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December 2015 / **Bulletin 100-20-7**

SPORLAN

SEHI-T Electric Expansion Valve

R-134a Chillers/Heat Pumps

SPORLAN

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SEHI-T Electric Expansion Valve

R-134a Chillers/Heat Pumps

FEATURES AND BENEFITS

- Reduction in number of expansion valves required per system
  - Valve cost reduction versus multiple expansion valves
  - Simplified system piping enables piping material cost reduction
  - Reduced install time enables labor cost reduction
  - Single actuator reduces control and wiring complexity
- Improved superheat or level control versus alternate metering device
- Standard 42mm DLA integrates with existing electronics
  - 6,386 steps of resolution
  - 75 Ω bipolar stepper motor
  - 160 mA per winding
- Bi-sealing piston assembly
- Integrated sightglass with moisture indicator for diagnostics and verification of operation

NOMENCLATURE:

Item Number: 805494
Type: SEHI-T
21 ODF x 25 ODM 20' - S

SEHI-T CAPACITY:

Refrigerant	Evaporator Temperature (°F)																	
	40°F						20°F						0°F					
	Pressure Drop Across Valve (psid)																	
	40	60	80	100	120	140	40	60	80	100	120	140	40	60	80	100	120	140
R-134a	419	513	592	662	725	783	399	489	565	631	691	747	379	465	537	600	657	710

Refrigerant	Evaporator Temperature (°C)																	
	5°C						-10°C						-20°C					
	Pressure Drop Across Valve (bar)																	
	2.5	4	5.5	8	8.5	10	2.5	4	5.5	8	8.5	10	2.5	4	5.5	8	8.5	10
R-134a	1612	2038	2390	2883	2972	3223	1509	1908	2238	2699	2782	3017	1437	1818	2132	2571	2651	2875

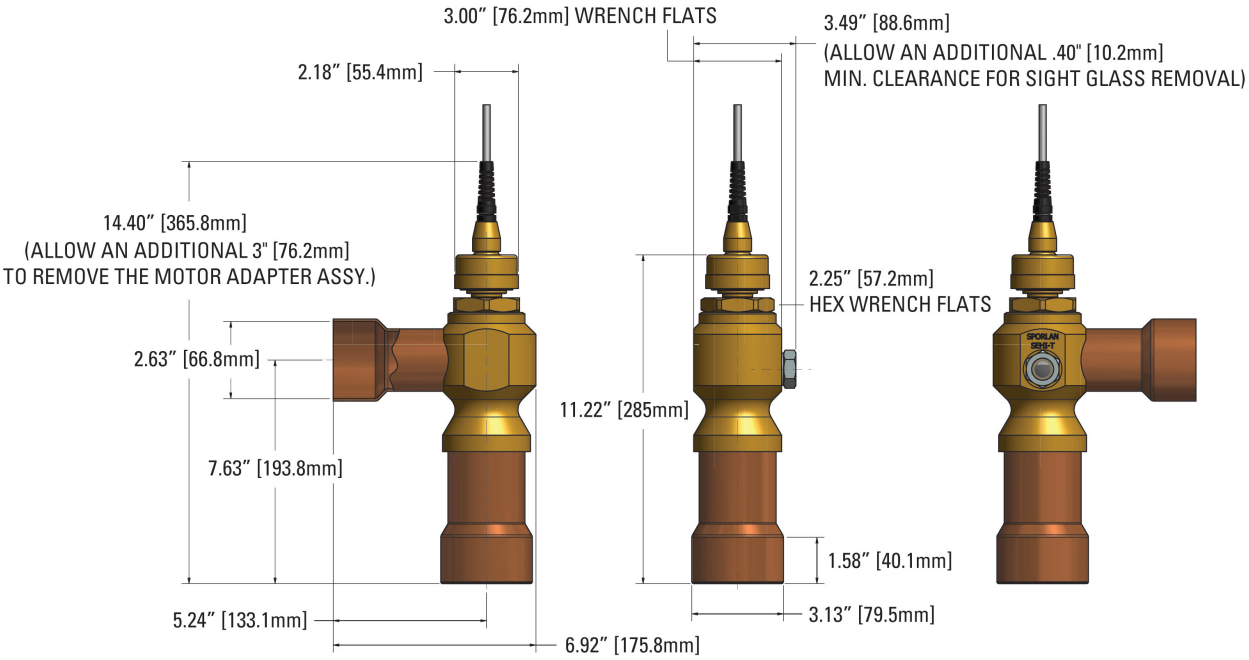
LIQUID CORRECTION FACTORS

°F	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
°C	-18	-12	-7	-1	4	10	16	21	27	32	38	43	49	54	60
R-134a	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	0.93	0.85	0.78	0.71

SPECIFICATIONS

Motor Type	Permanent magnet bipolar internal (wet) motor
Compatible Refrigerant	R-134a
Compatible Oil	POE, PAG
Supply Voltage (unless current limited)	12 VDC +10%-5%
Cable	Hermetic 4 conductor w/ stripped ends
Phase Resistance	75Ω ±10% at 70°F (21°C)
Stepping Current	160 mA / winding
Holding Current	Not recommended
Number of Full Steps	6,386
Step Rate	200 steps / second (PPS)
Initialization	7,500 steps closing
Overdriving	Recommended one 10% overdrive closed per day maximum (overdriving open not permitted)
MRP/MAP/MWP	500 psig (34 bar)
Ultimate Strength	1,900 psig (131 bar)
MOPD	150 psid (10.3 bar)
Max Internal Leakage	400 cc/min. at 100 psid (6.9 bar) dry air (bi-sealing)
Max External Leakage	0.10 oz./yr. at 300 psig (2.8 gram/yr. at 20 bar)
Liquid Temperature Range	-40°F to 155°F (-40°C to 68°C)
Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)
Installation Maximum Temperature	230°F (110°C) for 15 minutes (wet rag required for brazing)
Relative Humidity	0-100% (Condensing)
Mounting Orientation	Motor assembly above horizontal
Flow Direction	Forward flow only (side inlet) - Seals against pressure in both directions
Certifications	UL (SA5460), CE, ROHS, REACH

DIMENSIONS



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FOR USE ON AIR CONDITIONING and HEAT PUMP SYSTEMS ONLY

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