

RECOMMENDED SPARES LIST

|                |                            |                    |                |                 |                |
|----------------|----------------------------|--------------------|----------------|-----------------|----------------|
| CUSTOMER NAME  | ALSTOM POWER GENERATION AG | VENDOR CONTRACT N° | WG00799        | DATE            | 04-Jun-07      |
| PROJECT NAME   | MARTIZA EAST 1, BULGARIA   | DOCUMENT N°        | RSL CW32609/01 | AFTERMARKET REF | WB/070111/RSL3 |
| CUSTOMER PO N° | D61-450057376              | REV STATUS         | 0              | CONTACT         | W. BAKER       |

|               |   |             |                   |
|---------------|---|-------------|-------------------|
| Qty OT Valves | 1 | Description | GLOBE 1" ANSI 300 |
|---------------|---|-------------|-------------------|

| Tag N°   | Serial N°  | Qty Installed Per Valve | CD Drawing N°   | Drawing Item | Description                               | Part N°         | Notes | Recommended 2 Yrs Operation | Delivery | Unit Price | Total Ex-Works    |
|--|------------|-------------------------|-----------------|--------------|---|-----------------|-------|-----------------------------|----------|------------|-------------------|
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 3,4.5        | Assy Trim, 1" U 1 CAS Consisting of #     | TRM501890610402 | ③     | 1                           | 8 weeks  | € 1,342.50 | € 1,342.50        |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 3+           | Plug #                                    | PLG389020802    |       | 1                           | 8 weeks  | € 412.50   |                   |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 4+           | Page #                                    | CAG30105060402  | ③     | 1                           | 8 weeks  | € 637.50   |                   |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 5+           | Seat #                                    | SBG30158902     |       | 1                           | 8 weeks  | € 292.50   |                   |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 6+           | Stem                                      | STM310213002    |       | 1                           | 8 weeks  | € 262.50   | € 262.50          |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 9++          | Bonnet Gasket                             | 286549          | ①     | 2                           | 8 weeks  | € 22.50    | € 45.00           |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 10++         | Gland Washer                              | 373407          |       | 2                           | 8 weeks  | € 75.00    | € 150.00          |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 16++         | Gland Packing                             | 368489          | ①     | 2                           | 8 weeks  | € 82.50    | € 165.00          |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 18+          | Spirol Pin #                              | U20-119         |       | 1                           | 8 weeks  | € 3.00     | € 3.00            |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 20++         | Trim Gasket Consisting Of # #             | GSK5018902061   | ①     | 2                           | 8 weeks  | € 37.50    | € 75.00           |
| 01MAW15AA011   | CW32609/01 | 1                       | CD32609         | 20++         | Trim Gasket # #                           | 286709          | ①     | 2                           | 8 weeks  | € 37.50    |                   |
| 01MAW15AA011   | CW32609/01 | 1                       | REFER TO MANUAL | 14+          | Actuator Spares Kit 60D Consisting of # # | C80130-AQA      |       | 1                           | 8 weeks  | € 172.50   | € 172.50          |
| 01MAW15AA011   | CW32609/01 | 1                       | REFER TO MANUAL | 14+          | Diaphragm # # #                           | 185988BPP       |       | 1                           | 8 weeks  | € 172.50   |                   |
| 01MAW15AA011   | CW32609/01 | 1                       | REFER TO MANUAL | A2+          | Actuator Gasket                           | 078688BPP       |       | 1                           | 8 weeks  | € 15.00    | € 15.00           |
| 01MAW15AA011   | CW32609/01 | 1                       | REFER TO MANUAL | A6+          | Actuator U Cup Seal                       | 289037          |       | 1                           | 8 weeks  | € 15.00    | € 15.00           |
| Total Ex-Works Value Sheet                                     |            |                         |                 |              |   |                 |       |                             |          |            | € 2,245.50        |
| Packing  |            |                         |                 |              |   |                 |       |                             |          |            | See Summary Sheet |
| Carriage CPT Job Site Galabovo Romania                         |            |                         |                 |              |   |                 |       |                             |          |            | See Summary Sheet |
| Total Price Packed and Delivered CPT Job Site Galabovo Romania |            |                         |                 |              |   |                 |       |                             |          |            | € 2,245.50        |

For And On Behalf Of SPX Flow Control

Compiled By Mr D.G.Edwards  
Title/Position Aftermarket Manager  
Date

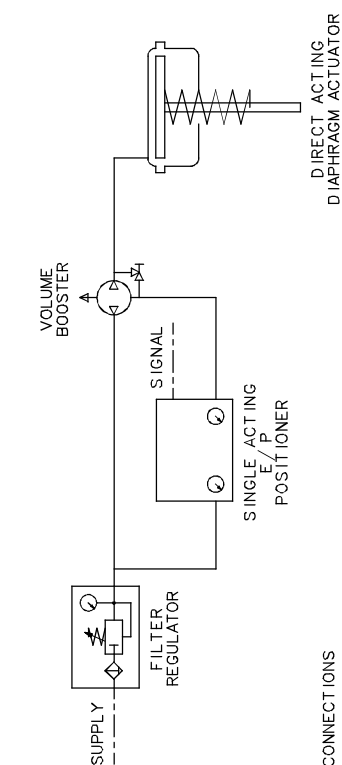
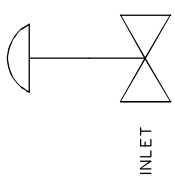
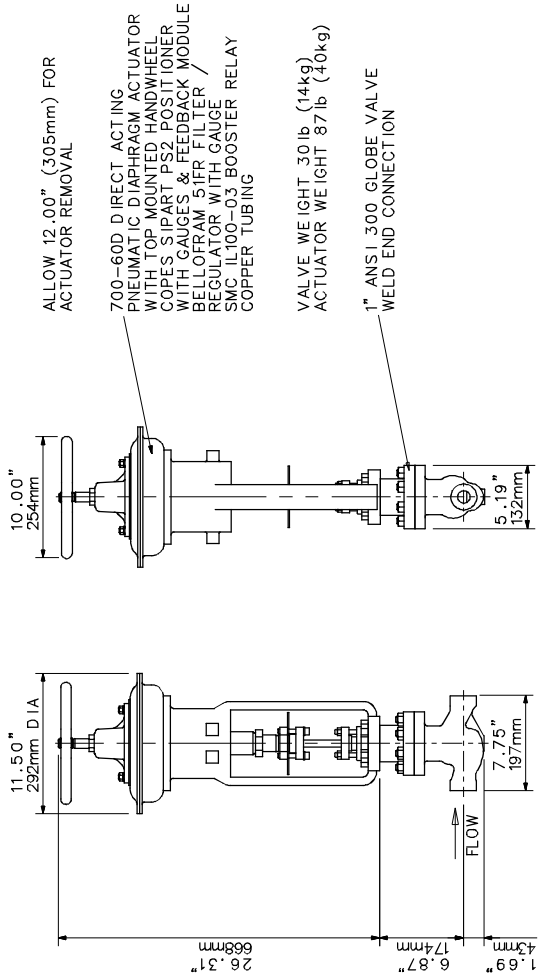
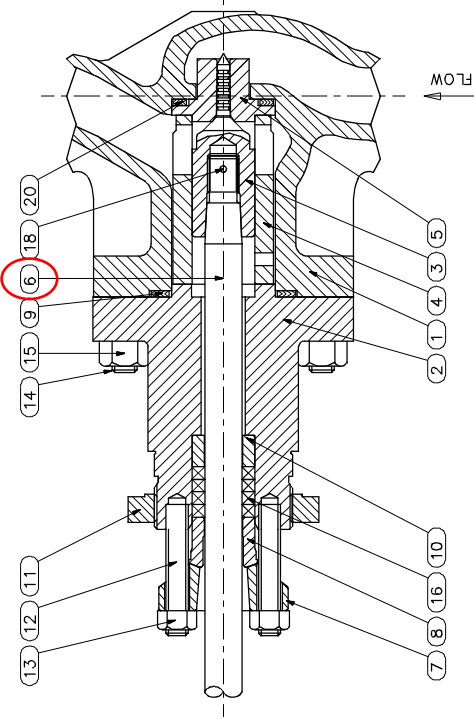
① Please note that items marked ①, must be changed during an inspection or maintenance overhaul it should be ensured that these items are available before commencing the inspection.  
Do Not Re-Use

③ Please note that items marked ③, are operational spares  
Please note that these items require factory mating prior to shipment and form a unique matched set that must not be separated in storage or during valve rebuild  
We will lap the plug with the seat prior to shipment  
Plug and seat cannot be purchased as individual components

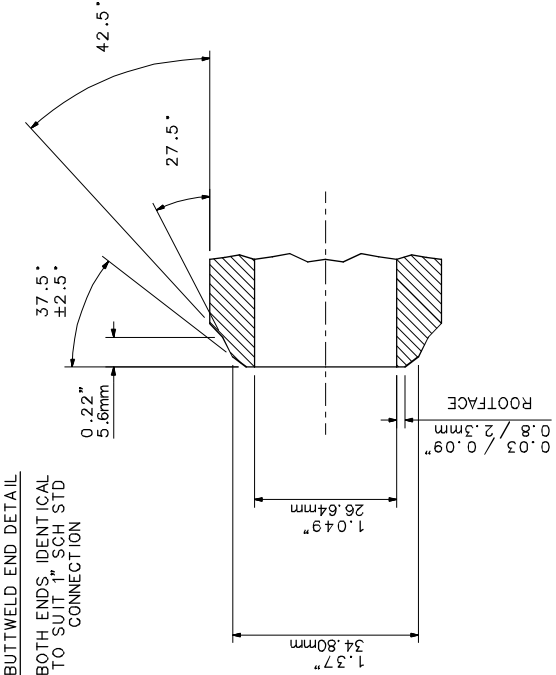
|   |                  |                           |               |                  |   |           |  |   |  |         |
|---|------------------|---------------------------|---------------|------------------|---|-----------|--|---|--|---------|
| <b>COPES-VULCAN, SPX Valves &amp; Controls</b><br>Road Two Industrial Estate, Winsford, Cheshire. United Kingdom<br>Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275   |                  |                           |               |                  | <b>CONTROL VALVE<br/>SPECIFICATION SHEET</b>  |           |  |   |  |         |
| Customer Name: <b>ALSTOM POWER GENERATION AG</b><br>Customer Inquiry: <b>EMAIL</b><br>Customer PO: <b>D61-4500057376</b><br>Ultimate User: <b>MARITZA EAST 1, BULGARIA</b><br>Tag: <b>02MAW15AA011</b><br>Application: <b>WATER CONTROL VALVE</b>   |                  |                           |               |                  | CV Inquiry: <b>DMS/060112/RK1</b><br>CV Job: <b>WG/00799</b><br>CV Job Ref: <b>CW32614</b><br>CV Serial #: <b>07CW32614/01</b><br>Item: <b>3</b><br>Quantity: <b>1</b>  |           |  |   |  |         |
| Description: <b>1" (25 mm), CL300, WCB , BW, GS-700-60 DA</b>   |                  |                           |               |                  |   |           |  |   |  |         |
| FLUID: <b>Water</b>   |                  | <b>SERVICE CONDITIONS</b> |               |                  |   |           |  |   |  |         |
|   | FLOW<br>(kg/sec) | P1<br>(bar a)             | P2<br>(bar a) | Temp.<br>(deg C) | Cv  | CV<br>(%) | Travel<br>(%)                          | Valve Outlet Vel.<br>(ft/sec)                 | Noise *<br>(dBA)   | Remarks |
| COND 1  | 0.131            | 20                        | 11.2          | 40               | 0.18  | 39%       | 42%                                    | 0.9   | <75  |         |
| COND 2  | 0.131            | 30                        | 11.2          | 40               | 0.13  | 26%       | 32%                                    | 0.9   | <75  |         |
| COND 3  | 0.25             | 20                        | 11.2          | 40               | 0.35  | 73%       | 71%                                    | 1.6   | <75  |         |
| COND 4  | 0.25             | 30                        | 11.2          | 40               | 0.24  | 50%       | 52%                                    | 1.6   | <75  |         |
| COND 5  |                  |                           |               |                  |   |           |  |   |  |         |
| SHUTOFF   |                  | 40                        | 1             |                  | Allowable Leakage:  |           |  | * Estimated Noise Level with 0" of Insulation |  |         |
| DESIGN  |                  | 40                        |               | 80               | Class IV  |           |  |   |  |         |
| <b>BODY AND BONNET</b>  |                  |                           |               |                  |   |           |  |   |  |         |
| Style: <b>GS - General Service, Globe</b><br>Size: <b>1 inch</b><br>ASME Class: <b>300 Standard</b><br>Body Inlet: <b>Butt Weld, Sch STD per ANSI B16.25, Fig. 2b</b><br>Body Outlet: <b>Butt Weld, Sch STD per ANSI B16.25, Fig. 2b</b><br>Material: <b>A-216 WCB</b><br>Inlet Pipe: <b>1 In. (25 mm), Sch STD</b><br>Outlet Pipe: <b>1 In. (25 mm), Sch STD</b>                   |                  |                           |               |                  | Bonnet Type: <b>Bolted</b><br>Packing Material: <b>Grafoil</b><br>Packing Hardware: <b>Stainless Steel</b><br>Packing Nut Torque: <b>4 ft-lbs.</b><br>Options: <b>Single Packed</b><br>Service: <b>Continuous Modulation</b>  |           |  |   |  |         |
| <b>TRIM</b>   |                  |                           |               |                  |   |           |  |   |  |         |
| Size: <b>#1 with 4 Ports</b><br>Style: <b>No. CASCADE (UnBalanced)</b><br>Flow Direction: <b>UNDER THE WEB</b><br>Stem Diameter: <b>.75 in.</b><br>Characteristic: <b>CASCADE, MEDIUM</b>   |                  |                           |               |                  | Seat Type: <b>METAL</b><br>Trim Material: <b>400/47 SST</b><br>Max. Cv Available: <b>0.48 @Max. Trim Travel of 1" (±1/8)</b><br>Min. Controllable Cv of Trim: <b>0.002</b>  |           |  |   |  |         |
| <b>ACTUATOR</b>   |                  |                           |               |                  |   |           |  |   |  |         |
| Style: <b>700 DIAPHRAGM</b><br>Size: <b>60 (Square Inch)</b><br>Action: <b>Spring Opening (Direct)</b><br>Handwheel: <b>Top Mounted</b><br>Frame Material: <b>Ductile Iron</b><br>Air Pressure Available: <b>5.0 bar g (73 psig)</b><br>Air Pressure Required: <b>1.7 bar g (25 psig)</b>   |                  |                           |               |                  | Actuator Mounting Style: <b>Screwed Ring</b><br>Actuator Spring: <b>357560</b><br>Spring Rate: <b>720 (lbs/inch)</b><br>Max. Stem Thrust Required to Close: <b>299 (lbs)</b><br>Max. Stem Thrust Required to Open: <b>138 (lbs)</b><br>Spring Precompression (Diaphragm Air Pressure): <b>3 (psig)</b><br>Pressure @ Full Valve Travel (With No Internal Valve Pres.): <b>15 (psig)</b> |           |  |   |  |         |
| <b>ACCESSORIES</b>  |                  |                           |               |                  |   |           |  |   |  |         |
| Positioner: <b>Copes SIPART PS2, Single Acting</b><br>Positioner Input Range: <b>4-20 mA</b><br>Position FeedBack Module (4-20ma) : <b>YES</b><br>Alarm Module : <b>NO</b><br>HART Module : <b>NO</b>   |                  |                           |               |                  | Airlock: <b>None</b><br>Filter/Regulator: <b>Bellofram 51FR w/Gauge</b><br>Solenoid Valve: <b>None</b><br>Booster Relay: <b>SMC IL100-03</b><br>Additional Acc'y:   |           |  |   |  |         |
| Piping: <b>Copper Tubing</b><br>Limit Switches: <b>None</b>   |                  |                           |               |                  |   |           |  |   |  |         |
| <b>COMMENTS</b>   |                  |                           |               |                  |   |           |  |   |  |         |
| conditions one and two, based on MAI requirements   |                  |                           |               |                  |   |           |  |   |  |         |
| Valve open / closed 10 seconds or less  |                  |                           |               |                  |   |           |  |   |  |         |
| Model = <b>GS1</b><br>Body Option: <b>BDY501080401</b><br>Bonnet Option: <b>BNT501170401</b><br>Trim Option: <b>TRM501890610402</b><br>Hardware Pack Option: <b>HDP5114112</b><br>Actuator Option: <b>ACT51101**21</b><br>Stem Option: <b>STM50101041032</b><br>Gasket Option: <b>GSK5019902061</b><br>Accessory Kit Option: <b>AC7A25*00*12020</b><br>I.D. Plate: <b>OPT187019</b> |                  |                           |               |                  | 03  | CMR       | Issued for contract use                |   | Mar-24-2007  |         |
|   |                  |                           |               |                  | 02  | IJW       | Revised Per Client Specification Rev A |   | Jul-25-2006  |         |
|   |                  |                           |               |                  | 01  | DMS       | REVISED PER CUSTOMER COMMENTS          |   | Jan-24-2006  |         |
|   |                  |                           |               |                  | 00  | DMS       | INITIAL BID                            |   | Jan-18-2006  |         |
|   |                  |                           |               |                  | Rev   | Initials  | Description                            |   | Date   |         |
|   |                  |                           |               |                  | Program Rev Level: <b>9.2.11</b>  |           | S                                      |   | File Name: <b>K:\...\Technical\Contract Docs\Data Sheets\DS-CW32614.VS3 (9.2.11)</b> |         |

| ITEM | DESCRIPTION    |
|------|----------------|
| 1    | BODY           |
| 2    | BONNET         |
| 3+   | PLUG           |
| 4+   | CAGE           |
| 5+   | SEAT           |
| 6+   | STEM           |
| 7    | GLAND BRIDGE   |
| 8    | GLAND FOLLOWER |
| 9++  | BONNET GASKET  |
| 10   | GLAND WASHER   |
| 11   | TOKE NUT       |
| 12   | GLAND STUD     |
| 13   | BONNET NUT     |
| 14   | BONNET STUD    |
| 15   | BONNET NUT     |
| 16++ | GLAND PACKING  |
| 18+  | SPIROL PIN     |
| 20++ | TRIM GASKET    |

RECOMMENDED SPARES  
+ OPERATIONAL SPARES  
++ COMMISSIONING SPARES



CONNECTIONS  
SUPPLY - 0.250" NPT FEMALE  
SIGNAL - ELECTRICAL



|  |   |  |   |     |              |      |    |       |       |     |              |            |  |  |  |         |  |       |  |    |  |                       |  |
|--|---|--|---|-----|--------------|------|----|-------|-------|-----|--------------|------------|--|--|--|---------|--|-------|--|----|--|-----------------------|--|
| THIS DRAWING IS THE PROPERTY OF COPES-VULCAN<br>AND MAY NOT BE USED WITHOUT THE EXPRESS<br>PERMISSION AND LICENCE OF COPES-VULCAN. | GENERAL ARRANGMENT DRAWING OF 1" ANSI 300 GLOBE VALVE<br>WITH CASCADE TRIM & CV700-60D DIRECT ACTING PNEUMATIC<br>DIAPHRAGM ACTUATOR WITH TOP MOUNTED HANDWHEEL | CUSTOMER NAME<br>PROJECT NAME<br>CUSTOMER TAG No<br>CUSTOMER NAME<br>VENDOR NAME<br><br>VENDOR CONTRACT<br>VENDOR JOB No<br>ITEM DESCRIPTION | ALSTON POWER GENERATION AG<br>MARTIZA EAST 1. BULGARIA<br>D61-450057376<br>02MAW15A011<br>COPES-VULCAN, WINSFORD<br>ENGLAND<br>No<br>WG00799<br>Vendor Job No<br>CW32614<br>WATER CONTROL VALVE | ISS | MODIFICATION | DATE | BY | SCALE | DRAWN | JRL | COPES-VULCAN |            |  |  |  |         |  |       |  |    |  |                       |  |
|  |   |  |   |     |              |      |    |       |       |     |              |            |  |  |  |         |  |       |  |    |  |                       |  |
|  |   |  |   |     |              |      |    |       |       |     |              |            |  |  |  |         |  |       |  |    |  |                       |  |
|  |   |  |   |     |              |      |    |       |       |     |              |            |  |  |  |         |  |       |  |    |  |                       |  |
| DO NOT SCALE<br>IF IN DOUBT - ASK!   |   |  |   |     |              |      |    |       |       |     |              | DRAWING NO |  |  |  | CD32614 |  | ISSUE |  | 00 |  | SPX Process Equipment |  |