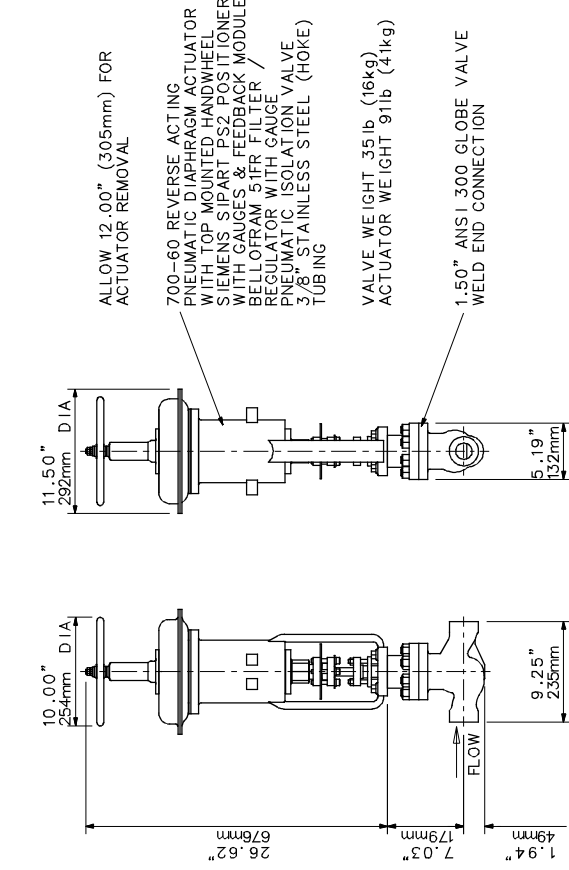
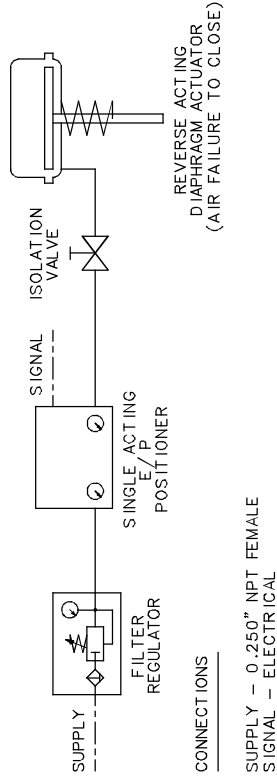


COPES-VULCAN, SPX Valves & Controls Road Two, Industrial Estate, Winsford, Cheshire, UK Phone: +44(0) 1606 552041 Fax: +44(0) 1606 558275					CONTROL VALVE SPECIFICATION SHEET					
Customer Name: ALSTOM POWER CENTRALES - BELFORT Customer Inquiry: EMAIL Customer PO: 745117 P12 73077 Ultimate User: MARITZA EAST 1 BULGARIA Tag: 09 LBG31 AA001 Application: CCCT PRESSURE CONTROL VALVE					CV Inquiry: DMS/060909/PM1 CV Job: WH/00071 CV Job Ref: CW32719 CV Serial #: 07CW32719/01 Item: 20 Quantity: 1					
Description: 1.5" (40 mm), CL300, WCB , BW, GS-700-60 RA										
FLUID: Steam		SERVICE CONDITIONS								
	FLOW (Mton/hr)	P1 (bar a)	P2 (bar a)	Temp. (deg C)	Cv	CV (%)	Travel (%)	Valve Outlet Vel. (ft/min)	Noise * (dBA)	Remarks
COND 1	0.234	15	1.2	307	1.65	75%	72%	24261	<75	
COND 2										
COND 3										
COND 4										
COND 5										
SHUTOFF		21	1	325	Allowable Leakage:			* Estimated Noise Level with 0" of Insulation		
DESIGN		21		325	Class IV					
BODY AND BONNET										
Style: GS - General Service, Globe Size: 1.5 inch ASME Class: 300 Standard Body Inlet: Butt Weld, Sch 80 per ANSI B16.25, Fig. 2b Body Outlet: Butt Weld, Sch 80 per ANSI B16.25, Fig. 2b Material: A-216 WCB Inlet Pipe: 1.5 In. (40 mm), Sch 80 Outlet Pipe: 1.5 In. (40 mm), Sch 80					Bonnet Type: Bolted Packing Material: Grafoil Packing Hardware: Stainless Steel Packing Nut Torque: 4 ft-lbs. Options: Single Packed					
TRIM										
Size: #6 with 4 Ports Style: No. CASCADE (UnBalanced) Flow Direction: UNDER THE WEB Stem Diameter: .75 in. Characteristic: CASCADE, MEDIUM					Seat Type: METAL Trim Material: 400/70 SST Max. Cv Available: 2.2 @Max. Trim Travel of 1" (±1/8) Min. Controllable Cv of Trim: 0.01					
ACTUATOR										
Style: 700 DIAPHRAGM Size: 60 (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: 1.7 bar g (25 psig)					Actuator Mounting Style: Screwed Ring Actuator Spring: 357563 Spring Rate: 720 (lbs/inch) Max. Stem Thrust Required to Close: 286 (lbs) Max. Stem Thrust Required to Open: 136 (lbs) Spring Precompression (Diaphragm Air Pressure): 6 (psig) Pressure @ Full Valve Travel (With No Internal Valve Pres.): 18 (psig)					
ACCESSORIES										
Positioner: Siemens 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: None Booster Relay: None 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 20 Seconds Stream Blow OUT trim kit to be supplied with valve										
Model = GS1.5 Body Option: BDY515110401 Bonnet Option: BNT515170401 Trim Option: TRM515940610403 Hardware Pack Option: HDP5114112 Actuator Option: ACT511020421 Stem Option: STM50215041032 Gasket Option: GSK5159902061 Accessory Kit Option: AC7A***000*0000 I.D. Plate: OPT187019					7	CMN	CVW 10181	Mar-19-2008		
					6	CMN	Shut off & Design Temps were 320	Oct-31-2007		
					5	CMR	Serial number was 07CW32719/01-02	Oct-10-2007		
					4	CMN	Revised per customer comments	Aug-31-2007		
					3	IJW	Revised For Contract Use	Jan-25-2007		
					2	MW	Revised per Clarification	Nov-21-2006		
					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-CW32719.VS3 (9.2.11)					



BOTH ENDS IDENTICAL
TO SUIT 1.5" SCH 80 PIPE

+ OPERATIONAL SPARES
++ COMMISSIONING SPARES

ALSTOM
 Power Generation AG
 Power Boiler GmbH

BY _____										SCALE _____										DOWN _____										JRL _____										<div><div>COPES-VULCAN</div><div>SPX Process Equipment</div></div>										CD 32719										ISSUE 03																													
7 J URL										7 DJ										7 J URL										7 DJ																				CHECKED _____										CWIN _____										APPROVED _____										TRACED _____									
7 J URL										7 DJ										7 J URL										7 DJ										MAIL _____										USED ON CW32719										DATE 20-04-07										DRAWING NO																			

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°	ESL/CW32719/01	AFTERMARKET REF	DGE/070206/IRSL8
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G. EDWARDS

Qty Of Valves	1 OFF	Description	GS Globe 1.5" 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
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09LBG31AA001	CW32719/01	1	CD32719	3,4,5	Assy Trim, 1.5" U 6 CAS NIT Consisting of #	M515940610403		1
09LBG31AA001	CW32719/01	1	CD32719	3+	Plug #	PLG394020803		1
09LBG31AA001	CW32719/01	1	CD32719	4+	Cage #	CAG30105060403		1
09LBG31AA001	CW32719/01	1	CD32719	5+	Seat#	SRG31559403		1
09LBG31AA001	CW32719/01	1	CD32719	6+	Stem	STM310213002		1
09LBG31AA001	CW32719/01	1	CD32719	9++	Bonnet Gasket	S286650	1	2
09LBG31AA001	CW32719/01	1	CD32719	10++	Gland Washer	S373407	2	2
09LBG31AA001	CW32719/01	1	CD32719	16++	Gland Packing	S368489	2	2
09LBG31AA001	CW32719/01	1	CD32719	20++	Trim Gasket Consisting Of ##	GSK6159902061	2	2
09LBG31AA001	CW32719/01	1	CD32719	20++	Trim Gasket #	S286712	2	2
09LBG31AA001	CW32719/01	1	See Manual	14,32,33,35,36	Actuator Spares Kit 60R Consisting of ###	C80132-AQA	1	1
09LBG31AA001	CW32719/01	1	See Manual	14+	Diaphragm #	S185988BPP	1	1
09LBG31AA001	CW32719/01	1	See Manual	32+	Gasket #	S356998	1	1
09LBG31AA001	CW32719/01	1	See Manual	33+	U Cup Seal #	S357800	1	1
09LBG31AA001	CW32719/01	1	See Manual	36+	O Ring (Inner) #	S357801	1	1
09LBG31AA001	CW32719/01	1	See Manual	36+	O Ring (Outer) #	S357802	1	1
09LBG31AA001	CW32719/01	1	See Manual	30+	Bushing	S356093	1	1

NOTES

1

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