Individual Solutions for Demanding Sectors

DYNAVERT Drives

LOHER

Loher stands for quality and reliability

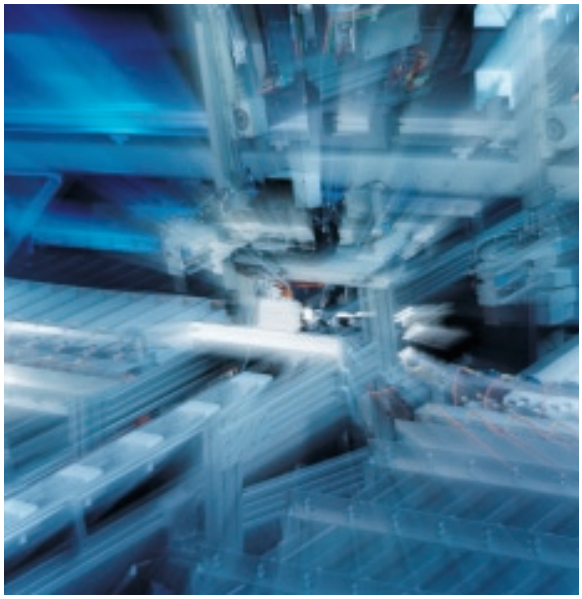
Loher, with its headquarters in Ruhstorf close to Passau, Germany, is one of the few suppliers that can offer the complete range of electric drive technology. Loher can look back on 100 years of tradition in the design and construction of electric motors – for more than 40 years, state-of-the-art control technology has been developed based on this extensive experience.

The specialist for many sectors

Loher offers complete system solutions – from the power supply up to the motor shaft – from engineering in the quotation phase up to commissioning on-site. All of this from a single source. Transformer, drive and motor, specifically adapted to the particular application, with an excellent price-performance ratio.

In addition to customized drive systems, we also offer a whole raft of drive inverter solutions. These are based on a standard range of accessory kits, which have enabled us to establish ourselves in the widest range of sectors.

Additional accessories allow the drive systems to be adapted to difficult line supply conditions, extremely long motor cables and various control and communication concepts – even in hazardous zones.



Loher drive inverters and motors

Intelligent drive systems from a single source

We are more than willing to clearly document both function and quality for you!

We offer complete drive systems, comprising transformers, drive inverters and motor from a single source! As system supplier, we provide the complete drive package. Our customers clearly see this as the most important advantage.

To prove the function of our drive systems, we have our own test field equipped with state-of-the-art equipment that is available for customer acceptance tests. In addition to visual and function checks and tests, in the presence of customers, we can also document the power rating, the efficiency of the complete drive as well as the line supply behavior.

Loher quality – something that you can always depend on:
We are certified to DIN ISO 9001 and we are regularly subject to stringent quality audits from independent institutions.

- **Complete drive from a single source – and therefore also clear responsibility for the complete drive**
- **Customer acceptance tests in the factory in compliance with all of the relevant standards and regulations**
- **Certified according to DIN ISO 9001**
- **Our test stand is equipped to handle drives up to 6,000 kVA incl. load and measuring equipment**

Three decades providing the highest reliability and availability

Loher DYNAVERT® drive inverters have already been in service for over three decades.

For applications where topmost priority is given to the highest degree of reliability and availability of the drives.

DYNAVERT was specifically designed for the following sectors right from the very start

- Chemical industry
- Power stations and utilities
- Plastic industry
- Basic materials industry
- Test stands
- Conveyor technology

and applications in general machinery construction.

DYNAVERT can be flexibly integrated into any automation concept – whether using conventional control technology or bus systems.
DYNAVERT T can be connected to any of the normally encountered line supply voltages – and can feed both synchronous and asynchronous motors.

All of the drive requirements are taken into consideration from the word go – from the coupling, through the motor, cables, drive inverter, line supply situation and connection to the supervisory control system.

Our many years of experience and competence as a motor manufacturer have been efficiently incorporated in the design and adaptation of DYNAVERT, as motors and drive inverters are developed, closely harmonized with one another.

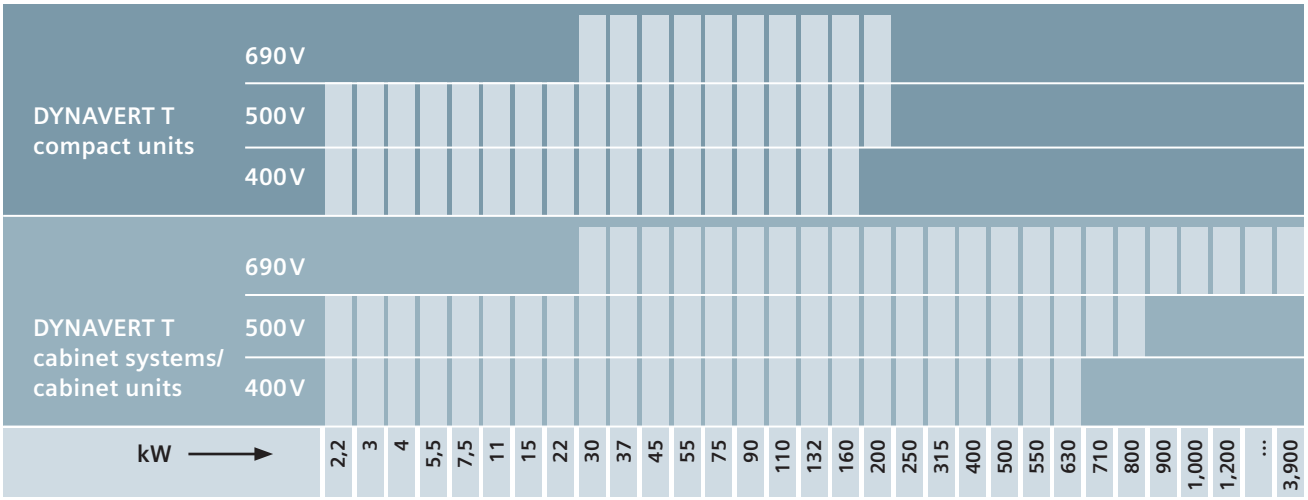
Advantages

- Cabinet units and cabinet systems in IP21 or higher degrees of protection
- All of the drive units have their own connection space
- Compact dimensions
- Equipped with radio interference suppression
- Low harmonics fed back into the line supply
- Long motor cables can be used as a result of the integrated dv/dt filter for DYNAVERT T and as an inherent system feature for DYNAVERT I
- Wide supply voltage range
- A main contactor is not required*
- Drive units with 500 V and 690 V rated line supply voltage can be connected to non-grounded line supplies (IT line supplies)
- ATEX-certified motors for hazardous zones*

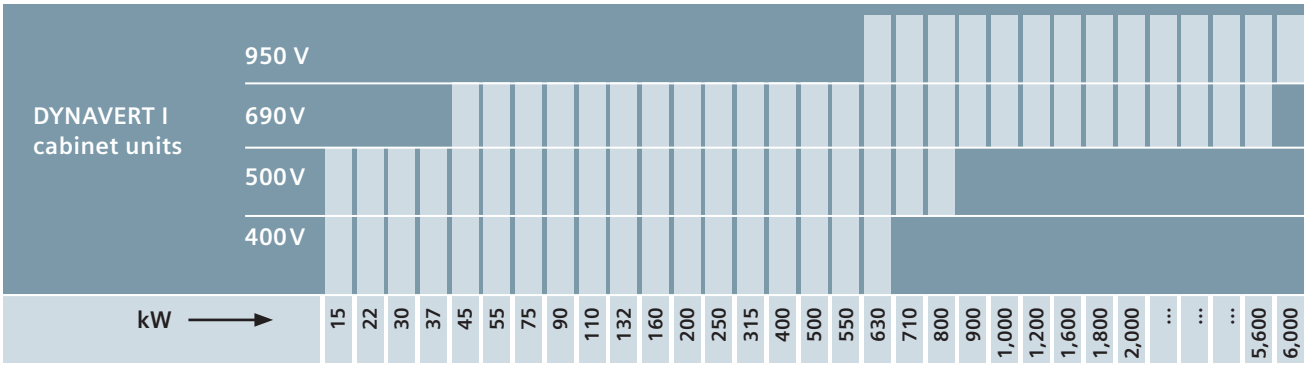
*only for DYNAVERT T

Loher DYNAVERT – compact and cabinet units

Power ranges, DYNAVERT T



Power ranges, DYNAVERT I



Loher DYNAVERT

Compact and complete from 2.2 kW to 6,000 kW

Supplementary equipment

- Radio interference suppression
  The line filter according to EN 55011, Class A allows the drive units to be connected to industrial and public line supplies (EN 61800-3, environments 1 and 2, grounded line supplies).
  Class B filters are optionally available for even higher demands.

- Harmonics fed back into the line supply
  The integrated line reactor reduces the line-side harmonics.

- Long motor cables
  The dv/dt output filter for DYNAVERT T permits long motor cables to be used.
  Due to the inherent system characteristics – for DYNAVERT I – almost unlimited motor cable lengths can be used.
  This provides a high degree of flexibility when designing plants and equipment – especially for drives located in hazardous Zones 1 and 2.

- The filters allow overvoltage limit values to be maintained for the motor insulation as well as air and creepage distances without requiring any additional measures.

- Shutdown concept (option)
  The ATEX-certified shutdown concept of the DYNAVERT T drive inverter permits the drive system to be shut down without requiring a main contactor.
  This also applies when operating motors in hazardous Zone 1. This provides extensive cost-saving potential on the plant side.

- Dual processor technology
  The dual processor technology means that there is sufficient computational performance to optimally harmonize the pulse pattern. This reduces the motor noise and lowers drive inverter and motor losses.

- Insulation monitoring
  The 500 V and 690 V drive units have insulation monitoring for non-grounded line supplies. This insulation monitoring reliably protects the drive inverter, cabling and the motor when insulation faults occur.
  The 400 V drive units are equipped with a ground fault monitoring with the same functionality for grounded line supplies.

Loher DYNAVERT

Highly versatile through distributed intelligence in the drive inverter

The control electronics – that have been completely new-designed – use dual processor technology and cover a wide range of applications.
With the appropriate menu setting, DYNAVERT T can control both asynchronous as well as synchronous motors.

A field-orientated controller is also available for DYNAVERT T to address applications that demand a high dynamic performance.

- Terminal strip in compliance with NAMUR Recommendation NE37, with
  - 4 freely parameterizable digital relay outputs
  - parameterizable group fault contact
  - 12 freely parameterizable digital inputs, 2 of which can be used either as PTC thermistor inputs or pulse inputs
  - 2 freely parameterizable analog inputs (0 –10 V, 0 –20 mA, 4 –20 mA or PTC), one of which can be used as an input for a temperature sensor
  - 2 freely parameterizable analog outputs (0 –10 V, 0 –20 mA, 4 –20 mA) with automatic changeover between current and voltage output
- Peripheral board 1...4
- HTL encoder
- RS485 for an external operator panel
- RS232 for PC
- SIN-COS tachometer
- Technology board
- Relay
  Protective separation according to VDE 0106/EN50178
- Optocoupler
  Protective separation according to VDE 0106/EN50178
- Bus boards for
  Profibus-DP, Modbus RTU, Ethernet*, Interbus-S*, CANopen*, DeviceNet*, ControlNet*

* being prepared

	Peripheral board 1	Peripheral board 2	Peripheral board 3	Peripheral board 4
2 PTC thermistor inputs for ATEX-certified (only DYNAVERT T) motor temperature monitoring for motors located in hazardous zones (alarm/trip)		●		●
One "safe standstill" digital input acc. to EN954-1, Cat. 3, only DYNAVERT T			●	●
9 digital inputs (DI)			●	●
3 relay outputs (DO)			●	●
2 analog outputs (AO)	●	●	●	●
24 V, 300 mA power supply unit			●	●

Loher DYNAVERT – the advantages at a glance

All DYNAVERT drive units are operated in the same way. This not only involves the compact units from 2.2 kW to 200 kW, but also the cabinet units up to 6,000 kW.

Operator control with multi-language plain text display and membrane keypad is both intuitive and extremely straightforward. Setpoints and parameters can be easily and transparently set using the menu structure.

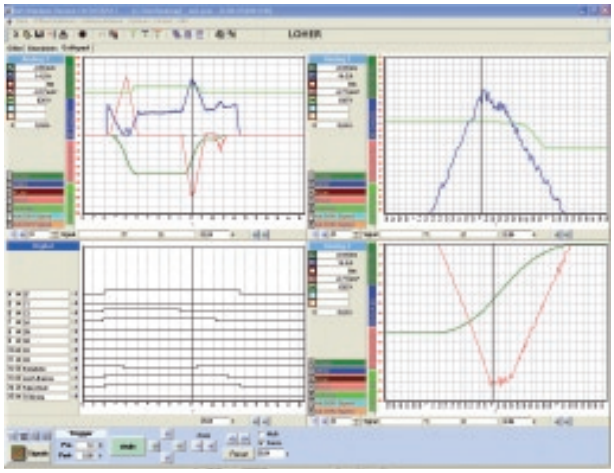
Advantages

- User-friendly operator control using a menu-prompted plain text display
- Standard operator control across the complete product series
- Communications via terminal strip, serial interfaces, Profibus DP or Modbus RTU

The transparently structured IMS* PC operator program for communications between the PC and drive inverter via USB adapter, RS232, RS485, Profibus DP or modem include the following functions:

- Prompted commissioning and operator control
- Online/offline parameterization
- Oscilloscope function
- It is possible to toggle between parameter and terminal strip view
- Function and message generators
- It is possible to toggle between various languages
- Extensive conversion and comparison functions
- Comments can be entered for all function terminals and messages
- Upread and download
- RS485 bus system with up to 253 drive inverters connected to a PC
- ASCII import of all parameters to automatically generate parameter sets
- Learning expert system
- Fault message and diagnostics evaluation

* Can be downloaded at no charge under www.loher.com



Services and Features

Explosion protection*
- ATEX-certified for motors located in hazardous zones
- A main contactor is not required

Safe Torque Off*
- The Safe Torque Off function prevents unexpected starting in compliance with EN60204-1, implemented according to EN954-1, Category 3

Power unit
- This corresponds to the EMC Directives (EN61800-3 environment 2) as a result of the line filter integrated as standard
- Low harmonics fed back into the line supply as a result of the integrated line reactor
- Output filter to permit longer motor cables for DYNAVERT T – or inherent to the system – almost unlimited motor cable lengths for DYNAVERT I
- Insulation monitoring for IT line supplies for 500/690 V drive units as well as ground fault monitoring for TN and TT line supplies integrated in the 400 V drive units
- Wide supply voltage range
- Low motor noise and low drive inverter and motor losses as a result of the optimized pulse pattern*
- Normal fuses can be used for protection (gL characteristic)

Control section
- High level of personnel and plant protection through protective separation between the analog and digital control peripheral and the power unit according to VDE 0106/ EN50178

Operator control and setting
- Transparent operator control and setting using a menu-prompted 4-line plain text display with membrane keypad at the drive inverter – or up to 1,000 m away in the main control room via RS485
- Extensive functions using the Windows-based PC operator control program

Communication
- Communication via a conventional terminal strip with freely-programmable digital and analog inputs/outputs, with
  - parameterizable limit value signals
  - parameterizable timers
  - parameterizable damping elements
  - parameterizable drive inverter behavior when inputs/outputs respond
- Communication and parameterization via
  - PC using IMS (Inverter Management Software) via RS232/RS485
  - external operator panel via RS485
  - bus systems such as Profibus DP or Modbus RTU

Drive behavior for DYNAVERT T
- Synchronous and asynchronous motors can be controlled
- Two closed-loop control types for induction motors:
  - field-oriented control for applications demanding a high dynamic performance
  - space-vector control for standard applications (without feedback)
- Optimum braking without supplementary equipment using super-saturation control

The following generally apply
- Automatic slip compensation
- Stall protection using current limiting control
- Flying restart circuit to connect to a rotating motor
- Automatic adaptation of the overload times
- Parameterizable DC braking for precise braking down to standstill
- Closed-loop torque control

*only for DYNAVERT T

DYNAVERT T – versions and design

Housing design for compact units

- Rugged sheet steel housing
- Degree of protection IP20, optionally IP21
- Generous terminal space for connecting cables in compliance with EMC Directives
- Complete shock hazard protection

Cabinet systems

Compact drive units are complemented by a Rittal TS8 cabinet and control accessories to form cabinet systems.

Advantages of the cabinet system

- Cost-optimized customized design using a modular system
- The complete system can be simply and quickly assembled by integrating various, industry sector-specific control packages
- High degree of flexibility and short delivery times by using CAE/CAM systems
- Can be integrated into any control concept using customer-specific versions
- Can be adapted to many bus systems
- Space-optimized overall concept
- Rittal TS8 cabinet system – guaranteeing worldwide acceptance
- Optimum space utilization through various cabinet sizes
- Can be simply adapted to the widest range of climatic conditions
- Simple to service and maintain as all of the components can be accessed from the front

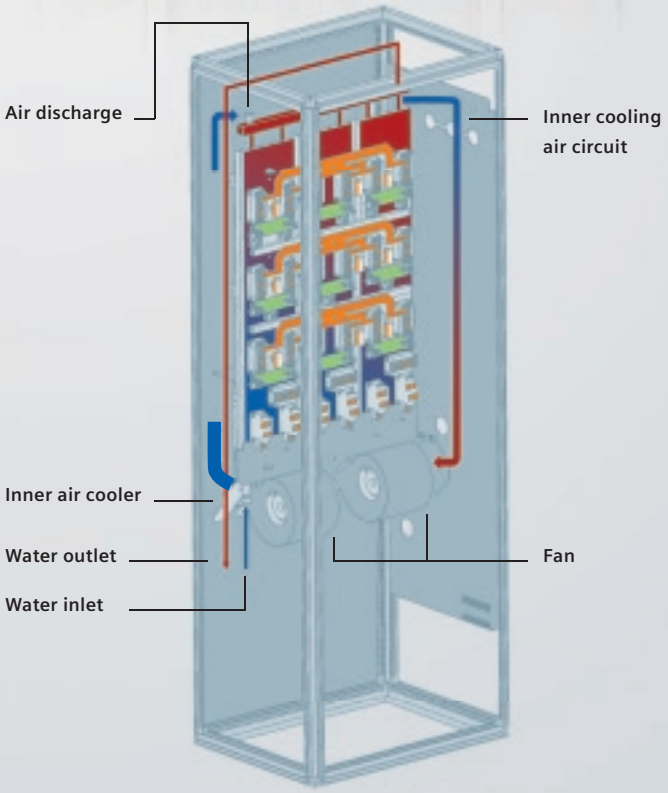
Number of compact units in the particular cabinet system

***without additional control or with accessory kit N**

Compact unit width	Compact system width 600 mm	800 mm	1,000 mm	1,200 mm
165 mm 2.2 kW – 11 kW (400 V) 2.2 kW – 15 kW (500 V)	3 / 6*	4 / 8*	5 / 10*	6 / 12*
225 mm 15 kW – 30 kW (400 V) 22 kW – 37 kW (500 V)	2 / 4*	3 / 6*	4 / 8*	4 / 8*
350 mm 37 kW – 110 kW (400 V) 45 kW – 132 kW (500 V) 30 kW – 132 kW (690 V)	1	2	2	3
500 mm 132 kW – 160 kW (400 V) 160 kW – 200 kW (500 V) 160 kW – 200 kW (690 V)	1	1	1	2

Cabinet unit design
- Rittal TS8 electrical cabinet
- IP21 degree of protection – higher degree of protection optionally available
- Integrated cable clamping bar and cable shield rail
- Generous terminal space for connecting cables in-line with EMC Directives
- Complete shock hazard protection

Cabinet units with direct water cooling
- No thermal load in electrical rooms
- Can be used almost everywhere – as a result of the IP55 degree of protection (display, IP54) even in environments that are damaging to machinery
- Reliable – even at high ambient temperatures up to 55 °C (131F) – through the optimum cooling system
- Lower noise as there is no forced ventilation
- Improved efficiency
- The cooling system operates with almost any water quality thanks to the stainless steel components used in the water circuit



DYNAVERT T

Standard accessory kits from 2.2 kW up to 3,900 kW

Accessory kit Q
- Main switch as load disconnector with door handle
- Changeover switch for local/remote operation – mounted in the cabinet door
- Peripheral board 2, including ATEX-certified PTC input

Accessory kit N
- Terminal block according to NAMUR Empfehlung NE37
- Peripheral board 4, incl. forced line disconnection, implemented in compliance with EN 954-1 up to Cat. 3 and ATEX-certified PTC input
- Changeover switch for test-normal operation – mounted in the cabinet

Accessory kit S
- Main switch as load disconnector with door handle
- Main contactor to disconnect from the line supply in a safety-relevant fashion
- Emergency Off safety relay according to EN954-1 or SIL1* acc. to IEC 61508
- Emergency Off button and Emergency Off reset in the cabinet door
- Changeover switch for local/remote operation – mounted in the cabinet door
- Peripheral board 2, including ATEX-certified PTC input

* SIL2/3 on request

Accessory kit D
- Main switch as load disconnector with door handle
- Possibility of disconnecting the inverter from the line supply at the input side
- Inverter contactor at the output side
- Bypass contactor
- Motor monitoring also in bypass operation
- Changeover switch for local/remote operation – mounted in the cabinet door
- Manual or automatic bypass changeover

General technical data
DYNAVERT T

Line supply voltage +10%, -15%	2T..-..400-002...160 2T..-..401-200...630 2T..-..50.-... 2T..-..69.-...	3~AC 230 ... 500 V (for TN/TT line supplies) 3~AC 230 ... 415 V (for TN/TT line supplies) 3~AC 230 ... 500 V (for IT line supplies) 3~AC 400 ... 690 V (for TN/TT/IT line supplies)
Line supply cos phi (1)		approx. 0.99
Line supply frequency		47 ... 63 Hz
Maximum output frequency		120 ... 250 Hz***
Output voltage (basic fundamental)		3 x 0 ... line supply voltage
Clock frequency		1.5 ... 10 kHz, can be parameterized***
Motor cable length (shielded or non-shielded)	2T..-.5400-... 2T..-.6401-... 2T..-.50-... 2T..-.69-...	200 m standard* 300 m standard 300 m standard 100 m standard**
Degree of protection	Compact drive units: Cabinet units/systems:	IP20 IP21, higher degrees of protection are optionally available

* 300 m filter can be optionally integrated into the drive unit
** 300 m filter can be optionally integrated into the drive unit with larger dimensions
*** Setting range depends on the unit power rating

General technical data – compact units

DYNAVERT T 400 V 6-pulse

Inverter type	Order No. (MLFB)	Output: Connection power [kVA]	Output: Continuous current [A]	Output: Short-time current* [A]	Output: Shaft output** [kW]	Mechanical system: Dimension*** [mm] H x W x D
2T2A05400-002	6SE0102-1AA15-5AA5	3.7	5.5	6.5	2.2	410 x 165 x 320
2T2A05400-003	6SE0102-1AA17-0AA5	4.6	7	8	3	410 x 165 x 320
2T2A05400-004	6SE0102-1AA21-0AA5	6.4	9.5	11	4	410 x 165 x 320
2T2A05400-005	6SE0102-1AA21-3AA5	8.6	13	15	5.5	410 x 165 x 320
2T2A05400-007	6SE0102-1AA21-8AA5	12.1	18	20	7.5	510 x 165 x 320
2T2A05400-011	6SE0102-1AA22-5AA5	16	24.5	27	11	510 x 165 x 320
2T2A05400-015	6SE0102-1AA23-7AA5	24.4	37	44	15	610 x 225 x 320
2T2A05400-022	6SE0102-1AA24-8AA5	32	48	54	22	610 x 225 x 320
2T2A05400-030	6SE0102-1AA25-8AA5	39.2	58	63	30	610 x 225 x 320
2T2A05400-037	6SE0102-1AA27-8AA5	52.3	78	88	37	710 x 350 x 320
2T2A05400-045	6SE0102-1AA28-8AA5	57.5	88	110	45	710 x 350 x 320
2T2A05400-055	6SE0102-1AA31-1AA5	74.8	110	126	55	710 x 350 x 320
2T2A05400-075	6SE0102-1AA31-5AA5	98.4	145	165	75	1,060 x 350 x 320
2T2A05400-090	6SE0102-1AA31-8AA5	119	175	204	90	1,060 x 350 x 320
2T2A05400-110	6SE0102-1AA32-1AA5	136	205	240	110	1,060 x 350 x 320
2T2A05400-132	6SE0102-1AA32-5AA5	161	245	300	132	1,060 x 500 x 320
2T2A05400-160	6SE0102-1AA33-0AA5	197	295	360	160	1,060 x 500 x 320

DYNAVERT T 500 V 6-pulse

Inverter type	Order No. (MLFB)	Output: Connection power [kVA]	Output: Continuous current [A]	Output: Short-time current* [A]	Output: Shaft output** [kW]	Mechanical system: Dimension*** [mm] H x W x D
2T2A05500-002	6SE0102-1AB14-5AA5	3.8	4.5	5	2.2	410 x 165 x 320
2T2A05500-003	6SE0102-1AB15-5AA5	4.5	5.5	6.5	3	410 x 165 x 320
2T2A05500-004	6SE0102-1AB17-0AA5	5.8	7	8	4	410 x 165 x 320
2T2A05500-005	6SE0102-1AB21-0AA5	8.2	9.5	11	5.5	410 x 165 x 320
2T2A05500-007	6SE0102-1AB21-3AA5	10.9	13	15	7.5	410 x 165 x 320
2T2A05500-011	6SE0102-1AB21-8AA5	15.2	18	20	11	510 x 165 x 320
2T2A05500-015	6SE0102-1AB22-5AA5	20.4	24.5	27	15	510 x 165 x 320
2T2A05500-022	6SE0102-1AB23-7AA5	31.3	37	44	22	610 x 225 x 320
2T2A05500-030	6SE0102-1AB24-8AA5	40.5	48	54	30	610 x 225 x 320
2T2A05500-037	6SE0102-1AB25-8AA5	49.6	58	63	37	610 x 225 x 320
2T2A05500-045	6SE0102-1AB27-8AA5	64.2	78	88	45	710 x 350 x 320
2T2A05500-055	6SE0102-1AB28-8AA5	76.1	88	110	55	710 x 350 x 320
2T2A05500-075	6SE0102-1AB31-1AA5	94.4	110	126	75	710 x 350 x 320
2T2A05500-090	6SE0102-1AB31-5AA5	124	145	165	90	1,060 x 350 x 320
2T2A05500-110	6SE0102-1AB31-8AA5	147	175	204	110	1,060 x 350 x 320
2T2A05500-132	6SE0102-1AB32-1AA5	171	205	240	132	1,060 x 350 x 320
2T2A05500-160	6SE0102-1AB32-5AA5	206	245	300	160	1,060 x 500 x 320
2T2A05500-200	6SE0102-1AB33-0AA5	248	295	360	200	1,060 x 500 x 320

DYNAVERT T 690 V 6-pulse

Inverter type	Order No. (MLFB)	Output: Connection power [kVA]	Output: Continuous current [A]	Output: Short-time current* [A]	Output: Shaft output** [kW]	Mechanical system: Dimension*** [mm] H x W x D
2T2A05690-030	6SE0102-1AC23-4AA5	45.5	36	45	30	710 x 350 x 320
2T2A05690-037	6SE0102-1AC24-2AA5	52.6	43	55	37	710 x 350 x 320
2T2A05690-045	6SE0102-1AC25-0AA5	60.9	50	65	45	710 x 350 x 320
2T2A05690-055	6SE0102-1AC25-8AA5	74	60	75	55	710 x 350 x 320
2T2A05690-075	6SE0102-1AC28-0AA5	97.9	80	90	75	710 x 350 x 320
2T2A05690-090	6SE0102-1AC31-0AA5	123	95	120	90	1,060 x 350 x 320
2T2A05690-110	6SE0102-1AC31-2AA5	143	120	140	110	1,060 x 350 x 320
2T2A05690-132	6SE0102-1AC31-4AA5	184	150	175	132	1,060 x 350 x 320
2T2A05690-160	6SE0102-1AC31-7AA5	216	175	210	160	1,060 x 500 x 320
2T2A05690-200	6SE0102-1AC32-1AA5	266	210	255	200	1,060 x 500 x 320

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40°C.
** Typical mechanical shaft output with conventional 2- to 6-pole standard motors.
*** Height without mounting lugs

General technical data – cabinet units 400 V and 500 V

DYNAVERT T 400 V 6-pulse[1]		Output				Mechanical system						
Inverter type	Order No. (MLFB) air cooling/ water cooling	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H	x	W	x	D		
2T3A-86401-200 2T3A-76401-200	6SE0183-1BA34-2AA6/ 6SE0176-1BA34-2AA6	249	380	470	200	2,002 2,202	x	806	x	605		
2T3A-86401-250 2T3A-76401-250	6SE0183-1BA34-7AA6/ 6SE0176-1BA34-7AA6	300	460	560	250	2,002 2,202	x	806	x	605		
2T3A-86401-315 2T3A-76401-315	6SE0183-1BA35-8AA6/ 6SE0176-1BA35-8AA6	403	630	700	315	2,002 2,202	x	806	x	605		
2T3A-86401-400 2T3A-76401-400	6SE0183-1BA37-0AA6/ 6SE0176-1BA37-0AA6	476	740	950	400	2,002 2,202	x	1,206	x	605		
2T3A-86401-500 2T3A-76401-500	6SE0183-1BA38-7AA6/ 6SE0176-1BA38-7AA6	602	910	1,110	500	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86401-560 2T3A-76401-560	6SE0183-1BA41-0AA6/ 6SE0176-1BA41-0AA6	675	1,020	1,230	560	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86401-630 2T3A-76401-630	6SE0183-1BA41-1AA6/ 6SE0176-1BA41-1AA6	761	1,140	1,370	630	2,002 2,202	x	1,606 1,806	x	605		

DYNAVERT T 500 V 6-pulse[1]		Output				Mechanical system						
Inverter type	Order No. (MLFB) air cooling/ water cooling	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H	x	W	x	D		
2T3A-86501-250 2T3A-76501-250	6SE0183-1BB34-2AA6/ 6SE0176-1BB34-2AA6	303	370	450	250	2,002 2,202	x	806	x	605		
2T3A-86501-315 2T3A-76501-315	6SE0183-1BB34-6AA6/ 6SE0176-1BB34-6AA6	378	460	560	315	2,002 2,202	x	806	x	605		
2T3A-86501-400 2T3A-76501-400	6SE0183-1BB36-0AA6/ 6SE0176-1BB36-0AA6	514	640	700	400	2,002 2,202	x	806	x	605		
2T3A-86501-500 2T3A-76501-500	6SE0183-1BB37-0AA6/ 6SE0176-1BB37-0AA6	606	730	950	500	2,002 2,202	x	1,206	x	605		
2T3A-86501-560 2T3A-76501-560	6SE0183-1BB38-2AA6/ 6SE0176-1BB38-2AA6	678	820	980	560	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86501-630 2T3A-76501-630	6SE0183-1BB38-8AA6/ 6SE0176-1BB38-8AA6	767	920	1,100	630	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86501-710 2T3A-76501-710	6SE0183-1BB41-0AA6/ 6SE0176-1BB41-0AA6	848	1,030	1,230	710	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86501-800 2T6A-76501-800	6SE0183-1BB41-1AA6/ 6SE0176-1BB41-1AA6	944	1,150	1,380	800	2,002 2,202	x	1,606 1,806	x	605		

[1] **Inverters with higher pulse numbers on request**

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40°C.
** Typical mechanical shaft output with conventional 2- to 6-pole standard motors.
*** Height without mounting lugs

DYNAVERT T 690 V 6-pulse[1]		Output				Mechanical system						
Inverter type	Order No. (MLFB) air cooling/ water cooling	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H	x	W	x	D		
2T3A-86691-250 2T6A-76691-250	6SE0183-1BC33-2AA6/ 6SE0176-1BC33-2AA6	312	270	320	250	2,002 2,202	x	806	x	605		
2T3A-86691-315 2T6A-76691-315	6SE0183-1BC33-6AA6/ 6SE0176-1BC33-6AA6	391	340	410	315	2,002 2,202	x	806	x	605		
2T3A-86691-400 2T6A-76691-400	6SE0183-1BC34-2AA6/ 6SE0176-1BC34-2AA6	502	440	510	400	2,002 2,202	x	806	x	605		
2T3A-86691-500 2T6A-76691-500	6SE0183-1BC35-2AA6/ 6SE0176-1BC35-2AA6	608	530	640	500	2,002 2,202	x	1,206	x	605		
2T3A-86691-560 2T6A-76691-560	6SE0183-1BC35-7AA6/ 6SE0176-1BC35-7AA6	676	590	710	560	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86691-630 2T6A-76691-630	6SE0183-1BC36-4AA6/ 6SE0176-1BC36-4AA6	762	660	800	630	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86691-710 2T6A-76691-710	6SE0183-1BC37-1AA6/ 6SE0176-1BC37-1AA6	856	750	890	710	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86691-800 2T6A-76691-800	6SE0183-1BC37-7AA6/ 6SE0176-1BC37-7AA6	956	840	980	800	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86691-909 2T6A-76691-909	6SE0183-1BC41-0AA6/ 6SE0176-1BC41-0AA6	1,080	950	1,060	900	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86691-910 2T6A-76691-910	6SE0183-1BC41-1AA6/ 6SE0176-1BC41-1AA6	1,168	1,040	1,130	1,000	2,002 2,202	x	1,606 1,806	x	605		
2T3A-86692-912 2T6A-76692-912	6SE0183-1CC41-2AA6/ 6SE0176-1CC41-2AA6	1,410	1,260	1,520	1,210	2,002 2,202	x	3,206 3,606	x	605		
2T3A-86692-913 2T6A-76692-913	6SE0183-1CC41-3AA6/ 6SE0176-1CC41-3AA6	1,603	1,430	1,700	1,380	2,002 2,202	x	3,206 3,606	x	605		
2T3A-86692-915 2T6A-76692-915	6SE0183-1CC41-5AA6/ 6SE0176-1CC41-5AA6	1,795	1,600	1,870	1,540	2,002 2,202	x	3,206 3,606	x	605		
2T3A-86692-917 2T6A-76692-917	6SE0183-1CC41-7AA6/ 6SE0176-1CC41-7AA6	2,030	1,810	2,020	1,750	2,002 2,202	x	3,206 3,606	x	605		
2T3A-86692-919 2T6A-76692-919	6SE0183-1CC42-0AA6/ 6SE0176-1CC42-0AA6	2,223	1,980	2,150	1,910	2,002 2,202	x	3,206 3,606	x	605		

[1] Inverters with higher pulse numbers on request

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40°C.
** Typical mechanical shaft output with conventional 2- to 6-pole standard motors.
*** Height without mounting lugs

General technical data – cabinet units 690 V

DYNAVERT T 690 V 12-pulse[1]		Output				Mechanical system						
Inverter type	Order No. (MLFB) air cooling/ water cooling	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H	x	W	x	D		
2T3F-86691-500 2T6F-76691-500	6SE0183-2BC35-2AA6/ 6SE0176-2BC35-2AA6	600	530	640	500	2,002 2,202	x	1,406	x	605		
2T3F-86691-560 2T6F-76691-560	6SE0183-2BC35-7AA6/ 6SE0176-2BC35-7AA6	667	590	710	560	2,002 2,202	x	1,806 2,006	x	605		
2T3F-86691-630 2T6F-76691-630	6SE0183-2BC36-4AA6/ 6SE0176-2BC36-4AA6	753	660	800	630	2,002 2,202	x	1,806 2,006	x	605		
2T3F-86691-710 2T6F-76691-710	6SE0183-2BC37-1AA6/ 6SE0176-2BC37-1AA6	848	750	890	710	2,002 2,202	x	1,806 2,006	x	605		
2T3F-86691-800 2T6F-76691-800	6SE0183-2BC37-7AA6/ 6SE0176-2BC37-7AA6	949	840	980	800	2,002 2,202	x	1,806 2,006	x	605		
2T3F-86691-909 2T6F-76691-909	6SE0183-2BC41-0AA6/ 6SE0176-2BC41-0AA6	1,076	950	1,060	900	2,002 2,202	x	1,806 2,006	x	605		
2T3F-86691-910 2T6F-76691-910	6SE0183-2BC41-1AA6/ 6SE0176-2BC41-1AA6	1,164	1,040	1,130	1,000	2,002 2,202	x	1,806 2,006	x	605		
2T3F-86692-912 2T6F-76692-912	6SE0183-2CC41-2AA6/ 6SE0176-2CC41-2AA6	1,405	1,260	1,520	1,210	2,002 2,202	x	3,206 3,606	x	605		
2T3F-86692-913 2T6F-76692-913	6SE0183-2CC41-3AA6/ 6SE0176-2CC41-3AA6	1,597	1,430	1,700	1,380	2,002 2,202	x	3,206 3,606	x	605		
2T3F-86692-915 2T6F-76692-915	6SE0183-2CC41-5AA6/ 6SE0176-2CC41-5AA6	1,781	1,600	1,870	1,540	2,002 2,202	x	3,206 3,606	x	605		
2T3F-86692-917 2T6F-76692-917	6SE0183-2CC41-7AA6/ 6SE0176-2CC41-7AA6	2,010	1,810	2,020	1,750	2,002 2,202	x	3,206 3,606	x	605		
2T3F-86692-919 2T6F-76692-919	6SE0183-2CC42-0AA6/ 6SE0176-2DC42-0AA6	2,199	1,980	2,150	1,910	2,002 2,202	x	3,206 3,606	x	605		
2T3F-86693-920 2T6F-76693-920	6SE0183-2DC42-2AA6/ 6SE0176-2DC42-2AA6	2,369	2,140	2,540	2,090	2,002 2,202	x	4,806 5,206	x	605		
2T3F-86693-923 2T6F-76693-923	6SE0183-2DC42-4AA6/ 6SE0176-2DC42-4AA6	2,648	2,400	2,800	2,350	2,002 2,202	x	4,806 5,206	x	605		
2T3F-86693-926 2T6F-76693-926	6SE0183-2DC42-7AA6/ 6SE0176-2DC42-7AA6	2,983	2,710	3,030	2,650	2,002 2,202	x	4,806 5,206	x	605		
2T3F-86693-929 2T6F-76693-929	6SE0183-2DC43-0AA6/ 6SE0176-2DC43-0AA6	3,272	2,970	3,230	2,910	2,002 2,202	x	4,806 5,206	x	605		
2T3F-86694-931 2T6F-76694-931	6SE0183-2EC43-2AA6/ 6SE0176-2EC43-2AA6	3,516	3,200	3,730	3,180	2,002 2,202	x	6,406 7,006	x	605		
2T3F-86694-935 2T6F-76694-935	6SE0183-2EC43-6AA6/ 6SE0176-2EC43-6AA6	3,956	3,610	4,030	3,590	2,002 2,202	x	6,406 7,006	x	605		
2T3F-86694-939 2T6F-76694-939	6SE0183-2EC44-0AA6/ 6SE0176-2EC44-0AA6	4,336	3,960	4,300	3,930	2,002 2,202	x	6,406 7,006	x	605		

[1] **Inverters with higher pulse numbers on request**

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40°C.
** Typical mechanical shaft output with conventional 2- to 6-pole standard motors.
*** Height without mounting lugs

DYNAVERT I

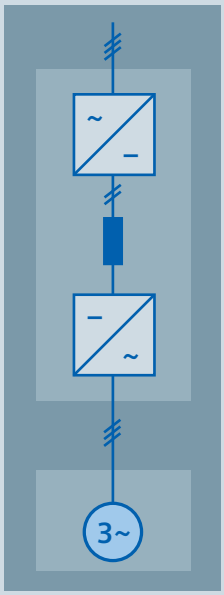
6-, 12- and 24-pulse versions

DYNAVERT® I drive units are current-source DC link inverters that are used to control induction motors. There have a fully controlled B6 bridge circuit on the line side and a B6 inverter circuit on the output side, which utilizes the principle of interphase commutation;
this distributes the DC link current from the DC link reactors with a square waveform with frequency f to the motor winding. As a consequence, the motor cable length is almost unlimited.

The power flows from the line supply to the motor for a motoring load. For regenerative operation, the rectifier on the line-side feeds the regenerated energy back into the line supply.
This means that from the inherent principle, 4-quadrant operation is possible without requiring any additional measures. 12- and 24-pulse versions further reduce the harmonics fed back into the line supply.

Customer-specific accessories are available on request.

6/6-pulse version to feed 3-phase motors

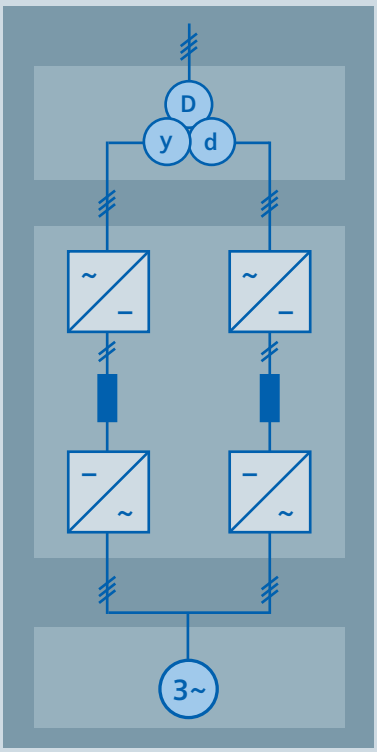


Drive inverter in a 12-pulse version

DYNAVERT I drive units are available in a 12-pulse version to reduce the harmonics fed back to the line supply. In this case, for instance, the harmonics with harmonic Nos. 5 and 7 almost completely disappear. A three-winding transformer with windings offset through 30° is required to feed the drive inverter (this is generally included in the scope of supply). Depending on the actual version, the units can also be redundantly configured (partial load operation using just one of the system halves).

12/6-pulse version to supply 3-phase motors

The 2J_F- ... drive units are only available equipped with a 12-pulse line side converter. This means that they are suitable to feed standard 3-phase motors.
They comprise two 6-pulse standard units.



12/12-pulse version to supply 6-phase motors

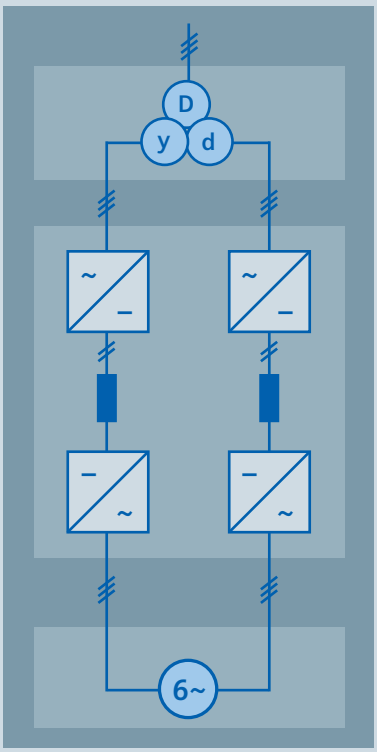
The 2J_D-... drive units are suitable for controlling special 6-phase motors. This is the reason that they are mainly used in the upper power range. Besides to low line harmonics, additional advantages include smoothing motor operation and low motor losses. They comprise two 6-pulse standard units.

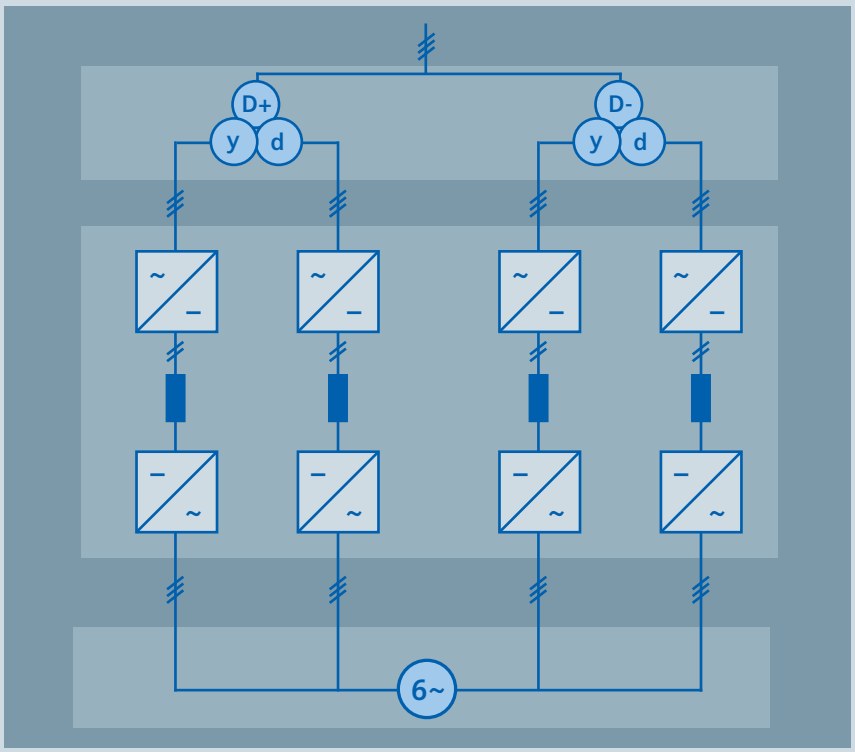
Drive inverter in a 24-pulse version

Contrary to the 12-pulse circuits, for this version, the 11th and 13th harmonics of the line current disappear.

- gi line supply = 99.9%
- Highest level of line compatibility
- Standards are complied with – even under difficult line supply characteristics and even when braking
- Partial system redundancy possible, also for the inverter transformers
- Power ratings up to 6 MW
- 690 V or 950 V supply voltage (other voltages, e.g. 850 V or 1,100 V, are available on request)

24/12-pulse version to control 6-phase motors





2 systems (master, slave) of a 24-pulse DYNAVERT I

General technical data DYNAVERT I

Line supply voltage +10%, -15%	2J..-.6400-... 2J..-.6440-... 2J..-.6500-... 2J..-.6690-... 2J..-.6950-...	3~AC 400 V, 415 V 3~AC 440 V, 460 V 3~AC 500 V 3~AC 690 V 3~AC 850 ... 1,140 V
Line supply cos phi (1)		Depends on the motor
Line frequency		50 Hz. optional 60 Hz
Maximum output frequency		60 Hz, higher on request
Output voltage (basic fundamental)		3 x 0 ... line supply voltage
Motor cable length (shielded or non-shielded)		500 m, longer on request
Degree of protection		IP21, higher degrees of protection optionally available

General technical data
400 V and 500 V

DYNAVERT I 400 V 6-pulse			Output			Mechanical system
Inverter type	Order No. (MLFB)	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H x W x D
2J3A-86400-015	6SE0383-1BA23-8AA6	26	38	42	15	2,002 x 606 x 605
2J3A-86400-022	6SE0383-1BA25-0AA6	35	50	55	22	2,002 x 606 x 605
2J3A-86400-030	6SE0383-1BA26-5AA6	45	65	72	30	2,002 x 606 x 605
2J3A-86400-037	6SE0383-1BA28-0AA6	55	80	88	37	2,002 x 606 x 605
2J3A-86400-045	6SE0383-1BA31-0AA6	66	95	105	45	2,002 x 606 x 605
2J3A-86400-055	6SE0383-1BA31-1AA6	80	115	127	55	2,002 x 606 x 605
2J3A-86400-075	6SE0383-1BA31-5AA6	105	150	165	75	2,002 x 606 x 605
2J3A-86400-090	6SE0383-1BA31-8AA6	125	180	198	90	2,202 x 606 x 605
2J3A-86400-110	6SE0383-1BA32-2AA6	155	225	248	110	2,002 x 1,206 x 605
2J3A-86400-132	6SE0383-1BA32-6AA6	185	265	292	132	2,002 x 1,206 x 605
2J3A-86400-160	6SE0383-1BA33-0AA6	210	305	336	160	2,002 x 1,206 x 605
2J3A-86400-200	6SE0383-1BA33-7AA6	255	370	407	200	2,002 x 1,206 x 605
2J3A-86400-250	6SE0383-1BA34-8AA6	335	480	530	250	2,002 x 1,406 x 605
2J3A-86400-315	6SE0383-1BA36-0AA6	415	600	660	315	2,002 x 1,406 x 605
2J3A-86400-350	6SE0383-1BA36-6AA6	455	660	725	350	2,002 x 1,406 x 605
2J3A-86400-400	6SE0383-1BA37-2AA6	500	725	800	400	2,002 x 2,406 x 605
2J3A-86400-500	6SE0383-1BA38-8AA6	665	960	1,055	500	2,002 x 2,406 x 605
2J3A-86400-550	6SE0383-1BA41-0AA6	720	1,040	1,145	550	2,002 x 2,406 x 605
2J3A-86400-630	6SE0383-1BA41-1AA6	795	1,150	1,265	630	2,002 x 2,406 x 605

DYNAVERT I 500 V 6-pulse			Output			Mechanical system
Inverter type	Order No. (MLFB)	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H x W x D
2J3A-86500-015	6SE0383-1BB22-8AA6	25	29	32	15	2,002 x 606 x 605
2J3A-86500-022	6SE0383-1BB24-0AA6	35	40	44	22	2,002 x 606 x 605
2J3A-86500-030	6SE0383-1BB25-0AA6	43	50	55	30	2,002 x 606 x 605
2J3A-86500-037	6SE0383-1BB26-0AA6	52	60	66	37	2,002 x 606 x 605
2J3A-86500-045	6SE0383-1BB27-5AA6	65	75	83	45	2,002 x 606 x 605
2J3A-86500-055	6SE0383-1BB28-8AA6	78	90	99	55	2,002 x 606 x 605
2J3A-86500-075	6SE0383-1BB31-2AA6	105	120	132	75	2,002 x 606 x 605
2J3A-86500-090	6SE0383-1BB31-4AA6	125	145	160	90	2,202 x 606 x 605
2J3A-86500-110	6SE0383-1BB31-8AA6	155	180	198	110	2,202 x 606 x 605
2J3A-86500-132	6SE0383-1BB32-1AA6	185	215	237	132	2,002 x 1,206 x 605
2J3A-86500-160	6SE0383-1BB32-4AA6	210	240	264	160	2,002 x 1,206 x 605
2J3A-86500-200	6SE0383-1BB32-8AA6	255	295	325	200	2,002 x 1,206 x 605
2J3A-86500-250	6SE0383-1BB33-8AA6	330	380	418	250	2,002 x 1,206 x 605
2J3A-86500-315	6SE0383-1BB34-8AA6	415	480	530	315	2,002 x 1,406 x 605
2J3A-86500-350	6SE0383-1BB35-3AA6	460	530	585	350	2,002 x 1,406 x 605
2J3A-86500-400	6SE0383-1BB35-8AA6	500	580	640	400	2,002 x 1,406 x 605
2J3A-86500-500	6SE0383-1BB37-6AA6	660	760	835	500	2,002 x 2,406 x 605
2J3A-86500-550	6SE0383-1BB38-4AA6	725	840	925	550	2,002 x 2,406 x 605
2J3A-86500-630	6SE0383-1BB38-8AA6	800	925	1,020	630	2,002 x 2,406 x 605
2J3A-86500-800	6SE0383-1BB41-2AA6	1,040	1,200	1,320	800	2,002 x 2,406 x 605

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40°C.
** Typical mechanical shaft output with conventional 2- to 6-pole standard motors.
*** Height without mounting lugs
Other voltages on request

DYNAVERT I 690 V 6-pulse

Inverter type	Order No. (MLFB)	Connection power [kVA]	Output: Continuous current [A]	Output: Short-time current* [A]	Output: Shaft output** [kW]	Mechanical system: Dimension*** [mm] H x W x D
2J3A-86690-045	6SE0383-1BC25-5AA6	66	55	61	45	2,002 x 606 x 605
2J3A-86690-055	6SE0383-1BC26-5AA6	78	65	72	55	2,002 x 606 x 605
2J3A-86690-075	6SE0383-1BC28-8AA6	108	90	99	75	2,002 x 606 x 605
2J3A-86690-090	6SE0383-1BC31-1AA6	130	110	121	90	2,202 x 606 x 605
2J3A-86690-110	6SE0383-1BC31-3AA6	160	135	149	110	2,202 x 606 x 605
2J3A-86690-132	6SE0383-1BC31-5AA6	185	155	171	132	2,202 x 606 x 605
2J3A-86690-160	6SE0383-1BC31-7AA6	210	175	193	160	2,002 x 1,206 x 605
2J3A-86690-200	6SE0383-1BC32-1AA6	255	215	237	200	2,002 x 1,206 x 605
2J3A-86690-250	6SE0383-1BC32-7AA6	330	275	303	250	2,002 x 1,206 x 605
2J3A-86690-315	6SE0383-1BC33-4AA6	410	345	380	315	2,002 x 1,206 x 605
2J3A-86690-350	6SE0383-1BC34-0AA6	465	390	429	350	2,002 x 1,206 x 605
2J3A-86690-400	6SE0383-1BC34-2AA6	500	420	460	400	2,002 x 1,406 x 605
2J3A-86690-500	6SE0383-1BC35-5AA6	655	550	605	500	2,002 x 1,606 x 605
2J3A-86690-550	6SE0383-1BC36-0AA6	715	600	660	550	2,002 x 1,606 x 605
2J3A-86690-630	6SE0383-1BC36-7AA6	800	670	735	630	2,002 x 2,406 x 605
2J3A-86690-800	6SE0383-1BC38-7AA6	1,040	870	955	800	2,002 x 2,406 x 605
2J3A-86690-909	6SE0383-1BC38-8AA6	1,145	960	1,055	900	2,002 x 3,206 x 605
2J3A-86690-910	6SE0383-1BC41-0AA6	1,290	1,080	1,190	1,000	2,002 x 3,206 x 605
2J3A-86690-911	6SE0383-1BC41-1AA6	1,375	1,150	1,265	1,100	2,002 x 3,206 x 605
2J3A-86690-912	6SE0383-1BC41-3AA6	1,600	1,340	1,475	1,200	2,002 x 3,206 x 605
2J3A-86690-914	6SE0383-1BC41-5AA6	1,830	1,530	1,685	1,400	2,002 x 3,206 x 605

DYNAVERT T I 690 V 12/6-pulse

Inverter type	Order No. (MLFB)	Connection power [kVA]	Output: Continuous current [A]	Output: Short-time current* [A]	Output: Shaft output** [kW]	Mechanical system: Dimension*** [mm] H x W x D
2J3F-86690-220	6SE0383-2CC32-7AA6	320	270	297	220	2,202 x 1,206 x 605
2J3F-86690-250	6SE0383-2CC33-1AA6	370	310	341	250	2,202 x 1,206 x 605
2J3F-86690-315	6SE0383-2CC33-5AA6	420	350	385	315	2,002 x 2,406 x 605
2J3F-86690-400	6SE0383-2CC34-3AA6	510	430	475	400	2,002 x 2,406 x 605
2J3F-86690-500	6SE0383-2CC35-5AA6	660	550	605	500	2,002 x 2,406 x 605
2J3F-86690-630	6SE0383-2CC37-0AA6	820	690	760	630	2,002 x 2,406 x 605
2J3F-86690-700	6SE0383-2CC37-8AA6	930	780	860	700	2,002 x 2,406 x 605
2J3F-86690-800	6SE0383-2CC38-4AA6	1,000	840	925	800	2,002 x 2,806 x 605
2J3F-86690-910	6SE0383-2CC41-1AA6	1,310	1,100	1,210	1,000	2,002 x 3,206 x 605
2J3F-86690-911	6SE0383-2CC41-2AA6	1,430	1,200	1,320	1,100	2,002 x 3,206 x 605
2J3F-86690-912	6SE0383-2CC41-3AA6	1,600	1,340	1,475	1,200	2,002 x 4,806 x 605
2J3F-86690-916	6SE0383-2CC41-7AA6	2,080	1,740	1,915	1,600	2,002 x 4,806 x 605
2J3F-86690-918	6SE0383-2CC42-0AA6	2,290	1,920	2,110	1,800	2,002 x 3,206 x 1,210
2J3F-86690-920	6SE0383-2CC42-1AA6	2,580	2,160	2,375	2,000	2,002 x 3,206 x 1,210
2J3F-86690-922	6SE0383-2CC42-3AA6	2,750	2,300	2,530	2,200	2,002 x 3,206 x 1,210
2J3F-86690-925	6SE0383-2CC42-6AA6	3,200	2,680	2,950	2,500	2,002 x 3,206 x 1,210
2J3F-86690-928	6SE0383-2CC43-0AA6	3,660	3,060	3,365	2,800	2,002 x 3,206 x 1,210

DYNAVERT I 690 V 12/12-pulse

Inverter type	Order No. (MLFB)	Connection power [kVA]	Output: Continuous current [A]	Output: Short-time current* [A]	Output: Shaft output** [kW]	Mechanical system: Dimension*** [mm] H x W x D
2J3D-86690-315	6SE0383-2CC31-7AA6	420	2*170	2*187	315	2,002 x 2,406 x 605
2J3D-86690-400	6SE0383-2CC32-0AA6	510	2*209	2*230	400	2,002 x 2,406 x 605
2J3D-86690-500	6SE0383-2CC32-6AA6	660	2*267	2*297	500	2,002 x 2,406 x 605
2J3D-86690-630	6SE0383-2CC33-3AA6	820	2*335	2*369	630	2,002 x 2,406 x 605
2J3D-86690-700	6SE0383-2CC33-7AA6	930	2*378	2*416	700	2,002 x 2,406 x 605
2J3D-86690-800	6SE0383-2CC34-0AA6	1,000	2*407	2*450	800	2,002 x 2,806 x 605
2J3D-86690-910	6SE0383-2CC35-3AA6	1,310	2*534	2*585	1,000	2,002 x 3,206 x 605
2J3D-86690-911	6SE0383-2CC35-8AA6	1,430	2*582	2*640	1,100	2,002 x 3,206 x 605
2J3D-86690-912	6SE0383-2CC36-5AA6	1,600	2*650	2*715	1,200	2,002 x 4,806 x 605
2J3D-86690-916	6SE0383-2CC38-4AA6	2,080	2*844	2*930	1,600	2,002 x 4,806 x 605
2J3D-86690-918	6SE0383-2CC38-8AA6	2,290	2*931	2*1,025	1,800	2,002 x 3,206 x 1,210
2J3D-86690-920	6SE0383-2CC41-0AA6	2,580	2*1,048	2*1,155	2,000	2,002 x 3,206 x 1,210
2J3D-86690-922	6SE0383-2CC41-1AA6	2,750	2*1,116	2*1,230	2,200	2,002 x 3,206 x 1,210
2J3D-86690-925	6SE0383-2CC41-3AA6	3,200	2*1,300	2*1,430	2,500	2,002 x 3,206 x 1,210
2J3D-86690-928	6SE0383-2CC41-4AA6	3,660	2*1,484	2*1,630	2,800	2,002 x 3,206 x 1,210

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40 °C.
** Typical mechanical shaft output with conventional 2- to 6-pole standard motors. ***Height without mounting lugs
Other voltages on request

General technical data

DYNAVERT I 690 V 24/12-pulse			Output			Mechanical system
Inverter type	Order No. (MLFB)	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H x W x D
2J3G-86690-800	6SE0383-4EC34-1AA6	1,020	2*417	2*460	800	2,002 x 4,806 x 605
2J3G-86690-910	6SE0383-4EC35-3AA6	1,320	2*534	2*585	1,000	2,002 x 4,806 x 605
2J3G-86690-912	6SE0383-4EC36-6AA6	1,640	2*669	2*735	1,200	2,002 x 4,806 x 605
2J3G-86690-914	6SE0383-4EC37-5AA6	1,860	2*757	2*835	1,400	2,002 x 4,806 x 605
2J3G-86690-916	6SE0383-4EC38-1AA6	2,000	2*815	2*895	1,600	2,002 x 5,606 x 605
2J3G-86690-920	6SE0383-4EC41-0AA6	2,620	2*1,067	2*1,175	2,000	2,002 x 6,406 x 605
2J3G-86690-922	6SE0383-4EC41-1AA6	2,860	2*1,164	2*1,280	2,200	2,002 x 6,406 x 605
2J3G-86690-924	6SE0383-4EC41-3AA6	3,200	2*1,300	2*1,430	2,400	2,002 x 4,806 x 1,210
2J3G-86690-932	6SE0383-4EC41-6AA6	4,160	2*1,688	2*1,855	3,200	2,002 x 4,806 x 1,210
2J3G-86690-936	6SE0383-4EC41-8AA6	4,580	2*1,862	2*2,050	3,600	2,002 x 6,406 x 1,210
2J3G-86690-940	6SE0383-4EC42-0AA6	5,160	2*2,095	2*2,305	4,000	2,002 x 6,406 x 1,210
2J3G-86690-944	6SE0383-4EC42-2AA6	5,500	2*2,231	2*2,455	4,400	2,002 x 6,406 x 1,210
2J3G-86690-948	6SE0383-4EC42-6AA6	6,400	2*2,600	2*2,860	4,800	2,002 x 6,406 x 1,210
2J3G-86690-956	6SE0383-4EC43-0AA6	7,320	2*2,968	2*3,265	5,600	2,002 x 6,406 x 1,210

DYNAVERT I 950 V 6-pulse[1]			Output			Mechanical system
Inverter type	Order No. (MLFB)	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H x W x D
2J3A-86950-630	6SE0383-1BI34-8AA6	805	490	539	630	2,002 x 2,406 x 605
2J3A-86950-800	6SE0383-1BI36-3AA6	1,035	630	693	800	2,002 x 2,406 x 605
2J3A-86950-909	6SE0383-1BI37-0AA6	1,150	700	770	900	2,002 x 2,406 x 605
2J3A-86950-910	6SE0383-1BI37-8AA6	1,298	790	869	1,000	2,002 x 3,206 x 605
2J3A-86950-911	6SE0383-1BI38-4AA6	1,381	840	924	1,100	2,002 x 3,206 x 605
2J3A-86950-912	6SE0383-1BI38-8AA6	1,578	960	1,056	1,200	2,002 x 3,206 x 605
2J3A-86950-915	6SE0383-1BI41-1AA6	1,939	1,180	1,298	1,500	2,002 x 3,206 x 605

DYNAVERT I 950 V 12/12-pulse[1]			Output			Mechanical system
Inverter type	Order No. (MLFB)	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H x W x D
2J3D-86950-912	6SE0383-2CI41-0AA6	1,610	2*475	2*525	1,200	2,002 x 4,806 x 605
2J3D-86950-916	6SE0383-2CI41-2AA6	2,070	2*611	2*670	1,600	2,002 x 4,806 x 605
2J3D-86950-918	6SE0383-2CI41-4AA6	2,300	2*679	2*745	1,800	2,002 x 4,806 x 605
2J3D-86950-920	6SE0383-2CI41-5AA6	2,600	2*766	2*845	2,000	2,002 x 3,206 x 1,210
2J3D-86950-922	6SE0383-2CI41-6AA6	2,760	2*815	2*895	2,200	2,002 x 3,206 x 1,210
2J3D-86950-925	6SE0383-2CI41-8AA6	3,160	2*931	2*1,025	2,500	2,002 x 3,206 x 1,210
2J3D-86950-930	6SE0383-2CI42-3AA6	3,880	2*1,145	2*1,260	3,000	2,002 x 3,206 x 1,210

DYNAVERT I 950 V 24/12-pulse[1]			Output			Mechanical system
Inverter type	Order No. (MLFB)	Connection power [kVA]	Continuous current [A]	Short-time current* [A]	Shaft output** [kW]	Dimension*** [mm] H x W x D
2J3G-86950-960	6SE0383-4EI42-2AA6	7,760	2*2,289	2*2,520	6,000	2,002 x 6,406 x 1,210

[1] **Additional types on request**

* The overload time is automatically controlled (thermal inverter model) – however, as a minimum 60 s at an ambient temperature of 40°C.

** Typical mechanical shaft output with conventional 2- to 6-pole standard motors. ***Height without mounting lugs

Other voltages (e.g. 850 V or 1,100 V) on request

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