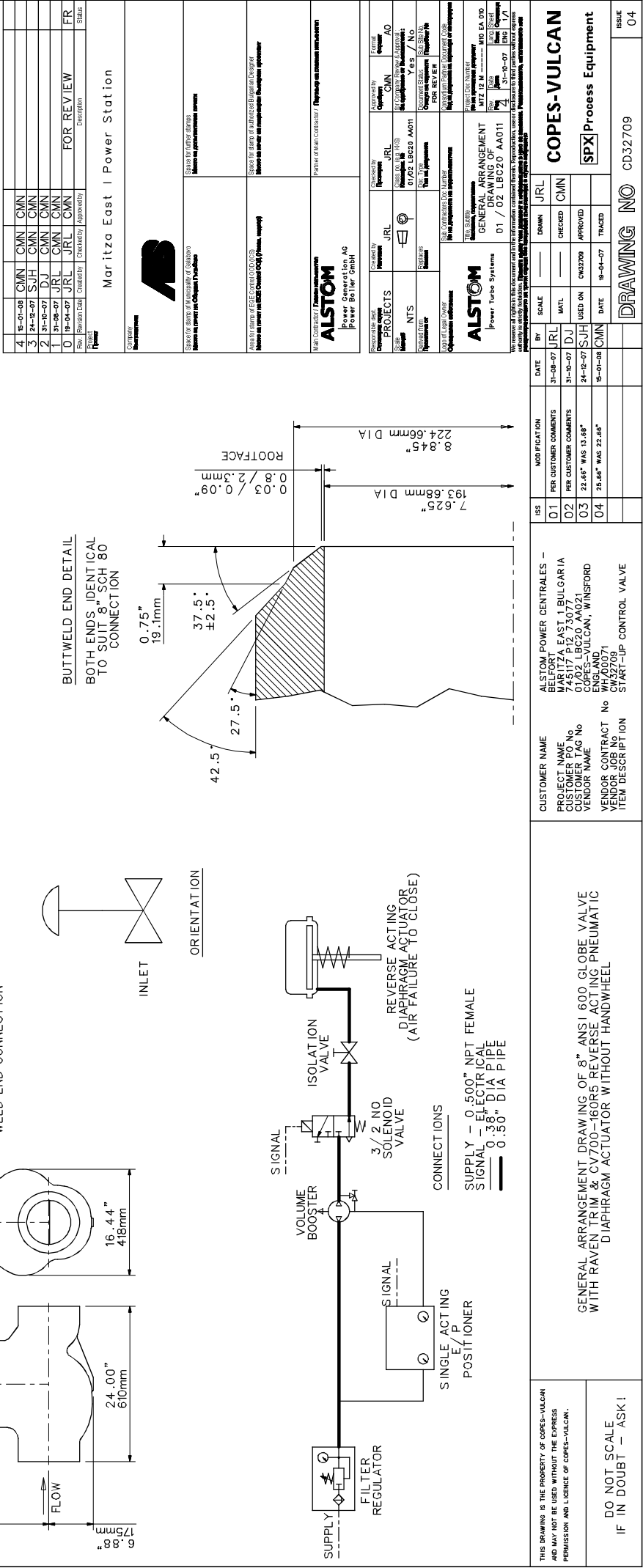
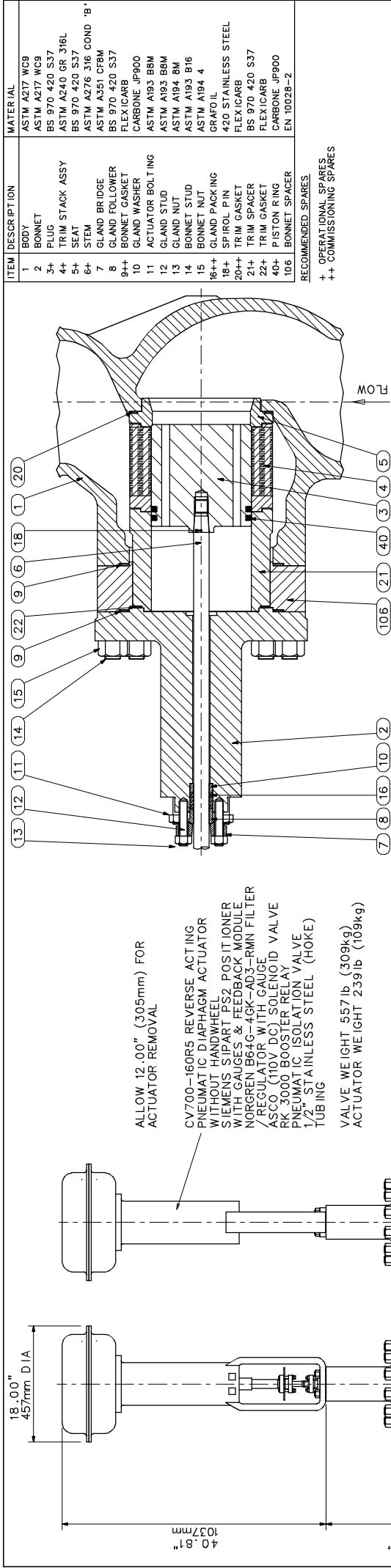


<div>COPES-VULCAN, SPX Process Equipment</div> <div>Road Two, Industrial Estate, Winsford, Cheshire. United Kingdom</div> <div>Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275</div>					<div>CONTROL VALVE</div> <div>SPECIFICATION SHEET</div>					
Customer Name: ALSTOM POWER CENTRALES - BELFORT					CV Inquiry: DMS/060909/PM1					
Customer Inquiry: EMAIL					CV Job: WH/00071					
Customer PO: 745117 P12 73077					CV Job Ref: CW32709					
Ultimate User: MARITZA EAST 1 BULGARIA					CV Serial#: 07CW32709/01-02					
Tag: 01/02 LBC20 AA011					Item: 10					
Application: START-UP CONTROL VALVE					Quantity: 2					
Description : 8 Inch, Class 600 STD, BW, A217 WC9, GS, CV700 160-5R										
FLUID: Steam		SERVICE CONDITIONS								
	FLOW t/hr	P1 bar.a	P2 bar.a	Temp deg C	Cv	Cv (%)	Travel (%)	Valve Outlet Vel. ft/min	Noise (dBA)	Velocity Head bar.a
COND 1	31.8	16.54	15.0	299.5	396.2	87%	83%	9373	<70	0.30
COND 2	64.2	39.2	15.0	334.0	164.06	36%	37%	19420	76	3.73
COND 3										
COND 4										
COND 5										
SHUTOFF		54	1.01		Allowable Leakage:			Predicted noise level with		Insulation 3.0 Inch
DESIGN		54		500	ANSI FCI 70-2 Class IV			Insulation (IEC 60534-8-3)		
BODY AND BONNET										
Style: GS - General Service, Globe					Bonnet Type: Bolted w/Extension & Bonnet Spacer					
Size: 8 Inch					Packing Material: Grafoil					
ASME Class: 600 Standard					Packing Hardware: Stainless Steel					
Body Inlet: Butt Weld, Sch 40 Per ANSI B16.25, Fig. 2b					Options: Single Packed					
Body Outlet: Butt Weld, Sch 40 Per ANSI B16.25, Fig. 2b					Service: Continuous Modulation					
Material: ASTM A217 WC9										
Inlet Pipe: 8" Sch 8mm WT										
Outlet Pipe: 8" Sch 8mm WT										
TRIM										
Size: 8 Inch with 4,2 Turns					Seat Type: Metal					
Style: RAVEN (Balanced with Piston rings)					Trim Material: 400/70 SST & 300SST Disc Stack					
Flow Direction: UNDER THE WEB					Max. Cv Available: 457.5 @Max Travel of 4.5" (+/-1/8)					
Stem Diameter: 1.00 Inch					Min. Controllable Cv of Trim: 12.96					
Characteristic: RAVEN										
ACTUATOR										
Actuator Model: CV700 160-5R					Actuator Mounting Style: 4 x Studded					
Action: Reverse (Air Fail Closed)					Actuator Spring: 357580					
Handwheel: None					Spring Rate: 768 lbf/in					
Frame Material: Ductile Iron					Max Stem Thrust Required to Close: 1422 lbf					
Air Pressure Available: 4.0 bar.g					Max Stem Thrust Required to Open: 730 lbf					
Air Pressure Required: 2.9 bar.g					Bench Set: 11 - 32 psi.g					
ACCESSORIES										
Positioner: Siemens SIPART PS2, Single Acting					Airlock: None					
Positioner Input Range: 4-20 mA					Filter/Regulator: Norgren B64G-4GK-AD3-RMN					Qty: 1
Position FeedBack Module (4-20mA): YES					Solenoid Valve: ASCO (110V DC)					Qty: 1
Alarm Module: NO					De-Energise to Vent Actuator					
HART Module: NO					Booster Relay: RK 3000					Qty: 1
Piping: 1/2" Stainless Steel Tubing (Hoke)					Additional Acc'y: Pneumatic Isolation Valve					
Limit Switches: None										
COMMENTS										
Solenoid Tag Number 01/02 LBC20AA011 A										
Stroking Speed Opening or Closing shall be less than 10 Seconds										
				06	CMN	Cond 2 flow changed. Tag No corrected			Oct-31-2007	
				05	CMN	Per Customer Comments			Aug-31-2007	
				04	JRL	Tag Number Change			Aug-23-2007	
				03	IJW	Released For Contract Use			Jan-24-2007	
				02	MW	Revised For L2 Meeting			Nov-20-2006	
				01	MW	Revised For RAVEN Trim			Oct-25-2006	
				00	MW	Original Data Sheet			Aug-31-2006	
				Rev	Initials	Description			Date	
Program Rev Level: UK-1-2 (WS Version)										



SPX Process Equipment

LISTEN₀₀₀₀₀INNOVATE₀₀₀₀₀DELIVER

COPES-VULCAN®

RECOMMENDED SPARES LIST

CUSTOMER NAME	ALSTOM POWER CENTRALES - BELFORT	VENDOR CONTRACT N°	WH/00071	DATE	21-May-07
PROJECT NAME	MARITZA EAST 1 BULGARIA	DOCUMENT N°	RSUCW32709/01 & 02	AFTERMARKET REF	DGE070206/RSLS
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G.EDWARDS

Qty Of Valves	2 OFF	Description	GS Globe 8" ANSI 600
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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
0102LBC20AA011	CW32709/01 & 02	1	CD32709	3,4,5,18,20,21,22,40	Assy Trim, Raven 8" 4, 2T 64P Consisting Of #	C99127AAQA		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	3+	Plug #	C33752-XMC		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	4+	Trim Stack #	C33829-AQA		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	5+	Seat #	C32826-XMC		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	18+	Spirol Pin #	U20-122		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	20++	Trim Gasket #	S269587	1	2
0102LBC20AA011	CW32709/01 & 02	1	CD32709	21+	Trim Spacer #	C33836-XMC		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	22+	Trim Gasket #	S353698	1	2
0102LBC20AA011	CW32709/01 & 02	2	CD32709	40++	Piston Ring #	C30140-BPP	1	4
0102LBC20AA011	CW32709/01 & 02	1	CD32709	6+	Stem	STM320328001		1
0102LBC20AA011	CW32709/01 & 02	1	CD32709	9++	Bonnet Gasket	S197477	1	2
0102LBC20AA011	CW32709/01 & 02	1	CD32709	10+	Gland Washer	S373408		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	14,30,32,33,35,36	Actuator Spares Kit 160R-L 1" Consisting of ###	C80141-AQA		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	14+	Diaphragm ## #	S195964BPP		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	32++	Gasket ## #	S356999		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	33+	U Cup Seal # #	S357800		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	35+	O Ring (Inner) ## #	S357801		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	36+	O Ring (Outer) ## #	S357802		1
0102LBC20AA011	CW32709/01 & 02	1	See Manual	30+	Bushing	S356093		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