MODULOC Control Systems

TM65 –WP Water Cooled and Air Purged Enclosure - MLS

MAIN FEATURES

- ***Robust Stainless Enclosure specifically built for mounting of MLS Laser Triangulation Meter in high ambient and high radiant heat area***
- ***Separate internal water cooled platform and water cooled radiator arrangement around three vertical faces of enclosure***
- ***Air Purge Nozzle with directional air flow chambers***
- ***Air Purging does not require dry clean air.***

Typical Applications:

- ***Mounting close to the hot mill line***
- ***Mounting beside Continuous Caster line***
- ***Mounting in High Ambient Steel Plant***

Description

The TM65-WP Enclosure is specifically built to enable the MLS Laser Triangulation Meters (LTM's) to be mounted close to hot product where both radiant heat and ambient heat level is high. This is accomplished by the insertion of water cooled radiators inside the stainless enclosure. Namely, the LTM is mounted on a separately water cooled internal platform to isolate it from hot metalwork or high ambient as well as the insertion water coolant radiators both in the front face and adjacent sides of the enclosure to isolate the LTM form radiant heat passing in front of the enclosure. Insulation is also in place on the top lid.

The water coolant is split into to separate water supply source inputs. The base coolant chamber should be used as a minimum requirement with connection via two 1/2" hose nozzles in the rear base of the enclosure. Where high ambient or radiant heat present, then the three vertical water coolant radiators should also be connected via the two 5/16" hose nozzles in the rear of the enclosure. These radiators are connected in sequence via the hose connections provided with the enclosure. A valve limiter is provided for the input water supply to these radiators to protect them from high water pressure as no greater than 3 atmospheres should be supplied to these water radiators. There is no water pressure limit on the lower water chamber.

In addition, to ensure accurate measurement is maintained in heavily contaminated area or where steam present a sophisticated Air purge nozzle with directional flow chambers is provided that allows input of a strong compressed air draft which need not be clean air source. Electrical connection is via two PG13 Cable glands to an internal terminal block.

MODULOC Technology - The Total Sensor Solution

MODULOC Control Systems Ltd.
St. Albans, Hertfordshire AL2 1JG United Kingdom
Phone: +44 (0)845 873 6501 FAX: +44 (0)158 283 1980
E-Mail: sales@moduloc-intl.com Website: www.moduloc-intl.com

MODULOC Control Systems, Inc.
500 Garden City Drive. - Suite 2B, Monroeville, PA 15146 USA
Phone: 412-824-1260 FAX: 412-824-8890
E-Mail: sales@moduloc-usa.com Website: www.moduloc-usa.com

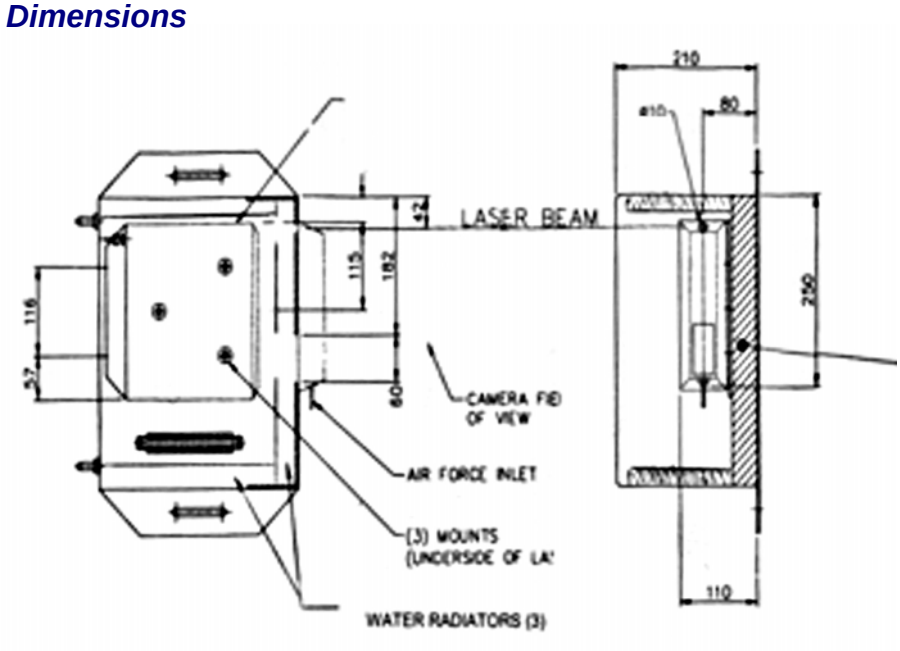
Housing Specifications

Housing: 316 Stainless Steel
Housing Rating - excluding Air nozzle: IEC IP65
Weight w/o Cable: 14 Kg excluding LTM
Basic Enclosure Size: 370 H x 290 W x 210 D
Cooling: Standard: Water Cooled Base Platform
Optional: -3R Water Cooled Radiators

Air & Optional Water Specifications

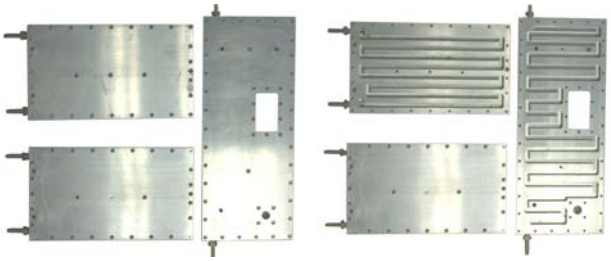
Air Pressure: 12 cu ft./min at 40 - 80 PSI
Platform : Water Pressure: 13 Bar maximum
Water Volume: Regulate to 20 –30 liters/min.
Radiators: Water Pressure: Regulate to 3 Bar
Water Volume: 20 l /min maximum
Water Temperature: For Ambient Temperature up to 70°C water must be below 20°C

Dimensions



Water Radiators

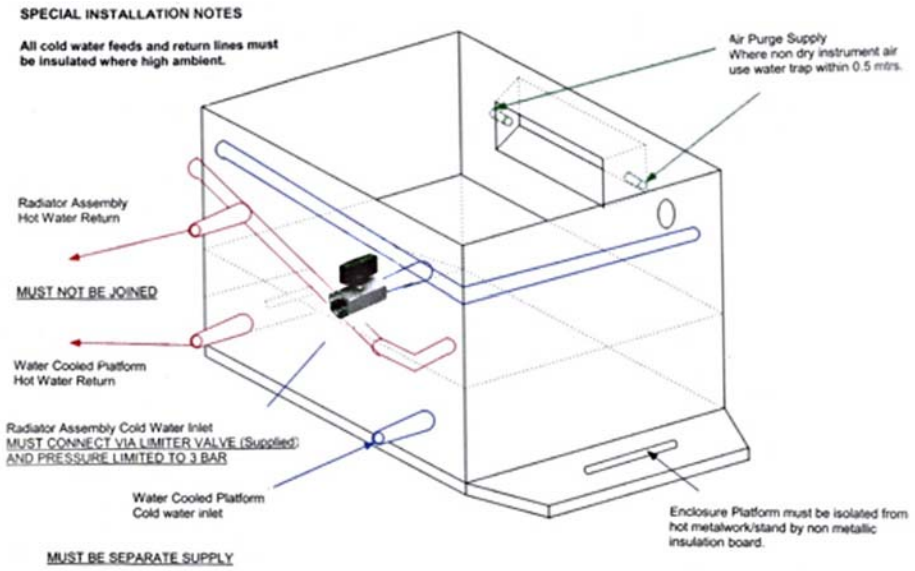
Illustrations show the three Optional Internal Radiators with covers in position and with covers removed showing water channels.



Laser in Position

The LTM is pre-mounted on a base plate for linear alignment to the viewing holes in the front of the enclosure. The LTM is secured in onto three internal studs on top of the water cooled platform via the spacer washers provided for vertical alignment.

Water Connections



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We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.

Your Local Sales Representative:

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