

2016-2017 General catalog update

Stepping Motor Driver

When the motorized stage is driven with the motion control board and the positioning unit, we recommend following drivers.
CRD5107P/CVD507-K-A9 has smooth driver function that is realized vibration reduction and low noise.

DC24V type input driver

SPEC				
Model	NEW Go on Sale on 1st FEB '19	Continuous sales	Discontinued	31th JLY '19
	CVD507-K-A9	CRD5107P	SD5107P3-A22	DFC5107P
Compatible motor	C9005C-90215P C2714-9015-1 C9582-9015-1 PK523HPB-C15 PK523HPB-C17 PK523HPMB PK523HPMB-C1 PK525HPB PK544PB-C18 PK546PB for KS451-40 (customized)			
Input power	DC24V±10% 1.4A(Max)		DC24-36V±10% 1A(Max)	
Rated current	0.75A/Phase			
Divisions	1~1/250		Full/Half	1~1/250
Operating temperature range	0~50°C		0~40°C	
Dimension	65(W)×45(D)×21max(H)mm		65(W)×45(D)×28max(H)mm	
Dimension	Photo coupler input			
Weight	0.02kg		0.04kg	

Cable for DC24V type input driver

600mm connector is crimped to a driver connector. A three-piece set of cable between driver and DC power, a motor and host controller Ready for use because if east insert to the driver directly. No need a crimping work and crimping tools, also avoid a damage of the driver due to miss wiring. (The connector assembly and wiring that included DC24 type driver required the specialized crimping tools).

SPEC		
Model	LCS04SD5	LCS02CFK
Compatible driver	CVD507-K-A9/CRD5107P/SD5107P3-A22	
Length	600mm	

Compare DFC5107P(Discontinued) and CVD507-K-A9

Compare main SPEC		
Model	DFC5107P	CVD507-K-A9
Input Power	DC24-36V±10%	DC24V±10%
Power current capacity	More than 1A	More than 1.4A
Rated current	0.75A/Phase	
Drive method	Bipolar rated current drive	
Excitation method	Micro step (1~250divisions 16steps)	
Input signal	Photo coupler input	
Input line driver	△ (non-recommendation)	○ (warranty Max:1MHz)
Input signal method	1 pulse input/2 pulses input	
Auto-current down	○	
Operating current regulation	Volume setting (analog) (switch ON for checking current)	Switch setting (25~100% 16 steps)
Stop-time current	Volume setting (analog) (switch OFF for checking current)	Switch setting (50% or 25% 2 steps)
Standard	UL compliant, non CE compliant	Non UL compliant, CE compliant
Dimension	100(W)×70(D)×36(H)mm	65(W)×45(D)×21max(H)mm
Mounting hall	Φ3.5×2 91×47mmpitch	Φ3.5×4 59×31mm pitch
Weight	0.04kg	

Compare I/O									
DFC5107P					CVD507-K-A9				
Connector	Pin	I/O	Signal name	Explanation	Connector	Pin	I/O	Signal name	Explanation
For power (CN1)	1	In	Power	DC12-24V	For power (CN1)	1	In	Power	DC12-24V
	2			GND		2			GND
	3			N.C.					
For input / output signal (CN2)	1	In	CW+	CW Pulse input (Puls input)	For input / output signal (CN3)	1	In	CW+	CW Pulse input (Puls input)
	2		CW-			2		CW-	
	3		CCW+	CCW Pulse input (rotary direction input)		3		CCW+	CCW Pulse input (rotary direction input)
	4		CCW-			4		CCW-	
	5	Out	A.W.OFF+	Output current off input		5	Out	A.W.OFF+	Output current off input
	6		A.W.OFF-			6		A.W.OFF-	
	7	Out	TIM+	Excitation timing output		7	Out	CS-	Step angle switch input
	8		TIM-			8		CS-	
	9		C/S+	Step angle switch input		9		ALM+	Alarm output
	10	Out	C/S-			10	Out	ALM-	
				11		TIM+		Excitation timing output	
				12		TIM-			
For motor (CN2)	1	Out	MOTOR	Motor lead blue	For motor (CN2)	1	Out	MOTOR	Motor lead blue
	2			Motor lead red		2			Motor lead red
	3			Motor lead orange		3			Motor lead orange
	4			Motor lead green		4			Motor lead green
	5			Motor lead black		5			Motor lead black

■ Compare I/O (Differences)

① Using connector

Connector	MSDR2436(DFC5107P)	CVD507-K-A9
Power(CN1)	171822-3 (TE)	51103-0200 (molex)
Motor(CN2)	171822-5 (TE)	51103-0500 (molex)
I/O(CN3)	1-171822-0 (TE)	51103-1200 (molex)
Contact	170204-2 (TE)	50351-8100 (molex)

② Specification : Input signal of step angle switch

Signal	MSDR2436(DFC5107P)	CVD507-K-A9
Input of step angle switch	OFF: step angle set with DATA1 ON : step angle set with DATA2	OFF: step angle set with STEP SW ON : full step (1/1)

③ Assign of input / output signal

Signal	MSDR2436(DFC5107P)	CVD507-K-A9
Excitation timing output	CN3 number 7,8	CN3 number 11,12
Input of step angle switch	CN3 number 9,10	CN3 number 7,8
Alarm output	-	CN3 number 9,10 (additional function)