



Figure similar

SIPLUS G120 PM240-2 IP20-FSA-U-400V 3 kW based on 6SL3210-1PE18-0UL1 with conformal coating, -20...+50 °C, unfiltered with integrated braking chopper 380-480 V 3 AC +10/-10% 47-63 Hz power high overload: 2.2 kW at 200% 3 s, 150% 57 s, 100% 240 s power low overload: 3 kW at 150% 3 s, 110% 57 s, 100% 240 s 196x 73x 165 (HxWxD), design FSA, degree of protection IP20 without CU and operating unit released as of CU FW version V4.7 HF8

General information	
Product type designation	PM240-2
Product version	FSA 3 kW
Design of the converter	FSA
based on	<a href="#">6SL3210-1PE18-0UL1</a>
Protection function	
• Undervoltage protection	Yes
• Overvoltage protection	Yes
• Overload protection	Yes
• Ground-fault protection	Yes
• short-circuit protection	Yes
• Stall protection	Yes
• With blocked rotor	Yes
• Temperature monitor for motor	Yes
• Temperature monitor for converter	Yes
• Parameter locking	Yes
Input voltage	
Type of input voltage	AC
Mains filter	
• present	No
Input current	
Input current with low overload	10.1 A
Input current with high overload	8.8 A
Output voltage	
Output voltage in relation to input voltage, min.	0 %
Output voltage in relation to input voltage, max.	95 %
Pulse frequency	4 kHz
Output current	
Output current, max.	11.8 A
Output current without overload	7.7 A
Output current with low overload	7.7 A
Output current with high overload	5.9 A
Power loss	
Power loss, max.	0.12 kW
Power electronics	
emitted active power with low overload	3 kW
emitted active power with high overload	2.2 kW
Efficiency	0.96

Type of duty cycle duration with low overload	1.1x rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s; 1.5x rated output current (i.e. 150 % overload) for 3 s with a cycle time of 300 s
Type of duty cycle duration with high overload	1.5x output current rating (i.e. 150 % overload) for 57 s with a cycle time of 300 s; 2x output current rating (i.e. 200 % overload) for 3 s with a cycle time of 300 s
Cooling method	Internal air cooling
Cooling air flow	0.005 m³/s
Short-time withstand current (SCCR) of the entire control cabinet in accordance with UL 508A	65 kA
<b>Isolation</b>	
Degree of pollution	2 according to EN 61800-5-1
<b>Degree and class of protection</b>	
IP degree of protection	IP20
Equipment protection class according to EN 61800-5-1	Class I (with protective bonding circuit) and Class III (PELV)
Touch protection according to EN 61800-5-1	Assuming use as prescribed
<b>Standards, approvals, certificates</b>	
Certificate of suitability	CE / TÜV
Standard for EMC according to EN 61800-3	the EMC product standard EN 61800-3 does not apply directly to a frequency inverter but to a PDS (Power Drive System), which comprises the complete circuitry, motor and cables in addition to the inverter
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	-20 °C; = Tmin
• max.	55 °C; = Tmax
Ambient temperature during storage/transportation	
• Storage, min.	-25 °C
• Storage, max.	55 °C
• Storage, min. [°F]	-13 °F
• Storage, max. [°F]	131 °F; Class 1K3 acc. to EN 60721-3-1
• Transportation, min.	-40 °C
• Transportation, max.	70 °C
• Transport, min. [°F]	-40 °F
• Transport, max. [°F]	158 °F; Class 2K3 according to EN 60721-3-2
Altitude during operation relating to sea level	
• Installation altitude above sea level without derating, max.	1 000 m
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Vibrations	
• Vibration frequency with constant acceleration during operation according to EN 60068-2-6, min.	58 Hz
• Vibration frequency with constant acceleration during operation according to EN 60068-2-6, max.	200 Hz; Constant acceleration = 9.81 m/s² (1 g)
• Vibration frequency with constant deflection during operation according to EN 60068-2-6, min.	10 Hz
• Vibration frequency with constant deflection during operation according to EN 60068-2-6, max.	58 Hz; Constant deflection 0.075 mm
• Oscillation frequency during transport in accordance with EN 60721-3-2	Class 2M3
Shock testing	
• Shock load during operation	(15x g)/11 ms
• Shock acceleration during operation according to EN 60068-2-27	147 m/s²
• Shock acceleration during transport according to EN 60721-3-2	Class 2M3
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	No

<b>Usage in industrial process technology</b>	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)

<b>Remark</b>	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!

<b>Conformal coating</b>	
<ul style="list-style-type: none"> <li>• Coatings for printed circuit board assemblies acc. to EN 61086</li> <li>• Military testing according to MIL-I-46058C, Amendment 7</li> <li>• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	<p>Yes; Class 2 for high reliability</p> <p>Yes; Discoloration of coating possible during service life</p> <p>Yes; Conformal coating, Class A</p>

### Cables

Cable length for motor, shielded, max.	50 m
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### Connection method

Design of electrical connection of motor	Plug-in screw terminals
<ul style="list-style-type: none"> <li>• connectable cable cross-section for motor supply line, min.</li> </ul>	1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• connectable cable cross-section for motor supply line, max.</li> </ul>	2.5 mm <sup>2</sup>
Type of electrical connection for mains supply line	Plug-in screw terminals
<ul style="list-style-type: none"> <li>• connectable cable cross-section for mains supply line, min.</li> </ul>	1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• connectable cable cross-section for mains supply line, max.</li> </ul>	2.5 mm <sup>2</sup>
Design of electrical connection for the PE conductor	Plug-in screw terminals

### Dimensions

Width	73 mm
Height	196 mm
Depth	165 mm

### Weights

Weight (without packaging)	1.4 kg
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### Other

Sound pressure level (1 m), max.	50 dB
Brake design	DC braking, compound braking, resistance braking with integrated brake chopper (for size FSGX optional)

### Classifications

	Version	Classification
eClass	16	27-02-31-01
eClass	14	27-02-31-01
eClass	12	27-02-31-01
eClass	9.1	27-02-31-01
eClass	9	27-02-31-01
eClass	8	27-02-31-01
eClass	7.1	27-02-31-01
eClass	6	27-02-31-01
ETIM	10	EC001857
ETIM	9	EC001857
ETIM	8	EC001857
ETIM	7	EC001857
IDEA	4	4139
UNSPSC	15	39-12-10-07

### Approvals / Certificates

<b>General Product Approval</b>
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[Manufacturer Declaration](#)



[China RoHS](#)



[China RoHS](#)

General Product Approval	EMV	Functional Safety	Test Certificates
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