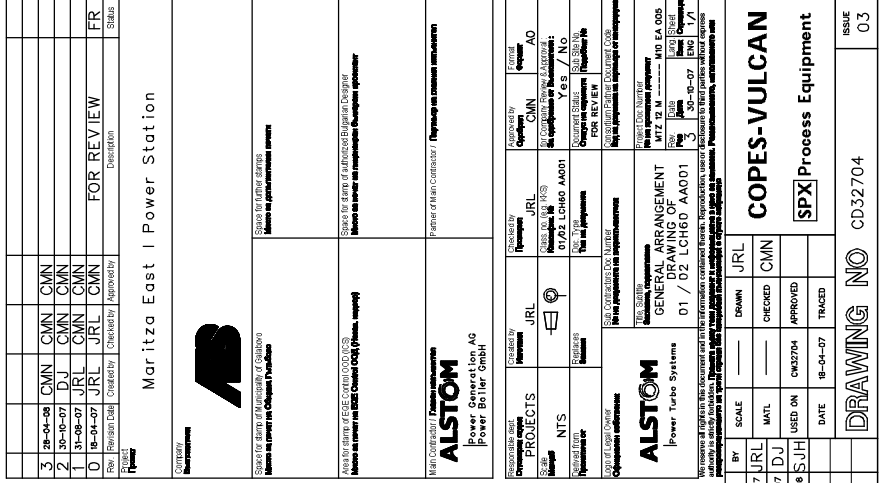
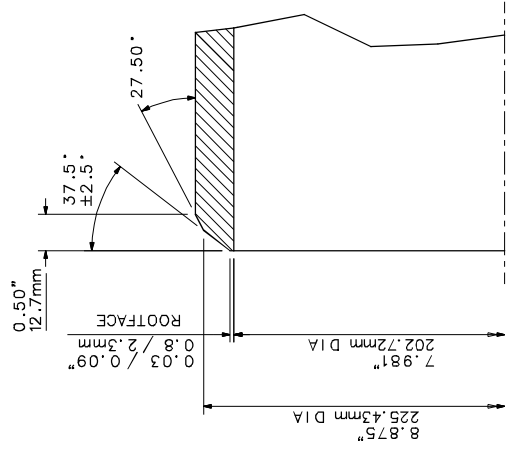
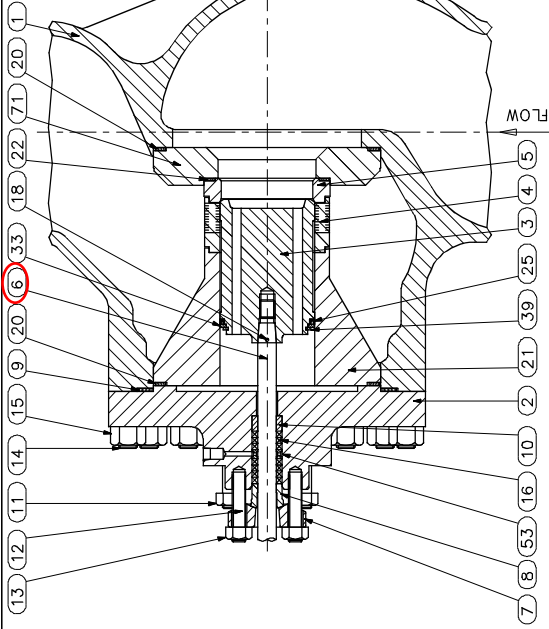


COPES-VULCAN, SPX Process Equipment Road Two, Industrial Estate, Winsford, Cheshire, United Kingdom Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275					CONTROL VALVE SPECIFICATION SHEET					
Customer Name: ALSTOM POWER CENTRALES - BELFORT Customer Inquiry: EMAIL Customer PO: 745117 P12 73077 Ultimate User: MARITZA EAST 1 BULGARIA Tag: 01/02 LCH60 AA001 Application: HP6 EMERGENCY DRAIN					CV Inquiry: DMS/060909/PM1 CV Job: WH/00071 CV Job Ref: CW32704 CV Serial#: 07CW32704/01-02 Item: 05 Quantity: 2					
Description : 8 Inch, Class 300 STD, BW, A216 WCB, GS, CV700 100D										
FLUID: Water		SERVICE CONDITIONS								
	FLOW t/hr	P1 bar.a	P2 bar.a	Temp deg C	Cv	Cv (%)	Travel (%)	Valve Inlet Vel. ft/sec	Noise (dBA)	Trim Exit Vel. m/sec
COND 1	114.0	20.70	0.283	193.20	47.8	86%	88%	3.7	---	20.82
COND 2	103.2	19.80	0.260	190.30	43.7	78%	82%	3.3	---	20.37
COND 3	19.2	6.70	0.053	158.20	20.3	36%	52%	0.6	---	11.88
COND 4										
COND 5										
SHUTOFF		26	1.01		Allowable Leakage:			Predicted noise level with Insulation (IEC 60534-8-3)		Insulation 0.0 Inch
DESIGN		26		230	ANSI FCI 70-2 Class V					
BODY AND BONNET										
Style: GS - General Service, Globe Size: 8 Inch ASME Class: 300 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 A216 WCB Inlet Pipe: 8" Sch 40 Outlet Pipe: 8" Sch 40					Bonnet Type: Bolted Packing Material: Grafoil Packing Hardware: Stainless Steel Options: Double Packed (w/leakoff tapped & Plugged) Service: Rarely Modulating					
TRIM										
Size: 4 Inch with 4 Turns Style: RAVEN (Balanced with Ucup seal) Flow Direction: UNDER THE WEB Stem Diameter: 0.75 Inch Characteristic: RAVEN					Seat Type: Metal Trim Material: 400/70 SST & 300SST Disc Stack Max. Cv Available: 55.7 @Max Travel of 1.5" (+/-1/8) Min. Controllable Cv of Trim: 0.66					
ACTUATOR										
Actuator Model: CV700 100D Action: Direct (Air Fail Open) Handwheel: None Frame Material: Ductile Iron Air Pressure Available: 5.0 bar.g Air Pressure Required: 2.4 bar.g					Actuator Mounting Style: 4 x Studded Actuator Spring: 357566 Spring Rate: 600 lbf/in Max Stem Thrust Required to Close: 1595 lbf Max Stem Thrust Required to Open: 240 lbf Bench Set: 5 - 14 psi.g					
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: Norgren B64G-4GK-AD3-RMN Qty: 1 Solenoid Valve: None Booster Relay: RK 3000 Qty: 1 Additional Acc'y: Pneumatic Isolation Valve Qty: 1					
Piping: 1/2" Stainless Steel Tubing (Hoke) Limit Switches: None										
COMMENTS										
Valve Gland is Double Packed for Vacuum Service Stroking Speed Opening or Closing shall be less than 4 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	23.03%	308316 ft/min		
					COND 2	FLASHING	22.77%	299679 ft/min		
					COND 3	FLASHING	21.72%	251288 ft/min		
					04	JRL	Per customer comments		Aug-30-2007	
					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.	<p align="center">GENERAL ARRANGEMENT OF 8" ANSI 300 GLOBE VALVE WITH RAVEN TRIM & CV700-100D DIRECT ACTING PNEUMATIC DIAPHRAGM ACTUATOR WITHOUT HANDWHEEL</p>	CUSTOMER NAME	ALSTOM POWER CENTRALES – BELFORT A EAST 1 BULLCAR IA		
		PROJECT NAME	745117_P1Z_73077		
		CUSTOMER PO No	01A02 LCHGO AA001		
		CUSTOMER TAG No	COPES-VULCAN, WINSPORD		
		VENDOR NAME	COPES-VULCAN, WINDSPORE WH/A0071		
		No	HP6 EMERGENCY DRAIN		
VENDOR CONTRACT VENDOR JOB NO		CU52704			
ITEM DESCRIPTION					
ISS	MODIFICATION	DATE	SFT	SCALE	JRL
01	PER CUSTOMER COMMENTS	31-09-07	—	—	—
02	PER CUSTOMER COMMENTS	30-09-07	DJ	MATL	CWIN
03	DRAWING ERROR	28-04-08	SHH	USED ON	CW32704
				DATE	1B-04-07
				DRAWING NO CD32704	
				REUSE	
				03	

COPES-VULCAN®

RECOMMENDED SPARES LIST

SPX Process Equipment

LISTEN...INNOVATE...DELIVER

CUSTOMER NAME	ALSTOM POWER CENTRALES - BELFORT	VENDOR CONTRACT N°	WH/00071	DATE	21-May-07
PROJECT NAME	MARITZA EAST 1 BULGARIA	DOCUMENT N°	RSL/CW32704/01 & 02	AFTERMARKET REF	DGE/070206/RSL8
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G. EDWARDS

Qty Of Valves	2 OFF	Description	GS Globe 8" 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
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	3,4,5,18,20,21,22,25,33,35,71	Assy Trim, Raven 8" 4T 40P Consisting Of #	C89107WAAQ		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	3+	Plug #	C32924-XMC		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	4+	Trim Slack #	C33819-AQA		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	5+	Seat#	SRG30410403		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	18+	Spirol Pin #	U20-120		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	20++	Trim Gasket #	S325432	1	4
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	21+	Trim Spacer #	C33820-XMC		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	22++	Trim Gasket #	S289587	1	4
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	25+	U Cup Seal #	VAS040101	1	4
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	33+	Seal Retainer #	RET3040104		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	39+	Retaining Ring #	S342287	1	4
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	71	Seat Adaptor Ring #	ADR3080402		
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	6+	Stem	STM310214502		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	9++	Bonnet Gasket	S197477	1	4
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	10+	Gland Washer	S373407		1
01/02LCH60AA001	CW32704/01 & 02	1	CD32704	16++	Gland Packing	S368491	1	4
01/02LCH60AA001	CW32704/01 & 02	1	See Manual	14	Actuator Spares Kit 10D Consisting of ###	C80134-AQA		1
01/02LCH60AA001	CW32704/01 & 02	1	See Manual	14+	Diaphragm ###	S185989BPP		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