

TWO-STAGE SCREW COMPRESSOR FOR HEAT PUMP
SRT314-HA ~ 413-HA SERIES

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MAX. CONDENSING TEMP.: 85°C
COP ABOVE 2.7



PETROCHEMICAL INDUSTRY



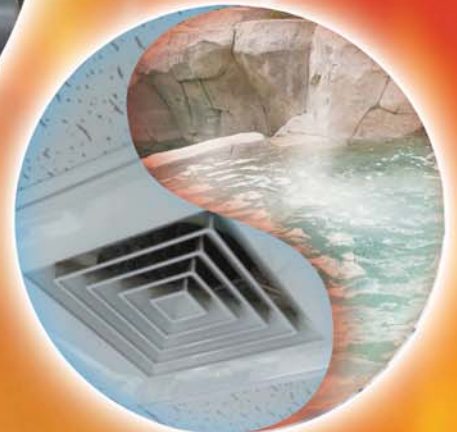
BUTCHERY



INDUSTRY PROCESS



ELECTRO PLATING



**HEATING AND COOLING
APPLICATION**

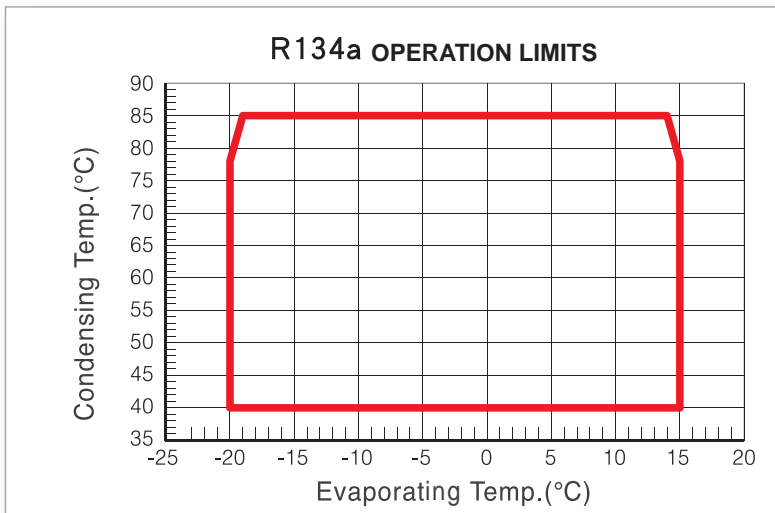


BOILER PREHEATING

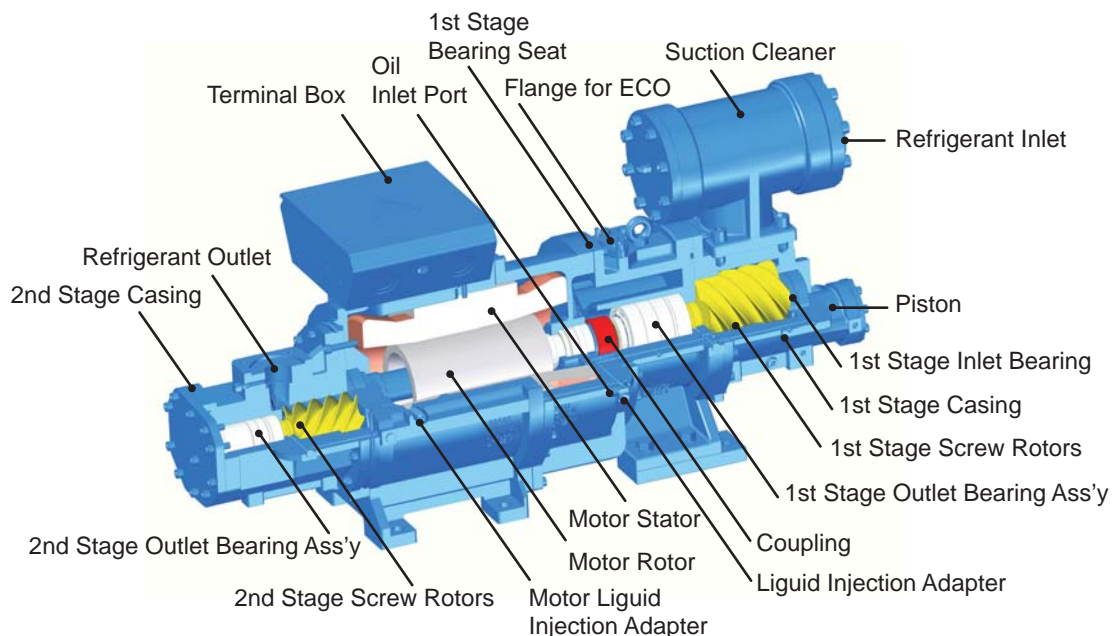
COMPRESSOR SPECIFICATIONS

		MODEL	SRT314-HA	SRT321-HA	SRT324-HA	SRT413-HA
HEATING CAPACITY		kW	200	300	400	500
FREQUENCY		Hz	50/60			
COMPRESSOR	SPEED	rpm	2950/3550			
	DISP. 1ST STAGE	m ³ /h	222/267	320/384	430/516	530/636
	DISP. 2ND STAGE	m ³ /h	143/172	167/200	210/252	250/300
REFRIGERANT		-	R134a			
MOTOR	POWER SUPPLY	v	380~415 / 380、440、460			
	STARTING METHOD	-	Y-Δ OR DIRECT-ON-LINE START-UP			
DIMENSION OF SUCTION PORT		Inch(mm)	2-5/8"(67)	4"(105)		
DIMENSION OF DISCHARGE PORT		Inch(mm)	1-5/8"(42)	2-5/8"(67)	3-1/8"(79)	
CAPACITY CONTROL		%	STEP CAPACITY CONTROL (25%、50%、100%) OR LINEAR CAPACITY CONTROL (25%~100%)			
LUBRICATION			OIL PRESSURE DIFFERENTIAL			

※ THE MAXIMUM CONDENSING TEMPERATURE OF SRT SCREW REFRIGERANT COMPRESSOR CAN REACH AS HIGH AS 85 °C.



STRUCTURE



HEATING EQUIPMENT EFFICIENCY COMPARISON

HEATING EQUIPMENT	HEAT VALUE	AVERAGE HEATING EFFICIENCY (COP)	HEAT OUTPUT
DIESEL BOILER	8,816 kcal / liter	75%	6,612 kcal/ liter
ELECTRIC WATER HEATER	860 kcal / kWh	90%	774 kcal/ kWh
NATURAL GAS WATER HEATER	12,000 kcal / liter	75%	9,000 kcal/ liter
LIQUID GAS WATER HEATER	8,942 kcal / kWh	75%	6,707 kcal/kWh
SMALL HEAT PUMP WATER HEATER	860 kcal / kWh	260%	2,236 kcal/ kWh
LARGE HEAT PUMP WATER HEATER	860 kcal / kWh	360%	3,096 kcal/kWh

※ BASED ON CPC OFFICIAL DATA



DIFFERENT FUEL COST

※ IT NEEDS 37,000 kcal TO HEAT 1,000 LITERS WATER FROM 21 °C TO 58°C.

※ FUEL COST IS BASED ON CPC AND TPC OFFICIAL DATA IN TAIWAN

HEATING EQUIPMENT	REQUIRED HEATING CAPACITY	UNIT HEAT CONTENT	FUEL CONSUMPTION	UNIT FUEL COST	TOTAL FUEL COST
DIESEL BOILER	37,000 kcal ÷	6,612 kcal / liter =	5.6 liter X	20 NT./ liter =	112 NT.
ELECTRIC WATER HEATER	37,000 kcal ÷	744 kcal / kWh =	74.8 kWh X	2.0 NT./ kWh =	95.6 NT.
LIQUID GAS WATER HEATER	37,000 kcal ÷	9,000 kcal / liter =	4.1 liter X	19 NT./ liter =	78 NT.
NATURAL GAS WATER HEATER	37,000 kcal ÷	6,707 kcal / kWh =	5.5 kWh X	13.5NT./ kWh =	74.9 NT.
HEAT PUMP WATER HEATER	37,000 kcal ÷	3,096 kcal / kWh =	12 kWh X	2.0 NT./ kWh =	24 NT.

FUSHENG SRT SERIES IS DESIGNED FOR HIGH TEMPERATURE HEAT PUMP APPLICATION.
THE COP IS AS HIGH AS 2.7 FOR HEATING WATER TO 85 °C.

AS THE OPERATION COST OF HEAT PUMP IS ONLY 33% OF OTHER SIMILAR HEATING EQUIPMENT,
THE USE OF HEAT PUMP CAN DRAMATICALLY REDUCE CARBON DIOXIDE EMISSION.

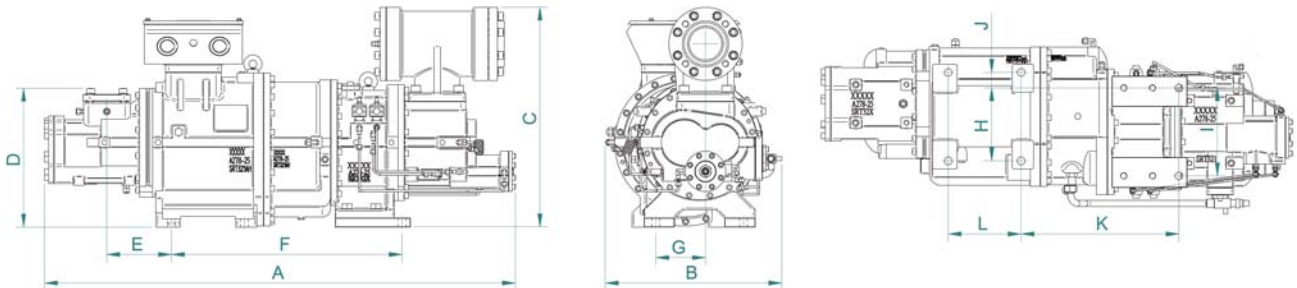
WHEN USING HEAT PUMP TO GENERATE HOT WATER, ENERGY SAVING AND ENVIRONMENTAL
PROTECTION CONCERNS CAN BE REACHED IN THE SAME TIME. DUE TO THE HIGH EFFICIENCY,
THE RETURN ON INVESTMENT CAN BE ACHIEVED IN ABOUT TWO YEARS.

FEATURES



- WIDE PRODUCT RANGE TO COVER MULTIPLE SMALL SCROLL OR PISTON COMPRESSORS IN HEAT PUMP APPLICATION.
- SUITABLE APPLICATION TO BOTH HIGH TEMPERATURE HOT WATER(85°C) AND LOW AMBIENT TEMPERATURE HEAT PUMPS (-30°C).
- COMPACT TWO-STAGE STRUCTURE DESIGN
- PATENTED MOTOR COOLING CIRCUIT TO FULFILL DIFFERENT HIGH TEMPERATURE OPERATION DEMANDS.
- HIGH RELIABILITY AND COP DESIGN WITH LOW VIBRATION AND NOISE LEVEL
- ENVIRONMENTALLY FRIENDLY REFRIGERANT (R134a)

OUTLINE DIMENSIONS



UNIT : mm

MODEL	A	B	C	D	E	F	G	H	I	J	K	L
314	1382	476	638	406	178	666	123	270	224	62	443	223
321	1440	540	672	424	198	706	152	222	268	48	483	223
324	1600	600	715	460	211	775	152	290	268	58	488	287
413	1684	600	743	460	231	821	186	290	270	35	534	287



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