

# DL105 I/O Specifications

## F1-130DD-D



### Wiring diagram and specifications

#### Power requirements

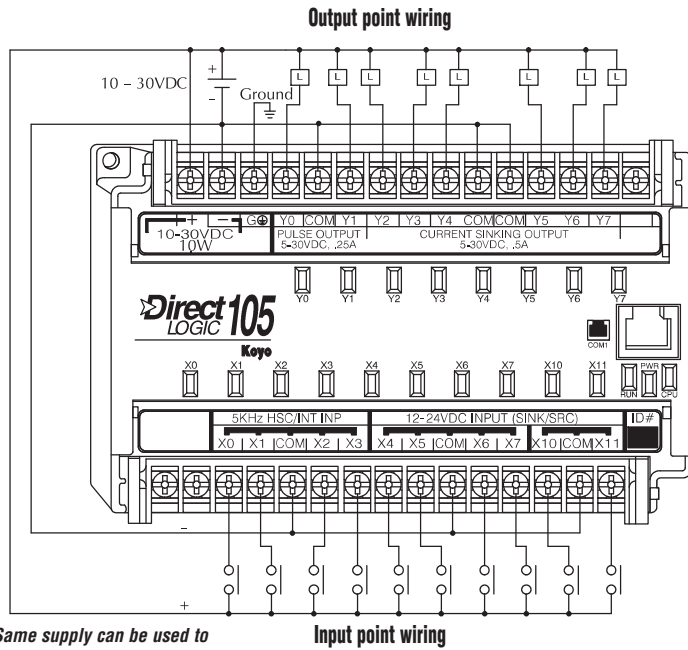
Voltage range .....10-30 VDC  
 .....10 W max.

#### DC input specifications

Number of input points .....10 (sink/source)  
 Number of commons .....3 (isolated)  
 Input voltage range .....(X0-X3): 10-26.4 VDC  
 .....(X4-X11): 10-26.4 VDC or  
 .....21.6-26.4 VAC  
 Input impedance .....2.8 KΩ @ 12-24 VDC  
 ON current/voltage level .....> 3 mA / > 9 VDC  
 OFF current/voltage level .....< 0.5 mA / < 2 VDC  
 OFF to ON response .....X0-X3: 50 μs  
 .....X4-X11: 2-8 ms  
 ON to OFF response .....X0-X3: 50 μs  
 .....X4-X11: 2-8 ms  
 Fuses .....None

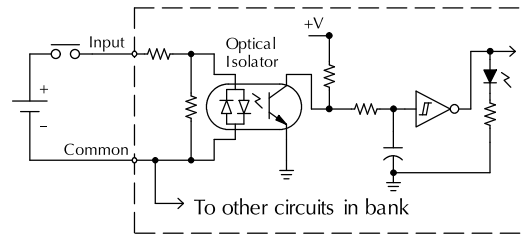
#### DC output specifications

Number of output points .....8 (sinking)  
 Number of commons .....3 (internally connected)  
 Output circuitry .....MOSFET  
 Output voltage range .....5-30 VDC  
 Peak voltage .....60 VDC  
 ON voltage drop .....0.4 VDC @ 0.5 A  
 Maximum current .....Y0-Y1: 0.5 A/point  
 .....Y2-Y7: 1.0 A/point  
 Maximum leakage current .....15 μA at 30 VDC  
 Maximum inrush current .....Y0-Y1: 1.5 A for 10 ms  
 .....Y2-Y7: 3 A for 10 ms  
 Minimum load .....None  
 OFF to ON response .....Y0-Y1: 10 μs  
 .....Y2-Y7: 3.5 μs  
 ON to OFF response .....Y0-Y1: 70 μs  
 .....Y2-Y7: 110 μs  
 Fuses .....None (external recommended)

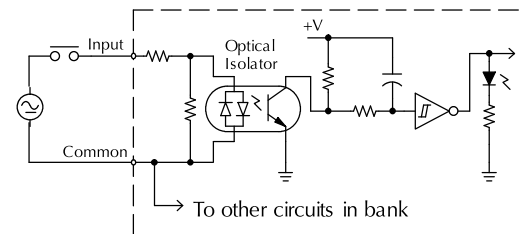


**Note:** Same supply can be used to power both input and output circuits because all circuits are isolated from the internal logic.

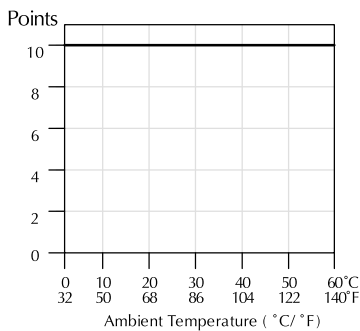
#### Equivalent circuit high-speed inputs (X0-X3)



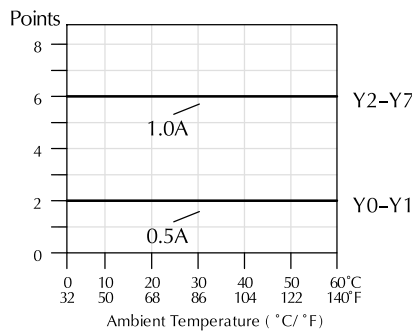
#### Equivalent circuit standard inputs (X4-X11)



Derating chart for DC inputs



Derating chart for DC outputs



#### Equivalent output circuit

