

The Application Note is pertinent to the AC Drives

## A Replacement Solution for Eclipse AC Drives

The Eclipse Series drives are digital, pwm, bipolar transistor adjustable frequency ac motor controllers. It was designed for three phase-input power with a three phase output for 3-phase squirrel induction motors covering a range of 7.5 to 250 horsepower. The units were chassis models with optional enclosures, available with or without operators and a remote keypad option. A dynamic braking module was also available. The table below is a cross-reference of available replacement drives.

	<b>Chassis</b>	<b>CT</b>	<b>VT</b>	<b>3 phase</b>	Commander SE	Unidrive GP	
<b>Model</b>	<b>Part No</b>	<b>HP</b>	<b>HP</b>	<b>Volts</b>			Unidrive VTC
Eclipse 1	6230-8201	7.5		208/240	SE33200550	GPD2203	
			10		SE33200750		UNI3201VTC
	6230-8202	10		208/240	SE33200750	GPD3201	
			15		SE43401100		UNI3202VTC
	6230-8300	8.3		380	SE33400750	GPD2402	
			12.5		SE33401100		UNI2403VTC
	6230-8301	12.5		380	SE33401100	GPD2403	
			16.6		SE33401500		UNI3401VTC
	6230-8302	16.6		380	SE33401500	GPD3401	
			25		SE53402200		UNI3403VTC
	6230-8400	10		415/480	SE33400750	GPD2402	
			15		SE43401100		UNI2403VTC
	6230-8401	15		415/480	SE43401100	GPD2403	
			20		SE43401500		UNI3401VTC
	6230-8402	20		415/480	SE43401500	GPD3401	
			30		SE53402200		UNI3403VTC
	6230-8500	7.5		575	N/A	N/A	
			10				N/A
	6230-8501	15		575	N/A	N/A	
			20				N/A
Eclipse 2	6230-8220	15		208/240	N/A	GPD3202	
			20				UNI3203VTC
	6230-8221	25		208/240	N/A	GPD3204	
			40				N/A
	6230-8320	25		380	SE53402200	GPD3403	
			37.5		SE53403700		UNI3405VTC
	6230-8321	41		380	SE53403700	GPD3405	
			61				UNI4402VTC
	6230-8420	30		415/480	SE53402200	GPD3403	
			50		SE53403700		UNI3405VTC
	6230-8421	50		415/480	SE53403700	GPD3405	
			75				UNI4402VTC

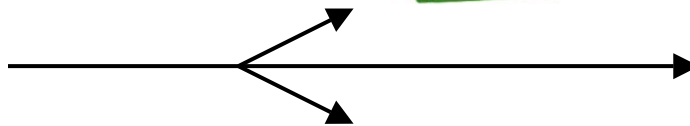
Model	Chassis Part No	CT HP	VT HP	3 phase Volts	Unidrive GP	Unidrive VTC
Eclipse 3	6230-8008	62		380	GPD4401	
			82			UNI4403VTC
	6230-8009	82		380	GPD4402	
			125			UNI4405VTC
(1)	6230-8010	62		380	GPD4401***	
			82			UNI4403VTC***
(1)	6230-8011	82		380	GPD4402***	
			125			UNI4405VTC***
(2)	6230-8014	62		380	GPD4401***	
			82			UNI4403VTC***
(2)	6230-8015	82		380	GPD4402***	
			125			UNI4405VTC***
	6230-8000	75		415/480	GPD4401	
			100			UNI4403VTC
	6230-8001	100		415/480	GPD4402	
			150			UNI4405VTC
(1)	6230-8002	75		415/480	GPD4401***	
			100			UNI4403VTC***
(1)	6230-8003	100		415/480	GPD4402***	
			150			UNI4405VTC***
(2)	6230-8012	75		415/480	GPD4401***	
			100			UNI4403VTC***
(2)	6230-8013	100		415/480	GPD4402***	
			150			UNI4405VTC***
Eclipse 3	6230-8445	150		415/480	GPD4405***	
			200		<b>Consult</b>	<b>Factory</b>
	6230-8450	200		415/480	<b>Consult</b>	<b>Factory</b>
			250		<b>Consult</b>	<b>Factory</b>

- (1) standard with Nema 1 encl. & AC line disconnects
- (2) standard with Nema 12 encl. & AC line disconnects
- \*\*\* consult factory -- Unidrive Expresspak
- (3) Replacement drives require external line fuses

**Commander SE**  
Size 2, 3, 4 & 5



**Eclipse 1**



**Unidrive (GP & VTC)**  
Size 2 & 3



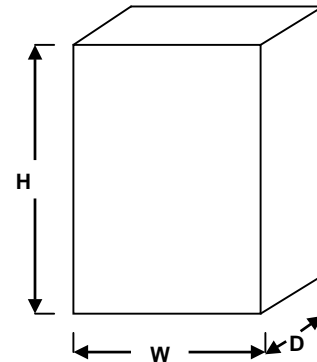
**Basic Drive Dimensions:**

Drive Model	Dim (HxWxD in inches)
Eclipse 1	19.25 x 11.75 x 10.75
Eclipse2	35.0 x 25.0 x 12.0
Eclipse3	51.0 x 27.0 x 12.75

Drive Model Commander SE	Dim (HxWxD in inches)
Size 1 SE1-----	6.9 x 4.0 x 5.12
Size 2 SE2-----	10.2 x 5.8 x 5.12
Size 3 SE3-----	12.4 x 7.5 x 6.13
Size 4 SE4-----	15.4 x 9.8 x 7.3

Drive Model Unidrive GP	Dim (HxWxD in inches)
Size 1 GPD1-----	13.19 x 3.75 x 7.88
Size 2 GPD2-----	13.19 x 7.50 x 7.88
Size 3 GPD3-----	13.9 x 14.75 x 10.25
Size 4 GPD4-----	27.56 x 19.69 x 10.25

Drive Model Unidrive VTC	Dim (HxWxD in inches)
Size 1 UNI1-----VTC	13.19 x 3.75 x 7.88
Size 2 UNI2-----VTC	13.19 x 7.50 x 7.88
Size 3 UNI3-----VTC	13.9 x 14.75 x 10.25
Size 4 UNI4-----VTC	27.56 x 19.69 x 10.25



Click on the link below to obtain more information on the Commander SE

[http://www.emersonct.com/download\\_usa/literaturePDF/pdCatalog2003/COMMSE.pdf](http://www.emersonct.com/download_usa/literaturePDF/pdCatalog2003/COMMSE.pdf)



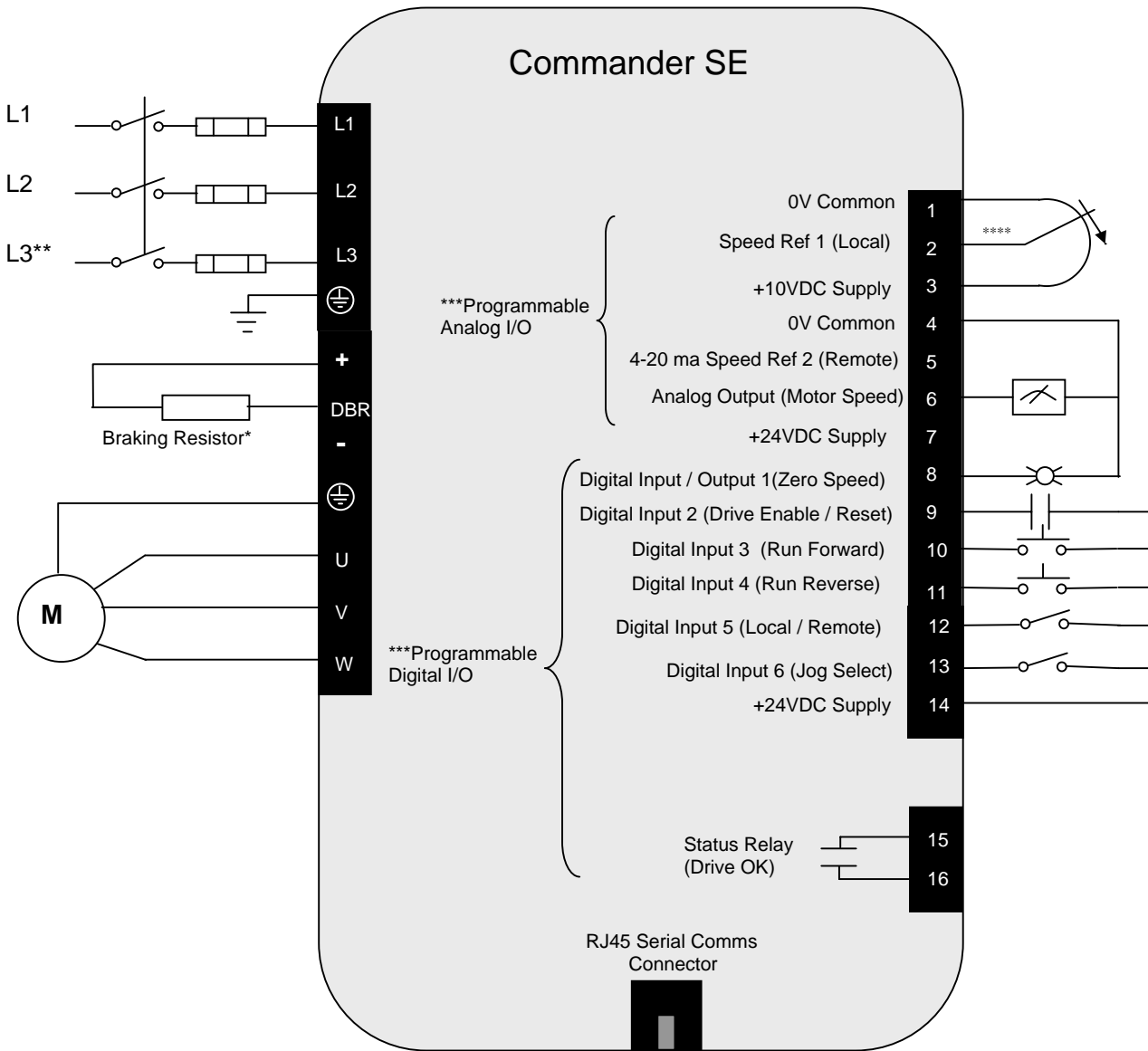
Click on the link below to obtain more information on the Unidrive

[http://www.emersonct.com/download\\_usa/literaturePDF/pdCatalog2003/Unidrive.pdf](http://www.emersonct.com/download_usa/literaturePDF/pdCatalog2003/Unidrive.pdf)



# Basic Drive Connections:

## Terminal Diagram



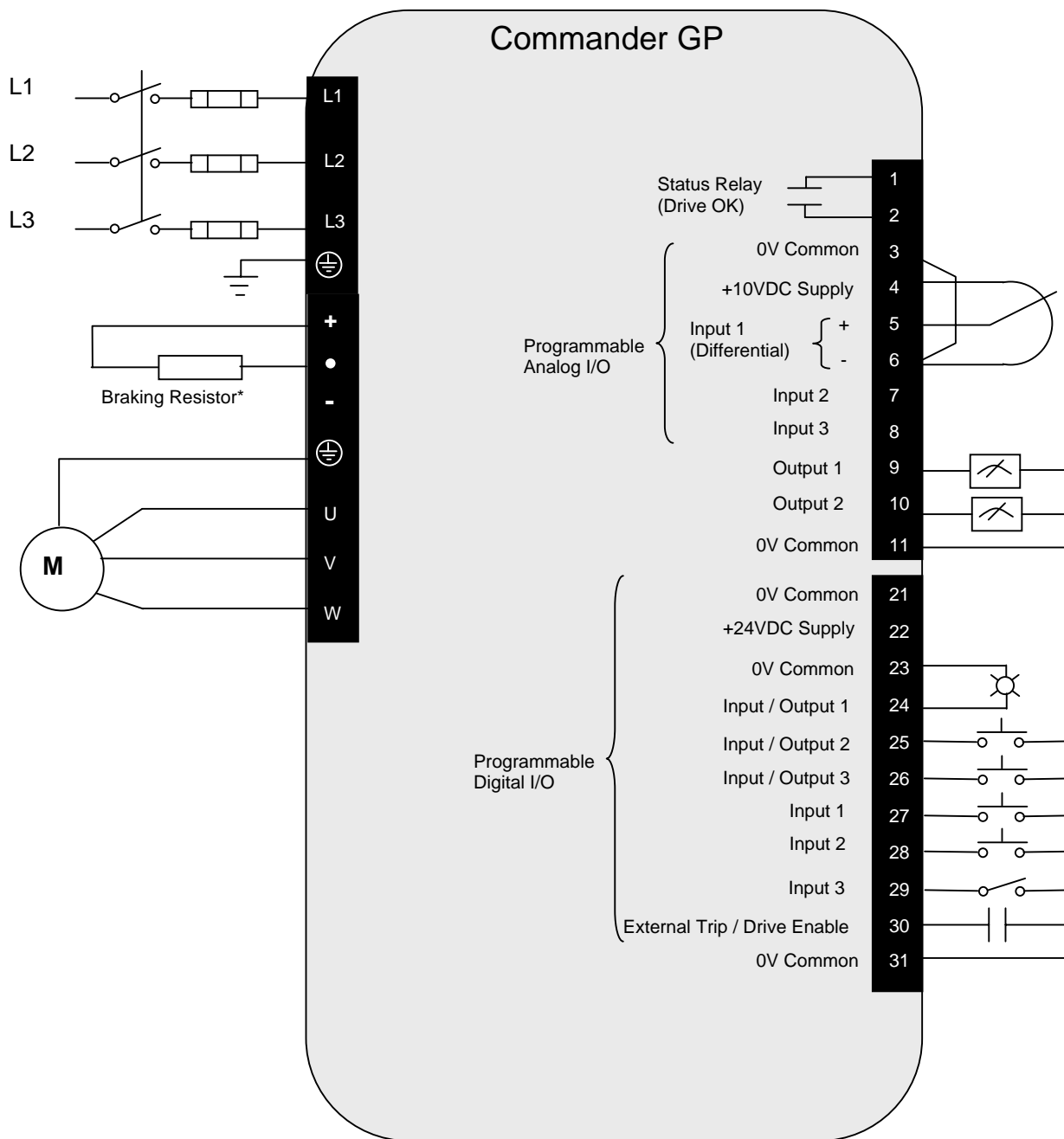
### Notes

- \* Thermal protection required. Not available on Commander SE Size1
- \*\* Commander SE Size 1 is single-phase input only.
- \*\*\* Some programmable I/O may be modified via menu Level1 (L1). Enhanced configuration may be done using SE Soft or through the use of the optional CTKP.
- \*\*\*\* For negative input from a process follower, use the SE51 Bi-polar option card

For complete instructions, refer to the Commander SE User Guide.

# Basic Drive Connections:

## Terminal Diagram



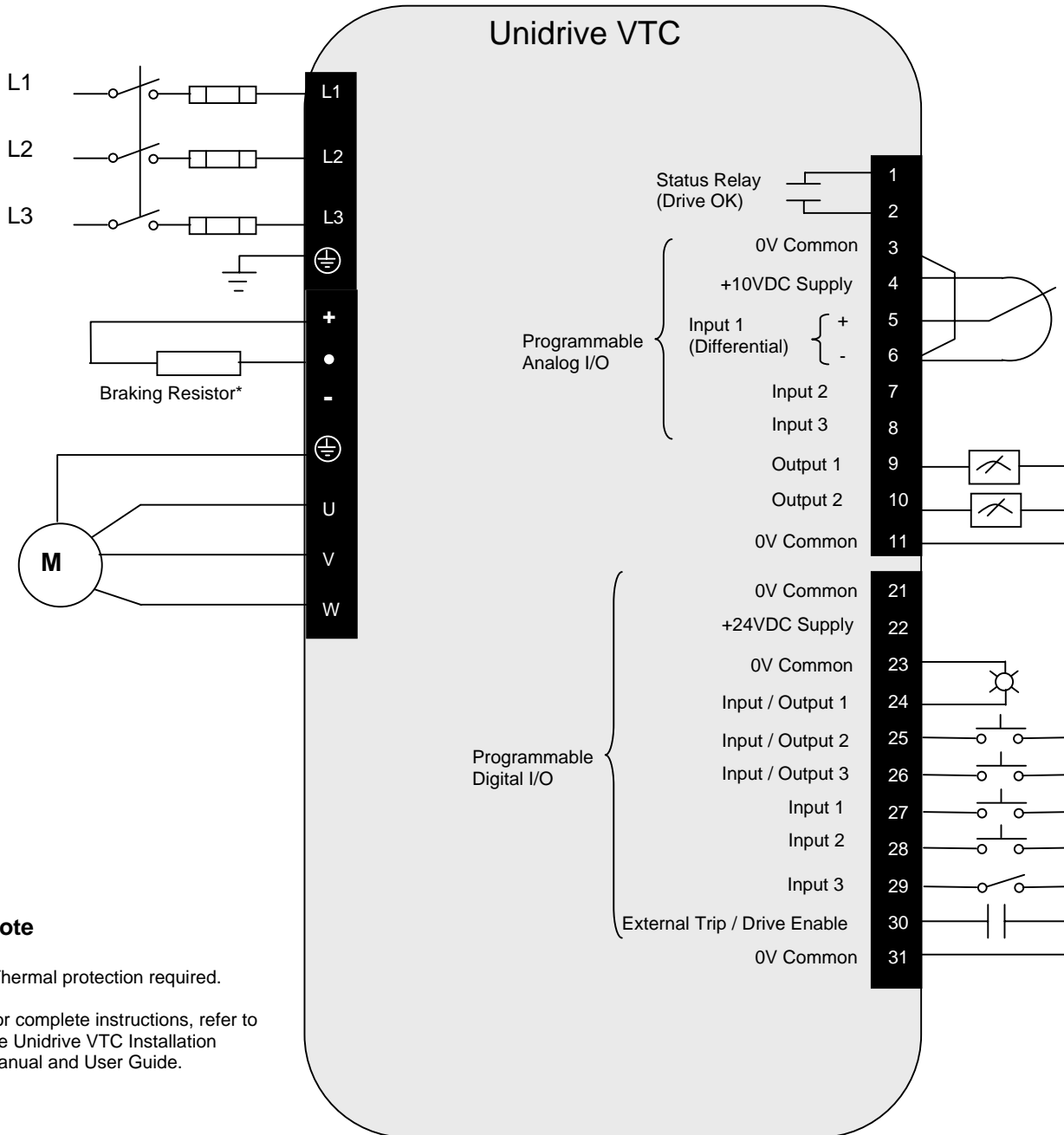
### Note

\*Thermal protection required.

For complete instructions, refer to the Commander GP Installation Manual and User Guide.

# Basic Drive Connections:

## Terminal Diagram



**Note**

\*Thermal protection required.

For complete instructions, refer to the Unidrive VTC Installation Manual and User Guide.

**Questions: Ask the author ??**

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