

<b>COPES-VULCAN, SPX Process Equipment</b> Road Two, Industrial Estate, Winsford, Cheshire. United Kingdom Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275					<b>CONTROL VALVE SPECIFICATION SHEET</b>					
Customer Name: <b>ALSTOM POWER CENTRALES - BELFORT</b> Customer Inquiry: <b>EMAIL</b> Customer PO: <b>745117 P12 73077</b> Ultimate User: <b>MARITZA EAST 1 BULGARIA</b> Tag: <b>01/02 LCA31AA001</b> Application: <b>RECIRCULATION VALVE</b>					CV Inquiry: <b>DMS/060909/PM1</b> CV Job: <b>WH/00071</b> CV Job Ref: <b>CW32718</b> CV Serial#: <b>07CW32718/01-02</b> Item: <b>19</b> Quantity: <b>2</b>					
Description : 8 Inch, Class 300 STD, FLG, A216 WCB, GS, CV700 160D										
FLUID: <b>Water</b>		SERVICE CONDITIONS								
	FLOW t/hr	P1 bar.a	P2 bar.a	Temp deg C	Cv Cv	Cv (%)	Travel (%)	Valve Outlet Vel. ft/sec	Noise (dBA)	Remarks
COND 1	350	18.5	0.500	37.4	96.0	85%	86%	10	<75	
COND 2	350	30.4	0.470	24.7	74.3	66%	70%	10	<75	
COND 3	105	29.5	0.071	24.7	22.48	20%	30%	3	<75	
COND 4										
COND 5										
SHUTOFF		36	1.01		Allowable Leakage:			Predicted noise level with		Insulation 0.0 Inch
DESIGN		36		80	ANSI FCI 70-2 Class IV			Insulation (IEC 60534-8-3)		
BODY AND BONNET										
Style: <b>GS - General Service, Globe</b> Size: <b>8 Inch</b> ASME Class: <b>300 Standard</b> Body Inlet: <b>Flanged, Raised Face Per ANSI B16.25</b> Body Outlet: <b>Flanged, Raised Face Per ANSI B16.25</b> Material: <b>ASTM A216 WCB</b> Inlet Pipe: <b>8" Sch 40</b> Outlet Pipe: <b>8" Sch 40</b>					Bonnet Type: <b>Bolted</b> Packing Material: <b>Grafoil</b> Packing Hardware: <b>Stainless Steel</b> Options: <b>Double Packed (w/leakoff Tapped &amp; Plugged)</b> Service: <b>Continuous Modulation</b>					
TRIM										
Size: <b>8 Inch with 8 Turns</b> Style: <b>RAVEN (Balanced with Ucup seal)</b> Flow Direction: <b>OVER THE WEB</b> Stem Diameter: <b>1.00 Inch</b> Characteristic: <b>RAVEN</b>					Seat Type: <b>Metal</b> Trim Material: <b>400/70SST &amp; 300SST Disc Stack</b> Max. Cv Available: <b>112.8 @Max Travel of 2.5" (+/-1/8)</b> Min. Controllable Cv of Trim: <b>3.44</b>					
ACTUATOR										
Actuator Model: <b>CV700 160D</b>  Action: <b>Direct (Air Fail Open)</b> Handwheel: <b>None</b> Frame Material: <b>Ductile Iron</b> Air Pressure Available: <b>4.0 bar.g</b> Air Pressure Required: <b>1.9 bar.g</b>					Actuator Mounting Style: <b>4 x Studded</b> Actuator Spring: <b>357572</b> Spring Rate: <b>640 lbf/in</b> Max Stem Thrust Required to Close: <b>1094 lbf</b> Max Stem Thrust Required to Open: <b>482 lbf</b> Bench Set: <b>5 - 15 psi.g</b>					
ACCESSORIES										
Positioner: <b>Siemens SIPART PS2, Single Acting</b> Positioner Input Range: <b>4-20 mA</b> Position FeedBack Module (4-20mA): <b>YES</b> Alarm Module: <b>NO</b> HART Module: <b>NO</b>  Piping: <b>3/8" Stainless Steel Tubing (Hoke)</b> Limit Switches: <b>None</b>					Airlock: <b>None</b> Filter/Regulator: <b>Bellofram 51FR c/w gauge Qty: 1</b> Solenoid Valve: <b>None</b> Booster Relay: <b>RK1000 Qty: 1</b> Additional Acc'y: <b>Pneumatic Isolation Valve Qty: 1</b>					
COMMENTS										
Downstream Orifice Plate Sized at CV700 (Approx 128mm Bore) to provide a small back pressure on the valve The Orifice Plate will impart the following pressure drops - COND 1 = 0.329 bar, COND 2 = 0.332 bar, COND 3 = 0.03 bar. If the Pressure Drops are increased above these values then cavitation will occur at the orifice plate. The pressure shown on the data sheet are those before the orifice plate. Orifice Plate manufactured from 420SST, Nitrided and designed to fit between 8" ANSI 300 RF Flanges Orifice Plate Tag Number is 01/02LCA31BP001 to be marked on outside edge Stroking Speed Opening or Closing Shall be Less than 10 Seconds Gland is Double Packed For Vacuum Service										
				03	IJW	Revised For Contract Use		Jan-25-2007		
				02	MW	Revised Per L2 Meeting		Nov-20-2006		
				01	MW	Stroking Speed & Trim Exit Velocity Added		Oct-25-2006		
				00	MW	Original Data Sheet		Sep-15-2006		
				Rev	Initials	Description		Date		
Program Rev Level: <b>UK-1-2 (WS Version)</b>										



SPX Process Equipment

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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/CW32718/01 & 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 300
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Tag N°	Serial N°	Qty Installed Per Valve	CD Drawing N°	Drawing Item	Description	Part N°	Notes	Recommended 2 Yrs Operation
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	3, 4, 5, 18, 20, 21, 22, 25	Assy Trim, 8" Raven 8T 46P Consisting Of #	C99107XAQA		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	3+	Plug #	C33827-XMC		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	4+	Trim Slack #	C33825-AQA		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	5+	Seat#	C32826-XMC		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	18+	Spiral Pin #	U20-122		1
01/02LCA31AA001	CW32718/01 & 02	2	CD32718	20++	Trim Gasket #	S269587	1	4
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	21+	Trim Spacer #	C33824-XMC		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	25++	U Cup Seal #	C27727-BPP	1	4
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	6+	Stem	STM320316001		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	9++	Bonnet Gasket	S197477	1	4
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	10+	Gland Washer	S373408		1
01/02LCA31AA001	CW32718/01 & 02	1	CD32718	16++	Gland Packing	S368496	1	4
01/02LCA31AA001	CW32718/01 & 02	1	See Manual	5,	Actuator Spares Kit 160D Consisting of ##	C80062-AQA		1
01/02LCA31AA001	CW32718/01 & 02	1	See Manual	5+	Diaphragm #	S18590BPP		1

NOTES

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COMMENTS

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