



Application Note #5474

Selection Matrix for the DMC-21x3 Series Controllers

This application note contains a selection matrix that can be used when ordering or designing a Galil DMC-21x3 system.

The matrix references the following items, which can also be found on the web at:
<http://www.galilmc.com/products/econo/dmc21x3.html>

ICM-20100 - provides D-sub connectors for cost-effective connection to external drives

ICM-20105 - provides D-sub connectors for interface to external drives in addition to optical isolation for inputs and outputs

AMP-20420 - contains two 200W PWM drives for driving brush-type servo motors.

AMP-20440 - contains four 200W PWM drives for driving brush-type servo motors.

AMP-20341 - contains four small 20W linear drives for driving small brush-type servo motors

AMP-20520 - contains two 500W PWM drives for driving brushless or brush-type servo motors

AMP-20540 - contains four 500W PWM drives for driving brushless or brush-type servo motors

AMP-20542 - contains four PWM drives for driving brushless or brush-type servo motors (3Amps Continuous, 5Amps peak at 18-60VDC). Software selectable for low inductance motors (chopper mode).

SDM-20240 - contains four small drives for stepper motors operating in full/half step mode

SDM-20620 - contains two drives for stepper motors operating in microstepping mode

SDM-20640 - contains four drives for stepper motors operating in microstepping mode

DB-28040 - provides 40 additional digital I/O and eight analog inputs

DB-28104 - provides sinusoidal interpolation for Sin/Cos encoders

Amplifier and Accessory Guidelines for DMC-21x3 Galil Motion Controllers

Use the table below to confirm whether the amplifier and accessory options you have selected will work together with a specific DMC-21x3 controller model. A, B, C, D, E, F, G, and H below represent the axis numbers 1 through 8. Some combinations of DMC-21x3 controllers with AMP or SDM interconnect boards are invalid (e.g. DMC-2183 with two AMP-20540s) or are not economical (e.g. DMC-2113 with AMP-20440—use an AMP-20420 instead). Consult a Galil application engineer at 800-377-6329 if you require assistance or if a desired configuration is not available.

	DMC-2113	DMC-2123	DMC-2133	DMC-2143	DMC-2153		DMC-2163		DMC-2173		DMC-2183	
					A,B,C,D	E	A,B,C,D	E,F	A,B,C,D	E,F,G	A,B,C,D	E,F,G,H
INTERCONNECT												
ICM-20100	√	√	√	√	√	√	√	√	√	√	√	√
ICM-20105	√	√	√	√	√	√	√	√	√	√	√	√
AMPLIFIERS												
AMP-20420	√	√	√	√	√	√	√	√	√	√	√	√
AMP-20440	No	No	√	√	√	No	√	No	√	√	√	√
AMP-20341	√	√	√	√	√	√	√	√	√	√	√	√
AMP-20520	√	√	√	√	√	No	√	No	√	No	√	No
AMP-20540	No	No	√	√	√	No	√	No	√	No	√	No
AMP-20542	No	No	√	√	√	No	√	No	√	No	√	No
SDM-20240	√	√	√	√	√	√	√	√	√	√	√	√
SDM-20620	√	√	√	√	√	No	√	No	√	No	√	No
SDM-20640	No	No	√	√	√	No	√	No	√	No	√	No
ACCESSORIES												
DB-28040	√	√	√	√	√	√	√	√	√	√	√	√
DB-28104	√	√	√	√	√	√	√	√	√	√	√	√

Notes:

-When using the DB-28040 or DB-28104 with the AMP-205x0 or SDM-206x0, a special right angle connector must be used. Contact Galil for details

-For more information on Power options, see Power Configurations for DMC-21x3 controllers and Daughter Boards application note.

<http://www.galilmc.com/support/appnotes/econo/note1247.pdf>