

FQP

**Compact and efficient design.
Reliable and robust electronics.
Automatic protection.**





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|-------------------------------|--|--|
| INPUT | Rated Operating Voltage | (3-Phase) 400 VAC (±10%) (3-Phase) 690 VAC (±10%) |
| | Operating Frequency ^[1] | 50 Hz, 60 Hz |
| | Rated Current ^[2] | 6 A to 344 A at 400 V 52 A to 213 A at 690 V |
| | Rated Motor Power | 2.2 kW to 200 kW at 400 V 45 kW to 200 kW at 690 V |
| MAIN FEATURES | Total Harmonic Current Distortion (THDi) ^[3] | Model FQP __ 05: <5% at rated power Model FQP __ 10: <10% at rated power |
| | Efficiency | 97% at rated voltage and power |
| | Displacement Power Factor (DPF = cos Φ) | ≥ 0.99 |
| | Drive DC Link Voltage Behavior | No load: +10% Full load: - 5% |
| | Insulating Voltage | 2500 VAC (1 min) |
| | Overload Capacity | 120% during 60 sec at 40 °C Other under request. |
| | No-load Current | <0.3 · I _{Rated} input at 400 VAC (capacitive current) <0.37 · I _{Rated} input at 500 VAC (capacitive current) <0.3 · I _{Rated} input at 690 VAC (capacitive current) |
| ENVIRONMENT CONDITIONS | Ambient Temperature | -30 °C to +50 °C |
| | Altitude | 1000 m |
| | Altitude de-rating | >1000 m, -1% per 100 m; 3000 m max |
| | Protection Degree | IP20 and IP42 |
| | Relative Humidity | <95%, non condensing |
| | Cooling | Internal forced cooling Frame 1: 70 m ³ /h fresh air Frame 2: 135 m ³ /h fresh air Frame 3: 165 m ³ /h fresh air Frame 4: 300 m ³ /h fresh air Frame 5: 550 m ³ /h fresh air |
| | STANDARDS ^[4] | Certifications |
| Electromagnetic compatibility | | EMC Directive (2004/108/CE) |
| | | IEC/EN 61800-3 |
| | | IEEE 519 |
| Design and construction | | LVD Directive (2006/95/CE) IEC/EN 61800-2 General requirements IEC/EN 61800-5-1 Safety |
| PROTECTIONS | Free-potential contact on terminals with thermal protection function for user ^[5] | |
| ADDITIONAL FEATURES | Line Voltage Unbalance Sensitivity | Low |
| | Line Impedance Sensitivity | Low |
| | Built-in contactor for capacitive current reduction ^[6] | |

NOTES

Frame 5 up, filters can be connected in parallel to rise 1750kW @400V and 2000kW @690V.
For more information, consult the SD750 installation manual.
[1] 60Hz under request
[2] Filter FQ05 reduces RMS input and peak current by reducing the harmonic currents and improving the power factor.
[3] General conditions:
-System requirements: THDv <2%, line voltage unbalance <1%.
-Harmonics are below the limits defined in IEEE519 for all I_{sc}/I_L.
[4] Corresponding to SD750+Freemaq.
[5] The connection of one digital input of the SD750 configured as 'External Fault' is recommended by Power Electronics.
[6] The control by means of one output relay from the SD750 is recommended by Power Electronics.



DIMENSIONS



| Frame | Width W (mm) | Depth D (mm) | Height H (mm) | Weight (kg) |
|-------|--------------|--------------|---------------|-------------|
| 1 | 207 | 297 | 508 | 50 |
| 2 | 500 | 394 | 851 | 75 |
| 3 | 500 | 390 | 990 | 107 |
| 4 | 608 | 440 | 1206 | 184 |
| 5 | 838 | 529 | 2000 | 584 |

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