

700 720 Model AC DRIVE User Manual

Sensorless current/flux vector control Краткое описание основных настроек



◆ Control terminal block

LS700M control terminals – wiring addresses and sequence are shown follows:

Di1	Di3	Di5	DCM	Do	Ai1	Ao	E	Tc
Di2	Di4	Di6	COM	Ai2	+10V	AVG	Ta	Tb

LS700 control terminals – wiring addresses and sequence are shown follows:

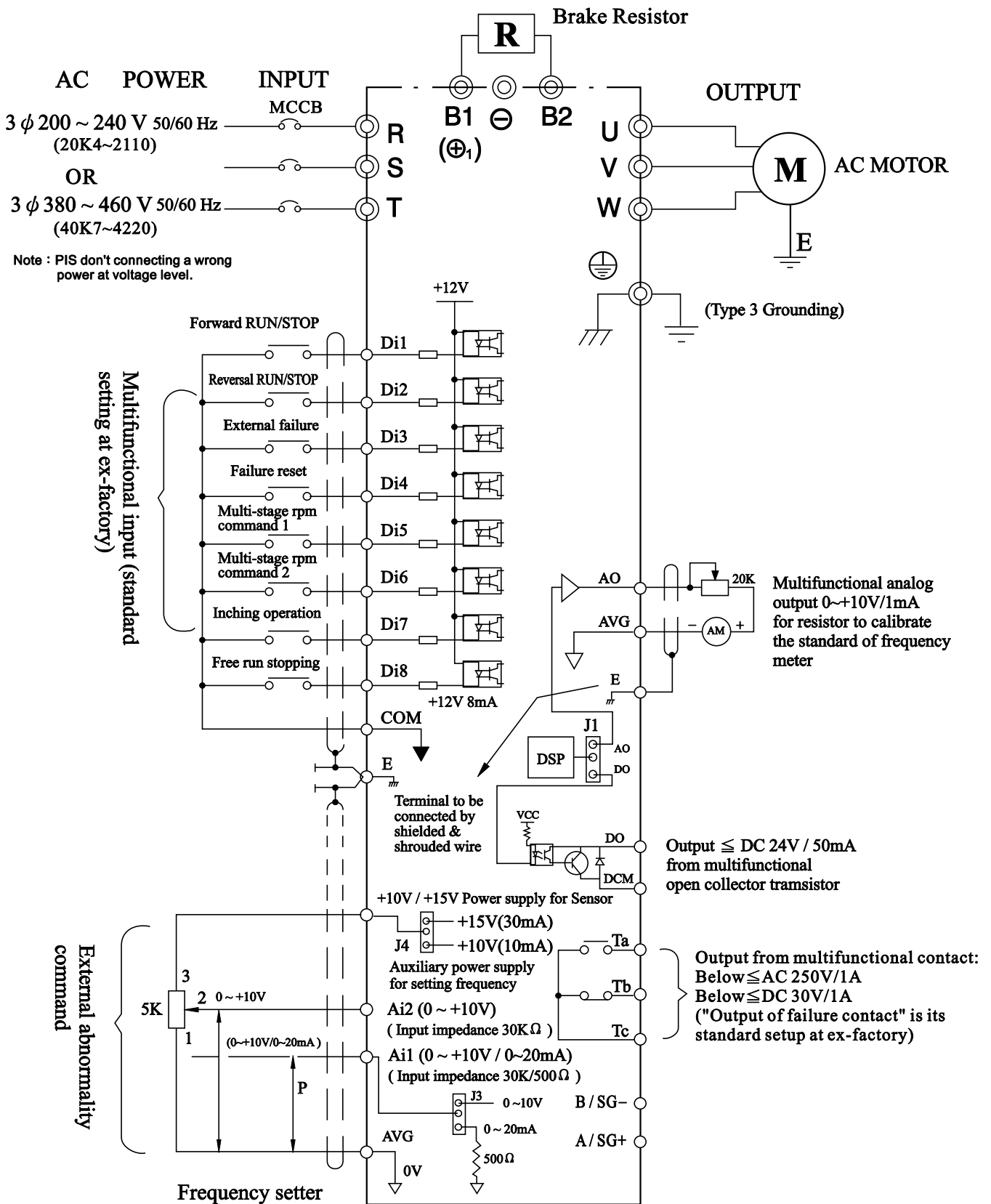
Di1	Di3	Di5	Di7	DCM	Do	Ai1	Ao	E	Tc
Di2	Di4	Di6	Di8	COM	Ai2	+10V	AVG	Ta	Tb

Diagram showing wiring connections for the LS700 control terminal block:

- A red line connects Di1 to Di2.
- A red line connects Di3 to Di4.
- A red line connects Di5 to Di6.
- A red line connects Di7 to Di8.
- A red line connects Do to COM.
- A red line connects Ai1 to Ai2.
- A red line connects Ao to +10V.
- A red line connects E to AVG.
- A red line connects Tc to Ta.
- A red line connects Tc to Tb.
- A red line connects Di8 to COM.
- A red line connects Di8 to Di7.
- A red line connects Di8 to Di9.
- A red line connects Di8 to Di10.
- A red line connects Di8 to Di11.
- A red line connects Di8 to Di12.
- A red line connects Di8 to Di13.
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- A red line connects Di8 to Di96.
- A red line connects Di8 to Di97.
- A red line connects Di8 to Di98.
- A red line connects Di8 to Di99.
- A red line connects Di8 to Di100.

- ※ Please use slender type "–" or "+" (#101 screwdriver) screwdriver to unscrew the terminal screws on the terminal block, then route the wire from the wiring opening below the terminal block to connect respective terminal and firmly fasten the terminal screws. (Please refer to P2-15 for cautionary points when wiring the terminal block is desired)

LS700 Control circuit wiring diagram



IV -Test Run-

Fast operation control mode

#Fast operation control mode

- ◎ There are several operation control methods applicable to the ac drive for the startup operation. You can use the following operation methods to simply and quickly start the ac drive.
- ◎ There are two primary operation control parameters to start the operation of ac drive: one is the F3: Operation Control Source and the other one is F4: Frequency command source. Please see the table below for description of operation.

Parameter function	Description of operation procedures	Ex-factory setting	Page No.
F3: Operation Control source			
0 : Digital operation panel	Depress FWD key after “F xx.xx” shown in the display window ↓ Enter into the forward-rotation operation mode	0	P5-2
	* Please pay attention to the motor’s direction of rotation when performing the test run.*		P5-2
1 : Digital input terminal	Terminal Di1 /ON →FWD(indicator ON) Run → OFF/stop.		P5-2
F4 : Frequency command source			
0 : Digital operation panel	Depress the ▲ key under running state to enter into the frequency-changing mode.	1	P5-2 P5-3
1 : Operation panel Ai input(V.R)	To perform the speed control from the potentiometer (V.R.) in operation panel.		
2 : Ai1 input (+10V/20mA)	To perform the speed control by inputting 0~+10V/0~20mA to analogy terminal Ai1.		
3 : Ai2 input (+10V)	To perform the speed control by inputting 0~+10V to analogy terminal Ai2.		
4 : Ai1+Ai2	To perform the speed control by making an addition operation of two analog signals from Ai1 and Ai2 analog terminals at the same time.		
5 : Ai1, Ai2/MAX	To take the maximum value from two sets of analog signals, Ai1 and Ai2, to perform operation control.		
6 : Ai1, Ai2/MIN	To take the minimum value from two sets of analog signals, Ai1 and Ai2, to perform operation control.		
7 : PID (LS720 retention)	To execute the external analog signals for PID feedback control.		
8 : Digital terminals for speed increase or decrease keys	To perform speed increase and decrease control by inputting signals to digital input terminals.		