

S Type Series and Technical Data

Table 11

400 V series											
3- Input U_1 380V - 480V $\pm 10\%$ 48 - 63 Hz	ACS401-	004- 3-X	005- 3-X	006- 3-X	009- 3-X	011- 3-X	016- 3-X	020- 3-X	025- 3-X	030- 3-X	041- 3-X
Frame size		R1			R2		R3		R4		
Nominal ratings (See G)	Unit										
Nominal motor P_N Squared torque	kW	3.0	4.0	5.5	7.5	11	15	18.5	22	30	37
Input current I_{1NSQ}	A	6.2	8.3	11.1	14.8	21.5	29	35	41	56	68
Continuous output current I_{2NSQ}	A	6.6	8.8	11.6	15.3	23	30	38	44	59	72
Max. output current $I_{2NSQmax}$ *	A	7.3	9.7	12.8	16.8	25.3	33	42	48	65	79
Nominal motor P_N Constant torque and power	kW	2.2	3.0	4.0	5.5	7.5	11	15	18.5	22	30
Input current I_{1N}	A	4.7	6.2	8.3	11.1	14.8	21.5	29	35	41	56
Continuous output current I_{2N} **	A	4.9	6.6	8.8	11.6	15.3	23	30	38	44	59
Max. output current I_{2Nmax}	A	7.4	9.9	13.2	17.4	23	34	45	57	66	88
Output voltage U_2	V	0 - U_1									
Switching frequency f_{sw}	kHz	4 (Standard) 8 (Low noise **)									
Protection limits	(See O)										
Overcurrent (peak)	A	20.3	27.5	37	48	64	76	99	125	145	195
Overvoltage: Trip limit	V DC	842 (corresponds to 624 VAC input)									
Undervoltage: Trip limit	V DC	333 (corresponds to 247 VAC input)									
Overtemperature	°C	95 (heat sink)									
Max. cable length $f_{sw} = 4$ kHz	m	100			200		200		200		
$f_{sw} = 8$ kHz		50			100		100		100		
Max. wire sizes and screw torque of connectors											
Power terminals ***	mm ²	10, AWG6 (stranded) / Torque 1.3-1.5 Nm					16, AWG4 (stranded) / Torque 1.5-1.8 Nm		35, AWG2 (stranded) / Torque 3.2-3.7 Nm		
Control terminals	mm ²	0.5 - 1.5 (AWG22...AWG16) / Torque 0.4 Nm									
Line fuse 3-**** ACS401-	A	10	10	16	16	25	35	50	50	63	80
Power losses (at nominal point)											
Power circuit	W	90	120	170	230	330	450	580	660	900	1100
Control circuit	W	6	6	6	6	6	6	6	6	6	6

* Power stages are designed for the continuous I_{2NSQ} current. These values are valid when the altitude is less than 1000 m ASL. See Q.

** Low noise setting only available with optional control panel. Derate P_N and I_2 to 80%.