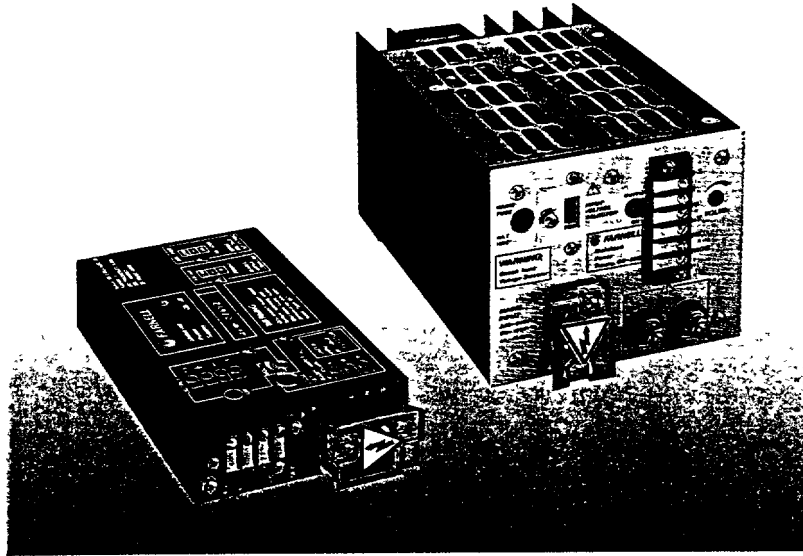


330-120

G Series

30 to 120 Watt Range



SINGLE OUTPUT

F 20

MODELS AVAILABLE

Model Number	Output Voltage	Adjustment Range	Output Current	Range
G06-5M	6V	4 - 6V	5A	G30
G06-10S	6V	4 - 6V	10A	G60
G06-20S	6V	4 - 6V	20A	G120
G12-2.5M	12V	8 - 13.2V	2.5A	G30
G12-05S	12V	8 - 12.6V	5A	G60
G12-10S	12V	8 - 12.6V	10A	G120
G15-02M	15V	10 - 16.5V	2A	G30
G15-08S	15V	10 - 15.75V	8A	G120
G24-1.4M	24V	16 - 26.4V	1.4A	G30
G24-2.5S	24V	16 - 25.2V	2.5A	G60
G24-05S	24V	16 - 25.2V	5A	G120

INPUT SPECIFICATION

Input Voltage 92 - 132V a.c. on 115V tap. 176 - 264V a.c. on 230V tap

Frequency 45 - 440Hz.

Supply Type Single phase TN-S systems (as defined in IEC364) i.e. systems with a separate earth conductor which is directly connected to the neutral conductor at the source

Efficiency Minimum 70% when loaded to maximum rated output power.

OUTPUT SPECIFICATION

Voltage Nominal output voltages and adjustment ranges are shown in the table of models above.

Current Recommended minimum operating current and maximum continuous current ratings (I_{MAX}) are shown in the table of models above. All maximum current ratings are applicable up to 55°C. From 55°C to 70°C derate linearly to 50% I_{MAX} at 70°C. All units require free air convection cooling

Combined Regulation

An input variation of from 198V to 264V or from 103V to 132V combined with a load change of from 0 to I_{MAX} causes a maximum output voltage variation of 0.1% of nominal

Ripple and Noise

With the output loaded to I_{MAX} the differential noise voltage over the frequency range 10Hz - 30MHz does not exceed 50mV pk-pk, 10mV r.m.s

PROTECTION

Hold Up

All units have sufficient energy storage to ride through a missing mains cycle when supplying full rated output power. At low mains input, 198V or 103V and output voltage at 6V or at nominal +5%, hold up >28ms.

Output Overvoltage

The output is protected against overvoltage. Unit shutdown will occur at approximately 120% of nominal.

Output Overcurrent

All units are protected against output overload.

AUXILIARY FUNCTIONS

Remote Sense	Available on all units
Parallel Operation	All units shown are suitable for operation in parallel with other units of the same model number
Series Operation	Units may be connected in series to provide higher output voltages
External Voltage Programming	The output voltage of G60 and G120 range units is programmable by an external resistor.
External Inhibit	The output current of G60 and G120 range units may be inhibited by a relay contact.
Indicators	A LED output present indicator is provided.

ISOLATION

Primary to Secondary	Complete units are tested to 1.5kV a.c. r.m.s. between input and output, with all output terminals connected together and connected to earth.
Secondary to Earth	Units are tested to 500V d.c. from output to earth, with all output terminals connected together

ELECTROMAGNETIC COMPATIBILITY

Exported Noise	All units meet the requirements of BS800, VDE0875 Curve N, CISPR (II) Curve N.
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MECHANICAL SPECIFICATION

Mechanical Format	All units are supplied fully enclosed as standard
Ventilation and Cooling	G30 range require free air flow around the unit. G60 and G120 units have ventilated faces top and bottom which require free airflow. In addition the G120 units have a heatsink on the rear face of the enclosure which must also have adequate airflow.
Mounting Orientation	G30 units may be mounted in any orientation. G60 and G120 units may be mounted in the orientation shown on the front elevation on the outline drawing, or inverted.

ENVIRONMENTAL CONDITIONS

Operating Temperature	-10 to 70°C. See current ratings in output specifications for any deratings required.
Operating Humidity	0 to 95% R.H. non-condensing.

INTERNATIONAL SAFETY STANDARDS

The following units have been tested by BABT and have been approved as being compliant with BS6301, G6-10S, G6-20S, G12-10S, G15-8S

More detailed information is available on these units from your local sales office or agent. Please refer to Section L at the end of your catalogue for your local contact.

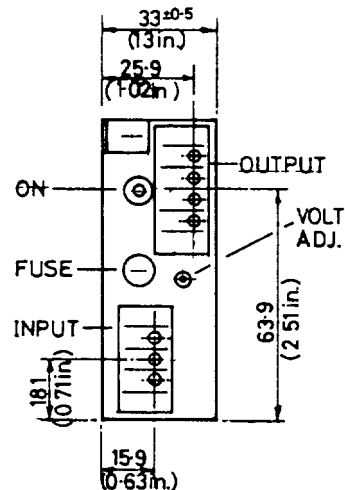
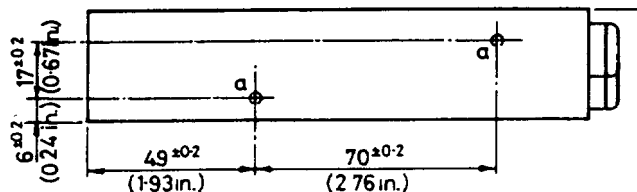
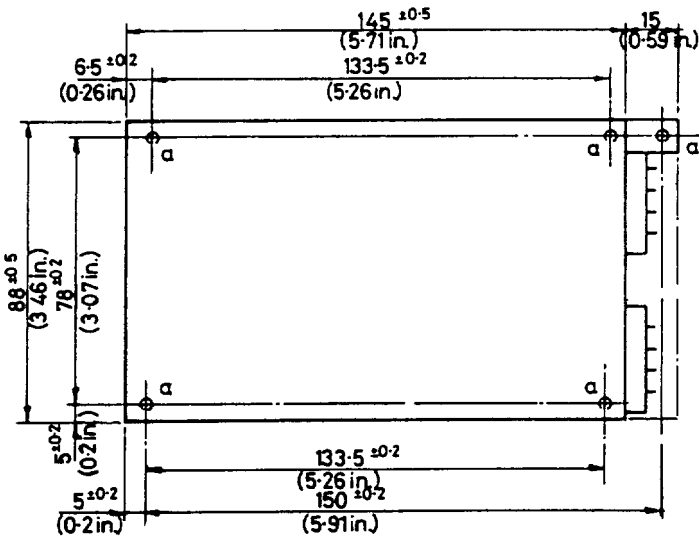
ORDERING INFORMATION

The order code is simply the model number preceded by the source code, '13'

SINGLE OUTPUT

G30 RANGE OUTLINE DRAWING

All dimensions are nominal and are given in mm (inches)



External Dimensions and Mass

145 + 15(5.71 + 0.59) x 88(3.46) x 33(1.30).
0.75kg (1.65lb)

Fixings

6 x M3 ISO standard threaded inserts are provided and are marked 'a' on the outline drawing

Connectors

The following connectors are provided on the power supply

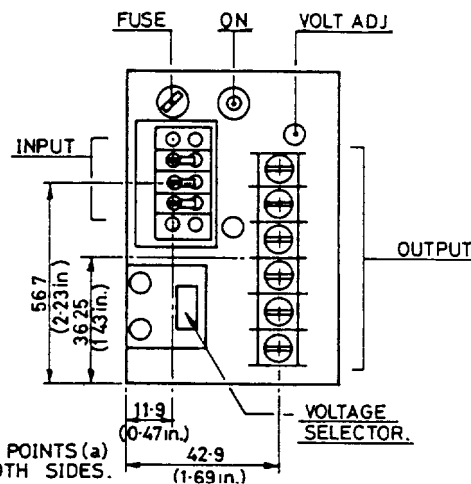
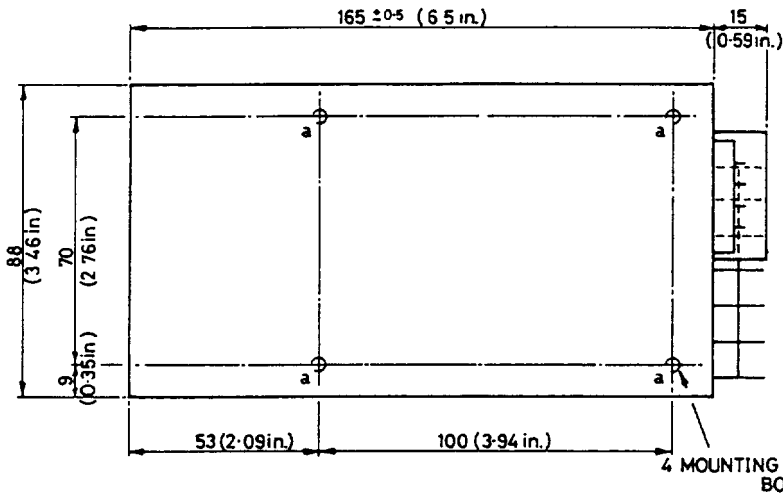
Input 3 x 6BA terminal screws

Output 4 x 6BA terminal screws

Input Voltage Selector Provided as a switch on rear face of unit

G60 RANGE OUTLINE DRAWING

All dimensions are nominal and are given in mm (inches)



External Dimensions and Mass

165 + 15(6.50 + 0.59) x 88(3.46) x 60(2.36) 1.2kg (2.65lb)

Fixings

8 x M3 ISO standard threaded inserts are provided and are marked 'a' on the outline drawing,

Connectors

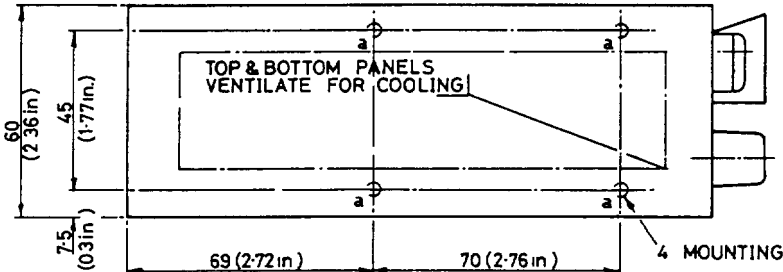
The following connectors are provided on the power supply

Input 3 x 6BA terminal screws

Output 6 x 6-32 UNC terminal screws

Input Voltage Selector Provided as a switch on unit front panel

Auxiliary functions Included on output connector



External Dimensions and Mass

165 + 15(6.50 + 0.59) x 88(3.46) x 60(2.36) 1.2kg (2.65lb)

Fixings

8 x M3 ISO standard threaded inserts are provided and are marked 'a' on the outline drawing,

Connectors

The following connectors are provided on the power supply

Input 3 x 6BA terminal screws

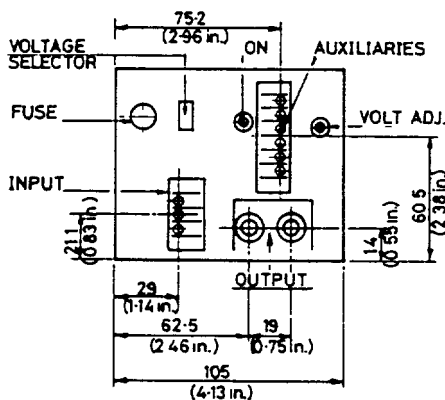
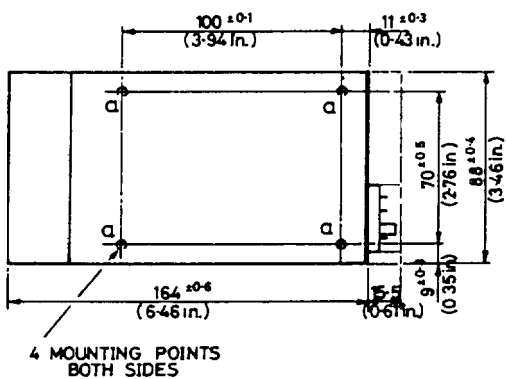
Output 6 x 6-32 UNC terminal screws

Input Voltage Selector Provided as a switch on unit front panel

Auxiliary functions Included on output connector

G120 RANGE OUTLINE DRAWING

All dimensions are nominal and are given in mm (inches)



External Dimensions and Mass

165 + 15(6.50 + 0.59) x 88(3.46) x 105(4.13) 1.8kg (3.97lb)

Fixings

12 x M3 ISO standard threaded inserts are provided and are marked 'a' on the outline drawing

Connectors

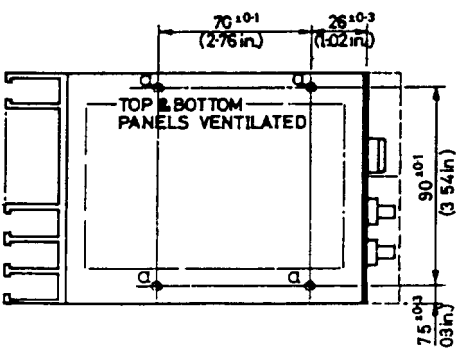
The following connectors are provided on the power supply

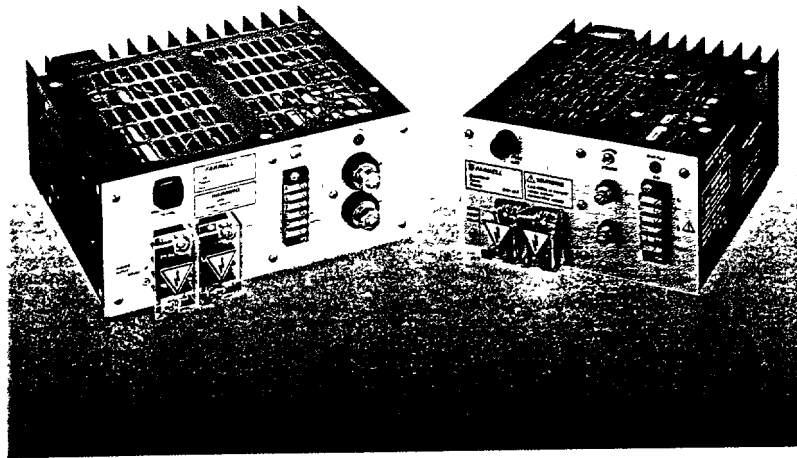
Input 3 x 6BA terminal screws

Output 2 x M5 ISO standard studs

Input Voltage Selector Provided as a switch on unit front panel

Auxiliary Functions 6 x 6BA terminal screws





SINGLE OUTPUT

B
23

MODELS AVAILABLE

Model Number	Output	Adjustment Voltage	Output Range	Range Current
G06-40A	6V	4 – 6V	40A	G240
G06-60A	6V	4 – 6V	60A	G360
G12-30A	12V	8 – 12.6V	30A	G360
G15-24A	15V	10 – 15.75V	24A	G360
G24-10A	24V	16 – 25.2V	10A	G240
G24-15A	24V	16 – 25.2V	15A	G360
G30-08A	30V	20 – 31.5V	8A	G240
G30-12A	30V	20 – 31.5V	12A	G360
G48-05A	48V	32 – 50.4V	5A	G240
G48-75A	48V	32 – 50.4V	7.5A	G360

INPUT SPECIFICATION

Input Voltage 92 – 132V a.c. on 115V tap 176 – 264V a.c. on 230V tap

Frequency 45 – 440Hz

Supply Type Single phase TN-S systems (as defined in IEC364) i.e. systems with a separate earth conductor which is directly connected to the neutral conductor at the source

Efficiency Minimum 70% when loaded to maximum rated output power

OUTPUT SPECIFICATION

Voltage Nominal output voltages and adjustment ranges are shown in the table of models above.

Current

Recommended maximum continuous operating current ratings (I_{MAX}) are shown in the table of models above. All maximum current ratings are applicable up to 55°C. From 55°C to 70°C derate current linearly from I_{MAX} at 55°C to 50% I_{MAX} at 70°C. All units require free air convection cooling. See outline drawing and mechanical specification for ventilation requirements.

Combined Regulation

An input variation of from 198V to 264V or from 103V to 132V and an output load variation of from 0 to 100% I_{MAX} causes a maximum output voltage variation of 0.1% of nominal.

Ripple and Noise

With the output loaded to I_{MAX} the differential noise voltage over the frequency range 10Hz – 30MHz does not exceed 50mV pk-pk, 10mV r.m.s. on outputs up to 24V, 75mV pk-pk on outputs from 30V upwards.

PROTECTION

- Hold Up** All units have sufficient energy storage to ride through a missing mains cycle when supplying full rated output power. At low mains input, 198V or 103V and output at 6V or at nominal +5%, hold up >28ms.
- Output Overvoltage** The output is protected against overvoltage. Unit shutdown will occur at approximately 120% of nominal.
- Output Overcurrent** All units are protected against output overload.

AUXILIARY FUNCTIONS

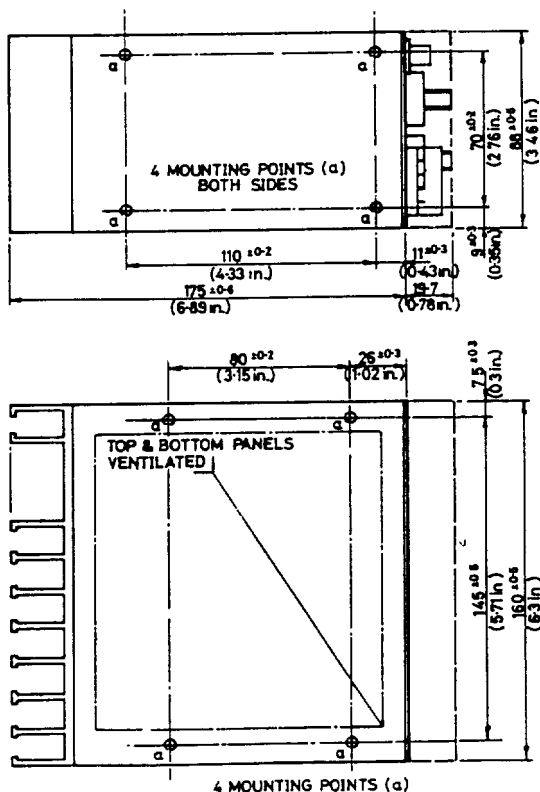
- Remote Sense** Available on all units.
- Parallel Operation** All units shown are suitable for operation in parallel with other units of the same model number.
- Series Operation** Units may be connected in series to provide higher output voltages.
- External Voltage Programming** The output voltage of all units is programmable by an external resistor.
- External Inhibit** The output current of all units may be inhibited by a relay contact.
- Indicators** A LED output present indicator is provided.

ISOLATION

- Primary to Secondary** Complete units are tested to 1 kV a.c. r.m.s. between input and output, with all output terminals connected together and connected to earth.
- Secondary to Earth** Units are tested to 500V d.c. from output to earth, with all output terminals connected together.

G240 RANGE OUTLINE DRAWING

All dimensions are nominal and are given in mm (inches).



ELECTROMAGNETIC COMPATIBILITY

- Exported Noise** All units meet the requirements of BS800, VDE0875 Curve N, CISPR (Publication 2) Curve N.

MECHANICAL SPECIFICATION

- Mechanical Format** All units are supplied fully enclosed as standard.
- Mounting Orientation** Units may be mounted in the orientation shown on the front elevation on the outline drawing or inverted.
- Ventilation and Cooling** The top and bottom faces of the units are ventilated and require free airflow. The heatsink area at the rear of the unit also requires free air flow.

ENVIRONMENTAL CONDITIONS

- Operating Temperature** -10 to 70°C. See current ratings in output specifications for any deratings required.
- Operating Humidity** 0 to 95% R.H. non-condensing.

INTERNATIONAL SAFETY STANDARDS

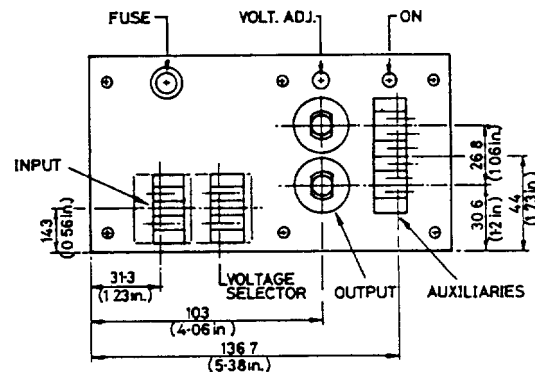
The following units have been tested by BABT and have been approved as being compliant with BS6301.

G06-60A; G24-15A, G30-08A; G30-12A, G48-05A, G48-7.5A.

More detailed information is available on these units from your local sales office or agent. Please refer to Section L at the end of your catalogue for your local contact.

ORDERING INFORMATION

The order code simply requires the model number to be prefixed by the source code '13'.



External Dimensions and Mass

175 + 19.7 (6.89 + 0.78) x 160 (6.30) x 88 (3.46).
3.0kg (6.6lb)

Fixings

8 x M3 ISO standard threaded inserts are provided and are marked 'a' on the outline drawing.

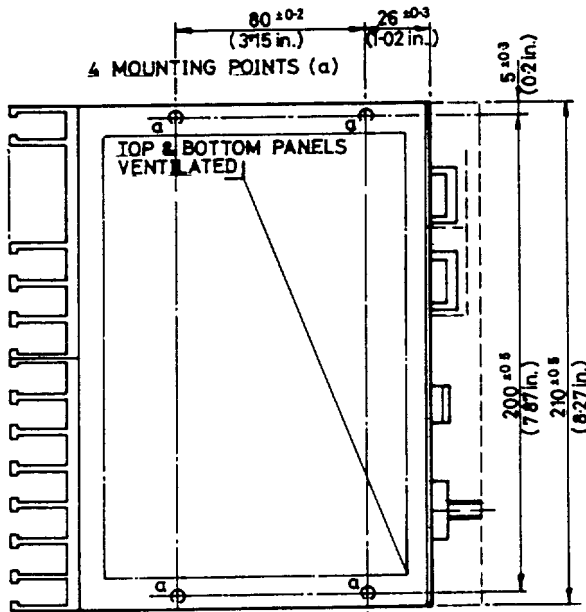
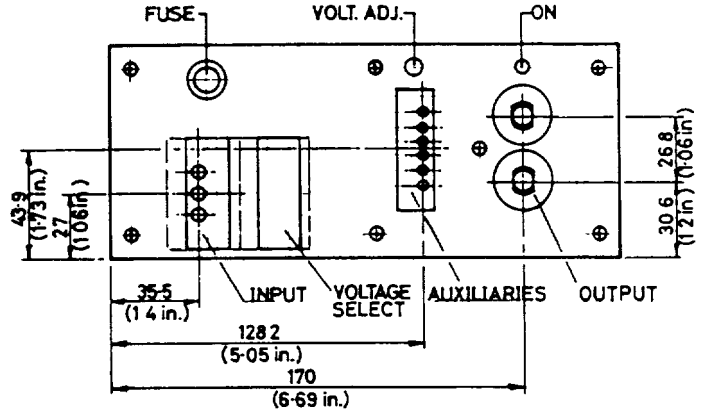
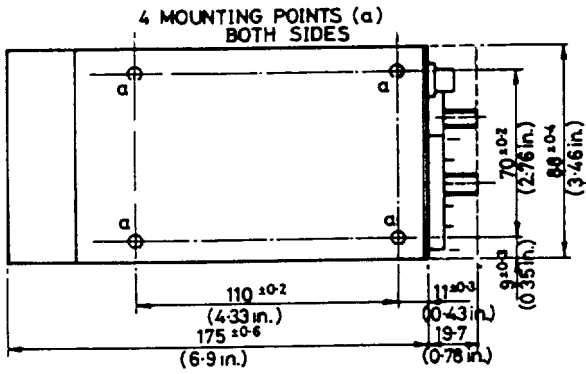
Connectors

The following connectors are provided on the power supply:

- Input 3 x 6BA terminal screws.
- Output 2 x M8 ISO standard studs on G0640A
2 x M5 ISO standard studs on other models
- Input Voltage Selector 3 x 6BA terminal screws.
- Auxiliary Functions 6 x 6BA terminal screws

G360 RANGE OUTLINE DRAWING

All dimensions are nominal and are given in mm (inches)



External Dimensions and Mass

175 + 19.7(6.89 + 0.78) x 210(8.27) x 88(3.46)
3.75kg (8.3lb)

Fixings

8 x M3 ISO standard threaded inserts are provided and are marked 'a' on the outline drawing

Connectors

The following connectors are provided on the power supply

- Input 3 x 4BA terminal screws
- Output 2 x M8 ISO standard studs
- Input Voltage Selector 3 x 4BA terminal screws
- Auxiliary Functions 6 x 6BA terminal screws