



Always The Best Solution by
HITROL CO., LTD.

General Arrangement Drawing for Level Switch

Doc. No	2485-0-HIT-GAD-001
Revision No	1
Revision Date	10/Jan/2014
Page	1 of 5

General Arrangement Drawing for Level Switch

- APPROVED WITH COMMENT
 REVIEWED RESUBMIT

This approval or review does not relieve the vendor / subcontractor of his responsibilities of the contract.

	ORIGINAL	CHECKED	APRD(PRJ)
SIGN	<i>Asinuddin</i>	<i>S-Rey</i>	<i>S.Hey</i>
DATE	27/01/2014	27/1/14	27/01/2014
SAMSUNG ENGINEERING CO., LTD.			

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WORK SITE	
HEAD QUARTER	
ENGINEERING	
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PROJECT	
SYSTEM	
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ELECTRICAL	
INSTRUMENT	
CIVIL	
ARCH & STR	
HVAC / F&F	
PROCUREMENT	
CONSTRUCTION	
QA/QC	
HSE	
COMMISSIONING	
SITE	
GSIM	
SEI	

Rev.	Date	Description	Prepared	Checked	Reviewed	Approved
1	22/Jan/2014	For Approval	<i>Joy</i>	<i>B.S.S</i>	<i>H.H.KIM</i>	<i>Y.H.KIM</i>
0	18/Dec/2013	For Approval	M.J.KIM	B.S.SUNG	H.J.KIM	Y.H.KIM

Energia San Luis de la Paz, S.A. de C.V

SLP CCGT Power Plant



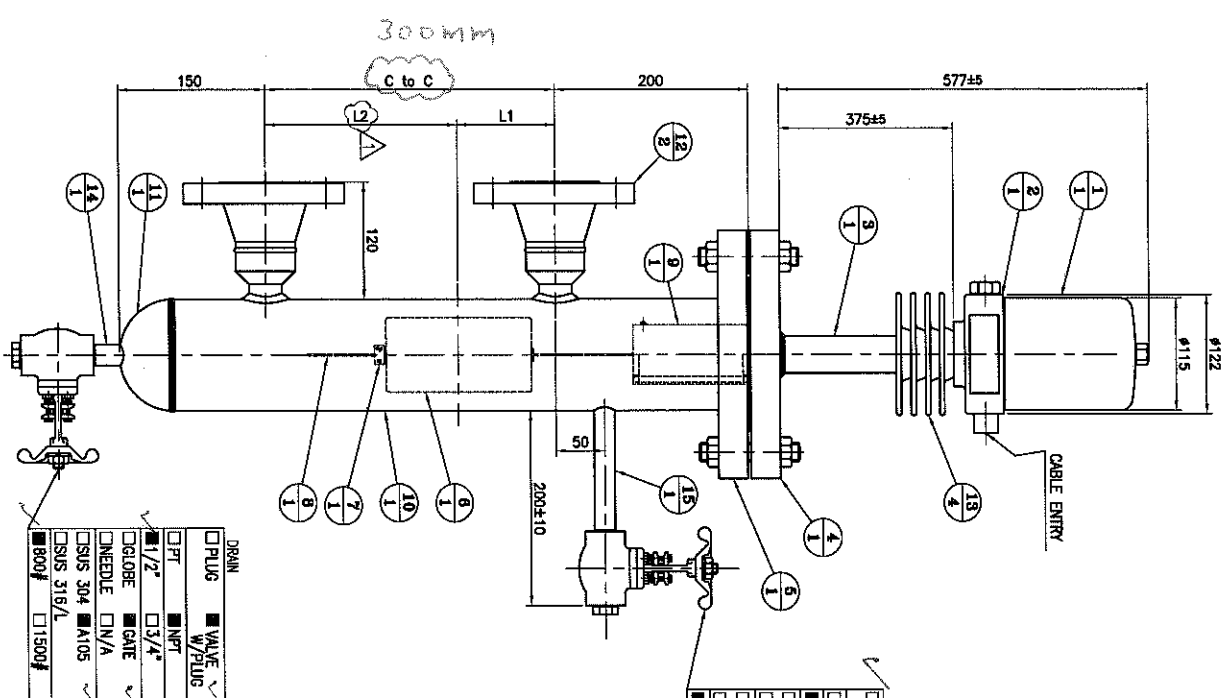
SAMSUNG ENGINEERING



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HITROL CO., LTD.

Department : INSTRUMENT	Project No. : SP2485	Document No. : 2485-0-HIT-GAD-001	Rev. No. : 1
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<input type="checkbox"/> PLUG	<input checked="" type="checkbox"/> VALVE
<input type="checkbox"/> PT	<input checked="" type="checkbox"/> W/PLUG
<input checked="" type="checkbox"/> 1/2"	<input checked="" type="checkbox"/> NPT
<input checked="" type="checkbox"/> 3/4"	<input checked="" type="checkbox"/> GATE
<input checked="" type="checkbox"/> NEEDLE	<input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> SUS 304	<input checked="" type="checkbox"/> A105
<input checked="" type="checkbox"/> SUS 316/L	<input type="checkbox"/> 1500#
<input checked="" type="checkbox"/> 800#	<input type="checkbox"/> 1500#

NO.	DESCRIPTION	MATERIAL	REMARK
1	COVER	C.S	
2	BASE	A.L.C	
3	CONNECTOR	SUS 304	
4	UPPER FLANGE	SUS 304	INS 4' 300# BS
5	LOWER FLANGE	SUS 304	INS 4' 300# BS
6	DISPLACER	SUS 316/L	
7	STOPPER	SUS 316/L	
8	WIRE	SUS 316/L	
9	SPRING HOLDER	SUS 316/L	
10	CHAMBER	SUS 316/L	4' 304.40
11	CAP	SUS 316/L	
12	PROCESS CONN.	SUS 316/L	
13	COOLING FIN	A.L.C	
14	DRAIN VALVE PIPE	C.S	1/2" S&S STD
15	VENT VALVE PIPE	C.S	1/2" S&S STD

FOR	LEVEL SWITCH
FUNCTION	1-POINT ALARM
MOUNTING	SIDE TO SIDE
ENCLOSURE	WEATHER PROOF (IP65)
FLUID NAME	WATER

PO	201312-063	TN	1312-19A
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NOTE

- Supplier Shall Provided the Gasket, Stud Bolt & Nuts with Washer.
 - Gasket : 1.6mm , NON-ASBESTOS Compressed Fiber Flat Ring Per ASME B16.21.
 - Stud Bolt : A193 Gr-B7, HOT-DIP Galvanized.
 - Heavy Hex Nut : A194 Gr-2H, HOT-DIP Galvanized.
 - Washer Shall be HOT-DIP Galvanized.
- Process Connection Accessory & Instrument Part Accessory will be supplied by HITROL.
- Stainless Steel NAME PLATE Shall be Permanently Attached in Level Switches.
- General Tolerance ±3 Except as Noted.

PROCESS CONN. SIZE	DISPLACER SIZE
<input checked="" type="checkbox"/> ANSI 2" 300# BRN	<input checked="" type="checkbox"/> #76.3x100

TAG NO.	TEMP	PRESS.	Sp. Gr.	QTY	L1	L2	C to C
0-LSH-AB002	450	27	0.845	1	150	425	575
0-LSH-AB001	450	27	0.845	1	150	575	725
0-LSH-AB004	350	27	0.845	1	150	425	575
0-LSH-AB003	350	27	0.845	1	150	575	725
0-LSH-AB006	350	27	0.845	1	150	425	575
0-LSH-AB005	350	27	0.845	1	150	575	725
0-LSH-AB008	350	27	0.845	1	150	425	575
0-LSH-AB007	350	27	0.845	1	150	575	725

C to C distance should be 300 mm.

<input type="checkbox"/> PLUG	<input checked="" type="checkbox"/> VALVE
<input type="checkbox"/> PT	<input checked="" type="checkbox"/> W/PLUG
<input checked="" type="checkbox"/> 1/2"	<input checked="" type="checkbox"/> NPT
<input checked="" type="checkbox"/> 3/4"	<input checked="" type="checkbox"/> GATE
<input checked="" type="checkbox"/> NEEDLE	<input checked="" type="checkbox"/> N/A
<input checked="" type="checkbox"/> SUS 304	<input checked="" type="checkbox"/> A105
<input checked="" type="checkbox"/> SUS 316/L	<input type="checkbox"/> 1500#
<input checked="" type="checkbox"/> 800#	<input type="checkbox"/> 1500#

APPROVED WITH COMMENT
REMOVED
RESUBMIT

This approval / authorization of the vendor / subcontractor of the responsibility to meet all requirements of the contract.

Energia San Luis de la Paz, S.A. de C.V.

SLP CCGT Power Plant

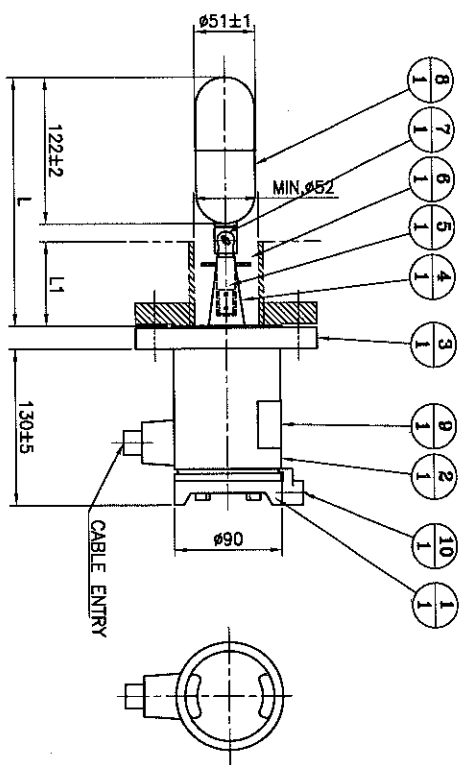
SAMSUNG ENGINEERING CO., LTD.
SEOUL, KOREA
JOB NO. SP-2485

HITROL CO., LTD.

General Arrangement Drawing
Displacer Type Level Switch

2485-0-HIT-GAD-001

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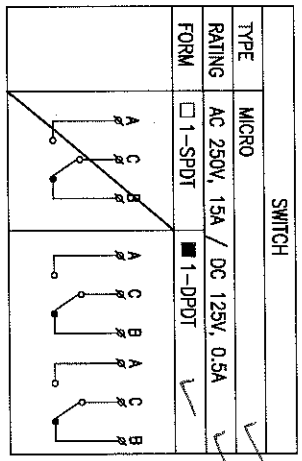


FOR MOUNTING	LEVEL SWITCH	SIDE	✓
ENCLOSURE	EX-PROOF (Ex d IIC T4), IP65		
FLUID NAME	WATER	Sp.Gr: 0.99~1	
MAX. PRESSURE	0.5MPa (FW: full of water) barg		
MAX. TEMP.	120	°C	

CABLE ENTRY (ADAPTOR) OPTION	
<input type="checkbox"/> PF 3/4"(F), Ex d IIC	<input type="checkbox"/> PT 3/4"(F), Ex d IIC
<input type="checkbox"/> PT 1/2"(F), Ex d IIC	<input type="checkbox"/> NPT 3/4"(F), Ex d IIC
<input checked="" type="checkbox"/> NPT 1/2"(F), Ex d IIC	<input type="checkbox"/> NPT 3/4"(F), Ex d IIC

NO.	DESCRIPTION	MATERIAL	REMARK
1	COVER	ALC	
2	BASE	SS 13	
3	PROCESS CONN.	304 SS, Kuroda	
4	FIXED BAR	316 SS, 2318, SS	
5	MAGNET HOLDER	316 SS, 2318, SS	
6	STOPPER	316 SS, 2318, SS	
7	PIN	316 SS, 2318, SS	
8	WASHER	316 SS, 2318, SS	
9	NAME PLATE	SUS 304	
10	LOCK	ALC	

TAG. NO.	QTY	L1	L	REMARK
0-LS-WP001	1	LATER	LATER	



NOTE

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 - Gasket : 1.6mm, NON-ASBESTOS Compressed Fiber Flat Ring Per ASME B16.21.
- Stud Bolt : A193 Gr.B7, HOT-DIP Galvanized.
- Heavy Hex Nut : A194 Gr.2H, HOT-DIP Galvanized.
- Washer Shall be HOT-DIP Galvanized.
- Process Connection Accessory & instrument Part Accessory will be supplied by HITROL.
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- General Tolerance ±3 Except as Noted.
- L1 = Tank Nozzle Height (mm)

PROCESS CONN. SIZE ANSI 2" 150# RF

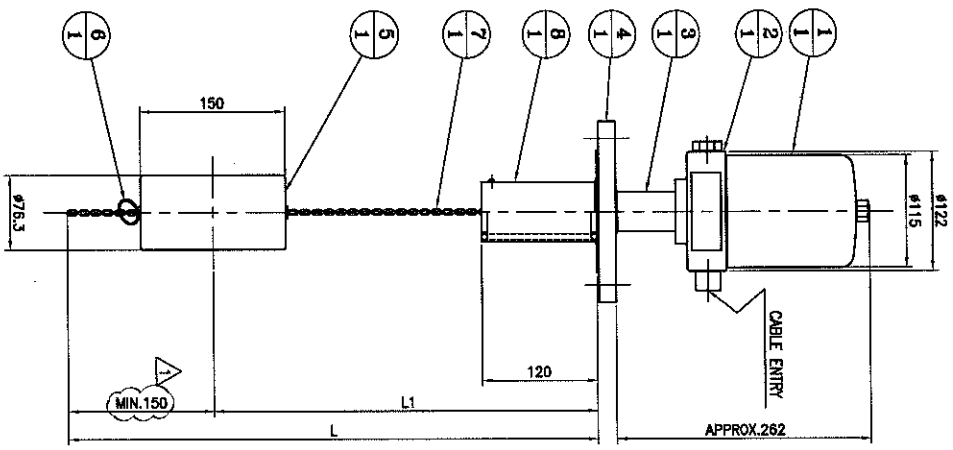
APPROVED WITH COMMENT
 REVIEWED
 DESIGNER
 The approval or review does not indicate the approval or subcontractor of the contractor.

SAMSUNG ENGINEERING CO., LTD.
 SAMSUNG ENGINEERING CO., LTD.
 SEOUL, KOREA
 408 NO. 57-2485

HITROL
 HITROL CO., LTD.
 General Arrangement Drawing
 Float Type Level Switch

DWG. NO. 2485-0-HI-GAD-001
 REV. A

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PO	201312-063	TN	1312-19A
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FOR	LEVEL SWITCH
FUNCTION	1-POINT ALARM
MOUNTING	TOP
ENCLOSURE	WEATHER PROOF (IP65)
MAX. PRESSURE	10 kgf/cm ²
MAX. TEMP	120 °C

CABLE ENTRY (ADAPTOR) OPTION	
<input type="checkbox"/> PF 1/2"(F), BS	<input type="checkbox"/> PT 3/4"(F), BS
<input type="checkbox"/> PT 1/2"(F), BS	<input type="checkbox"/> NPT 3/4"(F), BS
<input checked="" type="checkbox"/> NPT 1/2"(F), BS	<input type="checkbox"/> NPT 3/4"(F), BS

NO.	DESCRIPTION	MATERIAL	REMARK
1	COVER	C.S	
2	BASE	ALC	
3	CONNECTOR	SIS 304	
4	PROCESS CONN.	ALC	
5	DISPLACER	SS 316/316S 316	
6	STOPPER	SS 316/316S 316	
7	CHAIN (WIRE)	SS 316/316S 316	
8	SPRING HOLDER	SS 316/316S 316	

PROCESS CONN. SIZE	DISPLACER SIZE
<input checked="" type="checkbox"/> ANSI 4" 150# RF	<input checked="" type="checkbox"/> #76.3x#150

ELECTRICAL SPECIFICATION	
TYPE	MICRO
FORM	<input type="checkbox"/> 1-SPDT <input checked="" type="checkbox"/> 1-0PDT
CONTACT RATING	AC 250V, 15A DC 125V, 0.5A

SWITCH ACTION	
<input type="checkbox"/> OR	OPEN ON RISING LEVEL
<input type="checkbox"/> OR	CLOSE ON RISING LEVEL
<input type="checkbox"/> OR	OPEN ON FALLING LEVEL
<input type="checkbox"/> OR	CLOSE ON FALLING LEVEL

TAG. NO.	FLUID NAME	SP-GT	QTY	L1	L
B-S-XM011	WASTE WATER	0.965	1	3600	3750
B-S-XM013	SMITERY WATER	1.2	1	2000	2150
B-S-XM014	SMITERY WATER	1.2	1	1300	1450
B-SH-F0001	-	-	1	LATER	LATER

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<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> WITH COMMENT
<input type="checkbox"/> REVIEWED	<input type="checkbox"/> RESUBMIT

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SLP CCGT Power Plant

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HITROL CO., LTD.

SAMSUNG ENGINEERING CO., LTD.
SEOUL, KOREA
JOB NO. SP-2485

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General Arrangement Drawing
Displacer Type Level Switch

2485-0-HI-GAD-001

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