

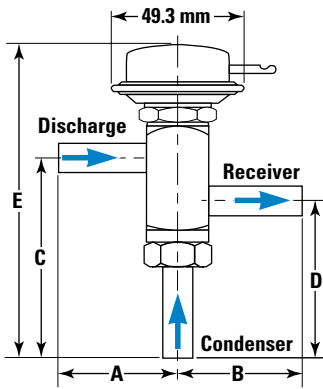
# HEAD PRESSURE CONTROL VALVES

## Specifications and Dimensions

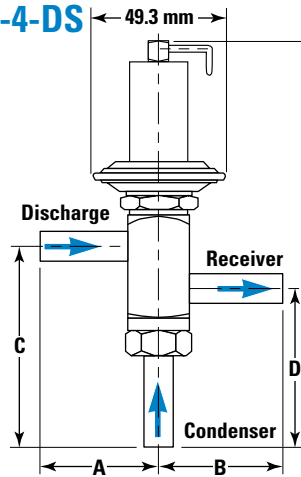
VALVE TYPE	STANDARD FACTORY SETTING bar	CONNECTIONS ODF SOLDER (Inches)		DIMENSIONS – mm								WEIGHT kg		REPLACEMENT PARTS				
		INLET(S)	OUTLET	A	B	C	D	E		F	G	I	NET		SHIP			
LAC-4	6.9, 12.4 or 14.5	1/4	1/4	45	48	77	61	120					.34	.39	Replacement Elements  Not Available  Non-Adjustable Dome Element: D3L (specify setting) or Non-Adjustable Remote Bulb Element: R3L (specify setting)			
		3/8	3/8										.36	.40				
LAC-4-DS		1/2	1/2	45	48	77	61	155					.37	.41				
		3/8	3/8										.40	.46				
LAC-5		1/2	1/2	42	41	96	76	D3L	R3L					1.13		1.20		
		5/8	5/8	44	43	98	78							157		144	1.16	1.22
		7/8	7/8	57	55	110	91							170		157	1.18	1.25
		1-1/8	1-1/8	61	60	114	95							173		161	1.25	1.32
LAC-10		Ⓞ 1-3/8 Ⓜ 7/8	7/8	72	68	112	88							1.45		1.55		
		Ⓞ 1-3/8 Ⓜ 1-1/8	1-1/8		65	123	98							187		174	1.49	1.59

Ⓞ Discharge Connection  
Ⓜ Condenser Connection

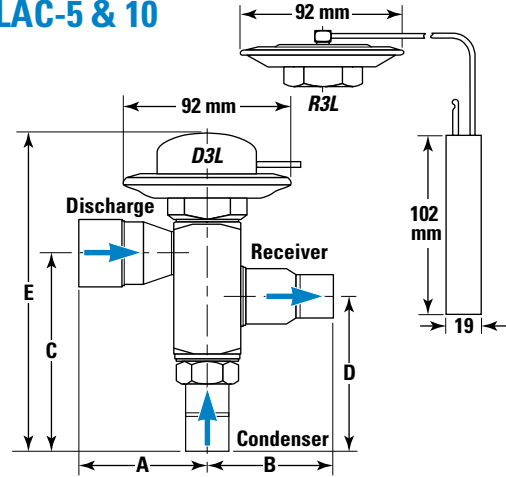
### LAC-4



### LAC-4-DS



### LAC-5 & 10



## LAC – Valve Nomenclature/Ordering Instructions

To eliminate shipment delays, specify complete valve designations.

<b>LAC</b>	<b>4</b>	<b>DS</b>	<b>100/180</b>	<b>3/8"</b>	<b>X</b>	<b>3/8"</b>	<b>X</b>	<b>3/8</b>	<b>ODF</b>
Valve Type: Low Ambient Control	Valve Size	Dual Setting Omit for standard dome element	Valve Setting(s) (psig) Specify one setting for standard dome element	Discharge Connection (Inches)		Condenser Connection (Inches)		Receiver Connection (Inches)	Solder Connections
<b>LAC</b>	<b>5</b>	<b>180</b>	<b>R</b>	<b>5/8"</b>	<b>X</b>	<b>5/8"</b>	<b>X</b>	<b>3/8</b>	<b>ODF</b>
Valve Type: Low Ambient Control	Valve Size	Valve Setting(s) (psig)	Indicates Remote Bulb Model Delete for standard dome element	Discharge Connection (Inches)		Condenser Connection (Inches)		Receiver Connection (Inches)	Solder Connections

# HEAD PRESSURE CONTROL VALVES

## Low Ambient (WINTER) Capacities – kW of Refrigeration

Capacities are based on -20°C evaporator temperature, 35°C condenser, 6°C subcooled liquid.

REFRIGERANT Valve Setting (bar)	MINIMUM AMBIENT DESIGN TEMP. °C	PRESSURE DROP ACROSS VALVE (bar)	VALVE TYPE					REFRIGERANT Valve Setting (bar)	MINIMUM AMBIENT DESIGN TEMP. °C	PRESSURE DROP ACROSS VALVE (bar)	VALVE TYPE				
			LAC-4	LAC-5	LAC-10	OROA-5	ORD-4				LAC-4	LAC-5	LAC-10	OROA-5	ORD-4
<b>22 407C</b> (12.4 bar)	-30	0.07	5.96	10.6	25.4	—	—	<b>404A</b> (14.5 bar)	-30	0.07	4.37	7.75	18.7	—	—
		0.14	8.38	14.9	35.7	—	—			0.14	6.15	11.0	26.2	—	—
		0.35	13.1	23.6	55.5	—	—			0.35	9.63	17.3	40.9	—	—
		1.60	26.9	49.6	112	54.4	54.4			1.60	19.9	36.5	83.0	39.5	39.5
	-20	2.00	29.8	55.2	123	83.3	83.3		2.00	22.0	40.6	91.5	60.4	60.4	
		0.07	6.38	11.3	27.1	—	—		0.07	4.64	8.20	19.7	—	—	
		0.14	8.97	16.0	38.0	—	—		0.14	9.52	11.6	27.7	—	—	
		0.35	14.0	25.2	59.1	—	—		0.35	10.2	18.3	43.1	—	—	
	-10	1.60	28.8	53.0	119	61.3	61.3		1.60	21.1	38.6	87.4	44.0	44.0	
		2.00	31.8	59.0	131	93.8	93.8		2.00	23.3	43.0	96.3	67.4	67.4	
		0.07	6.91	12.2	29.2	—	—		0.07	4.98	8.78	21.1	—	—	
		0.14	9.71	17.2	40.8	—	—		0.14	7.00	12.4	29.5	—	—	
<b>134a</b> (6.9 bar)	-30	0.35	15.2	27.2	63.5	—	—	<b>507</b> (14.5 bar)	-30	0.35	10.9	19.6	45.9	—	—
		1.60	31.1	57.2	127	71.2	71.2			1.60	22.5	41.3	92.9	50.7	50.7
		2.00	34.3	63.7	140	109	109			2.00	24.9	46.0	102	77.6	77.6
		0.07	4.86	8.65	20.9	—	—			0.07	4.12	7.32	17.6	—	—
	-20	0.14	6.83	12.2	29.2	—	—		0.14	5.80	10.3	24.8	—	—	
		0.35	10.7	19.2	45.4	—	—		0.35	9.10	16.3	38.6	—	—	
		1.60	21.4	40.1	88.8	40.6	40.6		1.60	18.8	34.5	78.5	37.2	37.2	
		2.00	23.5	44.5	96.6	62.4	62.4		2.00	20.8	38.4	86.5	57.0	57.0	
	-10	0.07	5.24	9.3	22.4	—	—		0.07	4.40	7.79	18.7	—	—	
		0.14	7.36	13.1	31.3	—	—		0.14	6.20	11.0	26.3	—	—	
		0.35	11.5	20.7	48.5	—	—		0.35	9.70	17.4	40.9	—	—	
		1.60	23.1	43.1	94.9	45.7	45.7		1.60	20.0	36.7	83.0	41.9	41.9	
<b>R-410A</b> (20.3 bar)	-30	2.00	25.3	47.8	103	70.2	70.2	2.00	22.1	40.9	91.5	64.1	64.1		
		0.07	5.73	10.1	24.3	—	—	0.07	4.75	8.38	20.1	—	—		
		0.14	8.05	14.3	34.0	—	—	0.14	6.68	11.8	28.1	—	—		
		0.35	12.5	22.6	52.7	—	—	0.35	10.4	18.7	43.8	—	—		
	-20	1.60	25.2	47.1	103	53.3	53.3	1.60	21.5	39.5	88.6	48.7	48.7		
		2.00	27.6	52.2	112	81.8	81.8	2.00	23.8	43.9	97.6	74.6	74.6		
		0.07	6.06	10.8	20.3	—	—	—	—	—	—	—	—		
		0.14	8.54	15.2	28.5	—	—	—	—	—	—	—	—		
	-10	0.35	13.4	24.0	44.4	—	—	—	—	—	—	—	—		
		0.70	18.8	33.9	61.8	—	—	—	—	—	—	—	—		
		0.07	6.48	11.5	21.6	—	—	—	—	—	—	—	—		
		0.14	9.13	16.2	30.3	—	—	—	—	—	—	—	—		

## High Ambient (SUMMER) Capacities – kW of Refrigeration

Capacities are based on -20°C evaporator temperature, 43°C condenser, 6°C subcooled liquid.

REFRIGERANT	PRESSURE DROP ACROSS VALVE (bar)	VALVE TYPE						REFRIGERANT	PRESSURE DROP ACROSS VALVE (bar)	VALVE TYPE						
		LAC-4	LAC-5	LAC-10	OROA-5	ORI-6	ORI-10			ORD-4	LAC-4	LAC-5	LAC-10	OROA-5	ORI-6	ORI-10
<b>22 407C</b>	0.07	9.13	19.5	41.5	37.0	26.0	69.2	<b>404A</b>	0.07	5.71	12.2	26.0	23.0	17.5	48.4	—
	0.14	12.8	27.6	57.7	52.1	37.8	95.6		0.14	7.98	17.2	36.1	32.5	25.4	66.8	—
	0.21	15.5	33.9	69.9	63.7	47.0	116		0.21	9.70	21.1	43.8	39.7	31.7	80.7	—
	0.28	17.8	39.1	80.1	73.5	54.9	132		0.28	11.2	24.4	50.2	45.8	37.0	92.3	—
	0.35	19.9	43.7	89.0	82.1	61.9	147		0.35	12.4	27.2	55.8	51.2	41.7	102	—
<b>134a</b>	0.07	8.15	17.4	37.1	33.0	18.2	45.6	<b>507</b>	0.07	5.58	11.9	25.5	22.6	17.8	49.3	—
	0.14	11.4	27.4	51.5	46.5	26.4	63.0		0.14	7.80	16.9	35.3	31.8	25.8	68.1	—
	0.21	13.9	30.2	62.4	56.9	32.9	76.1		0.21	9.49	20.7	42.8	38.9	32.1	82.3	—
	0.28	15.9	34.9	71.5	65.6	38.5	87.0		0.28	10.9	23.9	49.1	44.9	37.5	94.1	—
<b>410A</b>	0.35	17.7	39.0	79.5	73.2	43.4	96.5	0.35	12.2	26.7	54.5	50.1	42.4	104	—	
	0.07	8.70	18.6	29.3	—	—	—	—	—	—	—	—	—	—	—	
	0.14	12.2	26.3	40.7	—	—	—	—	—	—	—	—	—	—	—	
	0.21	14.8	32.2	49.3	—	—	—	—	—	—	—	—	—	—	—	
	0.28	17.0	37.2	56.5	—	—	—	—	—	—	—	—	—	—	—	
0.35	18.9	41.6	62.8	—	—	—	—	—	—	—	—	—	—	—	—	