

COPES-VULCAN, SPX Valves & Controls Road Two, Industrial Estate, Winsford, Cheshire, UK Phone: +44(0) 1606 552041 Fax: +44(0) 1606 558275					CONTROL VALVE SPECIFICATION SHEET					
Customer Name: ALSTOM POWER CENTRALES - BELFORT Customer Inquiry: EMAIL Customer PO: 745117 P12 73077 Ultimate User: MARITZA EAST 1 BULGARIA Tag: 01/02 LCJ31 AA001 Application: LP3 NORMAL DRAIN					CV Inquiry: DMS/060909/PM1 CV Job: WH/00071 CV Job Ref: CW32712 CV Serial #: 07CW32712/01-02 Item: 13 Quantity: 2					
Description: 8" (200 mm), CL150, WC9 , BW, GS-700-100 RA										
FLUID: Water		SERVICE CONDITIONS								
	FLOW (Mton/hr)	P1 (bar a)	P2 (bar a)	Temp. (deg C)	Cv	CV (%)	Travel (%)	Valve Outlet Vel. (ft/sec)	Noise * (dBA)	Remarks
COND 1	52.1	2.33	0.586	120.5	103	56%	69%	16069 (ft/min)	---	FLASHING
COND 2	13	1	0.211	88.8	27.9	15%	34%	7936 (ft/min)	---	FLASHING
COND 3	45.4	2.3	0.6	119.5	86.7	48%	63%	13101 (ft/min)	---	FLASHING
COND 4										
COND 5										
SHUTOFF		4	0.1	145	Allowable Leakage:			* Estimated Noise Level with 0" of Insulation		
DESIGN		4		145	Class IV					
BODY AND BONNET										
Style: GS - General Service, Globe Size: 8 inch ASME Class: 150 Standard Body Inlet: Butt Weld, Sch 40 per ANSI B16.25, Fig. 2b Body Outlet: Butt Weld, Sch 40 per ANSI B16.25, Fig. 2b Material: A-217 WC9 Inlet Pipe: 8 In. (200 mm), Sch 40 Outlet Pipe: 8 In. (200 mm), Sch 40					Bonnet Type: Bolted Packing Material: Grafoil Packing Hardware: Stainless Steel Packing Nut Torque: 6 ft-lbs. Options: Double Packed(w/Leakoff Tapped & Plugged) Service: Intermittent Modulation					
TRIM										
Size: 8 inch with 4 Starts Style: CAV-B9 (Balanced w/U-Cup Seals) Flow Direction: OVER THE WEB Stem Diameter: .75 in. Characteristic: CAV-B9					Seat Type: METAL Trim Material: 400/70 SST Max. Cv Available: 182.4 @Max. Act. Travel of 2" (±1/8) Min. Controllable Cv of Trim: 6.4					
ACTUATOR										
Style: 700 DIAPHRAGM Size: 100 (Square Inch) Action: Spring Closing (Reverse) Handwheel: Top Mounted Frame Material: Ductile Iron Air Pressure Available: 4.0 bar g (58 psig) Air Pressure Required: 2.2 bar g (32 psig)					Actuator Mounting Style: 4x Studded Actuator Spring: 357569 Spring Rate: 600 (lbs/inch) Max. Stem Thrust Required to Close: 1148 (lbs) Max. Stem Thrust Required to Open: 331 (lbs) Spring Precompression (Diaphragm Air Pressure): 12 (psig) Pressure @ Full Valve Travel (With No Internal Valve Pres.): 24 (psig)					
ACCESSORIES										
Positioner: Copes SIPART PS2, Single Acting Positioner Input Range: 4-20 mA Position FeedBack Module (4-20ma) : YES Alarm Module : NO HART Module : NO					Airlock: None Filter/Regulator: Bellofram 51FR w/Gauge Qty: 1 Solenoid Valve: ASCO (110 VDC) Qty: 1 De-energize to vent actuator Booster Relay: RK 1000 Qty: 1 Additional Acc'y: Pneumatic Isolation Valve Qty: 1					
Piping: 3/8" Stainless Steel Tubing (Hoke) Limit Switches: None										
COMMENTS										
Stroking Speed Opening or Closing Shall be Less than 10 seconds Estimated Fluid Flash level is 6.5% Solenoid Valve Tag No. is 01/02 LCJ31AA001A										
Model = GS8 Body Option: BDY508080203 Bonnet Option: BNT508280203 Trim Option: TRM508010710403 Hardware Pack Option: HDP5125112 Actuator Option: ACT510040421 Stem Option: STM50408011012 Gasket Option: GSK5080801061 Accessory Kit Option: AC7A25**0**2020 I.D. Plate: OPT187020										
					4	CMN	Revised per customer comments	Aug-31-2007		
					3	IJW	Revised For Contract Use	Jan-25-2007		
					2	MW	Revised Per L2 Meeting	Nov-20-2006		
					1	MW	Stroking speed added	Oct-26-2006		
					0	MW	Original Sizing	Sep-15-2006		
					Rev	Initials	Description	Date		
Program Rev Level: 9.2.11 S					File Name: O:\...\Technical\Contract Docs\Data Sheets\DS-CW32712.VS3 (9.2.11)					

SPX Process Equipment

LISTEN...INNOVATE...DELIVER

COPES-VULCAN®

RECOMMENDED SPARES LIST

CUSTOMER NAME	ALSTOM POWER CENTRALES - BELFORT	VENDOR CONTRACT N°	WH00071	DATE	21-May-07
PROJECT NAME	MARITZA EAST 1 BULGARIA	DOCUMENT N°	RSL/CW32712/01 & 02	AFTERMARKET REF	DGE/070206/IRSL8
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G. EDWARDS

Qty Of Valves	2 OFF	Description	GS Globe 8" ANSI 150
---------------	-------	-------------	----------------------

Tag N°	Serial N°	Qty Installed Per Valve	CD Drawing N°	Drawing Item	Description	Part N°	Notes	Recommended 2 Yrs Operation
--------	-----------	-------------------------	---------------	--------------	-------------	---------	-------	-----------------------------

0102LCJ31AA001	CW32712/01	1	CD32712	3,4,5,25,33,39	Assy, Trim 8" B MOD 8P NIT Consisting of #	M508010710403		1
0102LCJ31AA001	CW32712/01	1	CD32712	3+	Plug #	PLG308020103		1
0102LCJ31AA001	CW32712/01	1	CD32712	4+	Cage #	CAG30801050403		1
0102LCJ31AA001	CW32712/01	1	CD32712	5+	Seat#	SRG30810803		1
0102LCJ31AA001	CW32712/01	1	CD32712	25++	U Cup Seal #	VAS080101	1	4
0102LCJ31AA001	CW32712/01	1	CD32712	33+	Seal Retainer #	RET3080101	1	1
0102LCJ31AA001	CW32712/01	1	CD32712	39++	Retaining Ring #	S342285	1	4
0102LCJ31AA001	CW32712/01	1	CD32712	6+	Stem	STM310216002	1	1
0102LCJ31AA001	CW32712/01	1	CD32712	9++	Bonnet Gasket	S197477	1	4
0102LCJ31AA001	CW32712/01	1	CD32712	10+	Gland Washer	S373407		4
0102LCJ31AA001	CW32712/01	1	CD32712	16++	Gland Packing	S388491	1	4
0102LCJ31AA001	CW32712/01	1	CD32712	18+	Spirol Pin #	U20-120	1	1
0102LCJ31AA001	CW32712/01	1	CD32712	20++	Trim Gasket Consisting Of ##	GSK6080801061	1	4
0102LCJ31AA001	CW32712/01	2	CD32712	20++	Trim Gasket #	S269587	1	8
0102LCJ31AA001	CW32712/01	1	See Manual	14,30,32,33,35,36	Actuator Spares Kit 100R Consisting of ###	C80135-AQA		1
0102LCJ31AA001	CW32712/01	1	See Manual	14+	Diaphragm # ##	S185989BPP		1
0102LCJ31AA001	CW32712/01	1	See Manual	32++	Gasket # ##	S356999		1
0102LCJ31AA001	CW32712/01	1	See Manual	33+	U Cup Seal # ##	S357800		1
0102LCJ31AA001	CW32712/01	1	See Manual	35+	O Ring (Inner) # ##	S357801		1
0102LCJ31AA001	CW32712/01	1	See Manual	36+	O Ring (Outer) # ##	S357802		1
0102LCJ31AA001	CW32712/01	1	See Manual	30+	Bushing	S356093		1

NOTES

1 Please note that items marked with a [1], must be changed during an inspection or maintenance overhaul it should be ensured that these items are available before commencing the inspection.
Do Not Re-Use

COMMENTS