

订货号 : 6SL3220-1YD56-0CB0
Article No. :



图像类似
Figure similar

客户订单号 :
Client order no. :
西门子订单号 :
Order no. :
报价号 :
Offer no. :
注释 :
Remarks :

物品号 :
Item no. :
托运号 :
Consignment no. :
项目 :
Project :

额定数据
Rated data

通用技术参数
General tech. specifications

输入
Input

相位数 Number of phases	3 AC
电源电压 Line voltage	380 ... 440 V +10 % -15 %
电源频率 Line frequency	47 ... 63 Hz
额定电流 (LO) Rated current (LO)	617.00 A

功率系数 λ Power factor λ	0.75 ... 0.93
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偏移角 cos φ Offset factor cos φ	0.99
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效率 η Efficiency η	0.98
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声压级 LpA(1m) Sound pressure level (1m)	72.9 dB
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损耗功率 ³⁾ Power loss	6.890 kW
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滤波器等级 (集成式) Filter class (integrated)	C3 类电磁干扰滤波器 RFI suppression filter for Category C3
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EMC 类别 (含附件) EMC category (with accessories)	C3 类 Category C3
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安全功能 "Safe Torque Off" Safety function "Safe Torque Off"	无 SIRIUS 设备 (例如 : 通过 S7-1500F) without SIRIUS device (e.g. via S7-1500F)
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通讯
Communication

通讯 Communication	USS, Modbus RTU, BACnet MS/TP USS, Modbus RTU, BACnet MS/TP
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输出
Output

相位数 Number of phases	3 AC
额定电压 Rated voltage	400 V
额定功率 IEC 400V (LO) Rated power IEC 400V (LO)	315.00 kW
额定电流 400V (IN) Rated current 400V (IN)	582.62 A
额定电流 380V (IN) Rated current 380V (IN)	605.00 A
额定电流 (LO) Rated current (LO)	568.00 A
最大输出电流 Max. output current	770.00 A
脉冲频率 Pulse frequency	2 kHz
矢量控制时的输出频率 Output frequency for vector control	0 ... 100 Hz
V/f控制时的输出频率 Output frequency for V/f control	0 ... 100 Hz

过载能力

Overload capability

低过载 (LO)
Low Overload (LO)

周期时间 300 s 中, 110%基本负载电流 IL, 持续时间 60 s
110% base load current IL for 60 s in a 300 s cycle time



SINAMICS G120XA 数据表

Data sheet for SINAMICS G120XA

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Article No. :

输入/输出 Inputs / outputs	
数字量输入 - 标准 Standard digital inputs	
数量 Number	6
开关电平: 0 → 1 Switching level: 0 → 1	11 V
开关电平: 1 → 0 Switching level: 1 → 0	5 V
最大接通电流 Max. inrush current	15 mA
故障安全数字量输入 Fail-safe digital inputs	
数量 Number	0
数字量输出 Digital outputs	
作为继电器转换器的数量 Number as relay changeover contact	4
输出 (欧姆负载) Output (resistive load)	DC 30 V, 1.0 A
作为晶体管的数量 Number as transistor	0
模拟量/数字量输入 Analog / digital inputs	
数量 Number	2 (压差输入端) 2 (Differential input)
分辨率 Resolution	12 位
作为数字量输入的接通阈值 Switching threshold as digital input	
0 → 1	4 V
1 → 0	1.6 V
模拟量输出 Analog outputs	
数量 Number	2 (电位相关输出端) 2 (Non-isolated output)
PTC/ KTY接口 PTC/ KTY interface	
1 个电机温度传感器输入端, 可连接的 PTC 传感器, KTY, PT1000和Thermo-Click, 准确度在 ±5 °C 内 1 motor temperature sensor input, sensors that can be connected: PTC, KTY, PT1000 and Thermo-Click, accuracy ±5 °C	

闭环控制方式 Closed-loop control techniques	
V/f线性/平方/可参数设置 V/f linear / square-law / parameterizable	是 Yes
V/f, 带磁通电流控制 (FCC) V/f with flux current control (FCC)	是 Yes
V/f ECO 线性/平方 V/f ECO linear / square-law	是 Yes
矢量控制, 无编码器 Sensorless vector control	是 Yes
矢量控制, 带编码器 Vector control, with sensor	否 No
转矩控制, 无编码器 Encoderless torque control	是 Yes
转矩控制, 带编码器 Torque control, with encoder	否 No
环境条件 Ambient conditions	
喷漆标准 Standard board coating type	IEC 60721-3-3: 2002 规定的 3C2 级 Class 3C2, according to IEC 60721-3-3: 2002
冷却 Cooling	通过集成的风扇进行空气冷却 Air cooling using an integrated fan
冷却空气需求 Cooling air requirement	0.345 m³/s (12.183 ft³/s)
安装高度 Installation altitude	1,000 米 (3,280.84 ft)
环境温度 Ambient temperature	
运行 Operation	0 ... 60 °C (32 ... 140 °F)
运输 Transport	-40 ... 70 °C (-40 ... 158 °F)
存放温度 Storage	-25 ... 55 °C (-13 ... 131 °F)
相对空气湿度 Relative humidity	
运行, 最大 Max. operation	95 % 40 °C (104 °F) 时, 禁止发生凝露和结冰 95 % At 40 °C (104 °F), condensation and icing not permissible

SINAMICS G120XA 数据表

Data sheet for SINAMICS G120XA

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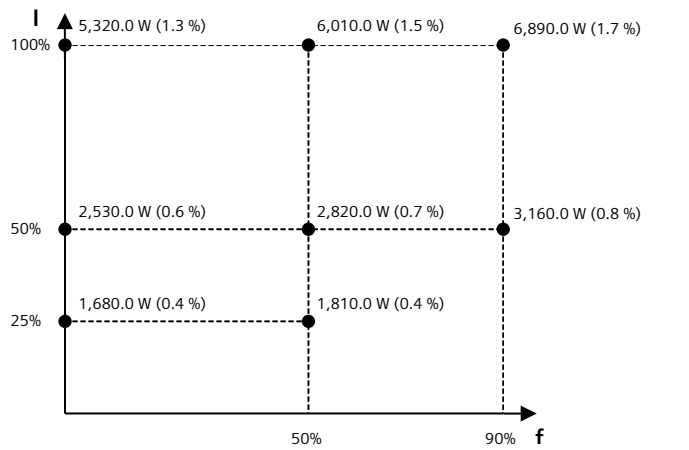
接口	
Connections	
信号电缆	
Signal cable	
接口横截面	0.15 ... 1.50 mm²
Conductor cross-section	(AWG 24 ... AWG 16)
电源侧	
Line side	
规格	M12 螺栓
Version	M12 screw
接口横截面	2 x 240.00 mm²
Conductor cross-section	(MCM 2 x 500)
电机侧	
Motor end	
规格	M12 螺栓
Version	M12 screw
接口横截面	4 x 240.00 mm²
Conductor cross-section	(MCM 2 x 500)
直流母线（用于制动电阻）	
DC link (for braking resistor)	
PE 端子	M12 螺栓
PE connection	M12 screw
最大电机电缆长度	
Max. motor cable length	
屏蔽	100 米 (328.08 ft)
Shielded	

机械数据	
Mechanical data	
防护等级	IP20 / UL 开放式
Degree of protection	IP20 / UL open type
外形尺寸	FSH
Frame size	
净重	132 kg (291.01 lb)
Net weight	
外形尺寸	
Dimensions	
宽度	548 mm (21.57 in)
Width	
高度	1,487 mm (58.54 in)
Height	
深度	410 mm (16.14 in)
Depth	

³⁾ 典型值。更多信息请参见本数据单页的"变频器损耗 IEC 61800-9-2"。

Typical value. More information can be found in the element group "Converter losses to IEC 61800-9-2" in this datasheet.

标准	
Standards	
符合标准	CE, EAC, RCM, RoHS II
Compliance with standards	CE, EAC, RCM, RoHS II
CE 标志	EMV 准则 2004 / 108/EG, 低压准则 2006/95/EG
CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC
符合IEC61800-9-2的变频器损耗*	
Converter losses to IEC61800-9-2*	
效率等级	IE2
Efficiency class	
对比参考变频器（90% / 100%）	41.2 %
Comparison with the reference converter (90% / 100%)	



百分比值给定了以变频器额定视在功率为基准的损耗。

The percentage values show the losses in relation to the rated apparent power of the converter.

该图显示了相对转矩电流 (I) 超过相对电机定子频率 (f) 时间点（根据标准 IEC61800-9-2）上的损耗。这些值适用于不带选项/附件的基本型变频器。

The diagram shows the losses for the points (as per standard IEC61800-9-2) of the relative torque generating current (I) over the relative motor stator frequency (f). The values are valid for the basic version of the converter without options/components.

*计算值

*calculated values