

**USING GS2  
AC DRIVES WITH  
DIRECTLOGIC PLCs**



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## Compatible *DirectLOGIC* PLCs and Modules

The following tables show which *DirectLOGIC* PLCs and modules can be used with the GS2 Series AC Drive.

DirectLOGIC PLC Modules for Use with GS2 AC Drives	
<b>DL05 PLCs</b>	
<b>D0-05AR</b>	DL05 CPU, 8 AC in / 6 Relay out, 110/220VAC Power Supply. Inputs: 8 AC inputs, 90-120 VAC, 2 isolated commons. Outputs: 6 Relay outputs, 6-27 VDC, 6-240 VAC, 2A/pt. max., 2 isolated commons
<b>D0-05DR</b>	DL05 CPU, 8 DC in / 6 Relay out, 110/220VAC Power Supply. Inputs: 8 DC inputs, 12-24 VDC current sinking/sourcing, 2 isolated commons. Outputs: 6 Relay outputs, 6-27 VDC, 6-240 VAC, 2A/pt. max., 2 isolated commons
<b>D0-05DD</b>	DL05 CPU, 8 DC in / 6 DC out, 110/220VAC Power Supply. Inputs: 8 DC inputs, 12-24 VDC current sinking/sourcing, 2 isolated commons. Outputs: 6 DC outputs, 6-27 VDC current sinking, 1.0A/pt. max.
<b>D0-05DD-D</b>	DL05 CPU, 8 DC in / 6 DC out, 12/24VDC Power Supply. Inputs: 8 DC inputs, 12-24 VDC current sinking/sourcing, 2 isolated commons. Outputs: 6 DC outputs, 6-27 VDC current sinking, 1.0A/pt. max.
<b>D0-05DR-D</b>	DL05 CPU, 8 DC in / 6 Relay out, 12/24VDC Power Supply. Inputs: 8 DC inputs, 12-24 VDC current sinking/sourcing, 2 isolated commons. Outputs: 6 Relay outputs, 6-27 VDC, 6-240 VAC, 2A/pt. max., 2 isolated commons
<b>DL06 PLCs</b>	
<b>D0-06DD1</b>	DL06 CPU, 20 DC in / 16 DC out, 110/220VAC Power Supply, with 0.3A 24VDC Auxiliary Device Power Supply. Inputs: 20 DC inputs, 12-24 VDC current sinking/sourcing, 5 isolated commons (4 inputs per common). Outputs: 16 DC outputs, 12-24 VDC current sinking, 1.0A/pt. max., 4 commons non-isolated (4 points per common)
<b>D0-06DR</b>	DL06 CPU, 20 DC in / 16 Relay out, 110/220VAC Power Supply, with 0.3A 24VDC Auxiliary Device Power Supply. Inputs: 20 DC inputs, 12-24 VDC current sinking/sourcing, 5 isolated commons (4 inputs per common). Outputs: 16 Relay outputs, 6-27 VDC, 6-240 VAC, 2A/pt. max., 4 isolated commons (4 points per common)
<b>D0-06AR</b>	DL06 CPU, 16 AC in / 20 Relay out, 110/220VAC power supply, with 0.3A 24VDC auxiliary device power supply. Inputs: 20 AC inputs, 90-120 VAC, 5 isolated commons (4 inputs per common). Outputs: 16 Relay outputs, 6-27 VDC, 6-240 VAC, 2A/pt. max., 4 isolated commons (4 points per common)
<b>D0-06DD1-D</b>	DL06 CPU, 20 DC in / 16 DC out, 12/24VDC Power Supply. Inputs: 20 DC inputs, 12-24 VDC current sinking/sourcing, 5 isolated commons (4 inputs per common). Outputs: 16 DC outputs, 12-24 VDC current sinking, 1.0A/pt. max., 4 commons non-isolated (4 points per common).
<b>D0-06DR-D</b>	DL06 CPU, 20 DC in / 16 Relay out, 110/220VAC Power Supply. Inputs: 20 DC inputs, 12-24 VDC current sinking/sourcing, 5 isolated commons (4 inputs per common). Outputs: 16 Relay outputs, 6-27 VDC, 6-240 VAC, 2A/pt. max., 4 isolated commons (4 points per common)
<b>DL05/DL06 DC Input/Output Module</b>	
<b>D0-08CDD1</b>	4 pt. 12-24VDC current sinking/sourcing input, 1 common, 4 pt. 12-24VDC sinking output, 0.3A/point, 1.2A/module, removable terminal, no fuse

DirectLOGIC PLC Modules for Use with GS2 AC Drives (cont.)	
<b>DL05/DL06 DC Output Module</b>	
<b>D0-10TD1</b>	10 pt. 12-24 VDC current sinking output module, 2 commons non-isolated (5 pts. per common), 0.3A/point, 1.5A/common, removable terminal, no fuse
<b>D0-16TD1</b>	16 pt. 12-24 VDC current sinking output module, 2 commons non-isolated (5 pts. per common), 0.3A/point, 1.5A/common, removable terminal, no fuse
<b>DL05/DL06 Analog Module</b>	
<b>F0-2AD2DA-2</b>	2 channel in, 2 channel out voltage analog option card; 0-5V, 0-10V
<b>F0-4AD2DA-2</b>	4 channel in, 2 channel out voltage analog option card; 0-5V, 0-10V
<b>F0-4AD2DA-1</b>	4 channel in, 2 channel sourcing out current analog option card; 4-20mA
<b>DL105 PLCs</b>	
<b>F1-130DR</b>	DL130 CPU, 10 DC in / 8 Relay out, 110/220VAC Power Supply. Inputs: 10 DC inputs, 12-24 VDC current sinking/sourcing, 3 isolated commons. Outputs: 8 relay outputs, 12-30 VDC, 12-250VAC, 7A/pt. max., 4 isolated commons
<b>F1-130DD</b>	DL130 CPU, 10 DC in / 8 DC out, 110/220VAC Power Supply. Inputs: 10 DC inputs, 12-24 VDC current sinking/sourcing, 3 isolated commons. Outputs: 8 DC outputs, 5-30VDC current sinking, 0.5A/pt. max, 3 internally connected commons
<b>F1-130DR-D</b>	DL130 CPU, 10 DC in / 8 Relay out, 12/24VDC Power Supply. Inputs: 10 DC inputs, 12-24 VDC current sinking/sourcing, 3 isolated commons. Outputs: 8 relay outputs, 12-30 VDC, 12-250VAC, 7A/pt. max., 4 isolated commons
<b>F1-130DD-D</b>	DL130 CPU, 10 DC in / 8 DC out, 12/24VDC Power Supply. Inputs: 10 DC inputs, 12-24 VDC current sinking/sourcing, 3 isolated commons. Outputs: 8 DC outputs, 5-30VDC current sinking, 0.5A/pt. max, 3 internally connected commons
<b>DL205 DC Output Module</b>	
<b>D2-16TD1-2</b>	16 pt. 12-24 VDC current sinking output module, 1 common (2 common terminals), 0.1A/point, 1.6A/module, no fuse, European type removable terminal
<b>D2-32TD1</b>	32 pt. 12-24 VDC current sinking output module. 1 common (4 common terminals), 0.1A/point, 3.2A/module, no fuse

DirectLOGIC PLC Modules for Use with GS2 AC Drives (cont.)	
<b>DL205 Relay Output Modules</b>	
<b>D2-04TRS</b>	4-pt. 5-30 VDC or 5-240 VAC isolated relay output module, 4 Form A (SPST) relays, 4 commons, 4A/point, 8.0A/module, replaceable fuse, removable terminal
<b>D2-08TR</b>	8-pt. 5-30 VDC or 5-240 VAC output module, 8 Form A (SPST) relays, 1 common (2 common terminals), 1A/point, 4.0A/module, replaceable fuse, removable terminal
<b>F2-08TR</b>	8-pt relay output, 10A/common, 5-30VDC or 5-240VAC
<b>F2-08TRS</b>	8-pt. 12-28 VDC or 12-240 VAC output module, 5 Form A (SPST) relays, 3 Form C (SPDT) relays, 8 isolated commons, 7A/point max., no fuses, removable terminal
<b>D2-12TR</b>	12 pt. 5-30 VDC or 5-240 VAC relay output module, 12 Form A (SPST) relays, 2 commons, 1.5A/point max., 3.0A/common, 2 replaceable fuses, removable terminal
<b>DL205 DC Input/Output Modules</b>	
<b>D2-08CDR</b>	4 pt. 24VDC sinking/sourcing input, 1 common, 4 pt. relay output, 1A/pt., 4A/module, 1 common, replaceable fuse
<b>DL205 Analog Output Module</b>	
<b>F2-02DAS-1</b>	2 channel, 16-bit resolution, Isolated 4-20mA sourcing (2 isolated commons). Designed to operate with 24 VDC user-supplied power supply.
<b>F2-02DAS-2</b>	2 channel analog output, 16 bit resolution, isolated, range: 0-5V, 0-10V (2 isolated commons). Designed to operate with 24 VDC user-supplied power supply.
<b>F2-08DA-1</b>	8 channel analog output module, 12 bit resolution, range: 4-20mA, sink or source output configurable. Designed to operate with 24 VDC user-supplied power supply.
<b>F2-02DA-2</b>	2 channel analog output module, 12 bit resolution, ranges: 0-5V, 0-10V, -5 to +5V, -10 to +10V. Designed to operate with 24 VDC user-supplied power supply.
<b>F2-08DA-2</b>	8 channel analog output module, 12 bit resolution, ranges: 0-5V, 0-10V. Designed to operate with 24 VDC user-supplied power supply.
<b>DL205 Analog Input Modules</b>	
<b>F2-04AD-2</b>	4 channel, 12-bit, 0-5V, 0-10V, -5 to +5V, -10 to +10V. Designed to operate with a 24VDC user supplied power supply.
<b>F2-08AD-2</b>	8 channel, 12-bit, 0-5V, 0-10V, -5 to +5V, -10 to +10V. Designed to operate with a 24VDC user supplied power supply.
<b>DL205 Analog Combination Modules</b>	
<b>F2-8AD4DA-1</b>	8 channel, 16-bit, 0-20mA in; 4 channel, 16-bit, 4-20mA out. Designed to operate with a 24VDC user supplied power supply.
<b>F2-8AD4DA-2</b>	8 channel, 16-bit, 0-5V, 0-10V in; 4 channel, 16-bit, 0-5V, 0-10V out. Designed to operate with a 24VDC user supplied power supply.

DirectLOGIC PLC Modules for Use with GS2 AC Drives (cont.)	
<b>DL305 Relay Output Modules</b>	
<b>D3-08TR</b>	8 pt. 5-30 VDC or 5-220 VAC output module, 5A/point DC or 4A/point AC, 8 Form A relays (SPST), 2 commons (isolated), non-removable terminal, 2 user replaceable fuses
<b>D3-16TR</b>	16 pt. 5-30 VDC or 5-220 VAC output module, 2A/point, 16 Form A relays (SPST), 2 commons (isolated), removable terminal, no internal fuses
<b>DL305 Analog Output Modules</b>	
<b>F3-04DAS</b>	4 channel isolated analog output module, 12 bit resolution, ranges: 0 to 5V, 0 to 10V, -5 to +5V, -10 to +10V, 4 to 20mA, 0 to 20mA. -750 to +750 VDC channel to channel isolation
<b>F3-16AD</b>	16 channel analog input module, 12 bit resolution, ranges: -5 to +5V, -10 to +10V, 0 to 10V, 0 to 20mA. Each point can be either a voltage or current input
<b>DL305 Analog Output Modules</b>	
<b>F3-04DAS</b>	4 channel isolated analog output module, 12 bit resolution, ranges: 0 to 5V, 0 to 10V, -5 to +5V, -10 to +10V, 4 to 20mA, 0 to 20mA. -750 to +750 VDC channel to channel isolation
<b>DL405 DC Output Modules</b>	
<b>D4-08TD1</b>	8 pt. 12-24 VDC current sinking output module, 2 commons (internally connected), 2A/point, 5A/common, removable terminal
<b>D4-16TD1</b>	16 pt. 5-24 VDC current sinking output module, 2 commons (internally connected), 0.5A/point, 3A/common, removable terminal
<b>D4-32TD1</b>	32 pt. 5-24 VDC current sinking output module, 4 commons (isolated), 0.2A/point, 1.6A/common. Requires one connector, sold separately
<b>DL405 Relay Output Modules</b>	
<b>D4-08TR</b>	8 pt. 5-30 VDC or 5-250 VAC output module, 8 Form A (SPST) relays, 2 commons (isolated), 2A/point, 5A/common, removable terminal
<b>F4-08TRS-1</b>	8 pt. 12-30 VDC or 12-250 VAC isolated output module, 4 Form A (SPST) and 4 Form C (SPDT) relays, 8 commons (isolated), 10A/point, 40A/module, removable terminal
<b>F4-08TRS-2</b>	8 pt. 12-30 VDC or 12-250 VAC isolated output module, 4 Form A (SPST) relays and 4 Form C (SPDT) relays, 8 commons (isolated), 5A/point, 40A/module, replaceable fuses, removable terminals
<b>D4-16TR</b>	16 pt. 5-30 VDC or 5-250 VAC output module, 8 Form A (SPST) relays, 2 commons (isolated), 1A/point, 5A/common, removable terminals
<b>DL405 Analog Input Modules</b>	
<b>F4-04ADS</b>	4 channel isolated analog input module, 12 bit resolution, ranges: 0 - 5V, 0 - 10V, 1 - 5V, -5V to +5V, -10V to +10V, 0 - 20mA, 4 - 20mA
<b>F4-08AD</b>	8 channel analog input module, 12 bit resolution, ranges: 4 to 20mA, 1 to 5V, 0 to 20mA, 0 to 5V, 0 to 10V, -5V to +5V, -10V to +10V
<b>F4-16AD-2</b>	16 channel analog input module, 12 bit resolution, ranges: 0-5V, 0-10V
<b>DL405 Analog Output Modules</b>	
<b>F4-04DAS-1</b>	4 channel analog output module, 16 bit resolution, isolated, range: 4 to 20mA current sourcing
<b>F4-04DAS-2</b>	4 channel analog output module, 16 bit resolution, isolated, range: 0-5V, 0-10V
<b>F4-08DA-2</b>	8 channel analog output module, 12 bit resolution, range: 0-5V or 0-10V
<b>F4-16DA-2</b>	16 channel analog output module, 12 bit resolution, range: 0-5V or 0-10V

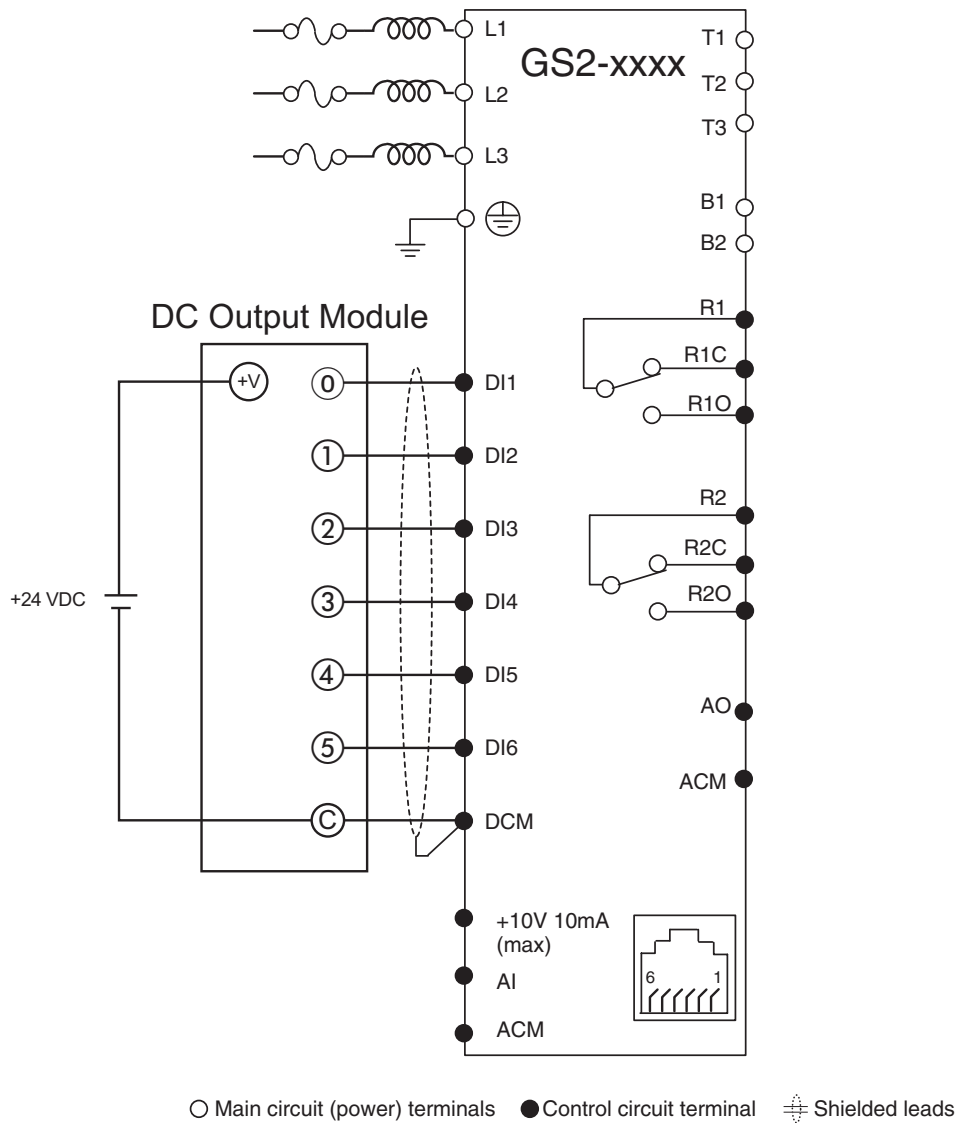
DirectLOGIC PLC Modules for Use with GS2 AC Drives (cont.)	
<b>Terminator I/O DC Output Modules</b>	
<b>T1K-08TD1</b>	8 pt. 12-24 VDC current sinking output module, 4 points per common, 1.0A/point, 2 replaceable fuses (T1K-FUSE-1). (use with T1K-08B or T1K-08B-1 terminal base)
<b>T1K-16TD1</b>	16 pt. 12-24 VDC current sinking output module, 4 points per common, 1.0A/point, 4 replaceable fuses (T1K-FUSE-1). (use with T1K-16B or T1K-16B-1 terminal base)
<b>Terminator I/O Relay Output Modules</b>	
<b>T1K-08TR</b>	8 pt. 5-30 VDC or 5-240 VAC output module, 8 Form A (SPST) relays, 4 points per common, 2.0A/point max., 2 replaceable fuses (T1K-FUSE-2). (use with T1K-08B or T1K-08B-1 terminal base)
<b>T1K-16TR</b>	16 pt. 5-30 VDC or 5-240 VAC output module, 16 Form A (SPST) relays, 4 points per common, 2.0A/point max., 4 replaceable fuses (T1K-FUSE-2). (use with T1K-16B or T1K-16B-1 terminal base)
<b>T1K-08TRS</b>	8 pt. 5-30 VDC or 5-240 VAC isolated relay output module, 8 Form A (SPST) relays, 1 point per common, 7.0A/point max., 8 replaceable fuses (T1K-FUSE-3). (isolation requires use of T1K-16B or T1K-16B-1 terminal base)
<b>Terminator I/O Analog Input Modules</b>	
<b>T1F-08AD-2</b>	8 channel analog input module, 14 bit resolution (13 bit plus sign bit), range: 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC (Use with T1K-08B or T1K-08B-1 terminal base.)
<b>T1F-16AD-2</b>	16 channel analog input module, 14 bit resolution (13 bit plus sign bit), range: 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC (use with T1K-16B or T1K-16B-1 terminal base.)
<b>Terminator I/O Analog Output Modules</b>	
<b>T1F-08DA-2</b>	8 channel analog output, 12 bit resolution, range: 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC. (use with T1K-08B or T1K-08B-1 terminal base)
<b>T1F-16DA-2</b>	16 channel analog output, 12 bit resolution, range: 1-5VDC, 1-10VDC, +/-5VDC, +/-10VDC. (use with T1K-16B or T1K-16B-1 terminal base)
<b>Terminator I/O Analog Input/Output Modules</b>	
<b>T1F-8AD4DA-1</b>	8 channel analog input module and 4 channel analog output module. Inputs: 14 bit resolution (13 bit plus sign bit), range: -20 to 20mA, 0-20mA, 4-20mA. Outputs: 12 bit resolution, range: 4-20mA, sinking or sourcing compatible. (use with T1K-08B or T1K-08B-1 terminal base)
<b>T1F-8AD4DA-2</b>	8 channel analog input module and 4 channel analog output module. Inputs: 14 bit resolution (13 bit plus sign bit), range: 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC. Outputs: 12 bit resolution, range: 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC. (use with T1K-08B or T1K-08B-1 terminal base)

# Typical Connections to the GS2 Series AC Drive

The following drawings show some typical connections between the GS2 Series AC Drive and DirectLOGIC PLCs and modules.

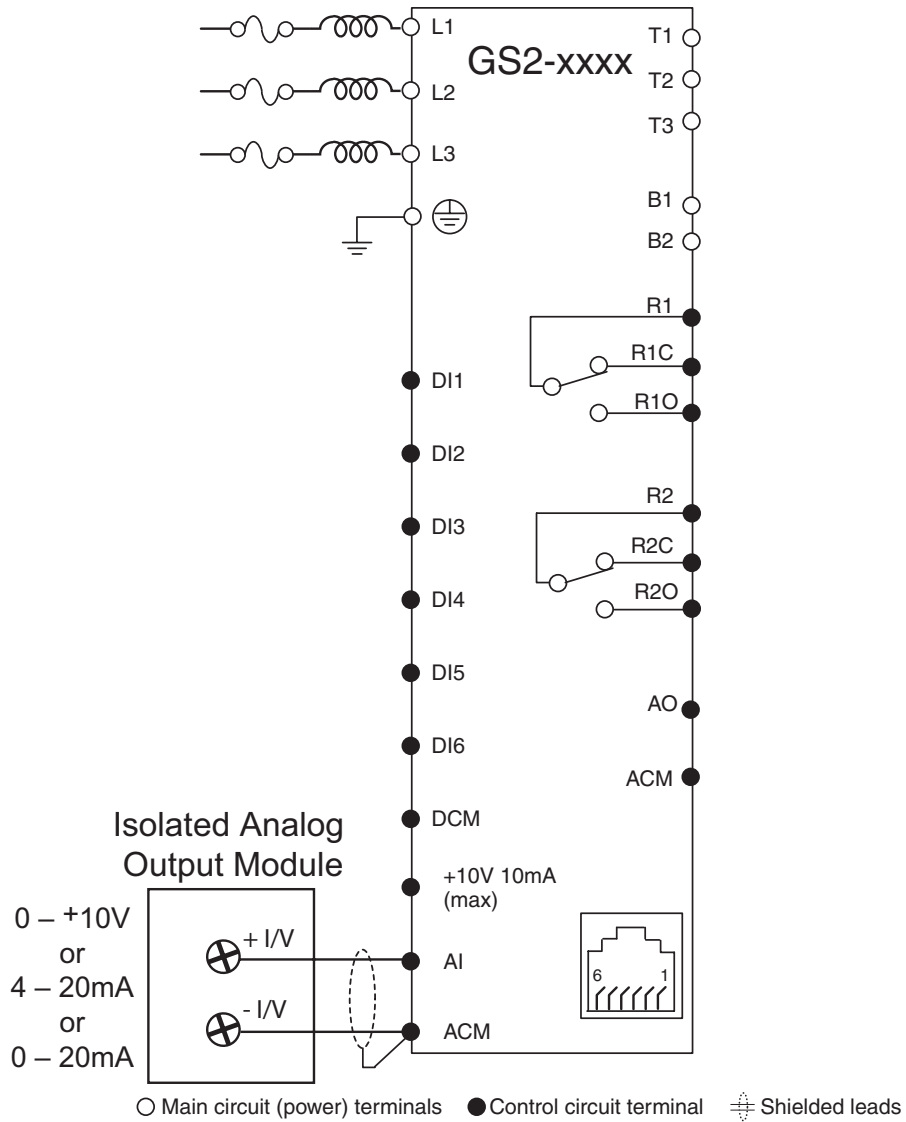
## DC Output Modules

- D0-05DD
- D0-05DD-D
- D0-06DD1
- D0-06DD1-D
- D0-10TD1
- D0-16TD1
- D2-16TD1-2
- D2-32TD1
- D4-08TD1
- D4-16TD1
- D4-32TD1
- T1K-08TD1
- T1K-16TD1



### Isolated Analog Output Modules

- F2-02DAS-1
- F2-02DAS-2
- F4-04DAS-1
- F4-04DAS-2





### Non-Isolated Voltage or Sourcing Current Analog Output Modules

- F0-02AD2DA-2
- F0-04AD2DA-1
- F0-04AD2DA-2
- F2-02DAS-1
- F2-02DAS-2
- F2-08DA-1
- F2-02DA-2
- F2-08DA-2
- F2-8AD4DA-1
- F2-8AD4DA-2
- F4-08DA-2
- F4-16DA-2
- T1F-08DA-2
- T1F-16DA-2
- T1F-8AD4DA-1
- T1F-8AD4DA-2

