

Athlon Bayport, TX		Date: 10/29/19 Revision: A	Created By: CJM Checked By:
GENERAL INFORMATION		COMMENTS	
Item No. and Tag	PSV-XX2		
Relieves Equipment No.	E-778 Shell Side		
Valve Location (P&ID #)	SK-19282010-001 Rev.A		
Manufacturer	Emerson Crosby		
Relief Valve Model No.	JOS-H-E		
Relief Valve Serial No.	New Valve For Purchase		
SERVICE CONDITIONS			
Design Code (ASME, DIN etc.)	ASME Sec. VIII		
Fluid	Steam		
Fluid State (Liquid, Vapor, or Liq/Vap)	Vapor		Operating Relieving
Required Capacity & Units	1,836 lb/hr	lb/hr	
Molecular Weight	18.02	lb/lbmol	
Specific Gravity at Flowing Conditions	0.381		Gas density: 0.4673 lb/ft ³
Viscosity at Relieving Temp, Cp	0.016		
Compressibility Factor, Z	0.9088		
Ratio of Heat Capacities, k	1.196		
Design Pressure of Equip., MAWP psig	165 psig		
Operating Pressure, psig			
Set Pressure, psig	165 psig		
Temperature, °F		388 deg F	Operating Relieving
Constant Back Pressure, psig	0 psig		
Variable Back Pressure, psig	0.75 psig		Builtup Backpressure
Cold Differential Set Pressure, psig	N/A		Atmospheric relief
Allowable Overpressure %	21%		
Blowdown %			
BASIS OF SELECTION			
Design/Sizing Basis	15: Exterior Fire		
Other Basis			
DESIGN DETAILS			
Design Type	Conventional		
Bonnet (Open or Closed)	Open		
Inlet Size, Rating, Facing			
Outlet Size, Rating, Facing			
Calculated Area, Sq In	0.805 sq in		Using ASME discharge coefficient
Orifice Letter Designation	E		
Orifice Area, Sq In	0.221 SqIn		ASME Actual Area
MATERIALS			
Body			
Bonnet			
Seat and Disk			
Guide and Ring			
Spring			
Bellows			
ACCESSORIES			
Lifting Lever (Plain, Packed or None)			
Code Stamp			
Cap (Screwed or Bolted)			
NOTES			
Rev 1.29.1			