

CONTROL VALVES

General		1 Tag Number		22-LCV-8008							
		2 P&ID n°		100-8136-22-PR-PID-2100 Sh 2 di 3							
General		3 Function		Contactor A-2201-V02 Glycol Out to Regeneration - Level Control Valve							
		4 Special Service									
General		5 Installation		In		Out					
		6 Line classification		2"-CG-22102-6SS0-HI		6SS0					
General		7 Fluid / State		TEG + Water + HG			Liquid				
		8 Valve Design Pressure		bar g	Min.	-	Max.	72			
General		9 Valve Design Temperature		°C	Min.	-	Max.	85			
		Process Conditions		10 Inlet Pressure		bar g	Minimum	Normal		Maximum	
11 Outlet Pressure				bar g		59.26					
12 Temperature				°C		6.5					
13 Flow rate				kg/h	1785	47			2805		
14 Mass density				kg/m3		2550					
15 Viscosity				cP		-					
16 Molecular Weight				kg/kmol		10					
17 Critical Pressure				bara		-					
18 Vapour Pressure				bara		79					
19 Z= Compress. Factor						59.26					
20 Specific Gravity						-					
21 k= Cp/Cv						1.056					
22 % Lifting				-							
23 Cv (Calculated)				71.45							
24 System Outlet Velocity		m/s		0.396							
Valve		25 Manufacturer / Body Size		CONFLOW	1"		74 Type / Manufacturer		Diaphragm	CONFLOW	
		26 Body Type / Pressure Rating		Globe	#600		75 Action Type		Single with spring return		
		27 Body Material		A351 CFM3			76 Model / Size		T250		
		28 Process Connections Type		Raised Face (RF) 125 to 250 AARH			77				
		29 Plug Type / Material		MFP	AISI 316 + Stellite GR. 6		78 Case Material		Carbon Steel		
		30 Plug Characteristic		Linear			79 Connection to Valve		Bored		
		31 Bonnet Type / Material		Bolted	A351 CF3M		80 Handwheel		Required		
		32 Bonnet Gasket		Spiral Wound SS 304 with Graphite			81 Installation		Top Mounted		
		33 Seat Type / Material		Metal Seat	AISI 316 + Stellite GR. 6		82 Painting System / Top Color		As per PTS 30480031-P	Red	
		34 Stem / Stem Packing Material		AISI 316 H7 - 16mm	Graphite		83				
		35 Bolts & Nuts Material		A193 B8M + A194 Gr. 8M			84 By-pass Valves		Not required		
		36 Watted Parts Material		AISI 316 L (As Minimum)			85 Power Connections Size / Type		1/8"	NPT-F	
		37 Seat Leakage Class		IV			86 Control Signal / Max Pressure		psi	6 - 30	35
		38 Max Sound Level at 1 m		dBa Calc.	73.2	Max.	87 Maximum Permissible pressure drop	bar	609		
		39 Flow Direction		Flow to Open			88				
40 Power Failure Action		Valve Close			89 Manufacturer / Model		SIEMENS	PS2			
41 Piping Flange and Flange Fitting Std.		ASME B16.5			90 Electrical Protection		Ex-I Zone 1 IIA T3				
42 Painting System / Top Color		As per PTS 30480031-P Standard			91 Inlet and Outlet Gauges		Required				
43 Other Mechanical Requirements		Anti-static device AISI 316L Identification Plate acc. to IEC-6594-5			92 Tropicalization		Required				
44					93 Electrical Cable entry		ISO M20				
45		Tropicalized			94 Enclosure Material		316 Stainless Steel				
Trim		46 Sizing Criteria		In accordance to ISA S75.01			95 Electromagnetic compatibility		As per IEC 61000-5-2		
		47					96 Input Signal		Foundation Fieldbus		
		48 Seat Passage		3/16"			97 Other Requirements				
		49 Max. Rated Cv		0.57			98 Ingress Protection		IP 66 Min.		
50 Rated Travel		0 - 100%			99 Accuracy						
Accessories		51					100 Tag N°		22-LY-8008		
		52 Tubing Size / Type		8mm			101 Other Requirements		Identification Plate in AISI 316L screwed		
		53 Tubing Material / Manufacturer		AISI 316L (As Minimum)			102				
		54 Valves Size / Type					103 Fluid / Phase		Instrument Air	Gas	
		55 Valves Material / Manufacturer					104 Operating / Design Press.		bar g	5.5 / 9.0	13.5
		56 Valves Rating		3500#			105 Operating / Design Temp.		°C	50	65
Require Certificates & Tests		57 Valves Option					106				
		58 Fitting Type		Double Compression			107				
		59 Fittings Material / Manufacturer		AISI 316L	Swagelok or equivalent		108 Material		AISI 316L		
		60 Fittings Rating		3500#			109 Ports Size / Type		1/4"	NPT-F	
		61					110 Options		Lockable, Integral Filter, Internal Relief		
		62 Painting / Tropicalization Certificate.					111 Pressure Indicator Material		AISI 316L		
63 ATEX stamp for all the components.					112 Pressure Indicator Range		0 - 10 barg				
64 Other Certificates and Test as per Reference Specification and Purchase Order.					113 Pressure Indicator Options						
65 EN 10204 Type 3.1 certification for pressure Part					114 Inlet Isolation Valve		as per accessory requirement				
66 CE & PED 97/23/CE Certificate					115 Electronic Components Tropicalization						
67					116 Flash downstream valve is about 6% wt.						
68					117 Valve will be insulated						
69					118						
Site Conditions		70 Ambient Temperature		°C	Min.	20	Max.	35	119 Total Required Quantity		
		71 Humidity		%	Min.	30	Max.	104	120 Supplier		
		72 Installation Area		Marine, corrosive, unsheltered			121				
		73 Hazardous Area Classification		ATEX ZONE 1, IIA, T3			122				