موتور دیزل : Deutz

ژنراتور : Stamford

Standby		Prime		
KVA	KW	KVA	KW	
103	82	94	75.2	دیزل ژنراتور

موتور دیزل

Manufacturer	Deutz	تولید کننده
Type	WP4D100E200	تیپ
Number of cylinders	4	تعداد سیلندر ها
Cylinder arrangement	Vertical in-line	آرایش سیلندر ها
Cycle	4 stroke	چرخه
Aspiration	Turbo charged	سیستم تنفس
Bore × Stroke , mm	105x120	قطر سیلندر × کورس پیستون
Displacement , Liters	4	جا به جایی
Speed Governor	Mechanical	سرعت گاورنر
Cooling System	water-cooled	سیستم خنک کننده
Frequency	50Hz	فرکانس
Starter Motor	24V	استارتر موتور

ژنراتور		
Manufacturer	Stamford	تولید کننده
Type	UCI224G	تیپ
Exciter type	Brushless	نوع کانتر
Power factor	0.8	ضریب قدرت
Voltage	380	ولتاژ
Frequency	50 Hz	فرکانس
Speed, Rpm	1500	سرعت
Insulation class	H	کلاس عایق
Protection class	IP23	کلاس حفاظتی
Excitation	Brushless	سیستم تحریک

Water Cooling residential Diesel Generator WP4D100E200 Stamford Alternator 50HZ

Place of Origin	China
Brand Name	VICTORY POWER RELIABILITY
Certification	CE, ISO, SONCAP
Model Number	Deutz 73KVA ~ 100KVA
Minimum Order Quantity	1 set
Price	Discussible
Packaging Details	Plywood case
Delivery Time	30 days
Payment Terms	L/C, T/T, Money Gram, Western Union, O/A
Supply Ability	500 sets/month

Products Detailed

Water Cooling Deutz Diesel Generator WP4D100E200 Stamford Alternator 50HZ

Quick Detail:

1. 58KW ~ 80KW Deutz Diesel Generator Set

2. Engine: Deutz engine WP4D100E200

3. Alternator: original Stamford alternator

4. Optional: silent type /Open type

5. 50Hz

Technical specification of Deutz diesel generator set:

Frequency 50HZ, 1500RPM, Rating voltage 380V/220V, 400V/230V/ 415V/240V
Power Factor 0.8(lagging) or 1.0
Protection Standard: IP21-IP23
Model of Connection: 3 phase or single phase
Insulation Grade: H
Stable voltage ≤ ±2.5%
Voltage-form distortion rate ≤5%
Brushless excitation
Engine charactors:Vertical type, 4-stroke, water cooled

Description:

Deutz series diesel generator sets are equipped with WP4D series engine. It is made by the joint venture of Germany Deutz Inc and Weichai. Victory-Deutz Diesel Gen-set is a set of complete equipment for electrical power supply. Adopting modular design, the engine features compact structure, large power output, economy, reliability, high universality of the spare parts and easy maintenance. Deutz engines, high-quality generators and advanced full-automatic control system are produced through strict test, which together provides reliable power no matter as standby, prime or continuous use. The capacity is is from 50KVA to 175KVA. It is departed into normal generating sets and automatic generating sets according to its control panel. It can be matched into trailer type, soundproof type etc. The manufacturing and inspection of generating sets fit to GB/T2820-1997 Standard.

Generator features:

Heavy load, durable 4-stroke water-cooled engine
Small size, light weight, compact structure, efficient output, reliable performance and economy
Electronic or mechnical governor

Fuel system

A type multi-cylinder combined injection pump and closed multi-hole injector have been used in combustion system; two-pole fuel filter ensures the cleaning fuel in injection pump, and increases the lifetime of injection pump. P type small pressure chamber Eurasian extrusive and grinding injector has been used to improve the quality of atomization.

Structure

Cylinder Heads: High strength nodular iron casting
Connecting Rods: Drop Forged High Carbon Alloy Steel
Crankshaft: High Steel Forging, bolt-on counterweights
Cylinder liners: Replaceable humid cylinder liner
Intake System Dry element air filter with visual restriction indicators, turbocharged (intercooler).

Data Sheet

Genset-Model	Frequenz (Hz)	Prime Power		Standby Power		Dimension and weight	
		KW	KVA	KW	KVA	L X W x H (mm)	Weight
V65D	50	58	73	65	81	1950 x 1000 x 1450	1020
V75D	50	68	85	75	93	1950 x 1000 x 1450	1020
V88D	50	80	100	88	110	1950 x 1000 x 1450	1020

Genset-Model	Fuel consumption		Engine Model	Engine Prime Power	Cylinders	Bore (mm)
	Diesel	Lub-oil				
	g/kw.h	g/kw.h				
V65D	227	1,36		90	6	105

V75D	227	1,36	WP4D100E200	90	6	105
V88D	227	1,36		90	6	105

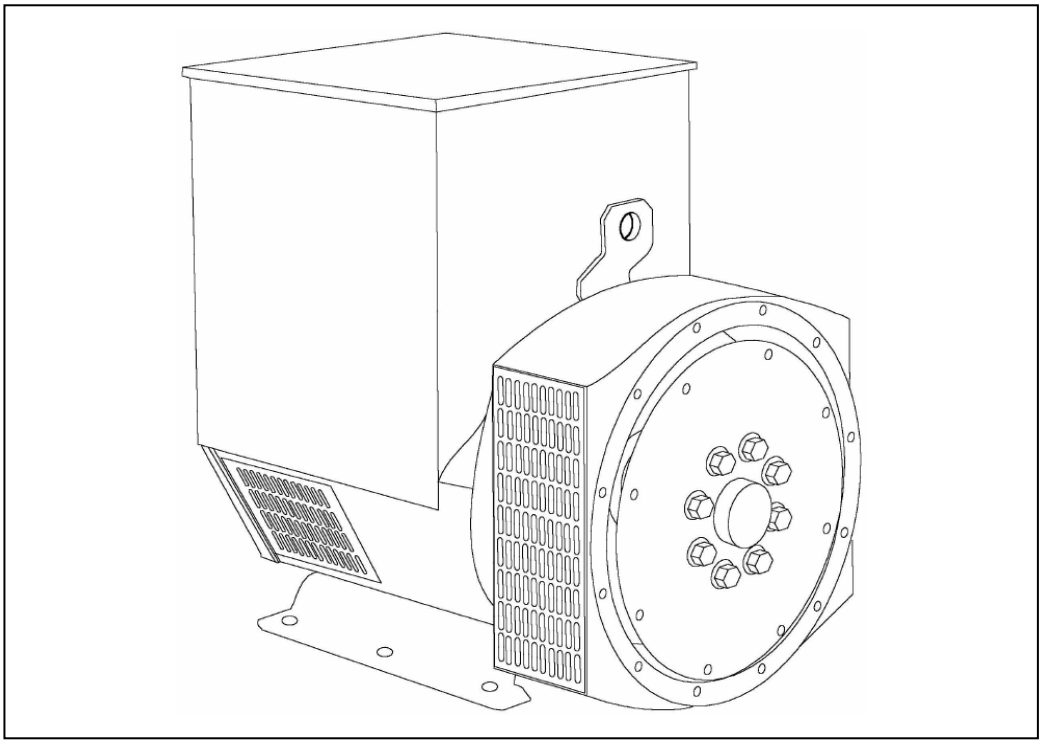
Genset-Model	Diesel Motor Deutz				
	Stroke (mm)	Displacement(L)	Lub oil Cap(L)	Cooling water capacity (L)	Vol for start(DC)
V45D	120	6.25	10.25	16.8	24 V
V50D	120	6.25	10.25	16.8	24 V
V55D	120	6.25	10.25	16,8	24 V

VICTORY POWER TECHNOLOGY Co.,LTD

BUsiness Type:	Manufacturer Distributor/Wholesaler Exporter Trading Company Seller
Main Market:	North America South America Western Europe Eastern Europe Eastern Asia Southeast Asia Middle East Africa Oceania Worldwide
Brands:	VICTORY POWER RELIABILITY
Employee Number:	250~300
Total Annual Sales Volume:	90% - 100%
Year Established:	1999

STAMFORD®

UCI224G - Technical Data Sheet



SPECIFICATIONS & OPTIONS

STANDARDS
Newage Stamford industrial generators meet the requirements of BS EN 60034 and the relevant section of other international standards such as BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359.
Other standards and certifications can be considered on request.

VOLTAGE REGULATORS

SX460 AVR - STANDARD
With this self excited control system the main stator supplies power via the Automatic Voltage Regulator (AVR) to the exciter stator. The high efficiency semiconductors of the AVR ensure positive build-up from initial low levels of residual voltage.
The exciter rotor output is fed to the main rotor through a three phase full wave bridge rectifier. This rectifier is protected by a surge suppressor against surges caused, for example, by short circuit.

AS440 AVR
With this self-excited system the main stator provides power via the AVR to the exciter stator. The high efficiency semi-conductors of the AVR ensure positive build-up from initial low levels of residual voltage.
The exciter rotor output is fed to the main rotor through a three-phase full-wave bridge rectifier. The rectifier is protected by a surge suppressor against surges caused, for example, by short circuit or out-of-phase paralleling.
The AS440 will support a range of electronic accessories, including a 'droop' Current Transformer (CT) to permit parallel operation with other ac generators.

MX341 AVR
This sophisticated AVR is incorporated into the Stamford Permanent Magnet Generator (PMG) control system.
The PMG provides power via the AVR to the main exciter, giving a source of constant excitation power independent of generator output. The main exciter output is then fed to the main rotor, through a full wave bridge, protected by a surge suppressor. The AVR has in-built protection against sustained over-excitation, caused by internal or external faults. This de-excites the machine after a minimum of 5 seconds.
An engine relief load acceptance feature can enable full load to be applied to the generator in a single step.
If three-phase sensing is required with the PMG system the MX321 AVR must be used.
We recommend three-phase sensing for applications with greatly unbalanced or highly non-linear loads.

MX321 AVR
The most sophisticated of all our AVRs combines all the features of the MX341 with, additionally, three-phase rms sensing, for improved regulation and performance.
Over voltage protection is built-in and short circuit current level adjustments is an optional facility.

WINDINGS & ELECTRICAL PERFORMANCE
All generator stators are wound to 2/3 pitch. This eliminates triplen (3rd, 9th, 15th …) harmonics on the voltage waveform and is found to be the optimum design for trouble-free supply of non-linear loads. The 2/3 pitch design avoids excessive neutral currents sometimes seen with higher winding pitches, when in parallel with the mains. A fully connected damper winding reduces oscillations during paralleling. This winding, with the 2/3 pitch and carefully selected pole and tooth designs, ensures very low waveform distortion.

TERMINALS & TERMINAL BOX
Standard generators are 3-phase reconnectable with 12 ends brought out to the terminals, which are mounted on a cover at the non-drive end of the generator. A sheet steel terminal box contains the AVR and provides ample space for the customers' wiring and gland arrangements. It has removable panels for easy access.

SHAFT & KEYS
All generator rotors are dynamically balanced to better than BS6861:Part 1 Grade 2.5 for minimum vibration in operation. Two bearing generators are balanced with a half key.

INSULATION/IMPREGNATION
The insulation system is class 'H'.
All wound components are impregnated with materials and processes designed specifically to provide the high build required for static windings and the high mechanical strength required for rotating components.

QUALITY ASSURANCE
Generators are manufactured using production procedures having a quality assurance level to BS EN ISO 9001.

The stated voltage regulation may not be maintained in the presence of certain radio transmitted signals. Any change in performance will fall within the limits of Criteria 'B' of EN 61000-6-2:2001. At no time will the steady-state voltage regulation exceed 2%.

NB Continuous development of our products entitles us to change specification details without notice, therefore they must not be regarded as binding.

Front cover drawing typical of product range.

WINDING 311

CONTROL SYSTEM	SEPARATELY EXCITED BY P.M.G.		
A.V.R.	MX321	MX341	
VOLTAGE REGULATION	± 0.5 %	± 1.0 %	With 4% ENGINE GOVERNING
SUSTAINED SHORT CIRCUIT	REFER TO SHORT CIRCUIT DECREMENT CURVES (page 7)		

CONTROL SYSTEM	SELF EXCITED		
A.V.R.	SX460	AS440	
VOLTAGE REGULATION	± 1.0 %	± 1.0 %	With 4% ENGINE GOVERNING
SUSTAINED SHORT CIRCUIT	SERIES 4 CONTROL DOES NOT SUSTAIN A SHORT CIRCUIT CURRENT		

INSULATION SYSTEM	CLASS H							
PROTECTION	IP23							
RATED POWER FACTOR	0.8							
STATOR WINDING	DOUBLE LAYER CONCENTRIC							
WINDING PITCH	TWO THIRDS							
WINDING LEADS	12							
STATOR WDG. RESISTANCE	0.055 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED							
ROTOR WDG. RESISTANCE	0.94 Ohms at 22°C							
EXCITER STATOR RESISTANCE	20 Ohms at 22°C							
EXCITER ROTOR RESISTANCE	0.078 Ohms PER PHASE AT 22°C							
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS EN 61000-6-4,VDE 0875G, VDE 0875N. refer to 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. 6309-2RS (ISO)							
	1 BEARING				2 BEARING			
WEIGHT COMP. GENERATOR	383 kg				400 kg			
WEIGHT WOUND STATOR	139 kg				139 kg			
WEIGHT WOUND ROTOR	126.75 kg				118.38 kg			
WR² INERTIA	0.7136 kgm^2				0.6818 kgm^2			
SHIPPING WEIGHTS in a crate	404 kg				420 kg			
PACKING CRATE SIZE	105 x 57 x 96(cm)				105 x 57 x 96(cm)			
	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	0.216 m^3/sec 458 cfm				0.281 m^3/sec 595 cfm			
VOLTAGE SERIES STAR	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
VOLTAGE PARALLEL STAR	190/110	200/115	208/120	220/127	208/120	220/127	230/133	240/138
VOLTAGE SERIES DELTA	220/110	230/115	240/120	254/127	240/120	254/127	266/133	277/138
kVA BASE RATING FOR REACTANCE VALUES	85	85	85	79	93.8	97.5	100	103.8
Xd DIR. AXIS SYNCHRONOUS	2.43	2.20	2.04	1.69	2.66	2.47	2.32	2.21
X'd DIR. AXIS TRANSIENT	0.19	0.17	0.16	0.13	0.20	0.19	0.17	0.17
X"d DIR. AXIS SUBTRANSIENT	0.13	0.12	0.11	0.09	0.14	0.13	0.12	0.12
Xq QUAD. AXIS REACTANCE	1.12	1.01	0.94	0.78	1.22	1.13	1.06	1.01
X"q QUAD. AXIS SUBTRANSIENT	0.17	0.15	0.14	0.12	0.15	0.14	0.13	0.12
X_L LEAKAGE REACTANCE	0.07	0.06	0.06	0.05	0.08	0.07	0.07	0.07
X_2 NEGATIVE SEQUENCE	0.16	0.14	0.13	0.11	0.15	0.14	0.13	0.12
X_0 ZERO SEQUENCE	0.11	0.10	0.09	0.07	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.	0.03 s							
T"d SUB-TRANSTIME CONST.	0.008 s							
T'do O.C. FIELD TIME CONST.	0.75 s							
Ta ARMATURE TIME CONST.	0.007 s							
SHORT CIRCUIT RATIO	1/Xd							

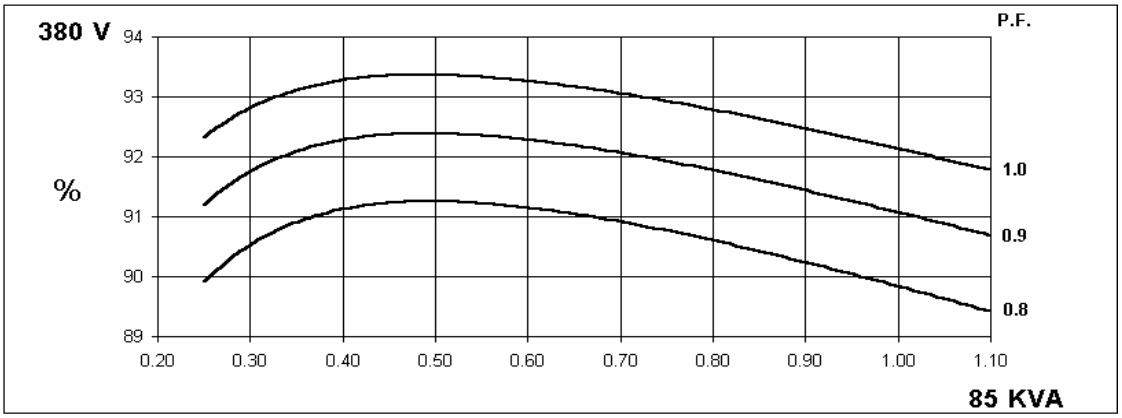
50 Hz

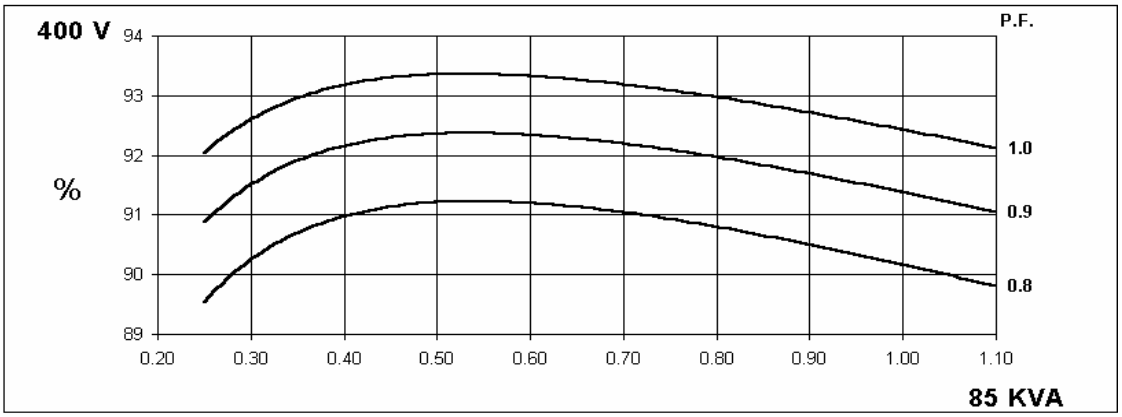
UCI224G

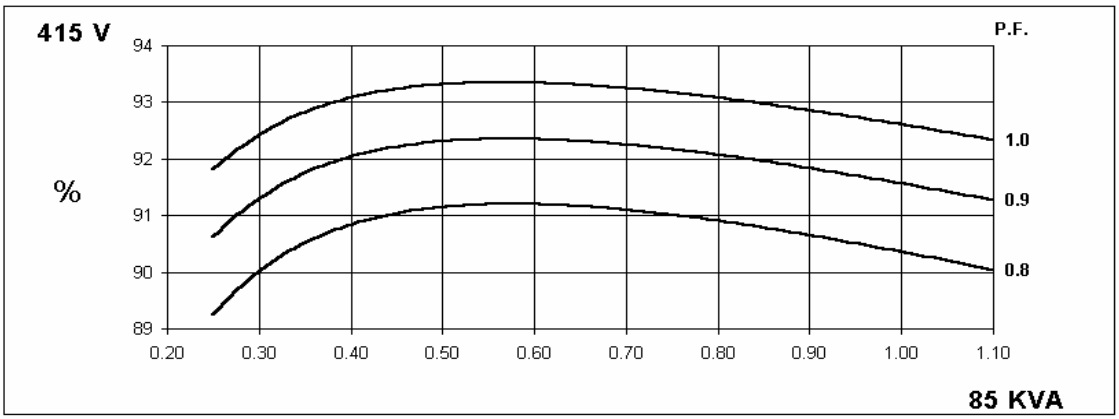
Winding 311

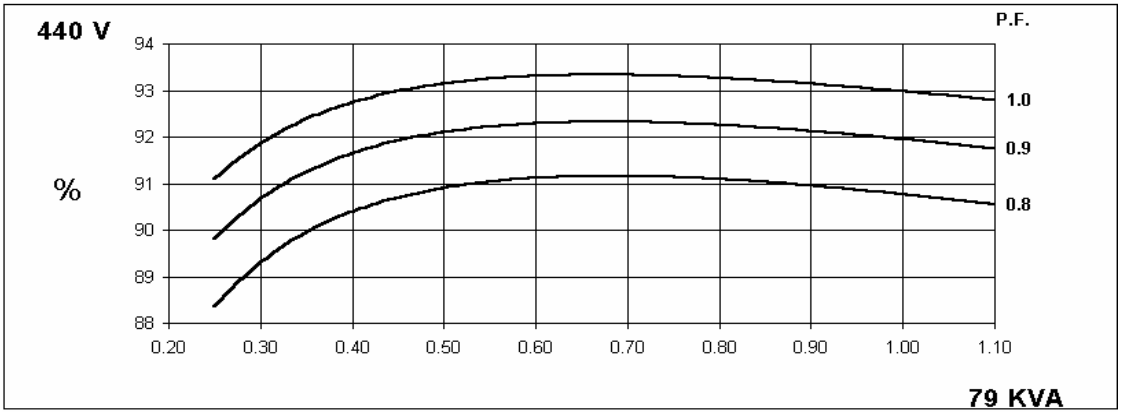
STAMFORD

THREE PHASE EFFICIENCY CURVES









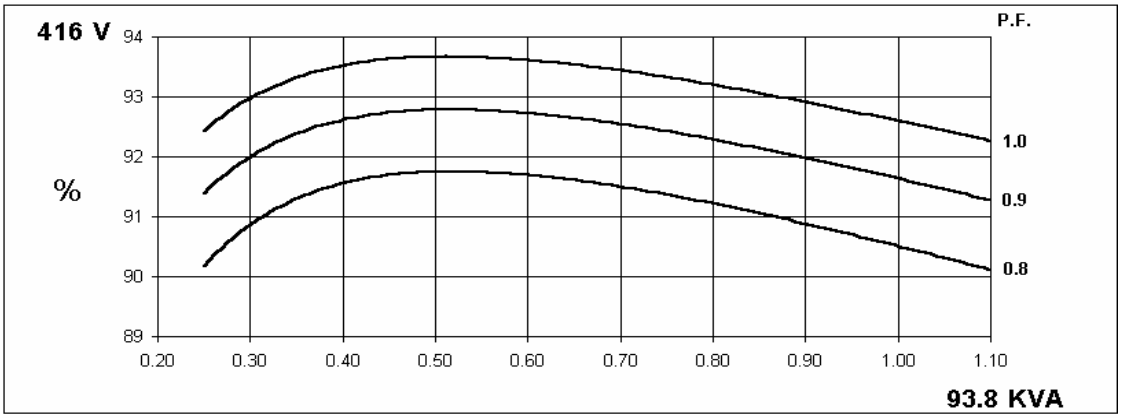
60 Hz

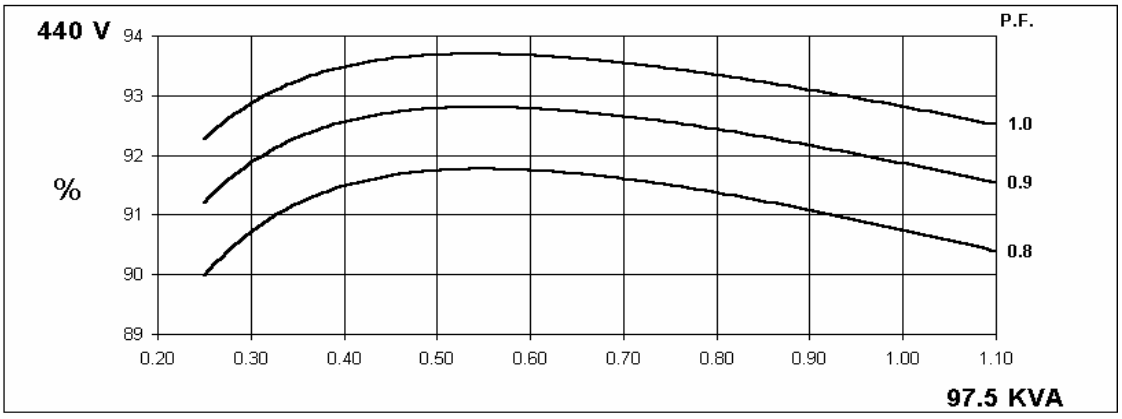
UCI224G

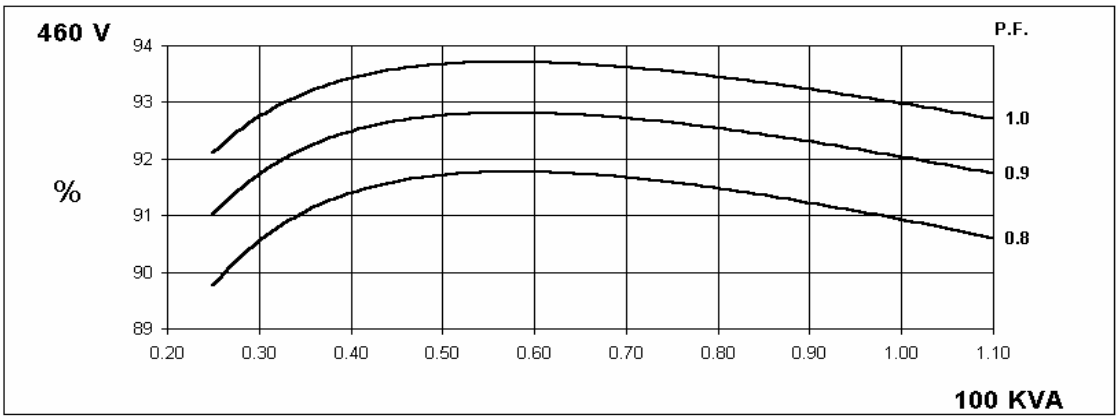
Winding 311

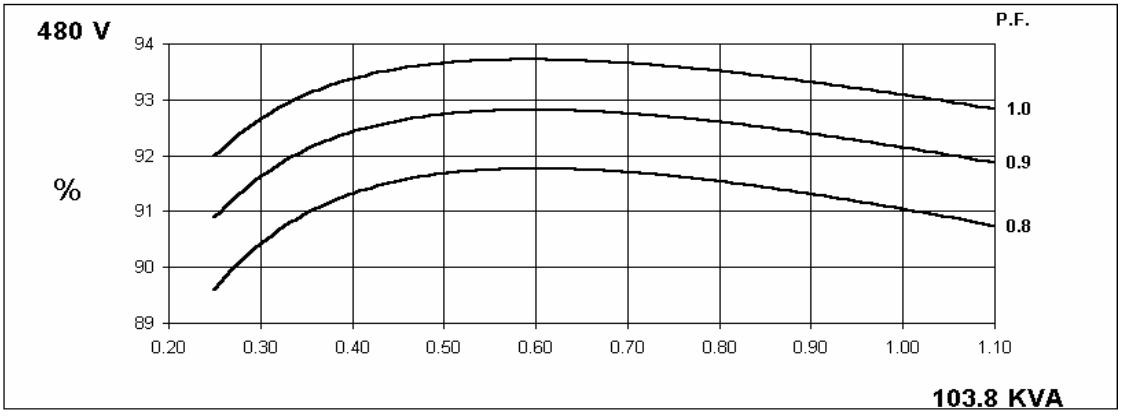
STAMFORD

THREE PHASE EFFICIENCY CURVES





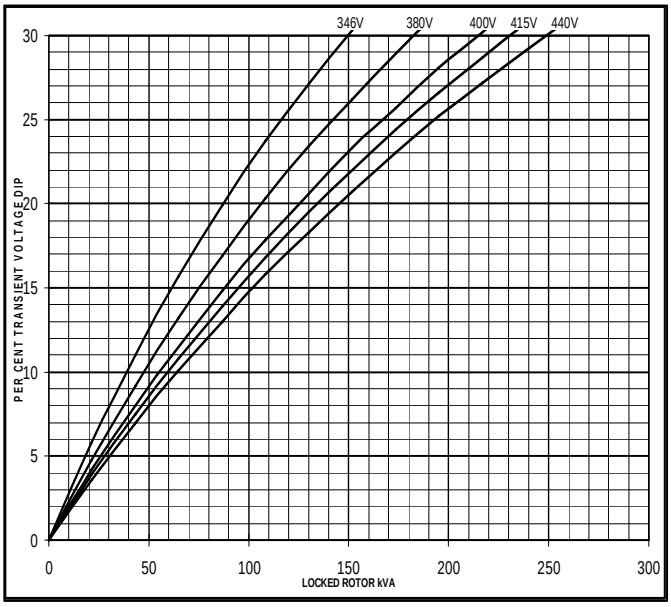




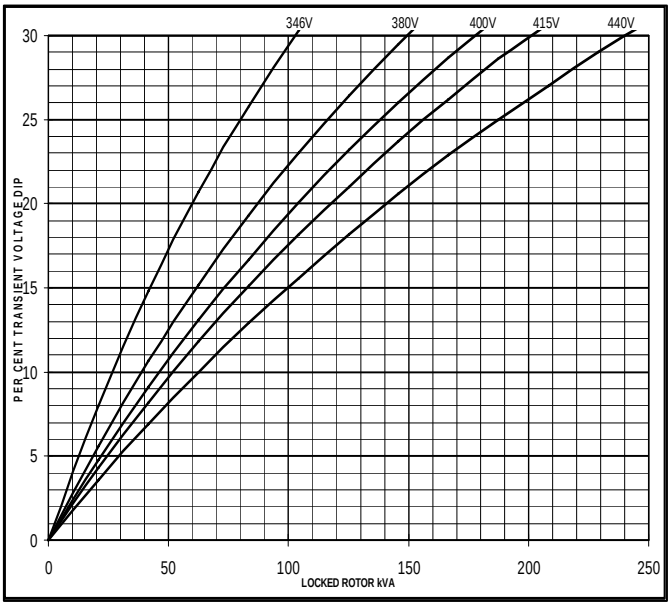
Locked Rotor Motor Starting Curve

50 Hz

MX

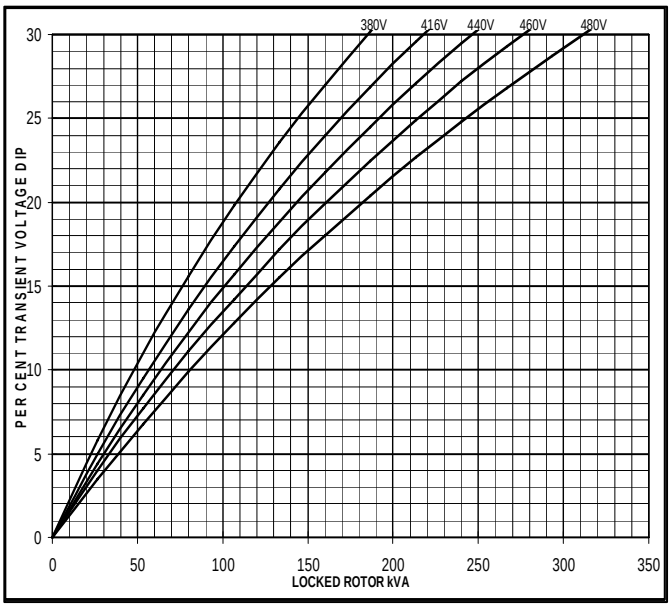


SX

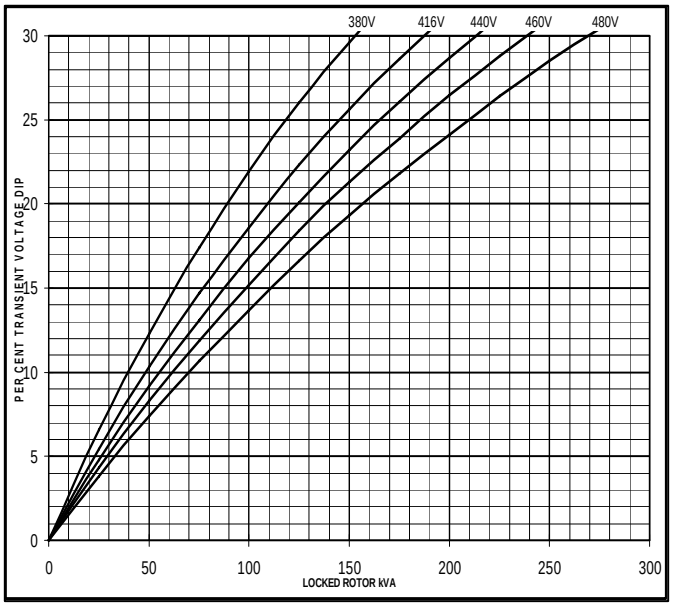


60 Hz

MX

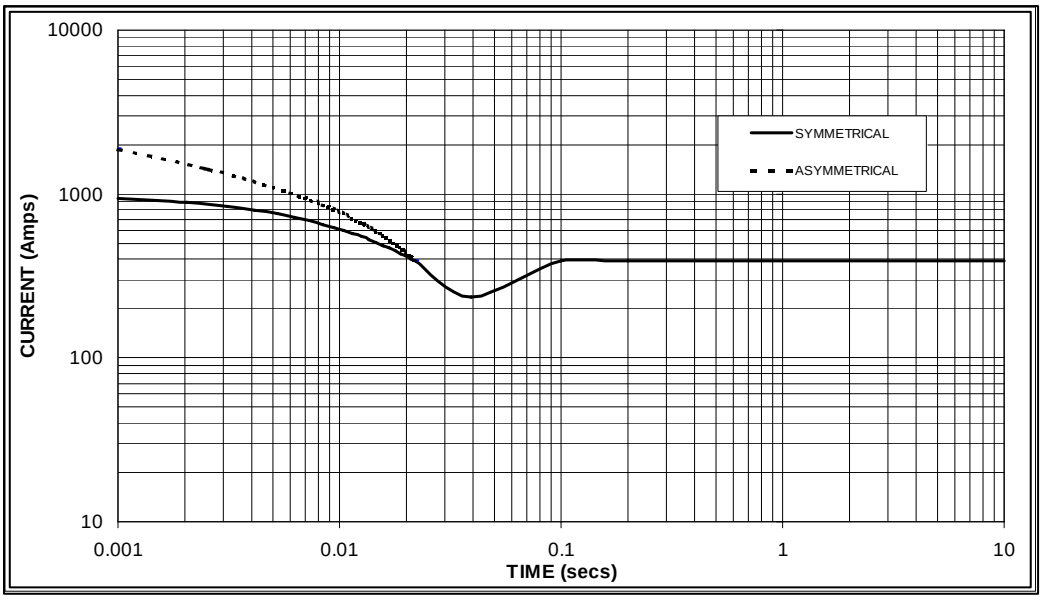


SX



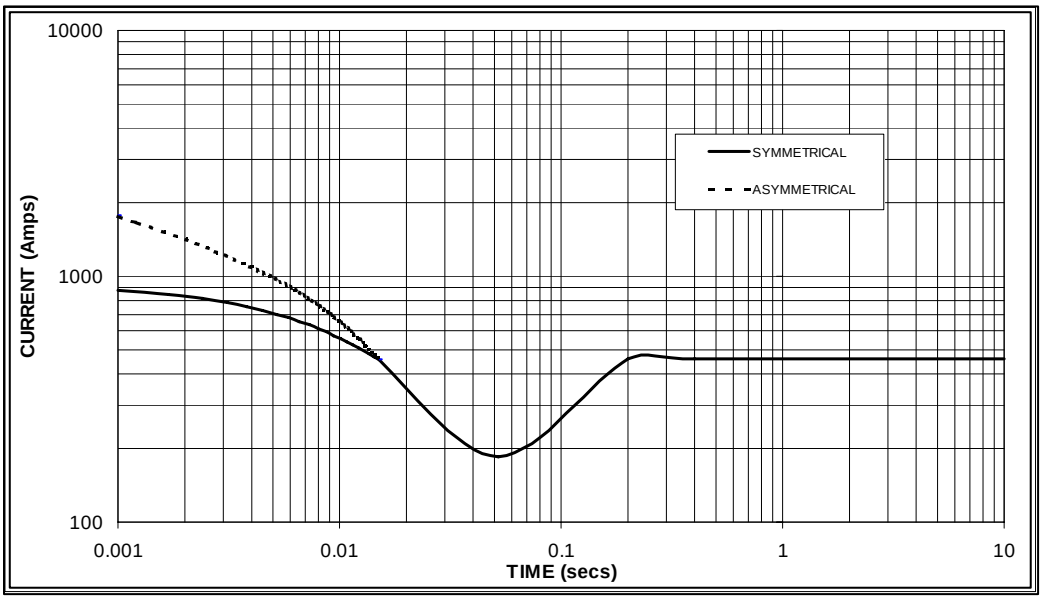
Three-phase Short Circuit Decrement Curve. No-load Excitation at Rated Speed Based on star (wye) connection.

50 Hz



Sustained Short Circuit = 390 Amps

60 Hz



Sustained Short Circuit = 460 Amps

Note 1

The following multiplication factors should be used to adjust the values from curve between time 0.001 seconds and the minimum current point in respect of nominal operating voltage :

50Hz		60Hz	
Voltage	Factor	Voltage	Factor
380v	X 1.00	416v	X 1.00
400v	X 1.07	440v	X 1.06
415v	X 1.12	460v	X 1.12
440v	X 1.18	480v	X 1.17

The sustained current value is constant irrespective of voltage level

Note 2

The following multiplication factor should be used to convert the values calculated in accordance with NOTE 1 to those applicable to the various types of short circuit :

	3-phase	2-phase L-L	1-phase L-N
Instantaneous	x 1.00	x 0.87	x 1.30
Minimum	x 1.00	x 1.80	x 3.20
Sustained	x 1.00	x 1.50	x 2.50
Max. sustained duration	10 sec.	5 sec.	2 sec.

All other times are unchanged

Note 3

Curves are drawn for Star (Wye) connected machines. For other connection the following multipliers should be applied to current values as shown :

Parallel Star = Curve current value X 2

Series Delta = Curve current value X 1.732

UCI224G

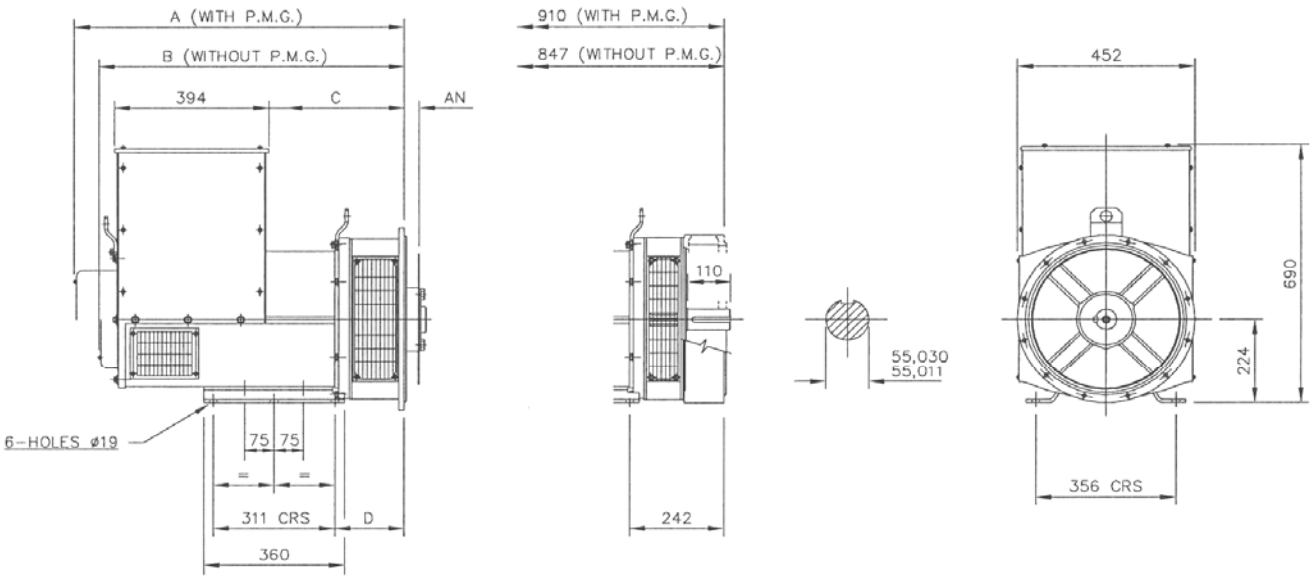
Winding 311 / 0.8 Power Factor

RATINGS

	Class - Temp Rise	Cont. F - 105/40°C				Cont. H - 125/40°C				Standby - 150/40°C				Standby - 163/27°C			
50 Hz	Series Star (V)	380	400	415	440	380	400	415	440	380	400	415	440	380	400	415	440
	Parallel Star (V)	190	200	208	220	190	200	208	220	190	200	208	220	190	200	208	220
	Series Delta (V)	220	230	240	254	220	230	240	254	220	230	240	254	220	230	240	254
	kVA	75.0	75.0	75.0	67.4	85.0	85.0	85.0	75.0	87.5	87.5	87.5	76.9	90.8	90.8	90.8	80.1
	kW	60.0	60.0	60.0	53.9	68.0	68.0	68.0	60.0	70.0	70.0	70.0	61.5	72.6	72.6	72.6	64.1
	Efficiency (%)	90.3	90.6	90.7	91.0	89.8	90.2	90.4	90.8	89.7	90.1	90.3	90.7	89.6	89.9	90.1	90.6
	kW Input	66.4	66.2	66.2	62.4	75.7	75.4	75.2	69.6	78.0	77.7	77.5	71.4	81.1	80.8	80.6	74.5

60 Hz	Series Star (V)	416	440	460	480	416	440	460	480	416	440	460	480	416	440	460	480
	Parallel Star (V)	208	220	230	240	208	220	230	240	208	220	230	240	208	220	230	240
	Delta (V)	240	254	266	277	240	254	266	277	240	254	266	277	240	254	266	277
	kVA	87.5	90.0	93.8	95.0	93.8	97.5	100.0	103.8	98.1	102.5	102.5	110.0	101.3	106.3	106.3	113.8
	kW	70.0	72.0	75.0	76.0	75.0	78.0	80.0	83.0	78.5	82.0	82.0	88.0	81.0	85.0	85.0	91.0
	Efficiency (%)	90.8	91.0	91.1	91.3	90.5	90.8	90.9	91.0	90.3	90.6	90.9	90.9	90.2	90.4	90.7	90.8
	kW Input	77.1	79.1	82.4	83.2	82.9	85.9	88.0	91.3	86.9	90.5	90.2	96.8	89.8	94.1	93.8	100.3

DIMENSIONS



SINGLE BEARING ADAPTORS				
ADAPTOR	A	B	C	D
SAE 1	859,3	796,3	359,3	191,3
SAE 2	845	782	345	177
SAE 3	845	782	345	177
SAE 4	845	782	345	177

COUPLING DISCS	
DISC	AN
SAE 8	61,90
SAE 10	53,98
SAE 11,5	39,68
SAE 14	25,40

STAMFORD

Barnack Road • Stamford • Lincolnshire • PE9 2NB

Tel: 00 44 (0)1780 484000 • Fax: 00 44 (0)1780 484100