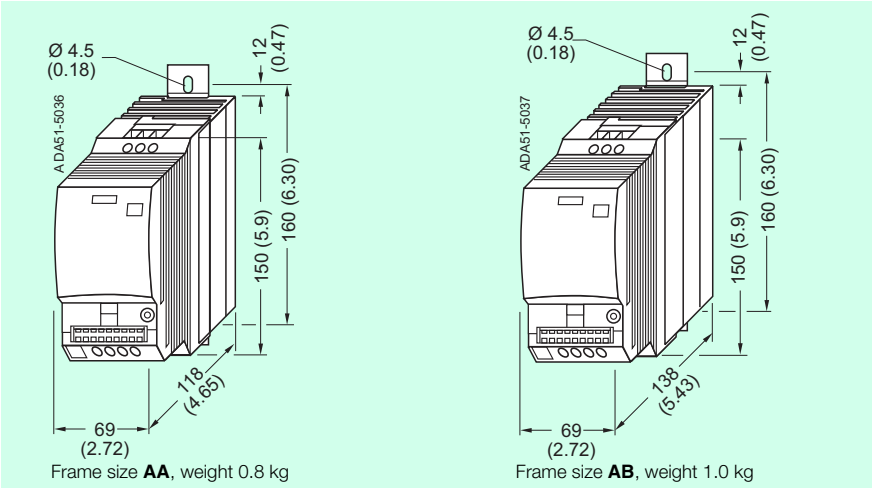
SIEMENS

MICROMASTER 410 Inverters 0.12 kW to 0.75 kW

Brief Description October 2001





Frame size **AA**, weight 0.8 kg

Frame size **AB**, weight 1.0 kg

All dimensions are in mm (the values in brackets are in inches).

Selection and Ordering Data

Rated output		Rated input current	Rated output current	Frame size	Order No.	
kW	hp	A	A		**MICROMASTER 410 without filter**	**MICROMASTER 410 with Class B filter**
Mains operating voltage 100 V to 120 V 1 AC, output voltage 200 V to 240 V three-phase (start of delivery as of December 2001)						
0.12	0.16	4.6	0.9	AA	**6SE6410-2UA11-2AA0**	–
0.25	0.33	7.5	1.7	AA	**6SE6410-2UA12-5AA0**	–
0.37	0.50	10.1	2.3	AA	**6SE6410-2UA13-7AA0**	–
0.55	0.75	13.4	3.2	AB	**6SE6410-2UA15-5BA0**	–
Mains operating voltage 200 V to 240 V 1 AC, output voltage 200 V to 240 V three-phase (start of delivery as of November 2001)						
0.12	0.16	1.5	0.9	AA	**6SE6410-2UB11-2AA0**	**6SE6410-2BB11-2AA0**
0.25	0.33	3.0	1.7	AA	**6SE6410-2UB12-5AA0**	**6SE6410-2BB12-5AA0**
0.37	0.50	4.4	2.3	AA	**6SE6410-2UB13-7AA0**	**6SE6410-2BB13-7AA0**
0.55	0.75	5.8	3.2	AB	**6SE6410-2UB15-5BA0**	**6SE6410-2BB15-5BA0**
0.75	1.0	7.8	3.6 (4.2 at 40 °C)	AB	**6SE6410-2UB17-5BA0**	**6SE6410-2BB17-5BA0**

All currents refer to a surrounding air temperature of 50 °C if not otherwise stated.

Options

Options	Order No.
Operator Panel	**6SE6400-0SP00-0AA0** (November 2001)
PC to inverter connection kit	**6SE6400-0PL00-0AA0** (January 2002)
Adapter for DIN rail mounting	**6SE6400-0DR00-0AA0** (January 2002)
Commissioning tools Starter and DriveMonitor on CD-ROM	**6SE6400-5EA00-1AG0** (November 2001)

The options listed here are suitable for all MICROMASTER 410 inverters.

MICROMASTER 410 Inverters

Technical Data

Input voltage and power ranges	1 AC 200 V to 240 V ± 10% 1 AC 100 V to 120 V ± 10%	0.12 to 0.75 kW 0.12 to 0.55 kW
Input frequency	47 to 63 Hz	
Output frequency	0 Hz to 650 Hz	
Power factor	≥ 0.7	
Inverter efficiency	96 % to 97 %	
Overload capability	up to 150 % of rated output current for 60 s, followed by 85 % for 240 s, cycle time 300 s	
Inrush current	less than rated input current	
Control method	linear *V/f*; parabolic *V/f* (fan curve); Multipoint *V/f* characteristic	
Pulse frequency	8 kHz (standard)	2 kHz to 16 kHz (in 2 kHz steps)
Fixed frequencies	3, programmable	
Skip frequency	1, programmable	
Setpoint resolution	10 bit analog	0.01 Hz serial
Digital inputs	3 freely programmable digital inputs, non isolated; PNP type; SIMATIC compatible	
Analog input	1, for setpoint (0 to 10 V, scalable or for use as 4th digital input)	
Relay output	1, parameterizable, 30 V DC/5 A (resistive load), 250 V AC/2 A (inductive load)	
Serial interface	RS 485, for operation with USS protocol	
Motor cable length	maximum 30 m (shielded)	maximum 50 m (unshielded)
Electromagnetic compatibility	Variant with integrated EMC filter according to EN 61 800-3 (specifies limit values according to EN 55 011 class B)	
Braking	DC Braking, Compound Braking	
Protection level	IP 20	
Operating temperature	–10 °C to +50 °C	
Storage temperature	–40 °C to +70 °C	
Humidity	95% RH – non-condensing	
Operational altitudes	up to 1000 m above sea level without derating	
Protection features	under-voltage, over-voltage, overload, earth fault, short circuit, stall prevention, motor over-temperature I^2t, inverter over-temperature	
Compliance with standards	UL, cUL, CE, c-tick	
CE mark	Conformity with EC low voltage directive 73/23/EEC and the electromagnetic compability directive 89/336/EEC	

Documentation

Typ of documentation (paper version)	Order No. (German Edition)	Order No. (English Edition)
Operating instructions (Nov. 2001)	**6SE6400-5EA00-0AP0**	**6SE6400-5EA00-0BP0**
Parameter list (Nov. 2001)	**6SE6400-5EB00-0AP0**	**6SE6400-5EB00-0BP0**
Getting-Started-Guide	supplied with each inverter (multi-language)	

Conditions of Sale and Delivery

In Germany

Subject to the General Conditions of Sales as well as the General Conditions of Supply and Delivery for Products and Services of the Electrical and Electronic Industry.

For Export

Subject to the General Conditions of Supply and Delivery for Products and Services of the Electrical and Electronic Industry and to any other conditions agreed upon with the recipients of catalogs/price lists.

Software products are subject to the General Licence Conditions for Software Products for Automation and Drives.

We reserve the right to make changes, in particular to the specified values, dimensions and weights, unless specified otherwise on the individual pages of this brief description.

The illustrations are for reference only.

Trademarks

® MICROMASTER is a Siemens registered trademark.

All other product and system names in this brief description are (registered) trademarks of their respective owners and must be treated accordingly.

Siemens AG
Automation and Drives Group
Standard Drives Division
Postfach 32 69
91050 Erlangen
Federal Republic of Germany

© Siemens AG 2001
www.siemens.de/micromaster

Excellence in Automation & Drives: Siemens

Siemens Aktiengesellschaft

Order No. **6ZB5721-0AA02-0BA0**
Printed in the Federal Republic of Germany
18404/122370 E/We 1001 4.0