

**1000/2000 Series****NTAC™ DRIVES**

200-460 VAC
1-5 Hp/0.75-3.7 kW
7.5-20 Hp/5.5-15 kW

Features

- Features SensorlessServo™ precision speed and torque control for use with three phase AC induction motors.
- One Micro-Controller dedicated to motor control and protective functions.
- Second Micro-Controller in keypad handle operator interface, I/O and special functions.
- Proportional plus Integral (PI) Setpoint Control
- Flexible digital inputs and outputs
- 2 x 16 LCD English/Spanish keypad
- AutoExec Mode to automate processes without the need for external logic controllers.
- Digital Operator Interface to operate the drive, change program parameters and to display operating conditions.
- Comprehensive monitoring of operating conditions while running, with four fault memory locations.
- Two Analog Inputs:
 Current Loop: Speed Command
 Voltage: Speed Command,
 Optional Direction Command
- One Analog Output:
 Current, Torque, Speed, Frequency, Output voltage,
 Power, DC Link Voltage
- Eight Digital Inputs:
 Run Forward, Run Reverse, Stop, Start Forward, Start Reverse, Reverse, Speed Up, Speed Down, Jog, Reset, Accel 2, Decel 2, Coast, External Fault-NO/NC, Fast Stop, Orient, Speed 0, Speed 1, Speed 2, IN1-IN4, Analog Voltage/Current Loop Select
- Two Open Collector, One Relay Output:
 Run, Fault, At Speed, Speed Detect HI/LO, Torque, Detect HI/LO, Reverse, OUT1-OUT3, OL Trip Alert

Specifications**Max Frequency:**

- 434 Hz

Min Speed:

- 1% of base speed *

Speed Regulation:

- Typically +/- 1 rpm

Speed Accuracy (0 - rated load):

- Typically +/- 0.5% of base speed

Constant Torque Speed Range:

- 100:1

Torque Response:

- Typical 1.5 ms to 90 % of commanded value

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

NTAC™ Drive Technical Specifications

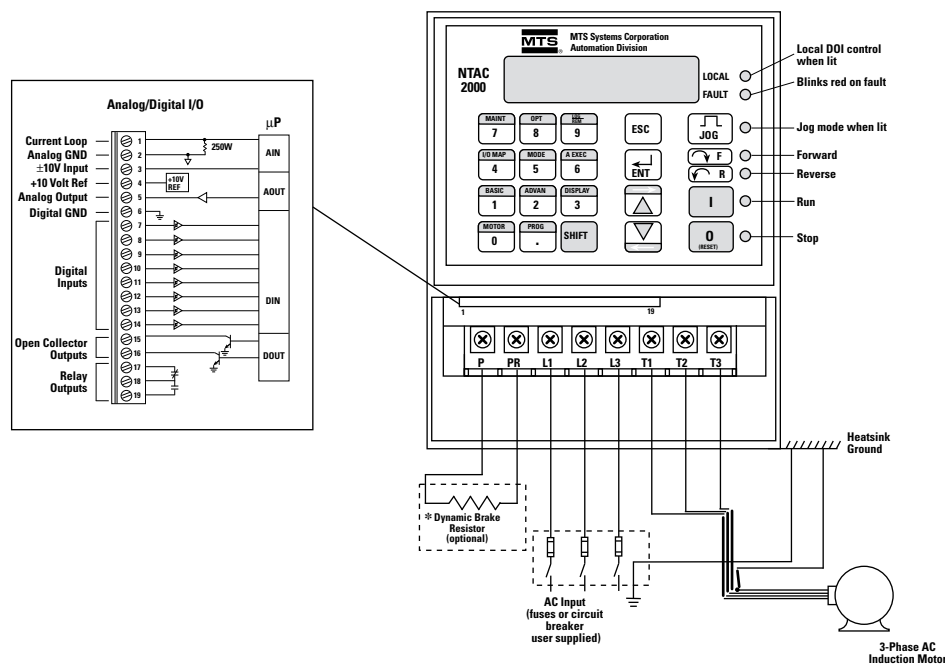
1-5 Hp

Model Number	NT20**-***				NT20**-***				
NTAC Drive Type Number	-A75	-1A5	-2A2	-3A7	-A75	-1A5	2A2	3A7	
NTAC, AC Induction Motor									
AC Line Input Voltage	VAC 200/240V±10%				380/480V±10%				
Cont. Output Cur.(RMS)	Arms	3.6	6.8	9.6	15.2	1.8	3.4	4.8	7.6
	Hp	1	2	3	5	1	2	3	5
	kW	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%
% Overload 3 sec	%	200%	200%	200%	200%	200%	200%	200%	200%

7.5-20 Hp

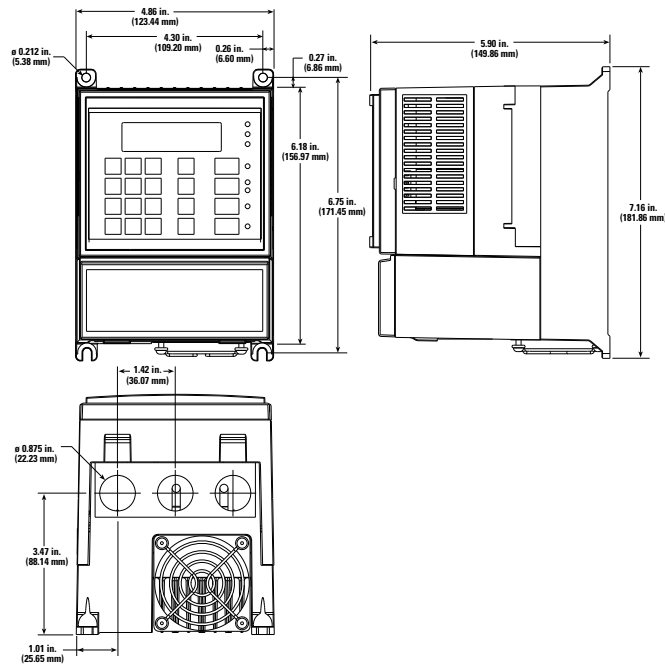
Model Number	NT20**-***			NT20**-***			
NTAC Drive Type Number	-5A5	-7A5		-5A5	-7A5	-011	-015
NTAC, AC Induction Motor							
AC Line Input Voltage	VAC 200/240V±10%			380/480V±10%			
Cont. Output Cur.(RMS)	Arms	22	28	11	14	21	27
	Hp	7.5	10	7.5	10	15	20
	kW	5.6	7.5	5.6	7.5	11	15
% Overload 1 min	%	150%	150%	150%	150%	150%	110%
% Overload 3 sec	%	200%	200%	200%	200%	150%	130%

Connection Diagram

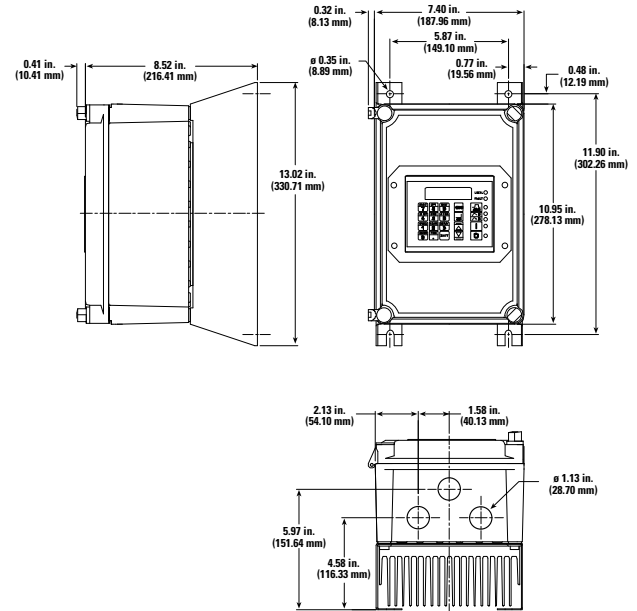


* Consult Dynamic Brake Resistor Data Sheet for standard available sizes.

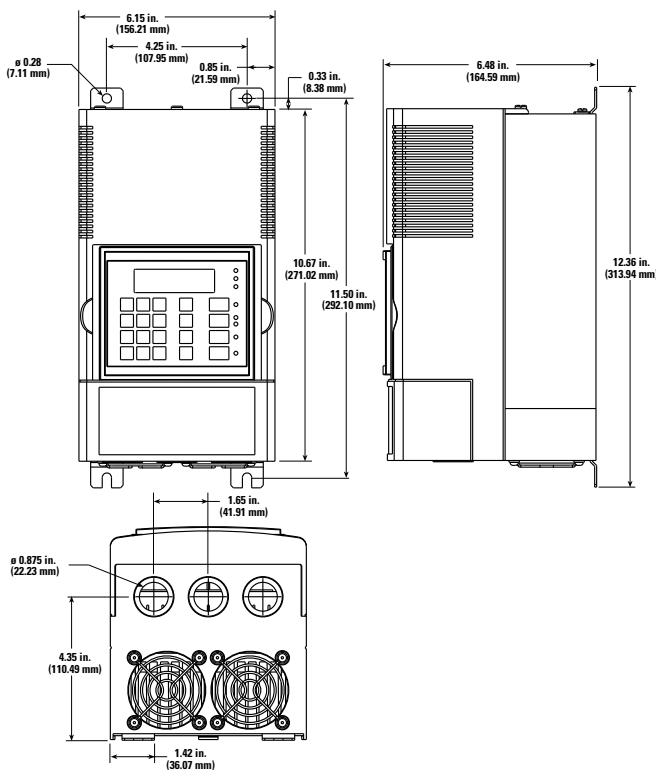
1-5 Hp - NEMA 1 (enclosed)



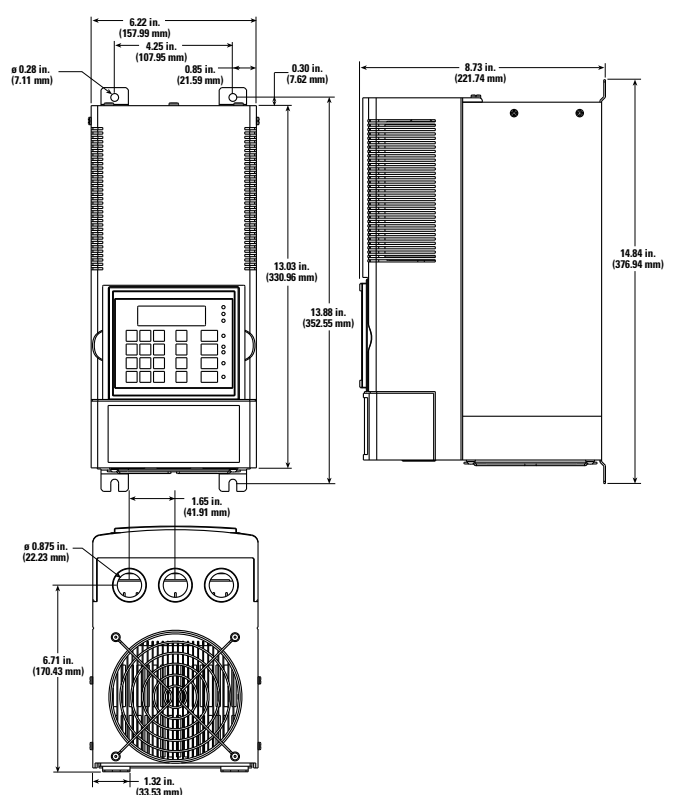
1-5 Hp - NEMA 4 (enclosed)



7.5 - 10 Hp NTAC, NEMA 1 (enclosed)



15 - 20 Hp NTAC, NEMA 1 (enclosed)



Ordering Chart

Example: NT2014A7500S

NT	20	1	4	A75	00S
MODEL	CONTROL TYPE	ENCLOSURE	VOLTAGE	POWER RATING	CONFIGURATION
NT=NTAC	20 = AC Induction Motor	1 = NEMA 1	2 = 200/240 V	A75 = 1 Hp	00S = Standard
		2 = NEMA 4	4 = 380/460 V	1A5 = 2 Hp	XXX = Special
				2A2 = 3 Hp	
				3A7 = 5 Hp	
				5A5 = 7.5 Hp	
				7A5 = 10 Hp	
				011 = 15 Hp	
				015 = 20 Hp	

Accessories:

Part Number	Description
NT20-RK-3	Remote Keypad Mounting Kit with 3 meter cable (Through-Door Mounting-Maintains NEMA 4 Rating) - Includes: 3m (10ft) cable, gasket, cut out template, mounting hardware, blank cover for drive
RS232 to RS-485	Converter with cable - RS 232 9-pin female, RS-485: RJ-12, 3 meter cable
DBRXX-XXXX	Dynamic Brake Resistor - Consult Dynamic Brake Resistor Data Sheet for standard available sizes. For non-standard ratings - consult factory.