

Heloc Pro Version 1.1.8

Release Notes

Thank you for interest in BARTEC's Heloc Pro heat tracing design software!

Technical Support

If you have any questions, issues, or suggestions related to Heloc Pro Software, please send an e-mail to heloc.support@bartec.com.

If you need assistance related to the electrical heat tracing systems or if you have questions about BARTEC products please send an e-mail to eht.support@bartec.com.

Change history

Version 1.1.8 (December 22, 2023)

1. Partially insulated and partially filled tanks could be configured.
2. Up to 6 heat sinks such as nozzles, manholes and ladders could be added to tank.
3. A conical top for vertical tanks and a skirt as support are added.
4. Area and perimeter of cross-section for saddles will be automatically adjusted if tank diameter changes.
5. Star and Delta wiring are now available for tanks.
6. Materials selection for series heaters was revised.
7. EKL light 0360 was taken from the product database.
8. The program will bring a warning message if the nominal sheath temperature is greater than limiter offset.
9. PBM-200 and PBM-300 connection kits could be used to energize one or two cable sets and as Splice Kit.
10. Fixed issue where the connection kit list in Connection Settings didn't consider the selection in Project Settings, Allowed Products.
11. The size of the Heloc Pro project file was optimized and reduced.
12. Fixed bug where the wrong circuit breaker size was displayed on report. The list of default circuit breakers sizes was extended up to 125A.

Version 1.1.7 (June 26, 2023)

1. Fixed issue that would sometimes cause a newly created 'Child' type to be lost when saving the project.
2. Updated the heater selection logic for tanks when using the 'Cover available area' setting to prefer lower cost heaters when searching for the best fit applied power.
3. Fixed issue with an incorrect error message displayed for Tank designs when there was no heater found because of not enough surface area available.
4. Fixed issue that could result in custom thermal insulations not being available in new projects after upgrading to the latest program version.
5. When calculating the maximal operating current, the actual maximum ambient temperature is now used instead of the fixed 40°C or 55°C temperatures defined in the certification.
6. HSB for ATEX Zone 2/22 is added to the catalogue. Technical data for HSB in North America was updated.
7. Fixed issue with incorrect order number French warning label.
8. Fixed issue that resulted in a missing junction box when a KRM temperature controller was selected.
9. Fixed issue where heater output was not adjusted by using AT80-164 and AT150-164 on tanks.
10. Fixed issue where AT150-164 was selected for PSB even AT80-164 was suitable.
11. Updated the catalog number for insulation bushings.
12. Fixed issue where pipe straps were not selected for Pt100 junction box.

Version 1.1.6 (April 3, 2023)

1. The quantity of heat sinks are now shown in dedicated columns on the Main Pipe Grid and also the Export Grid.
2. Fixed bug that was allowing incorrect Splice Kit selection for series heaters.
3. Fixed bug that was causing Child lines to revert to "Continuation" any time a change was made to the Parent line.
4. Added a column for Heating Circuit Name to the Main Tank Grid.
5. Added columns for Control Panel Tag, Feeder No., P&ID No., Hook-Up No. to the Main Grid and the Export Grid.
6. Fixed bug that was causing odd trace ratio with series heaters for line-neutral, line-line voltage type.
7. Fixed bug that was setting the Area Classification to default after the heater type was changed.
8. Fixed bug that was preventing the non-Ex PT100 sensors from being selected for ESTM-(L) control unit.

9. Fixed bug that was displaying the heater length value in BOM in wrong format and not converting it into imperial units.
10. Fixed bug that was preventing recalculation of the pipe group when removing one member of the group.

Version 1.1.5 (March 8, 2023)

1. Fixed bug that was introduced in version 1.1.4 that would allow non-Ex heaters to be selected for Ex areas.
2. Fixed bug that was preventing North American designs from issuing a warning message when the Max. Controlled Temp. exceeded the Max. Allowable Temp.
3. Fixed bug that caused the Min. and Max. Controlled Temperatures to be swapped when exporting to XLSX.
4. Fixed bug occurring when a new tank design was copied from an existing design and the new tank would show an error condition, even though no error existed.

Version 1.1.4 (February 20, 2023)

1. Added verification of operating current according to the new system and installation enclosure certificates for self-regulation heating cables.
2. When using "Import Pipes from XLSX", you can now type in the drop down lists of Heloc Pro field names to incrementally search for the closest match.
3. Updates to the PBTC temperature controller to support EKL and EMK heaters.
4. DPC/DTL (electronic controller EHT cabinet) has been added.
5. Corrected missing mounting bracket/plate for the ESTM controller.
6. Corrected the number of Pt100M insulation entries for PBTC controllers.
7. The term "Max. Exposure Temperature" has been changed to "Design Temperature"
8. For controllers that include a temperature sensor, the sensor temperature range is now checked against the Min. Ambient and Design Temperatures.
9. When using MSB heater in a stabilized design, the Base Temperature that is used for sheath temperature calculations is now shown on the Detail Report.
10. Added Error message if the maximal current exceeds the circuit breaker rating for DELTA voltage type.
11. Added header in BOM report for Product Groups. Updated layout for BOM and Circuit reports.

Version 1.1.3 (October 14, 2022)

1. Corrected issue with no glass cloth tape found for stainless steel pipe due to the renaming of GT-164 in version 1.1.2.

Version 1.1.2 (September 16, 2022)

1. Double clicking on a Heloc Pro project file (.hpf) will now result in Heloc Pro startup opening of the file.
2. Corrected issue that would result in some valid series heater designs for tanks to be skipped during AUTO heater selection.
3. Maximum amperage for EMK and EKL connections kits reviewed and updated.
4. Corrected issue that was preventing certain projects from being saved after importing from Excel.
5. When exporting a report, the folder that holds the project file will be used as the default.
6. Corrected certifications and temperature settings for BRTD sensor (North America).
7. Created a new "Pipe Circuit Report" type that combines some features of the Detail and Summary reports.
8. The warning messages that are displayed when required BOM items cannot be found now provide more detail about the reason for the omission.
9. Corrected part numbers and descriptions for German and Russian warning labels.
10. For the glass cloth tape, order number 392328, the catalog number and max. withstand temperature were updated to GT-164 and 180°C.
11. Added enable/disable check boxes to the Project Settings>>Heatsinks window for the custom heatsinks (S5 thru S10). This allows the user to explicitly control whether those heatsinks are visible in the Pipe Heatsinks window and reports.
12. When assigning a pipe as a child of another pipe, a confirmation message is now displayed informing that certain settings for the child pipe may need to be changed to match the parent pipe.
13. Fixed issue that was causing the program hang after changing the temperature class or temperature settings for tanks.

Version 1.1.1 (March 26, 2022)

1. Corrected issue with sheath temperature calculation for MSB heaters (introduced in version 1.1.0).

Version 1.1.0 (March 25, 2022)

1. For Parallel-Constant Wattage and Series heaters, the Nominal Sheath Temperature is now calculated and displayed on the main grid and Detail Report.
2. For Series heaters, the operating resistance is now displayed on the Detail Report.
3. Fixed issue that was causing BPL sheath temperatures to display 1000°C when in non-Ex locations.

4. The main grid now displays the quantity of Warnings (if any) for each Pipe or Tank.
5. Fixed issue that was preventing the Limiter setpoint from properly resetting when switching from hazardous (Ex) to non-hazardous (non-Ex) locations.
6. Corrected nominal resistance values for several heaters in the EMKD-A825 series heater family.
7. Fixed issue that causing an error by Design Region change.
8. Updated the sheath temperature calculation for Mineral Insulated Heaters according to the certification.

Version 1.0.13 (February 17, 2022)

1. Fixed issue where the custom heat sink name was not being saved.
2. Maximal heater length for BPL was updated according to the BPL data sheet.
3. Maximal workpiece/pipe temperature for 20BPL*-AL heater is updated. The higher temperatures are now permitted. The old designs should not be impacted.
4. Fixed issue where the HTSB and HSB+ heaters were selected at ambient temperatures below -40°C.
5. The Child Type attribute now could be imported. See section "Pipe Groups and Line Types" in the User Manual for more details.
6. The import feature is updated. See section "Importing Pipe Data from Excel or CSV" for more details.

Version 1.0.12. (September 17, 2021)

1. Fixed issue that would prevent a Parent line from being recalculated when the Child in the Pipe Group was converted to a Parent.
2. Fixed issue that would allow choice of Control Limited Design when Ordinary Location was selected.
3. Fixed issue that would allow "Heater output is too high" error to be displayed when it was not warranted.
4. Fixed issue that was allowing heater temperature checks to be skipped when one of the "Advanced Heater Selection Rules" were chosen in Project Settings
5. Power output voltage adjustment factors for HSB+ and HTSB heaters have been updated.
6. Part numbers for HTSB heaters have been updated.
7. Area classification certifications for the PBTC power connection/temperature controller kit have been updated.
8. Fixed an incorrect tank series heater selection error message that would be displayed if no suitable resistance cable could be found.
9. Nominal power per heating circuit on the Pipe Detail Report has been corrected. Only affects cases that have multiple circuits per pipe.
10. Fixed issue that would result in no heater selected for a tank when a Sheath Temperature Too High condition was detected and the Circuit Qty mode was set to AUTO.

Version 1.0.11. (April 30, 2021)

1. Fixed issue that could cause infinite calculation loop for very short length series heaters.
2. Fixed issue with EKL sheath temp calculations when using AL tape.
3. Fixed issue with 20HTSB2-CT uncontrolled temperature calculation sometimes being too high.
4. Fixed issue with some temperature controllers omitting mounting brackets when separate power connection kits were used.
5. Fixed issue in the Tank Configuration window that would sometimes prevent values for support legs from being saved.
6. Added additional validation of Connection Kits, Temperature Controllers and Sensors to ensure they are suitable for the pipe/tank environment. Warnings are provided if conditions are not met.
7. Added new Electrical Report for piping.
8. Added extensive new content to the online Help User Guide
9. Added new options in Project Settings for Advanced Heater Selection rules.
10. Added new validation checks for Power Splice/Tee and standard Splice/Tee Child configurations.

Version 1.0.10. (February 26, 2021)

1. Fixed issue that would cause Tank Summary and Detail reports to be empty.
2. Fixed issue that was preventing Excel from opening files created by the Tank Export to XLSX operation.
3. Fixed issue that prevented BPL heaters from being selected at elevated temperatures.
4. Reports now use the XLSX format instead of XLS when exporting to Excel

Version 1.0.9. (February 2, 2021)

1. Added the ability to specify Allowed Products for each project. See Project Settings.
2. Fixed issue that would prevent the application from starting if the "Office Dark Gray" color theme had been selected.
3. Fixed issue where a forced trace ratio on a Child would be reset when any change was made to the Parent.
4. Fixed issue where heatsink descriptions were not translated properly.
5. Updated Maximal Circuit Length data for HTSB heaters.

6. Fixed issue where some BOM report descriptions were being translated properly.

Version 1.0.8. (December 4, 2020)

1. Fixed issue that would prevent the correct heater length calculation for some Power-Parallel children.
2. Fixed issue that would prevent the Voltage Type list from refreshing properly after the Heater Type was changed.
3. Added the ability to specify a Minimum Trace Ratio as a function of Pipe Diameter and Maintain Temp. See Project Settings.
4. Added the ability to force the Trace Ratio on Child lines.
5. Added the ability to force numerous Heater Design Settings for Power-Parallel children
6. Added the ability to force the Circuit Quantity for Tank designs instead of forcing the Circuit Length.

Version 1.0.7. (October 16, 2020)

1. Fixed issue that would sometimes cause the program to hang with certain Tank Area Classification settings.
2. Fixed issue that would prevent the Warning Label list shown in the Project Settings to not refresh properly after the Product Region was changed.
3. A dedicated <Close> button has been added to the About window to make closing more explicit.
4. Cladding Emissivity has been added to the Detail report.
5. Control Limited Design is no longer an allowed choice for self-regulating heaters. This aligns with current certifications.

Version 1.0.6. (September 4, 2020)

1. Added dual core MI cable and TW-05 tie wire to North American catalog.
2. Numerous updates to North American connection kits.
3. When using Imperial units, calculated heater lengths are now rounded to the nearest foot.
4. Added Power-Splice and Power-Tee Child Types
5. Heater length details for heat sinks have been added to the Pipe Detail Report.
6. Added Stainless Steel pipe schedules for both IPS and DN. PT-164 tape is no longer allowed to be used on stainless steel pipe.
7. CB Size is now visible on the main grid and can be used with Global Copy.

Version 1.0.5. (June 5, 2020)

1. Right click on each row in the main grid will now display a popup menu with additional choices for Detail and Bill of Material reports.
2. Corrections to quantity of EMK cable sets when using three phases. This issue was introduced in 1.0.4.
3. Renamed IEB-EKL/PtM to IEB-M (multi use IEB).
4. Several corrections to bill of material entries for ESTM controllers.

Version 1.0.4. (May 29, 2020)

1. Three phase (star and delta) heater design is now supported for EKL and EMK series heaters.
2. For Parent/Child Pipe Groups using Line Sensing, you can now specify the segment location of the temperature sensor and the Min and Max Controlled Temperature calculation will reflect the imposed duty cycle.
3. You can now specify separate Splice and Tee kits.
4. Several bug fixes to the connection kit bill of material for EKL heaters.

Version 1.0.3. (April 3, 2020)

For North America, expected CSA approvals for MSB heaters have been temporarily delayed, so those heaters have been removed.

Version 1.0.2. (March 6, 2020)

1. Part numbers for new heaters MSB were updated.
2. Order numbers for new heaters PSB, new MSB, HSB+ and BPL were added.
3. In the Tank Detail Report, the tank total heat losses were subdivided into heat loss through tank body, supports/slab, and safety factor.
4. Heater selection algorithm for tanks was adjusted.
5. Fixed bug for zero sheath temperature of self-regulating heaters.
6. Fixed bug when the window with BOM and calculated values was in the background and not selectable.
7. Adjusted the algorithm for calculating additional heater length for heat sinks when more than 1 run of heater was used. In these cases, slightly less heater will be now required.
8. BARTEC standard adders for heat sinks are now read-only.
9. Fixed bug when custom heat sink adders were not saved when saving a project.
10. Fixed bug when changes to Additional Heater Length settings were not recognized.

11. Added new warning if Max Controlled Temp is greater than Max Allowed Temp.

Version 1.0.1. (December 24, 2019)

1. Fixed bug that was preventing tank designs when using PI series heaters.
2. Updated data for several heaters to correct Min/Max Controlled Temperatures calculations.
3. Fixed bug that was preventing some Area Classification settings from being copied when a Child Line was assigned to a Parent Line.

Version 1.0.0. (December 13, 2019, initial release)