

STAMFORD®

STAMFORD® Alternator Ratings Book

Marine



Edition 3



Introduction



Rating Definitions

All ratings are based on Rise by Resistance measurement method. Ratings based on Embedded Temperature Device (ETD) measurement may be provided under application to Cummins Generator Technologies. Open drip-proof enclosure protection according to IP23 is standard. Optional air inlet/outlet filters as well as higher IP protection modes can be supplied for certain models.

Thermal Insulation Class

Insulation class governs the maximum permissible temperature an alternator can operate without damaging the insulation system. Cummins Generator Technologies use Class H insulation for Marine alternators.

Insulation Class	Maximum Permissible Temperature
Class H	180 °C

Temperature Rise

Temperature rise is the increase in temperature above ambient temperature.

Temperature Rise	Temperature °C
Class B	70 °C
Class F	90 °C
Class H	110 °C

Marine Societies

All our manufacturing plants have witness test facilities, enabling marine classification society inspection and test. With some Marine Societies we have type approval - which avoids the need for marine inspectors to inspect every marine alternator that we manufacture, thus reducing marine inspection costs and witness testing charges for our customers. Type approval also means we can reduce our lead times.

STAMFORD alternators meet the classification requirements of all major marine societies:

- American Bureau of Shipping (ABS)
- Bureau Veritas (BV)
- China Corporation Register of Shipping (CCRS)
- China Classification Society (CCS)
- Det Norske Veritas Germanischer Lloyd (DNV GL)
- Indian Register of Shipping (IRS)
- Korean Register of Shipping (KRS)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NKK)
- Registro Italiano Navale (RINA)
- Russian River Register (RRR)
- Russian Maritime Register of Shipping (RMRS)
- Turkish Loyds (TL)

Other standards and certifications can be considered on request



Introduction



Derates

Ambient Temperature

If the ambient (alternator air inlet temperature) exceeds 50 °C then the alternator output rating must be reduced using the following tables.

STAMFORD Low Voltage

Temperature Rise	Multiplying Factor
55	0.97
60	0.94

STAMFORD Medium / High Voltage

Utilisation	Class H	Class F	Class B
Temperature °C	Multiplying Factor	Multiplying Factor	Multiplying Factor
55	0.97	0.96	0.93
60	0.94	0.92	0.88



Introduction



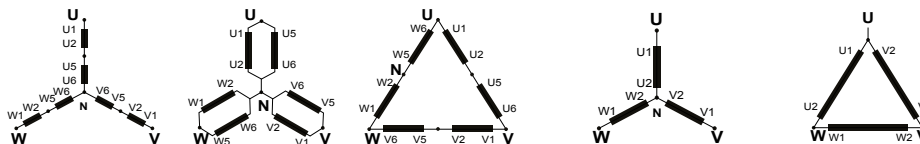
NOTICE

Additional parts may be required to achieve reconections

CAUTION

Misconnections can result in permanent machine damage. Refer to machine wiring diagram for specific details

Windings for STAMFORD alternators may be selected to give voltages at different connections as this table.



	WINDING NUMBER (3PHASE)	EXIT LEADS	SERIES STAR (3-PHASE)	PARALLEL STAR (3-PHASE)	SERIES DELTA (3-PHASE)	STAR (3-PHASE)	DELTA (3-PHASE)
50Hz	5	4					
	25	12	660-690	330-345	380-400		
	26	6				660-690	380-400
	311	12	380-440	190-220	220-254		
	312	6				380-440	220-254
60Hz	6	4					
	7	6				600	346
	13	6				380-416	220-240
	14	12	380-416	190-208	220-240		
	17	12	600	300	346		
	27	12	660-690	330-345	380-400		
	28	6				660-690	380-400
	311	12	416-480	208-240	240-277		
	312	6				416-480	240-277



Introduction



Useful Formulas

TO OBTAIN	Single Phase AC power	Three Phase AC power
kilowatts electrical (kW)	$\frac{\text{Volts} \times \text{Amps} \times \text{PF}}{1000}$	$\frac{\text{Volts} \times \text{Amps} \times \text{PF} \times \sqrt{3}}{1000}$
kilowatts electrical (kW)	$\text{kVA} \times \text{PF}$	$\text{kVA} \times \text{PF}$
kilowatts mechanical (kWm)	$\frac{\text{kVA} \times \text{PF}}{\text{Alternator Efficiency}}$	$\frac{\text{kVA} \times \text{PF}}{\text{Alternator Efficiency}}$
kVA	$\frac{\text{Volts} \times \text{Amps}}{1000}$	$\frac{\text{Volts} \times \text{Amps} \times \sqrt{3}}{1000}$
Amps	$\frac{\text{kVA} \times 1000}{\text{Volts}}$	$\frac{\text{kVA} \times 1000}{\text{Volts} \times \sqrt{3}}$
Speed (rpm)	$\frac{120 \times \text{Frequency}}{\# \text{ Poles}}$	$\frac{120 \times \text{Frequency}}{\# \text{ Poles}}$
% Voltage regulation (for Steady- Loads, from No- Load to Full-Load)	$\frac{V_{NL} - V_{FL}}{V_{FL}} \times 100$	$\frac{V_{NL} - V_{FL}}{V_{FL}} \times 100$
Horsepower required to drive alternator	$\frac{\text{kW}}{0.746 \times \text{Alternator Efficiency}}$	$\frac{\text{kW}}{0.746 \times \text{Alternator Efficiency}}$
First cycle RMS short circuit current ($\pm 10\%$)	$\frac{\text{Rated Amperes}}{\text{pu}X''d}$	$\frac{\text{Rated Amperes}}{\text{pu}X''d}$

- “PF” refers to power factor, which is expressed as a decimal fraction. For example, 80% power factor = 0.8 for the purposes of calculations.
- # Poles refers to number of Poles
- “Volts” refers to line-to-line voltage.
- “Amps” refers to line current in amperes.
- “pu” refers to per unit



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60Hz 1800rpm

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600V	Page 26
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50Hz 1000rpm

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60Hz 1200rpm

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4 POLE Three Phase

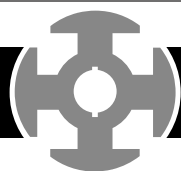


Star 380V
Parallel Star 190V
Delta 220V

50Hz/1500rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	6.6	5.3	6.0	4.8	5.3	4.2	6.8	5.4	6.2	5.0	5.5	4.4
PM044E	8.8	7.0	8.0	6.4	7.1	5.7	9.1	7.3	8.2	6.6	7.3	5.9
PM044F	11.1	8.9	10.0	8.0	8.8	7.0	11.4	9.1	10.3	8.2	9.1	7.3
PM044G	13.3	10.6	12.0	9.6	10.6	8.5	13.7	11.0	12.4	9.9	10.9	8.7
PM044H	15.5	12.4	14.0	11.2	12.3	9.8	16.0	12.8	14.4	11.5	12.7	10.2
PM144D	17.7	14.2	16.0	12.8	14.1	11.3	18.2	14.6	16.5	13.2	14.5	11.6
PM144E	22.1	17.7	20.0	16.0	17.6	14.1	22.8	18.2	20.6	16.5	18.1	14.5
PM144F	24.3	19.4	22.0	17.6	19.4	15.5	25.0	20.0	22.7	18.2	20.0	16.0
PM144G	26.5	21.2	24.0	19.2	21.2	17.0	27.3	21.8	24.7	19.8	21.8	17.5
PM144H	31.0	24.8	28.0	22.4	24.7	19.8	31.9	25.5	28.8	23.1	25.4	20.4
PM144J	35.4	28.3	32.0	25.6	28.2	22.6	36.5	29.2	33.0	26.4	29.0	23.2
PM144K	37.6	30.1	34.0	27.2	30.0	24.0	38.7	31.0	35.0	28.0	30.9	24.7
UCM224C	38.0	30.4	35.0	28.0	31.0	24.8	39.1	31.3	36.1	28.9	31.9	25.5
UCM224D	44.0	35.2	40.0	32.0	37.5	30.0	45.3	36.3	41.2	33.0	38.6	30.9
UCM224E	52.3	41.8	47.5	38.0	42.0	33.6	53.9	43.1	48.9	39.1	43.4	34.7
UCM224F	63.3	50.6	57.5	46.0	50.0	40.0	65.2	52.2	59.2	47.4	51.5	41.2
UCM224G	71.5	57.2	65.0	52.0	60.0	48.0	73.6	58.9	67.0	53.6	61.8	49.4
UCM274C	81.5	65.2	77.5	62.0	67.5	54.0	83.9	67.2	79.8	63.9	69.5	55.6
UCM274D	97.0	77.6	87.5	70.0	81.3	65.0	99.9	79.9	90.1	72.1	83.7	67.0
UCM274E	120.0	96.0	112.5	90.0	100.0	80.0	123.6	98.9	115.9	92.7	103.0	82.4
UCM274F	140.0	112.0	135.0	108.0	112.5	90.0	144.2	115.4	139.1	111.3	115.9	92.7
UCM274G	159.0	127.2	149.0	119.2	128.6	102.9	163.8	131.0	153.5	122.8	132.5	106.0
UCM274H	175.0	140.0	170.0	136.0	143.8	115.0	180.3	144.2	175.1	140.1	148.1	118.5
UCDM274K	195.0	156.0	195.0	156.0	185.0	148.0	200.9	160.7	200.9	160.7	185.0	148.0
S4L1M-C	215.0	172.0	210.0	168.0	185.0	148.0	221.5	177.2	216.3	173.0	191.0	152.8
S4L1M-D	240.0	192.0	230.0	184.0	200.0	160.0	247.2	197.8	237.0	189.6	206.0	164.8
S4L1M-E	295.0	236.0	275.0	220.0	240.0	192.0	304.0	243.2	283.3	226.6	247.2	197.8
S4L1M-F	340.0	272.0	310.0	248.0	275.0	220.0	350.2	280.2	319.3	255.4	283.3	226.6



4 POLE Three Phase



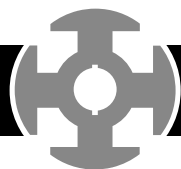
Star 380V
Parallel Star 190V
Delta 220V

50Hz/1500rpm
0.8 Power Factor

2 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM534C	390.0	312.0	365.0	292.0	320.0	256.0	402.0	321.6	376.0	300.8	329.6	263.7
HCM534D	435.0	348.0	405.0	324.0	355.0	284.0	448.1	358.4	417.2	333.7	365.7	292.5
HCM534E	530.0	424.0	475.0	380.0	415.0	332.0	546.0	436.8	489.3	391.4	427.5	342.0
HCM534F	565.0	452.0	505.0	404.0	440.0	352.0	582.0	465.6	520.2	416.1	453.2	362.6
HCM634G	630.0	504.0	630.0	504.0	530.0	424.0	636.2	509.0	648.9	519.1	545.9	436.7
HCM634H	765.0	612.0	700.0	560.0	638.0	510.4	765.0	612.0	721.0	576.8	657.1	525.7
HCM634J	830.0	664.0	810.0	648.0	735.0	588.0	830.0	664.0	834.3	667.4	757.1	605.6
HCM634K	930.0	744.0	900.0	720.0	790.0	632.0	930.0	744.0	927.0	741.6	813.7	651.0
PM734A 1	N/A	N/A	900.0	720.0	875.0	700.0	N/A	N/A	927.0	741.6	901.3	721.0
PM734B 1	N/A	N/A	955.0	764.0	955.0	764.0	N/A	N/A	984.0	787.2	983.7	786.9
PM734C 1	N/A	N/A	1180.0	944.0	1085.0	868.0	N/A	N/A	1215.4	972.3	1117.6	894.0
PM734D 1	N/A	N/A	1255.0	1004.0	1150.0	920.0	N/A	N/A	1293.0	1034.4	1185.0	948.0
PM734E 1	N/A	N/A	1365.0	1092.0	1325.0	1060.0	N/A	N/A	1406.0	1124.8	1365.0	1092.0
PM734F 1	N/A	N/A	1500.0	1200.0	1450.0	1160.0	N/A	N/A	1545.0	1236.0	1494.0	1195.2
PM734G 1	N/A	N/A	1740.0	1392.0	1535.0	1228.0	N/A	N/A	1792.2	1433.8	1581.1	1264.8
P80 LVSM804R 1	2015.0	1612.0	1832.0	1465.6	1569.0	1255.2	2076.0	1660.8	1887.0	1509.6	1616.1	1292.9
P80 LVSM804S 1	2332.0	1865.6	2120.0	1696.0	1815.0	1452.0	2402.0	1921.6	2184.0	1747.2	1870.0	1496.0
P80 LVSM804T 1	2548.0	2038.4	2316.0	1852.8	1983.0	1586.4	2624.4	2099.6	2386.0	1908.8	2043.0	1634.4
P80 LVSM804W 1	2970.0	2376.0	2700.0	2160.0	2312.0	1849.6	3059.1	2447.3	2781.0	2224.8	2381.4	1905.1
P80 LVSM804X 1	3269.0	2615.2	2972.0	2377.6	2545.0	2036.0	3367.1	2693.7	3061.2	2448.9	2621.4	2097.1

1. Star connection only



4 POLE Three Phase



Star 400V
Parallel Star 200V
Delta 230V

50Hz/1500rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	6.6	5.3	6.0	4.8	5.3	4.2	6.8	5.4	6.2	5.0	5.5	4.4
PM044E	8.8	7.0	8.0	6.4	7.1	5.7	9.1	7.3	8.2	6.6	7.3	5.9
PM044F	11.1	8.9	10.0	8.0	8.8	7.0	11.4	9.1	10.3	8.2	9.1	7.3
PM044G	13.3	10.6	12.0	9.6	10.6	8.5	13.7	11.0	12.4	9.9	10.9	8.7
PM044H	15.5	12.4	14.0	11.2	12.3	9.8	16.0	12.8	14.4	11.5	12.7	10.2
PM144D	17.7	14.2	16.0	12.8	14.1	11.3	18.2	14.6	16.5	13.2	14.5	11.6
PM144E	22.1	17.7	20.0	16.0	17.6	14.1	22.8	18.2	20.6	16.5	18.1	14.5
PM144F	24.3	19.4	22.0	17.6	19.4	15.5	27.3	21.8	24.7	19.8	21.8	17.5
PM144G	26.5	21.2	24.0	19.2	21.2	17.0	25.0	20.0	22.7	18.2	22.0	17.6
PM144H	31.0	24.8	28.0	22.4	24.7	19.8	31.9	25.5	28.8	23.1	25.4	20.4
PM144J	35.4	28.3	32.0	25.6	28.2	22.6	36.5	29.2	33.0	26.4	29.0	23.2
PM144K	37.6	30.1	34.0	27.2	30.0	24.0	38.7	31.0	35.0	28.0	30.9	24.7
UCM224C	38.0	30.4	35.0	28.0	31.0	24.8	39.1	31.3	36.1	28.9	31.9	25.5
UCM224D	44.0	35.2	40.0	32.0	37.5	30.0	45.3	36.3	41.2	33.0	38.6	30.9
UCM224E	52.3	41.8	47.5	38.0	42.0	33.6	53.9	43.1	48.9	39.1	43.3	34.6
UCM224F	63.3	50.6	57.5	46.0	50.0	40.0	65.2	52.2	59.2	47.4	51.5	41.2
UCM224G	71.5	57.2	65.0	52.0	60.0	48.0	73.6	58.9	67.0	53.6	61.8	49.4
UCM274C	81.5	65.2	77.5	62.0	67.5	54.0	83.9	67.2	79.8	63.9	69.5	55.6
UCM274D	97.0	77.6	87.5	70.0	81.3	65.0	102.9	82.3	90.1	72.1	83.7	67.0
UCM274E	120.0	96.0	112.5	90.0	100.0	80.0	123.6	98.9	115.9	92.7	103.0	82.4
UCM274F	140.0	112.0	135.0	108.0	112.5	90.0	144.2	115.4	139.1	111.3	115.9	92.7
UCM274G	159.0	127.2	149.0	119.2	128.6	102.9	163.8	131.0	153.5	122.8	132.5	106.0
UCM274H	175.0	140.0	170.0	136.0	143.8	115.0	180.3	144.2	175.1	140.1	148.1	118.5
UCDM274K	205.0	164.0	205.0	164.0	169.0	135.2	207.8	166.2	211.2	168.9	174.1	139.3
S4L1M-C	215.0	172.0	210.0	168.0	185.0	148.0	221.5	177.2	216.3	173.0	191.0	152.8
S4L1M-D	240.0	192.0	230.0	184.0	200.0	160.0	247.2	197.8	237.0	189.6	206.0	164.8
S4L1M-E	295.0	236.0	275.0	220.0	240.0	192.0	304.0	243.2	283.3	226.6	247.2	197.8
S4L1M-F	340.0	272.0	310.0	248.0	275.0	220.0	350.2	280.2	319.3	255.4	283.3	226.6
HCM534C	390.0	312.0	370.0	296.0	325.0	260.0	402.0	321.6	381.1	304.9	335.0	268.0
HCM534D	435.0	348.0	415.0	332.0	365.0	292.0	448.1	358.4	427.5	342.0	376.0	300.8



4 POLE Three Phase



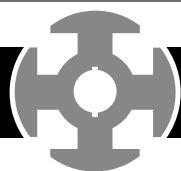
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Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM534E	530.0	424.0	490.0	392.0	430.0	344.0	546.0	436.8	505.0	404.0	443.0	354.4
HCM534F	585.0	468.0	525.0	420.0	460.0	368.0	603.0	482.4	541.0	432.8	474.0	379.2
HCM634G	650.0	520.0	650.0	520.0	550.0	440.0	670.0	536.0	670.0	536.0	567.0	453.6
HCM634H	785.0	628.0	720.0	576.0	656.0	524.8	785.0	628.0	742.0	593.6	676.0	540.8
HCM634J	850.0	680.0	830.0	664.0	750.0	600.0	850.0	680.0	855.0	684.0	773.0	618.4
HCM634K	950.0	760.0	920.0	736.0	800.0	640.0	970.0	776.0	948.0	758.4	824.0	659.2
PM734A 1	N/A	N/A	920.0	736.0	910.0	728.0	N/A	N/A	948.0	758.4	937.3	749.8
PM734B 1	N/A	N/A	1005.0	804.0	1005.0	804.0	N/A	N/A	1035.2	828.1	1035.2	828.1
PM734C 1	N/A	N/A	1240.0	992.0	1115.0	892.0	N/A	N/A	1277.2	1021.8	1148.5	918.8
PM734D 1	N/A	N/A	1320.0	1056.0	1190.0	952.0	N/A	N/A	1360.0	1088.0	1226.0	980.8
PM734E 1	N/A	N/A	1435.0	1148.0	1370.0	1096.0	N/A	N/A	1478.1	1182.4	1411.1	1128.9
PM734F 1	N/A	N/A	1580.0	1264.0	1495.0	1196.0	N/A	N/A	1627.4	1301.9	1540.0	1232.0
PM734G 1	N/A	N/A	1795.0	1436.0	1585.0	1268.0	N/A	N/A	1849.0	1479.2	1633.0	1306.4
P80 LVSM804R 1	2121.0	1696.8	1928.0	1542.4	1651.0	1320.8	2185.0	1748.0	1986.0	1588.8	1701.0	1360.8
P80 LVSM804S 1	2455.0	1964.0	2232.0	1785.6	1911.0	1528.8	2529.0	2023.2	2299.0	1839.2	1968.3	1574.7
P80 LVSM804T 1	2684.0	2147.2	2440.0	1952.0	2089.0	1671.2	2765.0	2212.0	2513.2	2010.6	2152.0	1721.6
P80 LVSM804W 1	3128.0	2502.4	2844.0	2275.2	2435.0	1948.0	3222.0	2577.6	2929.3	2343.5	2508.1	2006.4
P80 LVSM804X 1	3442.0	2753.6	3129.0	2503.2	2679.0	2143.2	3545.3	2836.2	3223.0	2578.4	2759.4	2207.5

1. Star connection only



4 POLE Three Phase



Star 415V
Parallel Star 208V
Delta 240V

50Hz/1500rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	6.6	5.3	6.0	4.8	5.3	4.2	6.8	5.4	6.2	5.0	5.5	4.4
PM044E	8.8	7.0	8.0	6.4	7.1	5.7	9.1	7.3	8.2	6.6	7.3	5.9
PM044F	11.1	8.9	10.0	8.0	8.8	7.0	11.4	9.1	10.3	8.2	9.1	7.3
PM044G	13.3	10.6	12.0	9.6	10.6	8.5	13.7	11.0	12.4	9.9	10.9	8.7
PM044H	15.5	12.4	14.0	11.2	12.3	9.8	16.0	12.8	14.4	11.5	12.7	10.2
PM144D	17.7	14.2	16.0	12.8	14.1	11.3	18.2	14.6	16.5	13.2	14.5	11.6
PM144E	22.1	17.7	20.0	16.0	17.6	14.1	22.8	18.2	20.6	16.5	18.1	14.5
PM144F	24.3	19.4	22.0	17.6	19.4	15.5	25.0	20.0	22.7	18.2	20.0	16.0
PM144G	26.5	21.2	24.0	19.2	21.2	17.0	27.3	21.8	24.7	19.8	21.8	17.5
PM144H	31.0	24.8	28.0	22.4	24.7	19.8	31.9	25.5	28.8	23.1	25.4	20.4
PM144J	35.4	28.3	32.0	25.6	28.2	22.6	36.5	29.2	33.0	26.4	29.0	23.2
PM144K	37.6	30.1	34.0	27.2	30.0	24.0	38.7	31.0	35.0	28.0	30.9	24.7
UCM224C	38.0	30.4	35.0	28.0	31.0	24.8	39.1	31.3	36.1	28.9	31.9	25.5
UCM224D	44.0	35.2	40.0	32.0	37.5	30.0	45.3	36.3	41.2	33.0	38.6	30.9
UCM224E	52.3	41.8	47.5	38.0	42.0	33.6	53.9	43.1	48.9	39.1	43.3	34.6
UCM224F	63.3	50.6	57.5	46.0	50.0	40.0	65.2	52.2	59.2	47.4	51.5	41.2
UCM224G	71.5	57.2	65.0	52.0	60.0	48.0	73.6	58.9	67.0	53.6	61.8	49.4
UCM274C	81.5	65.2	77.5	62.0	67.5	54.0	83.9	67.2	79.8	63.9	69.5	55.6
UCM274D	97.0	77.6	87.5	70.0	81.3	65.0	99.9	79.9	90.1	72.1	83.7	67.0
UCM274E	120.0	96.0	112.5	90.0	100.0	80.0	123.6	98.9	115.9	92.7	103.0	82.4
UCM274F	140.0	112.0	135.0	108.0	112.5	90.0	144.2	115.4	139.1	111.3	115.9	92.7
UCM274G	159.0	127.2	149.0	119.2	128.6	102.9	163.8	131.0	153.5	122.8	132.5	106.0
UCM274H	175.0	140.0	170.0	136.0	143.8	115.0	180.3	144.2	175.1	140.1	148.1	118.5
UCDM274K	213.0	170.4	200.0	160.0	162.0	129.6	219.4	175.5	206.0	164.8	166.9	133.5
S4L1M-C	215.0	172.0	210.0	168.0	185.0	148.0	221.5	177.2	216.3	173.0	191.0	152.8
S4L1M-D	240.0	192.0	230.0	184.0	200.0	160.0	247.2	197.8	237.0	189.6	206.0	164.8
S4L1M-E	295.0	236.0	275.0	220.0	240.0	192.0	304.0	243.2	283.3	226.6	247.2	197.8



4 POLE Three Phase



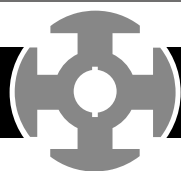
Star 415V
Parallel Star 208V
Delta 240V

50Hz/1500rpm
0.8 Power Factor

2 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
S4L1M-F	340.0	272.0	310.0	248.0	275.0	220.0	350.2	280.2	319.3	255.4	283.3	226.6
HCM534C	390.0	312.0	380.0	304.0	330.0	264.0	402.0	321.6	391.4	313.1	340.0	272.0
HCM534D	435.0	348.0	430.0	344.0	375.0	300.0	448.1	358.4	443.0	354.4	386.3	309.0
HCM534E	530.0	424.0	505.0	404.0	440.0	352.0	546.0	436.8	520.2	416.1	453.2	362.6
HCM534F	600.0	480.0	540.0	432.0	475.0	380.0	618.0	494.4	556.2	445.0	489.3	391.4
HCM634G	675.0	540.0	675.0	540.0	570.0	456.0	695.0	556.0	695.3	556.2	587.1	469.7
HCM634H	805.0	644.0	740.0	592.0	675.0	540.0	805.0	644.0	762.2	609.8	695.3	556.2
HCM634J	870.0	696.0	850.0	680.0	760.0	608.0	870.0	696.0	876.0	700.8	783.0	626.4
HCM634K	970.0	776.0	940.0	752.0	820.0	656.0	999.1	799.3	968.2	774.6	845.0	676.0
PM734A 1	N/A	N/A	955.0	764.0	910.0	728.0	N/A	N/A	984.0	787.2	937.3	749.8
PM734B 1	N/A	N/A	1040.0	832.0	1010.0	808.0	N/A	N/A	1071.2	857.0	1040.3	832.2
PM734C 1	N/A	N/A	1265.0	1012.0	1115.0	892.0	N/A	N/A	1303.0	1042.4	1148.5	918.8
PM734D 1	N/A	N/A	1345.0	1076.0	1190.0	952.0	N/A	N/A	1385.4	1108.3	1226.0	980.8
PM734E 1	N/A	N/A	1490.0	1192.0	1370.0	1096.0	N/A	N/A	1535.0	1228.0	1411.1	1128.9
PM734F 1	N/A	N/A	1640.0	1312.0	1495.0	1196.0	N/A	N/A	1689.2	1351.4	1540.0	1232.0
PM734G 1	N/A	N/A	1795.0	1436.0	1585.0	1268.0	N/A	N/A	1849.0	1479.2	1633.0	1306.4
P80 LVSM804R 1	2121.0	1696.8	1928.0	1542.4	1651.0	1320.8	2185.0	1748.0	1986.0	1588.8	1701.0	1360.8
P80 LVSM804S 1	2455.0	1964.0	2232.0	1785.6	1911.0	1528.8	2529.0	2023.2	2299.0	1839.2	1968.3	1574.7
P80 LVSM804T 1	2684.0	2147.2	2440.0	1952.0	2089.0	1671.2	2765.0	2212.0	2513.2	2010.6	2152.0	1721.6
P80 LVSM804W 1	3128.0	2502.4	2844.0	2275.2	2435.0	1948.0	3222.0	2577.6	2929.3	2343.5	2508.1	2006.4
P80 LVSM804X 1	3442.0	2753.6	3129.0	2503.2	2679.0	2143.2	3545.3	2836.2	3223.0	2578.4	2759.4	2207.5

1. Star connection only



4 POLE Three Phase



Star 440V
Parallel Star 220V
Delta 254V

50Hz/1500rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	6.3	5.0	5.7	4.6	5.0	4.0	6.5	5.2	5.9	4.7	5.2	4.2
PM044E	8.4	6.7	7.6	6.1	6.7	5.4	8.7	7.0	7.8	6.3	6.9	5.5
PM044F	10.5	8.4	9.5	7.6	8.4	6.7	10.8	8.7	9.8	7.8	8.7	7.0
PM044G	12.6	10.1	11.4	9.1	10.1	8.1	13.0	10.4	11.7	9.4	10.4	8.3
PM044H	14.7	11.8	13.3	10.6	11.7	9.4	15.1	12.1	13.7	11.0	12.1	9.7
PM144D	16.8	13.4	15.2	12.2	13.4	10.7	17.3	13.8	15.7	12.6	13.8	11.0
PM144E	21.0	16.8	19.0	15.2	16.8	13.4	21.6	17.3	19.6	15.7	17.3	13.8
PM144F	23.1	18.5	20.9	16.7	18.4	14.7	23.8	19.0	21.5	17.2	19.0	15.2
PM144G	25.2	20.2	22.8	18.2	20.1	16.1	26.0	20.8	23.5	18.8	20.7	16.6
UCM224C	26.8	21.4	25.5	20.4	22.5	18.0	27.6	22.1	26.3	21.0	23.2	18.6
PM144H	29.4	23.5	26.6	21.3	23.5	18.8	30.3	24.2	27.4	21.9	24.2	19.4
UCM224D	32.7	26.2	29.7	23.8	27.3	21.8	34.6	27.7	31.3	25.0	27.6	22.1
PM144J	33.6	26.9	30.4	24.3	26.8	21.4	33.7	27.0	30.6	24.5	28.1	22.5
PM144K	35.7	28.6	32.3	25.8	28.5	22.8	36.8	29.4	33.3	26.6	29.4	23.5
UCM224E	40.2	32.2	36.9	29.5	32.6	26.1	41.4	33.1	38.0	30.4	33.6	26.9
UCM224F	49.1	39.3	45.2	36.2	39.3	31.4	50.6	40.5	46.6	37.3	40.5	32.4
UCM224G	62.7	50.2	57.0	45.6	52.2	41.8	64.6	51.7	58.7	47.0	53.8	43.0
S4L1M-C	215.0	172.0	210.0	168.0	185.0	148.0	221.5	177.2	216.3	173.0	191.0	152.8
S4L1M-D	240.0	192.0	230.0	184.0	200.0	160.0	247.2	197.8	237.0	189.6	206.0	164.8
S4L1M-E	295.0	236.0	275.0	220.0	240.0	192.0	304.0	243.2	283.3	226.6	247.2	197.8
S4L1M-F	340.0	272.0	310.0	248.0	275.0	220.0	350.2	280.2	319.3	255.4	283.3	226.6
HCI544C	390.0	312.0	380.0	304.0	330.0	264.0	402.0	321.6	391.4	313.1	340.0	272.0
HCI544D	435.0	348.0	430.0	344.0	375.0	300.0	448.1	358.4	443.0	354.4	386.3	309.0
HCM534E	530.0	424.0	505.0	404.0	440.0	352.0	546.0	436.8	520.2	416.1	453.2	362.6
HCM534F	600.0	480.0	540.0	432.0	475.0	380.0	618.0	494.4	556.2	445.0	489.3	391.4
HCM634G	675.0	540.0	675.0	540.0	570.0	456.0	695.3	556.2	695.3	556.2	587.1	469.7
HCM634H	770.0	616.0	715.0	572.0	675.0	540.0	793.1	634.5	736.5	589.2	695.3	556.2



4 POLE Three Phase



Star 440V
Parallel Star 220V
Delta 254V

50Hz/1500rpm
0.8 Power Factor

2 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM634J	870.0	696.0	850.0	680.0	760.0	608.0	896.1	716.9	876.0	700.8	783.0	626.4
HCM634K	970.0	776.0	940.0	752.0	820.0	656.0	999.1	799.3	968.2	774.6	845.0	676.0
PM734A 1	N/A	N/A	1010.0	808.0	890.0	712.0	N/A	N/A	1040.3	832.2	917.0	733.6
PM734B 1	N/A	N/A	1105.0	884.0	990.0	792.0	N/A	N/A	1138.2	910.5	1020.0	816.0
PM734C 1	N/A	N/A	1240.0	992.0	1095.0	876.0	N/A	N/A	1277.2	1021.8	1128.0	902.4
PM734D 1	N/A	N/A	1320.0	1056.0	1165.0	932.0	N/A	N/A	1360.0	1088.0	1200.0	960.0
PM734E 1	N/A	N/A	1520.0	1216.0	1340.0	1072.0	N/A	N/A	1566.0	1252.8	1380.2	1104.2
PM734F 1	N/A	N/A	1665.0	1332.0	1465.0	1172.0	N/A	N/A	1715.0	1372.0	1509.0	1207.2
PM734G 1	N/A	N/A	1760.0	1408.0	1550.0	1240.0	N/A	N/A	1813.0	1450.4	1597.0	1277.6
P80 LVSM804R 1	1993.0	1594.4	1812.0	1449.6	1552.0	1241.6	2053.0	1642.4	1866.4	1493.1	1599.0	1279.2
P80 LVSM804S 1	2306.0	1844.8	2096.0	1676.8	1795.0	1436.0	2375.2	1900.1	2159.0	1727.2	1849.0	1479.2
P80 LVSM804T 1	2521.0	2016.8	2292.0	1833.6	1963.0	1570.4	2597.0	2077.6	2361.0	1888.8	2022.0	1617.6
P80 LVSM804W 1	2939.0	2351.2	2672.0	2137.6	2288.0	1830.4	3027.2	2421.7	2752.2	2201.7	2357.0	1885.6
P80 LVSM804X 1	3234.0	2587.2	2940.0	2352.0	2517.0	2013.6	3331.0	2664.8	3028.2	2422.6	2593.0	2074.4

1. Star connection only



4 POLE Three Phase



Star 660V-690V

Parallel Star 330V-345V

Delta 380V-400V

50Hz/1500rpm

0.8 Power Factor

Winding 25/26/65	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
UCM224C	33.5	26.8	32.0	25.6	27.5	22.0	34.5	27.6	33.0	26.4	28.3	22.7
UCM224D	43.5	34.8	40.0	32.0	37.5	30.0	44.8	35.8	41.2	33.0	38.6	30.9
UCM224F	58.0	46.4	53.0	42.4	46.0	36.8	59.7	47.8	54.6	43.7	47.4	37.9
UCM224G	71.0	56.8	63.5	50.8	55.0	44.0	73.1	58.5	65.4	52.3	56.7	45.3
UCM274C	81.5	65.2	77.5	62.0	67.5	54.0	83.9	67.2	79.8	63.9	69.5	55.6
UCM274D	97.0	77.6	87.5	70.0	81.3	65.0	99.9	79.9	90.1	72.1	83.7	67.0
UCM274E	120.0	96.0	112.5	90.0	100.0	80.0	123.6	98.9	115.9	92.7	103.0	82.4
UCM274F	140.0	112.0	135.0	108.0	112.5	90.0	144.2	115.4	139.1	111.2	115.9	92.7
UCM274G	155.0	124.0	145.0	116.0	125.0	100.0	159.7	127.7	149.4	119.5	128.8	103.0
UCM274H	175.0	140.0	170.0	136.0	143.8	115.0	180.3	144.2	175.1	140.1	148.1	118.5
S4L1M-C	210.0	168.0	200.0	160.0	175.0	140.0	216.3	173.0	206.0	164.8	180.3	144.2
S4L1M-D	235.0	188.0	225.0	180.0	195.0	156.0	242.1	193.6	231.8	185.4	200.9	160.7
S4L1M-E	280.0	224.0	260.0	208.0	225.0	180.0	288.4	230.7	267.8	214.2	231.8	185.4
S4L1M-F	360.0	288.0	340.0	272.0	295.0	236.0	370.8	296.6	350.2	280.2	303.9	243.1
HCM534C	435.0	348.0	405.0	324.0	355.0	284.0	448.1	358.4	417.2	333.7	365.7	292.5
HCM534D	330.0	264.0	300.0	240.0	365.0	292.0	339.9	271.9	309.0	247.2	376.0	300.8
HCM534E	495.0	396.0	440.0	352.0	380.0	304.0	509.9	407.9	453.2	362.6	391.4	313.1
HCM534F	565.0	452.0	505.0	404.0	440.0	352.0	582.0	465.6	520.2	416.1	453.2	362.6
HCM634G	680.0	544.0	630.0	504.0	530.0	424.0	680.0	544.0	648.9	519.1	545.9	436.7
HCM634H	765.0	612.0	700.0	560.0	638.0	510.4	765.0	612.0	721.0	576.8	657.1	525.7
HCM634J	830.0	664.0	810.0	648.0	735.0	588.0	832.6	666.1	832.6	666.1	757.1	605.6
HCM634K	900.0	720.0	850.0	680.0	740.0	592.0	900.0	720.0	875.5	700.4	762.2	609.8
PM734A 1	N/A	N/A	1025.0	820.0	910.0	728.0	N/A	N/A	1051.7	841.4	937.3	749.8
PM734B 1	N/A	N/A	1140.0	912.0	1005.0	804.0	N/A	N/A	1051.7	841.4	1035.2	828.1
PM734C 1	N/A	N/A	1230.0	984.0	1090.0	872.0	N/A	N/A	1266.9	1013.5	1122.7	898.2
PM734D 1	N/A	N/A	1345.0	1076.0	1190.0	952.0	N/A	N/A	1374.4	1099.5	1225.7	980.6
PM734E 1	N/A	N/A	1440.0	1152.0	1275.0	1020.0	N/A	N/A	1483.2	1186.6	1313.3	1050.6
PM734F 1	N/A	N/A	1690.0	1352.0	1495.0	1196.0	N/A	N/A	1593.5	1274.8	1539.9	1231.9
PM734G 1	N/A	N/A	1750.0	1400.0	1545.0	1236.0	N/A	N/A	1802.5	1442.0	1591.4	1273.1
P80 LVSM804T 1	2490.0	1992.0	2264.0	1811.2	1939.0	1551.2	2564.7	2051.8	2331.9	1865.5	1997.2	1597.7
P80 LVSM804W 1	2922.0	2337.6	2656.0	2124.8	2274.0	1819.2	3009.7	2407.7	2735.7	2188.5	2342.2	1873.8
P80 LVSM804Y 1	3344.0	2675.2	3040.0	2432.0	2603.0	2082.4	3444.3	2755.5	3131.2	2505.0	2681.1	2144.9

1. Star connection only



4 POLE Three Phase

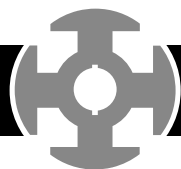


Star 380V
Parallel Star 190V
Delta 220V

60Hz/1800rpm
0.8 Power Factor

1 of 2

Winding 13/14	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	8.3	6.6	7.5	6.0	6.6	5.3	8.5	6.8	7.7	6.2	6.8	5.4
PM044E	11.1	8.9	10.0	8.0	8.8	7.0	11.4	9.1	10.3	8.2	9.1	7.3
PM044F	13.3	10.6	12.0	9.6	10.6	8.5	13.7	11.0	12.4	9.9	10.9	8.7
PM044G	16.6	13.3	15.0	12.0	13.2	10.6	17.1	13.7	15.5	12.4	13.6	10.9
PM044H	18.6	14.9	16.8	13.4	14.8	11.8	19.2	15.3	17.3	13.8	15.2	12.2
PM144D	22.1	17.7	20.0	16.0	17.6	14.1	22.8	18.2	20.6	16.5	18.1	14.5
PM144E	26.5	21.2	24.0	19.2	21.2	17.0	27.3	21.8	24.7	19.8	21.8	17.5
PM144F	29.2	23.4	26.4	21.1	23.3	18.6	30.1	24.1	27.2	21.8	24.0	19.2
PM144G	33.2	26.6	30.0	24.0	26.5	21.2	34.2	27.4	30.9	24.7	27.3	21.8
PM144H	38.7	31.0	35.0	28.0	30.9	24.7	39.9	31.9	36.1	28.8	31.8	25.5
PM144J	42.0	33.6	38.0	30.4	33.5	26.8	43.3	34.6	39.1	31.3	34.5	27.6
UCM224C	46.5	37.2	43.1	34.5	37.5	30.0	47.9	38.3	44.4	35.5	38.6	30.9
PM144K	48.7	39.0	44.0	35.2	38.8	31.0	50.2	40.1	45.3	36.3	40.0	32.0
UCM224D	54.3	43.4	51.3	41.0	46.3	37.0	55.9	44.7	52.8	42.3	47.7	38.2
UCM224E	63.0	50.4	56.3	45.0	50.0	40.0	64.9	51.9	58.0	46.4	51.5	41.2
UCM224F	72.5	58.0	68.8	55.0	59.4	47.5	74.7	59.7	70.9	56.7	61.2	48.9
UCM224G	91.0	72.8	81.3	65.0	75.0	60.0	93.7	75.0	83.7	67.0	77.3	61.8
UCM274C	105.0	84.0	93.8	75.0	81.3	65.0	108.2	86.5	96.6	77.3	83.7	67.0
UCM274D	115.0	92.0	107.5	86.0	87.5	70.0	118.5	94.8	110.7	88.6	90.1	72.1
UCM274E	135.0	108.0	125.0	100.0	110.0	88.0	139.1	111.2	128.8	103.0	113.3	90.6
UCM274F	155.0	124.0	147.5	118.0	127.5	102.0	159.7	127.7	151.9	121.5	131.3	105.1
UCM274G	181.3	145.0	166.0	132.8	147.5	118.0	186.7	149.4	171.0	136.8	151.9	121.5
UCM274H	212.5	170.0	200.0	160.0	175.0	140.0	218.9	175.1	206.0	164.8	180.3	144.2
S4L1M-C	265.0	212.0	250.0	200.0	220.0	176.0	273.0	218.4	257.5	206.0	226.6	181.3
S4L1M-D	305.0	244.0	270.0	216.0	235.0	188.0	314.2	251.3	278.1	222.5	242.1	193.6
S4L1M-F	425.0	340.0	395.0	316.0	345.0	276.0	437.8	350.2	406.9	325.5	355.4	284.3
HCI544C	445.0	356.0	410.0	328.0	355.0	284.0	458.4	366.7	422.3	337.8	365.7	292.5



4 POLE Three Phase



Star 380V
Parallel Star 190V
Delta 220V

60Hz/1800rpm
0.8 Power Factor

2 of 2

Winding 13/14	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCI544D	545.0	436.0	506.0	404.8	445.0	356.0	548.5	438.8	521.2	416.9	458.4	366.7
HCI544E	600.0	480.0	555.0	444.0	480.0	384.0	618.0	494.4	571.7	457.3	494.4	395.5
HCM534F	725.0	580.0	663.0	530.4	582.0	465.6	724.0	579.2	682.9	546.3	599.5	479.6
HCM634G	788.0	630.4	731.0	584.8	638.0	510.4	811.6	649.3	752.9	602.3	657.1	525.7
HCM634H	900.0	720.0	814.0	651.2	718.0	574.4	927.0	741.6	838.4	670.7	739.5	591.6
HCM634J	1113.0	890.4	1038.0	830.4	900.0	720.0	1146.4	917.1	1069.1	855.3	927.0	741.6
HCM634K	1220.0	976.0	1135.0	908.0	985.0	788.0	1256.6	1005.3	1169.1	935.2	1014.6	811.6
PM734A 1	N/A	N/A	1080.0	864.0	1010.0	808.0	N/A	N/A	1112.4	889.9	1040.3	832.2
PM734B 1	N/A	N/A	1180.0	944.0	1120.0	896.0	N/A	N/A	1215.4	972.3	1153.6	922.9
PM734C 1	N/A	N/A	1445.0	1156.0	1275.0	1020.0	N/A	N/A	1488.4	1190.7	1313.3	1050.6
PM734D 1	N/A	N/A	1570.0	1256.0	1380.0	1104.0	N/A	N/A	1601.6	1281.3	1421.4	1137.1
PM734F 1	N/A	N/A	2040.0	1632.0	1800.0	1440.0	N/A	N/A	2101.2	1681.0	1854.0	1483.2
P80 LVSM804R 1	2486.0	1988.8	2260.0	1808.0	1935.0	1548.0	2560.6	2048.5	2327.8	1862.2	1993.1	1594.4
P80 LVSM804S 1	2860.0	2288.0	2600.0	2080.0	2226.0	1780.8	2945.8	2356.6	2678.0	2142.4	2292.8	1834.2
P80 LVSM804T 1	2992.0	2393.6	2720.0	2176.0	2329.0	1863.2	3081.8	2465.4	2801.6	2241.3	2398.9	1919.1
P80 LVSM804W 1	3300.0	2640.0	3000.0	2400.0	2569.0	2055.2	3399.0	2719.2	3090.0	2472.0	2646.1	2116.9

1. Star connection only



4 POLE Three Phase

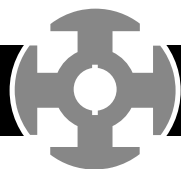


Star 416V
Parallel Star 208V
Delta 240V

60Hz/1800rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	7.3	5.8	6.6	5.3	5.8	4.6	7.5	6.0	6.8	5.4	6.0	4.8
PM044E	9.7	7.8	8.8	7.0	7.8	6.2	10.0	8.0	9.1	7.3	8.0	6.4
PM044F	12.2	9.8	11.0	8.8	9.7	7.8	12.6	10.1	11.3	9.1	10.0	8.0
PM044G	14.6	11.7	13.2	10.6	11.6	9.3	15.0	12.0	13.6	10.9	11.9	9.6
PM044H	17.0	13.6	15.4	12.3	13.6	10.9	17.5	14.0	15.9	12.7	14.0	11.2
PM144D	19.5	15.6	17.6	14.1	15.5	12.4	20.1	16.1	18.1	14.5	16.0	12.8
PM144E	24.3	19.4	22.0	17.6	19.4	15.5	25.0	20.0	22.7	18.1	20.0	16.0
PM144F	26.8	21.4	24.2	19.4	21.3	17.0	27.6	22.1	24.9	19.9	21.9	17.6
PM144G	29.2	23.4	26.4	21.1	23.3	18.6	30.1	24.1	27.2	21.8	24.0	19.2
PM144H	34.1	27.3	30.8	24.6	27.2	21.8	35.1	28.1	31.7	25.4	28.0	22.4
PM144J	38.9	31.1	35.2	28.2	31.0	24.8	40.1	32.1	36.3	29.0	31.9	25.5
UCM224C	43.8	35.0	39.4	31.5	35.0	28.0	45.1	36.1	40.6	32.5	36.1	28.8
PM144K	44.2	35.4	40.0	32.0	35.3	28.2	45.5	36.4	41.2	33.0	36.4	29.1
UCM224D	51.0	40.8	47.5	38.0	42.0	33.6	52.5	42.0	48.9	39.1	43.3	34.6
UCM224E	60.0	48.0	53.8	43.0	47.5	38.0	61.8	49.4	55.4	44.3	48.9	39.1
UCM224F	72.5	58.0	65.6	52.5	57.5	46.0	74.7	59.7	67.6	54.1	59.2	47.4
UCM224G	84.5	67.6	75.0	60.0	62.5	50.0	87.0	69.6	77.3	61.8	64.4	51.5
UCM274C	93.8	75.0	90.0	72.0	75.0	60.0	96.6	77.3	92.7	74.2	77.3	61.8
UCM274D	115.0	92.0	107.5	86.0	87.5	70.0	118.5	94.8	110.7	88.6	90.1	72.1
UCM274E	135.0	108.0	125.0	100.0	110.0	88.0	139.1	111.2	128.8	103.0	113.3	90.6
UCM274F	156.3	125.0	150.0	120.0	131.3	105.0	161.0	128.8	154.5	123.6	135.2	108.2
UCM274G	186.4	149.1	170.7	136.6	151.6	121.3	192.0	153.6	175.8	140.7	156.1	124.9
UCM274H	212.5	170.0	200.0	160.0	175.0	140.0	218.9	175.1	206.0	164.8	180.3	144.2
UCDM274K	255.0	204.0	240.0	192.0	210.0	168.0	259.4	207.5	247.2	197.8	216.3	173.0
S4L1M-C	295.0	236.0	255.0	204.0	225.0	180.0	288.2	230.6	262.7	210.1	231.8	185.4
S4L1M-D	252.0	201.6	250.0	200.0	226.0	180.8	259.6	207.6	257.5	206.0	232.8	186.2
S4L1M-E	340.0	272.0	315.0	252.0	275.0	220.0	350.2	280.2	324.5	259.6	283.3	226.6



4 POLE Three Phase



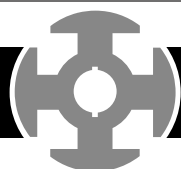
Star 416V
Parallel Star 208V
Delta 240V

60Hz/1800rpm
0.8 Power Factor

2 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
S4L1M-F	395.0	316.0	365.0	292.0	320.0	256.0	406.9	325.5	376.0	300.8	329.6	263.7
HCM534C	463.0	370.4	431.0	344.8	375.0	300.0	476.9	381.5	443.9	355.1	386.3	309.0
HCM534D	500.0	400.0	463.0	370.4	405.0	324.0	515.0	412.0	476.9	381.5	417.2	333.7
HCM534E	606.0	484.8	563.0	450.4	495.0	396.0	624.2	499.3	579.9	463.9	509.9	407.9
HCM534F	663.0	530.4	619.0	495.2	544.0	435.2	682.9	546.3	637.6	510.1	560.3	448.3
HCM634G	788.0	630.4	731.0	584.8	638.0	510.4	811.6	649.3	752.9	602.3	657.1	525.7
HCM634H	885.0	708.0	819.0	655.2	713.0	570.4	911.6	729.2	843.6	674.9	734.4	587.5
HCM634J	1031.0	824.8	956.0	764.8	825.0	660.0	1061.9	849.5	984.7	787.7	849.8	679.8
HCM634K	1150.0	920.0	1063.0	850.4	925.0	740.0	1184.5	947.6	1094.9	875.9	952.8	762.2
PM734A 1	N/A	N/A	1015.0	812.0	985.0	788.0	N/A	N/A	1045.5	836.4	1014.6	811.6
PM734B 1	N/A	N/A	1110.0	888.0	1095.0	876.0	N/A	N/A	1116.8	893.5	1116.8	893.5
PM734C 1	N/A	N/A	1390.0	1112.0	1225.0	980.0	N/A	N/A	1431.7	1145.4	1261.8	1009.4
PM734D 1	N/A	N/A	1480.0	1184.0	1305.0	1044.0	N/A	N/A	1524.4	1219.5	1344.2	1075.3
PM734E 1	N/A	N/A	1690.0	1352.0	1490.0	1192.0	N/A	N/A	1740.7	1392.6	1534.7	1227.8
PM734F 1	N/A	N/A	1910.0	1528.0	1685.0	1348.0	N/A	N/A	1967.3	1573.8	1735.6	1388.4
PM734G 1	N/A	N/A	2020.0	1616.0	1780.0	1424.0	N/A	N/A	2080.6	1664.5	1833.4	1466.7
P80 LVSM804R 1	2288.0	1830.4	2080.0	1664.0	1781.0	1424.8	2356.6	1885.3	2142.4	1713.9	1834.4	1467.5
P80 LVSM804S 1	2552.0	2041.6	2320.0	1856.0	1987.0	1589.6	2628.6	2102.8	2389.6	1911.7	2046.6	1637.3
P80 LVSM804T 1	2790.0	2232.0	2536.0	2028.8	2171.0	1736.8	2873.7	2299.0	2612.1	2089.7	2236.1	1788.9
P80 LVSM804W 1	3159.0	2527.2	2872.0	2297.6	2459.0	1967.2	3253.8	2603.0	2958.2	2366.5	2532.8	2026.2
P80 LVSM804X	3406.0	2724.8	3096.0	2476.8	2651.0	2120.8	3508.2	2806.5	3188.9	2551.1	2730.5	2184.4

1. Star connection only



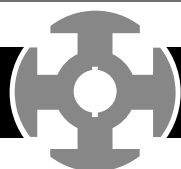
4 POLE Three Phase



Star 440V
Parallel Star 220V
Delta 254V
60Hz/1800rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	7.7	6.2	7.0	5.6	6.2	5.0	7.9	6.3	7.2	5.8	6.4	5.1
PM044E	10.4	8.3	9.4	7.5	8.3	6.6	10.7	8.6	9.7	7.7	8.5	6.8
PM044F	13.0	10.4	11.8	9.4	10.4	8.3	13.4	10.7	12.2	9.7	10.7	8.6
PM044G	15.6	12.5	14.1	11.3	12.4	9.9	16.1	12.9	14.5	11.6	12.8	10.2
PM044H	18.2	14.6	16.5	13.2	14.6	11.7	18.7	15.0	17.0	13.6	15.0	12.0
PM144D	20.8	16.6	18.8	15.0	16.6	13.3	21.4	17.1	19.4	15.5	17.1	13.7
PM144E	26.0	20.8	23.5	18.8	20.7	16.6	26.8	21.4	24.2	19.4	21.3	17.1
PM144F	28.5	22.8	25.8	20.6	22.8	18.2	29.4	23.5	26.6	21.3	23.5	18.8
PM144G	31.2	25.0	28.2	22.6	24.9	19.9	32.1	25.7	29.0	23.2	25.6	20.5
PM144H	36.4	29.1	32.9	26.3	29.0	23.2	37.5	30.0	33.9	27.1	29.9	23.9
PM144J	41.6	33.3	37.6	30.1	33.2	26.6	42.8	34.3	38.7	31.0	34.2	27.4
UCM224C	44.7	35.8	41.9	33.5	36.3	29.0	46.0	36.8	43.2	34.5	37.4	29.9
PM144K	46.4	37.1	42.0	33.6	37.0	29.6	47.8	38.2	43.3	34.6	38.1	30.5
UCM224D	53.1	42.5	50.0	40.0	43.8	35.0	54.7	43.8	51.5	41.2	45.1	36.1
UCM224E	63.0	50.4	56.3	45.0	50.0	40.0	64.9	51.9	58.0	46.4	51.5	41.2
UCM224F	75.6	60.5	68.8	55.0	60.0	48.0	77.9	62.3	70.9	56.7	61.8	49.4
UCM224G	87.0	69.6	78.8	63.0	68.8	55.0	89.6	71.7	81.2	64.9	70.9	56.7
UCM274C	102.5	82.0	92.5	74.0	77.5	62.0	105.6	84.5	95.3	76.2	79.8	63.9
UCM274D	117.5	94.0	110.0	88.0	90.0	72.0	121.0	96.8	113.3	90.6	92.7	74.2
UCM274E	137.5	110.0	131.3	105.0	112.5	90.0	141.6	113.3	135.2	108.2	115.9	92.7
UCM274F	162.5	130.0	156.0	124.8	137.5	110.0	167.4	133.9	160.7	128.5	141.6	113.3
UCM274G	192.8	154.2	186.0	148.8	162.0	129.6	198.6	158.9	191.6	153.3	166.9	133.5
UCM274H	218.8	175.0	212.5	170.0	187.5	150.0	225.4	180.3	218.9	175.1	193.1	154.5
S4L1M-C	260.0	208.0	245.0	196.0	215.0	172.0	267.8	214.2	252.4	201.9	221.5	177.2
UCDM274K	265.0	212.0	265.0	212.0	233.0	186.4	273.0	218.4	273.0	218.4	240.0	192.0
S4L1M-D	305.0	244.0	270.0	216.0	235.0	188.0	314.2	251.3	278.1	222.5	242.1	193.6



4 POLE Three Phase



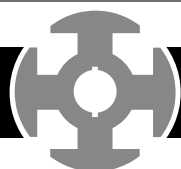
Star 440V
Parallel Star 220V
Delta 254V

60Hz/1800rpm
0.8 Power Factor

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Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
S4L1M-E	350.0	280.0	325.0	260.0	285.0	228.0	360.5	288.4	334.8	267.8	293.6	234.8
S4L1M-F	405.0	324.0	375.0	300.0	330.0	264.0	417.2	333.7	386.3	309.0	339.9	271.9
HCM534C	485.0	388.0	450.0	360.0	395.0	316.0	499.6	399.6	463.5	370.8	406.9	325.5
HCM534D	520.0	416.0	488.0	390.4	425.0	340.0	535.6	428.5	502.6	402.1	437.8	350.2
HCM534E	625.0	500.0	588.0	470.4	515.0	412.0	643.8	515.0	605.6	484.5	530.5	424.4
HCM534F	694.0	555.2	644.0	515.2	565.0	452.0	714.8	571.9	663.3	530.7	582.0	465.6
HCM634G	813.0	650.4	763.0	610.4	662.0	529.6	837.4	669.9	785.9	628.7	681.9	545.5
HCM634H	931.0	744.8	863.0	690.4	750.0	600.0	958.9	767.1	888.9	711.1	772.5	618.0
HCM634J	1063.0	850.4	988.0	790.4	850.0	680.0	1094.9	875.9	1017.6	814.1	875.5	700.4
HCM634K	1200.0	960.0	1113.0	890.4	965.0	772.0	1236.0	988.8	1146.4	917.1	994.0	795.2
PM734A 1	N/A	N/A	1100.0	880.0	1085.0	868.0	N/A	N/A	1133.0	906.4	1117.6	894.0
PM734B 1	N/A	N/A	1170.0	936.0	1170.0	936.0	N/A	N/A	1181.3	945.0	1181.3	945.0
PM734C 1	N/A	N/A	1480.0	1184.0	1305.0	1044.0	N/A	N/A	1524.4	1219.5	1344.2	1075.3
PM734D 1	N/A	N/A	1580.0	1264.0	1390.0	1112.0	N/A	N/A	1627.4	1301.9	1431.7	1145.4
PM734E 1	N/A	N/A	1800.0	1440.0	1590.0	1272.0	N/A	N/A	1854.0	1483.2	1637.7	1310.2
PM734F 1	N/A	N/A	2035.0	1628.0	1795.0	1436.0	N/A	N/A	2096.1	1676.8	1848.9	1479.1
PM734G 1	N/A	N/A	2155.0	1724.0	1900.0	1520.0	N/A	N/A	2219.7	1775.7	1957.0	1565.6
P80 LVSM804R 1	2420.0	1936.0	2200.0	1760.0	1884.0	1507.2	2492.6	1994.1	2266.0	1812.8	1940.5	1552.4
P80 LVSM804S 1	2702.0	2161.6	2456.0	1964.8	2103.0	1682.4	2783.1	2226.4	2529.7	2023.7	2166.1	1732.9
P80 LVSM804T 1	2952.0	2361.6	2684.0	2147.2	2298.0	1838.4	3040.6	2432.4	2764.5	2211.6	2366.9	1893.6
P80 LVSM804W 1	3344.0	2675.2	3040.0	2432.0	2603.0	2082.4	3444.3	2755.5	3131.2	2505.0	2681.1	2144.9
P80 LVSM804X 1	3599.0	2879.2	3272.0	2617.6	2802.0	2241.6	3707.0	2965.6	3370.2	2696.1	2886.1	2308.8

1. Star connection only



4 POLE Three Phase

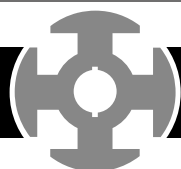


Star 460V
Parallel Star 230V
Delta 266V

60Hz/1800rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	8.1	6.5	7.3	5.8	6.4	5.1	8.3	6.7	7.5	6.0	6.6	5.3
PM044E	10.7	8.6	9.7	7.8	8.6	6.9	11.0	8.8	10.0	8.0	8.9	7.1
PM044F	13.5	10.8	12.2	9.8	10.8	8.6	13.9	11.1	12.6	10.1	11.1	8.9
PM044G	16.1	12.9	14.6	11.7	12.9	10.3	16.6	13.3	15.0	12.0	13.3	10.6
PM044H	18.8	15.0	17.0	13.6	15.0	12.0	19.4	15.5	17.5	14.0	15.5	12.4
PM144D	21.4	17.1	19.4	15.5	17.1	13.7	22.0	17.6	20.0	16.0	17.6	14.1
PM144E	26.8	21.4	24.2	19.4	21.3	17.0	27.6	22.1	24.9	19.9	21.9	17.6
PM144F	29.4	23.5	26.6	21.3	23.5	18.8	30.3	24.2	27.4	21.9	24.2	19.4
PM144G	32.2	25.8	29.1	23.3	25.7	20.6	33.2	26.5	30.0	24.0	26.5	21.2
PM144H	37.5	30.0	33.9	27.1	29.9	23.9	38.6	30.9	34.9	27.9	30.8	24.6
PM144J	42.9	34.3	38.8	31.0	34.2	27.4	44.2	35.3	40.0	32.0	35.2	28.2
UCM224C	46.4	37.1	42.0	33.6	37.0	29.6	47.8	38.2	43.3	34.6	38.1	30.5
PM144K	44.7	35.8	43.1	34.5	37.5	30.0	46.0	36.8	44.4	35.5	38.6	30.9
UCM224D	54.3	43.4	51.3	41.0	46.3	37.0	55.9	44.7	52.8	42.3	47.7	38.2
UCM224E	63.0	50.4	58.8	47.0	52.5	42.0	64.9	51.9	60.6	48.5	54.1	43.3
UCM224F	75.6	60.5	71.9	57.5	62.5	50.0	77.9	62.3	74.1	59.2	64.4	51.5
UCM224G	91.0	72.8	81.3	65.0	75.0	60.0	93.7	75.0	83.7	67.0	77.3	61.8
UCM274C	102.5	82.0	97.5	78.0	80.0	64.0	105.6	84.5	100.4	80.3	82.4	65.9
UCM274D	120.0	96.0	112.5	90.0	92.5	74.0	123.6	98.9	115.9	92.7	95.3	76.2
UCM274E	140.0	112.0	137.5	110.0	118.8	95.0	144.2	115.4	141.6	113.3	122.4	97.9
UCM274F	167.5	134.0	163.0	130.4	143.8	115.0	172.5	138.0	167.9	134.3	148.1	118.5
UCM274G	192.8	154.2	189.0	151.2	162.0	129.6	198.6	158.9	194.7	155.7	166.9	133.5
UCM274H	221.3	177.0	218.8	175.0	200.0	160.0	227.9	182.4	225.4	180.3	206.0	164.8
S4L1M-C	265.0	212.0	250.0	200.0	220.0	176.0	273.0	218.4	257.5	206.0	226.6	181.3
UCDM274K	275.0	220.0	270.0	216.0	236.0	188.8	283.3	226.6	278.1	222.5	243.1	194.5
S4L1M-D	320.0	256.0	280.0	224.0	250.0	200.0	329.6	263.7	288.4	230.7	257.5	206.0



4 POLE Three Phase



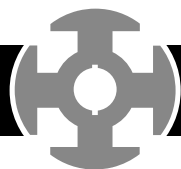
Star 460V
Parallel Star 230V
Delta 266V

60Hz/1800rpm
0.8 Power Factor

2 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
S4L1M-E	365.0	292.0	340.0	272.0	295.0	236.0	376.0	300.8	350.2	280.2	303.9	243.1
S4L1M-F	415.0	332.0	380.0	304.0	335.0	268.0	427.5	342.0	391.4	313.1	345.1	276.0
HCM534C	515.0	412.0	475.0	380.0	415.0	332.0	530.5	424.4	489.3	391.4	427.5	342.0
HCM534D	545.0	436.0	506.0	404.8	445.0	356.0	561.4	449.1	521.2	416.9	458.4	366.7
HCM534E	638.0	510.4	594.0	475.2	520.0	416.0	657.1	525.7	611.8	489.5	535.6	428.5
HCM534F	706.0	564.8	656.0	524.8	578.0	462.4	727.2	581.7	675.7	540.5	595.3	476.3
HCM634G	856.0	684.8	800.0	640.0	688.0	550.4	881.7	705.3	824.0	659.2	708.6	566.9
HCM634H	970.0	776.0	900.0	720.0	780.0	624.0	999.1	799.3	927.0	741.6	803.4	642.7
HCM634J	1113.0	890.4	1038.0	830.4	900.0	720.0	1146.4	917.1	1069.1	855.3	927.0	741.6
HCM634K	1238.0	990.4	1150.0	920.0	1000.0	800.0	1275.1	1020.1	1184.5	947.6	1030.0	824.0
PM734A 1	N/A	N/A	1120.0	896.0	1090.0	872.0	N/A	N/A	1153.6	922.9	1122.7	898.2
PM734B 1	N/A	N/A	1220.0	976.0	1190.0	952.0	N/A	N/A	1235.0	988.0	1225.7	980.6
PM734C 1	N/A	N/A	1510.0	1208.0	1335.0	1068.0	N/A	N/A	1555.3	1244.2	1375.1	1100.0
PM734D 1	N/A	N/A	1610.0	1288.0	1420.0	1136.0	N/A	N/A	1658.3	1326.6	1462.6	1170.1
PM734E 1	N/A	N/A	1840.0	1472.0	1620.0	1296.0	N/A	N/A	1895.2	1516.2	1668.6	1334.9
PM734F 1	N/A	N/A	2075.0	1660.0	1835.0	1468.0	N/A	N/A	2137.3	1709.8	1890.1	1512.0
PM734G 1	N/A	N/A	2200.0	1760.0	1940.0	1552.0	N/A	N/A	2266.0	1812.8	1998.2	1598.6
P80 LVSM804R 1	2530.0	2024.0	2300.0	1840.0	1969.0	1575.2	2523.0	2018.4	2369.0	1895.2	2028.1	1622.5
P80 LVSM804S 1	2825.0	2260.0	2568.0	2054.4	2199.0	1759.2	2909.8	2327.8	2645.0	2116.0	2265.0	1812.0
P80 LVSM804T 1	3087.0	2469.6	2806.0	2244.8	2403.0	1922.4	3179.6	2543.7	2890.2	2312.1	2475.1	1980.1
P80 LVSM804W 1	3493.0	2794.4	3175.0	2540.0	2719.0	2175.2	3597.8	2878.2	3270.3	2616.2	2800.6	2240.5
P80 LVSM804X 1	3765.0	3012.0	3422.0	2737.6	2930.0	2344.0	3878.0	3102.4	3524.7	2819.7	3017.9	2414.3

1. Star connection only



4 POLE Three Phase

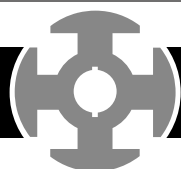


Star 480V
Parallel Star 240V
Delta 277V

60Hz/1800rpm
0.8 Power Factor

1 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	8.3	6.6	7.5	6.0	6.6	5.3	8.5	6.8	7.7	6.2	6.8	5.4
PM044E	11.1	8.9	10.0	8.0	8.8	7.0	11.4	9.1	10.3	8.2	9.1	7.3
PM044F	13.8	11.0	12.5	10.0	11.0	8.8	14.2	11.4	12.9	10.3	11.3	9.1
PM044G	16.6	13.3	15.0	12.0	13.2	10.6	17.1	13.7	15.5	12.4	13.6	10.9
PM044H	19.3	15.4	17.5	14.0	15.4	12.3	19.9	15.9	18.0	14.4	15.9	12.7
PM144D	22.1	17.7	20.0	16.0	17.6	14.1	22.8	18.2	20.6	16.5	18.1	14.5
PM144E	27.6	22.1	25.0	20.0	22.0	17.6	28.4	22.7	25.8	20.6	22.7	18.1
PM144F	30.4	24.3	27.5	22.0	24.3	19.4	31.3	25.0	28.3	22.7	25.0	20.0
PM144G	33.2	26.6	30.0	24.0	26.5	21.2	34.2	27.4	30.9	24.7	27.3	21.8
PM144H	38.7	31.0	35.0	28.0	30.9	24.7	39.9	31.9	36.1	28.8	31.8	25.5
PM144J	44.2	35.4	40.0	32.0	35.3	28.2	45.5	36.4	41.2	33.0	36.4	29.1
UCM224C	46.5	37.2	43.1	34.5	37.5	30.0	47.9	38.3	44.4	35.5	38.6	30.9
PM144K	48.6	38.9	44.0	35.2	38.8	31.0	50.1	40.0	45.3	36.3	40.0	32.0
UCM224D	56.3	45.0	51.3	41.0	46.3	37.0	58.0	46.4	52.8	42.3	47.7	38.2
UCM224E	66.0	52.8	58.8	47.0	52.5	42.0	68.0	54.4	60.6	48.5	54.1	43.3
UCM224F	80.0	64.0	71.9	57.5	62.5	50.0	82.4	65.9	74.1	59.2	64.4	51.5
UCM224G	92.0	73.6	81.3	65.0	75.0	60.0	94.8	75.8	83.7	67.0	77.3	61.8
UCM274C	108.8	87.0	97.5	78.0	80.0	64.0	112.1	89.7	100.4	80.3	82.4	65.9
UCM274D	125.0	100.0	112.5	90.0	92.5	74.0	128.8	103.0	115.9	92.7	95.3	76.2
UCM274E	144.0	115.2	137.5	110.0	118.8	95.0	148.3	118.7	141.6	113.3	122.4	97.9
UCM274F	168.8	135.0	163.0	130.4	143.8	115.0	173.9	139.1	167.9	134.3	148.1	118.5
UCM274G	205.7	164.6	189.0	151.2	162.0	129.6	211.9	169.5	194.7	155.7	166.9	133.5
UCM274H	225.0	180.0	218.8	175.0	200.0	160.0	231.8	185.4	225.4	180.3	206.0	164.8
S4L1M-C	270.0	216.0	255.0	204.0	225.0	180.0	278.1	222.5	262.7	210.1	231.8	185.4
UCDM274K	285.0	228.0	265.0	212.0	230.0	184.0	293.6	234.8	273.0	218.4	236.9	189.5
S4L1M-D	330.0	264.0	295.0	236.0	260.0	208.0	339.9	271.9	303.9	243.1	267.8	214.2
S4L1M-E	370.0	296.0	345.0	276.0	305.0	244.0	381.1	304.9	355.4	284.3	314.2	251.3



4 POLE Three Phase



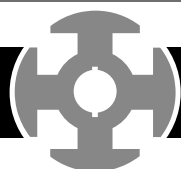
Star 480V
Parallel Star 240V
Delta 277V

60Hz/1800rpm
0.8 Power Factor

2 of 2

Winding 311/312/12	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
S4L1M-F	425.0	340.0	395.0	316.0	345.0	276.0	437.8	350.2	406.9	325.5	355.4	284.3
HCM534C	520.0	416.0	481.0	384.8	420.0	336.0	535.6	428.5	495.4	396.3	432.6	346.1
HCM534D	570.0	456.0	531.0	424.8	465.0	372.0	587.1	469.7	546.9	437.5	479.0	383.2
HCM534E	650.0	520.0	606.0	484.8	530.0	424.0	669.5	535.6	624.2	499.3	545.9	436.7
HCM534F	725.0	580.0	663.0	530.4	582.0	465.6	746.8	597.4	682.9	546.3	599.5	479.6
HCM634G	875.0	700.0	819.0	655.2	712.0	569.6	901.3	721.0	843.6	674.9	733.4	586.7
HCM634H	994.0	795.2	925.0	740.0	800.0	640.0	1023.8	819.1	952.8	762.2	824.0	659.2
HCM634J	1150.0	920.0	1063.0	850.4	925.0	740.0	1184.5	947.6	1094.9	875.9	952.8	762.2
HCM634K	1275.0	1020.0	1181.0	944.8	1010.0	808.0	1313.3	1050.6	1216.4	973.1	1040.3	832.2
PM734A 1	N/A	N/A	1170.0	936.0	1095.0	876.0	N/A	N/A	1205.1	964.1	1127.9	902.3
PM734B 1	N/A	N/A	1280.0	1024.0	1215.0	972.0	N/A	N/A	1288.6	1030.9	1251.5	1001.2
PM734C 1	N/A	N/A	1540.0	1232.0	1360.0	1088.0	N/A	N/A	1586.2	1269.0	1400.8	1120.6
PM734D 1	N/A	N/A	1645.0	1316.0	1450.0	1160.0	N/A	N/A	1694.4	1355.5	1493.5	1194.8
PM734E 1	N/A	N/A	1875.0	1500.0	1655.0	1324.0	N/A	N/A	1931.3	1545.0	1704.7	1363.7
PM734F 1	N/A	N/A	2120.0	1696.0	1870.0	1496.0	N/A	N/A	2183.6	1746.9	1926.1	1540.9
PM734G 1	N/A	N/A	2245.0	1796.0	1980.0	1584.0	N/A	N/A	2312.4	1849.9	2039.4	1631.5
P80 LVSM804R 1	2640.0	2112.0	2400.0	1920.0	2055.0	1644.0	2719.2	2175.4	2472.0	1977.6	2116.7	1693.3
P80 LVSM804S 1	2948.0	2358.4	2680.0	2144.0	2295.0	1836.0	3036.4	2429.2	2760.4	2208.3	2363.9	1891.1
P80 LVSM804T 1	3221.0	2576.8	2928.0	2342.4	2507.0	2005.6	3317.6	2654.1	3015.8	2412.7	2582.2	2065.8
P80 LVSM804W 1	3645.0	2916.0	3314.0	2651.2	2837.0	2269.6	3754.4	3003.5	3413.4	2730.7	2922.1	2337.7
P80 LVSM804X 1	3928.0	3142.4	3471.0	2776.8	3058.0	2446.4	4045.8	3236.7	3575.1	2860.1	3149.7	2519.8

1. Star connection only



4 POLE Three Phase



Star 600V
Parallel Star 300V
Delta 346V

60Hz/1800rpm
0.8 Power Factor

1 of 2

Winding 07/17	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
PM044D	8.3	6.6	7.5	6.0	6.6	5.3	8.5	6.8	7.7	6.2	6.8	5.4
PM044E	11.1	8.9	10.0	8.0	8.8	7.0	11.4	9.1	10.3	8.2	9.1	7.3
PM044F	13.8	11.0	12.5	10.0	11.0	8.8	14.2	11.4	12.9	10.3	11.3	9.1
PM044G	16.6	13.3	15.0	12.0	13.2	10.6	17.1	13.7	15.5	12.4	13.6	10.9
PM044H	19.4	15.5	17.5	14.0	15.4	12.3	20.0	16.0	18.0	14.4	15.9	12.7
PM144D	22.1	17.7	20.0	16.0	17.6	14.1	22.8	18.2	20.6	16.5	18.1	14.5
PM144E	27.7	22.2	25.0	20.0	22.0	17.6	28.5	22.8	25.8	20.6	22.7	18.1
PM144F	30.4	24.3	27.5	22.0	24.3	19.4	31.3	25.0	28.3	22.7	25.0	20.0
PM144G	33.2	26.6	30.0	24.0	26.5	21.2	34.2	27.4	30.9	24.7	27.3	21.8
PM144H	38.7	31.0	35.0	28.0	30.9	24.7	39.9	31.9	36.1	28.8	31.8	25.5
PM144J	44.2	35.4	40.0	32.0	35.3	28.2	45.5	36.4	41.2	33.0	36.4	29.1
UCM224C	46.5	37.2	43.1	34.5	37.5	30.0	47.9	38.3	44.4	35.5	38.6	30.9
PM144K	48.7	39.0	44.0	35.2	38.8	31.0	50.2	40.1	45.3	36.3	40.0	32.0
UCM224D	56.3	45.0	51.3	41.0	46.3	37.0	58.0	46.4	52.8	42.3	47.7	38.2
UCM224E	66.0	52.8	58.8	47.0	52.5	42.0	68.0	54.4	60.6	48.5	54.1	43.3
UCM224F	80.0	64.0	71.9	57.5	62.5	50.0	82.4	65.9	74.1	59.2	64.4	51.5
UCM224G	92.0	73.6	81.3	65.0	75.0	60.0	94.8	75.8	83.7	67.0	77.3	61.8
UCM274C	106.3	85.0	95.0	76.0	82.0	65.6	109.5	87.6	97.9	78.3	84.5	67.6
UCM274D	125.0	100.0	112.5	90.0	92.5	74.0	128.8	103.0	115.9	92.7	95.3	76.2
UCM274E	144.0	115.2	137.5	110.0	118.8	95.0	148.3	118.7	141.6	113.3	122.4	97.9
UCM274F	168.8	135.0	163.0	130.4	143.8	115.0	173.9	139.1	167.9	134.3	148.1	118.5
UCM274G	200.0	160.0	181.0	144.8	157.5	126.0	206.0	164.8	186.4	149.1	162.2	129.8
UCM274H	225.0	180.0	218.8	175.0	200.0	160.0	231.8	185.4	225.4	180.3	206.0	164.8
UCDM274J	270.0	216.0	255.0	204.0	225.0	180.0	278.1	222.5	262.7	210.1	231.8	185.4
S4L1M-C	269.0	215.2	261.0	208.8	239.0	191.2	277.1	221.7	268.8	215.1	246.2	196.9
S4L1M-D	330.0	264.0	295.0	236.0	260.0	208.0	339.9	271.9	303.9	243.1	267.8	214.2



4 POLE Three Phase



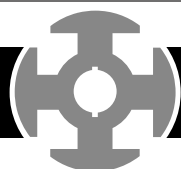
Star 600V
Parallel Star 300V
Delta 346V

60Hz/1800rpm
0.8 Power Factor

2 of 2

Winding 07/17	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
S4L1M-E	370.0	296.0	345.0	276.0	305.0	244.0	381.1	304.9	355.4	284.3	314.2	251.3
S4L1M-F	425.0	340.0	395.0	316.0	345.0	276.0	437.8	350.2	406.9	325.5	355.4	284.3
HCM534C	500.0	400.0	460.0	368.0	400.0	320.0	515.0	412.0	473.8	379.0	412.0	329.6
HCM534D	570.0	456.0	531.0	424.8	465.0	372.0	587.1	469.7	546.9	437.5	479.0	383.2
HCM534E	638.0	510.4	590.0	472.0	510.0	408.0	657.1	525.7	607.7	486.2	525.3	420.2
HCM534F	725.0	580.0	663.0	530.4	582.0	465.6	746.8	597.4	682.9	546.3	599.5	479.6
HCM634G	875.0	700.0	819.0	655.2	712.0	569.6	901.3	721.0	843.6	674.9	733.4	586.7
HCM634H	931.0	744.8	863.0	690.4	750.0	600.0	958.9	767.1	888.9	711.1	772.5	618.0
HCM634J	1150.0	920.0	1063.0	850.4	925.0	740.0	1184.5	947.6	1094.9	875.9	952.8	762.2
HCM634K	1275.0	1020.0	1181.0	944.8	1010.0	808.0	1313.3	1050.6	1216.4	973.1	1040.3	832.2
PM734A 1	N/A	N/A	1170.0	936.0	1095.0	876.0	N/A	N/A	1205.1	964.1	1127.9	902.3
PM734B 1	N/A	N/A	1280.0	1024.0	1215.0	972.0	N/A	N/A	1318.4	1054.7	1251.5	1001.2
PM734C 1	N/A	N/A	1540.0	1232.0	1360.0	1088.0	N/A	N/A	1586.2	1269.0	1400.8	1120.6
PM734D 1	N/A	N/A	1645.0	1316.0	1450.0	1160.0	N/A	N/A	1694.4	1355.5	1493.5	1194.8
PM734E 1	N/A	N/A	1875.0	1500.0	1655.0	1324.0	N/A	N/A	1931.3	1545.0	1704.7	1363.7
PM734F 1	N/A	N/A	2120.0	1696.0	1870.0	1496.0	N/A	N/A	2183.6	1746.9	1926.1	1540.9
PM734G 1	N/A	N/A	2245.0	1796.0	1980.0	1584.0	N/A	N/A	2312.4	1849.9	2039.4	1631.5
P80 LVSM804S 1	2737.0	2189.6	2488.0	1990.4	2130.0	1704.0	2819.1	2255.3	2562.6	2050.1	2193.9	1755.1
P80 LVSM804W 1	3645.0	2916.0	3314.0	2651.2	2837.0	2269.6	3754.4	3003.5	3413.4	2730.7	2922.1	2337.7
P80 LVSM804X 1	3928.0	3142.4	3571.0	2856.8	3058.0	2446.4	4045.8	3236.7	3678.1	2942.5	3149.7	2519.8

1. Star connection only



4 POLE Three Phase



Star 660V-690V

Parallel Star 330V-345V

Delta 380V-400V

60Hz/1800rpm

0.8 Power Factor

Winding 27/28	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
UCM274E	140.0	112.0	125.0	100.0	110.0	88.0	144.2	115.4	128.8	103.0	113.3	90.6
UCM274H	223.0	178.4	202.0	161.6	178.0	142.4	229.7	183.8	208.1	166.4	183.3	146.7
S4L1M-C	290.0	232.0	265.0	212.0	230.0	184.0	298.7	239.0	273.0	218.4	236.9	189.5
S4L1M-D	315.0	252.0	285.0	228.0	255.0	204.0	324.5	259.6	293.6	234.8	262.7	210.1
S4L1M-E	360.0	288.0	320.0	256.0	290.0	232.0	370.8	296.6	329.6	263.7	298.7	239.0
S4L1M-F	440.0	352.0	400.0	320.0	350.0	280.0	453.2	362.6	412.0	329.6	360.5	288.4
HCM534C	510.0	408.0	460.0	368.0	406.0	324.8	525.3	420.2	473.8	379.0	418.2	334.5
HCM534D	556.0	444.8	502.0	401.6	443.0	354.4	572.7	458.1	517.1	413.6	456.3	365.0
HCM534E	672.0	537.6	606.0	484.8	535.0	428.0	692.2	553.7	624.2	499.3	551.1	440.8
HCM534F	695.0	556.0	627.0	501.6	554.0	443.2	715.9	572.7	645.8	516.6	570.6	456.5
HCM634G	885.0	708.0	800.0	640.0	705.0	564.0	911.6	729.2	824.0	659.2	726.2	580.9
PM734A 1	N/A	N/A	1145.0	916.0	1010.0	808.0	N/A	N/A	1179.4	943.5	1040.3	832.2
HCM634K	1347.0	1078.0	1218.0	974.4	1075.0	860.0	1387.0	1110.0	1254.5	1003.6	1107.3	885.8
PM734B 1	N/A	N/A	1270.0	1016.0	1125.0	900.0	N/A	N/A	1308.1	1046.5	1158.8	927.0
PM734C 1	N/A	N/A	1500.0	1200.0	1325.0	1060.0	N/A	N/A	1545.0	1236.0	1364.8	1091.8
PM734D 1	N/A	N/A	1580.0	1264.0	1395.0	1116.0	N/A	N/A	1627.4	1301.9	1436.9	1149.5
PM734E 1	N/A	N/A	1675.0	1340.0	1475.0	1180.0	N/A	N/A	1725.3	1380.2	1519.3	1215.4
PM734F 1	N/A	N/A	1925.0	1540.0	1700.0	1360.0	N/A	N/A	1982.8	1586.2	1751.0	1400.8

1. Star connection only



6 POLE Three Phase



Star 380V-440V **50Hz/1000rpm**
Delta 220V-254V **0.8 Power Factor**

Winding 312	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM636G	250.0	200.0	250.0	200.0	220.0	176.0	257.5	206.0	257.5	206.0	226.6	181.3
HCM636H	330.0	264.0	330.0	264.0	290.0	232.0	339.9	271.9	339.9	271.9	298.7	239.0
HCM636J	400.0	320.0	400.0	320.0	350.0	280.0	412.0	329.6	412.0	329.6	360.5	288.4
HCM634K	505.0	404.0	505.0	404.0	440.0	352.0	520.2	416.1	520.2	416.1	453.2	362.6
PM736B 1	525.0	420.0	500.0	400.0	480.0	384.0	540.8	432.6	515.0	412.0	494.4	395.5
PM736D 1	655.0	524.0	655.0	524.0	630.0	504.0	674.7	539.7	674.7	539.7	648.9	519.1
PM736F 1	900.0	720.0	850.0	680.0	800.0	640.0	927.0	741.6	875.5	700.4	824.0	659.2

Star 416V **60Hz/1200rpm**
Delta 240V **0.8 Power Factor**

Winding 312	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM636G	294.0	235.2	294.0	235.2	250.0	200.0	302.8	242.3	302.8	242.3	257.5	206.0
HCM636H	393.0	314.4	388.0	310.4	330.0	264.0	404.8	323.8	399.6	319.7	339.9	271.9
HCM636J	475.0	380.0	475.0	380.0	405.0	324.0	489.3	391.4	489.3	391.4	417.2	333.7
HCM634K	594.0	475.2	594.0	475.2	510.0	408.0	611.8	489.5	611.8	489.5	525.3	420.2
PM736B 1	710.0	568.0	710.0	568.0	600.0	480.0	731.3	585.0	731.3	585.0	618.0	494.4
PM736D 1	920.0	736.0	920.0	736.0	800.0	640.0	947.6	758.1	947.6	758.1	824.0	659.2
PM736F 1	1240.0	992.0	1135.0	908.0	985.0	788.0	1277.2	1021.8	1169.1	935.2	1014.6	811.6

1. Star connection only



6 POLE Three Phase



Star 440V-480V **60Hz/1200rpm**
Delta 254V-277V **0.8 Power Factor**

Winding 312	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM636G	313.0	250.4	313.0	250.4	270.0	216.0	322.4	257.9	322.4	257.9	278.1	222.5
HCM636H	415.0	332.0	413.0	330.4	350.0	280.0	427.5	342.0	425.4	340.3	360.5	288.4
HCM636J	500.0	400.0	500.0	400.0	430.0	344.0	515.0	412.0	515.0	412.0	442.9	354.3
HCM634K	625.0	500.0	625.0	500.0	535.0	428.0	643.8	515.0	643.8	515.0	551.1	440.8
PM736B 1	750.0	600.0	750.0	600.0	650.0	520.0	772.5	618.0	772.5	618.0	669.5	535.6
PM736D 1	975.0	780.0	975.0	780.0	845.0	676.0	1004.3	803.4	1004.3	803.4	870.4	696.3
PM736F 1	1240.0	992.0	1200.0	960.0	1040.0	832.0	1277.2	1021.8	1236.0	988.8	1071.2	857.0

Star 600V **60Hz/1200rpm**
Delta 346V **0.8 Power Factor**

Winding 07	TEMPERATURE RISE											
	50 °C Ambient						45 °C Ambient					
	Continuous 110/50 (H)		Continuous 90/50 (F)		Continuous 70/50 (B)		Continuous 110/45 (H)		Continuous 90/45 (F)		Continuous 70/45 (B)	
Model	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW	kVA	kW
HCM636G	N/A	N/A	313.0	250.4	270.0	216.0	N/A	N/A	322.4	257.9	278.1	222.5
HCM636H	N/A	N/A	413.0	330.4	350.0	280.0	N/A	N/A	425.4	340.3	360.5	288.4
HCM636J	N/A	N/A	500.0	400.0	430.0	344.0	N/A	N/A	515.0	412.0	442.9	354.3
HCM634K	N/A	N/A	625.0	500.0	535.0	428.0	N/A	N/A	643.8	515.0	551.1	440.8
PM736B 1	750.0	600.0	750.0	600.0	650.0	520.0	772.5	618.0	772.5	618.0	669.5	535.6
PM736D 1	975.0	780.0	975.0	780.0	845.0	676.0	1004.3	803.4	1004.3	803.4	870.4	696.3
PM736F 1	1200.0	960.0	1200.0	960.0	1040.0	832.0	1236.0	988.8	1236.0	988.8	1071.2	857.0

1. Star connection only

Application Engineering

Application Engineering generally owns the technical relationship with our customers and therefore is the first point of contact. The team's aim is to 'Delight our Customers' by providing a world class customer service by striving to understand customer needs and best matched products to suit each individual customer application.

Application teams are based in the US, Europe, India and China, sharing a common email enquiry database. Due to this, there are always Application Engineers available to support customer requirements and deliver the best technical product selection that STAMFORD and AvK branded products can offer.

Key deliverables include:

- Provide technical data and support for STAMFORD and AvK products
 - Technical data, drawings, application guidance notes
 - Size alternators for different load applications -motors, lighting, non-linear (UPS, VSD, SCR)
 - Advise and discuss all aspects of alternator application, control and installation

- Discuss needs, resolve issues and review specification
 - Provide qualified technical recommendations to ensure fit for purpose products
 - Assist with design and development of complete generating set systems
- Provide bespoke application engineering training to suit customer requirements
 - Application sizing
 - Alternator selection considerations
 - Changing market requirements such as grid codes or marine standards
- Provide Voice of Customer and application field knowledge into new product introduction or product improvement programs.

Application Engineering support customers as they venture into new market segments and integrate product designs to ensure superior fit to market. The team work closely with the Application Validation Team to validate and fully understand the operating boundaries of our products to ensure the right machines meet the harsh, increasingly challenging environments in which our customers operate in.



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