DC Motor Controller DMC10

DMC10 is a compact, programmable DC servo motor controller.

The DMC10 features control via either the built-in RS232 interface or an analog input (+/-10V).

In addition, the DMC10 can be controlled as a step motor system controller via a step-pulse and direction input.

The DMC10 can be configured for absolute/relative positioning via 4 inputs.

DMC10 accepts a balanced or unbalanced signal from a standard 2-channel incremental encoder.

All inputs and outputs are optically isolated and overload protected.

The DMC10 has 4 general-purpose outputs. These can be configured to provide a signal, for example, when the motor has reached a required position, or an error signal if a condition arises that prevents motor operation.
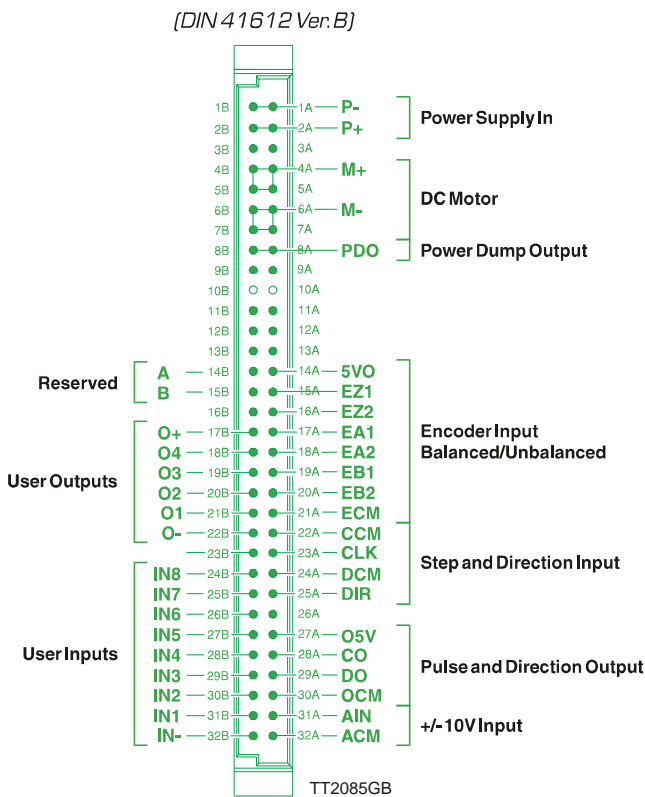
The DMC10 can be mounted in a 19" rack or on a suface

- Digital control loop

- EMC protected - CE approved

- Preprogrammed speed profiles

- Can handle motors up to 1kW

- Automatic Zero-point seek

- Setup stored in EEPROM
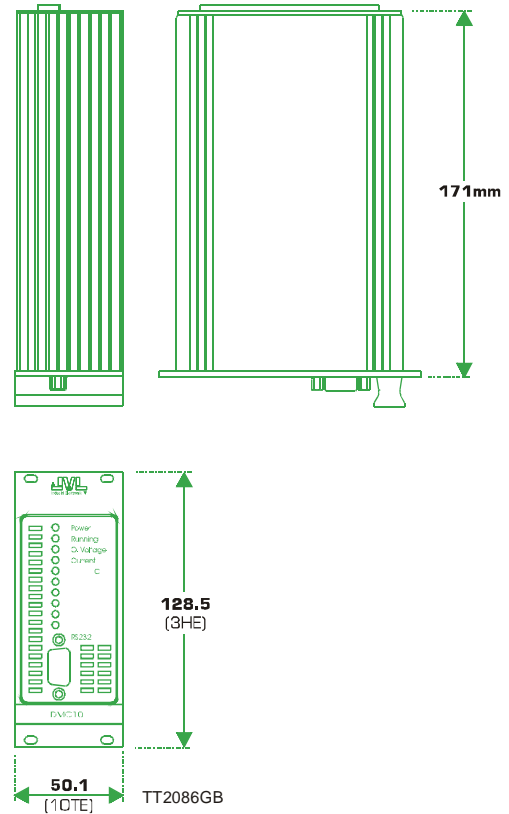
- Following input features:
  Analog +/-10V
  Step-pulse and direction
  Digital selection of position

- RS232 Interface

- Current overload protection

- Current: 12A continuous, 25Apeak

- Short-circuit and thermal protection

- End-of-travel inputs

- Voltage overload protection

- Small physical dimensions

- Absolute/Relative positioning

- Extremely precise positioning

DC Motor Controller DMC10

Connector Pin Designations

(DIN 41612 Ver. B)

Pin	Signal	Group
1B / 1A	P-	Power Supply In
2B / 2A	P+	
3B / 3A		
4B / 4A	M+	DC Motor
5B / 5A		
6B / 6A	M-	
7B / 7A		
8B / 8A	PDO	Power Dump Output
9B / 9A		
10B / 10A		
11B / 11A		
12B / 12A		
13B / 13A		
A — 14B / 14A	5VO	
B — 15B / 15A	EZ1	
16B / 16A	EZ2	
O+ — 17B / 17A	EA1	Encoder Input Balanced/Unbalanced
O4 — 18B / 18A	EA2	
O3 — 19B / 19A	EB1	
O2 — 20B / 20A	EB2	
O1 — 21B / 21A	ECM	
O- — 22B / 22A	CCM	
23B / 23A	CLK	Step and Direction Input
IN8 — 24B / 24A	DCM	
IN7 — 25B / 25A	DIR	
IN6 — 26B / 26A		
IN5 — 27B / 27A	O5V	
IN4 — 28B / 28A	CO	Pulse and Direction Output
IN3 — 29B / 29A	DO	
IN2 — 30B / 30A	OCM	
IN1 — 31B / 31A	AIN	+/-10V Input
IN- — 32B / 32A	ACM	

Reserved: A, B
User Outputs: O+, O4, O3, O2, O1, O-
User Inputs: IN8, IN7, IN6, IN5, IN4, IN3, IN2, IN1, IN-

TT2085GB

Physical Dimensions

171mm

128.5 (3HE)

50.1 (10TE)

TT2086GB

Technical Data

Description	Min.	Max.	Units
Supply Voltage:	15	80	VDC
Continuous Motor Current:	0	12	A
Peak Motor Current:	0	25	A
Max. Power Loss in Driver:	0	25	W
Motor Voltage:	0	85	V
Continuous "Power dump":	-	100	W
PWM Frequency:	22	23	kHz
Encoder Frequency:	0	500	kHz
Pulse Input - Frequency:	0	500	kHz
Encoder Supply (14A):	4.8	5.2	VDC
Temperature Protection:	-	75	°C
Weight:	-	720	gr.
Operating Temperature:	0	50	°C
User Inputs/Outputs:	4.5	30	VDC
Dimensions:	H = 128.5		mm
	D = 171		mm
	B = 50.1		mm

Accessories

Description	Type
Interface Cable (9pin)	RS232-9-1
Interface Cable (25pin)	RS232-25-9
Mounting Plate for surface	Base1
Connector Board for 19" rack	CON12
Programming Software	MotoWare