



1000/2000 Series

DRIVEBLOK® MODULE

120-460 VAC

0.5-5 Hp/1000 Series

7.5-20 Hp/2000 Series

Features

- Features SensorlessServo™ control of brushless permanent magnet motors and three phase AC induction motors.
- Speed and Torque Mode operation
- Flying start for AC induction motor
- Line drop-out ride-through
- wInControl® PC based set-up utility
- Linear and s-curve acceleration profiles
- Flexible Digital Inputs and Outputs
- 4-20 mA Current Loop:
Speed Ref, Torque Ref, Load limit
- +/- 10V Input:
Speed Ref, Speed & Direction Ref, Torque Ref, Load limit
- Three Analog Outputs:
Current, Torque, Torque Setpoint, Speed Set-Point, Speed, Frequency, Output voltage, Heatsink Temp, DC Link Voltage
- Eight Digital Inputs:
Run Enable, External Fault, Run, Jog, Direction, Digital Pot Accel, Digital Pot Decel, Accel / Decel Select, Preset Speed Bits 0-2, Preset Teach, Local Mode, Auto-Tune, Open Loop Control, Coast Stop, Torque Mode, Analog Setpoint Source, Fault Clear, Start/Stop, Current Loop Disable, Run Fwd, Run Rev, Start Fwd, Start Rev, Analog Input Polarity
- Two High Speed Digital Inputs:
Frequency Speed Ref, Duty Cycle Torque Ref, Frequency Torque Reference, Duty Cycle Speed Ref, Frequency Monitor, Duty Cycle Monitor
- Two Open Collector, Two Relay Outputs:
At Speed, Run, Fault, Reverse, Overload Alert, Over Temperature Alert, Speed Detect Low, Speed Detect High, Torque Detect Low, Torque Detect Hi, Auto-Tune, Brake Actuate, Set High, Set Low, Fault
- Provision for directly connecting an external braking resistor.

Specifications

Max. Frequency:

- 434 Hz

Min. Speed:

- 1% of base speed, induction motor
- 3 to 5% of no load speed, BLDC

Speed Regulation:

- Typically +/- 1 RPM

Speed Accuracy (0-rated load):

- Typically +/- 0.1% w/ BDM +/- 0.5% w/ ADM, as % of base or no load speed*

Constant Torque Speed Range, induction motor:

- 100:1

Torque Response:

- Typical 1.5 ms to 90% of commanded value

* Actual results based on motor type, construction and application.

DriveBlok® Technical Specifications

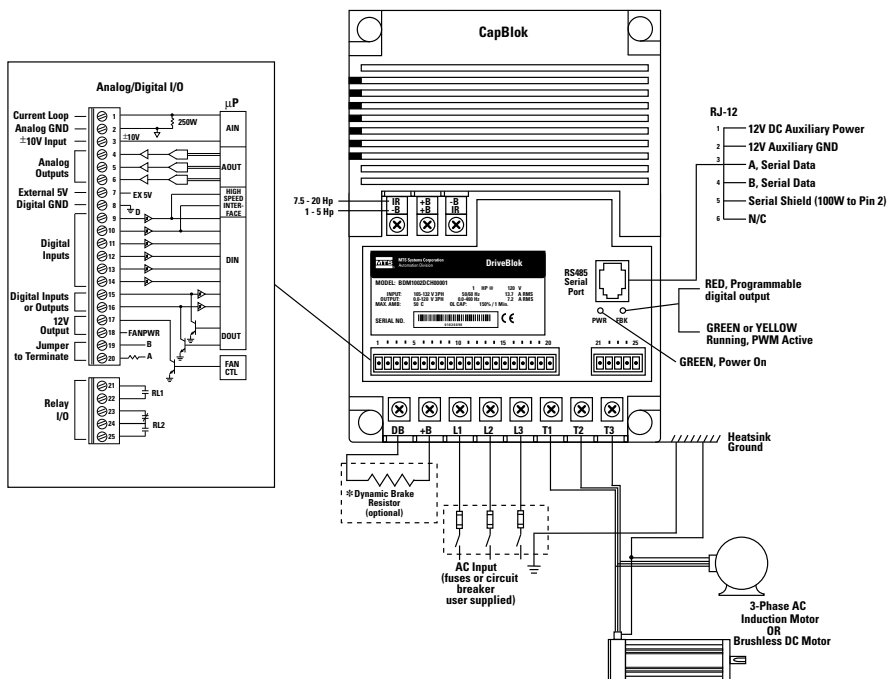
1000 Series

DriveBlok Module Type Number		1001C	1002C	1003C	1001D	1002D	1003D	1005D	1001E	1002E	1003E	1005E
ADM, AC Induction Motor												
AC Line Input Voltage	VAC	120V±10%			200/240V±10%				380/480V±10%			
Cont. Output Cur.(RMS)	Arms	4.0	7.2	10.4	3.6	6.8	9.6	15.2	1.8	3.4	4.8	7.6
	Hp	0.5	1.0	1.5	1	2	3	5	1	2	3	5
	kW	0.38	0.75	1.12	0.75	1.5	2.2	3.7	0.75	1.5	2.2	3.7
% Overload 1 min	%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
% Overload 3 sec	%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%
BDM Brushless PM Motor												
Cont. Output Cur.(RMS)	Arms	4.0	7.2	10.4	3.6	6.8	9.6	15.2	1.8	3.4	4.8	7.6
Peak Output Cur.	Arms	8.0	14.4	20.8	6.8	13.6	19.2	30.4	3.6	6.8	9.6	15.2

2000 Series

DriveBlok Module Type Number		2007D	2010D	2007E	2010E	2015E	2020E
ADM, AC Induction Motor							
AC Line Input Voltage	VAC	200/240V±10%			380/480V±10%		
Cont. Output Cur.(RMS)	Arms	22	28	11	14	21	27
	Hp	7.5	10	7.5	10	15	20
	kW	5.6	7.5	5.6	7.5	11	15
% Overload 1 min	%	150%	150%	150%	150%	150%	110%
% Overload 3 sec	%	200%	200%	200%	200%	150%	130%
BDM Brushless PM Motor							
Cont. Output Cur.(RMS)	Arms	22	28	11	14	21	27
Peak Output Cur. (RMS)	Arms	44	56	22	28	31.5	36.5

Connection Diagram



* Consult Dynamic Brake Resistor Data Sheet for standard available sizes.