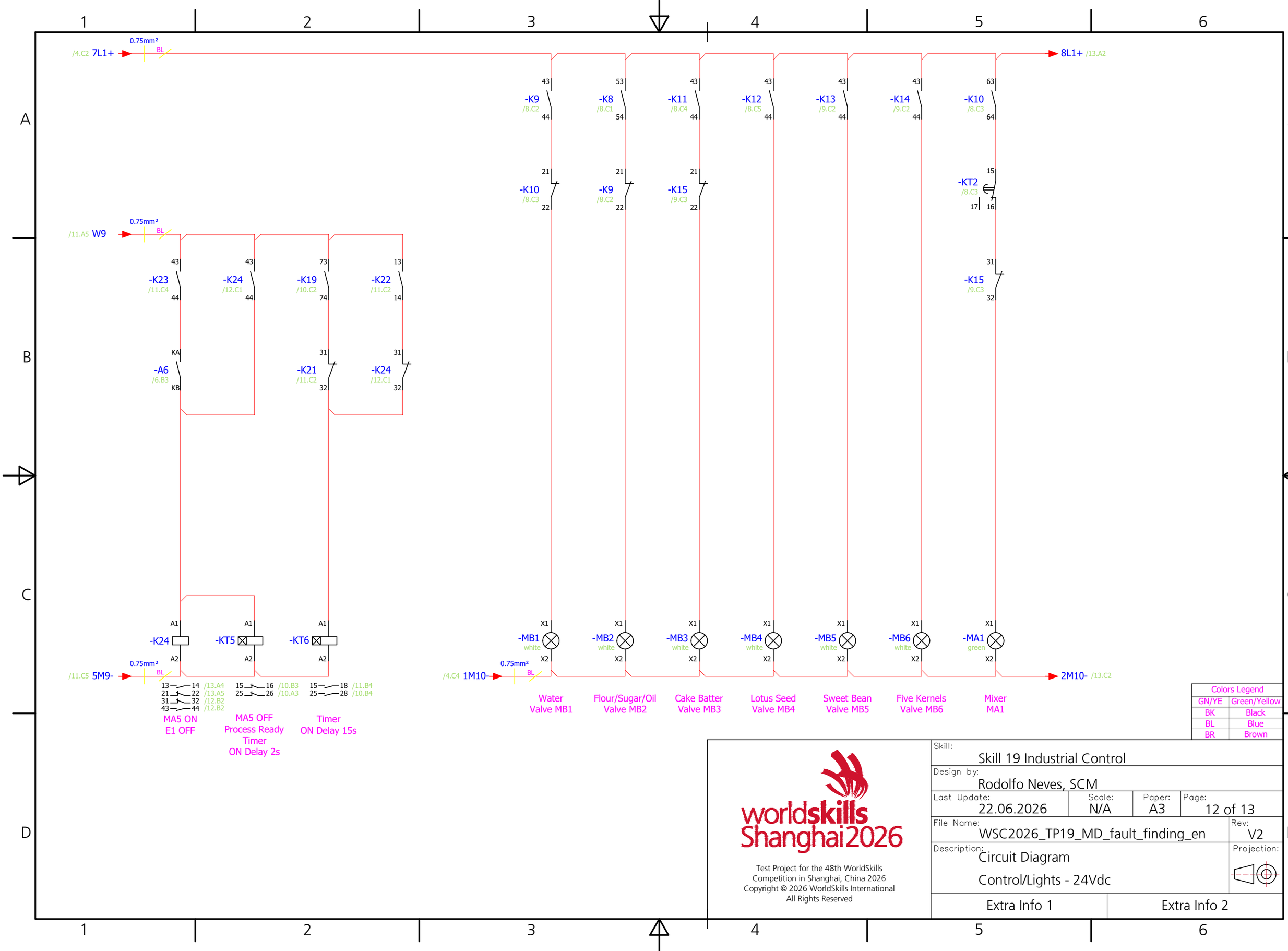
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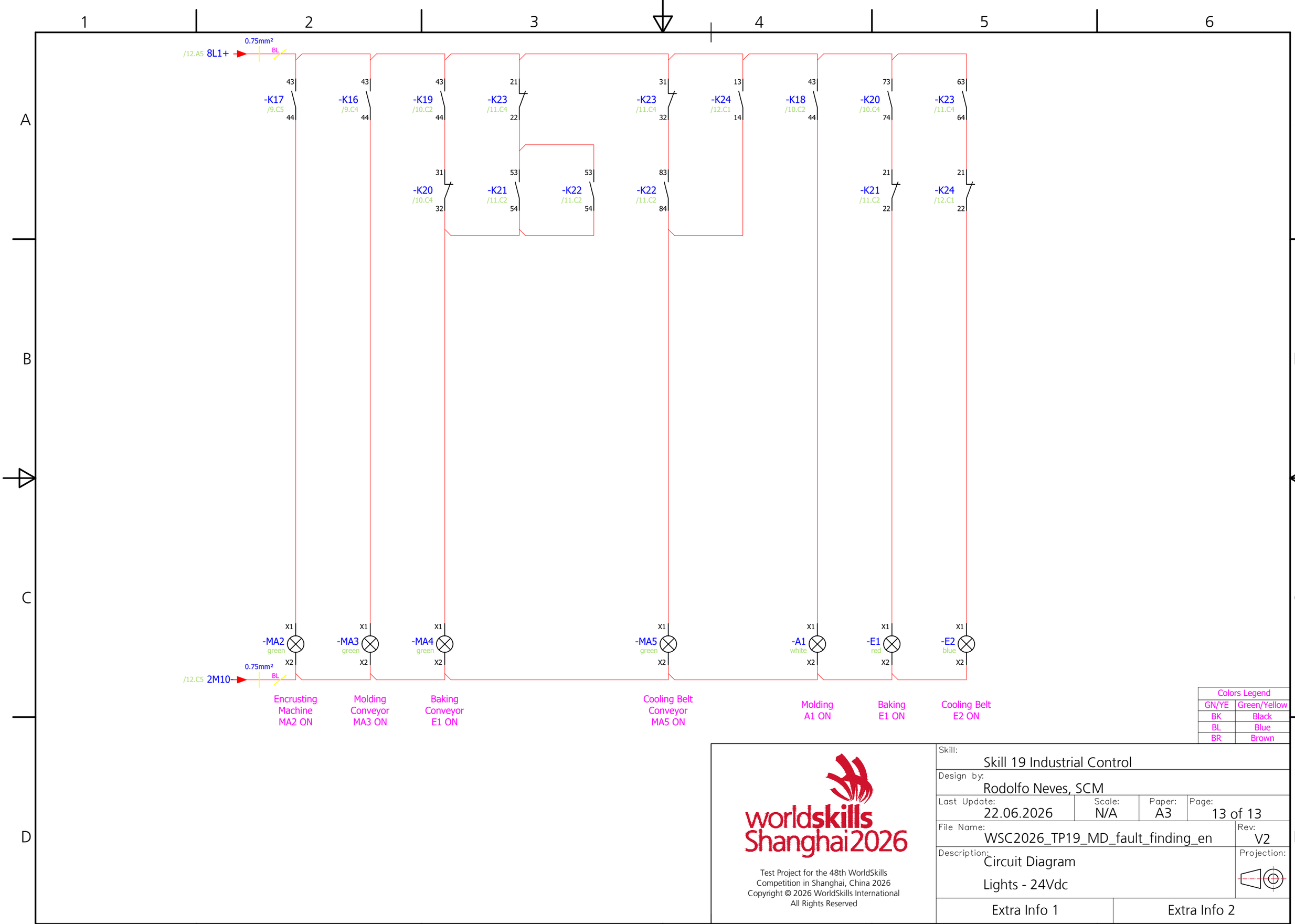
Description: Circuit Diagram
Control - 24Vdc

Projection:

Extra Info 1 | Extra Info 2


1
2
3
4
5
6
A
B
C
D
0.75mm²
BL
/10.A5 W7
-K16
/9.C4
21
22
-S12
green
3
4
-K22
/11.C2
43
44
-S13
blue
-K23
/11.C4
73
74
W9
/12.A1
/10.B5 W8
-K20
/10.C4
-K21
/11.C2
-K22
/11.C2
-K23
/11.C4
-X2
-S21
BR
-A5
/6.B1
KA
KB
-K19
/10.C2
-KT6
/12.C2
15
18
16
31
32
A1
A2
-K21
-K22
-K23
/10.C5 4M9-
5M9- /12.C1
13 14 /11.B2
21 22 /13.A5
31 32 /12.B2
43 44 /11.B2
53 54 /13.A3
MA4 ON
E1 OFF
13 14 /12.B2
21 22 /10.B3
31 32 /10.B5
43 44 /11.A3
53 54 /13.A3
63 64 /11.B2
73 74 /11.B4
83 84 /13.A4
MA4 ON
MA5 ON
13 14 /11.B4
21 22 /13.A3
31 32 /13.A4
43 44 /12.B1
53 54 /11.B2
63 64 /13.A5
73 74 /11.A5
MA4 OFF
MA5 OFF
E2 ON
Colors Legend
GN/YE Green/Yellow
BK Black
BL Blue
BR Brown
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Page: 11 of 13
File Name: WSC2026_TP19_MD_fault_finding_en
Rev: V2
Description: Circuit Diagram
Control - 24Vdc
Projection:
Extra Info 1
Extra Info 2


1
2
3
4
5
6
A
B
C
D
0.75mm²
BL
/4.C2 7L1+
8L1+ /13.A2
-K9 /8.C2 43 44
-K8 /8.C1 53 54
-K11 /8.C4 43 44
-K12 /8.C5 43 44
-K13 /9.C2 43 44
-K14 /9.C2 43 44
-K10 /8.C3 63 64
-K10 /8.C3 21 22
-K9 /8.C2 21 22
-K15 /9.C3 21 22
-KT2 /8.C3 15 16 17
-K15 /9.C3 31 32
/11.A5 W9
-K23 /11.C4 43 44
-K24 /12.C1 43 44
-K19 /10.C2 73 74
-K22 /11.C2 13 14
-A6 /6.B3 KA KB
-K21 /11.C2 31 32
-K24 /12.C1 31 32
-K24 A1 A2
-KT5 A1 A2
-KT6 A1 A2
/11.C5 5M9-
13 14 /13.A4
21 22 /13.A5
31 32 /12.B2
43 44 /12.B2
15 16 /10.B3
25 26 /10.A3
15 18 /11.B4
25 28 /10.B4
MA5 ON
E1 OFF
MA5 OFF
Process Ready
Timer
ON Delay 2s
Timer
ON Delay 15s
-MB1 white X1 X2
-MB2 white X1 X2
-MB3 white X1 X2
-MB4 white X1 X2
-MB5 white X1 X2
-MB6 white X1 X2
-MA1 green X1 X2
/4.C4 1M10-
2M10- /13.C2
Water
Valve MB1
Flour/Sugar/Oil
Valve MB2
Cake Batter
Valve MB3
Lotus Seed
Valve MB4
Sweet Bean
Valve MB5
Five Kernels
Valve MB6
Mixer
MA1
Colors Legend
GN/YE Green/Yellow
BK Black
BL Blue
BR Brown
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Scale: N/A
Paper: A3
Page: 12 of 13
File Name: WSC2026_TP19_MD_fault_finding_en
Rev: V2
Description: Circuit Diagram
Control/Lights - 24Vdc
Projection:
Extra Info 1
Extra Info 2



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File Name: WSC2026_TP19_MD_fault_finding_en			Rev: V2
Description: Circuit Diagram Lights - 24Vdc			Projection:
Extra Info 1		Extra Info 2	