

Refrigeration Controls

Product Overview — Style H, L, & P



Description

Bulletin 836 Refrigeration Controls are similar to Bulletin 836 Style A Pressure Controls. However, refrigeration controls are constructed with additional pulsation dampening to filter out the severe pulsations generated by reciprocating refrigeration compressors. Pressure controls not supplied with the added snubber function may result in reduced bellows life. The reduced life results from pulsations severe enough to cause the bellows to "squeal" at the pump frequency or at the harmonic wave generated at specific pump loading demands. Refrigeration controls are supplied as standard with the pulsation snubber built into the stem of the bellows.

Allen-Bradley heavy-duty refrigeration controls have copper alloy bellows for use with noncorrosive refrigerants. The devices can be supplied as single Open Type devices or mounted in a Type 1 enclosure. Standard controls have 7/16 in. – 20 SAE male threads for a 45° flare fuel and lubricant fitting. Optionally, the refrigeration controls can be supplied with capillary tubing. The capillary terminates with 1/4 in. tubing, which is flared and supplied with a 7/16 in. – 20 female nut. To modify the standard pressure connection, add suffix "-36" (denotes 36 in.) to the catalog number. There is no price addition for changing to a capillary-type pressure connection. Example: Cat. No. **836-H11-XHC**, modified for a 36 in. capillary connection, is Cat. No. **836-H11-XHC-36**.

Style H — High Pressure Refrigeration Controls



Style H

- Copper alloy bellows with built-in pulsation snubber
- 7/16 in. — 20 SAE male thread for 45° flare fitting
- Adjustable operating range — 30...120 psi
- Maximum line pressure — 450 psi
- Occasional surge pressure — 800 psi
- With capillary and flare connection

Style L — Low Pressure Refrigeration Controls



Style L

- Copper alloy bellows with built-in pulsation snubber
- With capillary and tubing connection
- Adjustable operating range — 20 in. Hg vacuum...120 psi
- Maximum line pressure — 220 psi

Style P — High Pressure Definite-Purpose Refrigeration Controls



Style P

- Copper alloy bellows with built-in pulsation snubber
- 7/16 in. — 20 SAE male thread for 45° flare fitting
- Operating range — 30...700 psi
- Line and occasional surge pressure — 800 psi
- Fixed differential — 30 psi



Style H High Pressure —
Copper Alloy, Open Type With Capillary
Adjustable Differential



Style L Low Pressure —
Copper Alloy, Open Type
Adjustable Differential



Style P High Pressure —
Copper Alloy, Open Type With Capillary
Fixed Differential

Style H High Pressure—Copper Alloy Bellows*

Pressure Specifications				Enclosure Type		Contact Reference Number (See table below)
Adjustable Operating Range [psi]	Adjustable Differential [psi] (Approximate Mid-Range Values)	Maximum Line Pressure [psi]	Limited Maximum Stop [psi]	Open Type Without Enclosure	Type 1	
				Cat. No.	Cat. No.	
30...270	30...80	600	—	836-H11-XHCS	836-H11-XHC	1
50...450	40...100	800	—	836-H11-BLCS	836-H11-BLC	1
100...285	40...90	600	285	836-H33-XKKS	836-H33-XKK	3
200...425	40...90	800	425	836-H33-BLKS	836-H33-BLK	3
125...280	60...120	800	280	836-H33-BKKS	836-H33-BKK	3
Customer Specified, Factory Locked Operating Range With Fixed Differential of 30 psi						
75...350	35	800	—	836-H33-XNAS	836-H33-XNA	3

Style L Low Pressure—Copper Alloy Bellows*

Pressure Specifications			Enclosure Type		Contact Reference Number (See table below)
Adjustable Operating Range [in. Hg Vacuum...psi]	Adjustable Differential [psi] (Approximate Mid-Range Values)	Maximum Line Pressure [psi]	Open Type (Without Enclosure)	Type 1	
			Cat. No.	Cat. No.	
20 in. Hg Vacuum...120 psi	5...30*	220	836-AL11-NKCS	836-AL11-NKC	1
20 in. Hg Vacuum...120 psi	9...50*	220	836-AL32-NKCHS	836-AL32-NKCH	2

Style P High Pressure Definite Purpose—Copper Alloy Bellows*

Pressure Specifications				Enclosure Type		Contact Reference Number (See table below)
Adjustable Operating Range [psi]	Fixed Differential [psi]	Maximum Line Pressure [psi]	Limited Maximum Stop [psi]	Open Type (Without Enclosure)	Type 1	
				Cat. No.	Cat. No.	
30...700	30	800	—	836-P11-ARBS	836-P11-ARB	1

Contact Reference Number Table

Reference Number	Description	Symbol	Rating
1	Single pole double throw — automatically opens or closes on rise or fall.		Non-inductive: 5 A, 240V ... 3 A, 600V Control Circuit Rating: AC-125VA, 24...600V DC-57.5VA, 115...230V
2	Single pole single throw, normally open — closes on rise.		1 Hp, 115V AC 1.5 Hp, 230V AC Control Circuit Rating: AC-600VA, 110...600V DC-57.5VA, 110...250V
3	Single pole single throw, normally closed — opens on rise.		

* Copper alloy bellows may be used on water or air, and other liquids not corrosive to this alloy.

* To determine differential in in. Hg vacuum, multiply the value in the table by 2.036 (or approximately 2).