



Engineering Change Notice

ECN #: RT3D-23

Original Part Numbers:	CM1-C-23L20C CM1-C-23S30C CM1-C-17L30C CM1-C-17S30C CM1-C-11L30C CM1-C-11S30C	New Part Numbers:	CM1-C-23L20D/E CM1-C-23S30D/E CM1-C-17L30D/E CM1-C-17S30D/E CM1-C-11L30D/E CM1-C-11S30D/E
Date of Notice:	13 th March, 2019		
Description of Change:			
<p>The micro-controller on the CM1 Cool Muscle line of motors has been updated. The original micro-controller UPD70F3025A (V853) has been replaced with the UPD70F3454 (V850/IG3).</p> <p>The firmware has been updated to be compatible with the new UPD70F3454 (V850/IG3) micro-controller.</p> <p>The changes were subjected to full backwards compatibility validation testing as per Myostat's ISO 9001:2015 engineering quality standards.</p> <p>The following tests were conducted</p> <ol style="list-style-type: none"> 1. Physical dimensions 2. Communication with all existing interfaces 3. Multiple motor daisy chaining 4. Digital inputs 5. Analog input 6. Digital outputs 7. CML motor functions (parameters, logic and program banks, homing modes, input/output functions, etc) 8. Torque/Speed curves 9. Speed ripple and position accuracy 10. Operating temperature <p>The above set of tests are a brief overview of 178 validation tests completed. The complete validation test plan is available on request.</p>			
Reason for Change:			
The UPD70F3025A (V853) microcontroller was deemed end of life by Renesas Electronics.			
Engineering Approved	Mark McCann	Approved Date	March 13, 2019
Quality Management Approved	Chris Murray	Approved Date	March 13, 2019