1. High-output three-phase RM24 stator (Lucas part no. is 47244.)
2. Welded rotor which was fitted to the late Norton Commandos (Lucas part no. 54201143 or 54212298)

Suitable Regulator or:

3. Shindengen SH 232-12
4. Shindengen SH 530-12

The RM19 stator (Lucas part no. 47204)
can be used for 6v and 12v systems. It has three cables which does not mean it is a three-phase stator. For 6v usage the wires are connected up for charge control via switching by the lighting switch. By connecting the green/yellow
wire to the green/black, leaving the common green/white wire alone it is converted to a output for 12 volt.

RM 21 (Lucas part no. 47205)
The rectifier and Zener Diode usually work well with this system though a solid state rectifier would be the better alternative.

The RM21 alternator will deliver 100 W or maybe up to 120 W with a sound modern rotor, at 3,000 rpm. A rotor in poor condition will reduce this output drastically.

47239
MkIII
type

The RM23 alternator
has a higher output, 180 W at 7,000 rpm and it still gives a very useful gain at low town speeds of 140 W at 3,000 rpm two zener diodes must be used, and the rectifier connections altered to accommodate this incorporates a half-wave rectifier (Lucas part no. 49181), the normal rectifier or an encapsulated alternative can be used.

High-output three-phase RM24 stator (Lucas part no. is 47244.)
The latest stator from Lucas is the three phase RM24. the high-output type is available in component form The high-output version gives 155W at 3,000 rpm and 180W at 7,000
rpm. It has a different charge control and rectifier from other types. In this case, there are a pair of zener diodes connected in parallel. The zeners must be a matched pair and the lengts of wiring
to them and its type is important.

Power Consumption
If you have a 12 volt system then the rectifier will absorb in the order of 12W, the ignition (whether electronic or points) about 20W
side, rear and instrument lights 15W,
headlight 45 or 60W

Regulators
If you need more power, then you should fit the RM24 high-output stator and fit the Shindengen
regulator (an electronic regulator does the job of the rectifier and the zeners, e.g. it rectifiers and regulates the voltage).

It is advisable to fit the welded rotor which was fitted to the late Norton Commandos (Lucas part no. 54201143 or 54212298) since the inner
sleeve of the earlier rotors sometimes get loose and seize with the stator and cause heavy engine breakdowns.

the Mity Max regulator, a huge and heavy thing which i fitted behind the gearbox. Measurements: l=80mm, w=72mm, h= 38mm,
weight: 350 grams, encapsulated. Wiring to either a positive or negative earth.

encapsulted regulators from Boyer, but they are huge, heavy and ugly. Measurements l=92mm (mountings in mild steel) l=54mm (box), w=92mm, h=73mm, weight: 500 grams. Wiring
to either a positive or negative earth.

Regulators which fit the RM24 alternator.

The first one is fitted to a Honda 400N, 400T and CX 500. Its type is Shindengen SH 232-12. Its three yellow wires go to the three alternator cables, the red/white cable is positive and
the black one is negative, e.g. that it can be used either for neg. or pos. ground.

The other one is from a Kawasaki KZ 750 E1 , H1 and from a Z550. Its type is Shindengen SH 530-12. The three yellow cables go to the
alternator, red/white and brown cable are positive (red/white to battery positive terminal, brown cable to wiring loom, positive, e.g. that these two cables should be connected) and black cable is negative, e.g. that this regulator, too, can be used either for neg. or pos. ground.

These regulators from Shindengen are tiny, neat, encapsulated in a small housing with fins (2/3 in size of a cigarette box) and IMHO the
best ones for RM24 alternators and Brit Bikes. You can get them at low prices (about 100 Deutsch-Marks = 65 US$) at autojumbles or used parts supplies for japanese bikes. They work well, are absolutely reliable and I will never use any other.

You need not to switch to electronic regulators of you single phase unit is OK. The zener diode and a solid state regulator work well as long as the rotor is in good shape.

The green/white, green/yellow, and green/black wiring colours were originally initiated to identify the difference between the wires, but when the three-phase alternator appeared, Lucas in their wisdom stuck to the same colours, even though thre is no need for identification with this unit: three wired of the same colour would have saved some confusion. So if you fit an electronic regulator, connect these three wires to the three yellow ones from the electronic regulator.