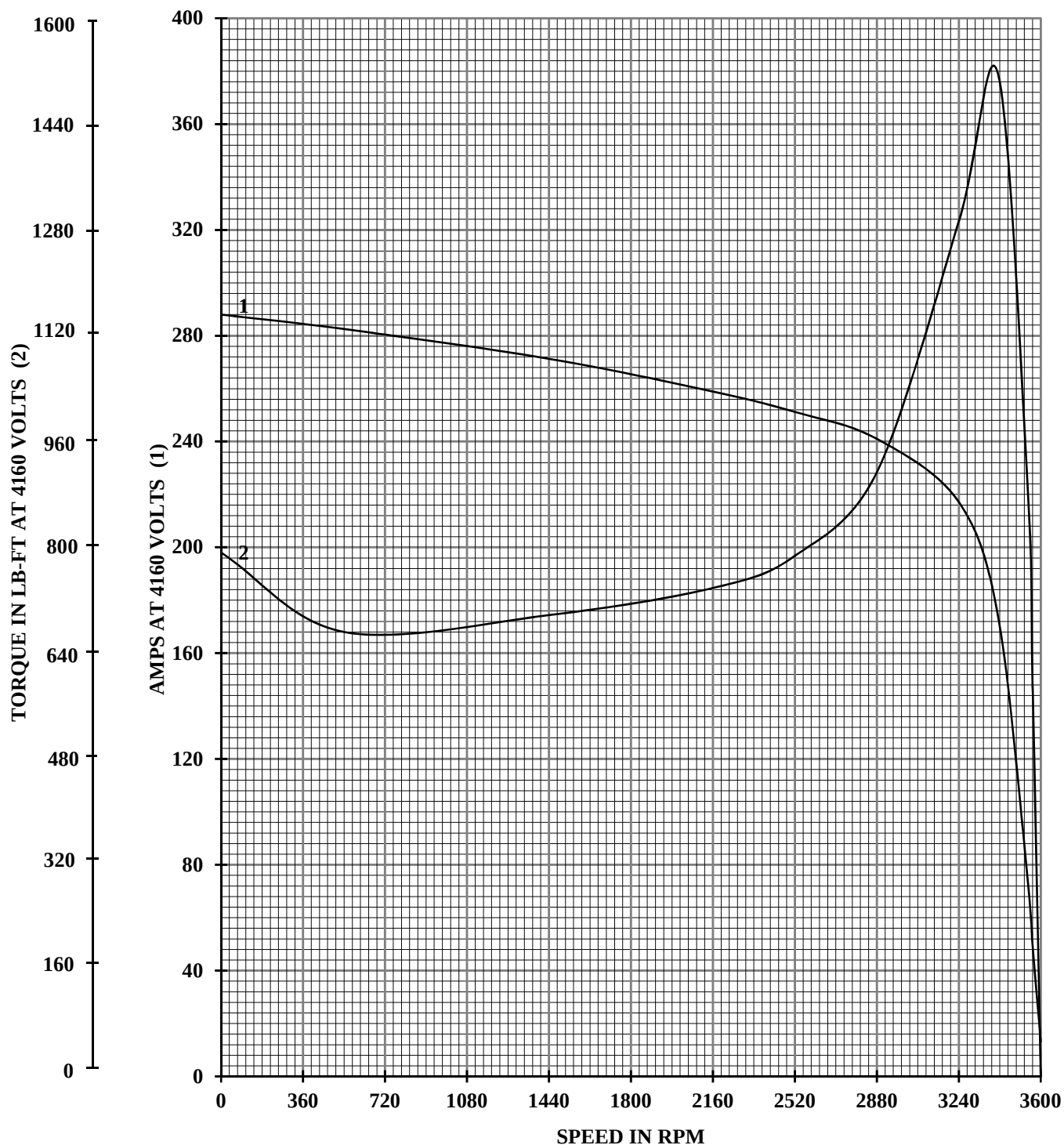


BALDOR -RELIANCE SALES ORDER	FRAME	HP	TYPE	PHASE	HERTZ	RPM
	449	400	P	3	60	3564
VOLTS	AMPS	DUTY	AMB°C	INSUL	S.F.	NEMA DESIGN
4160	48.9	CONT	40	F	1.15	---
CODE LETTER	ENCL.	ROTOR WK ² (lb-ft ²)	STATOR RES.@25°C OHMS (BETWEEN LINES)		TYPICAL DATA	
F	ODP	29	0.95932			
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	13.2	3600	5.8	0.0	
1/4	100	17.8	3592	62.9	92.5	
2/4	200	26.8	3583	81.3	95.0	
3/4	300	37.4	3574	87.0	95.4	
4/4	400	48.9	3564	88.9	95.2	
5/4	500	61.2	3554	89.2	94.7	
6/4	600	74.5	3543	88.7	94.1	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB-FT	AMPERES	
LOCKED ROTOR		0	134	792	288.0	
PULL UP		540	114	672	282.5	
BREAKDOWN		3413	260	1530	173.4	
FULL LOAD		3564	100	589	48.9	
AMPERES SHOWN FOR <u>4160</u> VOLT CONNECTION(S). IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE.						
REVISION 0						
 A MEMBER OF THE ABB GROUP			DR. BY <u>CD</u> CK. BY <u>T. Kelati</u> APP. BY <u>T. Kelati</u> DATE <u>4/28/2015</u>		A-C MOTOR PERFORMANCE	
					A44WG5198-R001 ISSUE DATE: 4/28/2015	

B-R S.O.		HERTZ	60	AMB°C	40	CODE LETTER	F
FRAME	449	RPM	3564	INSUL	F	ENCLOSURE	ODP
HP	400	VOLTS	4160	S.F.	1.15	STATOR RES.@25°C	0.95932
TYPE	P	AMPS	48.9	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	29	TYPICAL DATA	



AMPERES SHOWN FOR **4160** VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE.

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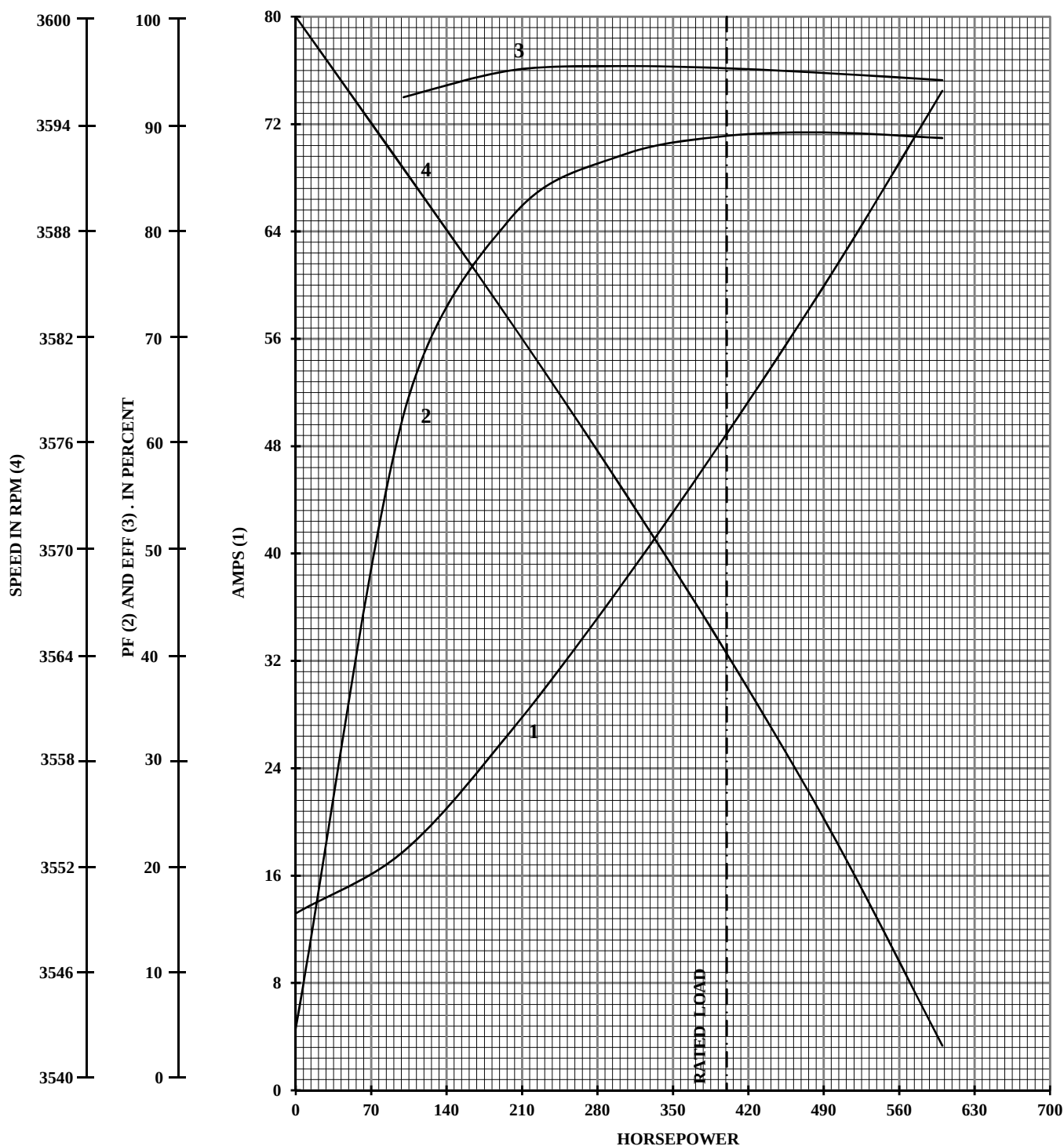
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CK. BY T. Kelati
APP. BY T. Kelati
DATE 4/28/2015

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PERFORMANCE
CURVES**

A44WG5198-R001

ISSUE DATE: 4/28/2015

B-R S.O.		HERTZ	60	AMB°C	40	CODE LETTER	F
FRAME	449	RPM	3564	INSUL	F	ENCLOSURE	ODP
HP	400	VOLTS	4160	S.F.	1.15	STATOR RES.@25°C	0.95932
TYPE	P	AMPS	48.9	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	29	TYPICAL DATA	



AMPERES SHOWN FOR **4160** VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE.

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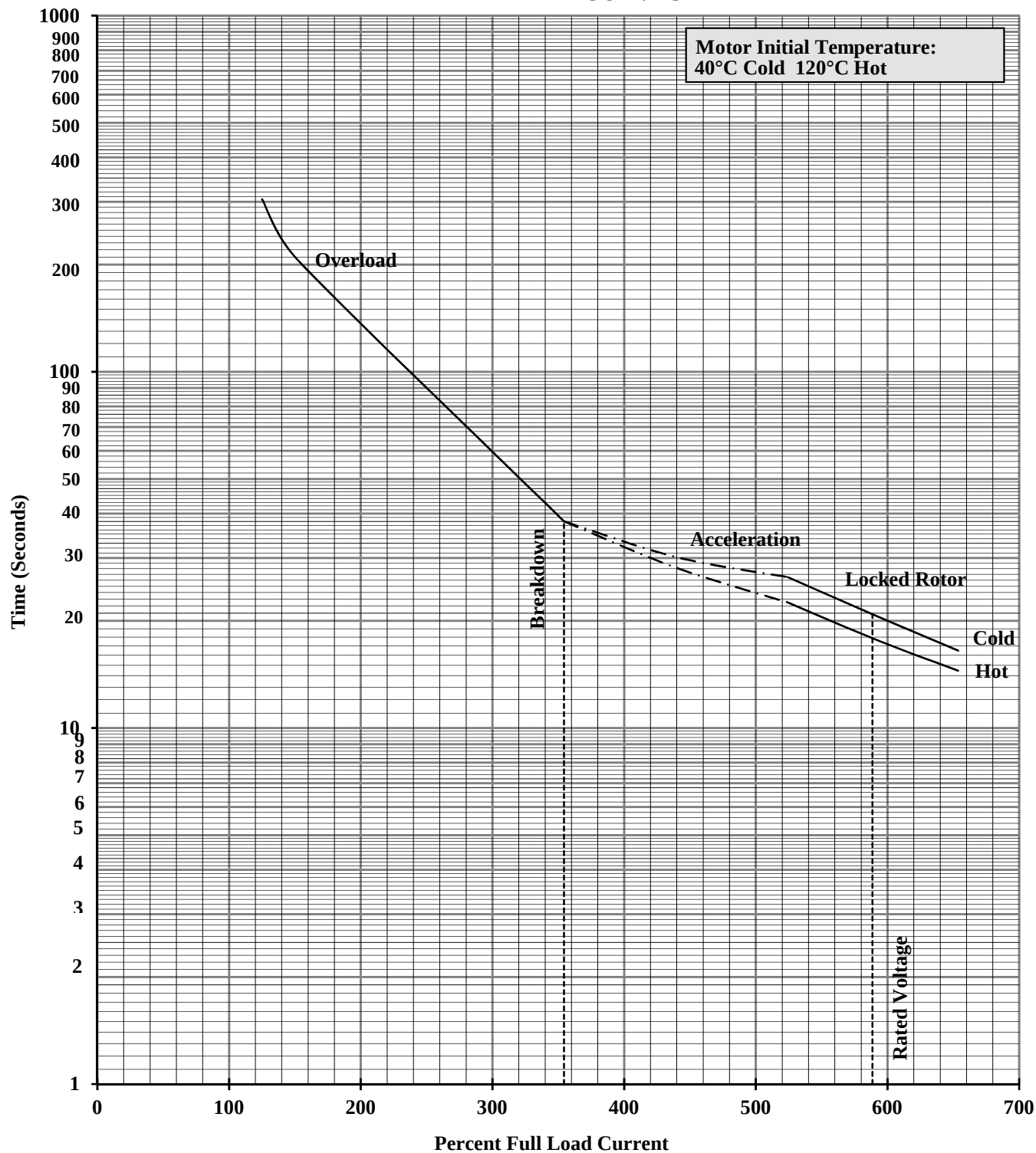
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ISSUE DATE: 4/28/2015

B-R S.O.		HERTZ	60	AMB°C	40	CODE LETTER	F
FRAME	449	RPM	3564	INSUL	F	ENCLOSURE	ODP
HP	400	VOLTS	4160	S.F.	1.15	STATOR RES.@25°C	0.95932
TYPE	P	AMPS	48.9	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	29	TYPICAL DATA	

THERMAL LIMIT CURVES



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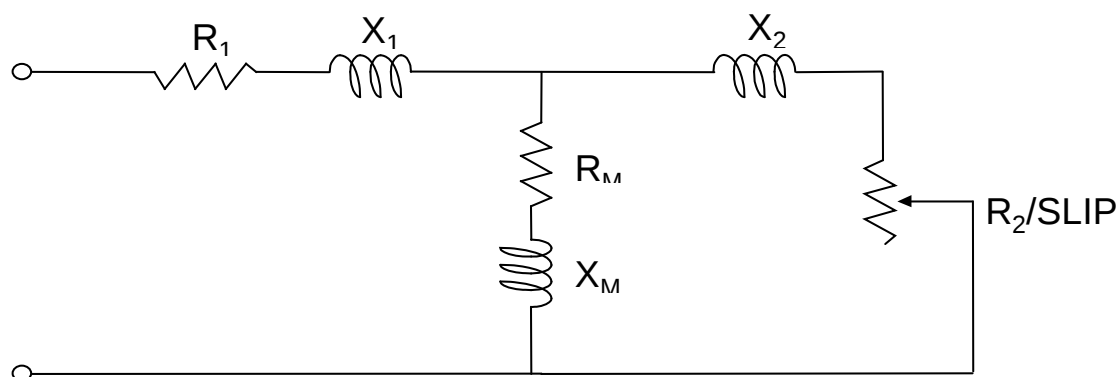
ISSUE DATE: 4/28/2015

B-R S.O.		HERTZ	60	AMB°C	40	CODE LETTER	F
FRAME	449	RPM	3564	INSUL	F	ENCLOSURE	ODP
HP	400	VOLTS	4160	S.F.	1.15	STATOR RES.@25°C	0.95932
TYPE	P	AMPS	48.9	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	29	TYPICAL DATA	

EQUIVALENT CIRCUIT DATA

(Per Unit, Per Phase)

FULL LOAD				LOCKED ROTOR			
R_1	0.01050	X_1	0.09121	R_1	0.00939	X_1	0.09387
R_2	0.00854	X_2	0.08619	R_2	0.03261	X_2	0.04366
R_M	0.09334	X_M	3.11105	R_M	0.41054	X_M	2.76961
BASE OHMS		57.99500		BASE VOLTS		2402	
SC Time Constant		0.043 Sec		$X'' = X_S$		0.13753	
OC Time Constant		0.993 Sec		X/R Ratio		10.92	



Parallel Equivalent			
FL R_M' pu	103.7855	LR R_M' pu	19.09505
FL X_M' pu	3.11385	LR X_M' pu	2.83046

R_1 = Stator dc resistance
 R_2 = Rotor resistance
 R_M = Core loss resistance
SC = Short circuit
OC = Open circuit

X_1 = Stator leakage reactance
 X_2 = Rotor leakage reactance
 X_M = Magnetizing reactance
FL = Full load
LR = Locked rotor

$X'' = X_S$ = Subtransient reactance

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