Base Load Power Hub (BLPH)

TECHNICAL DATASHEET For Radar Level Transmitters

Document Number: 123A90-DDL-IN-DS-40042

Document Class: 2

02	06/12/2024	Accepted for Construction (AFC)	VBA	LCA	DLO
01	29/08/2024	Accepted for Construction (AFC)	VBA	LCA	DLO
00	23/02/2024	Issue for Review (IFR)	VBA	LCA	DLO
Rev.	Date	Description	Prepared	Reviewed	Approved

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Revision / Change Log

Rev.	Description
00	ISSUE FOR REVIEW (IFR)
01	ACCEPTED FOR CONSTRUCTION (AFC)
02	ACCEPTED FOR CONSTRUCTION (AFC)

HOLDS LIST

No.	Description

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GENERAL REQUIREMENTS / NOTES

1) This datasheet is to be read in conjunction with following documents:
   a) Instrumentation for Package Unit Specification (123A90-DDL-IN-SP-40094);
   b) Material Requisition (123A90-DDL-IN-MR-40043);
   c) Specification for Piping Material Classes (123A90-DDL-PP-SP-70000).

2) Ambient Temperature Min: -8.4 °C, Norm: 10.5 °C, Max: +25.0 °C.

3) All materials including transmitters casing/housing shall be suitable for use in marine environment in AISI 316. Aluminium is not permitted.

4) Local Indicator shall be quoted as option.

5) The instrument shall be certified Exd IIC (or IIB+H2) T1 for Zone 2, IP66 as per ATEX directive.

6) All flanges in ASME B31.3 and ASME B31.12 shall be Raised Face type.

7) The SS nameplate shall indicate the tag number, manufacture name, model number, serial number, size, rating and other items as required.

8) Information with asterisk (*) shall be confirmed or provided by manufacturer according to the service condition.

9) HART revision 7 protocol is required for all electronic device 4-20mA Smart type, NAMUR NE43.

10) The specifications, design, testing, installation, operation and maintenance of all electrical power systems, electrical / electronic instrumentation and control equipment / systems shall comply with EMC directives. This is to ensure that the requirements for electromagnetic compatibility are considered during the various stages of design, construction, and installation. All as aspects of the control system shall be certified to 2014/30/EU. The vendor shall provide a Declaration of Conformity for their package stating as such.

11) Level transmitter shall be supplied with external Span and Zero adjustment (if any).

12) The transmitter accuracy shall be better than ±0,5% of calibrated span including the effects of linearity, hystersis, and repeatability.

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GENERAL	1	Tag Number					55-LIT-001				
	2	Service					WASTE WATER TANK (T-55001)				
	3	P&ID Number					123A90-DDL-PR-PID-80026				
	4	Equipment Number		Vessel Trim Number			T-55001		3"-WW-200-01CS-H		
	5	Area Classification					ATEX Zone2 - IIC (IIB+H2) T1				
	6										
PROCESS CONDITIONS	7	Fluid					WASTE WATER				
	8	Pressure	Unit	Min.	Oper.	Max.	barg		ATM		
	9	Temperature	Unit	Min.	Oper.	Max.	°C	5	AMB	35	
	10	Ambient Temperature		Min.		Max.	-8.4		25		
	11	Design Pressure		Min.		Max.			ATM		
	12	Design Temperature		Min.		Max.			80		
	13	Density (Liquid)					1000				
	14	Oper. Vapour Density					N/A				
	15	Viscosity					1				
	16	Fluid Dielectric Constant					80.2 @20°C				
	17										
BODY / GAUGE	18	Body or Gauge Material					AISI 316				
	19	Rating					#150				
	20	Connection Size & Type					FLANGED 3" 150# RF1, TOP MOUNTED				
	21	Cooling Extension					-				
	22	Stilling Well Required					-				
	23										
ANTENNA	24	Type					NON CONTACTING RADAR				
	25	Material					SS 316				
	26	Insertion Depth		Diameter			31 mm		72 mm		
	27	Operating Frequency					26 GHz				
	28	Distance (Adapter Plate to Tank Bottom)					High of Tank = 4660 mm				
	29	Function					LEVEL MEASUREMENT				
TRANSMITTER	30	Output		Power Supply			4-20mA		24Vdc (Loop powered)		
	31	Calibration Range Min.		Max.			0 mm		4660 mmm		
	32	Instrument Range Min.		Max.			0 mm		5000 mmm		
	33	Mounting					DIRECT ON LINE				
	34	Certification		Ingress Protection			Ex-d IIC (IIB+H2) T1		IP66		
	35	Electrical Class		Electrical Connection			-		N. 2 M20x1.5 mm		
	36	Accuracy		Repeatibility			Better then +/-0.5% of SPAN		≤0.25% of SPAN		
COMMUNICATION AND SOFTWARE	37	Communication Type		Signal Ttype			Conventional + Hart		4-20mA Loop powered		
	38	D D Revision		CFF Revision			-		-		
	39	Device Tag		Hart Tag			-		-		
	40	Internal Diagnostics		Capacitance			-		-		
	41	Segment		Device Address			-		-		
	42	Device Class		Simulate			-		-		
	43	Nominal Current		Operating Voltage			-		-		
OPTIONS	44	Interface Card					-				
	45	Cable (Antenna to Transmitter)					-				
	46	Integral Meter					Digital LCD indicator (4)				
	47										
	48										
PURCHASE	49	Manufacturer					TERRANOVA				
	50	Model					KRG-E-P3-R01-N-L-D08-F79-N00-N-D-V-81-A-R2-Z6				
	51	Purchase Order Number					1724000979				

Notes:

No.	Date	By	Chkd	Appr	Description
02	06/12/2024	VB	LC	DL	Accepted for Construction (AFC)
01	25/07/2024	VB	LC	DL	Accepted for Construction (AFC)
00	23/02/2024	VB	LC	DL	ISSUED FOR REVIEW (IFR)

INSTRUMENT DATASHEET

Radar Level Transmitter

CROSSWIND

ROSETTI MARINO

Sheet 5 of 5

Code: 511 | Dwg. No.: 123A90-DDL-IN-DS-40042 | Rev 02