



LIDCO, Pars SEE Zone, Assaluyeh,
Integrated Methanol and Ammonia
Plant 3000 MTPD MeOH / 900 MTPD NH3 PROJECT



Control Valve Data Sheets

Document No. 17735-48

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**Airpack B.V. - Air Compressor –
Integrated Methanol and Ammonia Plant
17735-COM Control Valve Data Sheets (K020)**

| REV. | DATE | DESCRIPTION | DRAWN | CHECKED | APPROVED |
|------|------------|---------------------|-------|---------|----------|
| 02 | 11-03-2024 | Issued for Approval | L.K. | S.K. | J.J. |
| 01 | 09-11-2023 | Issued for Approval | T.T. | S.K. | J.J. |

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| 20 | | | | | | 45 | | | | | | 70 | | | | | | 2 | | | | | |
| 21 | | | | | | 46 | | | | | | 71 | | | | | | 3 | | | | | |
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Notes:



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|-----|----|-----------|--------------|--|---|
| | | | | VALVE DATASHEET Index  |  |
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| 01 | SK | 9-11-2023 | For Approval | Sheet | 3 of 11 |
| Rev | By | Date | Description | Based on P&ID | Rev.06 |



| | | | | | | |
|--------------------|-------------------------------|--------------------------------------|----------------|---|-----------------------------------|--|
| GENERAL | 1 | Tag Number | | | 320PCV-8201 | |
| | 2 | Service | | | Compressor bypass (recycle) valve | |
| | 3 | P&ID No. | | | N278-VD-6019-PR-PID-0002 | |
| | 4 | Location | | | Bypass | |
| | 5 | Line number | | | 3/4"-IA-320-11-D42-N | |
| | 6 | Area classification | | | Safe area | |
| PROCESS CONDITIONS | 8 | Fluid | State | | Air | Dry Gas |
| | 9 | Pressure | Norm. | Max. | 30 bar(g) | |
| | 10 | Temperature | Norm. | Max. | 46 °C | 60 °C |
| | 11 | Design | Press. | Temp. | 39 bar(g) | 75 °C |
| | 12 | Ambient Temp. | Min. | Max. | 0 °C | 49 °C |
| | BODY | 13 | Type Of Body | | | Globe valve |
| 14 | | Body Size | | | 3/4" ANSI RF | |
| 15 | | Conn. Type | End Conn. Rat. | | RF | 300# |
| 16 | | Flange face finish | | | VTA | |
| 17 | | Body Material | | | SS316 | |
| 18 | | Packing Material | | | PTFE | |
| 19 | | Bonnet Type | | | Bolted, SS316 | |
| 20 | | Trim | Form | Characteristics | Disc | VTA |
| 21 | | | Seat Mat. | Cage mat. | PTFE | VTA |
| 22 | | | Disc Mat. | Shaft Mat. | SS 316 | SS316 |
| 23 | Required Seat Tightness | | | IV | | |
| 24 | Max. Allow. Sound Level (dBa) | | | 85 | | |
| Positioner | 25 | Positioner controller | | | Electro-pneumatic (I/P) | |
| | 26 | Interface | | | 4 -20 mA , HART | |
| | 27 | Supply / output pressure gauge | | | Yes, SS316 | |
| | 28 | Positioner material | | | SS316 | |
| | 29 | Enclosure class | | | IP65 | |
| ACTUATOR | 31 | Fail Position | | | FO (Fail Open) | |
| | 32 | Pneumatic Conn. | | | 1/4" NPT-F | |
| | 33 | Instrument Supply Fluid | | | Instrument Air | |
| | 34 | Instrument Supply Fluid pressure | | | 9,5 bar(g) | |
| | 35 | Position Monitor | | | Yes, 24 VDC 4-20 mA Transmitter | |
| | 36 | Electric Connection | | | ISO M20 x 1,5 | |
| | 37 | Cable Gland | | | Safe Area | |
| | 38 | | | | | |
| | 39 | | | | | |
| ACCESSORIES | 40 | Filter Regulator | | | Yes, Stainles steel | |
| | 41 | Filter Regulator manufacturer, model | | | VTA | VTA |
| | 42 | Gauges | | | Yes, Stainles steel | |
| | 43 | Tubing, Fitting | | | SS316 (Airpack scope) | |
| SERVICE | 44 | Flow Rate | | | 35 Nm³/h | |
| | 45 | Pressure | Inlet | outlet | 9,5 bar(g) | 30 bar(g) |
| | 46 | Pressure drop | | | To be advised by the manufacturer | |
| | 47 | Cv Selected | | | To be advised by the manufacturer | |
| | 48 | Cv required | | | To be advised by the manufacturer | |
| CERTIFICATES | 49 | 3.1 Material certificate | | | Yes | |
| | 50 | Hydrotest certificate | | | Yes | |
| | 51 | Leakage class | | | Yes | |
| PURCHASE | 52 | Valve Manufacturer | | | According to approved vendor list | |
| | 53 | Valve Model | | | Supplier to advise | |
| | 54 | Actuator Manufacturer | | | According to approved vendor list | |
| | 55 | Actuator Model | | | Supplier to advise | |
| | 56 | Positioner Manufacturer | | | According to approved vendor list | |
| | 57 | Positioner Model | | | Supplier to advise | |
| NOTES : | | | | | | |
| | | | | | | |
| | | | | VALVE DATASHEET Pressure Control Valve | |   |
| 02 | LK | 11-3-2024 | For Approval | | | |
| 01 | SK | 9-11-2023 | For Approval | | | |
| Rev | By | Date | Description | | | |
| | | | | Sheet 8 of 11 Based on P&ID Rev.06 | | |

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|--|----|--------------------------|---------------|---|---------|
| GENERAL | 1 | Tag Number | | 320CV-8201 | |
| | 2 | Service | | Check Valve | |
| | 3 | P&ID No. | | N278-VD-6019-PR-PID-0002 | |
| | 4 | Location | | Compressor Air Outlet | |
| | 5 | Line number | | 3/4"-IA-320-09-D42-N | |
| | 6 | Area classification | | Safe area | |
| PROCESS CONDITIONS | 7 | | | | |
| | 8 | | | | |
| | 9 | Fluid | State | Air | Dry Gas |
| | 10 | Pressure | Norm. Max. | 30 bar(g) | |
| | 11 | Temperature | Norm. Max. | | 60 °C |
| | 12 | Design | Press. Temp. | 39 bar(g) | 75 °C |
| | 13 | Ambient Temp. | Min. Max. | 0 °C | 49 °C |
| | 14 | Oper. Flow | | 35 Nm³/hr | |
| | 15 | | | | |
| BODY | 16 | | | | |
| | 17 | | | | |
| | 18 | | | | |
| | 19 | | | | |
| | 20 | Type Of Body | | Wafer type | |
| | 21 | Type Of valve | | Plate type | |
| | 21 | Body Size | | DN 20 (Process line = 3/4" ANSI 300# RF) | |
| | 22 | Body Material | | SS316 | |
| | 23 | Cracking Pressure | | VTA | |
| | 24 | Inlet Connection | Outlet Conn. | RF | RF |
| | 25 | Inlet Rating | Outlet Rating | 300# | 300# |
| | 26 | | | | |
| | 27 | | | | |
| | 28 | | | | |
| OPTIONS | 29 | | | | |
| | 30 | | | | |
| | 31 | | | | |
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| | 33 | | | | |
| CERTIFICATES | 34 | | | | |
| | 35 | | | | |
| | 36 | | | | |
| | 37 | | | | |
| PURCHASE | 38 | | | | |
| | 39 | | | | |
| | 40 | | | | |
| | 41 | | | | |
| NOTES : | 42 | | | | |
| | 43 | | | | |
| | 44 | | | | |
| | 45 | | | | |
| | 46 | 3.1 Material certificate | | Yes | |
| PURCHASE | 47 | | | | |
| | 48 | | | | |
| | 49 | | | | |
| | 50 | | | | |
| PURCHASE | 51 | | | | |
| | 52 | Manufacturer | | According to approved vendor list | |
| | 53 | Model | | Supplier to advise | |
| | 54 | | | | |
| 55 | | | | | |
| 56 | | | | | |
| <p>VALVE DATASHEET Check Valve</p>   | | | | | |
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| 01 | SK | 9-11-2023 | For Approval | Based on P&ID Rev.06 | |
| Rev | By | Date | Description | | |

| | | | | | | |
|--------------------|----|--------------------------|--------|-------|-----------------------------------|---------|
| GENERAL | 1 | Tag Number | | | 320ST-8201 | |
| | 2 | Service | | | Y-strainer | |
| | 3 | P&ID No. | | | N278-VD-6019-PR-PID-0002 | |
| | 4 | Location | | | Compressor Air Inlet | |
| | 5 | Line number | | | 1"-IA-320-01-D42-N | |
| | 6 | Area classification | | | Safe area | |
| | 7 | | | | | |
| | 8 | | | | | |
| PROCESS CONDITIONS | 9 | Fluid | State | | Air | Dry Gas |
| | 10 | Pressure | Norm. | Max. | 9,5 bar(g) | |
| | 11 | Temperature | Norm. | Max. | 46 °C | |
| | 12 | Design | Press. | Temp. | 12,5 bar(g) | 75 °C |
| | 13 | Ambient Temp. | Min. | Max. | 0 °C | 49 °C |
| | 14 | Oper. Flow | | | 35 Nm³/hr | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| BODY | 20 | Type Of Body | | | Y-strainer | |
| | 21 | Connection | | | 3/4" 300# RF | |
| | 22 | Body Material | | | SS 316 | |
| | 23 | Mesh Material | | | SS 316 | |
| | 24 | Mesh Size | | | 0,5 mm (Supplier to advise) | |
| | 25 | | | | | |
| | 26 | | | | | |
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| 46 | | | | | | |
| CERTIFICATES | 47 | 3.1 Material certificate | | | Yes | |
| | 48 | | | | | |
| | 49 | | | | | |
| | 50 | | | | | |
| | 51 | | | | | |
| | 52 | | | | | |
| PURCHASE | 53 | Manufacturer | | | According to approved vendor list | |
| | 54 | Model | | | Supplier to advise | |
| | 55 | | | | | |
| | 56 | | | | | |
| | 57 | | | | | |

NOTES :

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|-----|----|-----------|--------------|--|--|--|
| | | | | VALVE DATASHEET Y-Strainer | |   |
| 02 | LK | 11-3-2024 | For Approval | | | |
| 01 | SK | 9-11-2023 | For Approval | | | |
| Rev | By | Date | Description | | | |
| | | | | Sheet 10 of 11 Based on P&ID Rev.06 | | |

| | | | | | |
|--------------------|----|--------------------------|--------------|---|--------|
| GENERAL | 1 | Tag Number | | 320ST-8202 | |
| | 2 | Service | | Y-strainer | |
| | 3 | P&ID No. | | N278-VD-6019-PR-PID-0002 | |
| | 4 | Location | | Cooling Water Inlet | |
| | 5 | Line number | | 3/4"-CWS-320-20-B24C-N | |
| | 6 | Area classification | | Safe area | |
| | 7 | | | | |
| | 8 | | | | |
| PROCESS CONDITIONS | 9 | Fluid | State | Cooling Water | Liquid |
| | 10 | Pressure | Norm. Max. | 4,5 bar(g) | |
| | 11 | Temperature | Norm. Max. | 36 °C | |
| | 12 | Design | Press. Temp. | 7 bar(g) | 75 °C |
| | 13 | Ambient Temp. | Min. Max. | 0 °C | 49 °C |
| | 14 | Oper. Flow | | 1 Nm³/hr | |
| | 15 | | | | |
| | 16 | | | | |
| | 17 | | | | |
| | 18 | | | | |
| BODY | 20 | Type Of Body | | Y-strainer | |
| | 21 | Connection | | 3/4" 150# RF | |
| | 22 | Body Material | | Carbon steel | |
| | 23 | Mesh Material | | SS 316 | |
| | 24 | Mesh Size | | 0,5 mm (Supplier to advise) | |
| | 25 | | | | |
| | 26 | | | | |
| | 27 | | | | |
| | 28 | | | | |
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| 45 | | | | | |
| 46 | | | | | |
| CERTIFICATES | 47 | 3.1 Material certificate | | Yes | |
| | 48 | | | | |
| | 49 | | | | |
| | 50 | | | | |
| | 51 | | | | |
| | 52 | | | | |
| PURCHASE | 53 | Manufacturer | | According to approved vendor list | |
| | 54 | Model | | Supplier to advise | |
| | 55 | | | | |
| | 56 | | | | |
| | 57 | | | | |
| NOTES : | | | | | |
| | | | | | |
| | | | | VALVE DATASHEET Y-Strainer  | |
| | | | |  Sheet 11 of 10 Based on P&ID Rev.06 | |
| 02 | LK | 11-3-2024 | For Approval | | |
| 01 | SK | 9-11-2023 | For Approval | | |
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