

Road Two, Industrial Estate, Winsford, Cheshire. United Kingdom
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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 LCJ21 AA001**
Application: **LP2 EMERGENCY DRAIN**

CV Inquiry: **DMS/060909/PM1**
CV Job: **WH/00071**
CV Job Ref: **CW32710**
CV Serial#: **07CW32710/01-02**
Item: **11**
Quantity: **2**

Description : 10 Inch, Class 150 STD, BW, A217 WC9, SD, CV700 160D+TMHW

FLUID: Water

SERVICE CONDITIONS

[illegible]

BODY AND BONNET

Style: **SD-Severe Duty, Globe**
 Size: **10 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: **ASTM A217 WC9**
 Inlet Pipe: **10" Sch 40**
 Outlet Pipe: **10" Sch 40**

Bonnet Type: **Bolted**
Packing Material: **Grafoil**
Packing Hardware: **Stainless Steel**
Options: **Double Packed (w/leakoff Tapped & Plugged)**
Service: **Rarely Modulating**

TRIM

Size: **8 Inch with 2 Turns**
 Style: **RAVEN (Balanced with Ucup seal)**
 Flow Direction: **UNDER THE WEB**
 Stem Diameter: **1.00 Inch**
 Characteristic: **RAVEN**

Seat Type: **Metal**
Trim Material: **400/70SST & 300SST Disc Stack**
Max. Cv Available: **254.1 @Max Travel of 2" (+/-1/8)**
Min. Controllable Cv of Trim: **1.29**

ACTUATOR

Actuator Model: **CV700 160D+TMHW**

Actuator Mounting Style: **4 x Studded**

Action: **Direct** (Air Fail Open)

Actuator Spring: **357572**

Handwheel: Top Mounted

Spring Rate: **640** lbf/in

Frame Material: **Ductile Iron**

Max Stem Thrust Required to Close: **985** lbf

Air Pressure Available: **4.0** bar.g

Max Stem Thrust Required to Open: **399** lbf

Air Pressure Required: 1.8 bar.g

Bench Set: 6 - 15 psi.g

ACCESSORIES

Positioner: **Siemens SIPART PS2, Single Acting**

Airlock: None

Positioner Input Range: 4-20 mA

Filter/Regulator: **Norgren B64G-4GK-AD3-RMN**

Position FeedBack Module (4-20mA): **YES**

Solenoid Valve: **None**

Alarm Module: **NO**

Booster Relay: **RK 3000** Qty: **1**

HART Module: NO

Additional Acc'y: **Pneumatic Isolation Valve** Qty: **1**

Piping: 1/2" Stainless Steel Tubing (Hoke)

Limit Switches: **None**

COMMENTS

Gland is Double Packed for Vacuum Service
 Stroking Speed Opening or Closing shall be less than 10 Seconds

Fluid is Heavily Flashing at Valve Outlet, which could cause potentially high vapor velocity in the valve outlet and downstream pipework

Condition	Remarks	Calc. Flash %	Est. Outlet Vapour Vel.
COND 1	FLASHING	6.20%	78887 ft/min
COND 2	FLASHING	6.55%	73191 ft/min
COND 3	FLASHING	5.69%	47634 ft/min

04	CMN	Revised per customer comments	Aug-31-2007
03	IJW	Released For Contract Use	Jan-25-2007
02	MW	Revised Per L2 Meeting	Nov-20-2006
01	MW	Resized For RAVEN	Oct-25-2006
00	MW	Original Data Sheet	Sep-15-2006
Rev	Initials	Description	Date

Program Rev Level:	UK-1-2 (WS Version)
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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°	RSLCW3271001 & 02	AFTERMARKET REF	DGE070206RSL8
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G.EDWARDS

Qty Of Valves	2 OFF	Description	Isd Globe 10" ANSI 150
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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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0102LCJ21AA001	CW3271001 & 02	1	CD32710	3,4,5,18,20,21,22,25,71	Assy Trim, Raven 10" 2T 64P Consisting Of #	C99108GAQA		1
0102LCJ21AA001	CW3271001 & 02	1	CD32710	3+	Plug #	C33747-XMC		1
0102LCJ21AA001	CW3271001 & 02	1	CD32710	4+	Trim Stack #	C33805-AQA		1
0102LCJ21AA001	CW3271001 & 02	1	CD32710	5+	Seat #	C32826-XMC		1
0102LCJ21AA001	CW3271001 & 02	1	CD32710	18+	Spirol Pin #	U20-122		1
0102LCJ21AA001	CW3271001 & 02	2	CD32710	20++	Trim Gasket # #	S267466Q	1	8
0102LCJ21AA001	CW3271001 & 02	1	CD32710	21+	Trim Spacer #	C33803-XMA		1
0102LCJ21AA001	CW3271001 & 02	1	CD32710	22++	Trim Gasket # #	S269587	1	4
0102LCJ21AA001	CW3271001 & 02	1	CD32710	25+	U Cup Seal #	C27727-BPP	1	4
0102LCJ21AA001	CW3271001 & 02	1	CD32710	71	Seat Adaptor Ring #	ADR3100802		
0102LCJ21AA001	CW3271001 & 02	1	CD32710	6+	Stem	STM320317502		1
0102LCJ21AA001	CW3271001 & 02	1	CD32710	9++	Bonnet Gasket	S286657	1	4
0102LCJ21AA001	CW3271001 & 02	1	CD32710	10+	Gland Washer	S373408		4
0102LCJ21AA001	CW3271001 & 02	1	CD32710	16++	Gland Packing	S368496	1	1
0102LCJ21AA001	CW3271001 & 02	1	See Manual	5,	Actuator Spares Kit 160D Consisting of # #	C80062-AQA		1
0102LCJ21AA001	CW3271001 & 02	1	See Manual	5+	Diaphragm #	S185990BPP		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