DPF/DPFS series electronic expansion valve controller

T0055（1 carrying 2 ）

T0056（1 carrying 3）

Product Description

Used for super heat degree control and unit control of DPF/DPFS series electronic expansion vlave, and suitable for the electronic expansion valve driven by 4 phase stepper motors and controlled by 4 phase 8 beat 1-2 phase excitation driving mode. Ensure the system is operating within a safe range, improve the reliability of compressor and system, reduce system power consumption (improve system COP), enhance the refrigerating capacity of system.

Features

- Analyze the system current running state by collecting temperature information of each part of the system, use fuzzy algorithms, and adopt self-adaptive control;
- Fast response and action, precise adjustment;
- The electronic expansion valve controller can be set according to the system parameters to adapt demands of different equipments and conditions;
- Easy installation of guide rail type

Technical Parameters

Working environment	temperature -20~55℃, relative humidity ≤90%RH (no condensation)
Storing environment	temperature -40~80℃, relative humidity ≤95%RH(no condensation)
Input power	single phase alternative current 110~220V/50Hz(60Hz)
Electronic expansion valve outpu	single phase maximum load output 0.5A/12V
Temperature sensor input	5 way (including pressure sensor), temperature sensor B3470/5K，temperature resolution: 0.1℃
Pressure sensor input	1 way; pressure resolution: 0.01Bar
AC input switch	2 way
Relay output	2 way passive switch, load capacity: 5A/220V
Communication interface	1 way, RS485

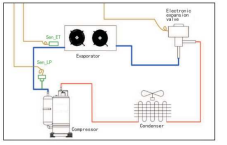
Model selection

No	Control method	code	Controller model	Adapter model		Quantity	Function description	Set parameter
1	Air return super heat degree control	T0055	PCH-FP2N	Electronic expansion valve	DPF、DPFS series	1	One main way (1 carrying 1) PIC 1	
				Pressure sensor	HS-P321-30- (-1~12) barG	1		201
				Temperature sensor	NTC5K3470	1		
	Air return super heat degree control	T0055	PCH-FP2N	Electronic expansion valve	DPF、DPFS series	2	Two main ways (1 carrying 2) Pic 2	
				Pressure sensor	HS-P321-30- (-1~12) barG	1		201
				Temperature sensor	NTC5K3470	2		
	Air return super heat degree control	T0056	PCH-FP3N	Electronic expansion valve	DPF、DPFS series	3	Three main ways (1 carrying 3) Pic 3	
				Pressure sensor	HS-P321-30- (-1~12) barG	1		201
				Temperature sensor	NTC5K3470	3		
2	Air return super heat degree+liquid injecting cooling	T0055	PCH-SP1L	Electronic expansion valve	DPF、DPFS series	2	One main way, one auxiliary Pic 4	
				Pressure sensor	HS-P321-30- (-1~12) barG	1		201
				Temperature sensor	NTC5K3470	2		

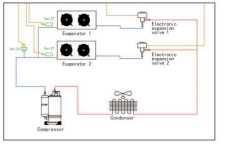
Model selection

No	Control method	code	Controller model	Adapter model		Quantity	Function description	Set parameter
3	Air return(exhaust) super heat degree+enhanced vapor injection	T005S	PCH-SD1G	Electronic expansion valve	DPF、DPFS series	2	One main way, one auxiliary Pic 5	
				Pressure sensor	HS-P321-30- (-1~12) barG	0		201
				Temperature sensor	NTC5K3470	5		
4	Air exhaust super heat degree+liquid injecting cooling	T005S	PCH-SD1L	Electronic expansion valve	DPF、DPFS series	2	One main way, one auxiliary Pic 6	
				Pressure sensor	HS-P321-30- (-1~12) barG	0		201
				Temperature sensor	NTC5K3470	3		
5	Air exhaust super degree	T005S	PCH-SD1N	Electronic expansion valve	DPF、DPFS series	1	One main way Pic 7	
				Pressure sensor	HS-P321-30- (-1~12) barG	0		201
				Temperature sensor	NTC5K3470	3		

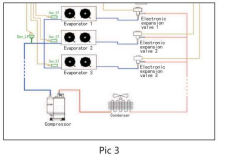
Application in system



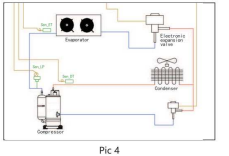
Pic 1
Air return super heat degree control (1 by 1)



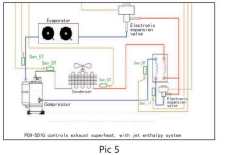
Pic 2
Air return super heat degree control (1 by 2)



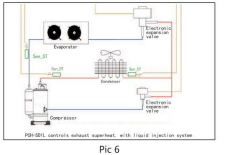
Pic 3
Air return super heat degree control (1 by 3)



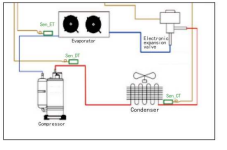
Pic 4
Air return super heat degree+liquid injecting cooling
(One main way, one auxiliary)



Pic 5
Air return(exhaust) super heat degree+enhanced vapor injection
(One main way, one auxiliary)



Pic 6
Air exhaust super heat degree+liquid injecting cooling
(One main way, one auxiliary)



Pic 7
Air exhaust super degree(One main way)