

CIRCON BASIC COMPILER

OVERVIEW

To solve today's sophisticated and challenging control problems, to implement custom, complex DDC control sequences, to integrate products from multiple vendors, the HVAC controls market needs a comprehensive but easy to use programming tool.

Circon BASIC and the Circon BASIC Compiler software, in conjunction with Circon's 300-series programmable controllers, enable you to meet these challenges and provide tailored solutions that exceed your customer's expectations.

APPLICATIONS

Circon BASIC is flexible and powerful, allowing a user with limited programming experience to implement more complicated control sequences. Circon BASIC is very similar to most other BASIC languages with its familiar English-like programming syntax. It is enhanced with many built-in subroutines and functions that extend its capabilities for control systems applications. These important capabilities allow a Circon BASIC program to interact with the physical input and output points of the controller and its functional blocks, use network variables to communicate application information with any other device on the LONWORKS® network, and to run multiple independent tasks simultaneously.

The Circon BASIC Compiler is fully compatible with Echelon® Corporation's LNS® and Tridium's NiagaraAX.

ORDERING INFORMATION

Part numbers:

11-0029 LNS-compatible

11-0+00 NiagaraAX-compatible

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131 Task Name: Outdoor Air Enthalpy calculation task.
132 Function: Will calculate the outdoor air enthalpy based on the temp and
133 relative humidity.
134 Notes: The outside air temp and relative humidity will be converted
135 to integers. This is required for proper calculations.
136
137 task(?)
138
139 // Task initialization here.
140 d* outAirTemp as uinteger
141 d* outAirHum as uinteger
142 d* outAirEnthalpy as uinteger
143 d* inAirTemp as uinteger
144 d* inAirHum as uinteger
145 d* inAirEnthalpy as uinteger
146 d* satPres for pressure for temp as uinteger // saturation pressure of h2o vapour
147 d* specEnthalpy as uinteger // enthalpy for saturated h2o vapour
148 d* humidRat as uinteger // humidity ratio (*10000)
149 d* index as uinteger
150 d* index2 as uinteger
151
152 // initialize steam chart data.
153 Init_steam()
154
155 TOPOFTASK:
156
157 // economizer enable/disable based on OA Enthalpy AND RA Enthalpy!
158
159 outAirTemp = fix_to_int((u)outAirTemp*274.0)*10.0
160 outAirHum = fix_to_int((u)outAirHum*20.0)
161 if outAirTemp > 489 then
162 outAirTemp = 489
163 end if
164 for index = 1 to 10
165 if outAirTemp <= steam_t[index] then
166 exit for
167 end if
168 next index
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FEATURES AND BENEFITS

- Compatible with all Circon 300-series programmable controllers for application flexibility
- Familiar, easy to use, industry-standard BASIC programming language enables faster program implementation, even for users with limited programming experience
- Enhanced with built-in functions that make complicated control sequences easier to implement
- Accesses LONWORKS® network variables for full interoperability with other devices
- Runs as an LNS plug-in or NiagaraAX wizard for optimum program development flexibility



LONMARK
PARTNER



LNS POWERED
by ECHOLON



Powered by
Niagara AX
FRAMEWORK



APPLICABLE CIRCON CONTROLLERS

The Circon BASIC Compiler can be used to develop programs for these Circon products:

- SCC-300-PRG 13-point terminal unit controller
- SCC-310-PRG 13-point terminal unit controller
- UHC-300 22-point controller
- UHC-320 13-point controller
- UHC-302-PRG* VAV terminal unit controller with integrated damper motor
- UHC-302-XPR* VAV terminal unit controller with external damper motor
- VAV-332-PRG VAV terminal unit controller with integrated damper motor
- VAV-332-XPR VAV terminal unit controller with external damper motor

* supported in LNS plug-in version only.

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