

# GlobeHeat Datasheet : Product Code GHT 6201



## Product Description: Quad 16mm<sup>2</sup> Cable Set, 30m Long

Consists of four lengths of heat and oil resistant flame retardant (HOFR), double insulated copper cable. Three of the cables are made of black copper cable and one from orange copper cable. Fitted with one 5 pin 415V plug to three 60A female and one 300A male Twistlock connectors.

## Applications

For use with mains units GHT 8003, GHT 8111 and GHT 8119 to supply three phase, 415V power to 4-bank channel heaters and ceramic pad mains heaters.

Specification	
Cable	16mm <sup>2</sup> heat and oil resistant flame retardant (HOFR), double insulated copper cable
Separator	PETP tape separator (or paper)
Isolation	EPR Insulations to BS7655
Current rating	135A
Voltage rating	100V (450V for non-welding applications if suitably protected from mechanical damage)
Temperature rating	-40°C to +85°C
Minimum Bending Radius	6 x overall diameter
Standard	BS638 Part 4
Weight	27kg

## Duty Cycle and Current Carrying Capacity

The current carrying capacity of a welding cable depends on the length of the duty cycle. The duty cycle is the length of time during which a loaded current passes through the cable over an operation period of five minutes, expressed as a percentage of that period. For example, if the current is flowing for the full 5 minutes the duty cycle is 100% and if the current is flowing for one minute the duty cycle is 20%. As conductor temperature carries according to the time in use as well as current, ratings shown are given as a guide.

The permissible loading of the cable for duty cycles other than those shown in the table can be calculated using the following formula:-

$$I = I_{100} \sqrt{F}$$

Where:

I: is the maximum permissible loading current for the required duty cycle

I<sub>100</sub>: is the maximum permissible loading current for a duty cycle of 100%

F: is the required duty cycle calculated as a percentage of the 5 minute operational period

Typical guidance values for different welding processes are as follows:

- Fully automatic welding 100%
- Semi Automatic Welding 65 – 85%
- Manual Welding 30 – 60%
- Very infrequent or occasional welding 20%

## Loading Current Values (A)

Nominal Cross Sectional Area mm <sup>2</sup>	100%	85%	60%	30%
16	135	145	175	230