

Road Two, Industrial Estate, Winsford, Cheshire. United Kingdom
Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275

Customer Name: **ALSTOM POWER CENTRALES - BELFORT**
Customer Inquiry: **EMAIL**
Customer PO: **745117 P12 73077**
Ultimate User: **MARITZA EAST 1 BULGARIA**
Tag: **01/02 LBC20 AA011**
Application: **START-UP CONTROL VALVE**

CV Inquiry: **DMS/060909/PM1**
CV Job: **WH/00071**
CV Job Ref: **CW32709**
CV Serial#: **07CW32709/01-02**
Item: **10**
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 (IEC 60534-8-3)		Insulation 3.0 Inch
DESIGN		54		500	ANSI FCI 70-2	Class IV				

BODY AND BONNET

Style: **GS - General Service, Globe**
 Size: **8 Inch**
 ASME Class: **600 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: **8" Sch 8mm WT**
 Outlet Pipe: **8" Sch 8mm WT**

Bonnet Type: **Bolted w/Extension & Bonnet Spacer**
Packing Material: **Grafoil**
Packing Hardware: **Stainless Steel**
Options: **Single Packed**
Service: **Continuous Modulation**

TRIM

Size: **8 Inch with 4,2 Turns**
 Style: **RAVEN (Balanced with Piston rings)**
 Flow Direction: **UNDER THE WEB**
 Stem Diameter: **1.00 Inch**
 Characteristic: **RAVEN**

Seat Type: **Metal**
Trim Material: **400/70 SST & 300SST Disc Stack**
Max. Cv Available: **457.5 @Max Travel of 4.5" (+/-1/8)**
Min. Controllable Cv of Trim: **12.96**

ACTUATOR

Actuator Model: **CV700 160-5R**

Actuator Mounting Style: **4 x Studded**

Action: **Reverse** (Air Fail Closed)

Actuator Spring: **357580**

Handwheel: **None**

Spring Rate: 70

Frame Material: **Ductile Iron**

Max Stem Thrust Required to Close: 1422

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

Max Stem Thrust Required to Open: **730**

Air Pressure Required: **2.9 bar.g**

Bench Set: 11 - 32

lbf/in**lbf****lbf**

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: **ASCO (110V DC)**

Alarm Module: **NO**

De-Energise to Vent Actuator

HART Module: NO

Booster Relay: **RK 3000**

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

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

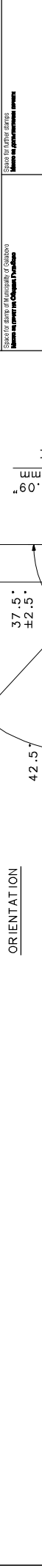
Limit Switches: **None**

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)
--------------------	----------------------------



THIS DRAWING IS THE PROPERTY OF COPES-VULCAN AND MAY NOT BE USED WITHOUT THE EXPRESS PERMISSION AND LICENCE OF COPES-VULCAN.	GENERAL ARRANGEMENT DRAWING OF 8" ANSI 600 GLOBE VALVE WITH RAVEN TRIM & CV700-160RS REVERSE ACTING PNEUMATIC DIAPHRAGM ACTUATOR WITHOUT HANDWHEEL	CUSTOMER NAME PROJECT NAME CUSTOMER P.O. No. CUSTOMER TAG No. VENDOR NAME VENDOR CONTRACT VENDOR JOB No. ITEM DESCRIPTION	ALSTOM POWER CENTRALES - ALSTOM LTD. MARTIZA EAST 1 BULGARIA 74517 PIZ 73077 74517 PIZ 73077 COPES-VULCAN ENGLAND, WINSFORD No START-UP CONTROL VALVE	ISS	MODIFICATION	DATE	BY	SCALE	JRL	DWNING	JRL		
				01	PER CUSTOMER COMMENTS	3-08-97	JRL	MAFL	CWNN	CWNN			
				02	PER CUSTOMER COMMENTS	31-10-97	DJ	USED ON	APPROVED				
				03	22.68" WAS 13.68"	24-12-97	SJH						
				04	28.68" WAS 22.68"	15-01-98	CWNN	DATE	18-04-97	TRAISED			
DO NOT SCALE IF IN DOUBT - ASK!												DRAWING NO CD32709	ISSUE NO 04

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
---------------	-------	-------------	----------------------

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	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