L-force catalogue

Automation systems
Drive solutions

Controls
Inverters
Motors
Gearboxes
Engineering tools

Inverters: Inverter Drives 8400 BaseLine

Lenze
As easy as that.

Contents of the L-force catalogue

Selected portfolio

Additional portfolio

Lenze makes many things easy for you.

With our motivated and committed approach, we work together with you to create the best possible solution and set your ideas in motion - whether you are looking to optimise an existing machine or develop a new one. We always strive to make things easy and seek perfection therein. This is anchored in our thinking, in our services and in every detail of our products. It's as easy as that!

1

Developing ideas

Are you looking to build the best machine possible and already have some initial ideas? Then get these down on paper together with us, starting with small innovative details and stretching all the way to completely new machines. Working together, we will develop an intelligent and sustainable concept that is perfectly aligned with your specific requirements.

2

Drafting concepts

We see welcome challenges in your machine tasks, supporting you with our comprehensive expertise and providing valuable impetus for your innovations. We take a holistic view of the individual motion and control functions here and draw up consistent, end-to-end drive and automation solutions for you - keeping everything as easy as possible and as extensive as necessary.

3

Implementing solutions

Our easy formula for satisfied customers is to establish an active partnership with fast decision making processes and an individually tailored offer. We have been using this easy principle to meet the ever more specialised customer requirements in the field of machine building for many years.

4

Manufacturing machines

Functional diversity in perfect harmony: as one of the few full-range providers in the market, we can provide you with precisely those products that you actually need for any machine task – no more and no less. Our L-force product portfolio, a consistent platform for implementing drive and automation tasks, is invaluable in this regard.

5

Ensuring productivity

Productivity, reliability and new performance peaks on a daily basis – these are our key success factors for your machine. After delivery, we offer you cleverly devised service concepts to ensure continued safe operation. The primary focus here is on technical support, based on the excellent application expertise of our highly-skilled and knowledgeable after-sales team.

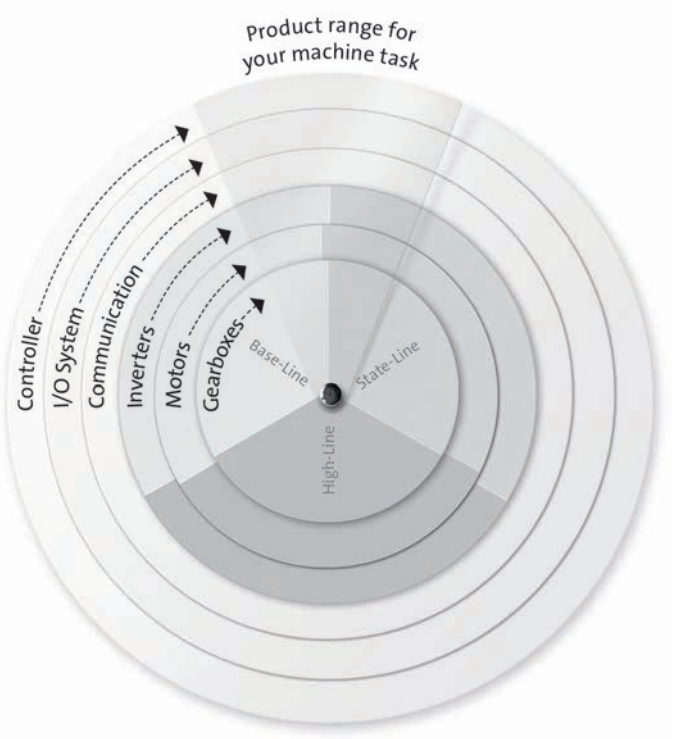
A matter of principle: the right products for every application.

Lenze's extensive L-force product portfolio follows a very simple principle. The functions of our finely scaled products are assigned to the three lines Base-Line, State-Line or High-Line.

But what does this mean for you? It allows you to quickly recognise which products represent the best solution for your own specific requirements.

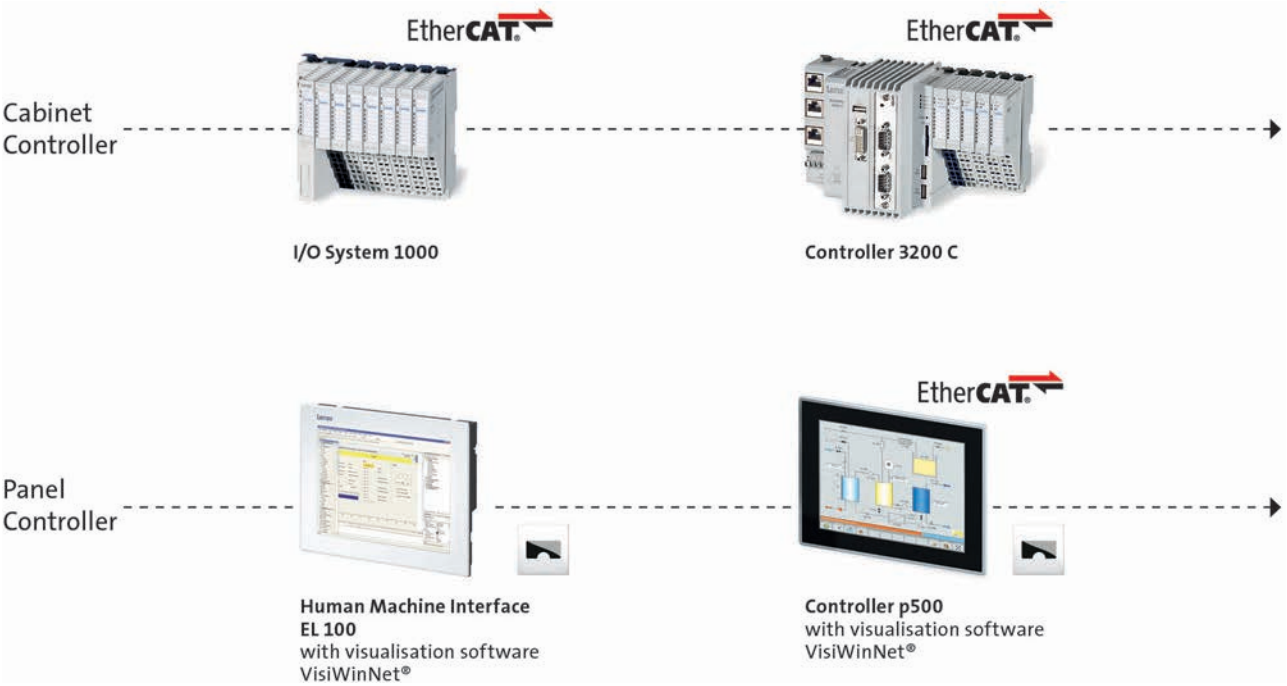
Powerful products with a major impact:
- Easy handling
- High quality and durability
- Reliable technologies in tune with the latest developments

Lenze products undergo the most stringent testing in our own laboratory. This allows us to ensure that you will receive consistently high quality and a long service life. In addition to this, five logistics centres ensure that the Lenze products you select are available for quick delivery anywhere across the globe. It's as easy as that!

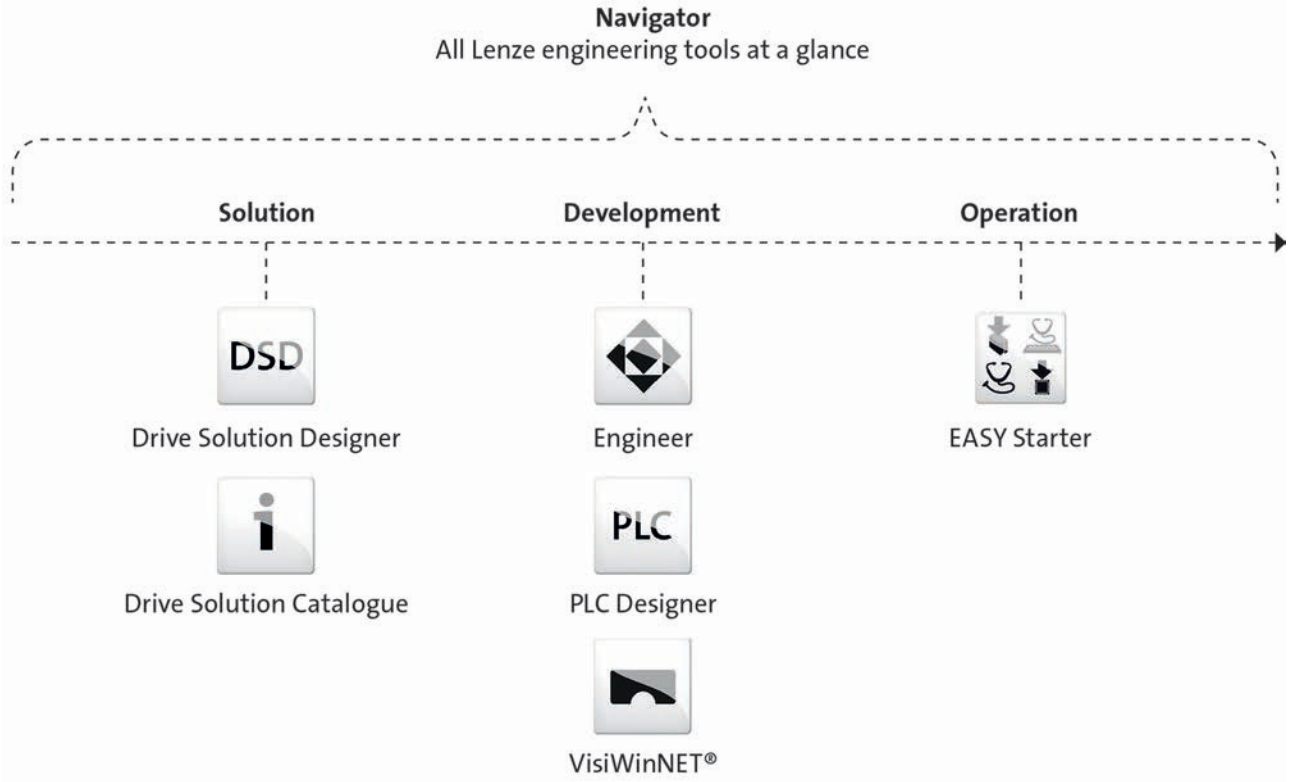


L-force product portfolio

Controls

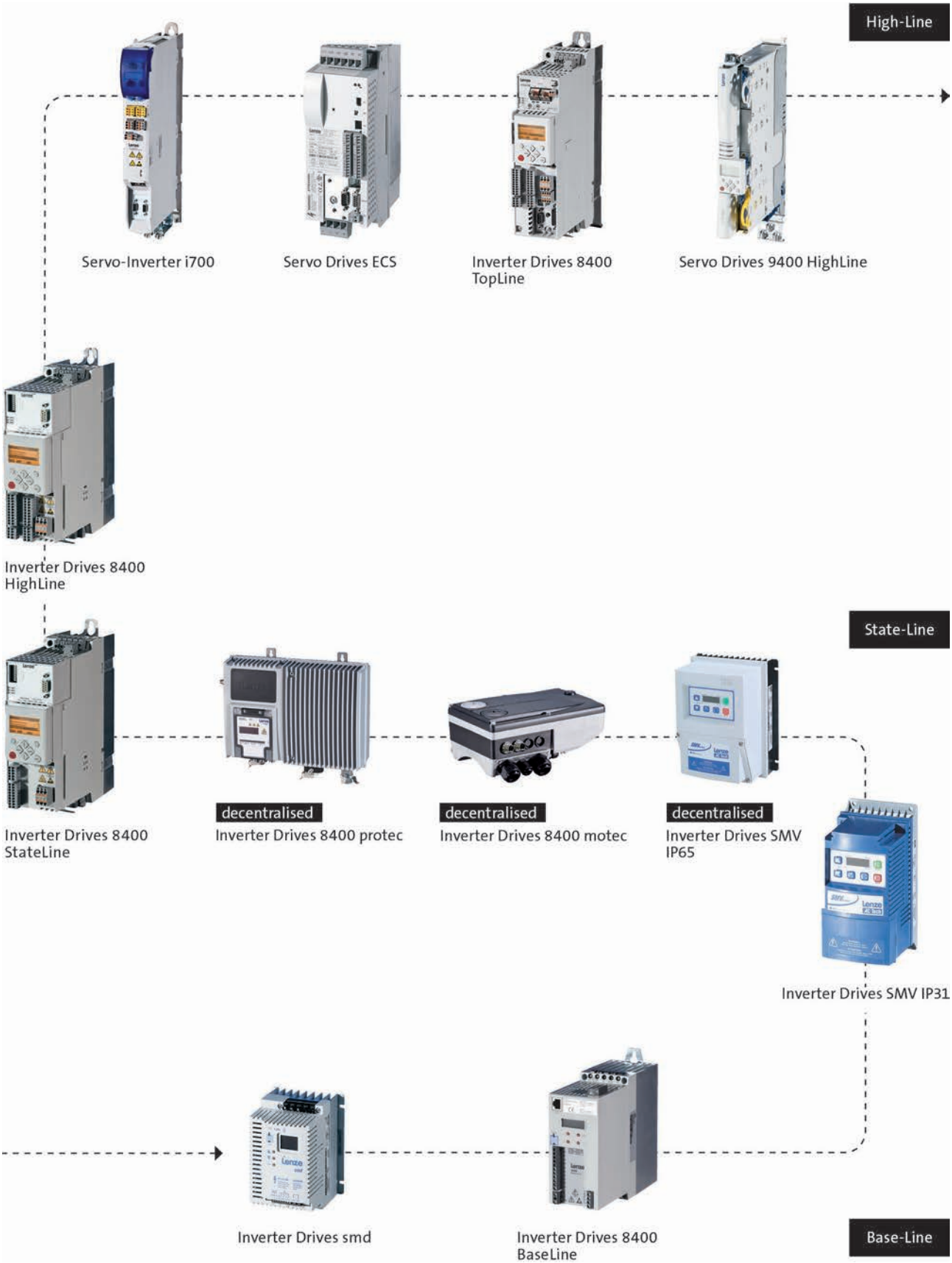


Engineering tools



L-force product portfolio

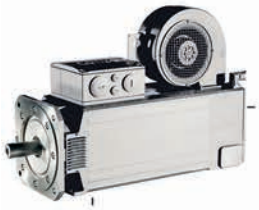
Inverters



L-force product portfolio

Motors

High-Line



MQA asynchronous servo motors

SDSGS synchronous servo motors

MDXKS synchronous servo motors

Synchronous servo motors MCS

Asynchronous servo motors MCA

Asynchronous servo motors SDSGA

State-Line

MF three-phase AC motors

MH three-phase AC motors

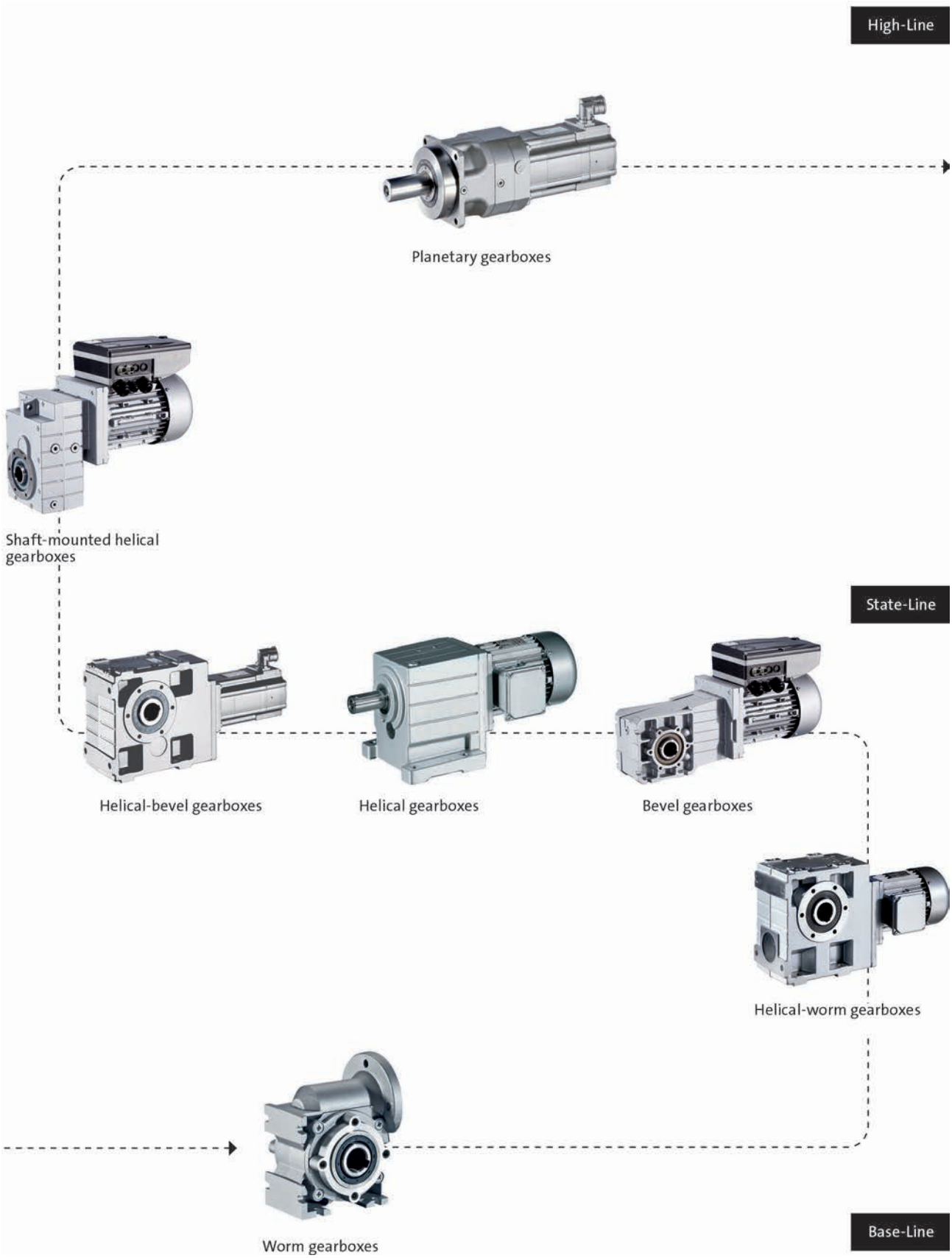
MD three-phase AC motors

Basic MD/MH three-phase AC motors

Base-Line

L-force product portfolio

Gearboxes



Inverter Drives 8400 BaseLine

0.25 ... 3.0 kW

Inverter Drives 8400 BaseLine

Contents

Product key

E84AV S C E 751 2 S X 0 - PM K XX

Design
BD – BaseLine (0.25 ... 3.0 kW)
BC – BaseLine (0.25 ... 3.0 kW)
SC – StateLine (0.25 ... 45.0 kW)
HC – HighLine (0.25 ... 45.0 kW)
TC – TopLine (0.25 ... 45.0 kW)

Mounting type
E – Installation
D – Push–trough technique (0.25 ... 15.0 kW)
C – Cold plate technique (0.25 ... 45.0 kW)

Power
251 – 0.25 kW
371 – 0.37 kW
551 – 0.55 kW
751 – 0.75 kW
112 – 1.1 kW
152 – 1.5 kW
222 – 2.2 kW
302 – 3.0 kW
402 – 4.0 kW
552 – 5.5 kW
752 – 7.5 kW
113 – 11.0 kW
153 – 15.0 kW
183 – 18.5 kW
223 – 22.0 kW
303 – 30.0 kW
373 – 37.0 kW
453 – 45.0 kW

Voltage class
2 – 230/240 V, 1/N/PE AC (0.25 ... 2.2 kW)
4 – 400/500 V, 3/PE AC (0.37 ... 45.0 kW)

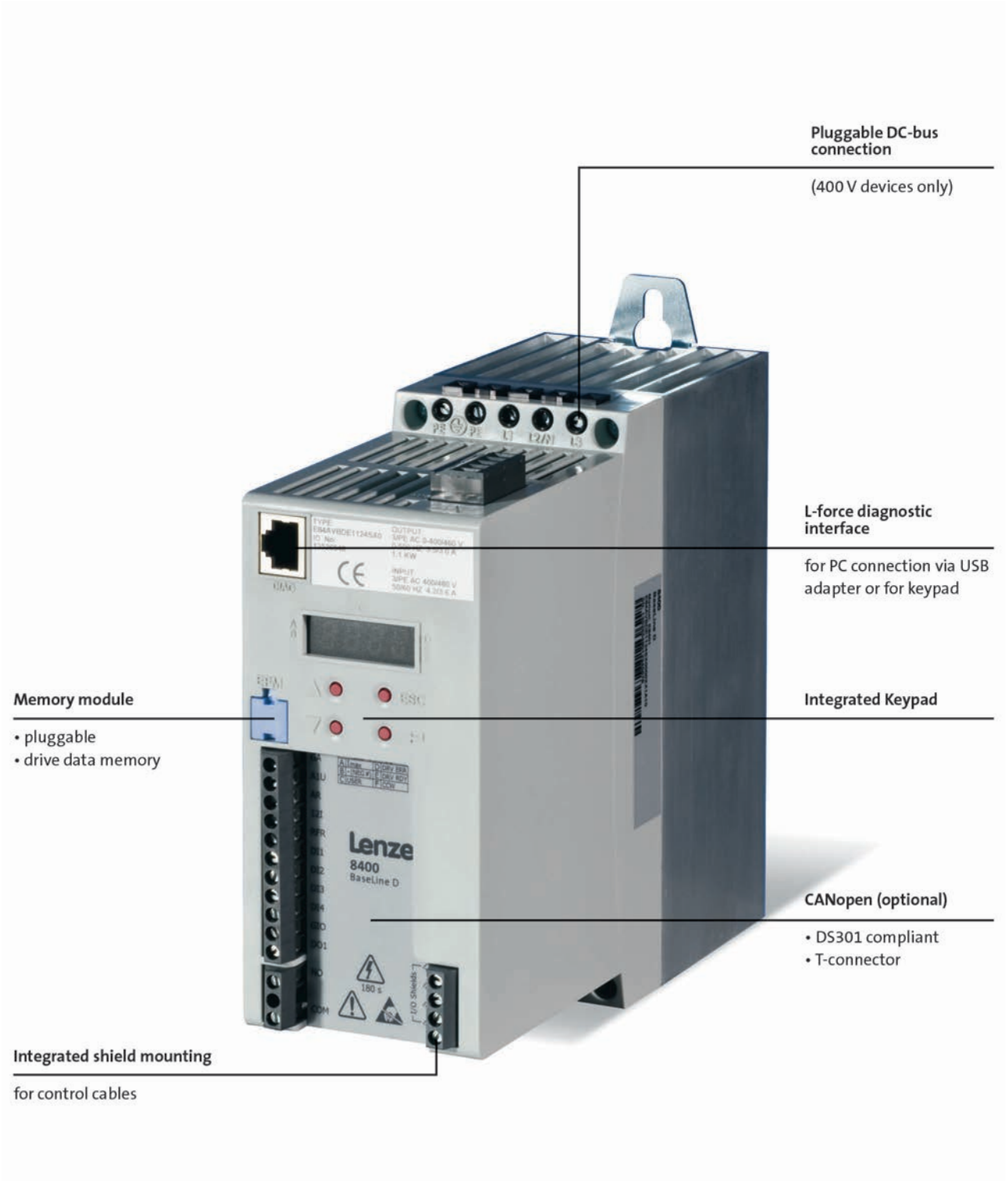
Ambient conditions
S – Standard (0.25 ... 15.0 kW)
V – Rough environment (coated printed circuit boards, 0.25 ... 45.0 kW)

Drive-based safety
X – No drive-based safety
B – With drive-based safety (STO)

Version identifier
0 or S

Extensions
Communication module and/or keypad connected
ET □XX EtherCAT
EC □XX Ethernet POWERLINK
PM □XX PROFIBUS
ER □XX PROFINET
□□ K XX Keypad

Equipment


Pluggable DC-bus connection
(400 V devices only)
L-force diagnostic interface
for PC connection via USB adapter or for keypad
Memory module
• pluggable
• drive data memory
Integrated Keypad
CANopen (optional)
• DS301 compliant
• T-connector
Integrated shield mounting
for control cables
Lenze
8400
BaseLine D

List of abbreviations

b	[mm]	Dimensions
C_{th}	[KWs]	Thermal capacity
f_{ch}	[kHz]	Rated switching frequency
h	[mm]	Dimensions
$I_{N, out}$	[A]	Rated output current
$I_{N, AC}$	[A]	Rated mains current
m	[kg]	Mass
n_{max}	[r/min]	Max. speed
P	[kW]	Typical motor power
P_V	[kW]	Power loss
P_N	[kW]	Rated power
R_N	[Ω]	Rated resistance
t	[mm]	Dimensions
U_{AC}	[V]	Mains voltage
U_{DC}	[V]	DC supply
$U_{N, AC}$	[V]	Rated voltage
U_{out}	[V]	Max. output voltage

ASM	Asynchronous motor
DIAG	Slot for diagnostic adapter
DIN	Deutsches Institut für Normung e.V.
EN	European standard
EN 60529	Degrees of protection provided by enclosures (IP code)
EN 60721-3	Classification of environmental conditions; Part 3: Classes of environmental parameters and their limit values
EN 61800-3	Electrical variable speed drives Part 3: EMC requirements including special test methods
IEC	International Electrotechnical Commission
IEC 61508	Functional safety of electrical/electronic/programmable electronic safety-related systems
IM	International Mounting Code
IP	International Protection Code
MCI	Slot for communication module (module communication interface)
NEMA	National Electrical Manufacturers Association
UL	Underwriters Laboratory Listed Product
UR	Underwriters Laboratory Recognized Product
VDE	Verband deutscher Elektrotechniker (Association of German Electrical Engineers)

Inverter Drives 8400

Cost-efficiency, time savings and quality enhancement are the challenges of the future. Lenze is facing these challenges with its L-force product portfolio – the holistic solution portfolio with precisely matched interfaces and components. For faster configuration and commissioning, better performance and more flexibility in production.

As such, the four versions of Inverter Drives 8400 - BaseLine, StateLine, HighLine and TopLine - have been designed for consistent process optimisation – throughout your entire value-added chain. They reduce your costs, from component selection, through project planning, manufacturing and commissioning, all the way up to servicing. We call this "rightsizing".

Rightsized for versatile applications
Are you looking to control a three-phase AC motor or perform positioning with or without feedback? Then select exactly the inverter you need from the scaled solution space of the Inverter Drives 8400 with units in the power range from 0.25 kW to 45 kW. You are sure to find exactly what you are looking for here, as the modular 8400 range of inverters offers the right solution for a broad spectrum of applications.

While the BaseLine is excellent for basic applications, the TopLine offers servo qualities and thereby fulfils with the strict requirements in terms of dynamics and accuracy.

8400 BaseLine - for constant motion
The BaseLine version is the entry-level model in terms of functionality and drive behaviour. Featuring an integrated keypad and everything you would expect from a modern frequency inverter suitable for universal use, the 8400 BaseLine is the ideal solution for applications such as conveyor drives, pumps, fans or ventilators.

Two versions
Two versions of the 8400 BaseLine are available:
- BaseLine C with CANopen;
  Product key: E84AVBCE□□□□SXO
- BaseLine D without communication;
  Product key: E84AVBDE□□□□SXO

Functions and features

Mode	
	8400 BaseLine
Control types, motor control	
	V/f control without feedback (linear or square-law) Sensorless vector control (torque/speed)
Basic functions	
	Application-oriented commissioning Freely assignable user menu Data logger DC brake function Flying restart circuit S-shaped ramps for smooth acceleration Max. output frequency 300 Hz PID controller 3 fixed frequencies
Monitoring and protective measures	
	Short circuit Earth fault Overvoltage Motor stalling $I^2 x t$-Motor monitoring
Diagnostics	
Diagnostic interface	Integrated For USB diagnostic adapter in PC connection
Status display	4 LEDs
Braking operation	
Brake chopper	Integrated (400 V types)
Brake resistor	External (400 V types)

Standards and operating conditions

Mode			
Product			8400 BaseLine
Conformity			
CE			Low-Voltage Directive
			2006/95/EG
Approval			
UL 508C			Power Conversion Equipment (File No. E170350)
CSA			
Certification			
			GOST-R
Degree of protection			
EN 60529 [2]			IP20
NEMA 250			Type 1
Climatic conditions			
Storage (EN 60721-3-1)			1K3 (temperature: -25 °C ... +60 °C)
Transport (EN 60721-3-2)			2K3 (temperature: -25 °C ... +70 °C)
Operation (EN 60721-3-3)			3K3 (temperature: -10°C ... +55°C)
Current derating at over 45°C			2.5% / K
Site altitude			
Amsl	H_{max}	[m]	4000
Current derating at over 1000 m		[%/1000 m]	5
Vibration resistance			
Transport (EN 60721-3-2)			2M2
Operation (EN 61800-5-1)			10 Hz ≤ f ≤ 57 Hz: ±0.075 mm amplitude, 57 Hz ≤ f ≤ 150 Hz: 1.0 g
Operation (Germanischer Lloyd)			5 Hz ≤ f ≤ 13.2 Hz: ± 1 mm amplitude 13.2 Hz ≤ f ≤ 100 Hz: 0.7 g

Mode	
Product	8400 BaseLine
Supply form	
	Systems with earthed star point (TN and TT systems)
Noise emission	
EN 61800-3	Integrated RFI suppression: category C2 up to 25 m shielded motor cable [-1]
Insulation resistance	
EN 61800-5-1	Overvoltage category III über 2000 m über NN Überspannungskategorie II
Degree of pollution	
EN 61800-5-1	2
Protective insulation of control circuits	
EN 61800-5-1	Safe mains isolation: double/reinforced insulation

[1] 1 - Please also refer to the Motor connection section

[2] Mounted and ready-to-use

Rated data 230 V

► Unless otherwise specified, the data refers to the default setting.

Data / Device

Operation with rated data: rated output current $I_{N,out}$ at mains voltage 230 V, switching frequency 8 kHz variable and max. ambient temperature 45 ^{0}C (default setting).
Output currents I_{out} apply to:
Ambient temperature 45 ^{0}C operating with constant switching frequency 2 kHz or 4 kHz.
Ambient temperature 40 ^{0}C operating with constant switching frequency 8 kHz or 16 kHz.

						
Typical motor power						
4-pole asynchronous motor	P	[kW]	0.25	0.37	0.55	0.75
Product key						
Inverter			E84AV□□□2512□□0	E84AV□□□3712□□0	E84AV□□□5512□□0	E84AV□□□7512□□0
Mains voltage range						
	U_{AC}	[V]	1/N/PE AC 180 V-0 % ... 264 V+0 %, 45 Hz-0 % ... 65 Hz+0 %			
Rated mains current						
With mains choke	$I_{N, AC}$	[A]	3.0	4.2	5.4	7.0
Without mains choke	$I_{N, AC}$	[A]	3.4	5.1	6.7	8.8
Rated output current						
	$I_{N, out}$	[A]	1.7	2.4	3.0	4.0
Output current						
2 kHz	I_{out}	[A]	1.7	2.4	3.0	4.0
4 kHz	I_{out}	[A]	1.7	2.4	3.0	4.0
8 kHz	I_{out}	[A]	1.7	2.4	3.0	4.0
16 kHz	I_{out}	[A]	1.1	1.6	2.0	2.7

Data for 60 s overload

Max. output current						
	$I_{max, out}$	[A]	2.6	3.6	4.5	6.0
Overload time						
	t_{ol}	[s]	60.0			
Recovery time						
	t_{re}	[s]	120.0			

Data for 3 s overload

Max. short-time output current						
	$I_{max, out}$	[A]	3.4	4.8	6.0	8.0
Overload time						
	t_{ol}	[s]	3.0			
Recovery time						
	t_{re}	[s]	12.0			

Rated data 230 V

► Unless otherwise specified, the data refers to the default setting.

						
Typical motor power						
4-pole asynchronous motor	P	[kW]	0.25	0.37	0.55	0.75
Product key						
Inverter			E84AV□□□2512□□0	E84AV□□□3712□□0	E84AV□□□5512□□0	E84AV□□□7512□□0
Power loss						
	P_V	[kW]	15.0	17.0	23.0	30.0
Max. cable length [1]						
Shielded motor cable	I_{max}	[m]	50			

Dimensions and weights

Dimensions						
Height	h	[mm]	165	165	165	165
Width	b	[mm]	70	70	70	70
Depth	t	[mm]	144	144	162	162
Mass						
	m	[kg]	1.2	1.2	1.2	1.2

[1] Technically possible cable lengths, irrespective of EMC requirements

Rated data 230 V

► Unless otherwise specified, the data refers to the default setting.

Data / Device

Operation with rated data: rated output current $I_{N,out}$ at mains voltage 230 V, switching frequency 8 kHz variable and max. ambient temperature 45 ^{0}C (default setting).
Output currents I_{out} apply to:
Ambient temperature 45 ^{0}C operating with constant switching frequency 2 kHz or 4 kHz.
Ambient temperature 40 ^{0}C operating with constant switching frequency 8 kHz or 16 kHz.

					
Typical motor power					
4-pole asynchronous motor	P	[kW]	1.10	1.50	2.20
Product key					
Inverter			E84AV□□□1122□□0	E84AV□□□1522□□0	E84AV□□□2222□□0
Mains voltage range					
	U_{AC}	[V]	1/N/PE AC 180 V-0 % ... 264 V+0 %, 45 Hz-0 % ... 65 Hz+0 %		
Rated mains current					
With mains choke	$I_{N, AC}$	[A]	9.9	11.8	15.7
Without mains choke	$I_{N, AC}$	[A]	12.0	13.7	22.0
Rated output current					
	$I_{N, out}$	[A]	5.5	7.0	9.5
Output current					
2 kHz	I_{out}	[A]	5.5	7.0	9.5
4 kHz	I_{out}	[A]	5.5	7.0	9.5
8 kHz	I_{out}	[A]	5.5	7.0	9.5
16 kHz	I_{out}	[A]	3.7	4.7	6.3

Data for 60 s overload

Max. output current					
	$I_{max, out}$	[A]	8.3	10.5	14.3
Overload time					
	t_{ol}	[s]	60.0		
Recovery time					
	t_{re}	[s]	120.0		

Data for 3 s overload

Max. short-time output current					
	$I_{max, out}$	[A]	11.0	14.0	19.0
Overload time					
	t_{ol}	[s]	3.0		
Recovery time					
	t_{re}	[s]	12.0		

Rated data 230 V

► Unless otherwise specified, the data refers to the default setting.

					
Typical motor power					
4-pole asynchronous motor	P	[kW]	1.10	1.50	2.20
Product key					
Inverter			E84AV□□□1122□□0	E84AV□□□1522□□0	E84AV□□□2222□□0
Power loss					
	P_V	[kW]	43.0	54.0	76.0
Max. cable length [1]					
Shielded motor cable	I_{max}	[m]		50	

Dimensions and weights

Dimensions					
Height	h	[mm]	165	215	215
Width	b	[mm]	70	70	70
Depth	t	[mm]	162	162	162
Mass					
	m	[kg]	1.4	1.9	1.9

[1] Technically possible cable lengths, irrespective of EMC requirements

Rated data 400 V

► Unless otherwise specified, the data refers to the default setting.

Data / Device

Operation with rated data: rated output current $I_{N,out}$ at mains voltage 400 V, switching frequency 8 kHz variable and max. ambient temperature 45 ^{0}C (default setting).
Output currents I_{out} apply to:
Ambient temperature 45 ^{0}C operating with constant switching frequency 2 kHz or 4 kHz.
Ambient temperature 40 ^{0}C operating with constant switching frequency 8 kHz or 16 kHz.

					
Typical motor power					
4-pole asynchronous motor	P	[kW]	0.37	0.55	0.75
Product key					
Inverter			E84AV□□□3714□□0	E84AV□□□5514□□0	E84AV□□□7514□□0
Mains voltage range					
	U_{AC}	[V]	3/PE AC 180 V-0 % ... 550 V+0 %, 45 Hz-0 % ... 65 Hz+0 %		
Rated mains current					
With mains choke	$I_{N, AC}$	[A]	1.4	1.8	2.2
Without mains choke	$I_{N, AC}$	[A]	1.8	2.3	3.2
Rated output current					
	$I_{N, out}$	[A]	1.3	1.8	2.4
Output current					
2 kHz	I_{out}	[A]	1.3	1.8	2.4
4 kHz	I_{out}	[A]	1.3	1.8	2.4
8 kHz	I_{out}	[A]	1.3	1.8	2.4
16 kHz	I_{out}	[A]	0.9	1.2	1.6

Data for 60 s overload

Max. output current					
	$I_{max, out}$	[A]	2.0	2.7	3.6
Overload time					
	t_{ol}	[s]	60.0		
Recovery time					
	t_{re}	[s]	120.0		

Data for 3 s overload

Max. short-time output current					
	$I_{max, out}$	[A]	2.3	3.2	4.2
Overload time					
	t_{ol}	[s]	3.0		
Recovery time					
	t_{re}	[s]	12.0		

Rated data 400 V

► Unless otherwise specified, the data refers to the default setting.

					
Typical motor power					
4-pole asynchronous motor	P	[kW]	0.37	0.55	0.75
Product key					
Inverter			E84AV□□□3714□□0	E84AV□□□5514□□0	E84AV□□□7514□□0
DC supply					
	U_{DC}	[V]	DC 455 V -0 % ... 775 V +0 %		
Rated DC-bus current					
	$I_{N, DC}$	[A]	2.2	2.8	3.6
Power loss					
	P_V	[kW]	15.0	22.0	29.0
Max. cable length [1]					
Shielded motor cable	l_{max}	[m]	50		

Brake chopper rated data

Rated power, Brake chopper					
	P_N	[kW]	1.3	1.3	1.3
Max. output power, Brake chopper					
	$P_{max, 1}$	[kW]	1.3	1.3	1.3
Min. brake resistance					
	R_{min}	[Ω]	390.0	390.0	390.0

Dimensions and weights

Dimensions					
Height	h	[mm]	165	165	165
Width	b	[mm]	70	70	70
Depth	t	[mm]	162	162	162
Mass					
	m	[kg]	1.2	1.2	1.2

[1] Technically possible cable lengths, irrespective of EMC requirements

Rated data 400 V

► Unless otherwise specified, the data refers to the default setting.

Data / Device

Operation with rated data: rated output current $I_{N,out}$ at mains voltage 400 V, switching frequency 8 kHz variable and max. ambient temperature 45 ^{0}C (default setting).
Output currents I_{out} apply to:
Ambient temperature 45 ^{0}C operating with constant switching frequency 2 kHz or 4 kHz.
Ambient temperature 40 ^{0}C operating with constant switching frequency 8 kHz or 16 kHz.

						
Typical motor power						
4-pole asynchronous motor	P	[kW]	1.10	1.50	2.20	3.00
Product key						
Inverter			E84AV□□□1124□□0	E84AV□□□1524□□0	E84AV□□□2224□□0	E84AVB□□3024□□0
Mains voltage range						
	U_{AC}	[V]	3/PE AC 180 V-0 % ... 550 V+0 %, 45 Hz-0 % ... 65 Hz+0 %			
Rated mains current						
With mains choke	$I_{N, AC}$	[A]	3.2	3.6	5.0	7.1
Without mains choke	$I_{N, AC}$	[A]	4.2	4.7	6.2	10.2
Rated output current						
	$I_{N, out}$	[A]	3.2	3.9	5.6	7.3
Output current						
2 kHz	I_{out}	[A]	3.2	3.9	5.6	7.3
4 kHz	I_{out}	[A]	3.2	3.9	5.6	7.3
8 kHz	I_{out}	[A]	3.2	3.9	5.6	7.3
16 kHz	I_{out}	[A]	2.1	2.6	3.7	4.9

Data for 60 s overload

Max. output current						
	$I_{max, out}$	[A]	4.8	5.9	8.4	11.0
Overload time						
	t_{ol}	[s]	60.0			
Recovery time						
	t_{re}	[s]	120.0			

Data for 3 s overload

Max. short-time output current						
	$I_{max, out}$	[A]	5.6	6.8	9.8	12.4
Overload time						
	t_{ol}	[s]	3.0			
Recovery time						
	t_{re}	[s]	12.0			

Rated data 400 V

► Unless otherwise specified, the data refers to the default setting.

						
Typical motor power						
4-pole asynchronous motor	P	[kW]	1.10	1.50	2.20	3.00
Product key						
Inverter			E84AV□□□1124□□0	E84AV□□□1524□□0	E84AV□□□2224□□0	E84AVB□□3024□□0
DC supply						
	U_{DC}	[V]	DC 455 V -0 % ... 775 V +0 %			
Rated DC-bus current						
	$I_{N, DC}$	[A]	5.1	5.8	7.6	10.0
Power loss						
	P_V	[kW]	42.0	48.0	66.0	91.0
Max. cable length [1]						
Shielded motor cable	l_{max}	[m]	50			

Brake chopper rated data

Rated power, Brake chopper						
	P_N	[kW]	2.9	2.9	3.5	7.3
Max. output power, Brake chopper						
	$P_{max, 1}$	[kW]	2.9	2.9	3.5	7.3
Min. brake resistance						
	R_{min}	[Ω]	180.0	180.0	150.0	82.0

Dimensions and weights

Dimensions					
Height	h	[mm]	165	165	215
Width	b	[mm]	70	70	70
Depth	t	[mm]	162	162	162
Mass					
	m	[kg]	1.4	1.4	1.9

[1] Technically possible cable lengths, irrespective of EMC requirements

Mains connection

- ► The mains fuse and cable cross-section specifications are for a mains connection of 1 x 230V or 3 x 400V.
- ► Class gG/gl fuses or class gRL semiconductor fuses.
- ► The cable cross-sections apply to PVC-insulated copper cables.
- ► Use for installation with UL-approved cables, fuses and brackets.

Operation with mains choke

Typical motor power	Mains voltage	Product key	Circuit breaker	Fuse		Mains connection
4-pole asynchronous motor		Inverter		EN 60204-1	UL	Cross-section (with mains choke)
P	U_{AC}		I	I	I	q
[kW]	[V]		[A]	[A]	[A]	[mm2]
0.25	1 AC 180 ... 264	E84AV□□□2512□□0	C6	6	6	1.0
0.37		E84AV□□□3712□□0			10	
0.55		E84AV□□□5512□□0	C10	10		1.5
0.75		E84AV□□□7512□□0			15	
1.10		E84AV□□□1122□□0	C16	16	20	2.5
1.50		E84AV□□□1522□□0			25	
2.20		E84AV□□□2222□□0	C20	20	30	4.0
0.37	3 AC 320 ... 550	E84AV□□□3714□□0	C6	6	6	1.0
0.55		E84AV□□□5514□□0				
0.75		E84AV□□□7514□□0				
1.10		E84AV□□□1124□□0			10	
1.50		E84AV□□□1524□□0				
2.20		E84AV□□□2224□□0	C10	10		1.5
3.00		E84AV□□□3024□□0			15	

Operation without mains choke

Typical motor power	Mains voltage	Product key	Circuit breaker	Fuse		Mains connection
4-pole asynchronous motor		Inverter		EN 60204-1	UL	Cross-section (without mains choke)
P	U_{AC}		I	I	I	q
[kW]	[V]		[A]	[A]	[A]	[mm2]
0.25	1 AC 180 ... 264	E84AV□□□2512□□0	C6	6	6	1.0
0.37		E84AV□□□3712□□0			10	
0.55		E84AV□□□5512□□0	C10	10		1.5
0.75		E84AV□□□7512□□0			15	
1.10		E84AV□□□1122□□0	C16	16	20	2.5
1.50		E84AV□□□1522□□0	C20	20	25	4.0
2.20		E84AV□□□2222□□0	C25	25	30	
0.37	3 AC 320 ... 550	E84AV□□□3714□□0	C6	6	6	1.0
0.55		E84AV□□□5514□□0				
0.75		E84AV□□□7514□□0				
1.10		E84AV□□□1124□□0	C10	10	10	1.5
1.50		E84AV□□□1524□□0				
2.20		E84AV□□□2224□□0				
3.00		E84AV□□□3024□□0	C16	16	15	2.5