

NVENT - DATA REQUIREMENTS FOR SKIN-EFFECT HEAT-TRACING SYSTEM

Email to: PTM-techsupport@nVent.com

Contact Information

Name	Today's date
Company name	Email address
Phone number	

Project Parameters

Project name		Maximum wind velocity			
Project location		Climate (tropical/arctic/etc.)			
Minimum ambient temperature		Altitude			
Maximum ambient temperature		Code and Standard (IEC/NEMA/NEC)			
Is pipeline:	Aboveground	Underground	Submerged	Other	
Is pipeline:	Existing	New			
Units of measure:	Celsius	Fahrenheit			

Design Parameters

Maintain temperature	Normal/process/flow operating temperature
Minimum cold start temperature	Minimum flow rate
Maximum exposure temperature (power-off)	Maximum flow rate
Minimum allowable product temperature	Flow inlet temperatures
Maximum allowable product temperature	

Pipe Specifications and Thermal Insulation

	Units of measure:	Inches	Millimeters	
Pipe size			Support type/size	
Pipe wall thickness			Number of supports/support spacing	
Pipe material			Insulation type	
Length of pipeline			Insulation k-factor	
		Meters	Feet	
Number of valves			Insulation thickness	
Number of flanges				
Will pipeline be:		Preinsulated	Field insulated	Unsure

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Power Supply Data

Power supply voltage	Maximum available fault current at source terminals (kA)
Power frequency	Power availability (one end, both ends, and the middle)
Maximum allowable single-phase load (KVA)	
Distance from source to panel location	

Control and Switchgear Panel

Area classification (nonhazardous/hazardous)	Enclosure protection class (NEMA or IP rating)
Class	Location (indoor/outdoor)
Division	Maximum sun load (w/m ²)
Zone	Minimum ambient temperature
Group	Maximum ambient temperature
T-rating	
AIT	

Transformer Data

Area classification (nonhazardous/hazardous)	Enclosure protection class (NEMA or IP rating)
Class	Location (indoor/outdoor)
Division	Maximum sun load (w/m ²)
Zone	Minimum ambient temperature
Group	Maximum ambient temperature
T-rating	
AIT	

Heat-up, Melt-out, or Cool-down Data

Fluid name	Start temperature	Final temperature
Specific heat	Heat-up time required	Cool-down time limit
Density solid	Density liquid	Density vapor
Heat of fusion	Heat of vaporization	Boiling point
Melting point		
Flowing fluid	If yes, define parameters for dynamic analysis (flow rate and units)	
	Yes	No

Other

Do you require fiber optic distributed temperature sensing:	Yes	No
Do you require FEA modeling?	Yes	No
Additional information		



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Raychem-FW-H58416-STSDesignrequestform-EN-1805