



TYPICAL SUBMITTAL DATA

BASE MODEL: 282PSL1704

Winding: 1704

Date: 03/15/22

Kilowatt ratings at	1800 RPM	60 Hertz	12 Leads		
kW (kVA)	3 Phase	0.8 Power Factor		Dripproof or Open Enclosure	
	CONTINUOUS ^{1, 2}			STANDBY ^{1, 2}	
Voltage*	NEMA B / 80 °C	NEMA F / 105 °C	NEMA H / 125 °C	NEMA F / 130 °C	NEMA H / 150 °C
240/480	12.5 (16)	15 (19)	16.5 (21)	16.5 (21)	17.5 (22)
220/440	12.5 (16)	15 (19)	16.2 (20)	16.2 (20)	17.5 (22)
208/416	12.5 (16)	15 (19)	16 (20)	16 (20)	17.5 (22)
200/400	12.1 (15)	14.3 (18)	15.3 (19)	15.4 (19)	18.1 (23)
190/380	11.5 (14)	13.5 (17)	14.5 (18)	14.6 (18)	16 (20)

① Rise by resistance method, Mil-Std-705, Method 680.1b.

② Machine rated for Max Ambient of 40 °C, Max Altitude 3300 ft

Submittal Data: 208 Volts*, 16 kW, 20 kVA, 0.8 P.F., 1800 RPM, 60 Hz, 3 Phase **Low Wye CONNECTION**

Mil-Std-705B Method	Description	Value	Units	Mil-Std-705C Method	Description	Value	Units
301.1b	Insulation Resistance	>1.5 Meg	Ohms	505.3b	Overspeed	2250	RPM
302.1a	High Potential Test			507.1c	Phase Sequence CCW-ODE	ABC	
	Main Stator	1960	Volts	508.1c	Voltage Balance, L-L or L-N	0.2%	
	Main Rotor	1500	Volts	601.4a	L-L Harmonic Max - Total (Distortion Factor)	3.0%	
	Exciter Stator	1500	Volts		L-L Harmonic Max - Single	3.0%	
	Exciter Rotor	1500	Volts	601.1c	Deviation Factor	5.0%	
401.1a	Stator Resistance, Line to Line Low Wye Connection	0.26750	Ohms	---	TIF (1960 Weightings)	<50	
	Rotor Resistance	0.34	Ohms	---	THF (IEC, BS & NEMA Weightings)	<2%	
	Exciter Stator	17.5	Ohms	---	Winding Pitch	2/3	
	Exciter Rotor	0.12	Ohms				
410.1a	No Load Exciter Field Amps at 208 Volts Line to Line	0.5	A DC	Additional Prototype Mil-Std Methods are Available on Request.			
420.1a	Short Circuit Ratio	0.590					
421.1a	Xd Synchronous Reactance	2.780	PU	--	Generator Frame	282	
		6.014	Ohms	--	Type	MagnaPlus	
422.1a	X2 Negative Sequence React.	0.240	PU	--	Insulation	Class H	
		0.520	Ohms	--	Coupling - Single Bearing	Flexible	
423.1a	X0 Zero Sequence Reactance	0.063	PU	--	Amortisseur Windings	Full	
		0.137	Ohms	--	Excitation	Ext. Voltage Regulated, Brushless	
425.1a	X'd Transient Reactance	0.172	PU	--	Voltage Regulator	SE350	
		0.372	Ohms	--	Voltage Regulation	1.00%	
426.1a	X''d Subtransient Reactance	0.146	PU				
		0.316	Ohms				
				--	Cooling Air Volume	250	CFM
				--	Heat rejection rate	152	Btu's/min
427.1a	T'd Transient Short Circuit Time Constant	0.018	Sec	--	Full load current	55.5	Amps
				--	Minimum Input hp required	25	HP
428.1a	T''d Subtransient Short Circuit Time Constant	0.008	Sec	--	Full load torque	73	Lb-ft
				--	Efficiency at rated load :	85.7%	
430.1a	T'do Transient Open Circuit Time Constant	0.47	Sec				
432.1a	Ta Short Circuit Time Constant of Armature Winding	0.014	Sec	--	Weight	270	lbs

* Voltages refer to wye (star) connection, unless otherwise specified.

www.regalrexnord.com/brands/Marathon-Generators



Not indicative of legal entity.



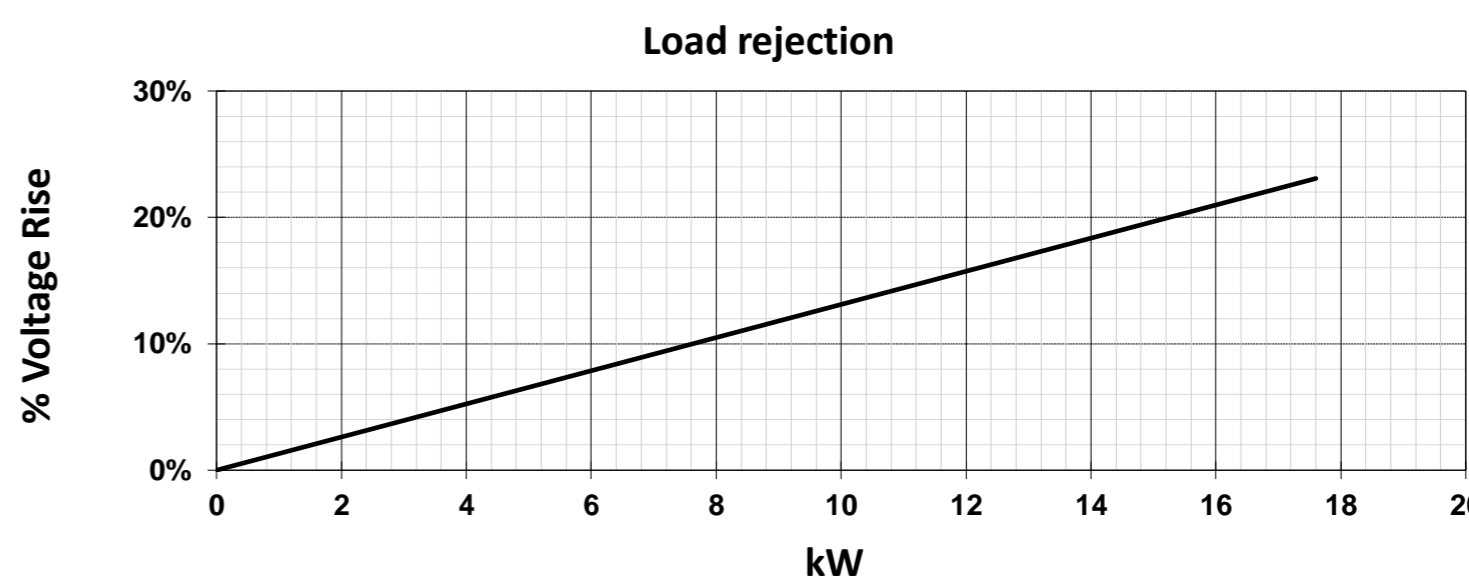
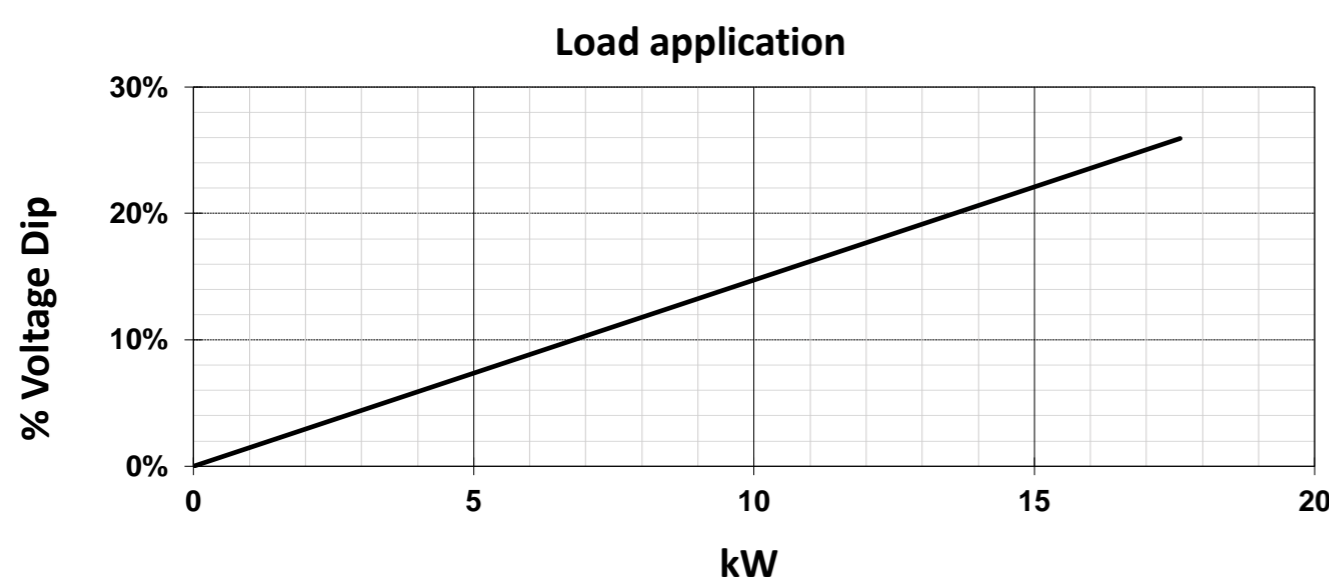
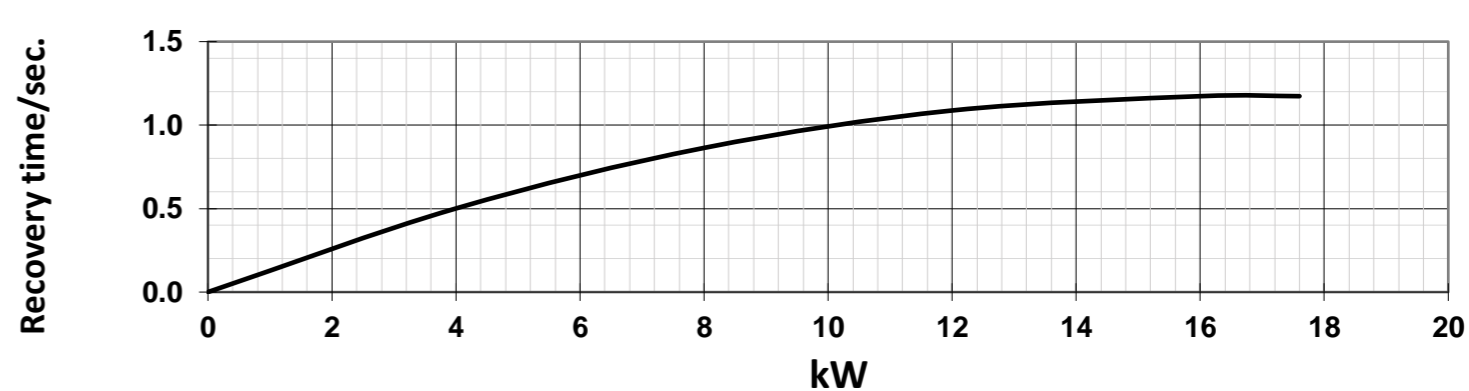
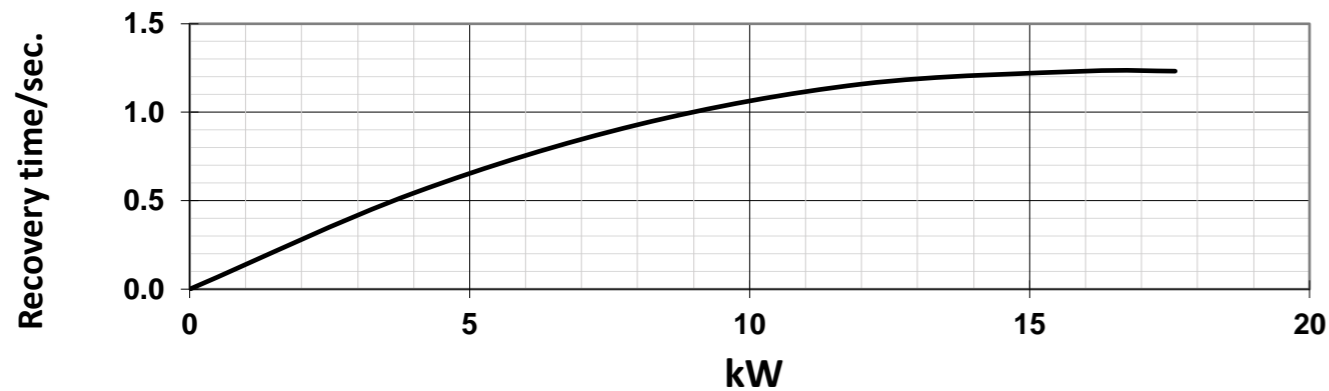
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TYPICAL DYNAMIC CHARACTERISTICS

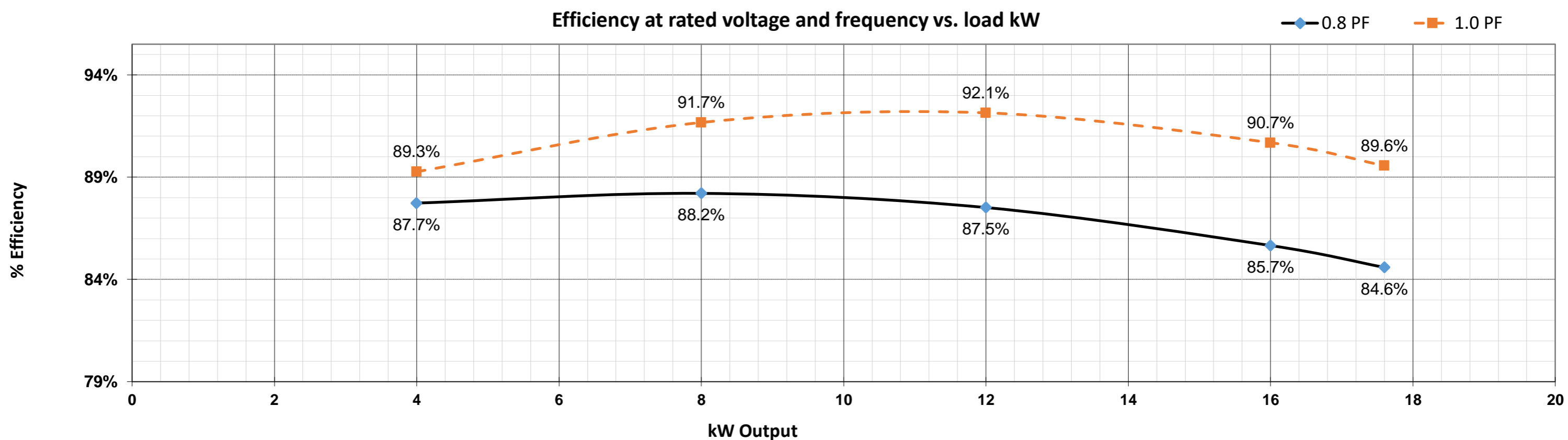
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Date: **03/15/22**

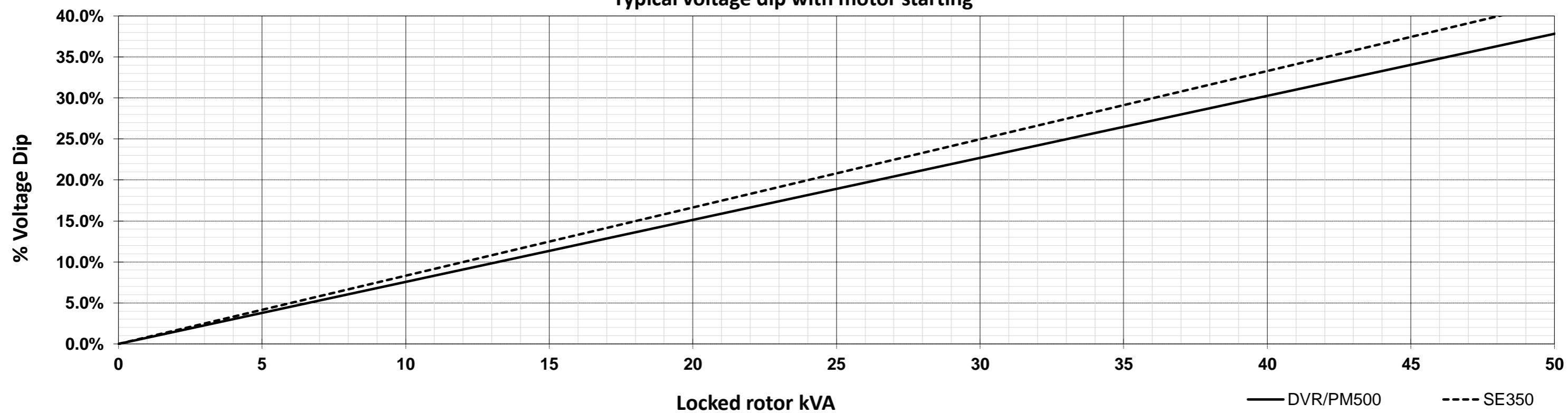
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Efficiency at rated voltage and frequency vs. load kW



Typical voltage dip with motor starting



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DECREMENT CURVE

BASE MODEL: 282PSL1704

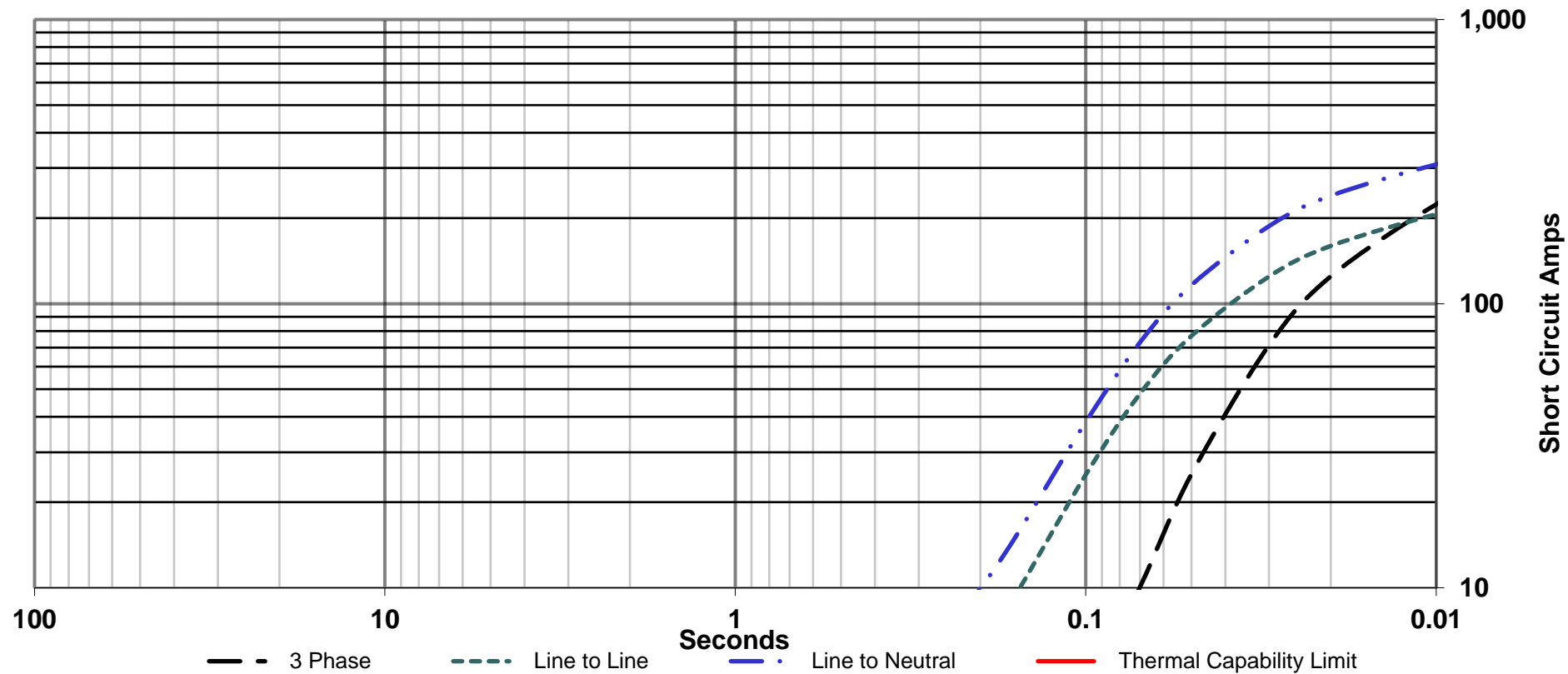
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Full Load Current : 55.5 amps
Steady State S.C. Current : 2.78 amps

Max. 3 ph. Symm. S.C. Current : 380 amps

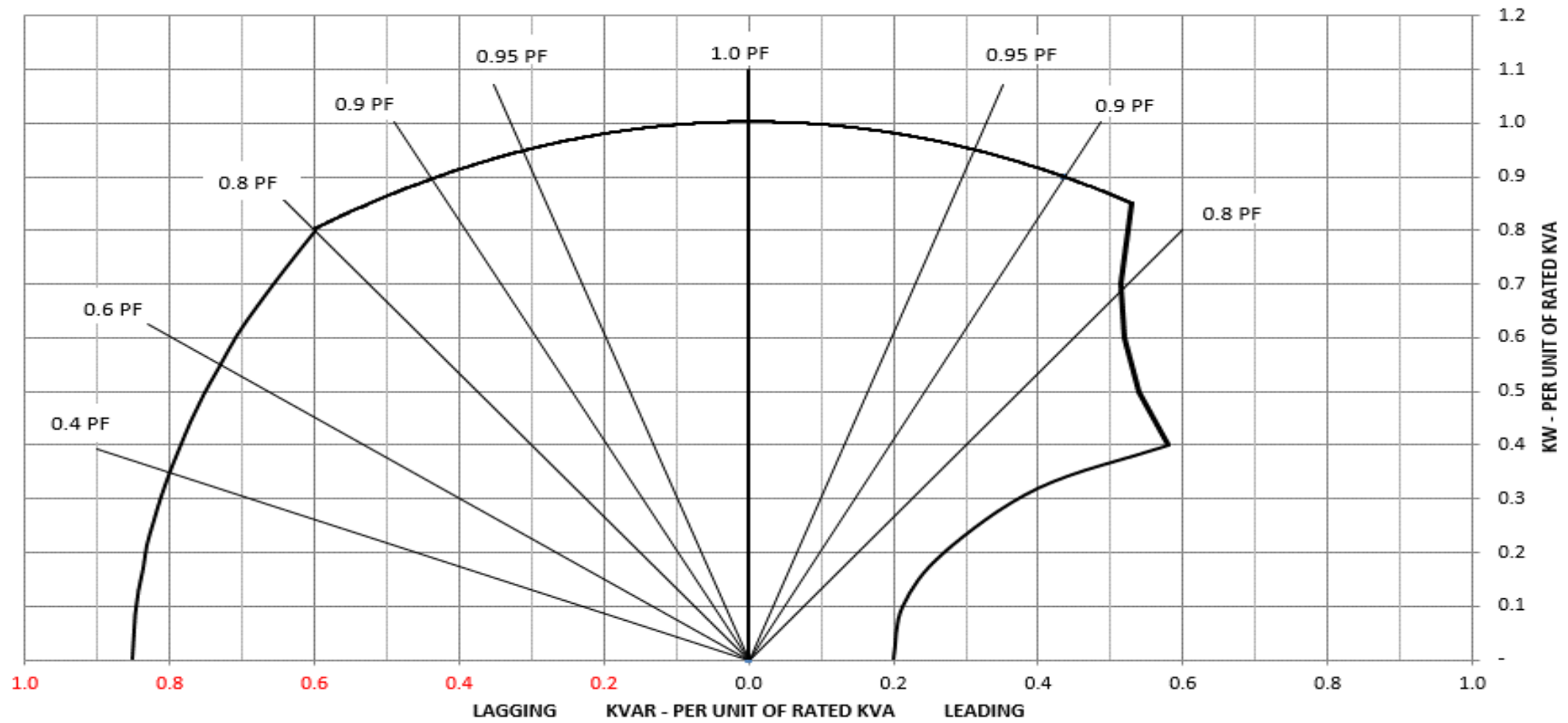
Symmetrical Component values, Maximum Asymmetrical Values Are 1.732 Times Symmetrical Values



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Typical Reactive Capability Curve

Date : 03/15/22



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THERMAL DAMAGE CURVE

Date : 03/15/22

Base is 3.0 P.U. current for 10 seconds from $T = 40/(I-1)^2$
Windings at operating temperature

