CUSTOMER	SMART #1701

NAME	TURBO-COMPRESSOR
	CONTROL PANEL

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER	SMART #1701	APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	TOTAL COVER	=	PI	UNIT	mm
		CHECKED	S.H.JUNG	DATE	-					REV. NO.	NONE
SUPPLIER	Hanwha Power Systems	DESIGNED	-	DATE	-	DWG. NO.	EP06-003159A	+	PI	SHEET	1
		DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	&	PI	TOTAL SHEET	35

TOTAL INDEX

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	TOTAL INDEX
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

=	PI	UNIT	mm
+	PI	REV. NO.	NONE
&	PI	SHEET	2
		TOTAL SHEET	35

GENERAL SPECIFICATION

NO.	DESCRIPTION	SPECIFICATION
1	COMMERCIAL POWER	1) RATED VOLTAGE : 3PHASE AC 380V
		2) RATED FREQUENCY : 60Hz
		3) CAPACITY : 7.0KW
2	EMERGENCY POWER	1) RATED VOLTAGE : N/A
		2) RATED FREQUENCY : N/A
		3) CAPACITY : N/A
3	CONTROL POWER	1) AC CONTROL : 1PHASE AC 110V
		2) DC CONTROL : DC 24V
		3) SUPPLY SYSTEM : CONTROL TR, SMPS
4	AUX. OIL PUMP	1) RATED VOLTAGE : 3PHASE AC 380V
		2) CAPACITY : 1.5kW
5	RESERVOIR OIL HEATER	1) RATED VOLTAGE : 3PHASE AC 380V
		2) CAPACITY : 4.0kW
6	CONTROL SEQUENCE	1) RATED VOLTAGE : 1PHASE AC 110V
		2) CAPACITY : 1.5KW
7	VACUUM PUMP	1) RATED VOLTAGE : N/A
		2) CAPACITY : N/A

NO.	DESCRIPTION	SPECIFICATION
8	APPLICATION	IEC
9	PROTECTION OF CIRCUIT	1) CIRCUIT BREAKER : MCCB, CP, FUSE
		2) PUMP & HEATER : MMS (MANUAL MOTOR STARTER)
10	WORKING CONDITION	1) HEIGHT : UP TO 1000M ABOVE SEA LEVEL
		2) SURROUNDING : MIN (-18) °C, MAX (48) °C
		3) HUMIDITY : (80) % BELOW
11	PANEL (LCP)	1) MATERIAL : SPHC
		2) STEEL THICKNESS
		- FRAME : 1.6 mm - DOOR : 1.6 mm
		- COVER : 1.6 mm
		- OTHERS : 1.6 mm
		3) ENCLOSURE CLASS : IP41
		4) PANEL PURGE INLET AIR TUBE : N/A
		5) LOCATION : IN DOOR
		6) IN/OUTSIDE COLOR : RAL 7015
		7) INNER PLATE COLOR : RAL 7015
		8) PAINTING THICKNESS : 60um
12	CASE TYPE	1) PANEL : SELF STANDING
		2) CABLE ENTRANCE : BOTTOM

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	GENERAL SPECIFICATION
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP05-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

= PI
+ PI
& PI

UNIT	mm
REV. NO.	NONE
SHEET	3
TOTAL SHEET	35

GENERAL SPECIFICATION

NO.	DESCRIPTION	SPECIFICATION
13	EACH CONDUCTOR COLOR	1) COLOR CLASSIFY (AC THREE PHASE)
		- L1(R) : RED - L2(S) : YELLOW - L3(T) : BLUE
		- PE(N) : GREEN
		2) COLOR CLASSIFY (AC SINGLE PHASE)
		- L1(L) : BLACK - L2(T) : BLACK
		3) COLOR CLASSIFY (DC)
		- POSITIVE(P) : RED - NEGATIVE(N) : BLUE
14	INTERNAL WIRE	1) AC POWER LINE : KIV/HKIV(60227), BLACK / 1.5SQ ~ 10.0SQ
		2) AC CONTROL LINE : KIV/HKIV(60227), RED / 1.0SQ ~ 6.0SQ
		3) DC POWER LINE : KIV/HKIV(60227), BLACK / 0.5SQ ~ 1.5SQ
		4) DC CONTROL LINE :
		- POSITIVE(P) : KIV/HKIV(60227), BLUE / 0.5SQ ~ 1.5SQ
		- NEGATIVE(N) : KIV/HKIV(60227), BLUE / 0.5SQ ~ 1.5SQ
		5) GROUND : KIV/HKIV(60227), GR/YW / 1.5SQ ~ 6.0SQ
		6) PLC CABLE : AWM 1007 VM-1 / 20AWG
15	TERMINAL TYPE	1) MAIN POWER : "PIN" TYPE
		2) CONTROL POWER : "O, Y, PIN" TYPE
		3) PLC : "O, Y, PIN" TYPE
		4) SIGNAL : "O, Y, PIN" TYPE

NO.	DESCRIPTION	SPECIFICATION
16	NAME PLATE	1) MATERIAL : ACRYL
		2) BACK GROUND COLOR : WHITE
		3) LETTER COLOR : BLACK
		4) SIGN LETTER : ENGLISH

17 MMS SETTING VALUE

AUX. OIL PUMP & VACUUM PUMP

CAPACITY	FUNCTION	220V	380V	400V	415V	440V	460V	480V
500Watt	LOAD(A)	3.2	1.8	1.8	1.7	1.6	1.6	1.5
1500Watt	LOAD(A)	8.4	4.8	4.7	4.5	4.2	4.0	3.9
3750Watt	LOAD(A)	19.0	11.0	9.6	10.0	9.5	9.1	8.7

RESERVOIR OIL HEATER

CAPACITY	FUNCTION	220V	380V	400V	415V	440V	460V	480V
4000Watt	LOAD(A)	13.1	7.6	7.2	7.0	6.6	6.3	6.0
6000Watt	LOAD(A)	39.5	11.4	10.8	10.4	9.8	9.4	9.0

MMS SETTING VALUE = In * 125%

AUX. OIL PUMP : IN = WATT / (1.732 * VOLTAGE * POWER FACTOR * EFFICIENCY)

RESERVOIR OIL HEATER : In = WATT / (1.732 * VOLTAGE)

CAPACITY	POWER FACTOR	Efficiency	
500Watt	70%	71.5%	
1500Watt	75%	78%	
3750Watt	78%	83%	

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	GENERAL SPECIFICATION-2	= PI	UNIT mm
CHECKED	S.H.JUNG	DATE	-				REV. NO. NONE
DESIGNED	-	DATE	-	DWG. NO.	EP06-003159A	+ PI	SHEET 4
DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	& PI	TOTAL SHEET 35

SYMBOL & LEGEND

NAME	SYMBOL
PLC CARD	
AUXILIARY RELAY (COIL)	
FUSE	
FLOAT SWITCH NO CONTACT	
PUSH BUTTON NC CONTACT	
THREE-PHASE MOTOR	

NAME	SYMBOL
MOLDED CASE CIRCUIT BREAKER	
NO CONTACT	
LIMIT SWITCH NO CONTACT	
FLOAT SWITCH NC CONTACT	
THERMO RELAY NO CONTACT	
THREE-PHASE OIL HEATER	

NAME	SYMBOL
MANUAL MOTOR STARTERS	
POWER NO CONTACT	
LIMIT SWITCH NC CONTACT	
SELECT SWITCH NO CONTACT	
THERMO RELAY NC CONTACT	
CAPACITOR	

NAME	SYMBOL
CIRCUIT PROTECTOR	
NC CONTACT	
EMERGENCY PUSH BUTTON NO CONTACT	
SELECT SWITCH NC CONTACT	
RTD	
BUZZER	

NAME	SYMBOL
TERMINAL	
POWER NC CONTACT	
EMERGENCY PUSH BUTTON NC CONTACT	
PUSH BUTTON NO CONTACT	
FAN MOTOR	-FAN
NOISE FILTER	

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	
CHECKED	S.H.JUNG	DATE	-	
DESIGNED	-	DATE	-	
DRAWN	T.W.KIM	DATE	2017-08-09	

DWG. NAME	SYMBOL & LEGEND	=	PI
DWG. NO.	EP06-003159A	+	PI
PROJECT	SMART #1701	&	PI

UNIT	mm
REV. NO.	NONE
SHEET	5
TOTAL SHEET	35

SYMBOL & LEGEND

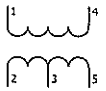
NAME	SYMBOL
GROUND	

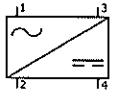
NAME	SYMBOL
SHIELD	

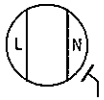
NAME	SYMBOL
FLUORESCENT LAMP	

NAME	SYMBOL
INDICATOR LIGHT	

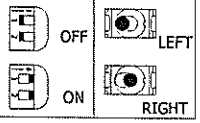
NAME	SYMBOL
SOL VALVE	

NAME	SYMBOL
TRANSFORMER	

NAME	SYMBOL
POWER SUPPLY	

NAME	SYMBOL
RECEPTACLE	

NAME	SYMBOL
HEATER ELEMENT	

NAME	SYMBOL
DIP SWITCH STATUS	

NAME	SYMBOL
DIODE	

NAME	SYMBOL
WIRE JUMPER	

NAME	SYMBOL
CABLE TWIST	

NAME	SYMBOL
PROXIMITY SENSOR	

REV.	DATE	DESCRIPTION of REVISION	CUSTOMER	SUPPLIER

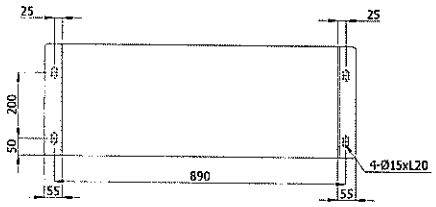
SMART #1701

Hanwha Power Systems

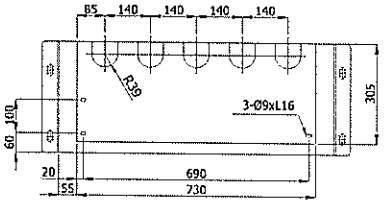
APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	SYMBOL & LEGEND
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

=	PI	UNIT	mm
+	PI	REV. NO.	NONE
&	PI	SHEET	6
		TOTAL SHEET	35

NO	DESCRIPTION	PART NUMBER	TAG NUMBER
1	SELECT SWITCH	[illegible]141	HS001
2	PUSH BUTTON	EP[illegible]1800-001	HS002
3	PUSH BUTTON	EP07-000956	HS003
4	PUSH BUTTON	EP07-000847	HS004
5	EMERGENCY PUSH BUTTON	EP07-000509	HS005
6	EMERGENCY COVER	EP07-011027	E-COVER
7	COOLING FAN COVER	EP03503400-004	CPC
8	COOLING FAN	EP03403400-002	FAN
9	TOUCH SCREEN	EP10-001871	TOUCH



TOP VIEW



SECTION "A-A"

SELECT SWITCH - NP (ACRYL)

N P	A	B	C	COLOR
NP1	UN LOAD	-	AUTO LOAD	BLACK
-	-	-	-	-

PUSH BUTTON - NP (ACRYL)

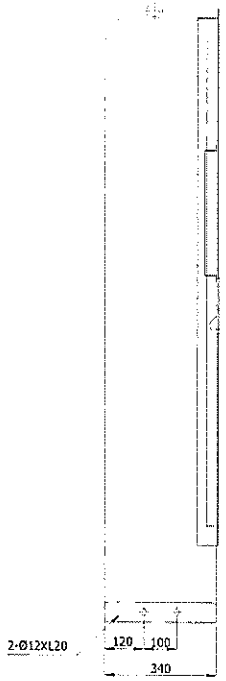
N P	LETTER	COLOR
NP2	START	GREEN
NP3	STOP	BLACK
NP4	RESET	BLUE

EMERGENCY PUSH BUTTON - NP

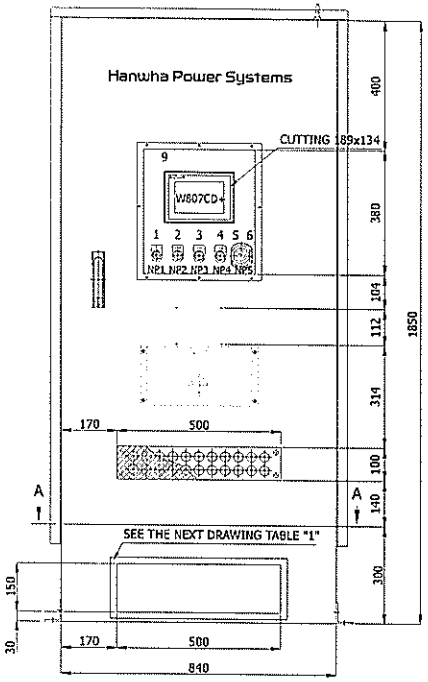
N P	LETTER	COLOR
NP5	EMERGENCY STOP	RED

NAME PLATE (ACRYL)

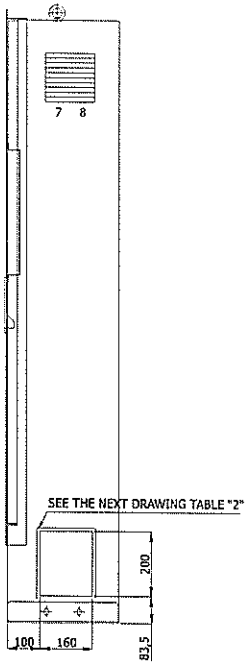
N P	LETTER	COLOR



LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW

- NOTE -

1. PLATE
   BODY : 1.6mm (SPHC)
   DOOR : 1.6 mm (SPHC)
2. COLOR
   BODY : RAL 7015
   INNER PLATE : RAL7015
3. HINGE : 3EA (INSIDE)
4. PANEL : : w840xh1850xd340
5. EARTH BAR : 2EA
6. INNER PLATE : 1EA
   CONTROL PLATE : w800xh1370xd15x2.3t

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

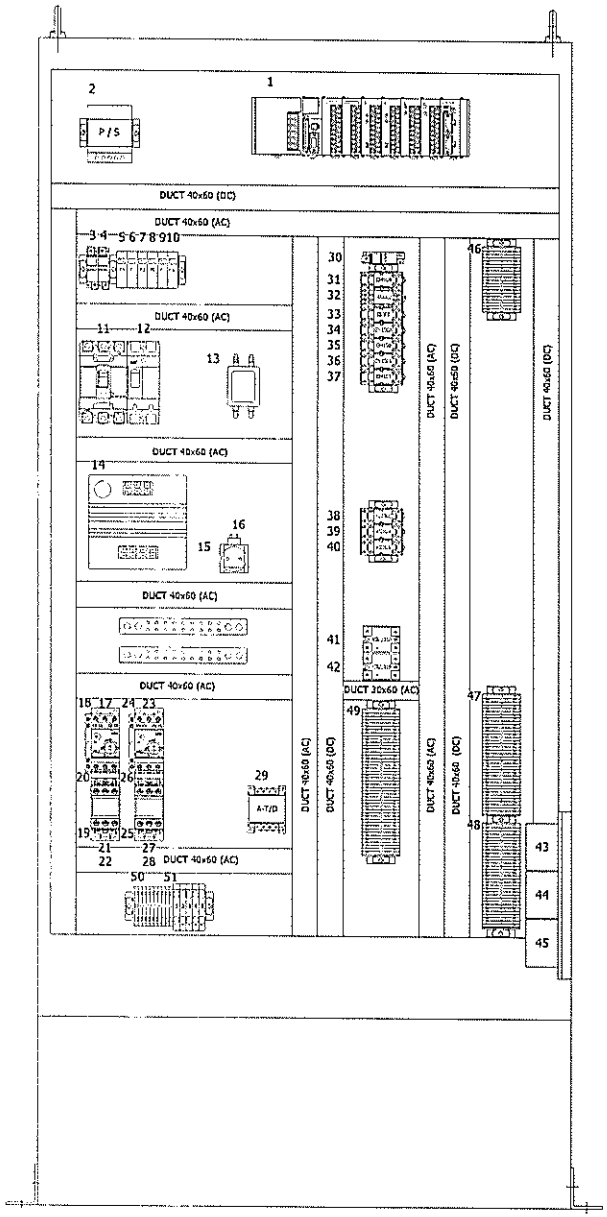
SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	LOCAL PANEL ASSY OUTLINE
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

=	PJT	UNIT	mm
+	LCP	REV. NO.	NONE
&	POD	SHEET	7
		TOTAL SHEET	35



NO	DESCRIPTION	PART NUMBER	TAG NUMBER
1	PLC		PLC ASSY
2	POWER SUPPLY	5945S1000020-03	SMPS1
3	CIRCUIT PROTECTOR	EP07-001033	CP1
4	CIRCUIT PROTECTOR	EP07-101033	CP2
5	FUSE	EP04101800-001	F1
6	FUSE	EP04101800-001	F2
7	FUSE	EP10-002271	F3
8	FUSE	EP10-002270	F6
9	FUSE	EP10-002271	F7
10	FUSE	EP10-002271	F10
11	MOLD CASE CIRCUIT BREAKER	EP07-002108	MCCB1
12	MOLD CASE CIRCUIT BREAKER	EP07-000400	MCCB2
13	NOISE FILTER	EP03103400-001	NF1
14	TRANSFORMER	EP23-001027A	TR
15	RECEPTACLE	EP00902600-002	REC1
16	CAPACITOR (FOR IGV ACTUATOR)	5945S1000043	C1
17	MMS (MANUAL MOTOR STARTER)	EP07-000791	MMS1
18	MMS ALARM CONTACT	EP20-000120	MMS1
19	MMS MOUNTING UNIT	EP10-000953	MMS1
20	MMS DIRECT ADAPTER	EP10-000951	MMS1
21	MAGNETIC CONTACTOR	EP07-000399	MC1
22	SPARK KILLER	EP01601900-002	SK1
23	MMS (MANUAL MOTOR STARTER)	EP07-000389	MMS2
24	MMS ALARM CONTACT	EP20-000120	MMS2
25	MMS MOUNTING UNIT	EP10-000953	MMS2
26	MMS DIRECT ADAPTER	EP10-000951	MMS2
27	MAGNETIC CONTACTOR	EP07-000399	MC2
28	SPARK KILLER	EP01601900-002	SK2
29	AC CURRENT TRANSDUCER	EP00101500-001	CD150
30	CIRCUIT PROTECTOR	EP07-001033	CP3
31	RELAY	EP18-001041	EM104
32	RELAY	EP18-001036	XL002
33	RELAY	EP18-001041	EL100
34	RELAY	EP18-001041	EY150A
35	RELAY	EP18-001041	EH150
36	RELAY	EP18-001041	EY150B
37	RELAY	EP18-001041	EH101
38	RELAY	EP18-001037	XS150C
39	RELAY	EP18-001037	XS104
40	RELAY	EP18-001037	XS101
41	SOLID STATE RELAY	EP18-001028	IGV211A
42	SOLID STATE RELAY	EP18-001028	IGV211B
43	VIBRATION TRANSMITTER	CST51301-G03	VT131X
44	VIBRATION TRANSMITTER	CST51301-G03	VT132X
45	VIBRATION TRANSMITTER	CST51301-G03	VT133X
46	TERMINAL BLOCK	EP01700500-001	TB1
47	TERMINAL BLOCK	EP01700500-001	TB2
48	TERMINAL BLOCK	EP01700500-001	TB3
49	TERMINAL BLOCK	EP01700500-001	TB4
50	TERMINAL BLOCK	EP01700500-002	TB5
51	TERMINAL BLOCK	EP21-000087	TB6

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

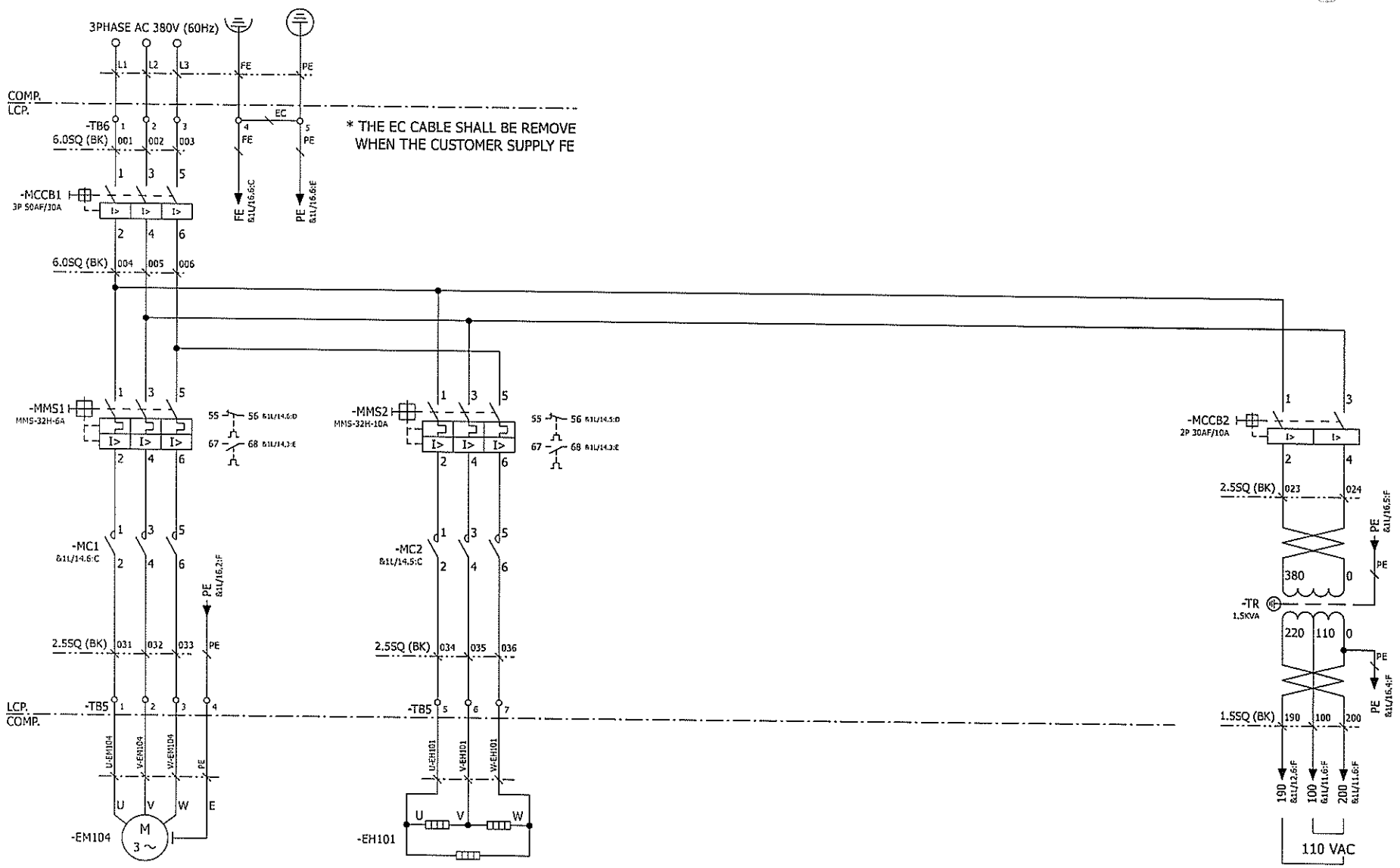
SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	LOCAL PANEL INNER OUTLINE	=	PJT	UNIT	mm
DWG. NO.	EP06-003159A	+	LCP	REV. NO.	NONE
PROJECT	SMART #1701	&	POD	SHEET	9
				TOTAL SHEET	35

CUSTOMER'S LOW VOLTAGE
INSTALLATION



AUXILIARY OIL PUMP

1.5KW

RESERVOIR OIL HEATER

4KW

SEQUENCE CIRCUIT
POWER

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

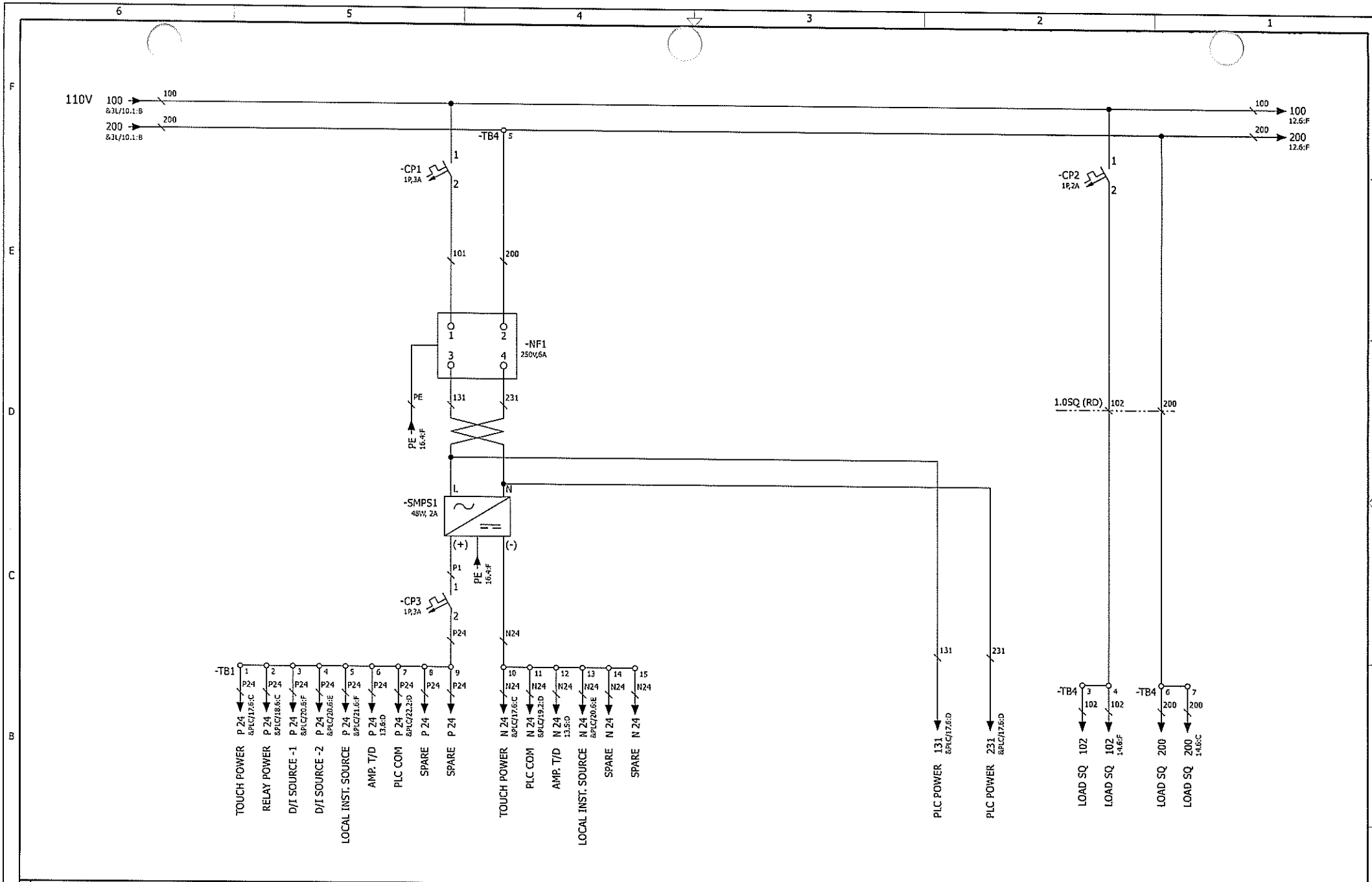
SUPPLIER

SMART #1701

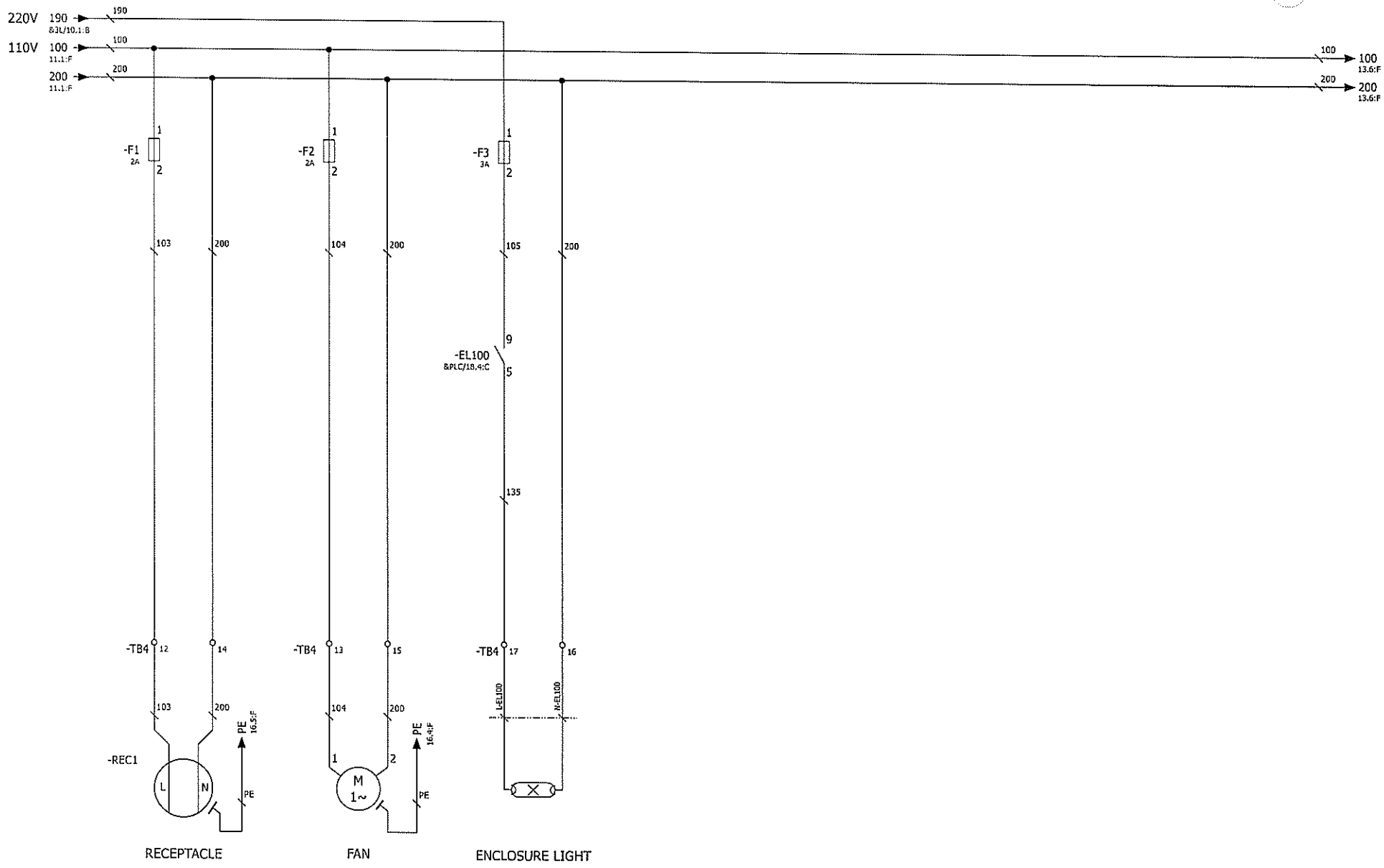
Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	THREE LINE DIAGRAM
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

=	PJT	UNIT	mm
+	LCP	REV. NO.	NONE
&	3L	SHEET	10
		TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION	CUSTOMER	SMART #1701	APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	SEQUENCE DIAGRAM	= PJT	UNIT	mm
			SUPPLIER	Hanwha Power Systems	CHECKED	S.H.JUNG	DATE	-				REV. NO.	NONE
					DESIGNED	-	DATE	-	DWG. NO.	EP06-003159A	+ LCP	SHEET	11
					DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	& 1L	TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

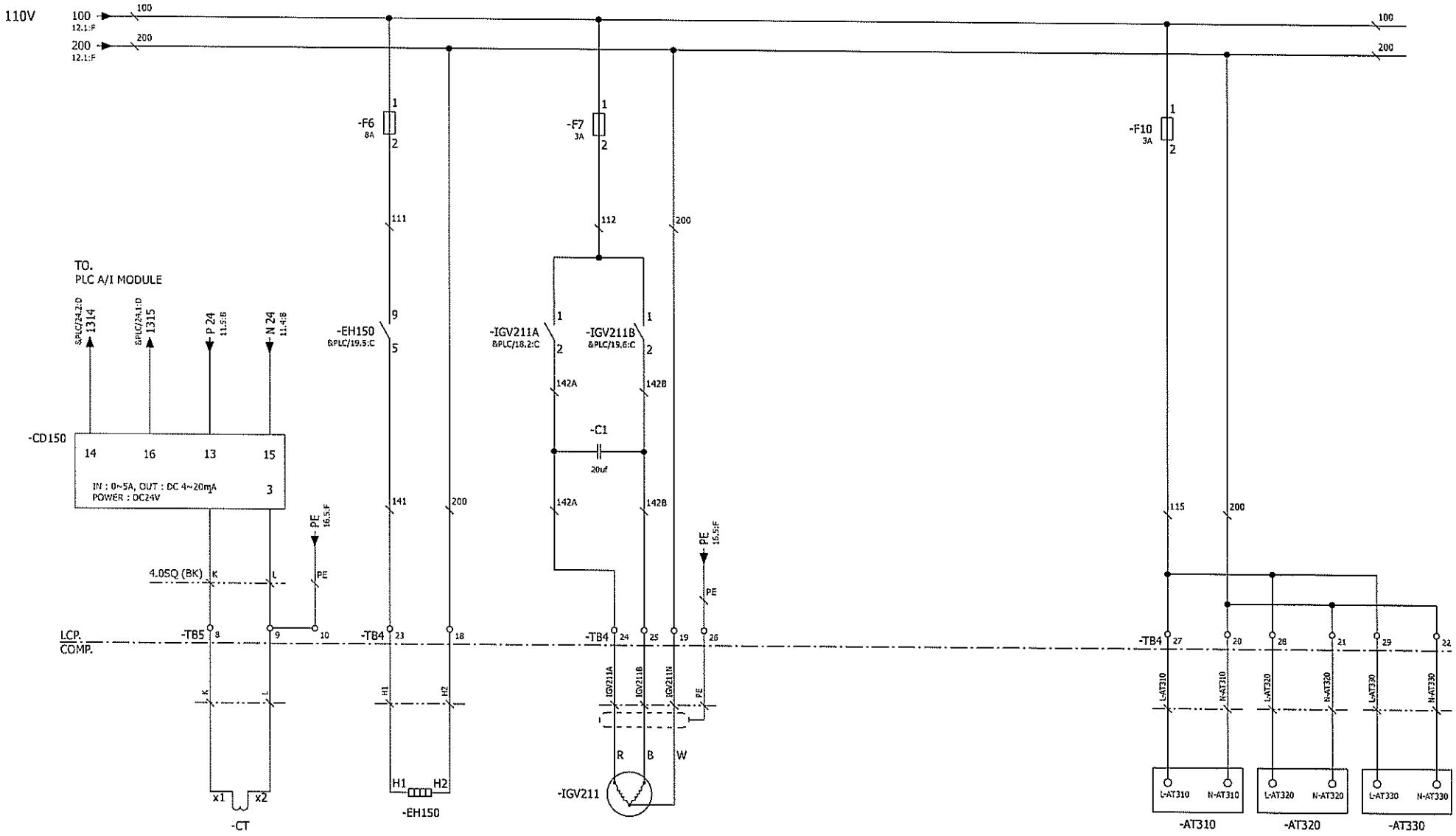
SMART #1701

Hanwha Techwin

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	2017-08-09
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	SEQUENCE DIAGRAM	=	PJT
DWG. NO.	EP06-003159A	+	LCP
PROJECT	SMART #1701	&	1L

UNIT	mm
REV. NO.	NONE
SHEET	12
TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION

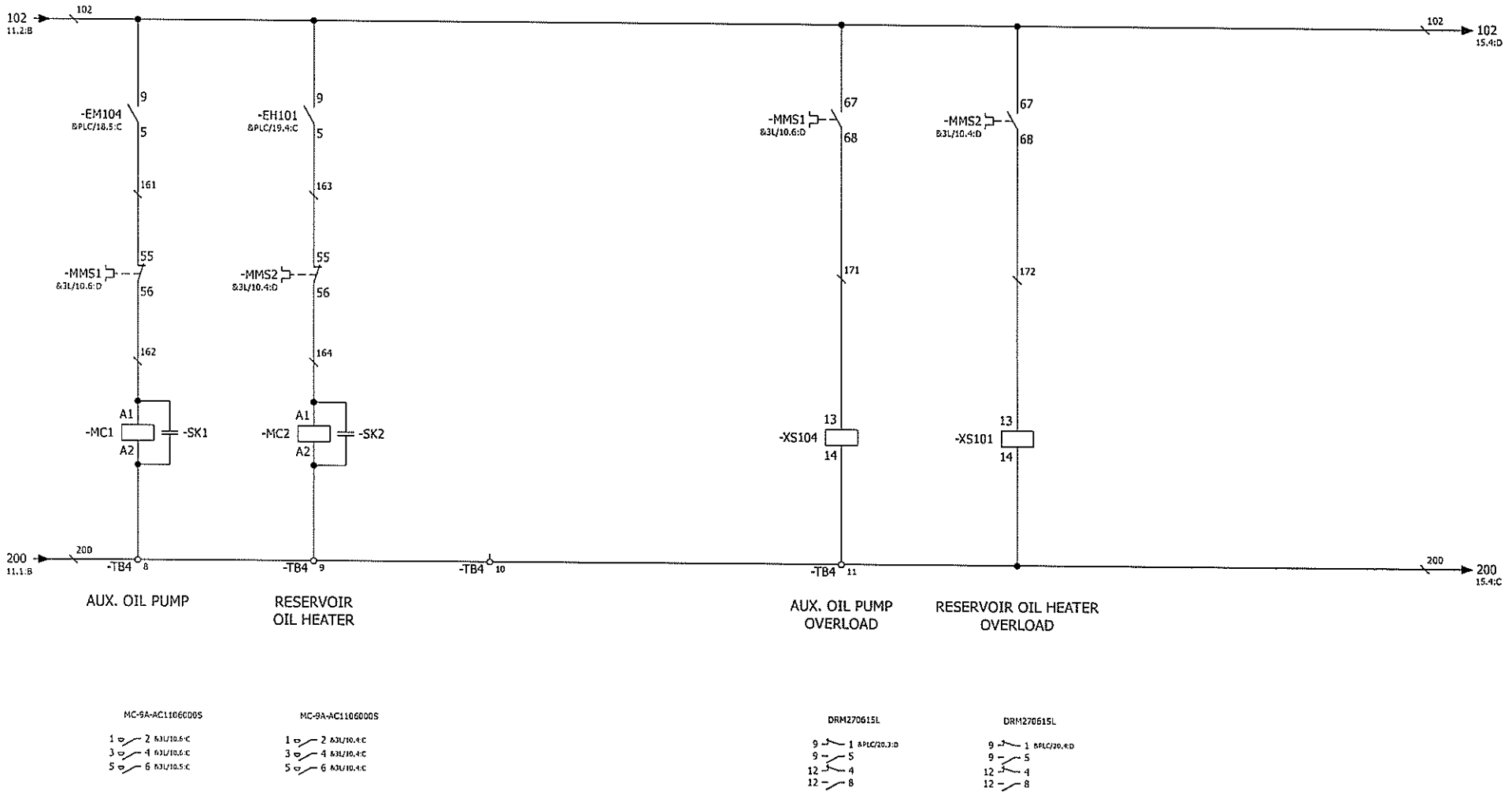
CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	SEQUENCE DIAGRAM	= PJT	UNIT mm
CHECKED	S.H.JUNG	DATE	-				REV. NO. NONE
DESIGNED	-	DATE	-	DWG. NO.	EP06-003159A	+ LCP	SHEET 13
DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	& 1L	TOTAL SHEET 35



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

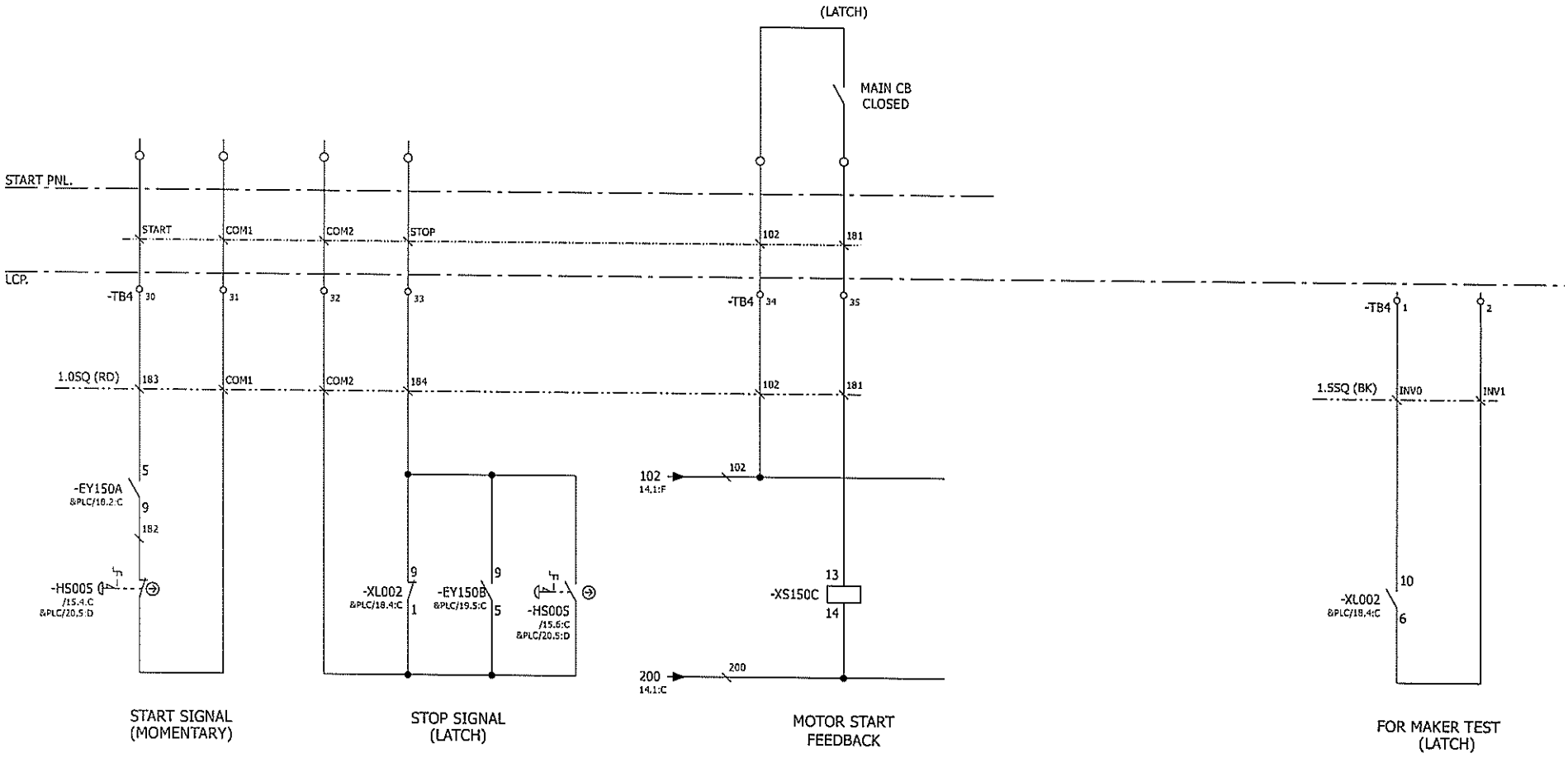
SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	SEQUENCE DIAGRAM
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

		UNIT	mm
=	PJT	REV. NO.	NONE
+	LCP	SHEET	14
&	1L	TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION

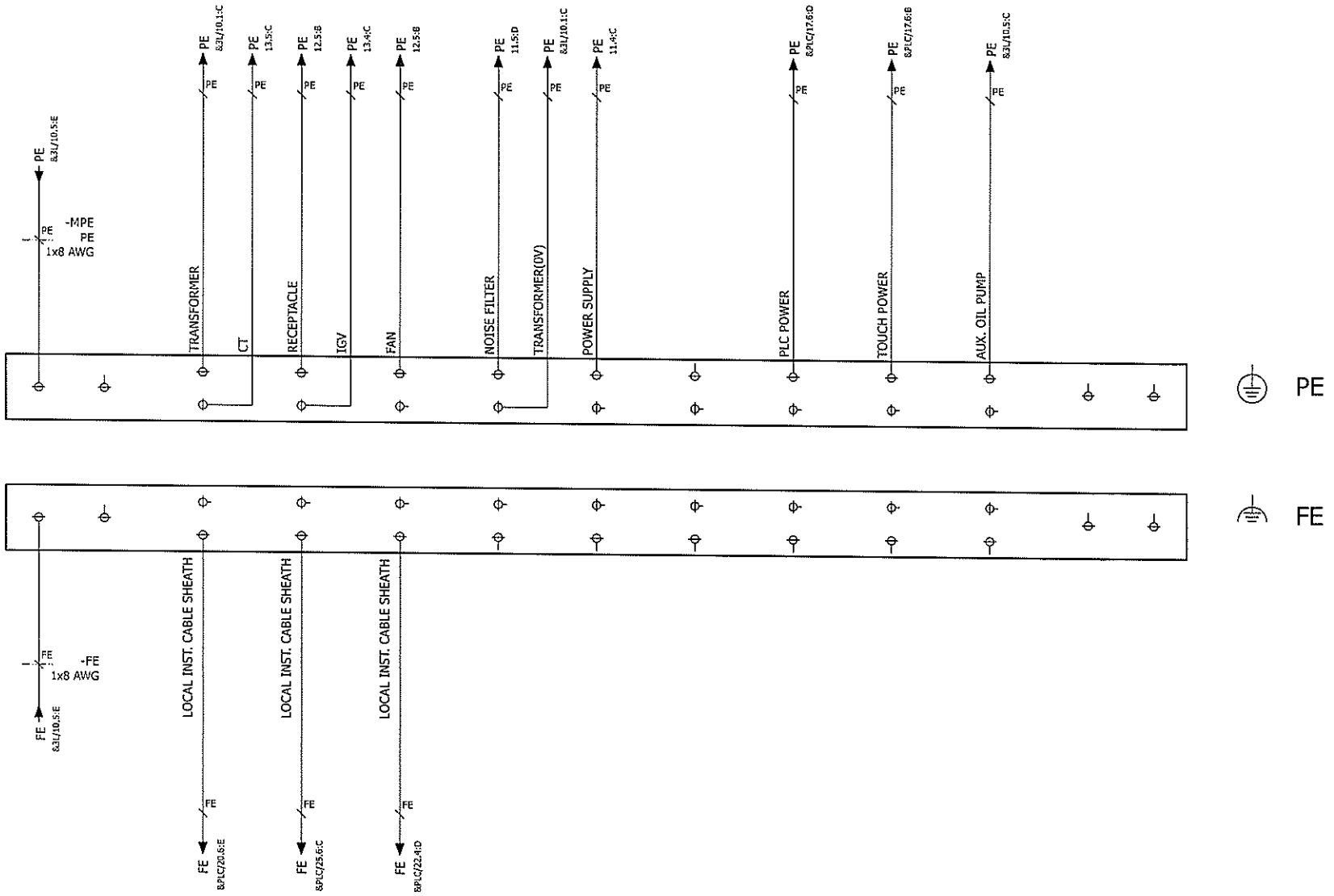
CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	LCP DRYCONTACT-0	=	PJT	UNIT	mm
CHECKED	S.H.JUNG	DATE	-					REV. NO.	NONE
DESIGNED	-	DATE	-	DWG. NO.	EP06-003159A	+	LCP	SHEET	15
DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	&	1L	TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

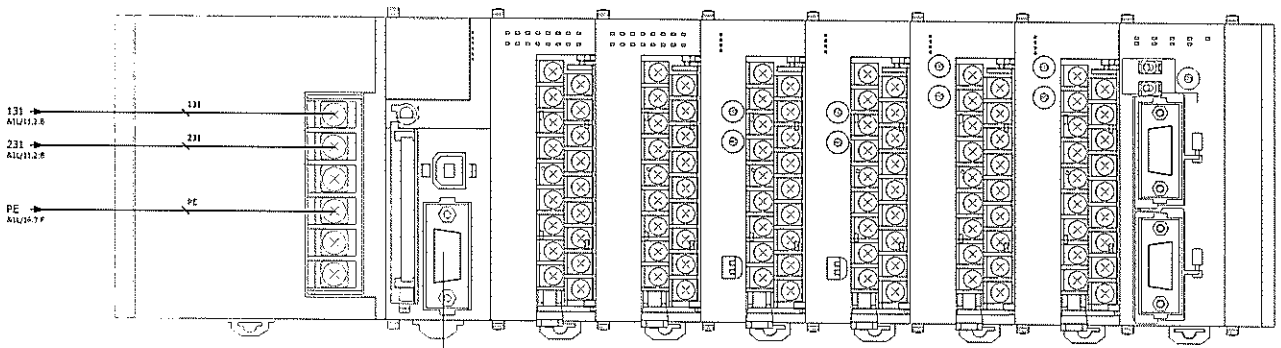
SMART #1701

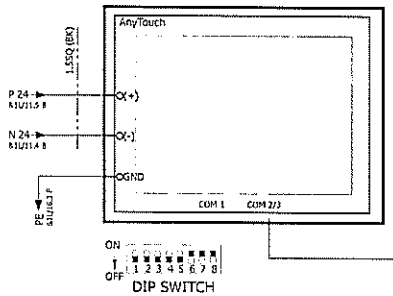
Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	EARTH DISTRIBUTION
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

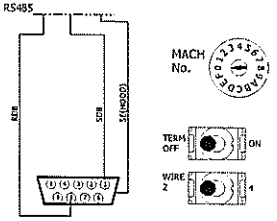
=	PJT	UNIT	mm
+	LCP	REV. NO.	NONE
&	1L	SHEET	16
		TOTAL SHEET	35

CJ1W-PA205R CJ2M-CPU13 CJ1W-OC211 CJ1W-ID211 CJ1W-DA021 CJ1W-AD081-V1 CJ1W-AD04U CJ1W-AD04U CJ1W-SCU41-V1

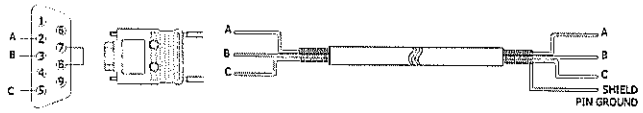




DIP SWITCH



PORT1 (RS422/485)



TOUCH SCREEN CONNECTOR : FEMALE

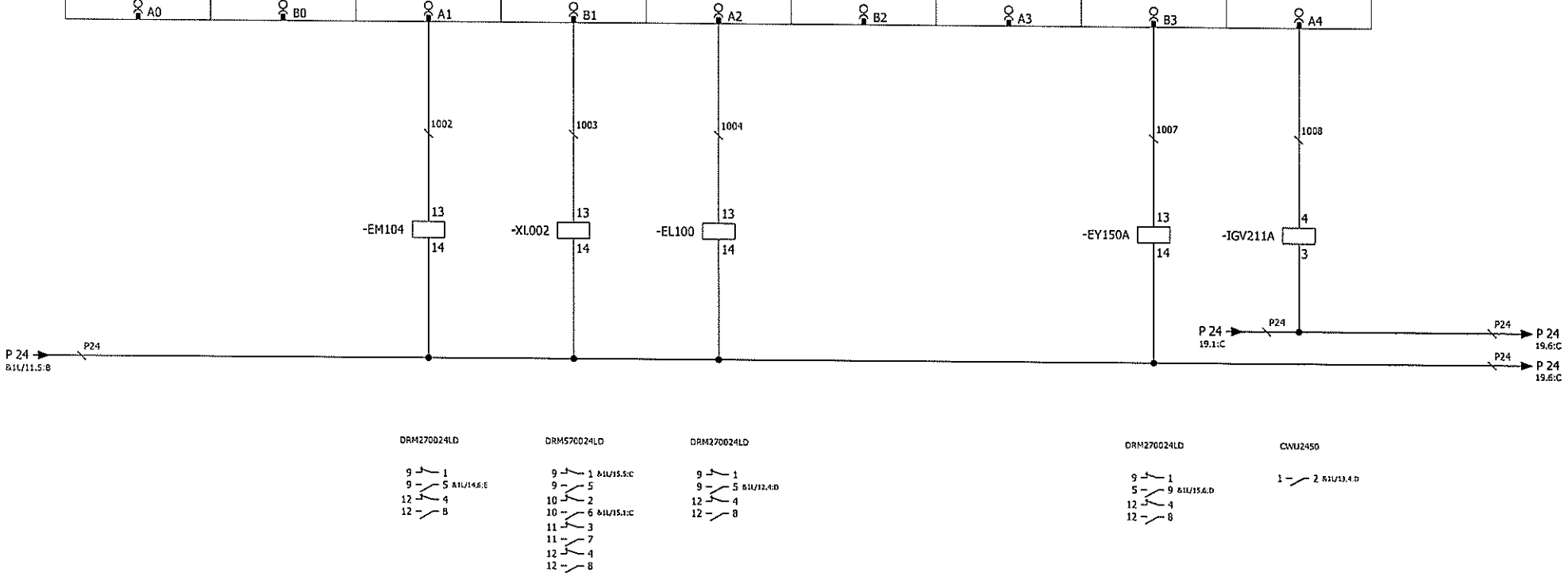
PLC CONNECTOR : MALE

REV.	DATE	DESCRIPTION of REVISION	CUSTOMER	SMART #1701					DWG. NAME	PLC CONFIGURATION	=	PJT	UNIT	mm
			SUPPLIER	Hanwha Power Systems	APPROVED	B.J.KIM	DATE	2017-08-09					REV. NO.	NONE
					CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A	+	LCP	SHEET	17
					DESIGNED	-	DATE	-						
					DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	&	PLC	TOTAL SHEET	35

-DO-0 CJ1W-OC211

DIGITAL OUTPUT

DO 0	DO 1	DO 2	DO 3	DO 4	DO 5	DO 6	DO 7	DO 8
SPARE	SPARE	AUX. OIL PUMP (1=ON)	COMMON SHUTDOWN (0=SHUTDOWN)	ENCLOSURE LIGHT (1=ON)	SPARE	SPARE	COMPRESSOR RUN (1=RUN) (MOMENTARY)	INLET GUIDE VANE OPEN (MOMENTARY)
A0	B0	A1	B1	A2	B2	A3	B3	A4

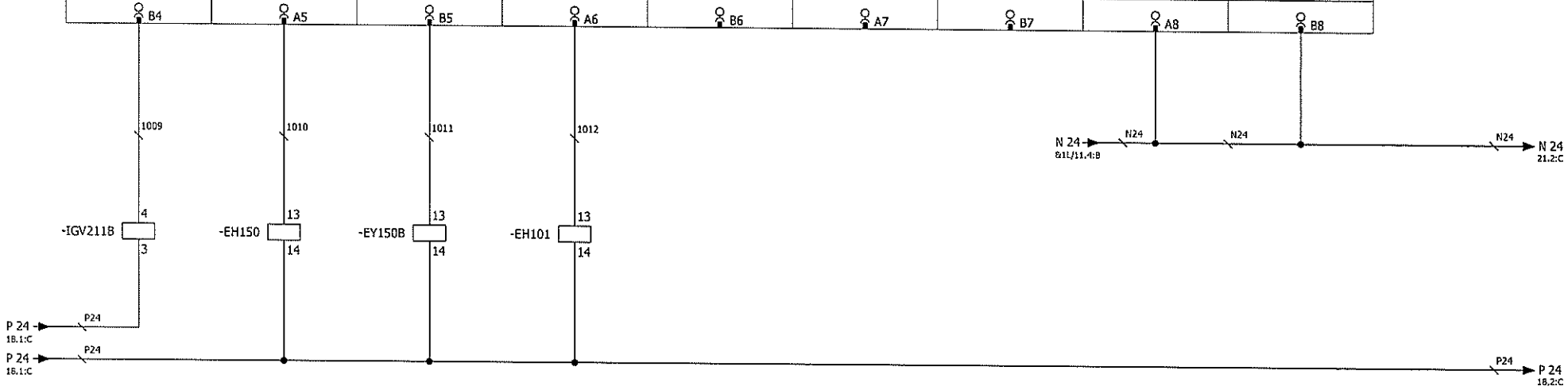


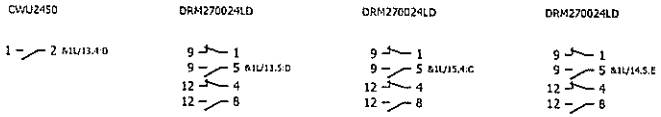
REV.	DATE	DESCRIPTION of REVISION	CUSTOMER	SMART #1701	APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	PLC DIGITAL OUTPUT-0	UNIT	mm
			SUPPLIER	Hanwha Power Systems	CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A	REV. NO.	NONE
					DESIGNED	-	DATE	-	PROJECT	SMART #1701	SHEET	18
					DRAWN	T.W.KIM	DATE	2017-08-09			TOTAL SHEET	35

-DO-0 CJ1W-OC211

DIGITAL OUTPUT

DO 9	DO 10	DO 11	DO 12	DO 13	DO 14	DO 15	COM	COM
INLET GUIDE VANE CLOSE (MOMENTARY)	MOTOR SPACE HEATER (1=ON)	COMPRESSOR STOP (1=STOP)	RESERVOIR OIL HEATER (1=ON)	SPARE	SPARE	SPARE	COMMON	COMMON
B4	A5	B5	A6	B6	A7	B7	A8	B8





REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

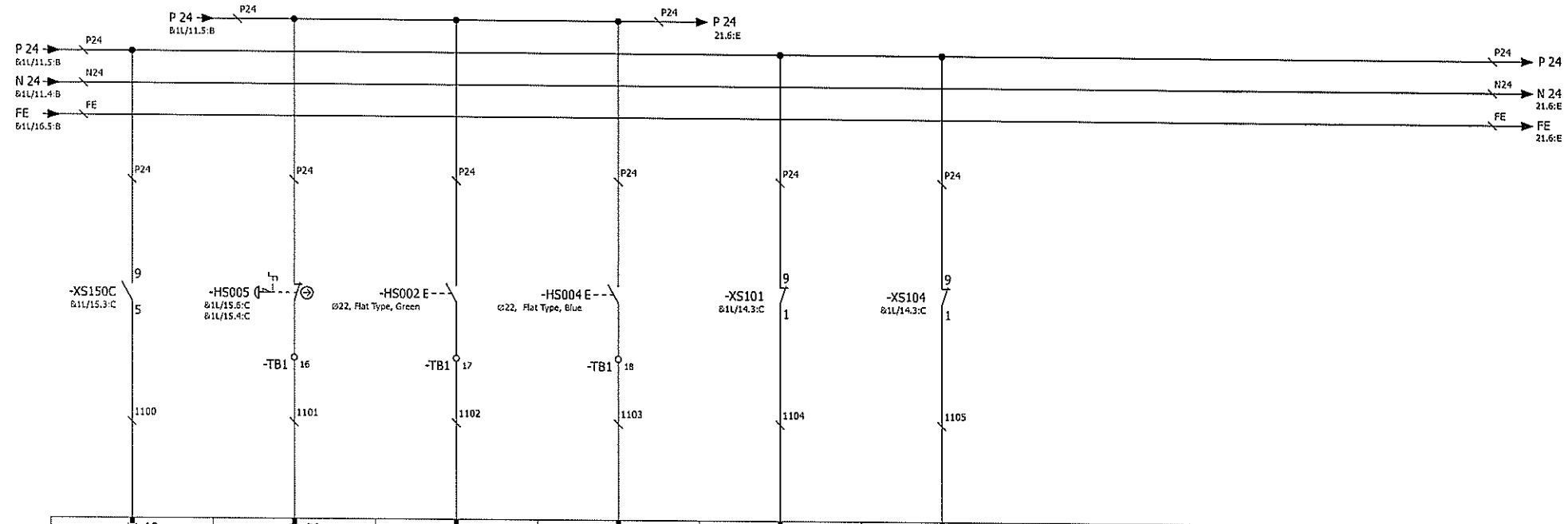
SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	PLC DIGITAL OUTPUT-0
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

=	PJT	UNIT	mm		
+	LCP	REV. NO.	NONE		
&	PLC	SHEET	19		
		TOTAL SHEET	35		



	A0	B0	A1	B1	A2	B2	A3	B3
	MOTOR START FEEDBACK SIGNAL	EMERGENCY STOP	START	RESET	RESERVOIR OIL HEATER OVERLOAD	AUX. OIL PUMP OVERLOAD	SPARE	SPARE
	DI 0	DI 1	DI 2	DI 3	DI 4	DI 5	DI 6	DI 7
-DI-0	CJ1W-ID211	DIGITAL INPUT						

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

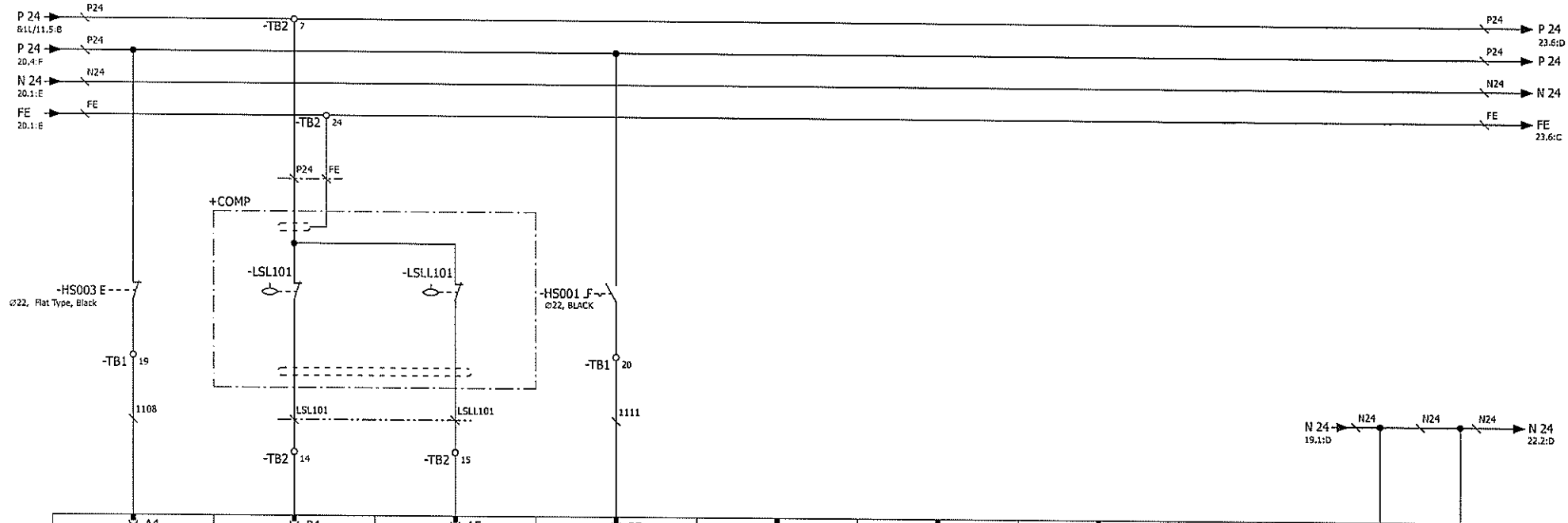
SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	
CHECKED	S.H.JUNG	DATE	-	
DESIGNED	-	DATE	-	
DRAWN	T.W.KIM	DATE	2017-08-09	

DWG. NAME	PLC DIGITAL INPUT-C	=	PJT	UNIT	mm
DWG. NO.	EP06-003159A	+	LCP	REV. NO.	NONE
PROJECT	SMART #1701	&	PLC	SHEET	20
				TOTAL SHEET	35



A4	B4	A5	B5	A6	B6	A7	B7	A8	B8
STOP	OIL LEVEL SWITCH LOW (ALARM)	OIL LEVEL SWITCH LOW LOW (SHUTDOWN)	UNLOAD/AUTOLOAD SELECT SWITCH (1=AUTOLOAD)	SPARE	SPARE	SPARE	SPARE	COMMON	COMMON
DI 8	DI 9	DI 10	DI 11	DI 12	DI 13	DI 14	DI 15	COM	COM

-DI-0 CJ1W-ID211 DIGITAL INPUT

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME: PLC DIGITAL INPUT-0

DWG. NO.: EP06-003159A

PROJECT: SMART #1701

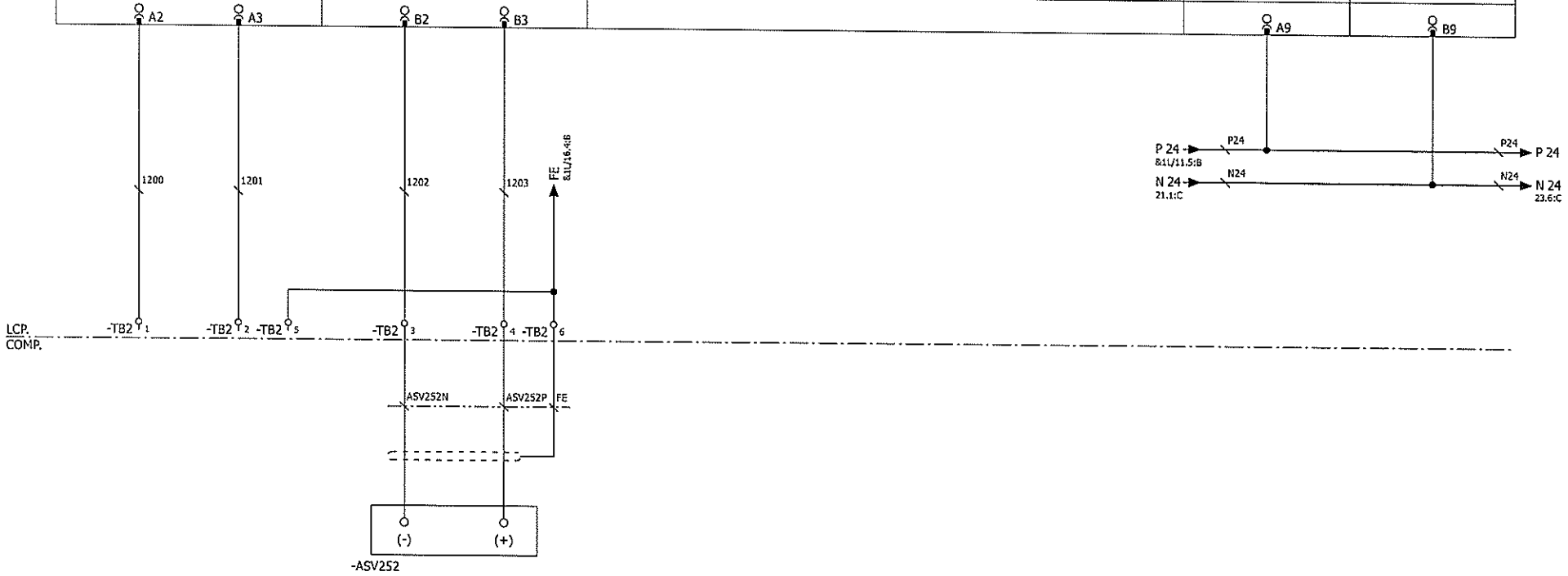
= PJT
+ LCP
& PLC

UNIT: mm
REV. NO.: NONE
SHEET: 21
TOTAL SHEET: 35

-AO-0 CJ1W-DA021

ANALOG OUTPUT

AO 1	AO 2		COM	COM
SPARE	MODULATING BLOW OFF VALVE (4~20mA)		COMMON	COMMON
A2	A3	B2	B3	A9	B9



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

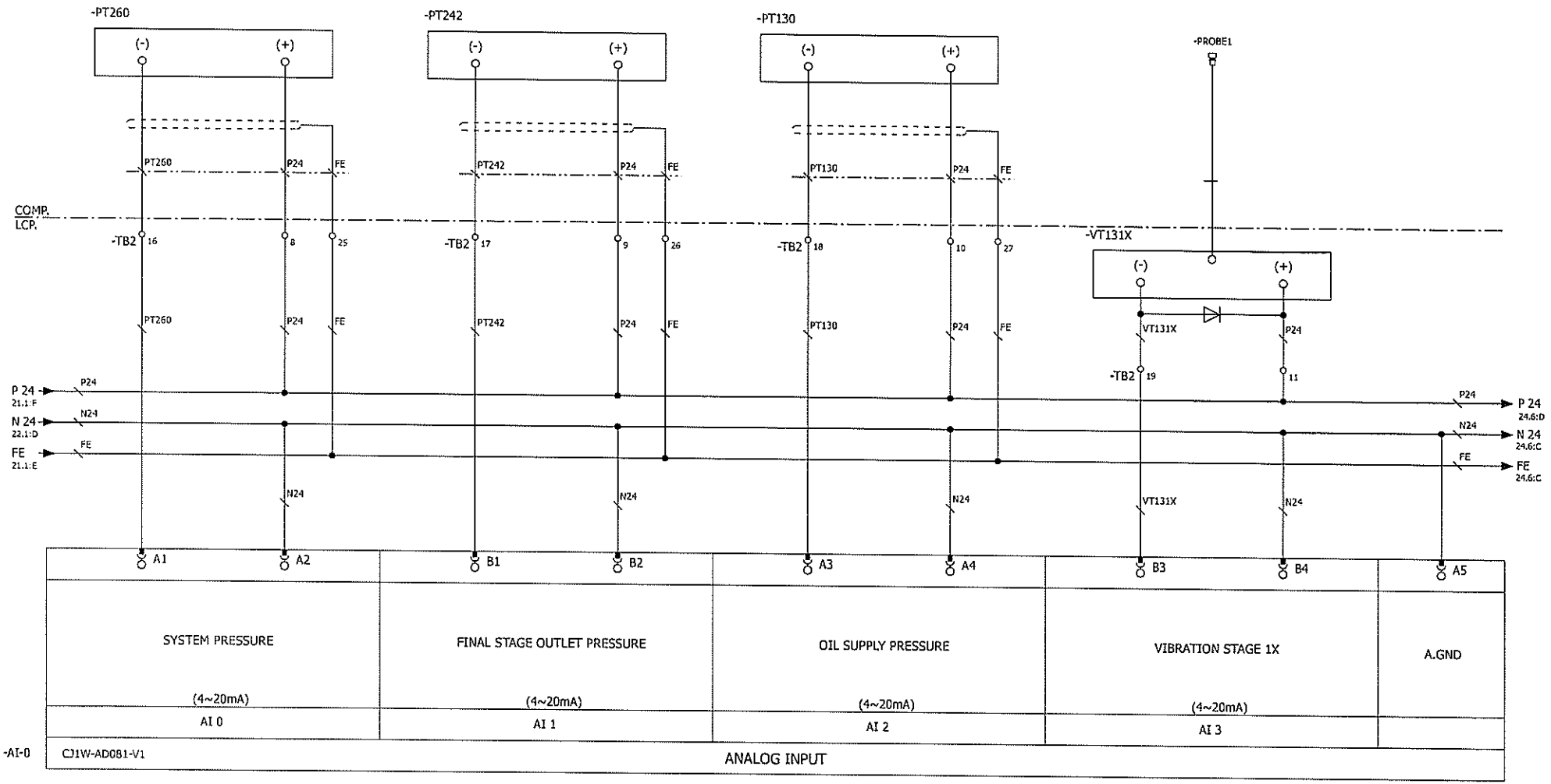
SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME: PLC ANALOG OUTPUT-0
CHECKED	S.H.JUNG	DATE	-	
DESIGNED	-	DATE	-	DWG. NO.: EP06-003159A
DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT: SMART #1701

= PJT
+ LCP
& PLC

UNIT	mm
REV. NO.	NONE
SHEET	22
TOTAL SHEET	35



SYSTEM PRESSURE	FINAL STAGE OUTLET PRESSURE	OIL SUPPLY PRESSURE	VIBRATION STAGE 1X	A.GND
(4~20mA)	(4~20mA)	(4~20mA)	(4~20mA)	
AI 0	AI 1	AI 2	AI 3	
-AI-0 CJ1W-AD081-V1	ANALOG INPUT			

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

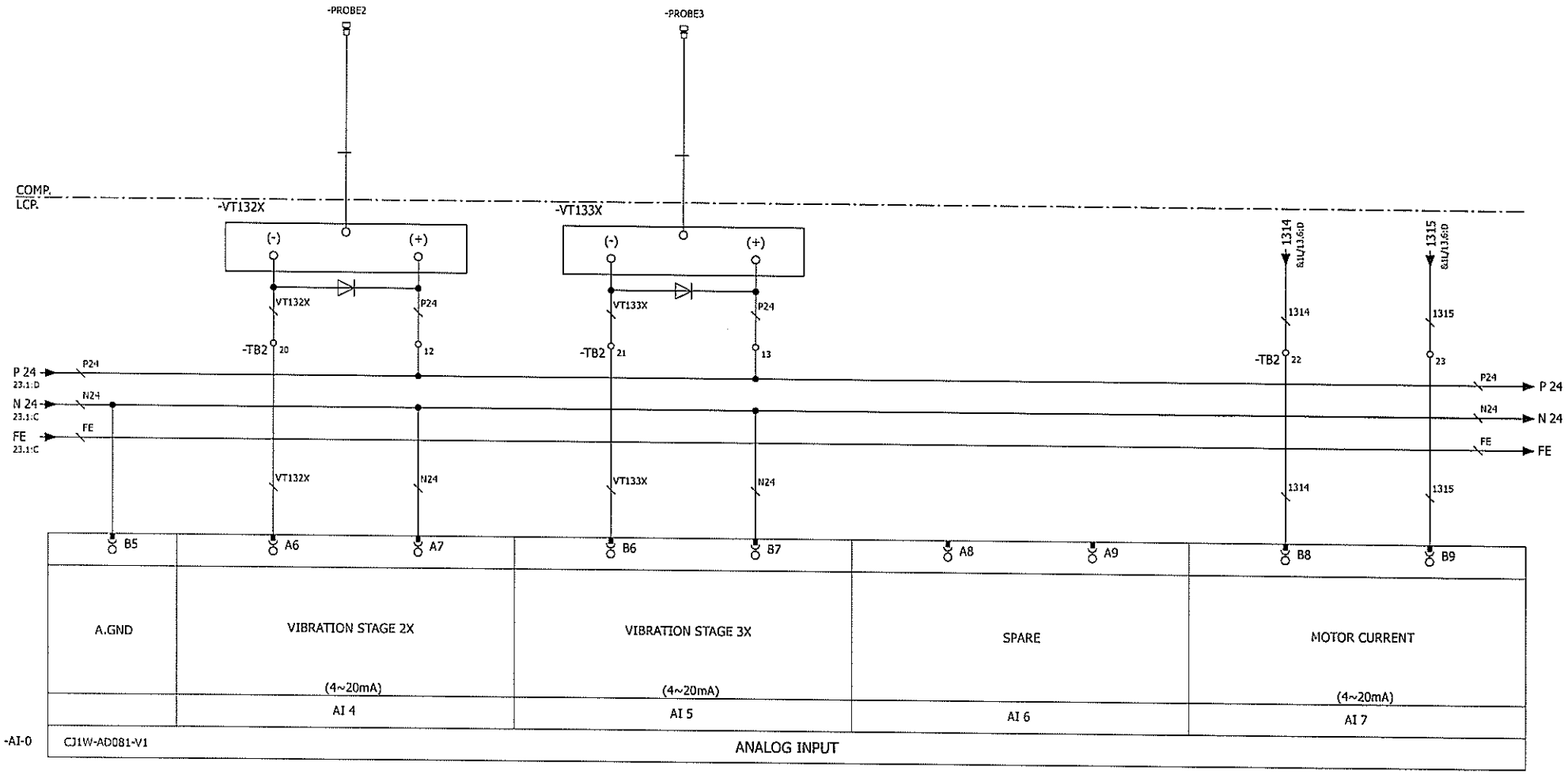
SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	PLC ANALOG INPUT-0
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

		UNIT	mm
=	PJT	REV. NO.	NONE
+	LCP	SHEET	23
&	PLC	TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

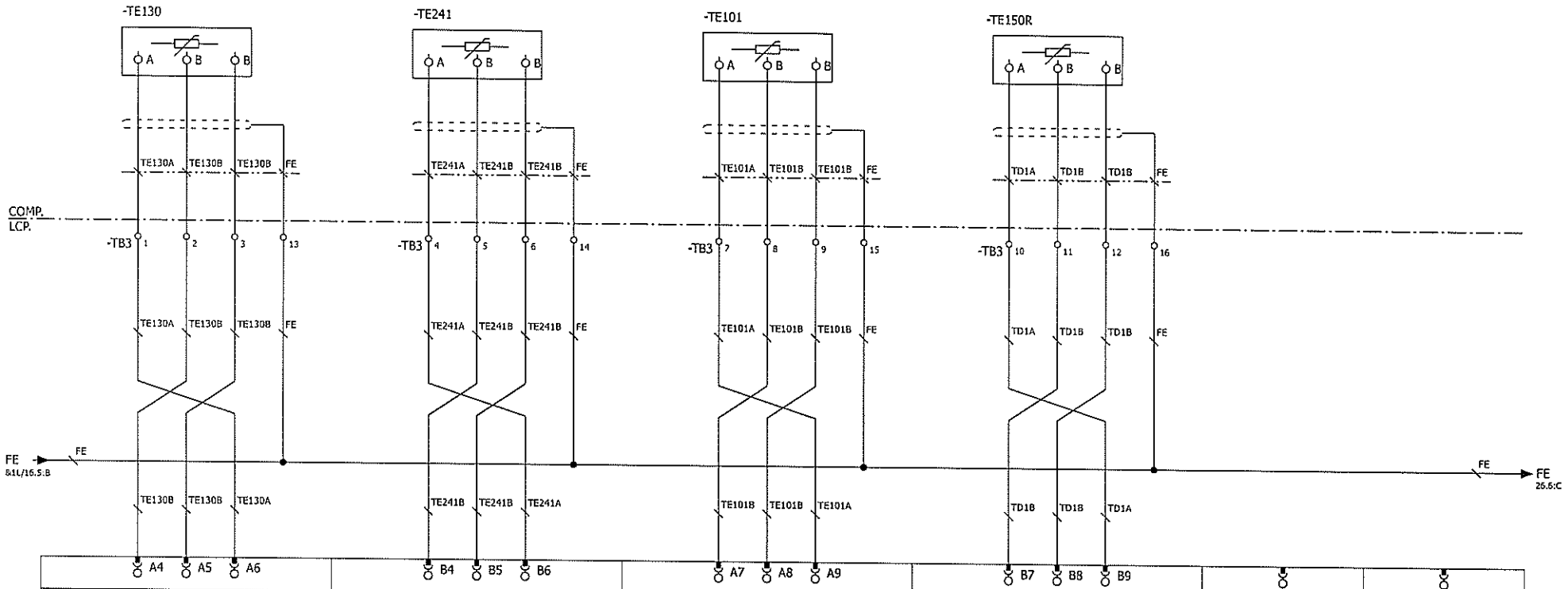
SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	PLC ANALOG INPUT-0
DWG. NO.	EP06-003159A
PROJECT	SMART #1701

=	PJT	UNIT	mm
		REV. NO.	NONE
+	LCP	SHEET	24
&	PLC	TOTAL SHEET	35



OIL SUPPLY TEMPERATURE	FINAL STAGE INLET TEMPERATURE	OIL RESERVOIR TEMPERATURE	MOTOR WINDING R TEMPERATURE	N/A	N/A
(PT100ohm)	(PT100ohm)	(PT100ohm)	(PT100ohm)		
RTD 0	RTD 1	RTD 2	RTD 3		
-RTD-0	CJ1W-AD04U	RTD			

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

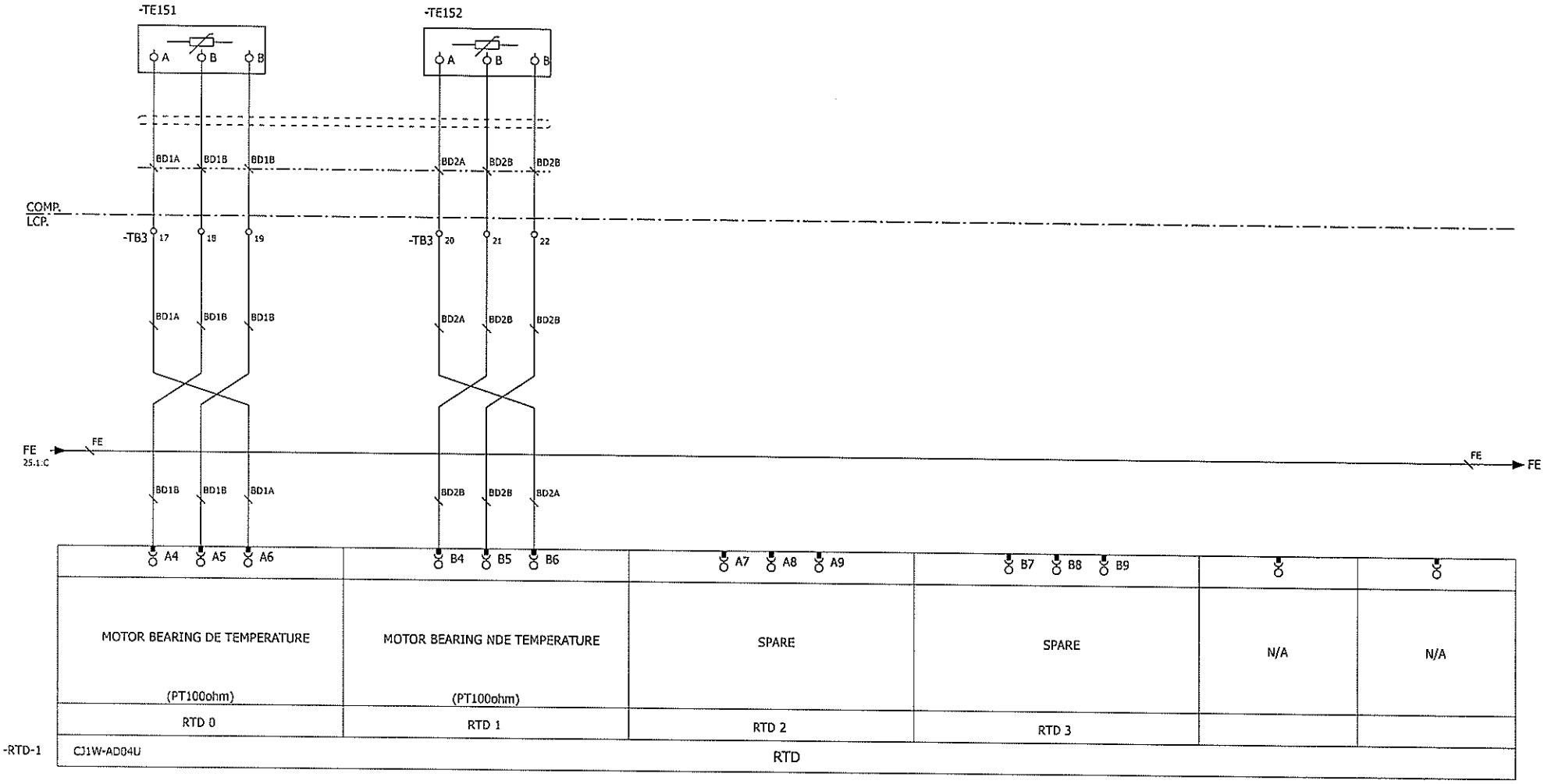
SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	PLC RTD-0	=	PJT
DWG. NO.	EP06-003159A	+	LCP
PROJECT	SMART #1701	&	PLC

UNIT	mm
REV. NO.	NONE
SHEET	25
TOTAL SHEET	35



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

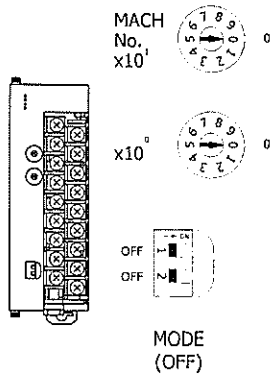
Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	PLC RTD-1
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

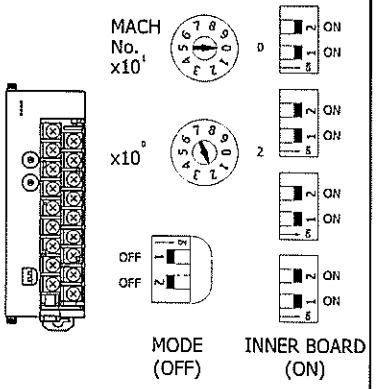
=	PJT	UNIT	mm
+	LCP	REV. NO.	NONE
&	PLC	SHEET	26
		TOTAL SHEET	35

* DIP SWITCH SETTING OF PLC *

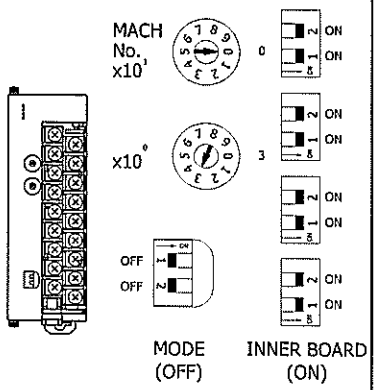
ANALOG OUTPUT-0



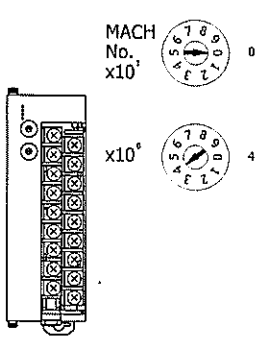
ANALOG INPUT-0



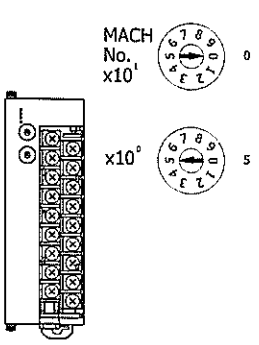
ANALOG INPUT-1



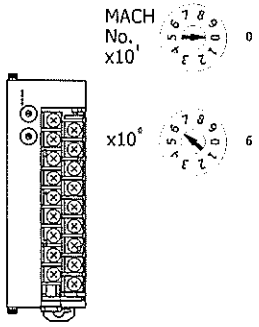
RTD-0



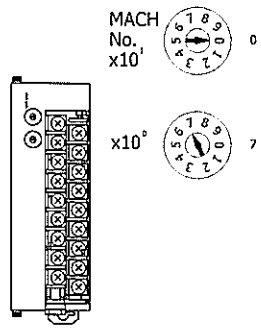
RTD-1



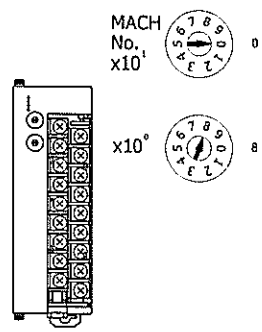
RTD-2



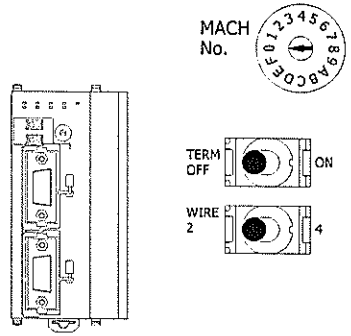
RTD-3



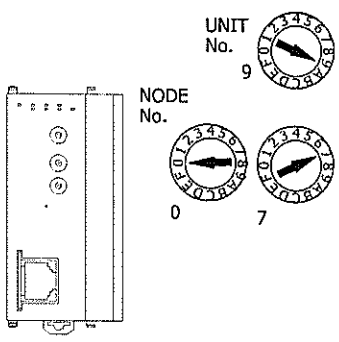
RTD-4



COMMUNICATION



COMMUNICATION



REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	PLC DIP SWITCH SETTING	=	PJT
CHECKED	S.H.JUNG	DATE	-				
DESIGNED	-	DATE	-	DWG. NO.	EP06-003159A	+	LCP
DRAWN	T.W.KIM	DATE	2017-08-09	PROJECT	SMART #1701	&	PLC

UNIT	mm
REV. NO.	NONE
SHEET	27
TOTAL SHEET	35

TERMINAL DIAGRAM

TB1	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
1	●			P24	TOUCH POWER	&1L/11.5:B
2	●			P24	RELAY POWER	&1L/11.5:B
3	●			P24	D/I SOURCE -1	&1L/11.5:B
4	●			P24	D/I SOURCE -2	&1L/11.5:B
5	●			P24	LOCAL INST. SOURCE	&1L/11.5:B
6	●			P24	AMP. T/D	&1L/11.5:B
7	●			P24	PLC COM	&1L/11.5:B
8	●				SPARE	&1L/11.5:B
9	●		P24		SPARE	&1L/11.5:B
10	●		N24	N24	TOUCH POWER	&1L/11.4:B
11	●			N24	PLC COM	&1L/11.4:B
12	●			N24	AMP. T/D	&1L/11.4:B
13	●				LOCAL INST. SOURCE	&1L/11.4:B
14	●				SPARE	&1L/11.4:B
15	●				SPARE	&1L/11.4:B
16			1101		EMERGENCY STOP	&PLC/20.5:D
17			1102		START	&PLC/20.5:D
18			1103		RESET	&PLC/20.4:D
19			1108		STOP	&PLC/21.6:D
20			1111		SELECT SWITCH	&PLC/21.4:D

TB2	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
1	'		1200			&PLC/22.6:C
2	'		1201			&PLC/22.5:C
3	'		1202	ASV252N	MODULATING BLOW OFF VALVE	&PLC/22.5:C
4	'		1203	ASV252P	MODULATING BLOW OFF VALVE	&PLC/22.4:C
5	●					&PLC/22.5:C
6	●		FE	FE	MODULATING BLOW OFF VALVE	&PLC/22.4:C
7	●		P24	P24	OIL LEVEL SWITCH	&PLC/21.5:F
8	●			P24	SYSTEM PRESSURE	&PLC/23.5:D
9	●			P24	FINAL STAGE OUTLET PRESSURE	&PLC/23.4:D
10	●			P24	OIL SUPPLY PRESSURE	&PLC/23.3:D
11	●			P24	VIBRATION STAGE 1X	&PLC/23.2:D
12	●			P24	VIBRATION STAGE 2X	&PLC/24.5:D
13	●			P24	VIBRATION STAGE 3X	&PLC/24.4:D
14	'			LSL101	OIL LEVEL SWITCH	&PLC/21.5:C
15	'			LSLL101	OIL LEVEL SWITCH	&PLC/21.5:C
16	'		PT260	PT260	SYSTEM PRESSURE	&PLC/23.6:D
17	'		PT242	PT242	FINAL STAGE OUTLET PRESSURE	&PLC/23.5:D
18	'		PT130	PT130	OIL SUPPLY PRESSURE	&PLC/23.3:D
19	'		VT131X	VT131X	VIBRATION STAGE 1X	&PLC/23.2:D
20	'		VT132X	VT132X	VIBRATION STAGE 2X	&PLC/24.5:D
21	'		VT133X	VT133X	VIBRATION STAGE 3X	&PLC/24.4:D
22	'		1314	1314	MOTOR CURRENT	&PLC/24.2:D
23	'		1315	1315	MOTOR CURRENT	&PLC/24.1:D
24	●		FE	FE	OIL LEVEL SWITCH	&PLC/21.5:E
25	●			FE	SYSTEM PRESSURE	&PLC/23.5:D
26	●			FE	FINAL STAGE OUTLET PRESSURE	&PLC/23.4:D
27	●			FE	OIL SUPPLY PRESSURE	&PLC/23.3:D
28						&PLC/17.3:F
29						&PLC/17.3:F
30						&PLC/17.3:F
31						&PLC/17.3:F
32						&PLC/17.3:F
33						&PLC/17.3:F
34						&PLC/17.3:F
35						&PLC/17.2:F
36						&PLC/17.2:F
37						&PLC/17.2:F

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER: SMART #1701

SUPPLIER: Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	TERMINAL DIAGRAM	=	RE	UNIT	mm
DWG. NO.	EP06-003159A	+	TB	REV. NO.	NONE
PROJECT	SMART #1701	&		SHEET	28
				TOTAL SHEET	35

TERMINAL DIAGRAM

TB3	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
1	'		TE130A	TE130A	OIL SUPPLY TEMPERATURE	&PLC/25.6:D
2	'		TE130B	TE130B	OIL SUPPLY TEMPERATURE	&PLC/25.6:D
3	'		TE130B	TE130B	OIL SUPPLY TEMPERATURE	&PLC/25.5:D
4	'		TE241A	TE241A	FINAL STAGE INLET TEMPERATURE	&PLC/25.5:D
5	'		TE241B	TE241B	FINAL STAGE INLET TEMPERATURE	&PLC/25.5:D
6	'		TE241B	TE241B	FINAL STAGE INLET TEMPERATURE	&PLC/25.4:D
7	'		TE101A	TE101A	OIL RESERVOIR TEMPERATURE	&PLC/25.4:D
8	'		TE101B	TE101B	OIL RESERVOIR TEMPERATURE	&PLC/25.4:D
9	'		TE101B	TE101B	OIL RESERVOIR TEMPERATURE	&PLC/25.3:D
10	'		TD1A	TD1A	MOTOR WINDING R TEMPERATURE	&PLC/25.3:D
11	'		TD1B	TD1B	MOTOR WINDING R TEMPERATURE	&PLC/25.2:D
12	'		TD1B	TD1B	MOTOR WINDING R TEMPERATURE	&PLC/25.2:D
13	●		FE	FE	OIL SUPPLY TEMPERATURE	&PLC/25.5:D
14	●			FE	FINAL STAGE INLET TEMPERATURE	&PLC/25.4:D
15	●			FE	OIL RESERVOIR TEMPERATURE	&PLC/25.3:D
16	●			FE	MOTOR WINDING R TEMPERATURE	&PLC/25.2:D
17	'		BD1A	BD1A	MOTOR BEARING DE TEMPERATURE	&PLC/26.6:D
18	'		BD1B	BD1B	MOTOR BEARING DE TEMPERATURE	&PLC/26.6:D
19	'		BD1B	BD1B	MOTOR BEARING DE TEMPERATURE	&PLC/26.5:D
20	'		BD2A	BD2A	MOTOR BEARING NDE TEMPERATURE	&PLC/26.5:D
21	'		BD2B	BD2B	MOTOR BEARING NDE TEMPERATURE	&PLC/26.5:D
22	'		BD2B	BD2B	MOTOR BEARING NDE TEMPERATURE	&PLC/26.4:D
23						&PLC/17.2:F
24						&PLC/17.2:F
25						&PLC/17.2:F
26						&PLC/17.2:F
27						&PLC/17.2:F
28						&PLC/17.2:F
29						&PLC/17.2:F
30						&PLC/17.2:F
31						&PLC/17.2:F
32						&PLC/17.2:F

TB4	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
1	'		INV0		FOR MAKER TEST	&1L/15.1:E
2	'		INV1		FOR MAKER TEST	&1L/15.1:E
3	●				LOAD SQ	&1L/11.2:B
4	●		102	102	LOAD SQ	&1L/11.2:B
5	●		200	200	COM	&1L/11.4:F
6	●				LOAD SQ	&1L/11.1:B
7	●				LOAD SQ	&1L/11.1:B
8	●				LOAD SQ	&1L/14.6:C
9	●				LOAD SQ	&1L/14.5:C
10	●				LOAD SQ	&1L/14.4:C
11	●				LOAD SQ	&1L/14.3:C
12	'		103	103	RECEPTACLE	&1L/12.6:C
13			104	104	FAN	&1L/12.5:C
14	●			200	RECEPTACLE	&1L/12.5:C
15	●			200	FAN	&1L/12.5:C
16	●			N-EL100	ENCLOSURE LIGHT	&1L/12.4:C
17	'		135	L-EL100	ENCLOSURE LIGHT	&1L/12.4:C
18	●			H2	MOTOR SPACE HEATER	&1L/13.5:C
19	●			IGV211N	INLET GUIDE VANE	&1L/13.4:C
20	●		200	N-AT310	AUTO TRAP	&1L/13.2:C
21	●			N-AT320	AUTO TRAP	&1L/13.1:C
22	●			N-AT330	AUTO TRAP	&1L/13.1:C
23	'		141	H1	MOTOR SPACE HEATER	&1L/13.5:C
24	'		142A	IGV211A	INLET GUIDE VANE	&1L/13.4:C
25	'		142B	IGV211B	INLET GUIDE VANE	&1L/13.4:C
26	'		PE	PE	INLET GUIDE VANE	&1L/13.4:C
27	●		115	L-AT310	AUTO TRAP	&1L/13.2:C
28	●			L-AT320	AUTO TRAP	&1L/13.1:C
29	●			L-AT330	AUTO TRAP	&1L/13.1:C
30			183	START	STARTER PANEL INTERFACE	&1L/15.6:E
31			COM1	COM1	STARTER PANEL INTERFACE	&1L/15.5:E
32			COM2	COM2	STARTER PANEL INTERFACE	&1L/15.5:E
33			184	STOP	STARTER PANEL INTERFACE	&1L/15.5:E
34	'		102	102	STARTER PANEL INTERFACE	&1L/15.4:E
35			181	181	STARTER PANEL INTERFACE	&1L/15.3:E
36						&PLC/17.4:F
37						&PLC/17.4:F
38						&PLC/17.4:F
39						&PLC/17.4:F
40						&PLC/17.3:F
41						&PLC/17.3:F
42						&PLC/17.3:F
43						&PLC/17.3:F
44						&PLC/17.3:F

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	TERMINAL DIAGRAM	=	RE	UNIT	mm
DWG. NO.	EP06-003159A	+	TB	REV. NO.	NONE
PROJECT	SMART #1701	&		SHEET	29
				TOTAL SHEET	35

TERMINAL DIAGRAM

TB4	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
45						&PLC/17.3:F

TB5	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
1			031	U-EM104	AUXILIARY OIL PUMP	&3L/10.6:B
2			032	V-EM104	AUXILIARY OIL PUMP	&3L/10.6:B
3			033	W-EM104	AUXILIARY OIL PUMP	&3L/10.5:B
4			PE	PE	AUXILIARY OIL PUMP	&3L/10.5:B
5			034	U-EH101	RESERVOIR OIL HEATER	&3L/10.4:B
6			035	V-EH101	RESERVOIR OIL HEATER	&3L/10.4:B
7			036	W-EH101	RESERVOIR OIL HEATER	&3L/10.4:B
8			K	K	MOTOR CURRENT	&1L/13.6:C
9			L	L	MOTOR CURRENT	&1L/13.5:C
10			PE		MOTOR CURRENT	&1L/13.5:C

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	TERMINAL DIAGRAM	=	RE	UNIT	mm
DWG. NO.	EP06-003159A	+	TB	REV. NO.	NONE
PROJECT	SMART #1701	&		SHEET	30
				TOTAL SHEET	35

TERMINAL DIAGRAM

TB6	JUMPER		LABELLING		CABLE DESIGNATION	LOCATION
	SADDLE	WIRE	IN	OUT		
1			L1	001	MAIN POWER	&3L/10.6:F
2			L2	002	MAIN POWER	&3L/10.6:F
3			L3	003	MAIN POWER	&3L/10.5:F
4	●		FE	FE	MAIN POWER	&3L/10.5:F
5	●		PE	PE	MAIN POWER	&3L/10.5:F

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SMART #1701

SUPPLIER

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	TERMINAL DIAGRAM	=	RE
DWG. NO.	EP06-003159A	+	TB
PROJECT	SMART #1701	&	

UNIT	mm
REV. NO.	NONE
SHEET	31
TOTAL SHEET	35

LOOP DIAGRAM

TB. NO.	LABELLING	CABLE DESIGNATION	SPECIFICATION	SCOPE
TB6-1	L1	LCP MAIN POWER	POWER CABLE	CUSTOMER
TB6-2	L2			
TB6-3	L3			
TB6-4	FE			
TB6-5	PE			
TB4-30	START	STARTER PANEL INTERFACE	SIGNAL CABLE	CUSTOMER
TB4-31	COM1			
TB4-32	COM2			
TB4-33	STOP			
TB4-34	102			
TB4-35	181			
TB5-1	U-EM104	AUXILIARY OIL PUMP	F-CV 4Cx2.5SQ	SUPPLIER
TB5-2	V-EM104			
TB5-3	W-EM104			
TB5-4	PE			
TB5-5	U-EH101	RESERVOIR OIL HEATER	F-CV 3Cx2.5SQ	SUPPLIER
TB5-6	V-EH101			
TB5-7	W-EH101			
TB5-8	K	MOTOR CURRENT	VCTF 2Cx4.0SQ	SUPPLIER
TB5-9	L			
TB4-17	L-EL100	ENCLOSURE LIGHT	VCTF 2Cx0.75SQ	SUPPLIER
TB4-16	N-EL100			
TB4-23	H1	MOTOR SPACE HEATER	VCTF 2Cx1.5SQ	SUPPLIER
TB4-18	H2			
TB4-24	IGV211A	INLET GUIDE VANE	CVV-SB 3Cx1.5SQ	SUPPLIER
TB4-25	IGV211B			
TB4-19	IGV211N			
TB4-26	PE			
TB4-27	L-AT310	AUTO TRAP #1	VCTF 2Cx0.75SQ	SUPPLIER
TB4-20	N-AT310			
TB4-28	L-AT320	AUTO TRAP #2	VCTF 2Cx0.75SQ	SUPPLIER
TB4-21	N-AT320			
TB4-29	L-AT330	AUTO TRAP #3	VCTF 2Cx0.75SQ	SUPPLIER
TB4-22	N-AT330			
TB2-7	P24	OIL LEVEL SWITCH	CVV-SB 3C x 0.75SQ	SUPPLIER
TB2-14	LSL101			
TB2-24	FE			
TB2-15	LSLL101			
TB2-3	ASV252N	MODULATING BLOW OFF VALVE	CVV-SB 2C x 0.75SQ	SUPPLIER
TB2-4	ASV252P			
TB2-6	FE			
TB2-16	PT260	SYSTEM PRESSURE	CVV-SB 2C x 0.75SQ	SUPPLIER
TB2-8	P24			
TB2-25	FE			
TB2-17	PT242	FINAL STAGE OUTLET PRESSURE	CVV-SB 2C x 0.75SQ	SUPPLIER
TB2-9	P24			

TB. NO.	LABELLING	CABLE DESIGNATION	SPECIFICATION	SCOPE
TB2-26	FE	FINAL STAGE OUTLET PRESSURE	CVV-SB 2C x 0.75SQ	SUPPLIER
TB2-18	PT130	OIL SUPPLY PRESSURE	CVV-SB 2C x 0.75SQ	SUPPLIER
TB2-10	P24			
TB2-27	FE			
VT131X-		VIBRATION STAGE 1X	EXTENSION CABLE	SUPPLIER
VT132X-		VIBRATION STAGE 2X	EXTENSION CABLE	SUPPLIER
VT133X-		VIBRATION STAGE 3X	EXTENSION CABLE	SUPPLIER
TB3-1	TE130A	OIL SUPPLY TEMPERATURE	CVV-SB 3C x 0.75SQ	SUPPLIER
TB3-2	TE130B			
TB3-3	TE130B			
TB3-13	FE			
TB3-4	TE241A	FINAL STAGE INLET TEMPERATURE	CVV-SB 3C x 0.75SQ	SUPPLIER
TB3-5	TE241B			
TB3-6	TE241B			
TB3-14	FE			
TB3-7	TE101A	OIL RESERVOIR TEMPERATURE	CVV-SB 3C x 0.75SQ	SUPPLIER
TB3-8	TE101B			
TB3-9	TE101B			
TB3-15	FE			
TB3-10	TD1A	MOTOR WINDING R TEMPERATURE	CVV-SB 15C x 0.75SQ	SUPPLIER
TB3-11	TD1B			
TB3-12	TD1B			
TB3-16	FE			
TB3-17	BD1A			
TB3-18	BD1B			
TB3-19	BD1B			
TB3-20	BD2A			
TB3-21	BD2B			
TB3-22	BD2B			

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09	DWG. NAME	LOOP DIAGRAM
CHECKED	S.H.JUNG	DATE	-	DWG. NO.	EP06-003159A
DESIGNED	-	DATE	-	PROJECT	SMART #1701
DRAWN	T.W.KIM	DATE	2017-08-09		

=	RE	UNIT	mm
+	LOCAL	REV. NO.	NONE
		SHEET	32
&		TOTAL SHEET	35

CONTROL PART LIST

NO.	NAME	PART NO.	SPECIFICATION	MANUFACTURE	Q'TY	REMARKS	DWG. LOCATION
1	AC CURRENT TRANSDUCER	EP00101500-001	INPUT: 0~5A, OUTPUT: DC 4~20mA AUX POWER : DC 24V AVERAGE SENSING	DAEJOO	1		LCP / 13
2	CAPACITOR (FOR IGV ACTUATOR)	5945S1000043	20uf +/- 6% , 370VAC 50/60Hz	NUEVA(CSC)	1		LCP / 9
3	CIRCUIT PROTECTOR	EP07-001033	1P,DINRAIL TYPE,3A,FINGER SAFETY COVER ,AC/DC	HONEYWELL	2		LCP / 9
4	CIRCUIT PROTECTOR	EP07-101033	1P,DINRAIL TYPE,2A,FINGER SAFETY COVER ,AC/DC	HONEYWELL	1		LCP / 9
5	COOLING FAN	EP03403400-002	SLEEVE BEARING, RPM:2600/3000, AC110V	SUNTRONIX	1		LCP / 7
6	COOLING FAN COVER	EP03503400-004	WITH FILTER, STANDARD TYPE	KFM	1		LCP / 7
7	EMERGENCY COVER	EP07-011027	22Ø EMERGENCY BUTTON COVER	OMRON	1		LCP / 7
8	EMERGENCY PUSH BUTTON	EP07-000509	22Ø, MUSHROOM TYPE Ø40, PUSH LOCK TURN RESET, 1A2B RED	OMRON	1		LCP / 7
9	FUSE	EP04101800-001	2A	HAN YOUNG	2		LCP / 9
10	FUSE	EP10-002271	3A	HAN YOUNG	3		LCP / 9
11	FUSE	EP10-002270	8A	HAN YOUNG	1		LCP / 9
12	MAGNETIC CONTACTOR	EP07-000399	MC-9 SUSOL AC110V 9A 32AF,50/60Hz	LSIS	2		LCP / 14
13	MMS (MANUAL MOTOR STARTER)	EP07-000791	3P 32AF 50kA (Range 4~6A)	LSIS	1		LCP / 10
14	MMS (MANUAL MOTOR STARTER)	EP07-000389	3P 32AF 50kA (Range 6~10A)	LSIS	1		LCP / 10
15	MMS ALARM CONTACT	EP20-000120	1a1b	LSIS	2		LCP / 9
16	MMS DIRECT ADAPTER	EP10-000951	DA-32HA (ADAPTER)	LSIS	2		LCP / 9
17	MMS MOUNTING UNIT	EP10-000953	MMS-32* BASE	LSIS	2		LCP / 9
18	MOLD CASE CIRCUIT BREAKER	EP07-002108	3P 50AF/30AT/, ABS53C	LSIS	1		LCP / 10
19	MOLD CASE CIRCUIT BREAKER	EP07-000400	2P 30AF/10AT/, ABS32C	LSIS	1		LCP / 9
20	NOISE FILTER	EP03103400-001	250V MAX, RATED CURRENT : 6A, MAX LEAK CURRENT : 0.5mA OPERATING TEMPERATURE:-25~85°C	ORIENT ELEC	1		LCP / 9
21	POWER SUPPLY	5945S1000020-03	CONNECTION SYSTEM:SCREW CONNECTION AC TO DC	WEIDMULLER	1		LCP / 11
22	PUSH BUTTON	EP00501800-001	Ø22, Flat Type, Green, ARF-F112G	HAN YOUNG	1		LCP / 7

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER: SMART #1701

SUPPLIER: Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	LCP PART LIST	=	RE	UNIT	mm
DWG. NO.	EP06-003159A	+	LCP PL	REV. NO.	NONE
PROJECT	SMART #1701	&		SHEET	33
				TOTAL SHEET	35

CONTROL PART LIST

NO.	NAME	PART NO.	SPECIFICATION	MANUFACTURE	Q'TY	REMARKS	DWG. LOCATION
23	PUSH BUTTON	EP07-000966	∅22, Flat Type, Black, ARF-F112B	HAN YOUNG	1		LCP / 7
24	PUSH BUTTON	EP07-000847	∅22, Flat Type, Blue, ARF-F112A	HAN YOUNG	1		LCP / 7
25	RECEPTACLE	EP00902600-002	AC250V, 16A MAX	ILSHIN ELC.IND.	1		LCP / 9
26	RELAY	EP18-001041	2POLE, COIL:24VDC, RATED : 250V, 10A	WEIDMULLER	6		LCP / 18;LCP / 19
27	RELAY	EP18-001036	4POLE, COIL:24VDC, RATED : 250V, 5A	WEIDMULLER	1		LCP / 18
28	RELAY	EP18-001037	2POLE, COIL:115 VAC, RATED : 250V, 10A	WEIDMULLER	3		LCP / 14;LCP / 15
29	SELECT SWITCH	EP20-000141	22∅, SELECT SWITCH, 2 MANUAL 1a1b, BLACK	OMRON	1		LCP / 7
30	SOLID STATE RELAY	EP18-001028	LOAD VOLTAGE 24-280 VAC, COIL : 20-48 VDC or 20-280 VAC, LOAD CURRENT 50A	CRYDOM	2		LCP / 18;LCP / 19
31	SPARK KILLER	EP01601900-002	SPARK KILLER	SHINSHIN	2		LCP / 9
32	TERMINAL BLOCK	EP01700500-001	TENSION CLAMP(FERRULE TYPE) 2-CONNECTION MAX 4sq(AWG30~12), 21A Z DU2.5	WEIDMULLER	134		LCP / 9
33	TERMINAL BLOCK	EP01700500-002	TENSION CLAMP(FERRULE TYPE) 2-CONNECTION MAX 6sq(AWG22~8), 36A" ZDU 6.0	WEIDMULLER	10		LCP / 9
34	TERMINAL BLOCK	EP21-000087	TENSION CLAMP(FERRULE TYPE) 2-CONNECTION MAX 10sq(AWG16~6), 60A ZDU 10	WEIDMULLER	5		LCP / 9
35	TOUCH SCREEN	EP10-001871	7" 16W, 0°C~50°C, 85%RH Touch 7'(W8)	HAKKO	1		LCP / 7
36	TRANSFORMER	EP23-001027A	TYPE : 1PHASE 380/110-220V, 1.5KVA	SINSUENG	1		LCP / 10
37	VIBRATION CABLE	CST51321-G05	6.5M	SHINKAWA	3		LCP / 9
38	VIBRATION TRANSMITTER	CST51301-G03	WK SERIES 7.0M SYSTEM	SHINKAWA	3		LCP / 9

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER

SUPPLIER

SMART #1701

Hanwha Power Systems

APPROVED	B.J.KIM	DATE	2017-08-09
CHECKED	S.H.JUNG	DATE	-
DESIGNED	-	DATE	-
DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	LCP PART LIST	=	RE	UNIT	mm
DWG. NO.	EP06-003159A	+	LCP PL	REV. NO.	NONE
PROJECT	SMART #1701	&		SHEET	34
				TOTAL SHEET	35

PLC PART LIST

NO.	NAME	PART NO.	SPECIFICATION	MANUFACTURE	Q'TY	REMARKS	DWG. LOCATION
1	PLC - RTD	EP10-000722	PLC - RTD INPUT 4CH	OMRON	2		LCP / 17
2	PLC - AI	EP10-000720	PLC - ANALOG INPUT 8CH (4~20mA)	OMRON	1		LCP / 17
3	PLC - AO	EP10-000721	PLC - ANALOG OUTPUT 2CH	OMRON	1		LCP / 17
4	PLC - DI	EP10-000718	PLC - DIGITAL INPUT 16CH	OMRON	1		LCP / 17
5	PLC - DO	EP10-000719	PLC - DIGITAL OUTPUT 16CH RELAY TYPE	OMRON	1		LCP / 17
6	PLC-COMMUNICATION	EP10-000723	PORT1-(RS-422A/485), PORT2-(RS-232C)	OMRON	1		LCP / 17
7	PLC - CPU	EP10-000726	PLC - CPU (20K Step)	OMRON	1		LCP / 17
8	PLC POWER	EP10-000716	PLC POWER	OMRON	1		LCP / 17
9	PLC-TOUCH CABLE	EP02-002165A	CABLE ASS'Y [OMRON<->W8]	HTW	1		LCP / 17

REV.	DATE	DESCRIPTION of REVISION

CUSTOMER: SMART #1701

SUPPLIER: Hanwha Power Systems

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CHECKED	S.H.JUNG	DATE	-
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DRAWN	T.W.KIM	DATE	2017-08-09

DWG. NAME	PLC PART LIST	=	RE	UNIT	mm
DWG. NO.	EP06-003159A	+	PLC PL	REV. NO.	NONE
PROJECT	SMART #1701	&		SHEET	35
				TOTAL SHEET	35