

## Section 8

### SAMPLE ASD APPLICATION DATA FORM

DATE:	
COMPANY NAME:	
ADDRESS:	
CITY:	
STATE:	
ZIP CODE:	
PHONE:	
FAX:	
E-MAIL:	

#### 8.1 APPLICATION

TYPE OF MACHINE AND/OR EQUIPMENT:	
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BRAKE HORSEPOWER: \_\_\_\_\_ BHP AT \_\_\_\_\_ RPM

LOAD INERTIA REFLECTED TO MOTOR: \_\_\_\_\_ LB-FT<sup>2</sup>

TYPE OF LOAD: ☐ VARIABLE TORQUE SPEED RANGE \_\_\_\_\_ TO \_\_\_\_\_  
☐ CONSTANT TORQUE SPEED RANGE \_\_\_\_\_ TO \_\_\_\_\_  
☐ CONSTANT HORSEPOWER SPEED RANGE \_\_\_\_\_ TO \_\_\_\_\_  
☐ OTHER: \_\_\_\_\_

LOAD DUTY CYCLE (DESCRIBE): \_\_\_\_\_

NOTE: IF APPLICABLE, SHOW TIME VS. LOAD GRAPH AS AN ATTACHMENT

IMPACT LOAD (DESCRIBE): \_\_\_\_\_

NOTE: IF APPLICABLE, SHOW TIME VS. LOAD GRAPH AS AN ATTACHMENT

IS HIGH BREAKAWAY TORQUE REQUIRED (> 150%)? ☐ NO ☐ YES, SPECIFY \_\_\_\_\_ %

IS HIGH OVERLOAD TORQUE REQUIRED (> 140%)? ☐ NO ☐ YES, SPECIFY \_\_\_\_\_ %

IS SPEED REGULATION REQUIRED (< 1%)? ☐ NO ☐ YES, SPECIFY \_\_\_\_\_ % OF BASE SPEED

IS ACCELERATION OR DECELERATION TIME CRITICAL? ☐ NO ☐ YES

ACCELERATION REQUIREMENT: MINIMUM: \_\_\_\_\_ SECONDS MAXIMUM: \_\_\_\_\_ SECONDS

DECELERATION REQUIREMENT: MINIMUM: \_\_\_\_\_ SECONDS MAXIMUM: \_\_\_\_\_ SECONDS

## 8.2 MOTOR

TYPE/DESIGN: ☐ NEMA A ☐ NEMA B ☐ NEMA C ☐ NEMA D DEFINITE-PURPOSE INVERTER-FED

☐ OTHER (DESCRIBE): \_\_\_\_\_

MOTOR INSTALLATION: ☐ NEW OR ☐ EXISTING

IF EXISTING, PLEASE PROVIDE:

MEASURED LOAD RUNNING AMPS: \_\_\_\_\_ PEAK LOAD AMPS: \_\_\_\_\_

HORSEPOWER: \_\_\_\_\_ VOLTAGE: \_\_\_\_\_ FREQUENCY: \_\_\_\_\_

RPM: \_\_\_\_\_ FLA: \_\_\_\_\_ LRA: \_\_\_\_\_ ENCLOSURE TYPE: \_\_\_\_\_ FRAME: \_\_\_\_\_

SERVICE FACTOR: \_\_\_\_\_ GEAR BOX TYPE (WORM, PLANETARY, ETC): \_\_\_\_\_ GEAR RATIO: \_\_\_\_\_

IS AN ENCODER MOUNTED ON THE MOTOR? (DESCRIBE): \_\_\_\_\_

IS THERE A SEPARATELY POWERED BLOWER? (DESCRIBE): \_\_\_\_\_

ARE THERE SPACE HEATERS IN THE MOTOR? ☐ NO ☐ YES (DESCRIBE): \_\_\_\_\_

ANY TEMPERATURE DETECTION OR TRIP DEVICE? ☐ NO ☐ YES (DESCRIBE): \_\_\_\_\_

## 8.3 CONTROL

TYPE: ☐ V/Hz ☐ SENSORLESS VECTOR ☐ FEEDBACK VECTOR

INDICATE TYPE OF CONTROL SCHEME TO BE UTILIZED:

☐ START / STOP

☐ HAND-AUTO SELECTOR ☐ HAND-OFF-AUTO SELECTOR ☐ RUN-JOG ☐ FORWARD-REVERSE

HAND = SPEED REFERENCE BY MANUAL SPEED POTENTIOMETER

AUTO = SPEED REFERENCE BY ☐ 0-5VDC ☐ 0-10VDC ☐ 4-20mADC ☐ 0-20mADC ☐ 20-4mADC

☐ LOCAL-REMOTE (SPECIFY): ☐ REMOTE CONTROL BY MANUAL SPEED POTENTIOMETER  
☐ REMOTE CONTROL FROM REMOTE OPERATOR STATION  
☐ REMOTE CONTROL FROM AUTO SPEED REFERENCE INPUT

SERIAL COMMUNICATION: ☐ YES ☐ NO

IF YES, SPECIFY: ☐ DEVICE NET ☐ MODBUS/JBUS ☐ MODBUS+ ☐ LONWORKS

☐ OTHER (SPECIFY): \_\_\_\_\_

## 8.4 MOTOR ENVIRONMENT

AMBIENT TEMPERATURES: \_\_\_\_\_ MINIMUM °C (°F) \_\_\_\_\_ MAXIMUM °C (°F)

ALTITUDE IF GREATER THAN 3,300 FEET ABOVE SEA LEVEL, SPECIFY: \_\_\_\_\_ FT

ENCLOSURE TYPE: \_\_\_\_\_

SOUND LEVEL REQUIREMENT: \_\_\_\_\_ MAXIMUM DBA

## 8.5 CONTROL ENVIRONMENT

DISTRIBUTION VOLTAGE: \_\_\_\_\_ ± \_\_\_\_\_ %, ☐ 1 PHASE OR ☐ 3 PHASE, ☐ 60HZ OR ☐ 50 HZ

DRIVE CONTROLLER ENCLOSURE TYPE: ☐ OPEN ☐ NEMA TYPE 1 ☐ NEMA TYPE 12

☐ OTHER (SPECIFY): \_\_\_\_\_

AMBIENT TEMPERATURES: \_\_\_\_\_ MINIMUM °C (°F) \_\_\_\_\_ MAXIMUM °C (°F)

ALTITUDE IF GREATER THAN 3,300 FEET ABOVE SEA LEVEL, SPECIFY: \_\_\_\_\_ FT

HUMIDITY? \_\_\_\_\_ %

SHOCK OR VIBRATION REQUIREMENT? \_\_\_\_\_

## 8.6 CONNECTION

TYPE OF CABLE BETWEEN MOTOR AND CONTROL: \_\_\_\_\_ LENGTH (IN FEET): \_\_\_\_\_

INSTALLATION: ☐ METAL CONDUIT

☐ PVC CONDUIT

☐ CABLE TRAY

☐ UNDERGROUND

☐ OTHER: \_\_\_\_\_

8.7 OTHER

ARE THERE POWER LINE HARMONIC REQUIREMENTS? ☐ YES ☐ NO

IF YES, DESCRIBE: \_\_\_\_\_

IS THERE A CONTACTOR BETWEEN THE LINE AND THE CONTROL? ☐ YES ☐ NO

IF YES, IS IT TO BE USED TO START AND STOP THE DRIVE? ☐ YES ☐ NO

IS THERE A CONTACTOR BETWEEN THE CONTROL OUTPUT AND THE MOTOR(S)? ☐ YES ☐ NO

IF YES, WILL THE CONTACTOR BE OPERATED WHILE THE DRIVE IS RUNNING? ☐ YES ☐ NO

IS A CONTROL BYPASS CONTACTOR REQUIRED? ☐ YES ☐ NO

IS THERE A MECHANICAL BRAKE ON THE MOTOR? ☐ YES ☐ NO

IF YES, IS THE BRAKE USED FOR ANY OTHER PURPOSE THAN A HOLDING

BRAKE WHILE THE MOTOR IS STOPPED? ☐ YES ☐ NO

IF YES, EXPLAIN OPERATION:

IS THERE MORE THAN ONE MOTOR CONNECTED TO THE CONTROL? ☐ YES ☐ NO

A. IF YES, NUMBER OF MOTORS: \_\_\_\_\_

B. WILL ANY OF THE MOTORS BE STARTED WHILE OTHERS ARE RUNNING? ☐ YES ☐ NO

NOTE: REFER TO THE *NATIONAL ELECTRICAL CODE*® FOR INDIVIDUAL MOTOR PROTECTION.

ARE THERE ANY OTHER SPECIAL REQUIREMENTS IN THIS APPLICATION? ☐ YES ☐ NO

IF YES, DESCRIBE: \_\_\_\_\_

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\_\_\_\_\_

SIGNATURE \_\_\_\_\_

DATE: \_\_\_\_\_