

SEK SERIES**ELECTRONIC
EXPANSION
VALVE KIT****FEATURES**

- COMPLETE AND SIMPLE SOLUTION FOR REFRIGERATION SYSTEM
- QUICK AND ACCURATE SUPERHEAT CONTROL TO ENSURE THE SYSTEM OPERATING WELL
- KIT CONTAINS SEC SERIES CONTROLLER: EEV, PRESSURE TRANSDUCER WITH PACKARD CABLE, TEMPERATURE SENSOR
- LPF SERIES, EEV WITH VERY LOW INTERNAL LEAKAGE <1ML/MIN

MODEL DESIGNATION LEGEND

NO.			Model Designation Legend
1	2	3	
SEK	10	01	SANHUA electronic Expansion valve Kit
SEK	10	01	Valve orifice
SEK	10	01	Design code

Mas informacion

MANUAL LPF



BOLETIN KIT ELECTRONICO



MANUAL CONTROL SEC



GENERAL SPECIFICATIONS

Controller:

Items	Description	
Dimension	87(W)mm x 114(H)mm x 30 (D)mm	
Power supply	24Vdc+10%/-15% Class II	
Power consumption	15VA with LPF at 24VDC	
Operation	-30~55°C, Humidity≤95%RH	
Storage	-30~55°C, Humidity≤95%RH	
Protection level	IP20	

LPF and Coil with 3m cable length:

Items	Description	
Rated voltage	12V DC (± 10%)	
Excitation mode	1-2 phase excitation, uni-polar-500stps	
Excitation rate	30 - 90pps	
Current and resistance	260mA, 46 ± 3.7 Ω/phase(20°C)	
Medium temp.	-40°C / +70°C (duty cycle≤40%)	
Ambient temp.	-40°C / +60°C (duty cycle≤40%)	
Relative humidity	0 to 95% RH	
Design Pressure	42bar	
MOPD	35 bar	

ELECTRONIC EXPANSION VALVE KIT



Pressure transducer and Packard cable with 2m length:

Items	Description	
Voltage supply	10-30Vdc	
Output	4-20mA	
Pressure range	-1~12 Bar	
Test Pressure	52.5Bar	
Accuracy	±0.8% F.S.(-40~+40°C)	
Protection class	IP 67	
Connection Type	Thread SAE - 1/4"7/16-20UNF	
Electrical connector	Packard connector	

Temperature sensor:

Items	Description	
Type	NTC 5KΩat 25°C	
Wire	2×0.5mm²-2m length	
Protection class	IP 67	
Accuracy	±0.3°C (below25°C)	
Temperature Range	-50 ~50°C	

ORDERING METHOD

Model	Part Number	Valve Connection	Common products	Valve type
SEK08-01	10142001402	3/8 - 1/2	SEC612-R4 -> Controller YCQC02L18 -> Pressure Transmitter YCQC02-013022 -> Packard Cable NTC2A1 -> Probe PQ-M24012-000008 -> EEV coil	LPF08-001
SEK10-01	10142000102			LPF10-002
SEK14-01	10142000302			LPF14-002
SEK18-01	10142000502			LPF18-002
SEK24-01	10142000702			LPF 24-002
SEK30-01	10142001302			LPF30-001
SEK32-01	10142001202			LPF32-001
SEK08-02	10142002102			10 -12 mm
SEK10-02	10142000202	LPF10-004		
SEK14-02	10142000402	LPF14-004		
SEK18-02	10142000602	LPF18-003		
SEK24-02	10142000802	LPF24-003		
SEK30-02	10142002002	LPF30-002		
SEK32-02	10142001902	LPF32-003		

Compatible with the main refrigerants on the market:

R404A, R134a, R407C, R507, R1234ze, R1234yf, R450A, R513A, R448A, R449A, R452A, R245fa, R23, R407A, R407F, R124, R407H, R454C, R455A. For other refrigerants as R290, CO2, R410a... please contact your local representative.



CAPACITY SELECTION FOR LPF

Valve Model	Evap Temp. (°C)	Max cooling capacity [kW]				
		Cond. Temp. @35°C, SH=6K, SBC=2K				
		R404A	R449A	R452A	R513A	R455A
LPF08	-30	2.0	2.7	2.1	1.8	2.6
	-20	2.0	2.7	2.1	1.8	2.6
	-10	2.0	2.7	2.1	1.8	2.7
	0	1.9	2.7	2.1	1.8	2.6
	10	1.8	2.5	2.0	1.6	2.5
LPF10 944471	-30	3.2	4.4	3.3	2.9	4.2
	-20	3.3	4.5	3.4	2.9	4.3
	-10	3.3	4.4	3.4	2.9	4.3
	0	3.2	4.3	3.4	2.9	4.3
	10	2.9	4.0	3.2	2.7	4.1
LPF14	-30	6.1	8.4	6.3	5.4	8.0
	-20	6.2	8.5	6.5	5.5	8.1
	-10	6.2	8.4	6.5	5.6	8.2
	0	6.0	8.2	6.4	5.4	8.1
	10	5.6	7.7	6.0	5.0	7.8
LPF18 94473	-30	8.4	11.6	8.8	7.5	11.0
	-20	8.6	11.7	9.0	7.7	11.2
	-10	8.6	11.6	9.0	7.7	11.3
	0	8.3	11.3	8.8	7.5	11.2
	10	7.7	10.6	8.3	7.0	10.7
LPF24 944475	-30	11.5	15.8	12.0	10.2	15.0
	-20	11.8	16.0	12.3	10.5	15.4
	-10	11.7	15.9	12.4	10.5	15.5
	0	11.4	15.5	12.1	10.2	15.3
	10	10.5	14.5	11.4	9.5	14.7
LPF30	-30	16.3	22.4	17.0	14.5	21.3
	-20	16.6	22.7	17.4	14.8	21.8
	-10	16.6	22.5	17.5	14.9	21.9
	0	16.1	21.9	17.1	14.5	21.7
	10	14.9	20.5	16.1	13.5	20.8
LPF32	-30	17.9	24.6	18.6	15.9	23.4
	-20	18.3	24.9	19.1	16.3	23.9
	-10	18.2	24.7	19.2	16.3	24.1
	0	17.7	24.0	18.8	15.9	23.8
	10	16.3	22.5	17.7	14.8	22.8

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Valve Model	Evap Temp. (°C)	Max cooling capacity [kW]				
		Cond. Temp. @45°C, SH=6K, SBC=2K				
		R404A	R449A	R452A	R513A	R455A
LPF08	-30	1.9	2.7	1.9	1.7	2.5
	-20	1.9	2.7	2.0	1.8	2.6
	-10	2.0	2.8	2.1	1.8	2.6
	0	2.0	2.7	2.1	1.8	2.6
	10	1.9	2.6	2.0	1.8	2.6
LPF10 944471	-30	3.0	4.3	3.2	2.8	4.0
	-20	3.1	4.4	3.3	2.9	4.2
	-10	3.2	4.5	3.4	3.0	4.3
	0	3.2	4.5	3.4	3.0	4.3
	10	3.1	4.3	3.3	2.9	4.2
LPF14	-30	5.7	8.2	6.0	5.3	7.7
	-20	6.0	8.4	6.2	5.6	7.9
	-10	6.1	8.5	6.4	5.7	8.1
	0	6.1	8.4	6.4	5.7	8.2
	10	5.9	8.2	6.3	5.5	8.0
LPF18 944473	-30	7.9	11.4	8.3	7.4	10.6
	-20	8.2	11.6	8.6	7.7	11.0
	-10	8.4	11.8	8.8	7.9	11.2
	0	8.4	11.7	8.9	7.9	11.3
	10	8.1	11.3	8.7	7.7	11.1
LPF24 944475	-30	10.8	15.5	11.3	10.1	14.5
	-20	11.3	15.9	11.8	10.5	15.0
	-10	11.5	16.1	12.1	10.8	15.3
	0	11.5	16.0	12.1	10.8	15.4
	10	11.1	15.5	11.9	10.5	15.2
LPF30	-30	15.3	22.0	16.0	14.3	20.5
	-20	15.9	22.5	16.7	14.9	21.2
	-10	16.3	22.8	17.1	15.2	21.7
	0	16.2	22.6	17.2	15.3	21.8
	10	15.7	21.9	16.8	14.8	21.5
LPF32	-30	16.8	24.1	17.5	15.7	22.5
	-20	17.5	24.7	18.3	16.3	23.3
	-10	17.8	25.0	18.8	16.7	23.8
	0	17.8	24.8	18.9	16.7	23.9
	10	17.2	24.0	18.4	16.3	23.6

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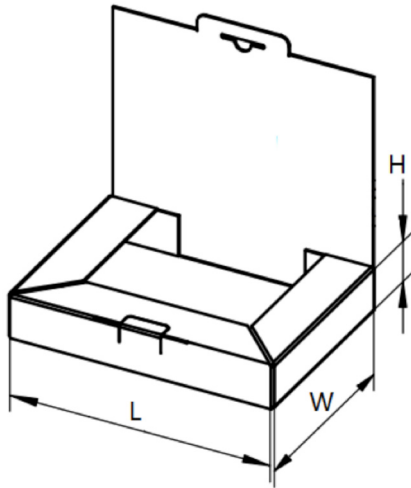


Valve Model	Evap Temp. (°C)	Max cooling capacity [kW]				
		Cond. Temp. @55°C, SH=6K, SBC=2K				
		R404A	R449A	R452A	R513A	R455A
LPF08	-30	1.6	2.5	1.7	1.6	2.3
	-20	1.7	2.6	1.8	1.7	2.4
	-10	1.8	2.7	1.9	1.8	2.5
	0	1.8	2.7	2.0	1.8	2.5
	10	1.8	2.7	2.0	1.9	2.5
LPF10 944471	-30	2.6	4.1	2.8	2.7	3.7
	-20	2.8	4.2	3.0	2.8	3.9
	-10	2.9	4.3	3.1	2.9	4.0
	0	3.0	4.4	3.2	3.0	4.1
	10	3.0	4.3	3.2	3.0	4.2
LPF14	-30	5.0	7.7	5.3	5.1	7.0
	-20	5.3	8.0	5.6	5.3	7.4
	-10	5.6	8.2	5.9	5.6	7.7
	0	5.7	8.3	6.0	5.7	7.8
	10	5.7	8.2	6.1	5.7	7.9
LPF18 94473	-30	6.9	10.7	7.3	7.0	9.7
	-20	7.4	11.1	7.7	7.4	10.2
	-10	7.7	11.4	8.1	7.7	10.6
	0	7.9	11.5	8.3	7.9	10.8
	10	7.8	11.4	8.4	7.9	10.9
LPF24 944475	-30	9.5	14.6	10.0	9.6	13.3
	-20	10.1	15.2	10.6	10.1	14.0
	-10	10.5	15.5	11.1	10.5	14.5
	0	10.7	15.7	11.4	10.8	14.8
	10	10.7	15.6	11.5	10.8	14.9
LPF30	-30	13.4	20.7	14.1	13.5	18.8
	-20	14.2	21.5	15.0	14.3	19.8
	-10	14.9	22.0	15.7	14.9	20.5
	0	15.2	22.2	16.1	15.3	21.0
	10	15.2	22.0	16.2	15.3	21.1
LPF32	-30	14.7	22.7	15.5	14.8	20.7
	-20	15.6	23.5	16.5	15.7	21.7
	-10	16.3	24.1	17.2	16.4	22.5
	0	16.7	24.4	17.7	16.8	23.0
	10	16.7	24.1	17.8	16.8	23.1

ELECTRONIC EXPANSION VALVE KIT



PACKAGE DIMENSIONS



Name	Dimensions (mm)			Weight (kg)
	L	W	H	
SEK EEV kit	312	226	50	0.78

