

## N3 Compact Drive Features

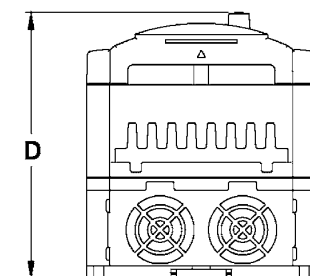
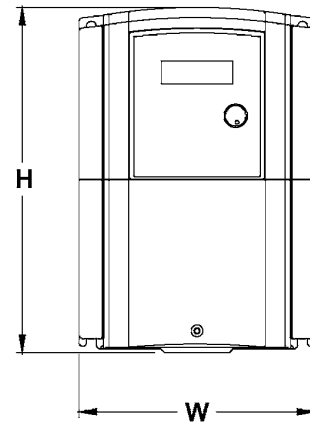
- z Sensorless Vector AC Drive
- z BACnet and Modbus RTU Protocols Embedded
- z PID Control with Sleep Mode
- z PC Programming Software Included
- z RS 485 Interface Option
- z .5-3 hp, 200-240V, 50/60 Hz, 1-Phase Input/ 3-Phase Output
- z .5-40 hp, 200-240V, 50/60 Hz, 3-Phase Input/ 3-Phase Output
- z 1-75 hp, 380-480V, 50/60 Hz, 3-Phase Input/ 3-Phase Output
- z UL, cUL, and CE Approved
- z EEPROM Program Copy Unit (Optional)

## N3 Compact Drive Operator Interface Features

- z Configuration Mode Indication
- z LEDs Indicate Mode Sequence
- z Bright 4-Digit LED Display
- z LEDs Indicate Units of Measure
- z On-Board Speed Potentiometer
- z PLC Driven: Ability to Operate Remotely or Locally
- z Removable Keypad can be Installed up to 16 ft (4.88m) from the N3 Drive



## Dimensions and Weights



### 230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (INCHES)			APPROX. WT. (lbs)
			HEIGHT	WIDTH	DEPTH	
*N3-2P5-CS-U	.5	3.1	6.42	3.54	5.79	3
*N3-201-CS-U	1	4.5	6.42	3.54	5.79	3
*N3-202-CS-U	2	7.5	7.36	5.04	5.83	4
*N3-203-CS-U	3	10.5	7.36	5.04	5.83	5

### 230V 3-Phase Input/ 3-Phase Output\*\*\*

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (Inches)			APPROX. WT. (lbs)
			HEIGHT	WIDTH	DEPTH	
*N3-2P5-C-U	.5	3.1	6.42	3.54	5.79	3
*N3-201-C-U	1	4.5	6.42	3.54	5.79	3
*N3-202-C-U	2	7.5	6.42	3.54	5.79	3
*N3-203-C-U	3	10.5	7.36	5.04	5.83	4
*N3-205-C-U	5	17.5	7.36	5.04	5.83	5
*N3-207-C-U	7.5	26.0	10.24	7.32	7.68	13
*N3-210-C-U	10	35.0	10.24	7.32	7.68	13
*N3-215-N1-U	15	48.0	14.17	10.43	9.70	27
*N3-220-N1-U	20	64.0	14.17	10.43	9.70	27
*N3-225-N1-U	25	80.0	14.17	10.43	9.70	29
**N3-230-N1-U	30	96.0	25.45	10.60	12.00	67
**N3-240-N1-U	40	130.0	25.45	10.60	12.00	67

### 460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (Inches)			APPROX. WT. (lbs)
			HEIGHT	WIDTH	DEPTH	
*N3-401-C-U	1	2.3	6.42	3.54	5.79	3
*N3-402-C-U	2	3.8	6.42	3.54	5.79	3
*N3-403-C-U	3	5.2	7.36	5.04	5.83	4
*N3-405-C-U	5	8.8	7.36	5.04	5.83	4
*N3-407-C-U	7.5	13.0	10.24	7.32	7.68	13
*N3-410-C-U	10	17.5	10.24	7.32	7.68	13
*N3-415-C-U	15	25.0	10.24	7.32	7.68	13
*N3-420-N1-U	20	32.0	14.17	10.43	9.70	27
N3-425-N1-U	25	40.0	14.17	10.43	9.70	29
N3-430-N1-U	30	48.0	14.17	10.43	9.70	29
**N3-440-N1-U	40	64.0	25.45	10.60	12.00	67
**N3-450-N1-U	50	80.0	25.45	10.60	12.00	67
**N3-460-N1-U	60	96.0	29.39	12.13	15.20	102
**N3-475-N1-U	75	128.0	29.39	12.13	15.20	102

Note: Suffix CS = Chassis Unit 1-Phase  
C = Chassis Unit 3-Phase  
N1 = NEMA 1

All Chassis Units will Ship with NEMA 1 Boxes for Field Installation  
\* Includes Dynamic Braking Transistor  
\*\* Includes DC Bus Link Reactor  
\*\*\* Do Not Apply Single Phase Input Power to these Models.

### SPECIFICATIONS

Control Mode	Sensorless Vector and V/ Hz
Input Voltage Rating	230V 1-Phase and 3-Phase; 460V 3-Phase
Input Voltage Tolerance	+10%, -15 Hz
Frequency Control Range	0 to 400 Hz
Speed Control Accuracy	+/- 0.5% (Sensorless Vector Mode)
Speed Commands	0 to 10VDC, 0 to 20mA, Pulse Input
Overload Capacity	150% Current of Drive Rating for 1 Minute
Braking	DC Injection Braking; Dynamic Braking (Optional)
Protective Functions	Motor and Inverter Overload, Overvoltage, Overheating, Peak Overcurrent
Programmable I/O	6 Digital Inputs (NPN or PNP), 2 Relay Outputs, 2 Analog inputs (0-10V or 4-20mA), 1 Analog Output (0-10V)
Ambient Temperature	-10°C to +50°C, (14°F to 122°F)
Enclosure	IP20 Protective Chassis/ NEMA 1

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www.energiacontrolada.com

**TECO**  **Westinghouse**

**N3**  
Compact AC Drive



# N3 Compact Variable Speed Drive

BACnet Protocol is now standard on all N3 compact drives!

The N3 series variable speed drives feature a compact design, sensorless vector operation, auto-cycle capabilities, Modbus RTU communication, and direct BACnet capabilities. With 2 to 3 parameter settings, users can now utilize BACnet to communicate with other control devices through either the RS485 connection or the RS-232 connection port.

- Full level of information can be accessed via BACnet
- Operate and control through BACnet or locally with BACnet in a monitor only mode
- Selection via parameter between BACnet or Modbus RTU

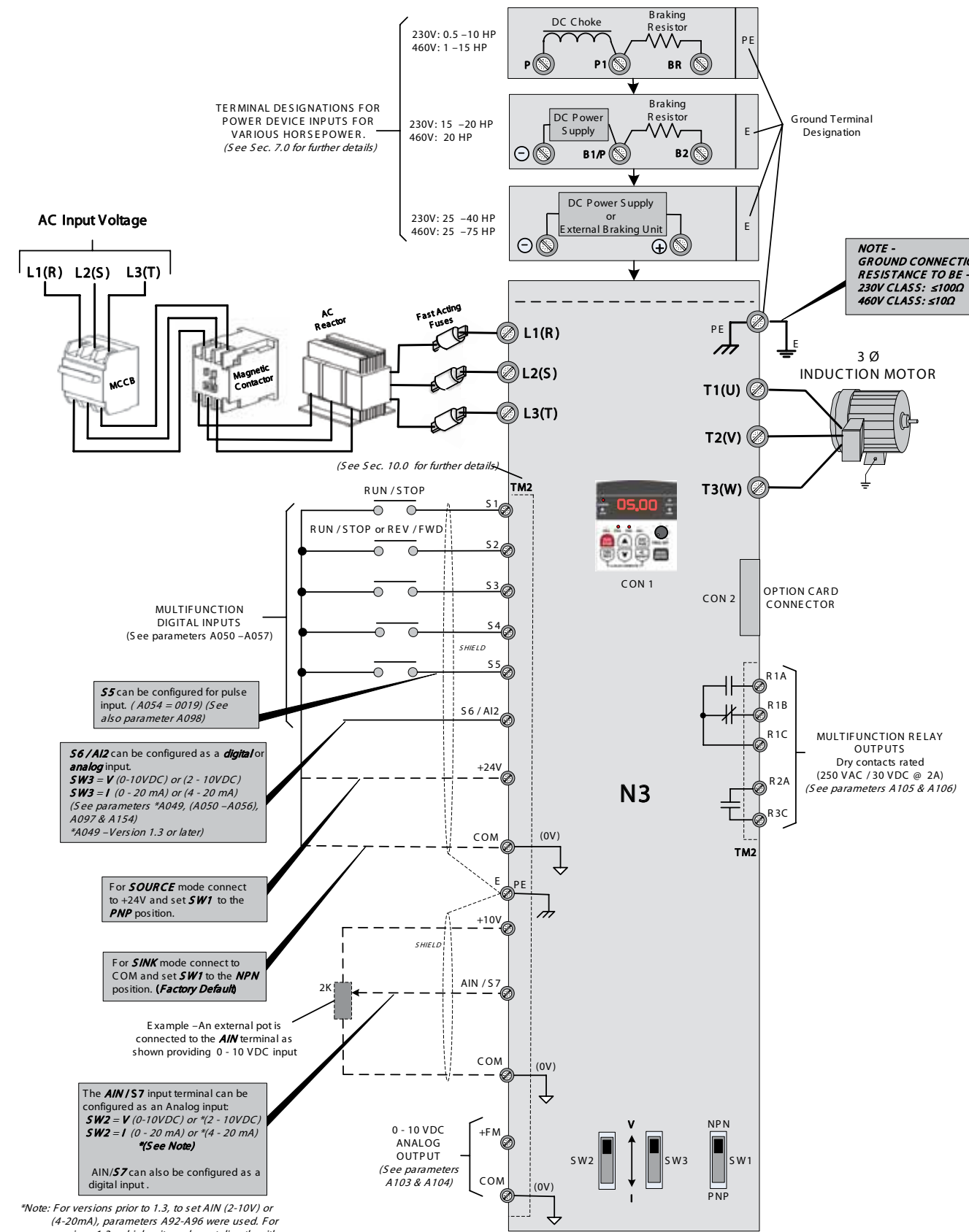
## BACnet Applications

- Energy Management
- Building Management
- HVAC
- Water/ Wastewater Industries



# Wiring Diagrams

1-2 hp  
3-75 hp (Prior to Firmware Version 1.3)



3-75 hp (Firmware Version 1.3 or Later)

