

DS7 Soft Start Controller for Single Phase Applications

Introduction

The DS7 soft start controller may be utilized to accomplish motor starting using the reduced voltage method for single-phase applications. Soft starter sizing is determined by the horsepower or kW rating of the motor. Please note that all references to sizing the DS7 Soft Start Controller are based on motor full load amps (FLA) rather than horsepower. This is to preclude improper sizing due to variations of motor FLA among various motor manufacturers. The soft start controller selection process for single phase control is identical to three phase for standard and heavy duty applications.

Sizing

DS7 Soft Start Controllers are sized in accordance with their maximum current ratings. Correct sizing may be accomplished by referring to the DS7 current ratings in Table 1.

Table 1.

Catalog Number	Rated Current (A)	Frame Size	Recommended Single Phase Wiring Configuration
DS7-34_SX004	4	1	FIGURE 1
DS7-34_SX007	7	1	FIGURE 1
DS7-34_SX009	9	1	FIGURE 1
DS7-34_SX012	12	1	FIGURE 1
DS7-34_SX016	16	2	FIGURE 1
DS7-34_SX024	24	2	FIGURE 1
DS7-34_SX032	32	2	FIGURE 1
DS7-34_SX041	41	3	FIGURE 2
DS7-34_SX055	55	3	FIGURE 2
DS7-34_SX070	70	3	FIGURE 2
DS7-34_SX081	81	3	FIGURE 2
DS7-34_SX100	100	3	FIGURE 2
DS7-34_SX135	135	4	FIGURE 2
DS7-34_SX160	160	4	FIGURE 2
DS7-34_SX200	200	4	FIGURE 2



Powering Business Worldwide

DS7 Mains Connections

Connections of the DS7 to a single-phase application is shown in Figures 1 and 2.

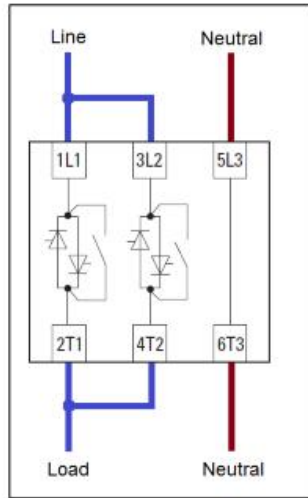


Figure 1 - Frames 1 & 2

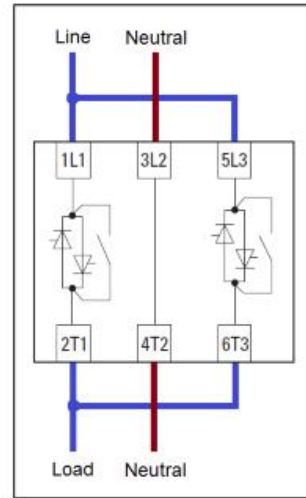


Figure 2 - Frames 3 & 4

Supporting Documentation

Manual	Reference Number
DS7 IL Frame 1 (4-12A)	IL03902003Z
DS7 IL Frame 2 (16-32A)	IL03902004Z
DS7 IL Frame 3 & 4 (41-200A)	IL03902005Z
DS7 User Manual	MN03901001Z

Additional Help

In the US or Canada: please contact the Technical Resource Center at 1-877-ETN-CARE or 1-877-326-2273 option 2, option 2.

All other supporting documentation is located on the Eaton web site at www.eaton.com/Drives

