Reviewing PLC Capabilities

The following functionality tables (A, B and C) provide an overview of the capabilities of our various PLC families. When you have identified the type and quantity of I/O devices required by your application, the I/O Availability table shows you which family or families will meet those specifications.

The Communications table lists all the supported protocols and which PLC can communicate using that protocol. You can also see which family supports various PLC download and networking applications. More CPUs and our base CPU family base block communications are fully supported. You will also have a complete view of networking devices or modules to integrate into your PLC systems.

The Programming program provides a list of all the major programming functions it affects. The amount of memory is needed. The Communications program shows what protocol is usable with each CPU. The Communications program that can be used to configure the PLC.

A  I/O Availability

Check the I/O types supported by the DirectLogic PLC families

B  Communications

Check the communications types supported by the DirectLogic PLC families

C  Programming

Check the programming instructions supported by the DirectLogic PLC families

Standard RLL programming

In ladder programming, the called CPU will check the I/O, and determine the appropriate programming. It includes operational instruction sets, assembly language, machine language, and BASIC language instructions. It includes operational instructions, assembly language, and machine language instructions. It includes operational instructions, assembly language, and machine language instructions.

Allow instructions

The ladder programming path allows programming. It includes operational instructions, assembly language, and machine language instructions. It includes operational instructions, assembly language, and machine language instructions. It includes operational instructions, assembly language, and machine language instructions.

PID loop operation

The PID loop operation is used to calculate the loops. It includes operational instructions, assembly language, and machine language instructions. It includes operational instructions, assembly language, and machine language instructions.
Reviewing PLC Capabilities

The DirectLogic family includes DL05, DL06, and DL405 products as an extension of the capabilities of our existing DirectLogic PLC families. When you have identified the type and quantity of I/O elements required by your application, the I/O Availability table shows which family or family mix, as well as special configured versions, will meet your requirements.

A I/O Availability

Check the I/O types supported by the DirectLogic PLC families

I/O Availability

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>DL05</td>
<td>DL06</td>
<td>DL105</td>
<td>DL405</td>
<td>DL305</td>
<td>D4-450(DC-1)</td>
<td>D4-450(DC-2)</td>
<td>D4-440(DC-1)</td>
<td>D4-440(DC-2)</td>
<td>D4-430</td>
<td>D3-350</td>
<td>D3-340</td>
<td>D3-330</td>
<td>D2-260</td>
<td>D2-250(-1)</td>
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<tr>
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<td>DL06</td>
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<td>D4-450(DC-1)</td>
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<td>D2-240</td>
<td>D2-240</td>
</tr>
</tbody>
</table>

B Communication

Check the communications types supported by the DirectLogic PLC families

The Communications table lists all the supported protocols and which PLC can communicate using that protocol. You can also see which families support certain I/O, network connection options, and RLL programming. Many CPUs and our basic (I/O) base units have communication ports built-in and are ready to be configured for your needs. These can be used to connect your PLC to a variety of peripheral devices or to communicate with other PLCs.

C Programming

Check the programming instructions supported by the DirectLogic PLC families

The Programming table provides listing of the major program functions. It shows the amount of memory and instruction capacity for each CPU. This programming documentation shows the format of the various programming tools that can be used to configure the CPU.

Standard RLL programming, also called RLL Plus, is built on basic logic and general programming instruction sets, including logic and general programming operations. It includes devices such as timers, counters, and general functions to configure your PLC.

Allow instructions

These [intelligent logic instructions] are preprogrammed: 100% in the background. They are instructions that allow you to enter system programming without the burden of learning the entire programming language. This reduces the time required for potentially lengthy setup of instructions.

PID loop operation

The PID loop operation uses settable tables to configure the loops. Features include scale tuning, cut-on, cut-off, one-shot, 

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* These are modules that the physical unit is connected to.

* Battery backed-up memory

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## Reviewing PLC Capabilities

The DirectLOGIC Extended 500 family (DL05, DL105 and DL205) are members of the DirectLOGIC PLC Family. When you have identified the type and quantity of I/O devices required by your application, the I/O Availability table shows you which family or families will meet these specifications.

### I/O Availability

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<thead>
<tr>
<th>CPU Family</th>
<th>CPU Code</th>
<th>Total Possible I/O</th>
<th>10 in/8 out</th>
<th>8 in/6 out</th>
<th>20 in/16 out</th>
<th>15.5K</th>
<th>14.6K</th>
<th>15.3K</th>
<th>15.8K</th>
<th>16.3K</th>
<th>17.3K</th>
<th>18K</th>
<th>18.5K</th>
<th>9.1K</th>
<th>9.3K</th>
<th>9.5K</th>
<th>10 in/8 out</th>
<th>8 in/6 out</th>
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### Communications

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<th>DL205</th>
<th>DL305</th>
<th>DL405</th>
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</thead>
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<tr>
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<td>✓</td>
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<tr>
<td>ETHERNET Remote I/O Slave</td>
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<td>✓</td>
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<tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>RS232/422/485 Master</td>
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</table>

### Programming

The Programming table provides a listing of the major program functions. It also shows the amount of memory and instruction capacity for each CPU. The programming descriptions below explain the various programming tools that can be used to configure the PLC.

#### Standard RLL programming

The DirectLOGIC PLC incorporates a basic RLL programming language, Intel-80 series (Intel 8080/8085 compatible) or Zilog-Z8 series (Zilog Z80 compatible). This language is useful for developing logic and general purpose programming. It includes instructions for loops, timers, counters, indexed access, and conditional branches.

#### PID loop operation

The PID loop operation uses a set of tables to configure the loops. Features include zero tuning, options, S/P modification, generation, and more.

#### Stage programming

Stage programming is also called ELI. This is a feature that allows you to enter system parameters for each stage. The stage programming eliminates the need for potentially lengthy setup of system configuration codes. Parametric setup is based on the background so you never have to use it.

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The Communications table lists all the supported protocols and which PLC can communicate using that protocol. You can also see which families support various I/O, Ethernet, memory options and RLL programming. Many CPUs and our based I/O have built-in communications ports that can be used to communicate with other PLCs and field devices. The PLC also has a built-in family of communication ports that can be interfaced with our DIO boards that provide additional communications options. The Communications table also shows the amount of memory and instruction capacity for each CPU.

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The Communications table lists all the supported protocols and which PLC can communicate using that protocol. You can also see which families support various I/O, Ethernet, memory options and RLL programming. Many CPUs and our based I/O have built-in communications ports that can be used to communicate with other PLCs and field devices. The PLC also has a built-in family of communication ports that can be interfaced with our DIO boards that provide additional communications options. The Communications table also shows the amount of memory and instruction capacity for each CPU.