

## **MLFB-Ordering data**

6SL3220-3YE40-0AF0



Client order no. : Order no. : Offer no. :

Item no.: Consignment no. : Project :

Rated data		General tech. specifications	
		Power factor λ	0.90 0.95
3 AC		Offset factor cos φ	0.99
380 480 V +10 % -20 %		Efficiency η	0.98
47 63 Hz		Sound pressure level (1m)	70 dB
400V IEC	480V NEC	Power loss	1.550 kW
107.00 A	91.00 A	Filter class (integrated)	RFI suppression filter for
94.00 A	80.00 A		Category C2
		Ambier	nt conditions
3 AC			
400V IEC	480V NEC	Cooling	Air cooling using an integrated fan
55.00 kW	75.00 hp	Cooling air requirement	0.083 m³/s (2.931 ft³/s)
45.00 kW	50.00 hp	Installation altitude	1000 m (3280.84 ft)
110.00 A	96.00 A	Ambient temperature	
90.00 A	77.00 A	Operation	-20 45 °C (-4 113 °F)
113.00 A		Transport	-40 70 °C (-40 158 °F)
149.00 A		Storage	-25 55 °C (-13 131 °F)
4 kHz		Relative humidity	
0 200 Hz		Max. operation	95 % At 40 °C (104 °F), condensation and icing not permissible
0 550 Hz		Closed-loop o	control techniques
	3 AC 380 480 V 47 63 Hz 400V IEC 107.00 A 94.00 A  3 AC 400V IEC 55.00 kW 45.00 kW 110.00 A 90.00 A 113.00 A 149.00 A 4 kHz 0 200 Hz	3 AC  380 480 V +10 % -20 %  47 63 Hz  400V IEC	Power factor λ  3 AC  380 480 V +10 % -20 %  47 63 Hz  400V IEC

Overload capa	ability	
---------------	---------	--

110% base load current IL for 60 s in a 300 s cycle time

#### High Overload (HO)

150% x base load current IH for 60 s within a 600 s cycle time

V/f linear / square-law / parameterizable	Yes
V/f with flux current control (FCC)	Yes
V/f ECO linear / square-law	Yes
Sensorless vector control	Yes
Vector control, with sensor	No
Encoderless torque control	Yes
Torque control, with encoder	No



## **MLFB-Ordering data**

6SL3220-3YE40-0AF0



			Figure simil
Mechanical	data	Com	nmunication
Degree of protection	IP20 / UL open type	Communication	PROFINET / EtherNet/IP
Size	FSE	Со	nnections
Net weight	29 kg (63.93 lb)	Signal cable	
Width	275 mm (10.83 in)	Conductor cross-section	0.15 1.50 mm <sup>2</sup> (AWG 24 AWG 16)
Height	551 mm (21.69 in)	Line side	
Depth	239 mm (9.41 in)	Version	screw-type terminal
Inputs / ou	puts	Conductor cross-section	25.00 95.00 mm² (AWG 4 AWG -1)
tandard digital inputs		Motor end	
Number	6	Version	Screw-type terminals
Switching level: 0→1	11 V	Conductor cross-section	25.00 95.00 mm² (AWG 4 AWG -1)
Switching level: 1→0	5 V	DC link (for braking resistor)	)
Max. inrush current	15 mA	PE connection	Screw-type terminals
ail-safe digital inputs		Max. motor cable length	
Number	1	Shielded	200 m (656.17 ft)
Digital outputs		Unshielded	300 m (984.25 ft)
Number as relay changeover contact	2	S	tandards
Output (resistive load)	DC 30 V, 5.0 A		III -III CE C T:-I· (DCM) FAC VCC CEM
Number as transistor	0	Compliance with standards	UL, cUL, CE, C-Tick (RCM), EAC, KCC, SEM F47, REACH
analog / digital inputs			
Number	2 (Differential input)	CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC
Resolution	10 bit		
witching threshold as digital in	out		
0→1	4 V		
1→0	1.6 V		

# PTC/ KTY interface

**Analog outputs** 

Number

1 motor temperature sensor input, sensors that can be connected: PTC, KTY and Thermo-Click, accuracy  $\pm 5~^\circ\text{C}$ 

1 (Non-isolated output)



#### **MLFB-Ordering data**

#### 6SL3220-3YE40-0AF0

90%



#### Converter losses to EN 50598-2\*

	Converter losses to Ert 50530 E		
Efficie	ncy class		IE2
Compa 100%)	arison with the reference o	converter (90% /	-48.30 %
1.	<b>↑</b>		
100% -	1190.7 W (1.56 %)	1390.6 W (1.82 %)	1727.8 W (2.27 %)
500/	660.7 W (0.87 %)	733.1 W (0.96 %)	840.6 W (1.10 %)
50% →		! !	
25% -	481.9 W (0.63 %)	512 W (0.67 %)	
23/0		T !	

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

50%

The diagram shows the losses for the points (as per standard EN 50598) 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.

# Operator panel: Intelligent Operator Panel (IOP-2)

S	Screen	Ambie	ent conditions
Display design	LCD colors	Ambient temperature durin	g
Screen resolution	220 240 Birral	Operation	0 50 °C (32 122 °F)
	320 x 240 Pixel		55 °C only with door mounting kit
Mech	anical data	Storage	-40 70 °C (-40 158 °F)
Degree of protection	IP55 / UL type 12	Transport	-40 70 °C (-40 158 °F)
Net weight	0.13 kg (0.30 lb)	Relative humidity at 25°C du	uring
Width	70.0 mm (2.76 in)	Max. operation	95 %
Height	106.85 mm (4.21 in)		
Depth	19.65 mm (0.77 in)		Approvals
		Certificate of suitability	CE, cULus, EAC, KCC, RCM

<sup>\*</sup>converted values