	<u> </u>								ON F						Р	age 1 c	of 3		
V	Vinnipèg		VAF	RIAB	ILE F	FREC	QUE	ENC	Y DR	RIVE,	60	0V, <	37 kW		II	D:			
Project	Facility:							Proje	ct Nam	ne:									
Pro	Area :							Bid C)pportu	ınity:									
	Load:	T				\	VFD	D Location:				ı	Cell #:						
	VED	Manufactu	ırer:					Model:				Serial #	:						
	VFD:	Size:				Rated Volta		V		V		Currer Rating		Α		Control Voltage:			V
	Circuit	☐ Fused	☐ Fused Disc. Ratir			ing: A Fuse			Fuse S	Size:	ze: A ———		Fuse Mfg Model:						
	Protection:			<u> </u>			, Inst.					Manufacturer:							
		☐ Breake	er	Ratir	Rating: A				Setting	g:		Α	Model:						
	Line	Presen	nt	R	Rating:						Manufact	urer:							
Data	Reactor:	□ N/A			Nating.						Model:								
VFD Data	Load Reactor:	☐ Presen☐ N/A	ıt	R	Rating:					Manufacturer: Model:									
	Dimaga	□ NEMA Manufacturer:				r:						Model:							
	Bypass Contactor:] IEC] N/A	N	NEMA Size:					IEC R	Ratir	ng:		A 🗆 /	\C-3	☐ AC	;-4		
	Bypass Overload				Ī	☐ 10 ☐ 20 Setting / ☐ 30 Rating:					А	Manufact	urer:						
	Protection:	☐ Not Ap	☐ Not Applicable			☐ Unknowi					•		Model:						
	Control Pow Transformer		Size:		VA Sec.			. Volta	age:	,	V	Primar	y Fuse:	A	A Se	econdary	Fuse:		Α
	Current Trai	nsformer:	Ratio:					Ту			ype	:							
Motor Data	ID:						Size		1	kW /	/		HP	1	Volt	tage:			V
ğă	Full Load An	nps:	A S	Servic	e Fact	tor:		1.00 1.15	Inver	rter Du	uty] Yes] No	C	ther:	:			
	Starter Ident	ification Ta	g Install	ed:		□ Y	'es	1	No	Vis	ual	Signs	of Overhea	ating:			☐ Yes	s [□ No
βι	Cleanliness	(As Found)):	☐ Go	ood [Acc	cepta	able [☐ Poo	or Sup	ppoi	t Insul	ators:			Good [] Accepta	able	☐ Poor
Cleani	Connections	;		☐ Go	ood [☐ Acc	cepta	able [] Poo		ectro	/Mech	anical			Good 🗌	Accepta	ble	☐ Poor
on /	Ground Con	nection		☐ Go	ood [Acc	epta	able [☐ Poo	or Cor	ntac	tor Co	ndition:			Good 🗌	Accepta	ble	☐ Poor
spect	Door Mecha	nical		☐ Go	ood [Acc	epta	able [] Poo	or Cor	ntac	t Align	ment:			Good [] Accepta	able	☐ Poor
Visual Inspection / Cleaning	Verify Bypas sized for the		nent is co	orrectl	ly [Y€	es [☐ No	□ N/A	A Exe	ercis	se Circ	uit Breake	r/MCP/D	iscor	nnect			☐ Yes
Vis	Cables Supp	orted Appr	ropriately	y:	_	_] Yes	□ No	o Uni	it Cl	eaned	:	es Pho	togra	aph Taker	n: [] Ye	S
	Comments:																		



INSPECTION FORM VARIABLE FREQUENCY DRIVE, 600V, <37 kW

Page	2 of 3	
ID:		

	Test	А	В	С	Test Summary					
Pole nents	Bypass Contactor Contact Resistance (μΩ)					Test Inconclusive				
Contact / Pole Measurements	Breaker/Disconnect Resistance (μΩ)				Further Investig	gation Required.				
Seg	Main Fuse Resistance (μΩ)									
	Comments:									
	Test Preparation: Source: Sou									
	WARNING: DISCONNECT AL	L POWER CABLES	S FROM VFD MO	DULE AND ALL C	ONTROL POWER I	FUSES PRIOR TO TEST.				
sst	Test	Voltage	In	sulation Resistar	nce (MΩ)	Ground all phases not				
ce Te			Α	В	С	under test!				
sistan	Disconnect Line to GND	1000 VDC								
on Res	Disconnect Load to GND	1000 VDC								
Insulation Resistance Test	Disconnect Line to Load	1000 VDC				T				
u	Bypass Contactor Line To GND	1000 VDC				Test Summary ☐ Test Passed ☐ Test Inconclusive				
	Bypass Contactor Load To GND	1000 VDC				Further Investigation Required.				
	Bypass Contactor Line to Load	1000 VDC				Test Failed				
	Comments:									



INSPECTION FORM VARIABLE FREQUENCY DRIVE, 600V, <37 kW

Page	3 of 3	
ID:		

	Test Prepa	aration: Run moto	r at full loa	ad.						
ction	Ramp Up	Time	Specified	d:	sec	Actual:			sec	Comments:
Inspe	Measured	Motor Current	ØA	А	ØB		Α	ØC A		
ional	VFD Moto	r Current	ØA	А	ØB		A ØC		А	
Operational Inspection	Remote (F Displayed	RTU/PLC/DCS) Motor Current:		А						
	Ramp Down Time			d:	sec	Actual:			sec	
S	Record F	Parameters and Se	ttings on	Separate She	et.	Commer	nts:			
Setting	Completed:			☐ Yes	□No					
	Dotumos	l to Comicos		□ Vaa	□No	Commer	nts:			
<u>.s</u>		I to Service:		☐ Yes	☐ No	Commo				
Final Analysis	Monitorir Required	ng / Further Inspec I:	tion	☐ Yes	☐ No					
•		Replacement Requ	uired:	☐ Yes	☐ No					
		0		NI		T	0:			Detection and constitution
		Company		Name			ગુા	nature		Date (yyyy/mm/dd)
Perfo	rmed By									
Chec	ked By									

Note: The person performing the check is responsible for ensuring that the data is transcribed from the handwritten form correctly, and that the analysis results are correct.

	<u> </u>					INS	PECT	ION F	ORM					Page 1 of	2	
\ \ \	Vinnipeg				MO	FOR S	START	ER, F	VNR,	600V				ID:		
Project	Facility:						Proje	ect Nan	ne:							
Pro	Area :						Bid (Opportu	nity:							
	Load:						Starter L	onotion							Cell #:	
				Turn			Starter L	Jocation	l -							
	Manufacture			Тур			,	Ι_				Serial #:				.,
	Size:		Rate	ea vo	oltage:	V	/	Curre	nt Ratino	g: 	A Co		Con	trol Voltage:		V
	Circuit	☐ Fu	sed Dis	SC.	Rating:		Α	Fuse	Size:	Α	Model:					
Jata	Protection:		eaker		Rating:		Α	ΠΙΟΙ. Δ		Manufacturer:						
Starter Data		□ мс	CP		rtating.			Setting:			Mod	el:				
Sta	Overload	_	ermal ectronic		Class:	☐ 10 ☐ 20		Setting /		Α	Man	ufacturer:				
	Protection:		elligent		Class.	☐ 30 ☐ Ur) nknown	Rating:		A	Mod	el:				
	Transformer.			Sec. Vol				l ry Fuse: A Secondary I			Fuse:	Α				
	Current Transformers: Phases:		s:	□ A □ B	[☐ None] None Rati		o:		round ault CT:	_	Present Not Present	Ratio:		
	Transformer	J.			С							auit O1.	Ш.	10111000111		
o r	ID:						Size:		kW /		Н	Р	٧	'oltage:		V
Motor Data	Full Load Am	ıps:		A S	Service Fac	ctor:		Othe	:							
	<u> </u>			<u> </u>												
	Starter Identi	fication	Tag In	stalle	ed:	☐ Ye	es 🗆					rheating:			☐ Yes	☐ No
ning	Cleanliness (As Fou	ınd):		Good [Acce	eptable	otable Poor Support Insulators:					☐ Good ☐ Acceptable ☐ Poor			
Clea	Connections				Good [☐ Acce	eptable	☐ Poo	r Interio	o/Mecha ock:	anicai	□ N	/A [☐ Good ☐ /	Acceptable	Poor
ion /	Ground Conr	nection	:		Good [☐ Acce	eptable	☐ Poo	r Conta	ctor Cor	nditior	n:		☐ Good ☐ /	Acceptable	Poor
spect	Door Mechar	nical			Good [☐ Acce	eptable	☐ Poo	r Conta	ct Alignr	ment:			☐ Good ☐ /	Acceptable	Poor
Visual Inspection / Cleaning	Verify O/L ele the load:	ement i	s corre	ctly s	sized for		☐ Yes	s 🗌 No	Exerc	ise Circu	uit Bre	aker/MCP	/Disc	connect		☐ Yes
, Xi	Cables Supp	orted A	ppropri	iately	/ :		☐ Yes	s 🗌 No	Unit C	leaned:] Yes Ph	noto	graph Taken:		⁄es
	Comments:															
		Test						В		С						
S					A			В				Test Sum		-		
t/Polε ment	Contact R											☐ Test Pa	cond	clusive		
Contact/Pole Measurements	Disconnect Resis	/ Break tance (Ή,								Furthe Test Fa		estigation R	equired.	
Co	Fuse Re	sistanc	e (μΩ)													
	Comments:															



INSPECTION FORM MOTOR STARTER, FVNR, 600V

Page	2 of 2	
ID:		

Test	Test Prepa	Source: Source: Source: Disolated Contactor: Open Cable Dest. / Load: Note: Approval of City's Representative is required prior to leaving cables connected during the test.										
nce T		Test	V	alta ma		Insu	lation Resistanc	e (MΩ)	Ground all phases not			
sistaı		rest	V	oltage	Α		В	С	under test!			
Insulation Resistance	Contacto	r Line To GND	100	00 VDC					Test Summary ☐ Test Passed			
ulatic	Contactor	r Load To GND	100	00 VDC					Test Inconclusive Further Investigation			
lns	Contacto	or Line to Load	1000 VDC						Required. Test Failed			
	Comments	s:						•	•			
		d to Service:		☐ Yes	☐ No	Comme	nts:					
Final	Monitorir Required	ng / Further Inspe	ection	☐ Yes	□No							
⋖		Replacement Re	quired:	☐ Yes	□No							
		Company		Name			Signature		Date (yyyy/mm/dd)			
Perfo	rmed By											
Chec	ked By	•										

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INSPECTION FORM AC MOTOR, LOW VOLTAGE

Page:	1 of 2		
ID:			

#:	Facility:				Project Name	. .						
Project	-											
Δ.	Area :			В	Bid Opportur	nity:						
	Size:	kW /	HP	Volta	age:		V	R	R.P.M:			
Data	Manufacturer:			Mod	del:			S	Serial Number:			
Motor Data	Frame Type:		FLA:		A Servic	e Fac	ctor:	С	Other:			
Σ	Cooling:	☐ Air ☐ Fan	# Cooling Fans:			Vindin 1ateria		· ·				
	M . 11 .00 .0	-		,		\ , #	10: 10					
	Motor Identification	n Tag Installe			□ No		sual Signs of Over	heati	ng:		Yes	
ning	Connections:				table Poor Air Baffles: Good Acce						<u> </u>	
Clea	Paint:		☐ Good ☐ Ad	cepta	able 🗌 Poo	r Filt	ter Media:		□ N/A	☐ Good ☐ Acc	ceptable Poor	
/ uoi:	Cooling Fans:	□ N/.	A Good A	cepta	able 🗌 Poo	r Fai	n Controls:		□ N/A	☐ Good ☐ Acc	ceptable Poor	
Visual Inspection / Cleaning	Anchorage/Alignm	ent:	☐ Good ☐ Ad	cepta	able 🗌 Poo	r						
al Ins	Ground Connectio	n:	☐ Good ☐ Ad	cepta	able 🗌 Poo	r						
Visu	Mechanical/Electri Operation:	cal Noise Du	uring 🔲 \	'es	□No	Luk	brication Required	d:		☐ Ye	es 🗌 No	
	Cleanliness (As Fo	ound):	☐ Good ☐ A	ccepta	able 🗌 Poo	r Un	it Cleaned:	Yes	Photo	graph Taken:	☐ Yes	
				Res	sistance (MΩ)			Dielectric				
	Stator Winding	Test Voltage (Vdc)	Winding Temperature (℃	;)	30 Sec	1 min.	10 m	in. (a)	Absorption Ratio	Polarization Index (a)		
nce		500								-	-	
sista		500	40									
n Re										-	-	
g Insulation Resistance		500	40									
g Ins		500								-	-	
Windin		500	40									
>	Notes:											
	. ,		and calculation of								la d	
	Test Summary		Test Passed	_ res	t inconclusiv	/e. F	urther Investigation	n Ke	quirea.	☐ Test Fai	<u>lea</u>	
		Res	istance (μΩ)				Test Summary					
ling ance	A - B		B – C		A - C		☐ Test Passed☐ Test Inconclu	sive				
Winding Resistance							Further Invest Test Failed	stigati	on Requ	uired.		
Comments:												



INSPECTION FORM AC MOTOR, LOW VOLTAGE

Page:	2 of 2	
ID:		

	☐ Not App	nlicable					
ion			Test Voltage	Bearing		Resistance (MΩ)	
sulat	E	Bearing	(Vdc)	Temperature (℃)	1 min.		rected to 40°C
Bearing Insulation Resistance			500				
3earii R€			500				
ш	Test Sumi	mary [Test Passed	☐ Test Inconclusiv	e. Further Investigation	Required.	Test Failed
	□ Not An	oliooblo					
	Not App		Iro.	<u>С</u>	Actual Bearing Temper	roturo	°C
	Actual Winding Temperatur		ile.		Actual Bearing Temper	lature	1
ø.	RT	D	Resistance (Ω)	Calculated Temperature (℃)	RTD	Resistan (Ω)	Calculated Temperature (°C)
nce							
RTD Resistance							
'nΣ							
	Test Sumi	mary [Test Passed	☐ Test Inconclusiv	e. Further Investigation	Required.	Test Failed
Note:	Test co	nnection resistan	ce of bolted con	nections. Report on ca	able inspection sheet.		
	Returned	to Service:		☐ Yes ☐ No	Comments:		
Final Analysis	Monitorin Required	g / Further Inspec	ction	☐ Yes ☐ No			
⋖	Repair / F	Replacement Req	uired:	☐ Yes ☐ No			
		Company	Nan	ne	Signature		Date (yyyy/mm/dd)
Perfo	rmed By						
Checked By							

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v	Vinnipeg		INSPECTION F										Page 1 of 1		
	rnnnpeg		POWER CABLE <				: 1000V					Cable ID:			
Project	Facility:				Project Name:										
Pr	Area :					Bid Opportunity:									
	Source:						Dest. / Load:								
Cable Data	Manufact	urer:		Туре:					Conductor:					uminum	
	No. of Conductors:		Size:		☐ AWG ☐ MCM		Length:		m Measured Jacket Markings			☐ Previous Data s ☐ TDR			
			Operating Voltage:		V		Date Installed:								
	Installatio	n: Cable Tra	ay [] EMT] Steel C	Condu	it 🗆	Alum. Co		- Ither						
Visual Inspection	Physical Damage on Exposed Ends:					□No	Cable Ic	Cable Identification Tag Installed:					☐ Ye	s 🗌 No)
	Visual Sig	gns of Overheating	<u> </u>	☐ Ye	es	□No	Cable S	e Supported Appropriately:					☐ Ye	s 🗌 No)
ğ	Bend Rad	dius Acceptable:		☐ Ye	es	□No	Comme	Comments:							
Insulation Resistance Test	Test Preparation	Source: Disconnected Connected	Disco	☐ Disconnected is required,						oproval of City's Representative ed, prior to leaving cables ed during the test.					
	Cable Temperature: ℃ Temperature Correction Factor for 20℃:									Groun		conducto	rs not under	test for ea	ach
	Test				Insu	lation Re	tion Resistance (MO)			Te	Test Summary				
	Voltage		A-G	A-GND B		GND	C-GN	N-G		ND	☐ Test Passed ☐ Test Inconclusive Further Investigation Required.				
	V	Reading													
	v	Corrected to 20°	С									Test Failed			
		00VDC Test Voltag	ge for 600	V rated o	cables	s, 500VD0	C for cable	es rate	ed <= 3	00V.					
Comments:															
e	Note: Tor	que check required	d for all ca	ables. Co	onnec	tion Resis	stance Te	st req	juired fo	or cables 4/	⁄0 AW	'G or larg	er.		
Connection Resistance	Te	ermination					n Resistance (μΩ)					Torque Check			
n Res			Α		В		С		1	N	_				
ectio	Source Dest. / Load										□ ok				
Conr	Comment						□ ОК								
	Commonto.														
Final Analysis	Cable Re	□ No Comments:													
	Monitorin	g / Further Inspecti	□ No												
	Repair / F	Replacement Requi	☐ No												
Company				Name					Signature			Date (yyyy/mm/dd)			
Perfor	med By														
Checked By															