

Servo Drives 9400 HighLine

Accessories



Sinusoidal filters

A sinusoidal filter in the motor cable limits the rate of voltage rise and the capacitive charge/discharge currents that occur during inverter operation. In combination with the specified line filter, the EMC requirements of the limit class C2 for conducted noise emissions are still met, even if longer shielded or even unshielded motor cables are used.

Application range:

- Only use a sinusoidal filter with standard 0 to 550 V asynchronous motors
- Operation only with V/f or V/f² characteristic control
- Set the switching frequency permanently to the specified value
- Limit the output frequency of the Servo Drives 9400 to the specified value



Sinusoidal filters

| Typical motor power | Mains voltage | Product key | | | | Rated inductance | Switching frequency | Mass |
|---------------------------|--------------------|--------------|--------------|--------------|-------------------|------------------|---------------------|--------------|
| | | Single Drive | RFI filter | Mains filter | Sinusoidal filter | | | |
| 4-pole asynchronous motor | | | | | | | | |
| P | U _{AC} | | | | | L _N | f _{ch} | m |
| [kW] | [V] | | | | | [mH] | [kHz] | [kg] |
| 0.37 | 3 AC 180... 550 | E94AS□E0024 | | E94AZMS0034 | EZS3-004A200 | 11.0 | 4 8 | 4.0 |
| 0.75 | | E94AS□E0034 | | E94AZMS0094 | EZS3-010A200 | | | |
| 1.50 | | E94AS□E0044 | | | | E94AZMS0184 | | EZS3-024A200 |
| 3.00 | | E94AS□E0074 | | E94AZMS0314 | EZS3-037A200 | | | |
| 5.50 | | E94AS□E0134 | E94AZRS0544 | | | EZS3-048A200 | | 1.20 |
| 7.50 | | E94AS□E0174 | | EZS3-061A200 | 1.00 | | | |
| 11.0 | | E94AS□E0244 | EZS3-072A200 | | | 0.95 | | 37.0 |
| 15.0 | | E94AS□E0324 | | EZS3-115A200 | 0.70 | | | |
| 22.0 | | E94AS□E0474 | EZS3-150A200 | | | 0.50 | 69.0 | |
| 30.0 | | E94AS□E0594 | | E94AZRS0954 | | | | |
| 45.0 | | E94AS□E0864 | | | | | | |
| 55.0 | | E94AS□E1044 | | | | | | |

4.3

Servo Drives 9400 HighLine

Accessories



Sinusoidal filters

| Typical motor power | Mains voltage | Product key | | Max. output frequency | Rated inductance | Switching frequency | Mass |
|---------------------------|---------------------|---------------------------|----------------------------|-----------------------|------------------|---------------------|-------|
| 4-pole asynchronous motor | | Single Drive | Sinusoidal filter | | | | |
| P | U _{AC} | | | f _{max, 2} | L _N | f _{ch} | m |
| [kW] | [V] | | | [Hz] | [mH] | [kHz] | [kg] |
| 75.0 | 3 AC 342 ... 550 | E94AS□E1454 | EZS3-180A200 ³⁾ | | 0.40 | 2 4 | 95.0 |
| 90.0 | | E94AS□E1724 | EZS3-250A200 ³⁾ | | 0.35 | | 107.0 |
| 105 | | E94AS□E2024 | | | | | 109.0 |
| 130 | | E94AS□E2454 | EZS3-350A200 ³⁾ | | 0.21 | | 132.0 |
| 150 | | E94AS□E2924 | | | 0.14 | | 161.0 |
| 190 | | E94AS□E3664 | EZS3-480A200 ³⁾ | | 0.21 | | 266.0 |
| 240 | | E94AS□E4604 ¹⁾ | EZS3-350A200 ³⁾ | | 0.14 | | 278.0 |
| 300 | | E94AS□E5724 ¹⁾ | EZS3-480A200 ³⁾ | | 0.21 | | 300.0 |
| 335 | | E94AS□E6354 ¹⁾ | | | | | 321.0 |
| 370 | | E94AS□E6954 ²⁾ | EZS3-350A200 ³⁾ | | | | |

¹⁾ Two sinusoidal filters must be connected in parallel

²⁾ Three sinusoidal filters must be connected in parallel

³⁾ If the parameters for devices over 75 kW/145 A are set for operation with "increased rated output current" (code C01199), different assignments may be necessary.