

Technical details

Mains Connection	
Voltage and power range	3-phase, U_N from 0.75 up to 160 kW 380 to 480 V, +10%/-15%
Frequency	50/60 HZ $\pm 5\%$
Power factory	$\cos\phi = 0.98$
Efficiency (at nominal power)	98%
Motor Connection	
Voltage	0 to U_N , 3-phase
Frequency	0 to 500 Hz
Motor control	Scalar and vector control
Speed control	Static accuracy: 20% of motor nominal slip Dynamic accuracy: 1% seconds with 100% torque step
Product compliance	
CE	
Low Voltage Directive 2006/95/EC, EN 61800-5-1: 2007	
Machinery Directive 2006/42/EC, EN 61800-5-2: 2007	
EMC Directive 2004/108/EC, EN 61800-3: 2004 + A1: 2012	
Quality assurance system	
ISO 9001 and Environmental system ISO 14001	
Waste electrical and electronic equipment directive (WEEE) 2002/96/EC	
RoHS directive 2011/65/EU	
EAC	
EMC according to EN 61800-3: 2004 + A1: 2012	
ACS560 with built-in C3 category filter as standard	

Environmental limits	
Ambient temperature	
Transport	-40 to +70 °C
Storage	-40 to +70 °C
Operation area	-15 to +40 °C no frost allowed. R0 to R2 frames - No deration needed up to 50 °C, deration needed above +50 °C to +55 °C R3 to R8 frames: No deration needed up to +40 °C, deration needed above +40 °C to +55 °C. Refer HW manual for more information.
Coating	Coated circuit boards
Cooling method	
Air-cooled	Dry clean air
Altitude	
0 to 1,000 m	Without deration
1,000 to 4,000 m	With deration of 1%/100 m
Relative humidity	5 to 95%, no conden- sation allowed
Degree of protection	IP20
Functional safety	Safe torque off, (STO according EN 61800-5-2), IEC 61508 e d2: SIL 3, IEC 61511: SIL 3, IEC 62061: SIL CL 3, EN ISO 13849-1: PL E
Contamination levels	No conductive dust allowed
Storage	IEC 60721-3-1, Class 1C2 (chemical gases), Class 1S2 (solid particles)*
Operation	IEC 60721-3-3, Class 3C2 (chemical gases), Class 3S2 (solid particles)*
Transportation	IEC 60721-3-2, Class 2C2 (chemical gases), Class 2S2 (solid particles)*
* C = chemically active substances	
S = mechanically active substances	