

FTMST 48-05 SPECIFICATION

GENERAL DESCRIPTION

- FTMST48-05 is a motor control board for two phase Stepper Motors rated up to 48V / 5 Amps

OVERVIEW

- Controls Two Phase Stepper Motor
- Full Step to 1/256 Microstepping

GENERAL FEATURES

- Pulse and Direction control input
- Status LED's indicate Power, Mode and Fault conditions
- Mixed decay ENABLE/DISABLE option
- Optically isolated control inputs

OPERATIONAL SPECIFICATION

PARAMETER NAME	MIN	NOM	MAX	UNIT
Power Supply	12	-	48	V
Pulse Frequency @ 1/256 microstep	-	50	-	kHz
Speed Range(Depends on motor)	0.5	200	-	rpm
Continuous Output Current (At 25°C)	-	-	5	A
Operating Temperature Range	0	-	70	°C
Storage Temperature Range	-25	-	85	°C
Control Input Voltage	5	-	10	V

DIRECTION

- By using Direction input (DIRECTION, EX- GND) the direction of the motor can be changed.

STEP INPUT

- According to the step input (PULSE, EX- GND), speed of the motor can be varied from MIN to MAX.

ENABLE/DISABLE

- By giving +5V to Disable Input (DISABLE, EX - GND) we can DISABLE the motor.

SPEED

- Speed of the Motor can be varied from MIN to MAX by varying the Potentiometer from Left to Right

LED's

- Fault LED - It is ON, Colour RED
- Mode LED - Continuous ON in P&D Mode and Blinks on AUTO Mode, Colour GREEN
- Power LED - Turns ON when Drive is Powered, Colour GREEN

MICROSTEPPING

S1	S2	S3	S4	STEP MODE
OFF	OFF	OFF	OFF	Full Step
OFF	OFF	OFF	ON	1/2 Step
OFF	OFF	ON	OFF	1/4 Step
OFF	OFF	ON	ON	1/8 Step
OFF	ON	OFF	OFF	1/16 Step
OFF	ON	OFF	ON	1/32 Step
OFF	ON	ON	OFF	1/64 Step
OFF	ON	ON	ON	1/128 Step
ON	OFF	OFF	OFF	1/256 Step

*ALL OTHER SETTINGS WILL BE INVALID AND DRIVE WILL NOT WORK

MODE SETTINGS

S1	POWER DOWN MODE
OFF	Disable
ON	Enable

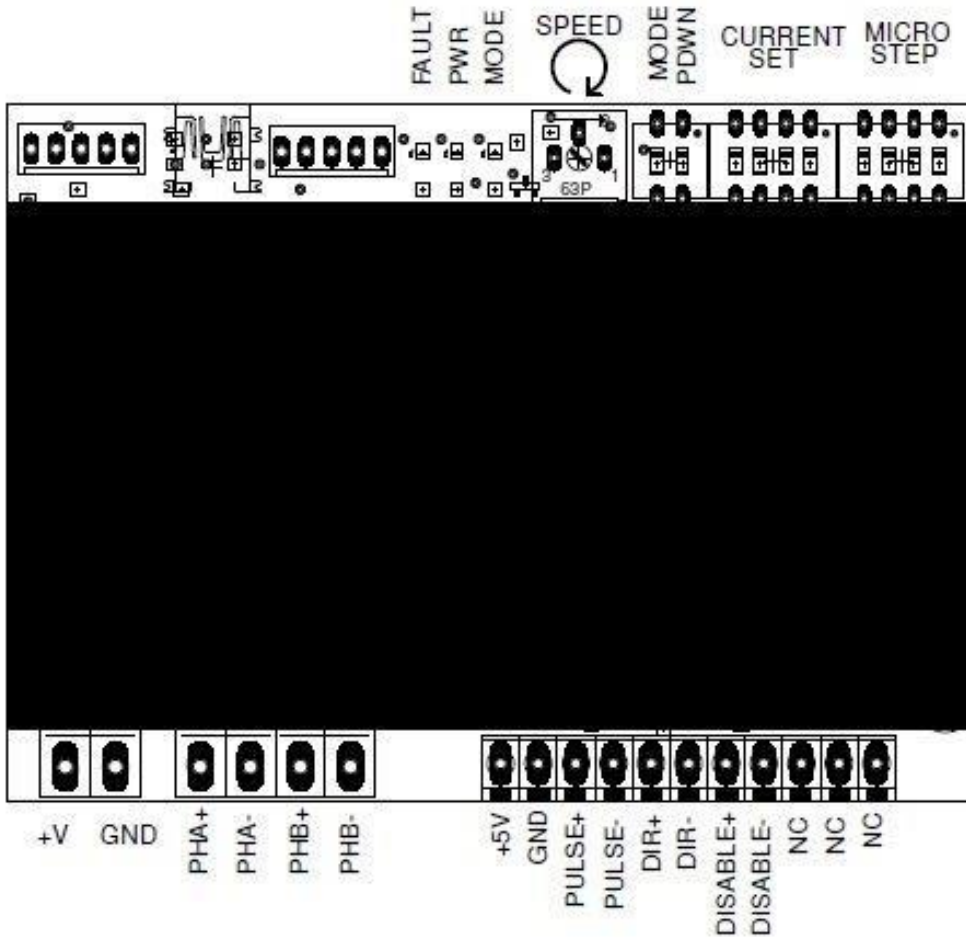
POWER DOWN MODE (Not implemented in this drive)

- If the Power Down Mode is enabled in P & D Mode, the output current will be reduced to 0.25 Ampere in the absence of pulse.

S2	MODE
OFF	P & D
ON	AUTO

CURRENT SETTING

S1	S2	S3	S4	CURRENT
OFF	OFF	OFF	OFF	0.25 Amp
OFF	OFF	OFF	ON	0.5 Amp
OFF	OFF	ON	OFF	0.75 Amp
OFF	OFF	ON	ON	1 Amp
OFF	ON	OFF	OFF	1.25 Amp
OFF	ON	OFF	ON	1.5 Amp
OFF	ON	ON	OFF	1.75 Amp
OFF	ON	ON	ON	2 Amp
ON	OFF	OFF	OFF	2.25 Amp
ON	OFF	OFF	ON	2.5 Amp
ON	OFF	ON	OFF	2.75 Amp
ON	OFF	ON	ON	3 Amp
ON	ON	OFF	OFF	3.5 Amp
ON	ON	OFF	ON	4 Amp
ON	ON	ON	OFF	4.5 Amp
ON	ON	ON	ON	5 Amp



*** NOTE : PLEASE USE CABLE SHOES FOR PERFECT CONNECTIONS**