

US DRIVES, INC.

P.O. Box 281 2221 Niagara Falls Boulevard Niagara Falls, New York 14304-0281 Tel: (716) 731-1606 Fax: (716) 731-1524

Visit us at www.usdrivesinc.com

VFD Application Checklist

The following VFD Application Checklist includes most of the questions that should be answered before selecting an AC Drive for a specific application. Please fill out as much of this checklist as you can and email it to sales@usdrivesinc.com. A US Drives Application Engineer will contact you.

Use one VFD Application Checklist for each AC Drive. Successful Drive application does not require a complete answer to each and every question contained in this Checklist. Many of the questions in this VFD Application Checklist are designed to help identify specific requirements that will not be found in many applications.

Your Company:	Phone:
Your Name:	Email:
Application Information:	
Customer Name: Project / Item Identification: Application Description: Load Type: Breakaway Torque: Acceleration Time: Deceleration Time: Inertia: Stopping Requirements: Braking Requirements: Braking Time / Duty Cycle: Additional Comments:	(Pump, Fan, Other)(Constant Torque, Variable Torque, Other)(Pound-Feet, Newton-Meters, or Percent Full Load)SecondsSeconds(Pound Feet Squared or other Identifiable Units)(Coast to Rest, Ramp Stop, Dynamic or Regen Braking)(Pound-Feet, Newton Meters, or Percent Full Load)(Continuous Seconds On, Percent Duty Cycle)
Environment:	
City / State / Country: Elevation: Indoors or Outdoors: Maximum Temperature: Minimum Temperature: Additional Comments:	(Feet or Meters Above Sea Level) (Control Location / Motor Location – In Sun or Shaded) (Control Location / Motor Location – Degrees C or F) (Control Location / Motor Location – Degrees C or F)
AC Power System Information:	
Supply Source: Transformer KVA Configuration: Voltage: Frequency: Fault Current: Additional Comments:	(Utility, Generator, Both, Other) KVA (Wye, Delta, Grounded Neutral, Ungrounded System) VAC (208, 240, 380, 400, 415, 480, 600, Other) Hz (60, 50, Other) Amperes



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AC Drive Requirements:

Horsepower:	Horsepower
Full Load Current	FLA '
Overload Requirements:	
Continuous Overload:	Percent Full Load
60 Second Overload:	Percent Full Load
Other Overload:	
Control Type:	(V/Hz, Open Loop Vector, Closed Loop Vector)
Percent Speed Regulation:	Percent (of Maximum Speed)
Input Rectifier Circuit:	(6 Pulse - Standard, 12 and 18 Pulse –Optional)
Enclosure Type:	(Chassis, Nema 1, Nema 12, Nema 3R, Nema 4, Nema 4X,
	Ventilated, Non-Ventilated, Wall Mount, Floor Mount,
	Floor Mount with Feet, Air Conditioned, Other)
Maximum Enclosure Size:	(H x W x D – Inches or mm)
Ambient Temperature:	Degrees C or F (Minimum and Maximum)
AC Power Distribution Options:	,
Input Protection:	(None, Input Disconnect, Input Circuit Breaker)
Bypass:	(None, Manual Bypass, Automatic Bypass)
DC Link Reactor:	(No, Yes – 3%)
AC Line Reactor:	(No, Yes – 3% or 5%, Inside Drive Enclosure or External Mount
Output Reactor:	(No, Yes – 3% or 5%, Inside Drive Enclosure or External Mount
Long Lead Filter	(Specify Distance to Motor in Feet)
Inputs:	,
Digital:	(Quantity, Voltage Level, Type)
Analog:	(Quantity, 0 to +/- 10 Volts and / or 4 to 20 ma)
Outputs:	,
Digital:	(Quantity, Voltage Level, Max Current, Type)
Analog:	(Quantity, 0 to +/- 10 Volts and / or 4 to 20 ma)
Communications Options:	(None, RS-232/422/485, Modbus, DeviceNet, Profibus,
	Ethernet, Metasys, Other)
Door Mounted Keypad:	(Standard with 2 Line, 32 Character Digital Readout,
	Start & Stop Keys, Speed Increase & Decrease Keys,
	Forward/Reverse Key, Miscellaneous Indicators)
Additional Metering Devices:	(Voltmeter, Ammeter, Others - Digital or Analog Type)
Additional Operators:	(Start & Stop Pushbuttons, Speed Pot, Auto/Manual
	and/or Local/Remote Selector Switch, Other Devices)
Miscellaneous Options:	,
AC Blower Motor Starter:	(Yes, No, Blower Motor Volts, 1/3 Phase, FL Amps)
Space Heater:	(Yes, No, External or Internal Source Voltage)
Brake Control:	(AC or DC Coil, Voltage and Current Rating)
Certifications:	(None, UL, cUL, CE, Other)
Testing:	(Certified Test Reports, Factory Witness Test, Other Tests)
Other Special Requirements:	



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AC Motor Information:	
New or Existing:	(New, Existing)
Supplied By:	(Others, Drive Manufacturer)
Horsepower:	HP
Voltage:	Volts (200, 230, 380, 400, 460, 575, Other)
Full Load Amperes:	Amperes
Full Load RPM	RPM
Frequency	Hz (50, 60, Other)
Inverter Grade Insulation:	(Yes, No)
Minimum Speed:	RPM
Maximum Speed:	RPM
Load Characteristics:	(Constant Torque, Variable Torque, Other)
Low Speed Operation:	RPM (Lowest Continuous Operating Speed)
Enclosure Type:	(ODP, TEFC, TENV, TEBC, Other)
Nema Type:	(A, B, C, D, Other)
Blower Cooled:	(Yes, No, Blower Motor Volts, 1/3 Phase, FL Amps)
Encoder:	(Yes, No, PPR, Volts)
Distance From VFD:	Feet or Meters
Other Accessories:	(Thermostat, Stator RTD's, Bearing RTD's, Space Heater, Brakes, Other)
Input AC Line Harmonic Requirement	nts:
Must Meet IEEE-519-1992:	(Yes, No)
System Type:	(Special, General, Dedicated)
Point of Common Coupling:	(Distribution Transformer Primary, Secondary, Other)
Distribution Transformer	
KVA:	KVA
Impedance:	Percent
Short Circuit Current:	Amperes
Additional Linear Load:	(Horsepower or Kilowatts)
Additional Non-Linear Load:	(Horsepower or Kilowatts and Type)
Phase Shift Transformer:	(Required For 12 or 18 Pulse Rectifiers – Furnished By
	(Located Inside Drive Enclosure or Externally Mounted
Services:	
On Site Start-Up Service:	(Location, Number of Days, Approximate Dates)
On Site Training: Other Services:	(Location, Number of Days, Approximate Dates)
Other Requirements:	