

“YOUR NEXT PROJECT SHOULD INCLUDE NEXDRIVE INDUSTRIAL DRIVES”



3Phase Drive Only

Electrical Specifications:

Rated Input Voltage:	200-250Vac, 380-480Vac, 500-600Vac MODEL SPECIFIC -10% of minimum, +10% of maximum
Hp	7.5 hp – 3500 hp
Frequency Tolerance:	48-63 Hz
Number of Phases:	3 or 1 (model specific)
Displacement Power Factor:	.95 or greater
Efficiency:	97% or greater at rated current
Max. Short Circuit Current Rating:	200,000A rms symmetrical, 600 volts

Control Specifications:

Control Method:	Sine coded PWM with programmable carrier Space Vector control
Output Voltage:	0 to rated voltage
Output Frequency Range:	0 to 600 Hz
Frequency accuracy:	Analog reference: 0.1% of max frequency Digital reference: 0.01% of max frequency
Frequency resolution:	Analog reference: 0.06Hz at 60Hz Digital reference: 0.001Hz at 60Hz
Accel/Decel:	0.1 to 3276 sec.
Drive overload:	At Constant Torque: 150% of drive rated output for 1 minute At Variable Torque: 120% of drive rated output for 1 minute
Inverse Time Overload:	Programmable motor overload protection to comply with N.E.C. Article 430
Current limit:	Proactive current limit programmable in % of motor rated current
Braking torque:	Approximately 20%. (Optional Added Resistor Brake Unit) OR (Regen Unit)
Maximum connected motor:	2 times rated drive horsepower
Control power ride-thru:	2 seconds or greater, depending on load

Environmental Specifications:

Ambient Temperature:	-10°C to 50°C (14°F to 122°F) Nema type 1 enclosed
Storage Temperature:	-40°C to 70°C (-40°F to 158°F) Nema type 1 enclosed
Altitude:	Sea level to 3300 Feet [1000m] without derating
Humidity:	95% relative humidity non-condensing
Vibration:	9.8m/sec ² (1.0G) peak
Immunity:	IEEE C62.41-1991 Category B (Formally known as IEEE 587) EN50082-2 (Generic Immunity Standard)
Input R.F.I. Filter:	Standard on all models. (Recommended Input Reactor And Fast Acting fuses)

Physical attributes:

Mounting:	Through hole or panel mount for size 0 to size 3 drives Size 4 drives are free standing enclosure
Nema Rating:	Type 1 (IP20) as standard, Type 12 (IP54) optional
Construction:	Steel construction (reduces E.M.I.)

Protective Features:

- Programmable motor overload protection to comply with N.E.C. Article 430 / ULC approved
- Drive overload protection to protect inverter
- Motor stall protection at acceleration /deceleration and constant speed operation
- Peak output current monitoring to protect against line-to-line shorts and line-to-ground shorts
- Ground fault monitoring
- Heatsink over-temperature monitoring
- AC line overvoltage protection
- DC bus over-voltage protection
- DC bus under-voltage protection
- Programmable stall protection
- Control power ride-thru 2 seconds or greater, depending on load
- Internal power supply monitoring
- AC power loss detection
- Critical speed rejection with programmable 3 points with bandwidth to avoid mechanical resonance.
- Flycatcher “catch a spinning motor”
- Password protection to prevent parameter changes by unauthorized personnel.

- 4 to 20ma reference loss detection
- Programmable thresholds and more

Control I/O:

- 8 Digital Inputs: 7 user programmable inputs and 1 dedicated input for "Stop", rated for 24Vdc logic control
- 2 Digital Outputs: 2 programmable dry contacts rated 115Vac @ 5A; 30Vdc @ 3.5A
- 2 analog inputs: -10 to +10V (10 bits) with input impedance: 75KΩ, or 4-20 mA @ 500Ω - Programmable
- 2 analog outputs: -10 to +10V (10 bits) @ 2 mA max; output impedance = 100Ω. - Programmable
- 1 voltage reference: +15Vdc reference @ 10 mA max
- 24Vdc source: Use to power operator pushbuttons and option boards: 24Vdc @ 80 mA max

Standard Drives Features:

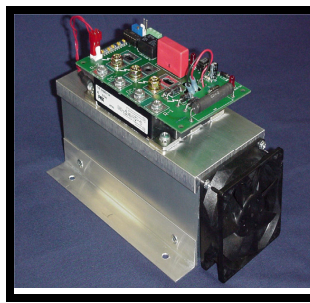
- New generation IGBT
- Nema type 1 & 12 (IP20) as standard for all models
- 50°C ambient with standard Nema 1 & 12 (IP20) enclosure
- High voltage ratings: 208,240,250Vac+10% , 380,460,500Vac+10% models, and 600Vac+10% models
- Built-in power factor correction DC reactor for all models above 20 Hp
- **REMOTE COMMUNICATIONS: ModbusRTU, MetasysN2, TCIP, RS422, 232, 485, DeviceNet, Profibus, Canopen, Interbus, Controlnet, Bacnet, Lonworks, Zigbee Wireless, FLN**
- Input line suppression: Metal oxide varistors for line-to-line and line-to-ground voltage surge protection
- Built-in radio frequency filter
- Nonvolatile parameter storage
- All parameters are saved in EEPROM (nonvolatile)
- Autologging fault history: ten last faults recorded in order of occurrence
- Internal control diagnostics.
- Simple programming through the Real-time Operator module (R.O.M.) with all data entries and monitoring in engineering units with English descriptions
- Setpoint Control P.I.D.
- Injection DC Braking with braking time calculated automatically by the drive
- Critical speed rejection
- Programmable autorestart.
- Fixed or variable carrier (programmable).
- Programmable "Total Drive Run Time" accumulator.
- Parameter security code.
- User definable displays with programmable format and parameter scaling.
- 7 programmable digital inputs for custom setups.
- Metering: AC line voltage, motor current, motor voltage, DC Bus voltage, Kw, Kwh, running Kwh cost, and more...
- 8 programmable digital preset speeds with user selectable acceleration and deceleration rates.
- M.O.P. function.
- Programmable PWM carrier frequency, fixed or variable.
- Programmable thresholds.
- Programmable maintenance timers.
- Bi-directional auto-speed search (flycatcher) for starting into rotating loads.
- S-curve accel/decel control.
- Programmable time delay and logic functions (AND, OR, NOR) of bit parameters, digital inputs and outputs.
- Adding, subtracting, multiplying, dividing, ramping, limiting, and/or filtering functions of parameters and analog inputs and outputs.
- Parameters can be displayed, routed to an analog/digital output, or re-routed and used as an input parameter to control another function within the drive.
- User programmable functions and modes.
- Motor Bypass option /ULC/CSA/ Brake Resistor / Regen Unit
- Brake Chopper Module, Regenerative Feed Back Module, 18 Pulse Clean Drive Options Avail.



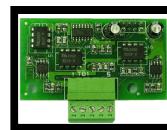
REGEN UNIT



1 PHASE TO 3 PHASE UNIT



BRAKE RESISTOR UNIT



COM CARD



BYPASS UNIT