



Specification Sheet for WorldWide Electric AHD9104

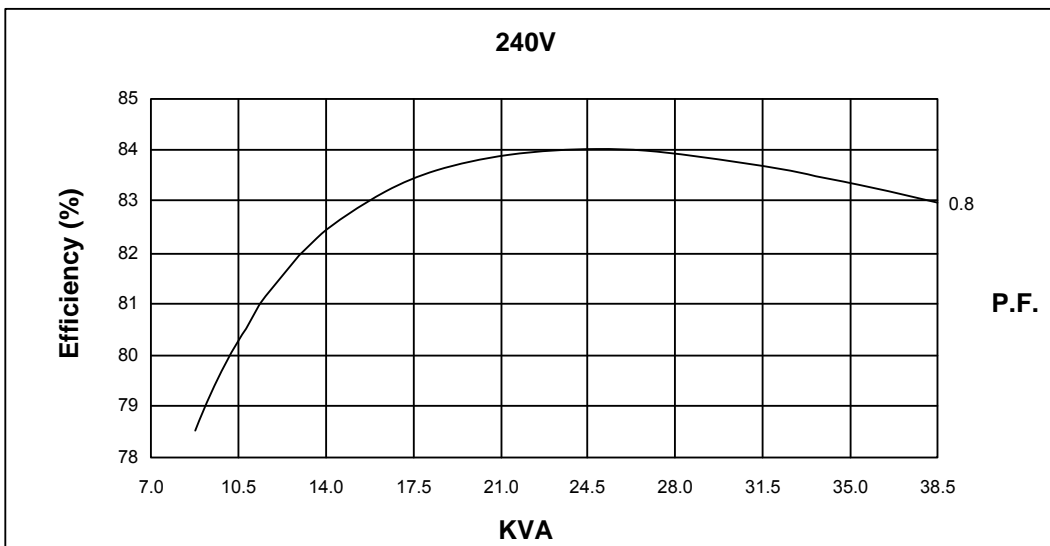
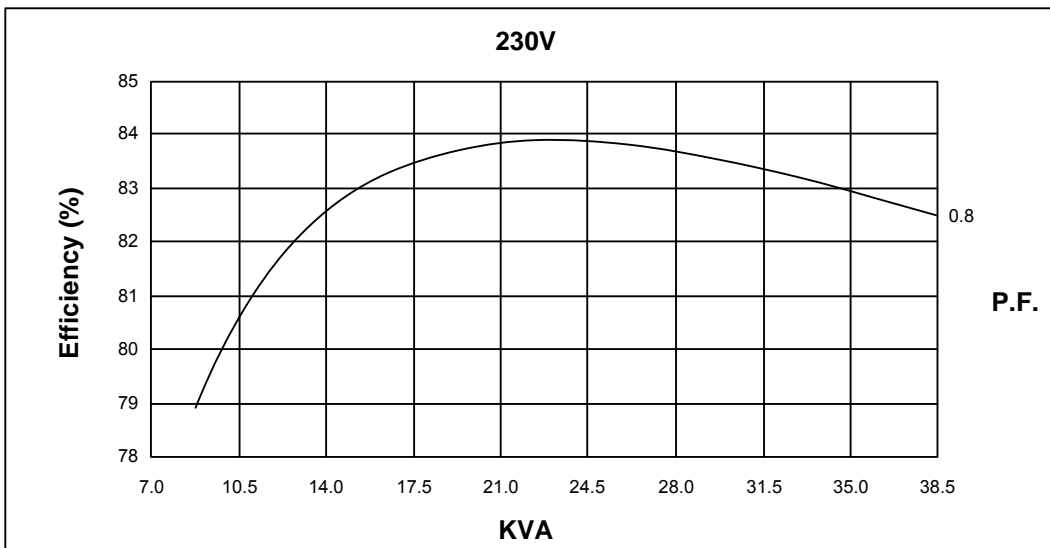
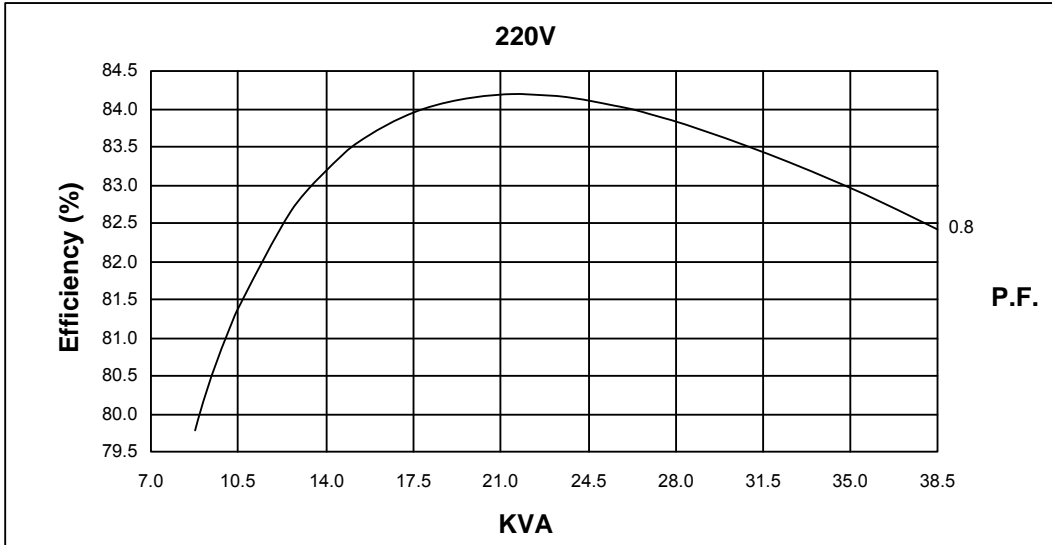
CONTROL SYSTEM	SELF-EXCITED					
AUTOMATIC VOLTAGE REGULATOR	AGR460 (STANDARD)			AGR440 (OPTIONAL)		
VOLTAGE REGULATION	± 1.0 %			± 1.0 %		
SUSTAINED SHORT CIRCUIT	NONE – SELF-EXCITED MACHINES CANNOT SUPPLY A SHORT-CIRCUIT CURRENT					
INSULATION SYSTEM	CLASS H					
PROTECTION	IP23					
RATED POWER FACTOR	0.8					
STATOR WINDING	SINGLE LAYER CONCENTRIC					
WINDING PITCH	TWO-THIRDS					
NUMBER OF WINDING LEADS	4					
STATOR WINDING RESISTANCE	0.0484Ω @ 22°C WIRED AS SERIES					
ROTOR WINDING RESISTANCE	0.96Ω @ 22°C					
EXCITER STATOR RESISTANCE	23Ω @ 22°C					
EXCITER ROTOR RESISTANCE	0.122Ω @ 22°C					
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N. Consult the factory for others.					
WAVEFORM DISTORTION	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%					
MAXIMUM OVERSPEED	2250 Rev/Min					
BEARING DRIVE END	BALL. 6312 - 2RS (ISO)					
BEARING NON-DRIVE END	BALL. 6306 - 2RS (ISO)					
	1 BEARING			2 BEARING		
WEIGHT COMP. GENERATOR	214 kg			226 kg		
WEIGHT WOUND STATOR	79 kg			79 kg		
WEIGHT WOUND ROTOR	73.95 kg			77.15 kg		
WR ² INERTIA	0.2921 kgm ²			0.2978 kgm ²		
SHIPPING WEIGHTS in a crate	224 kg			236 kg		
PACKING CRATE SIZE	97 x 57 x 96 (cm)			97 x 57 x 96 (cm)		
TELEPHONE INTERFERENCE	THF < 2%			TIF < 50		
COOLING AIR	0.19 m ³ /sec, 403 CFM					
VOLTAGE, SERIES	220		230		240	
VOLTAGE, PARALLEL	110		115		120	
POWER FACTOR	0.8	1.0	0.8	1.0	0.8	1.0
KVA BASE RATING FOR REACTANCE VALUES	35	40	35	40	35	40
X _d DIR. AXIS SYNCHRONOUS	2.127	2.431	1.946	2.224	1.787	2.042
X' _d DIR. AXIS TRANSIENT	0.162	0.185	0.148	0.169	0.136	0.155
X'' _d DIR. AXIS SUBTRANSIENT	0.088	0.101	0.081	0.093	0.074	0.085
X _q QUAD. AXIS REACTANCE	1.027	1.174	0.940	1.074	0.863	0.986
X'' _q QUAD. AXIS SUBTRANSIENT	0.180	0.206	0.164	0.187	0.151	0.173
X _L LEAKAGE REACTANCE	0.067	0.077	0.061	0.070	0.056	0.064
X ₂ NEGATIVE SEQUENCE	0.134	0.153	0.123	0.141	0.113	0.129
X ₀ ZERO SEQUENCE	0.033	0.038	0.030	0.034	0.028	0.032
REACTANCES ARE SATURATED.	VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED.					
T' _d TRANSIENT TIME CONST.	0.025 s					
T'' _d SUB-TRANSIENT TIME CONST.	0.0016 s					
T' _{do} O.C. FIELD TIME CONST.	0.59 s					
T _a ARMATURE TIME CONST.	0.0105 s					
SHORT CIRCUIT RATIO	1/X _d					



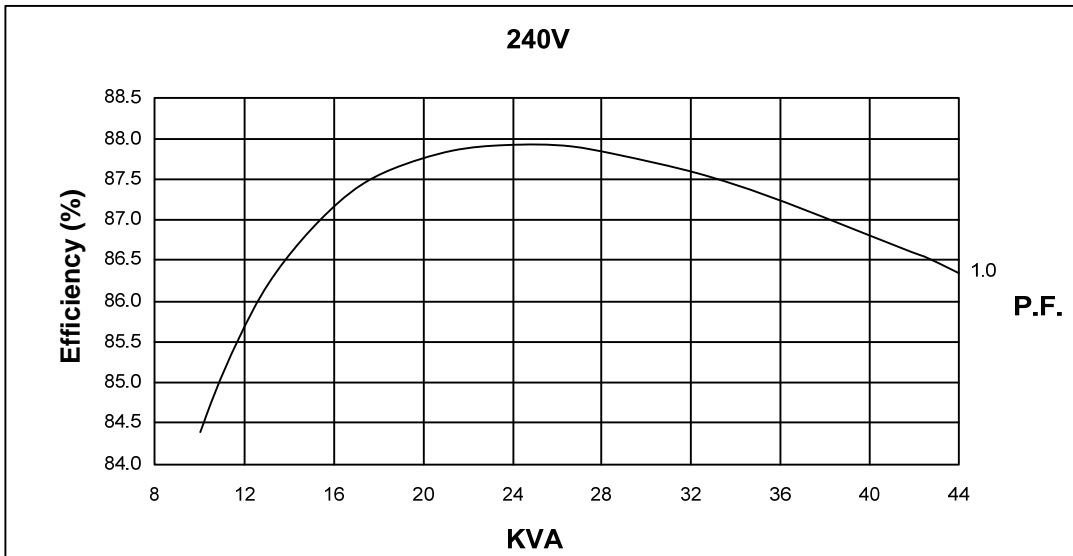
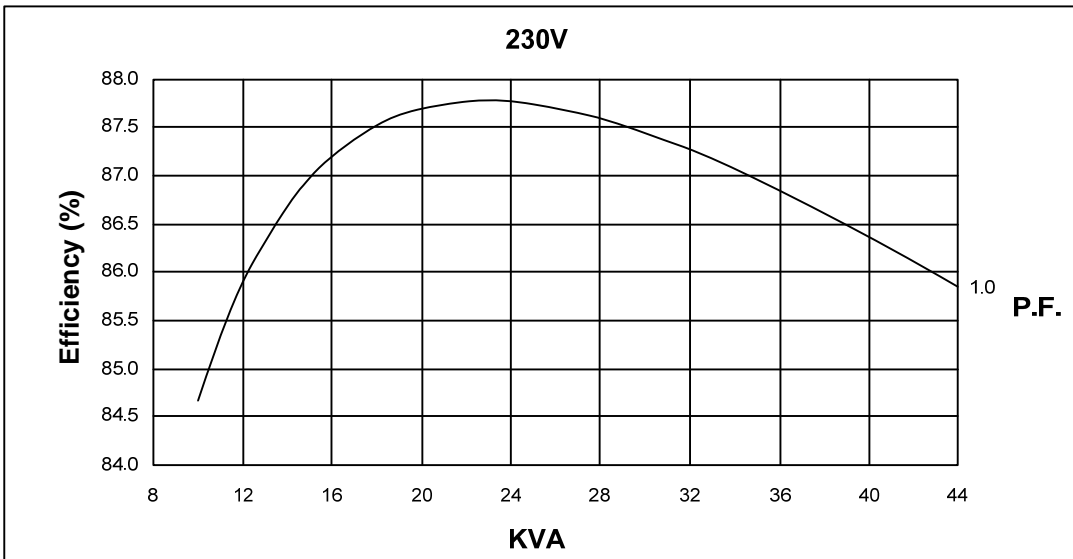
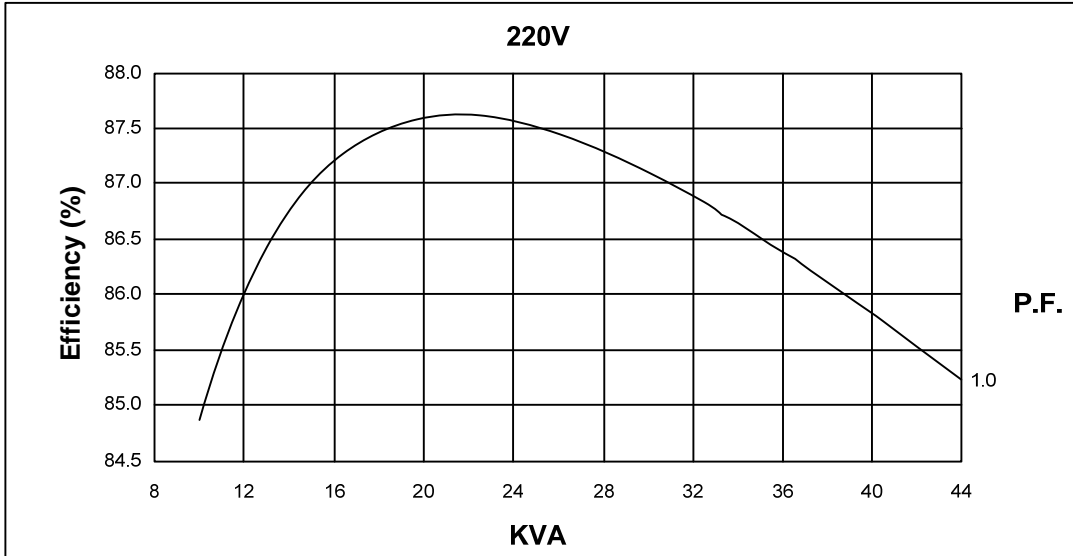
Specification Sheet for WorldWide Electric AG184J-4

CONTROL SYSTEM	SELF-EXCITED					
AUTOMATIC VOLTAGE REGULATOR	AGR460 (STANDARD)			AGR440 (OPTIONAL)		
VOLTAGE REGULATION	$\pm 1.0\%$			$\pm 1.0\%$		
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INSULATION SYSTEM	CLASS H					
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WINDING PITCH	TWO-THIRDS					
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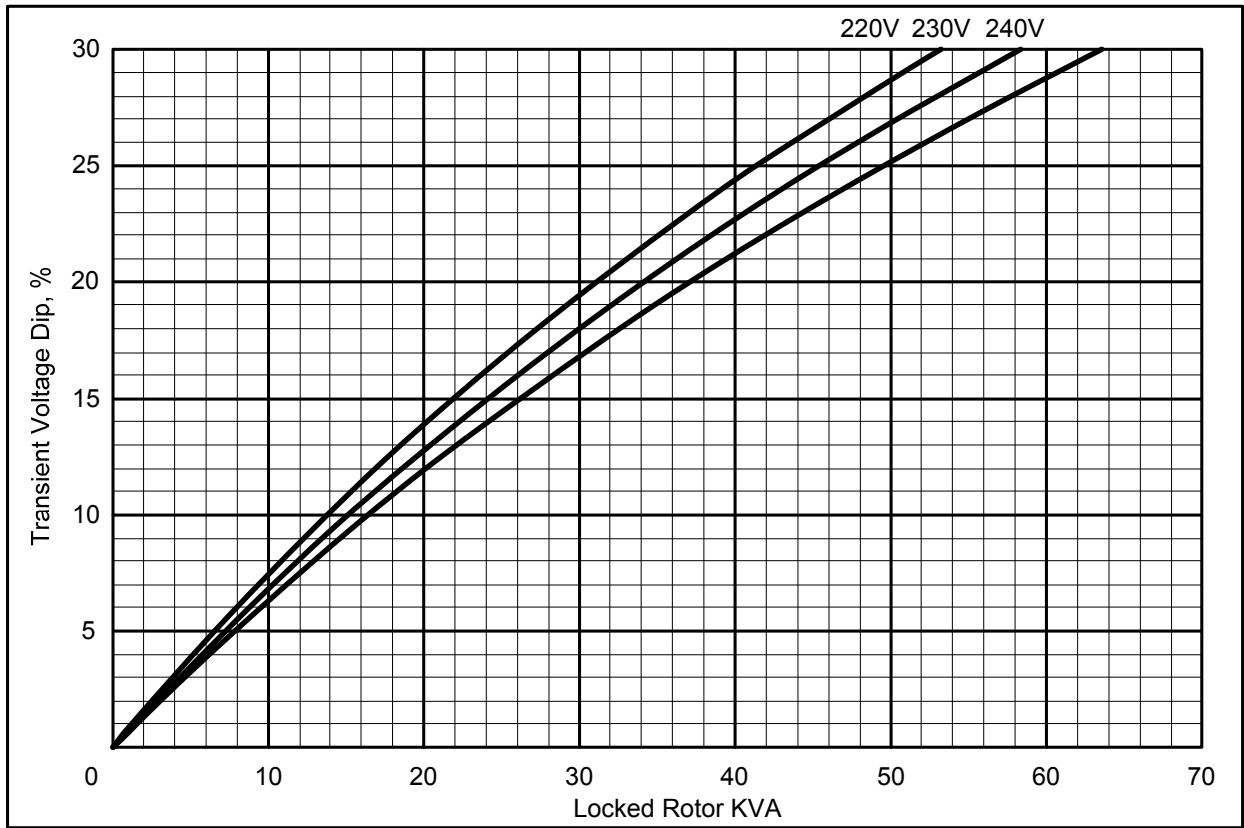
SINGLE-PHASE EFFICIENCY CURVES FOR 06 WINDING AT 0.8 POWER FACTOR



SINGLE-PHASE EFFICIENCY CURVES FOR 06 WINDING AT 1.0 POWER FACTOR



LOCKED ROTOR MOTOR STARTING CURVE



50 Hz RATINGS

Class	F						H					
Temp Rise	105°C R/R (40°C)						125°C R/R (40°C)					
Power Factor	0.8			1.0			0.8			1.0		
Series Voltage	220	230	240	220	230	240	220	230	240	220	230	240
Parallel Voltage	110	115	120	110	115	120	110	115	120	110	115	120
KVA Output	25.7	25.7	25.7	27.5	27.5	27.5	28.0	28.0	28.0	30.0	30.0	30.0
kW Output	20.6	20.6	20.6	27.5	27.5	27.5	22.4	22.4	22.4	30.0	30.0	30.0
Efficiency, %	82.9	83.3	83.6	85.8	86.3	86.7	82.5	82.9	83.3	85.3	85.9	86.3
kW Input	24.8	24.7	24.6	32.1	31.9	31.7	27.2	27.0	26.9	35.2	34.9	34.8

60 Hz RATINGS

Class	F						H					
Temp Rise	105°C R/R (40°C)						125°C R/R (40°C)					
Power Factor	0.8			1.0			0.8			1.0		
Series Voltage	220	230	240	220	230	240	220	230	240	220	230	240
Parallel Voltage	110	115	120	110	115	120	110	115	120	110	115	120
KVA Output	32.0	32.0	32.0	36.5	36.5	36.5	35.0	35.0	35.0	40.0	40.0	40.0
kW Output	25.6	25.6	25.6	36.5	36.5	36.5	28.0	28.0	28.0	40.0	40.0	40.0
Efficiency, %	82.9	83.3	83.6	85.8	86.3	86.7	82.5	82.9	83.3	85.3	85.9	86.3
kW Input	30.9	30.7	30.6	42.5	42.3	42.1	34.0	33.8	33.6	46.9	46.6	46.3