



SOFT-STARTER PANEL


3Phase 380V 600HP

D			CUSTOMER	SMART(BR)	APPROVED	J.S.PARK	DATE	2017. 09	DWG. NAME	TITLE	=		UNIT	mm
C					CHECKED	J.H.KIM	DATE	2017. 09	DWG. NO.					REV. NO.
B			SUPPLIER		DESIGNED	S.B.CHOI	DATE	2017. 09		EP08-002672A	+		SHEET	00
A					DRAWN	S.B.CHOI	DATE	2017. 09	PROJECT	SMART(BR)	&		TOTAL SHEET	13
REV.	DATE	DESCRIPTION OF REVISION												

6		5		4		3		2		1							
<div>DWG NAME INDEX</div>																	
NO	TITLE NAME			SHEET NO.			CODE		REM.								
1	TITLE			00													
2	DWG NAME INDEX			01													
3	SPECIFICATION			02 ~ 03													
4	SOFT STARTER & RELAY COORDINATION			04													
5	OUT LINE DIAGRAM			05													
6	BLANK PAGE			06													
7	THREE LINE DIAGRAM			07													
8	CONTROL POWER DIAGRAM			08													
9	SEQUENCE DIAGRAM			09 ~ 11													
10	TERMINAL BLOCK DIAGRAM			12													
11	PART LIST			13													
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<div><div><div>D</div><div>C</div><div>B</div><div>A</div></div><div>REV. DATE DESCRIPTION OF REVISION</div></div>				CUSTOMER		SMART(BR)		APPROVED	J.S.PARK	DATE	2017. 09	DWG. NAME	DWG NAME INDEX	=		UNIT	mm
								CHECKED	J.H.KIM	DATE	2017. 09			REV. NO.		0	
								DESIGNED	S.B.CHOI	DATE	2017. 09			SHEET		01	
				SUPPLIER				DRAWN	S.B.CHOI	DATE	2017. 09	PROJECT	SMART(BR)	&		TOTAL SHEET	13
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SPECIFICATION -1


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D			CUSTOMER	SMART(BR)	APPROVED	J.S.PARK	DATE	2017. 09	DWGS. NAME	SPECIFICATION-1	=		UNIT	mm	A	
C					CHECKED	J.H.KIM	DATE	2017. 09	DWGS. No.					REV. NO.		0
B				SUPPLIER	 Hanwha Power Systems	DESIGNED	S.B.CHOI	DATE	2017. 09		EP08-002672A	+		SHEET		02
A						DRAWN	S.B.CHOI	DATE	2017. 09	PROJECT	SMART(BR)	&		TOTAL SHEET		13
REV.	DATE	DESCRIPTION OF REVISION														

SPECIFICATION -2


1	PROJECT NAME	BR SMART
2	APPLICATION	<input type="checkbox"/> UL <input checked="" type="checkbox"/> IEC <input type="checkbox"/> JIS/JEM <input type="checkbox"/> ANSI
3	WORKING CONDITION	HEIGHT : UP TO 1000M ABOVE SEA LEVEL SURROUNDING: MIN (-10)°C, MAX (40)°C HUMIDITY : (80)% BELOW
4	PANEL	1) STEEL THICKNEES FRAME: <input checked="" type="checkbox"/> 2.3t <input type="checkbox"/> 3.2t DOOR: <input type="checkbox"/> 2.3t <input checked="" type="checkbox"/> 3.2t COVER: <input checked="" type="checkbox"/> 2.3t <input type="checkbox"/> 3.2t OTHERS: <input checked="" type="checkbox"/> 2.3t <input type="checkbox"/> 3.2t 2) COLOR <input checked="" type="checkbox"/> 5Y 7/1 <input type="checkbox"/> 7.5BG 6/1.5 3) PAINTING THICKNEES <input checked="" type="checkbox"/> 60um <input type="checkbox"/> 4) PROTECTION CLASS <input type="checkbox"/> IP41 <input checked="" type="checkbox"/> IP54
5	EACH CONDUCTOR COLOR	1) COLOR CLASSIFY(AC THREE PHASE) R(L1): BLACK, S(L2): RED, T(L3): BLUE, G(E): GREEN 2) COLOR CLASSIFY(AC SINGLE PHASE) R(L1): BLACK, S(L2): RED, T(L3): BLUE, N: WHITE 3) COLOR CLASSIFY(DC) P:RED, N: BLUE

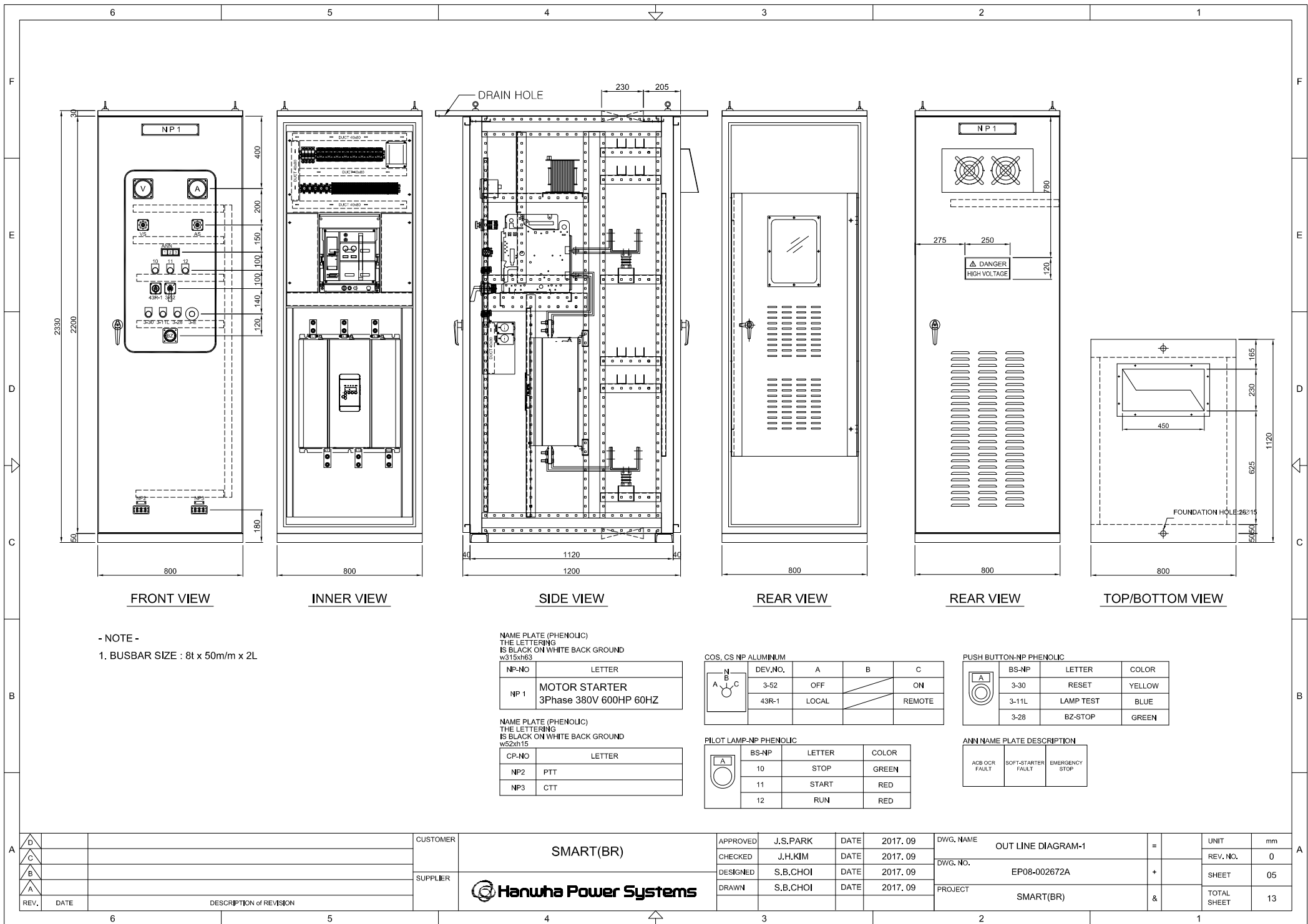
6	INTERNAL WIRE	1) DC CONTROL : ■ KIV BLUE ■ 1.5SQ
		2) AC CONTROL : ■ KIV YELLOW ■ 1.5SQ
		3) PT SECONDARY : ■ KIV RED ■ 2.5SQ
		4) CT SECONDARY : ■ KIV BLACK ■ 4.0SQ
		5) ZCT SECONDARY: □ KIV BLACK □ 1.5SQ
		6) SIGNAL GROUND : ■ KIV GREEN ■ 2.5SQ
		7) HV CABLE :□ MLFC BLACK □ 60SQ
		8) LV GROUND :□ F-GV GREEN ■ 95SQ
7	NAME PLATE	1) MATERIAL ■ PHENOLIC □ ACRYL □ ALLUMINUM □ SUS
		2) BACK GROUND COLOR: ■ WHITE □ BLACK
		3) LETTER COLOR: □ WHITE ■ BLACK
		4) SIGN LETTER: ■ ENGLISH □ KOREA




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REV.	DATE	DESCRIPTION OF REVISION		DRAWN	S.B.CHOI		DATE	2017. 09	PROJECT	SMART(BR)	&		TOTAL SHEET	13	

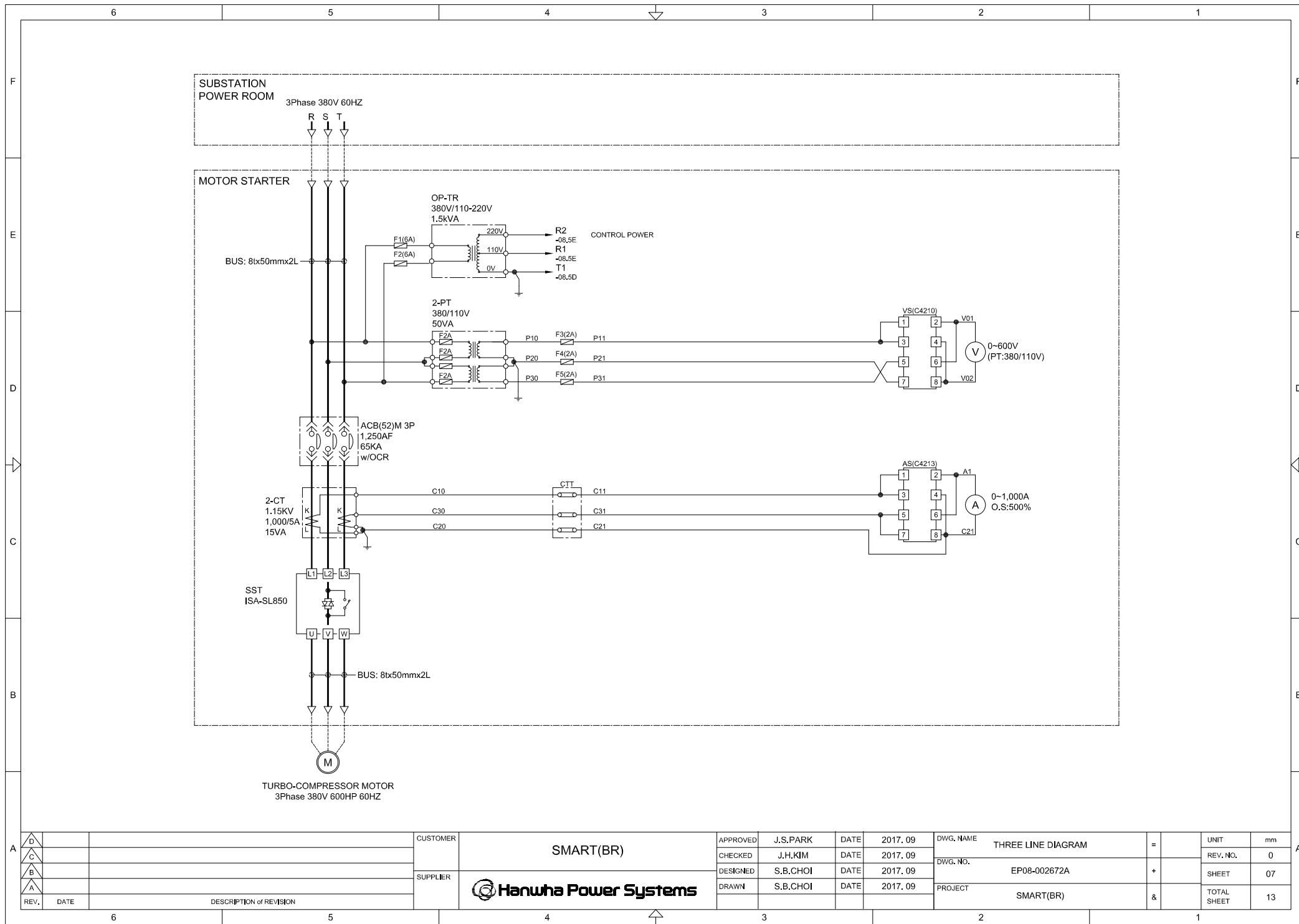
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LISTA DE PARÂMETROS		
PARÂMETROS	DESCRIÇÃO	VALORES
C 1.1	TIPOS DE CONTROLE	1 RAMPA TENSÃO
C 1.2	TENSÃO INICIAL PARTIDA	35%
C 1.3	TEMPO MÁXIMO PARTIDA	36s
C 1.4	DETECÇÃO FIM PARTIDA	0 AUTOMÁTICO
APLICAÇÃO BOMBA ?	<input checked="" type="checkbox"/>	NÃO
C 2.1	TENSÃO	380V
C 2.2	CORRENTE	783.0A
C 2.3	RPM	3570 RPM
C 2.4	POTÊNCIA	448.0 KW
C 2.5	F.P.	0,91 COS ϕ
C 2.6	F.S.	1,15
C 3.1	MODO LOC/REM	SEMPRE REMOTO
C 3.3	D1x	-
C 4.1	D11	GIRA/PARA
C 4.2	D12	SEM FUNÇÃO
C 5.7.3	0	INATIVA

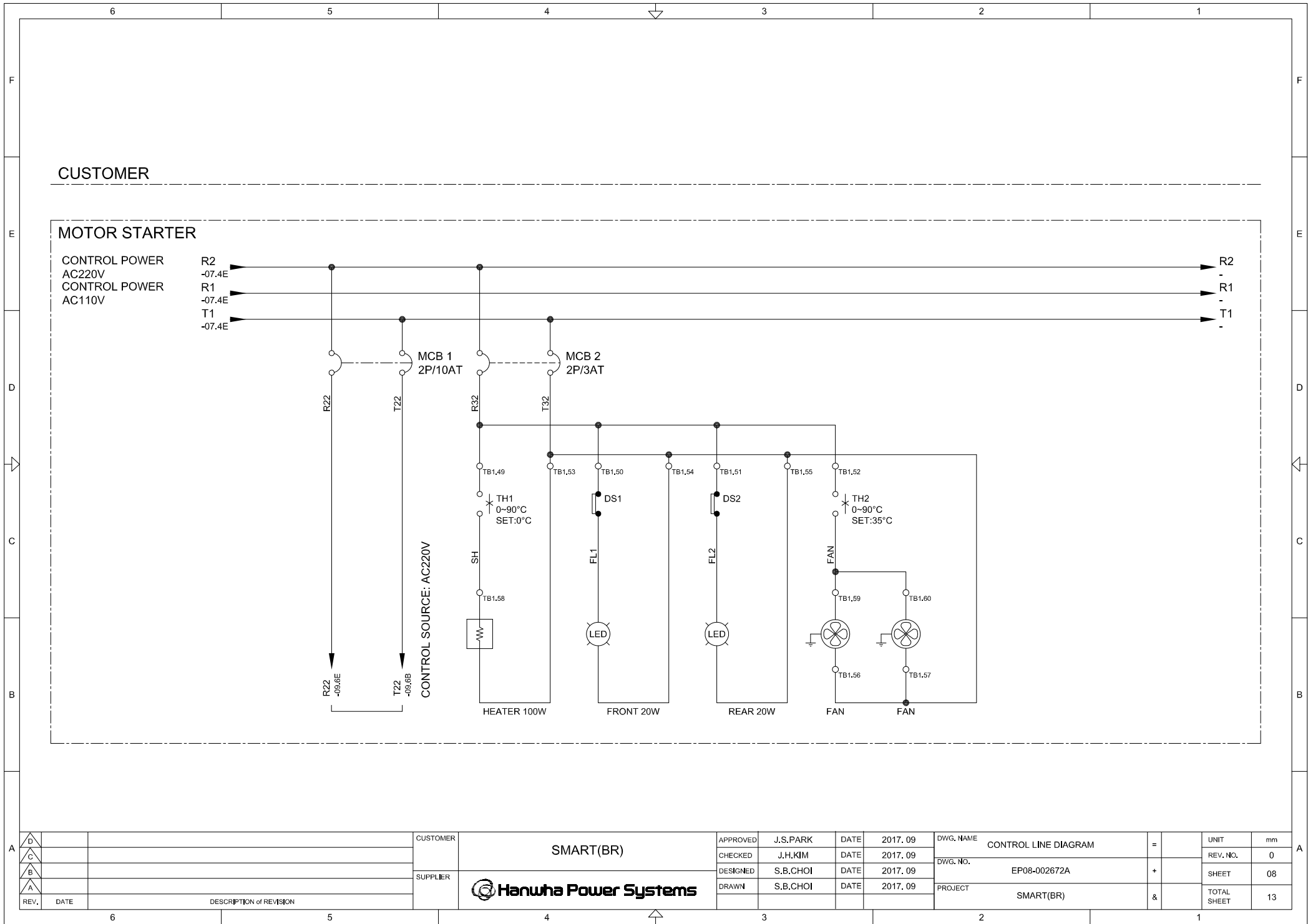
A	D			CUSTOMER	SMART (BR)	APPROVED	J.S.PARK	DATE	2017.09	DWG. NAME	RELAY CORDINATION	■		UNIT	mm	A
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	B			SUPPLIER		DESIGNED	S.B. CHOI	DATE	2017.09		+		SHEET	4		
	A	2022.09	ALTERAÇÃO DA SOFT-STARTER			DRAWN	S.B. CHOI	DATE	2017.09	PROJECT	SMART(BR)	&		TOTAL SHEET	13	
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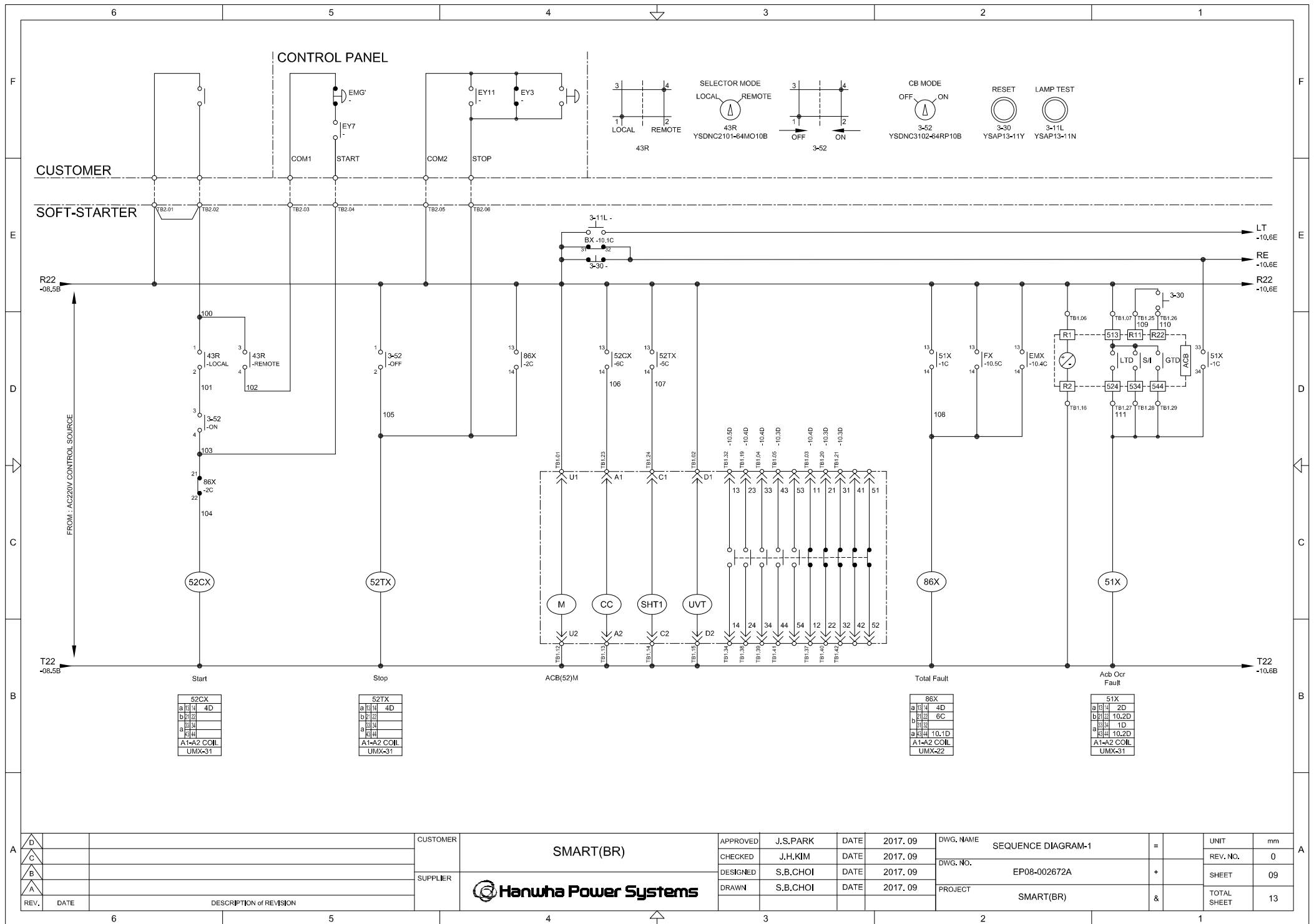


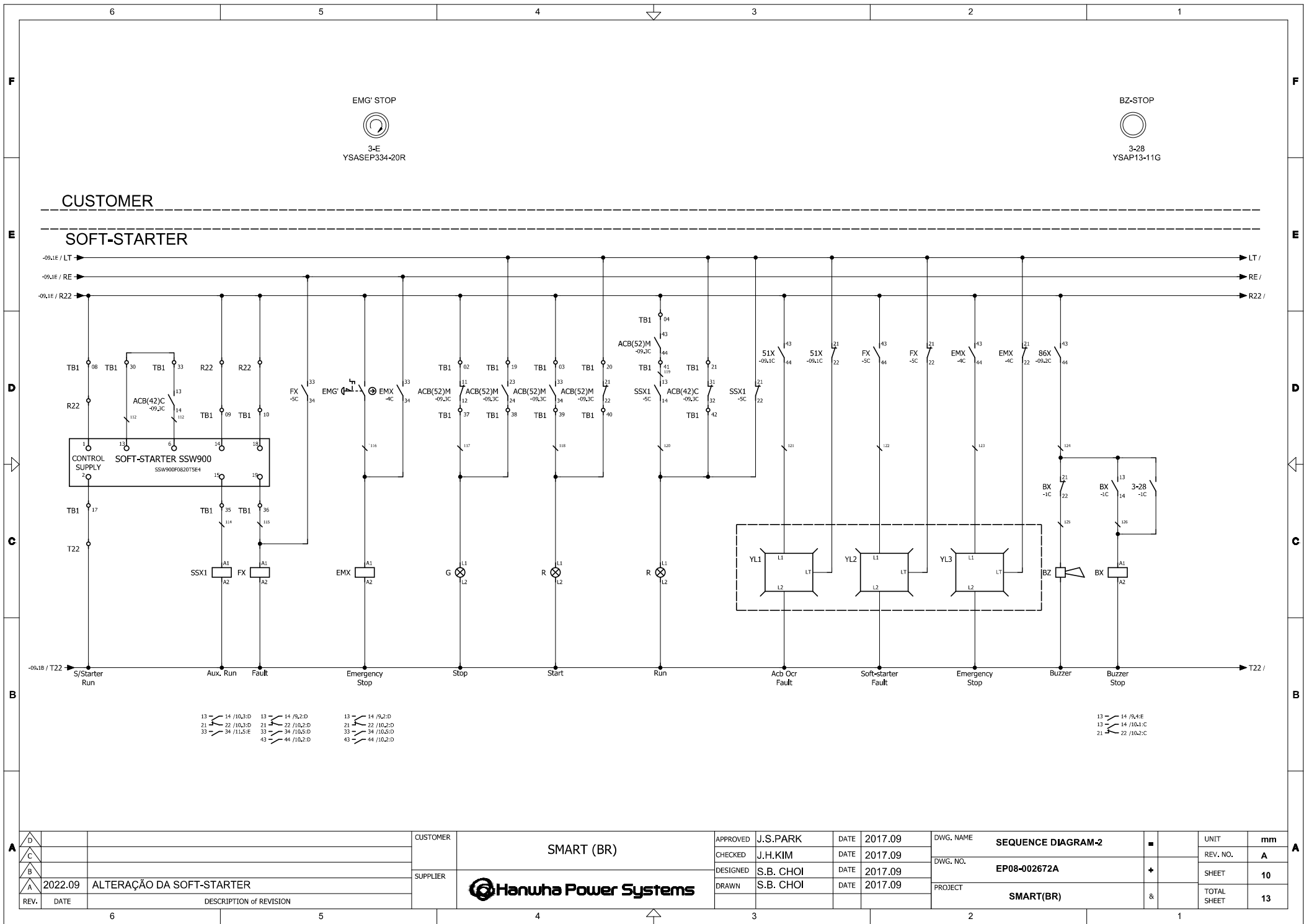
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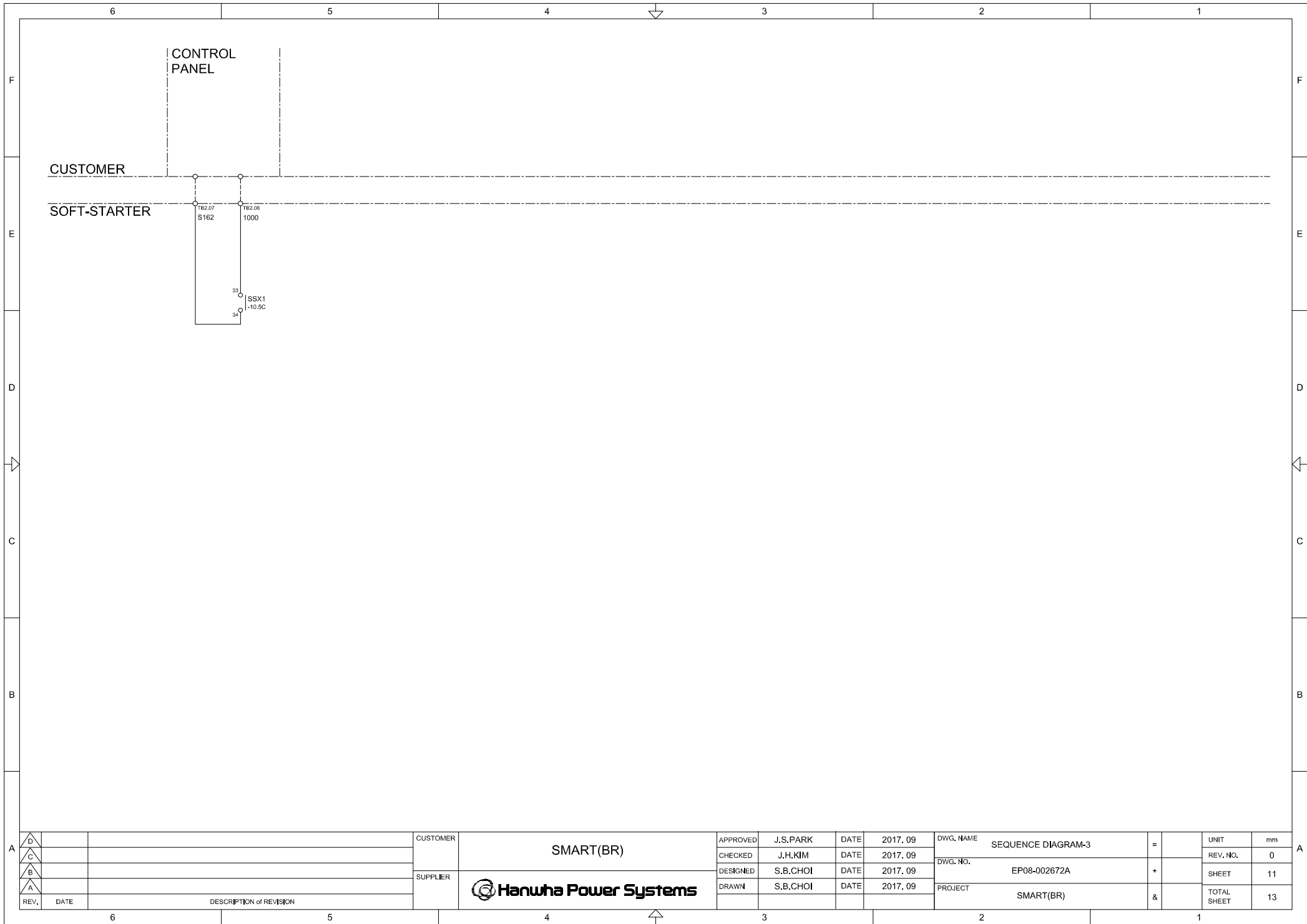

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PART LIST											
NO.	SYMBOL	DESCRIPTION	SPECIFICATION	Q'TY	TYPE	MAKER	REMARK				
1	ACB	AIR CIRCUIT BRAKER	3P 1,250A 65kA w/OCR	1	AN-13D3-13J	LSIS					
2	SST	SOFT-STARTER	3P 380V 600HP	1	ISA-SL850	IGEL					
3	PT	POTENTIAL TRANSFORMER	3P 380V/110V 50VA	1	KBO50-22	LIGHT STAR					
4	CT	CURRENT TRANSFOMER	1.15KV 1,000/5A 15VA	2	KBM-14	LIGHT STAR					
5	OP TR	OPERATION TRANSFORMER	1P 380/110-220V 1.5kVA	1	1P 1.5kVA	SINSEUNG					
6	V	VOLT-METER	0~600V 380/110V	1	WA-V2	KYONGBO					
7	A	AMPERE METER	0~1,000A OS:500%	1	WA-A2	KYONGBO					
8	VS	VOLTAGE TRANSFER SWITCH	3P3W	1	YSC4210-64MOB	YONG SUNG					
9	AS	AMPERE TRANSFER SWITCH	3P3W	1	YSC4213-64MOB	YONG SUNG					
10	3-52	CONTROL SWITCH	OFF ↔ ON	1	YSDNC3102-64RP10B	YONG SUNG					
11	43R	CAM SWITCH	LOCAL ↔ REMOTE	1	YSDNC2101-64MO10B	YONG SUNG					
12	PTT	VOLTAGE TEST TERMINAL	3POLE	1	YSPTT-03S	YONG SUNG					
13	CTT	CURRENT TEST TERMINAL	3POLE	1	YSCTT-03S	YONG SUNG					
14	3-30	PUSH BUTTON	P30 1a1b YELLOW	1	YSAP13-11Y	YONG SUNG					
15	3-11L	PUSH BUTTON	P30 1a1b BLUE	1	YSAP13-11N	YONG SUNG					
16	3-28	PUSH BUTTON	P30 1a1b GREEN	1	YSAP13-11G	YONG SUNG					
17	3-E	EMERGENCY PUSH BUTTON	P30 1a1b RED	1	YSSEP334-11R	YONG SUNG					
18	10	PILOT LAMP	P30 AC220V GREEN	1	YSPL3-AL22G	YONG SUNG					
19	11,12	PILOT LAMP	P30 AC220V RED	2	YSPL3-AL22R	YONG SUNG					
20	ANN	SQUARE LAMP	30x30 AC220V(Y,Y,Y)	1	YSSL33-AL22	YONG SUNG					
21	BZ	BUZZER	P66 AC220V	1	KMB-P80A2	KACON					
22	F1,F2	FUSE HOLDER	FUSE:6A	2	SHFH-30CH	SUNGHO					
23	F3,F4,F5	FUSE HOLDER	FUSE:2A	3	SHFH-30CH	SUNGHO					
24	MCB1	MINIATURE CIRCUIT BREAKER	2P 10A	1	C60N-C10A	SCHNEIDER					
25	MCB2	MINIATURE CIRCUIT BREAKER	2P 3A	1	C60N-C3A	SCHNEIDER					
26	RY	AUX.RELAY	AC220V 3a1b	6	UMX-31	HYUNDAI					
27	RY	AUX.RELAY	AC220V 2a2b	2	UMX-22	HYUNDAI					
28	LED	LED LAMP	AC220V 20W	2	KG-PL200V	KG-AUTO					
29	DS	MICRO SWITCH	AC250V 1a1b	2	Z15G-07B	KACON					
30	FAN	PANEL COOLING FAN	P150 AC220V	2	SJ1725HA2	SUNTRONIX					
31	TS	THERMER START	0~90°C	2	CY1T-90	CYMAX					
32	SH	SPACE HEATER	AC220V 100W	1	CYSH-AL2	CYMAX					
33											
34											
35											

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