

<div>COPES-VULCAN, SPX Process Equipment</div> <div>Road Two, Industrial Estate, Winsford, Cheshire. United Kingdom</div> <div>Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275</div>					<div>CONTROL VALVE</div> <div>SPECIFICATION SHEET</div>					
Customer Name: <b>ALSTOM POWER CENTRALES - BELFORT</b>					CV Inquiry: <b>DMS/060909/PM1</b>					
Customer Inquiry: <b>EMAIL</b>					CV Job: <b>WH/00071</b>					
Customer PO: <b>745117 P12 73077</b>					CV Job Ref: <b>CW32702</b>					
Ultimate User: <b>MARITZA EAST 1 BULGARIA</b>					CV Serial#: <b>07CW32702/01-02</b>					
Tag: <b>01/02LAB40 AA002</b>					Item: <b>03</b>					
Application: <b>DRUM LEVEL NORMAL CONTROL VALVE</b>					Quantity: <b>2</b>					
Description : <b>8 Inch, Class 2500 STD, BW, A217 WC6, SD, Pneumatic Piston</b>										
FLUID: <b>Water</b>		SERVICE CONDITIONS								
	FLOW t/hr	P1 bar.a	P2 bar.a	Temp deg C	Cv	Cv (%)	Travel (%)	Valve Outlet Vel. ft/sec	Noise (dBA)	Trim Exit Vel. m/sec
COND 1	960.5	213.7	203.7	182.4	402.5	85%	79%	32	<75	20.17
COND 2	889.2	210.0	200.0	179.0	371.8	79%	71%	29	<75	20.17
COND 3	864.0	225.6	215.7	173.6	361.9	77%	69%	28	<75	20.07
COND 4	449.6	197.6	187.6	152.1	185.1	39%	34%	14	<75	20.17
COND 5	304.9	189.5	179.0	137.0	121.6	26%	23%	10	<75	20.67
SHUTOFF		333	1.01		Allowable Leakage:			Predicted noise level with		Insulation 0.0 Inch
DESIGN		333		195	ANSI FCI 70-2 Class V			Insulation (IEC 60534-8-3)		
BODY AND BONNET										
Style: <b>SD-Severe Duty, Globe</b>					Bonnet Type: <b>Pressure Seal</b>					
Size: <b>8 Inch</b>					Packing Material: <b>Teflon</b>					
ASME Class: <b>2500 Standard</b>					Packing Hardware: <b>Stainless Steel</b>					
Body Inlet: <b>Butt Weld, Sch 160 Per ANSI B16.25, Fig. 2b</b>					Options: <b>Single Packed</b>					
Body Outlet: <b>Butt Weld, Sch 160 Per ANSI B16.25, Fig. 2b</b>					Service: <b>Continuous Modulation</b>					
Material: <b>ASTM A217 WC6</b>										
Inlet Pipe: <b>310mm ID x 25.5mm WT</b>					Inlet Reducer: <b>8" Sch 160 x 310mm ID x 25.5mm WT, Length: 12.00 In., 15NiCuMoNb5</b>					
Outlet Pipe: <b>310mm ID x 25.5mm WT</b>					Outlet Expander: <b>8" Sch 160 x 310mm ID x 25.5mm WT, Length: 12.00 In., 15NiCuMoNb5</b>					
TRIM										
Size: <b>8 Inch with 2 Turns</b>					Seat Type: <b>Metal</b>					
Style: <b>RAVEN (Balanced with Ucup seal)</b>					Trim Material: <b>400/70 SST &amp; 300SST Disc Stack</b>					
Flow Direction: <b>OVER THE WEB</b>					Max. Cv Available: <b>472.2 @Max Travel of 4.5" (+/-1/8)</b>					
Stem Diameter: <b>1.25 Inch</b>					Min. Controllable Cv of Trim: <b>1.29</b>					
Characteristic: <b>RAVEN</b>										
ACTUATOR										
Actuator Model: <b>Pneumatic Piston</b>					Actuator Mounting Style: <b>Studded</b>					
18" Diameter					Actuator Spring: <b>TBA</b>					
Action: <b>Direct (Air Fail Open)</b>					Spring Rate: <b>TBA</b>					
Handwheel: <b>None</b>					Max Stem Thrust Required to Close: <b>12286 lbf/in</b>					
Frame Material: <b>Ductile Iron</b>					Max Stem Thrust Required to Open: <b>4577 lbf</b>					
Air Pressure Available: <b>5.0 bar.g</b>					Bench Set: <b>N/A psi.g</b>					
Air Pressure Required: <b>3.5 bar.g</b>										
ACCESSORIES										
Positioner: <b>Siemens SIPART PS2, Single Acting</b>					Airlock: <b>None</b>					
Positioner Input Range: <b>4-20 mA</b>					Filter/Regulator: <b>Davis Pneumatics, w/Gauge</b> Qty: 1					
Position FeedBack Module (4-20mA): <b>YES</b>					Solenoid Valve: <b>None</b>					
Alarm Module: <b>NO</b>					Booster Relay: <b>As Required for Stroke Speed</b>					
HART Module: <b>NO</b>					Additional Acc'y: <b>Pneumatic Isolation Valve</b> Qty: 1					
Piping: <b>1/2" Stainless Steel Tubing (NERO)</b>										
Limit Switches: <b>None</b>										
COMMENTS										
Stroking Speed Opening or Closing shall be less than 30 Seconds										
Trim Exit Velocities are Shown										
Reducer / Transition pieces shall be provided on the inlet & Outlet Connection to match the customer pipe size and material.										
	06	CMN	Design and Shut Off Pressures were 331 Customer Req						Dec-24-2007	
	05	CMN	Shut Off was Class IV						Nov-14-2007	
	04	ADA	DESIGN REVIEW						Mar-28-2007	
	03	IJW	Issued For Contract Use						Jan-24-2007	
	02	MW	Revised Per L2 Meeting						Nov-20-2006	
	01	MW	Revised to RAVEN Trim						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>										



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/CW32702/01 & 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	SD Globe 8" ANSI 2500
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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
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	3,4,5,18,20,21,22,25,39,88,107,142	Assy Trim, 8" Raven 2T 32P Consisting Of #	C99107VQAQ		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	3+	Plug #	C33751-XMC		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	4+	Trim Slack #	C33745-AQA		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	5+	Seat#	C32826-XMC		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	18+	Spirol Pin #	U20-126		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	20++	Trim Gasket #	S269593	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	21+	Trim Spacer #	C33754-XMA		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	25++	U Cup Seal #	C27727-BPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	39	Retaining Ring #	C33040-XHE		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	89,107	Assy Split Ring Bolt & Bar #	C33042-AQA		1
01/02LAB40AA002	CW32702/01 & 02	16	CD32702	89	Split Ring Bolt #	C33038-XHR		16
01/02LAB40AA002	CW32702/01 & 02	14	GD32702	107+	Locking Bar #	SBF0030X0120		14
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	142++	U Cup Seal #	C33753-BPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	6+	Stem	STM330431004		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	46++	Pressure Seal	C22971UBPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	16++	Gland Packing	C11578-BPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	144+	Gland Spring	C08421-BPP		1
01/02LAB40AA002	CW32702/01 & 02	1	See Manual		Actuator Repair Kit	AKX25-256		1

NOTES

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