Specification Sheet for WorldWide Electric EDD3112, Three-Phase

CONTROL SYSTEM	SELF-EXCITED				P.M.G.-EXCITED			
AUTOMATIC VOLTAGE REGUALTOR	AGR440				AGR321		AGR341	
VOLTAGE REGULATION	± 1.0 %				± 0.5 %		± 1.0 %	
	WITH 4% ENGINE GOVERNING							
SUSTAINED SHORT CIRCUIT	NONE – SELF-EXCITED MACHINES CANNOT SUPPLY A SHORT-CIRCUIT CURRENT				SEE SHORT-CIRCUIT DECREMENT CURVES			
INSULATION SYSTEM	CLASS H							
PROTECTION	IP23							
RATED POWER FACTOR	0.8							
STATOR WINDING	DOUBLE LAYER LAP							
WINDING PITCH	TWO-THIRDS							
NUMBER OF WINDING LEADS	12							
STATOR WINDING RESISTANCE	0.0065Ω/PHASE @ 22°C WIRED AS HIGH WYE (SERIES STAR)							
ROTOR WINDING RESISTANCE	1.55Ω @ 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. 6220 (ISO)							
BEARING NON-DRIVE END	BALL. 6314 (ISO)							
	1 BEARING				2 BEARING			
WEIGHT COMP. GENERATOR	1263 kg				1275 kg			
WEIGHT WOUND STATOR	584 kg				584 kg			
WEIGHT WOUND ROTOR	502 kg				473 kg			
WR² INERTIA	6.8928 kgm^2				6.6149 kgm^2			
SHIPPING WEIGHTS in a crate	1355 kg				1395 kg			
PACKING CRATE SIZE	166 x 87 x 124 (cm)				166 x 87 x 124 (cm)			
	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF < 2%				TIF < 50			
COOLING AIR	1.035 m^3/sec, 2202 CFM				1.312 m^3/sec, 2780 CFM			
HIGH WYE (SERIES STAR), VAC	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
LOW WYE (PARALLEL STAR), VAC	190/110	200/115	208/120	220/127	208/120	220/127	230/133	240/138
HIGH (SERIES) DELTA, VAC	220/110	230/115	240/120	254/127	240/120	254/127	266/133	277/138
KVA BASE RATING FOR REACTANCE VALUES	450	450	450	450	525	550	581	594
Xd DIR. AXIS SYNCHRONOUS	3.27	2.95	2.74	2.44	3.94	3.69	3.57	3.35
X'd DIR. AXIS TRANSIENT	0.18	0.16	0.15	0.13	0.18	0.17	0.16	0.15
X''d DIR. AXIS SUBTRANSIENT	0.13	0.12	0.11	0.10	0.13	0.12	0.12	0.11
Xq QUAD. AXIS REACTANCE	2.66	2.40	2.23	1.98	3.12	2.92	2.82	2.65
X''q QUAD. AXIS SUBTRANSIENT	0.26	0.24	0.22	0.20	0.34	0.32	0.31	0.29
X_L LEAKAGE REACTANCE	0.07	0.06	0.06	0.05	0.08	0.07	0.07	0.07
X_2 NEGATIVE SEQUENCE	0.19	0.17	0.16	0.14	0.23	0.22	0.21	0.20
X_0 ZERO SEQUENCE	0.11	0.10	0.09	0.08	0.11	0.10	0.10	0.09
REACTANCES ARE SATURATED.	VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED.							
T'd TRANSIENT TIME CONST.	0.08 s							
T''d SUB-TRANSTIME CONST.	0.012 s							
T'do O.C. FIELD TIME CONST.	2 s							
Ta ARMATURE TIME CONST.	0.017 s							
SHORT CIRCUIT RATIO	1/Xd							

50Hz RATINGS

Class	F				H				Standby							
Temp Rise	105°C R/R (40°C)				125°C R/R (40°C)				150°C R/R (40°C)				163°C R/R (27°C)			
High Wye (Series Star) Voltage	380	400	415	440	380	400	415	440	380	400	415	440	380	400	415	440
Low Wye (Parallel Star) Voltage	190	200	208	220	190	200	208	220	190	200	208	220	190	200	208	220
High (Series) Delta Voltage	220	230	240	254	220	230	240	254	220	230	240	254	220	230	240	254
KVA Output	400	445	400	400	450	500	450	450	478	512	478	478	495	520	495	495
kW Output	320	356	320	320	360	400	360	360	382	410	382	382	396	416	396	396
Efficiency, %	94.5	94.3	94.8	94.9	94.0	93.8	94.4	94.6	93.8	93.7	94.2	94.4	93.6	93.6	94.1	94.3
kW Input	339	378	338	337	383	426	381	381	408	437	406	405	423	444	421	420

60Hz RATINGS

Class	F				H				Standby							
Temp Rise	105°C R/R (40°C)				125°C R/R (40°C)				150°C R/R (40°C)				163°C R/R (27°C)			
High Wye (Series Star) Voltage	416	440	460	480	416	440	460	480	416	440	460	480	416	440	460	480
Low Wye (Parallel Star) Voltage	208	220	230	240	208	220	230	240	208	220	230	240	208	220	230	240
High (Series) Delta Voltage	240	254	266	277	240	254	266	277	240	254	266	277	240	254	266	277
KVA Output	481	500	531	538	525	550	581	594	550	581	613	625	569	600	631	644
kW Output	385	400	425	430	420	440	465	475	440	465	490	500	455	480	505	515
Efficiency, %	94.3	94.4	94.4	94.5	94.0	94.1	94.1	94.2	93.8	93.9	93.9	94.0	93.6	93.7	93.7	93.9
kW Input	408	424	450	455	447	468	494	504	469	495	522	532	486	512	539	549