Low Voltage Starter Sales Checklist

*Note: Items marked with * are mandatory fields.*

*Project Name and/or End-User: _____

*Contact Name: _____ *Phone Number: _____ *Email: _____

*Project Type: ☐Budgetary ☐Funded Est. Installation Timeframe: _____

*Specifications: ☐Yes ☐No Competitors: _____

SECTION A – Starter Application:

***Type of application (load)** _____

Present starting method: ☐ Across the Line ☐ Wye-Delta ☐ Auto Transformer ☐ Other: _____

Starts / Stops per day: ☐ 1-5 ☐ 6 -10 ☐ 11-15 ☐ 16-20 ☐Over 20 _____ *(please specify)*

Current Acceleration Time ☐1-5 seconds ☐ 6-10 seconds ☐11-15 seconds ☐16-20 seconds ☐ >20 seconds _____ *(please specify)*

Current Deceleration Time (if applicable) ☐ 1-5 seconds ☐ 6-10 seconds ☐ 11-15 seconds ☐ 16-20 seconds ☐ > 20 seconds _____ *(please specify)*

Input Power

Source
☐ Utility *(Transformer feed capacity – kVA)* _____
☐ Generator *(generator kW rating)* _____

Type
☐ Delta ☐ Wye
☐ 3-wire ☐ 4-wire

Grounding
☐ Delta, Corner Grounded
☐ High resistance ground ☐ Solid Ground ☐ Ungrounded

BENSHAW
Applied Motor Controls

SECTION B - Motor Data:

***Type of motor:** ☐ Induction ☐ Synchronous ☐ Wound Rotor

(If Synchronous or Wound Rotor, see Section "E" or "F" for additional questions.)

***Horsepower:**_____ (HP) ***Motor voltage:** _____ (VAC) ***Motor Frequency:** _____ (Hz)

FLA: _____ **Service Factor:** _____ **Motor LRA:** _____ **Motor Speed:** _____ (RPM)

NEMA Design: ☐ A ☐ B ☐ C ☐ D ☐ E

SECTION C - Enclosure / Environment Data:

***Expected ambient temperature:** Minimum: _____ Maximum: _____
(Space Heater required if less than 0°C)

Space heater: ☐ Yes ☐ No ***Physical Location:** ☐ Indoor ☐ Outdoor

Size limitations (if any): _____ "H x _____ "W x _____ "D

***Altitude:** ☐ Up to 3,300ft. ☐ Above 3,300ft. _____
(please specify)

Unusual Ambient Conditions (if any): _____
(describe)

Color: ☐ ANSI 61 Grey *(standard)* ☐ Precision Tan/Beige *(standard)* ☐ Other: _____ *(please specify)*

Cable *Entry* location: ☐ Top ☐ Bottom *(standard)* **Cable *Exit* location:** ☐ Top ☐ Bottom *(standard)*

***NEMA Enclosure Type:** ☐ 1 ☐ 3R ☐ 12 *(standard)* ☐ Other: *(please specify)*

SECTION D - Miscellaneous:

***Disconnect:** ☐ Circuit Breaker ☐ Fusible Disconnect ☐ Non-fused Disconnect ☐ None

Starting Method: ☐ Keypad *(standard)* ☐ 2-Wire Control ☐ 3-Wire Control ☐ Other: _____ *(please specify)*

***Across-The-Line Starting Option:** ☐ Yes ☐ No *(standard)*

***Will any of the following be present?:**

☐ Power Factor Correction Capacitors
Note: *PFCC must be located on the Line side of the Starter and must be isolated from the line during starting.*

☐ Lightning Arrestors
Note: *May be placed on either the Line or Load side of the Starter.*

☐ Surge Capacitors
Note: *Must be at the motor terminals **and** must be isolated during starting to prevent Starter damage.*

*SECTION E – Synchronous Motor Data: *(Required only for synchronous motors)*

Normal Field Current: _____ (ADC)

Max Field Current: _____ (ADC)

Field Discharge Resistor Rating: _____ (Ω)

Synchronous Motor Field Voltage: _____ (VDC)

*SECTION F – Wound Rotor Motor Data: *(Required only for wound rotor motors)*

Wound Rotor Motor: ☐ Starting Duty Resistor ☐ Continuous (Running) Duty Resistor

Quantity of steps/resistance: _____

Present number of steps: _____

Secondary Voltage: _____ (VAC)

Secondary Current: _____ (amps)

Additional information: _____

SECTION G – Additional Modifications, Accessories and/or Information: _____

_____

_____

_____

_____

_____
Customer Contact Name

_____
Customer's Company

_____
Date