

## SECTION 1 - OVERVIEW

This manual is organized so that information is easy to find and easy to use. It begins by detailing how to identify the DeltaMax package, Delta drives, and Delta motors. Followed by a general description of the product and its components. The basic electrical characteristics of the DeltaMax package including the Delta Motors are described, and comprehensive product specifications are provided.

The operation of the product is then described, complete with signal wiring and parameter set up. Sections on Power and Driver Wiring, Regen Resistor selection and Dynamic and Mechanical Braking follow. A section describing alarms and status can aid you in the unlikely event that anything goes wrong.

Motor and Driver Speed/Torque Curves follow this information, allowing you to match Drivers and Motors to your specific applications. A final section which contains cables and various Mechanical Drawings round out this manual.

### 1.1 IDENTIFYING DELTAMAX PACKAGES

DeltaMax packages can be identified as follows.

Your DeltaMax package model number uses this designation:

DELTAMAX-XYYYYYABCDEFG,

WHERE:

X = motor series

Blank = standard

A = A series

B = B series

C = Custom

D = D series

E = E series

YYYY = is the rated mechanical output wattage of the package

A = H = 3000 rpm rated motor

M = 2000 rpm rated motor

L = 1500 rpm rated motor

C = custom motor

B = R = resolver based system

RA = absolute resolver sensor based system

E = encoder based system

EA = absolute encoder sensor based system

C = A = 220 VAC system, single or three phase

B = 120 VAC system, single phase (only for smallest drive and only up to 200 watts)

D = motor and driver options

B = integral brake option

I = 14 bit analog input

T = for windings with "Tropical" fungus protection

1X = 1 cycle resolver

others as defined in future

EFG = possible various options

C = CAN Bus option

D = DeviceNet option

H = Proprietary

S = Sourcing Inputs and Outputs

## 1.1 IDENTIFYING DELTAMAX PACKAGES (cont'd)

Example: A DeltaMax package designated DELTAMAX-120HRB is a 120-watt motor, with a 3000 rpm rated motor, a resolver based system, 120 VAC system. If this same package was equipped with DeviceNet and sourcing I/O, it would be designated DELTAMAX-120HRBDS.

## 1.2 IDENTIFYING DELTAMAX DRIVES

DeltaMax Drivers can be identified as follows. This information is on the Driver label:

Your DeltaMax Driver model number uses this designation:

DMAX-CURRENT/ZYEFG,

WHERE:

CURRENT = Peak Driver Current in amps (rms)

Z = feedback method:

R = resolver feedback

E = encoder feedback

RA = absolute resolver feedback

EA = absolute encoder feedback

Y = input voltage:

A = 220 VAC input (single or three phase)

B = 115 VAC input (single phase) - only available up to 200 watts

EFG = possible various options

C = CAN Bus option

D = DeviceNet option

H = Proprietary

I = 14 bit analog input A & D converter

S = Sourcing Inputs and Outputs

Example: A DeltaMax Driver designated DMAX-8.5/RB has a peak current rating of 8.5 A rms, resolver feedback, and 115 VAC 1Ø input voltage.

### 1.3 IDENTIFYING DELTA MOTORS

Delta Motors can be identified as follows. This information is on the Motor label:

Your Delta Motor model number uses this designation:

DBM-SERIES WATTAGE/SPEED YZ,

WHERE:

SERIES	=	Motor series
		Blank = standard
A	=	A series
B	=	B series
C	=	Custom
D	=	D series
E	=	E series
WATTAGE	=	Rated Motor Power in watts
SPEED	=	Rated Motor Speed in hundreds of RPMs
Y	=	feedback method:
		R = resolver feedback
		E = encoder feedback
		RA = absolute resolver feedback
		EA = absolute encoder feedback
Z	=	B for a motor with an integral brake
		T for windings with "Tropical" fungus protection
		W for washdown sealing
		1X = 1 cycle resolver

Example: A Delta Motor designated DBM-120/30R is a 120-watt motor with a 3000 rpm rated speed and resolver feedback. If the same motor was equipped with an integral brake, it would be designated DBM-120/30RB. If the same motor was equipped with "Tropical" fungus protection, it would be designated DBM-120/30RT and with a brake, it would be designated DBM-120/30RBT.

