Drive Appendices

Medium Voltage Adjustable Speed Drives Related Services

Medium Voltage Worksheet

MEDIUM VOLTAGE WORKSHEET

Specification for Procurement 2400/3300/4160/6600/6900 VAC Adjustable Speed Drive

PROJECT REFERENCE:	R.F.Q. REFERENCE	
SPEC. REFERENCE	DATE	

MOTOR DATA

HP/kW	
New/Existing	
Voltage (Volts)	
FLA (Amps)	
Speed (RPM)	
Motor Lead Length (Ft)	
Service Factor	
Space Heater (Volts/Watts)	
RTD (Make/Qty)	
Inverter-Duty	∎Yes ■No
Encoder	

LOAD TYPE

Variable Torque	
Constant Torque	
Regeneration	
Fan/Pump	
Other	
Speed Range	Hz to Hz

BREAKAWAY TORQUE

0 to 100%	
101 to 150%	

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ENVIRONMENT

Control Room Max. Ambient °C		
Control Room Min. Ambient	°C	
Elevation	Meters ASL	
Humidity Non-condensing	%	
Adjustable Speed Drive Cabinet Space Heater	Yes No	
Adjustable Speed Drive Cabinet Space Heater Test Circuit	it 🛛 Yes 🗖 No	
Motor Space Heater Circuit (Externally Powered)	□ Yes	∎No
Motor Cabinet Space Heater Test Circuit	□ Yes	∎No

DESIGN STANDARDS

ENCLOSURE

UL		NEMA 1	
cUL		NEMA 3R	
IEEE 519		Electrical House	
Other			

SPEED REGULATION

0.5%, Without Tachometer	
0.1% With Tachometer	
Other	
Motoring	
Volts/Hz Speed Control	
Closed Loop Vector Control	
Master Follower	
Speed Regulation without Encoder/ Resolver	
Speed Regulation with Encoder/Resolver	

SUPPLY SYSTEM VOLTAGE (± 10%)

2400 V		
3300 V		
4160 V		
6600 V		
6900 V		
OtherV		
Line Frequency	D 60 Hz	□ 50 Hz

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CABLE

Power Cable Entry	∎тор	ВОТТОМ
Power Cable Exit	∎тор	ВОТТОМ
Control Cable Entry	∎тор	ВОТТОМ
Control Cable Exit	∎тор	ВОТТОМ

OPTIONS

SUPERIOR Key Interlocks			
KIRK Key Interlocks			
Relay Outputs 115 V, 2 A, Form-C			
24 VDC Power Supply			
4 to 20 mA Isolated Analog Outputs	□ Speed	Current	■Voltage
4 to 20 mA isolated Analog Outputs	Load	Dther	
Control Power Backup 1 KVA, 120 V, Toshiba UPS			
Control Power Backup 1 KVA, 120 V, By Others			
Auxiliary Pilot Lights			
Auxiliary Pilot Lights Type			
Auxiliary Push Buttons			
Auxiliary Push Buttons Type			
Redundant Fan (3,460 V)			
Additional Controls			
(Please Attach Control Schematic)			

AUXILIARY EQUIPMENT

Bypass Starter	
Across The Line	
RVAT	
Solid State Starter	
Synchronous Transfer	
Number of Motors	
Indoor Rated Sync.Transfer (GEAR)	
Outdoor Rated Sync.Transfer (GEAR)	
Gear Supplied by Others	

COMMUNICATION OPTIONS

TOSLINE S20	
DeviceNET	
ProfiBus	
Ethernet	
ModBus RTU/PLUS	
Other	

MOTOR PROTECTION

TE-RTD12

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MULTILIN 369	
MULTILIN 869	
SEL 710-5	
SEL 710-5 with RTD inputs	
RTD TYPE	

SERVICES

Startup (Included in Price of Unit)	
Onsite Factory Training Testing	
Factory Training Houston	

SPARES

Spare Parts Kit	Yes	■No
Spare Power Module	Yes	∎No

SOFTWARE

PC Interface Software	□ Yes	□No
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TESTING

Witness Test – QC Runback	
Witness Test – Dynamometer (Upto 1250 HP)	
Adjustable Speed Drive/Motor Combined Test at Motor Vendor's Facility	

ADDITIONAL REQUIREMENTS