

The Application Note is pertinent to the AC Drives

A Replacement Solution from Horizon to Commander SE or Commander SK

The Horizon AC drive was an adjustable frequency, adjustable voltage (VVI) ac motor controller. It was designed for single phase input power (115/230 vac) with a three phase output for 3-phase squirrel cage induction motors. Three models were available covering the range of ¼ to 1 Hp. The units were supplied in a NEMA 1 enclosure (optional NEMA 4/12 conversion kit). This drive had three basic functions: Start/stop switch, speed pot and an optional fwd/rev selector. The table below shows a cross reference to currently available Digital AC drives.

Horizon Model	Input Voltage	Output Amps	Commander SE	Commander SK	Input Voltage	Output Amps SE (SK)
2990-8000	120vac, 1ph	3.2	Not Available	Not Available	---	---
2990-8002	240vac, 1ph	2.0	SE11200037	SKA1200037	240vac, 1ph	2.3 (2.2)
2990-8005	240vac, 1ph	3.6	SE11200055	SKA1200055	240vac, 1ph	3.1 (3.0)
			SE11200075	SKA1200075	240vac, 1ph	4.3 (4.0)

Outline Dimensions: (Drawn to scale)



NEMA 1 only



Click on green drives for more information on that model



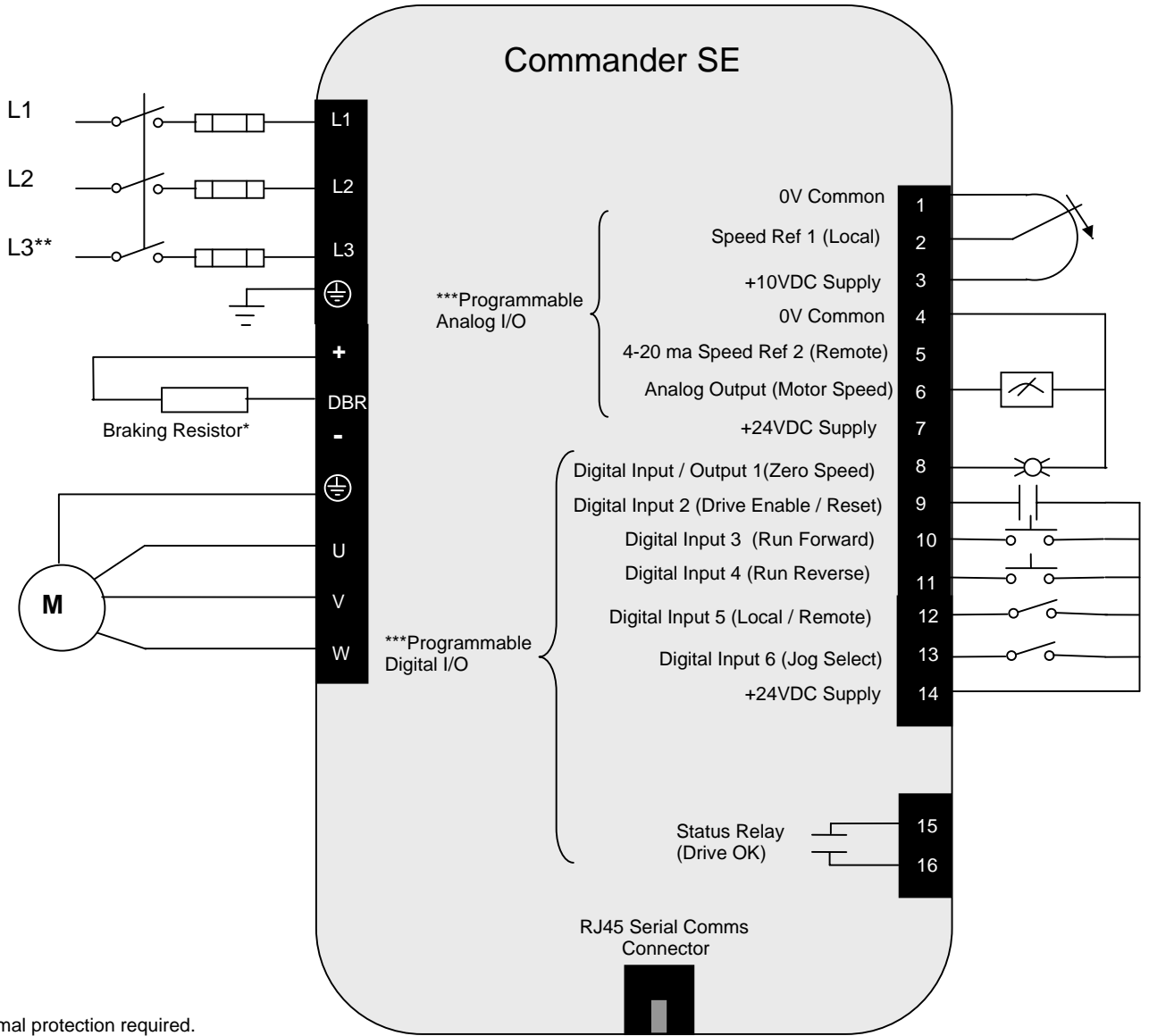
Optional NEMA 1

The Commander SE / SK are fully digital PWM type, open loop vector ac motor controllers. Just as the Horizon, the drive has start/stop, fwd/rev and a "digital" speed pot on the front cover. In addition to the simple features provided with the Horizon, the Commander SE / SK have many advanced features (PID loop, MOP function, Preset speeds, S-ramp and DC injection braking to mention a few) available including serial communications and field bus connectivity.

[Click on the link below to obtain more information on the Commander SE](http://www.emersonct.com/download_usa/literature/06catalogpdfs/06cat_d_ac-commander_se.pdf)
http://www.emersonct.com/download_usa/literature/06catalogpdfs/06cat_d_ac-commander_se.pdf

[Click on the link below to obtain more information on the Commander SK](http://www.emersonct.com/download_usa/literature/06catalogpdfs/06cat_c_ac-commander_sk.pdf)
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Terminal Diagram

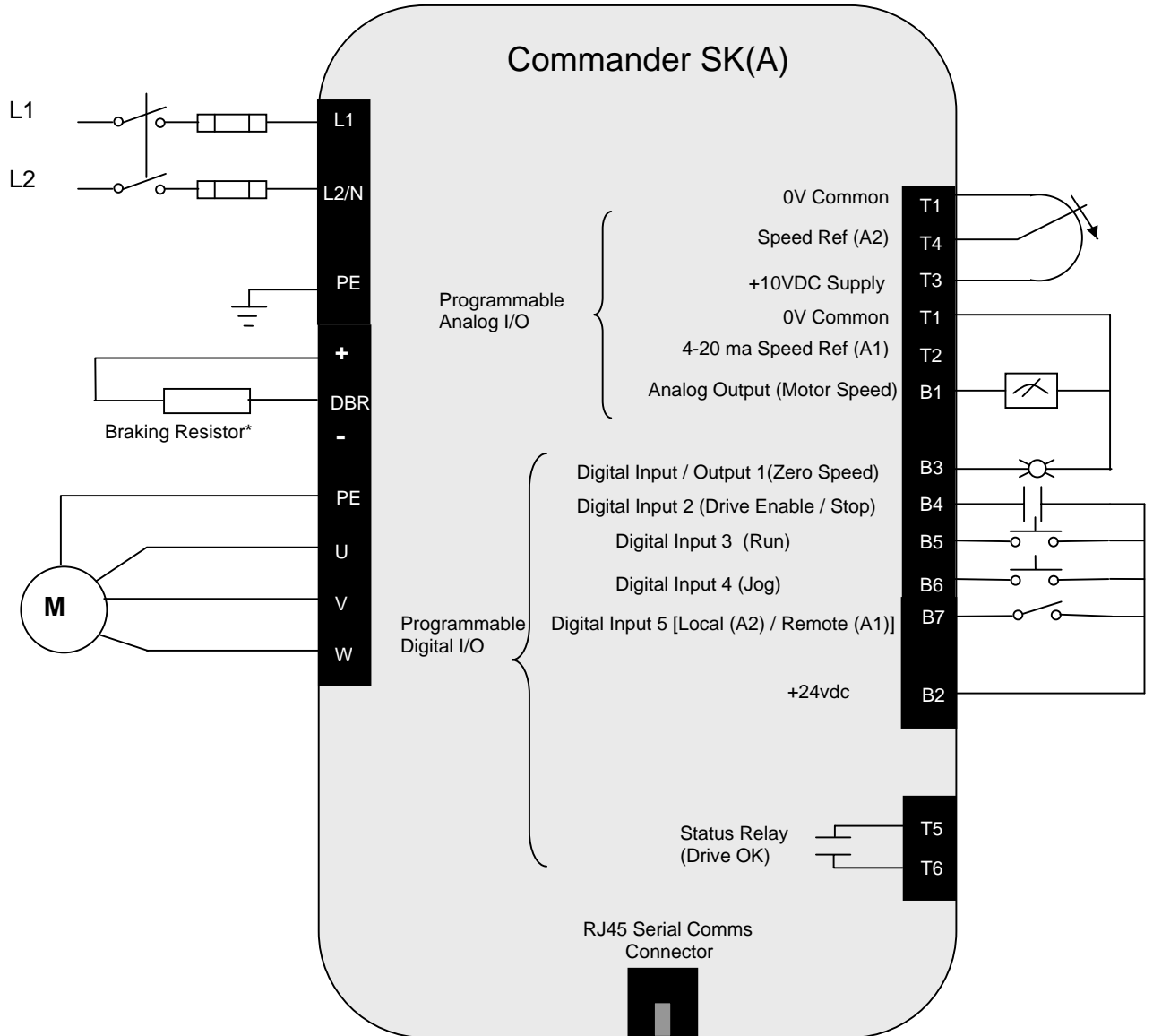


Notes

- * 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 complete instructions, refer to the Commander SE User Guide.

Terminal Diagram



Notes

* Thermal protection required.

** Commander S Size A is single-phase input only.

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