TB0408 Stuga PCB Design Normalisation

This document records the result of the process carried out today to “normalise” the design and part notation for the PCBs that Stuga outsource. This follows confusion of poor naming and a lack of part numbers.

Contents

Technical Bulletin

TB Number:	408-2
Originator:	Gareth Green
Machine:	All
Date:	27/06/18
Circulate to:	Stores; Service; Suppliers
Title:	Stuga PCB Design Normalisation
Version 2	Error made with C0000436 card, should have been numbered C0000269. Now corrected C0000436 is a card in its own right, but rarely used.

Summary

This document records the result of the process carried out today to “normalise” the design and part notation for the PCBs that Stuga outsource. This follows confusion of poor naming and a lack of part numbers.

- All PCB assemblies (BOM) have been renumbered (if necessary) to start with a ‘C’
- All PCB assemblies (BOM) renamed to start “PCB Assembly” and renamed to make more sense and to remove mistakes and confusion
- All PCB board artwork renumbered to have the same number as the parent assembly with “–PCB” on the end
- All PCB board artwork renamed to start “PCB:” and the same name as the assembly

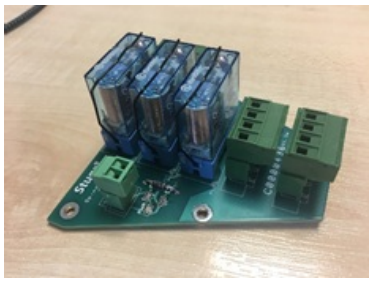
C0000269 Spindle Control ZX Mk1-3

- This board replaces the older C0269 that was sourced from Smartdrive before they went out of business.

C0000436 Spindle Control ZX Mk4

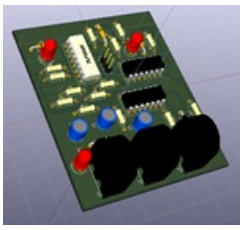
- There is more confusion generated by another spindle card with taller relays, labelled C0000436.

· This card is used on ZX4 Mk4 machines with EtherCAT system and was later replaced by a simple Schrack relay and terminal blocks



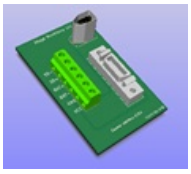
C0001137 3 Phase Current Monitor

· Used to monitor the current output on 3 phases and provide 3 channel voltage output
· This board will not be required in future when the new inverter is implemented



C0001163 RS Automation Encoder Interface

· Used to convert the bare ended cable wires into a socket for a standard Firewire lead for final connection to encoder input on
RS Automation Drive.
· 25 way high density D socket was a trial to maybe utilise the connectors already in existence on older machines, but in practice it is easier to cut the plug off and use bare ended cores in the screw terminals, therefore this connector is not fitted
· Only needs the firewire and the 6 way Screw termination



C0001206 Smartdrive Replacement Breakout

· This board replaces the older C0000157 that was sourced from Smartdrive before they went out of business.
· Used to breakout the RS Automation and Samsung drive 50 way connector to the drive connections
· This was previously numbered
o R0010304 for the assembly
o E0001206 for the PCB

C0001180 RS Automation All-in-one Interface

· This is a new design to replace C0001163 and C0001206 along with a 50way-50 way lead into one direct plug in card
· This saves on components, mounting space and wiring
· As of June 2018, main 50 way connector is on August delivery, so full replacement project on hold