

# TECHNICAL SPECIFICATION

## Heat Treatment Module (6 Output)

Stock Reference: 16050 for 50kVA, 16051 for 70kVA

Compliance with international heat treatment codes and standards requires equipment that can provide accurate control of the heat treatment specification parameters, including uniformity of temperature throughout the geometry of the work piece. As part of our commitment to continuing innovation, Stork Cooperheat's 50kVA and 70kVA Heat Treatment Modules include our unique 'Advantage 3' temperature programmer/controllers which ensure the required temperature uniformity within each control zone. The design of our equipment is based on over 50 years experience as a market leader in the field of heat treatment and has been developed to meet the real needs of the heat treatment engineering industry. Stork Cooperheat modules deliver :-

- Value for Money
- Versatility
- Ease of operation and maintenance
- Safety
- Fitness for purpose



### Features:

- Outputs per channel for both 30V or 60V heaters (40V and 80V output units also available)
- 'Advantage 3' operates in °C or °F
- Displays set point and work piece temperature
- LED shows 'power on' for each output channel
- Connector block provided for simple connection of primary supply cable
- Constructed from high-grade stainless steel giving excellent protection against corrosion, including marine offshore applications
- Core winding thermostats provide automatic protection against transformer coil overheating
- Primary over-current protection provided by a three-phase circuit breaker

### Benefits:

- Rapid return on investment
- Unique 'Advantage 3' programmer/controller linking features allow the operator to carry out up to 6 heat treatment cycles simultaneously
- Each 'Advantage 3' communicates with other controlling zones on the same heat treatment. This controls and limits the differential between each control zone within the work piece being heated
- Simple access to transformer tapping board and instruments for maintenance by means of a swing hinged front panel
- Safe voltages employed. Voltage to earth from any single output socket is 32.5V a.c.

50kVA Module	70kVA Module
<b>Transformer Core</b>	
<ul style="list-style-type: none"> <li>• Three phase, forced air cooled, class H, 50kVA</li> <li>• Primary winding connected in Delta</li> <li>• Secondary winding connected in Star</li> <li>• Auxiliary winding: 110V a.c. 3.3kVA single phase</li> </ul>	<ul style="list-style-type: none"> <li>• Three phase, forced air cooled, class H, 70kVA</li> <li>• Primary winding connected in Delta</li> <li>• Secondary winding connected in Star</li> <li>• Auxiliary winding: 110V a.c. 3.3kVA single phase</li> </ul>
<b>Primary Supply</b>	
<ul style="list-style-type: none"> <li>• Primary voltage: 380V, 415V, 440V</li> <li>• Primary current: 76A, 70A, 66A</li> <li>• Frequency: 50/60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>• Primary voltage: 380V, 415V, 440V</li> <li>• Primary current: 106A, 97A, 92A</li> <li>• Frequency: 50/60 Hz</li> </ul>
<b>Protection</b>	
<ul style="list-style-type: none"> <li>• Three phase 80A circuit breaker with shunt trip</li> <li>• Three primary core winding over temperature thermostats linked to circuit breaker shunt trip</li> </ul>	<ul style="list-style-type: none"> <li>• Three phase 125A circuit breaker with shunt trip</li> <li>• Three primary core winding over temperature thermostats linked to circuit breaker shunt trip</li> </ul>
<b>Secondary Outputs</b>	
<ul style="list-style-type: none"> <li>• Output: 32.5V – 0V – 32.5V (for 30V and 60V heating element operation)</li> <li>• Auxiliary outputs: Two 110V, 10A, 50/60Hz output sockets</li> <li>• Number of temperature controlled output channels: 6 channels</li> <li>• Maximum load per output channel: 8.1kW (e.g. three 60V, 2.7kW heating elements)</li> <li>• Maximum current per output channel: 135A</li> </ul>	<ul style="list-style-type: none"> <li>• Output: 32.5V – 0V – 32.5V (for 30V and 60V heating element operation)</li> <li>• Auxiliary outputs: Two 110V, 10A, 50/60Hz output sockets</li> <li>• Number of temperature controlled output channels: 6 channels</li> <li>• Maximum load per output channel: 10.8kW (e.g. four 60V, 2.7kW heating elements)</li> <li>• Maximum current per output channel: 180A</li> </ul>
<b>Construction</b>	
<ul style="list-style-type: none"> <li>• Case: 304 Stainless Steel case fitted with four 150mm nylon wheels</li> <li>• Weight: 330kg</li> <li>• Height: 110mm</li> <li>• Width: 680mm</li> <li>• Depth: 665mm</li> </ul>	<ul style="list-style-type: none"> <li>• Case: 304 Stainless Steel case fitted with four 150mm nylon wheels</li> <li>• Weight: 330kg</li> <li>• Height: 110mm</li> <li>• Width: 680mm</li> <li>• Depth: 665mm</li> </ul>
<b>Temperature Control</b>	
<ul style="list-style-type: none"> <li>• Case: Temperature measurement, display and control</li> <li>• Degrees Fahrenheit or Degrees Centigrade</li> <li>• Start temperature</li> <li>• Temperature ramp up and down in degrees per hour</li> <li>• Hold/soak temperature set point and hold/soak time period setting</li> </ul>	
<b>Switching</b>	
<ul style="list-style-type: none"> <li>• Six double pole, 180a, contractors with 110V a.c. coil</li> </ul>	

