ENG

SYSTEM INVERTER

SIEIDrive ADV200

GEFRAN

THE ACKNOWLEDGED INTERNATIONAL LEADER

Thanks to forty years of experience, Gefran is the world leader in the design and production of solutions for **measuring, controlling, and driving industrial production processes.**
We have 14 branches in 12 countries and a network of over 80 worldwide distributors.

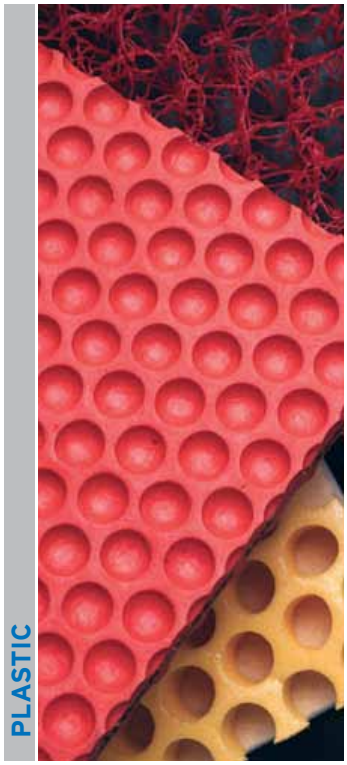
QUALITY AND TECHNOLOGY

Gefran components are a **concentrate of technology**, the result of constant research and of **cooperation with major research centres**.
For this reason, Gefran is synonymous with quality and expertise in the design and production of:

- **sensors** for measuring main variables such as **temperature, pressure, position and force**
- **state-of-the-art components and solutions for indication and control**, satisfying demands for optimisation of processes and intelligent management of energy consumption
- **automation platforms** of various complexities
- **electronic drives and electric motors** in AC and DC for all industrial automation, HVAC, water treatment, lift, and photovoltaic needs.

Gefran's know-how and experience guarantee continuity and tangible solutions.

GEFRAN



PERFORMANCE

In addition to foreseeing the market's application needs, Gefran forms partnerships with its customers to find **the best way to optimise and boost the performance of various applications.** Gefran products communicate with one another to provide integrated solutions, and can dialogue with devices by other companies thanks to compatibility with numerous fieldbuses.

CANopen EtherCAT EtherNet/IP DeviceNet GDNET Modbus PROFIBUS PROFINET

SERVICES

PRE AND POST SALES
A team of Gefran experts works with the customer to select the ideal product for its application and to help install and configure devices (technohelp@gefran.com).

TRAINING
Gefran offers a wide range of courses at different levels for the technical-commercial study of the Gefran product range as well as specific courses *on demand*.

TEST BENCHES

MATERIAL HANDLING

CONVEYORS

MATERIAL RECYCLING MACHINERY

DESCRIPTION

ADV200

The new inverter series "**SIEIDrive ADV200**" represents an innovative concept in drive technology, as a result of the constant technological research and of the experience that the Gefran Group has acquired keeping a constant presence aside that of the major sector players.
The new range has been engineered and developed to satisfy the real needs of System Integrators and OEM's in order to provide them the best innovations and economical competitiveness in the international markets.
Based on full mechanical modularity and on a powerful, intuitive and "fully open" programming platform, **ADV200** offers absolute integration flexibility with high-end performance in any system architectures of the most advanced automation environments.

The ADV200 are also available on a range of panel-mounted inverters configuration.
It are designed as a compact, ready-for-use solution fully compatible with the maximum operating conditions of the drive.
Panels are available with power ratings from 90 kW to 1.2 MW with standard input bridge or the "Active Front End" solution, in two main versions Ready to use and Basic.

POWER RANGE

Models	Power (kW)																																
	0.37	0.55	0.75	1.5	2.2	3.0	4.0	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	200	250	315	355	400	500	630	710	900	1000	
ADV200-4			Size 1					Size 2			Size 3			Size 4			Size 5			Size 6		Size 7					Parallel size 7 (*)						
ADV200-DC												Size 3		Size 4			Size 5			Size 6		Size 7					Parallel size 7 (*)						
ADV200-6																		S.5		Size 6		Size 7					Parallel size 7 (*)						

Power ratings of up to 1.2 MW on request.

(*) Inverters of between 400 kW and 710 kW comprise one master and one slave. Inverters of over 900 kW comprise one master and two slaves.

GENERAL CHARACTERISTICS

Power supply	ADV200-4: 3 x 380VAC -15% ... 500VAC +5%		
	ADV200-4/4A-DC: 450...750VDC;		
	ADV200-6/6A-DC: 840 ... 1120VDC (5750 ... 61320); 600 ... 1120VDC (≥ 71600).		
	ADV200-6: 3 x 690VAC ±10%; 50-60 HZ ± 2% (5750 ... 61320), 3 x 500...690VAC ±10%; 50-60 HZ ± 2% (71600 ... 1000kW),		
Power ratings	ADV200-4: from 0.75kW to 1.2MW	ADV200-DC: from 18.5kW to 1.2MW	ADV200-6: from 75kW to 1.15MW
Maximum output voltage	0,98 x Vin		
Maximum output frequency f2	500Hz (1007 ... 72000), 200Hz (72500 ... 1000kW)		
IGBT braking unit	Sizes 1007 ... 5550: Internal (with external resistor); braking torque 150 % MAX Sizes ≥ 5750: External optional (BUy series)		
Overload (for Synchronous motor)	**ADV200-4, ADV200-4-DC, ADV200-6-DC** Heavy Duty: 160 % x In (1' each 5'), 200 % x In (for 3"). Light Duty: 110 % x In (1' each 5').		
	ADV200-6 (5750 ... 6110) Heavy Duty: 150 % x In (1' each 5'), 200 % x In (for 3"). Light Duty: n.d.		
	ADV200-6 (72000 ... 1000kW) Heavy Duty: 160 % x In (1' each 5'), 200 % x In (for 3"). Light Duty: 110 % x In (for 60").		
Overload (for Asynchronous motor)	**ADV200-4, ADV200-4-DC, ADV200-6-DC** Heavy Duty: 150 % x In (1' each 5'), 180 % x In (for 0.5"). Light Duty: 110 % x In (1' each 5').		
	ADV200-6 (5750 ... 6110) Heavy Duty: 136 % x In (for 60"), 183 % x In (for 0.5"). Light Duty: n.d.		
	ADV200-6 (72000 ... 1000kW) Heavy Duty: 150 % x In (for 60"), 180 % x In (for 0.5"). Light Duty: 110 % x In (for 60").		
Control mode	Open-loop vector control Vector control with feedback Open loop V/f and V/f with feedback		
Optional cards	Integration of up to 3 options onboard the drive		
	"Safety" card compliant with machine safety directives (for ADV200-...+SI models)		
Multi-language programming SW	GF-eXpress (5 languages)		
PLC	PLC with advanced IEC61131-3 programming environment		
Rated protection	IP20-rated protection (IP00 size 7 and parallel)		
Fieldbus management	DeviceNet, CANopen®, Modbus RTU, EtherCAT, GDNET, PROFIBUS, Ethernet IP		

		Control mode	Speed control precision (*)	Range di controllo
Precision	**Asynch.**	FOC with feedback	± 0.01% motor speed rating	1 : 1000
		Open-loop FOC	± 30% motor slip rating	1 : 100
		V/F	± 60% motor slip rating	1 : 30
	Synch.	FOC with feedback	± 0.01% motor speed rating	1 : 1500
		Open-loop FOC	± 0,1% motor speed rating	1 : 20

(*) for standard 4-pole motor

Standard supply configuration	**Programming keypad**	Integrated KB_ADV
	Regulation	• 2 bipolar analog inputs (Voltage/Current) • 2 bipolar analog outputs (1: Voltage/Current, 1: Voltage) • 6 digital inputs (PNP/NPN) • 2 digital outputs (PNP/NPN) • 2 relay outputs, single contact • RS485 serial line (Modbus RTU)
	Power	• Integrated choke DC side (up to 132 kW) • Integrated mains filter • Integrated dynamic braking module (up to 55kW)
	Reference resolution	• Digital = 15bit + sign • Analog input = 11-bit + sign • Analog output = 11-bit + sign
Conformity	**Immunity/Emissions**	CEE - EN 61800-3
	Safety standards	EN 50178, EN 61800-5-1, UL508C, UL840 degree of pollution 2 STO (Safe Torque Off): IEC 61508 SIL 3, EN 954-1 Cat. 3 EN 61508 and EN 61800-5-2
Environmental conditions	**Ambient temperature**	-10°C ... +40°C (+14°F ...+104°F), +40°C...+50°C (+104°F...+122°F) with derating
	Altitude	Max 2000 m.(up to 1000 m without derating)
Markings	CE	Complies with the EEC directive concerning low voltage equipment
	UL c UL us	ADV200-4 and ADV200-4/4A-DC: UL and cULus, Complies with directives for the American and Canadian markets.

ADV200

Modularity

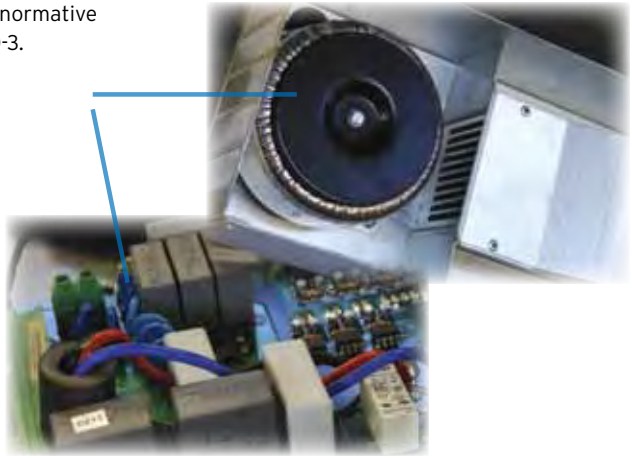
An innovative concept of integrated technology that offers full modularity. Mountable side by side and with accessories specifically dedicated to system solutions , **ADV200** has been engineered to make installation easy for any operator, both in existing systems and in specific machine solutions, always offering a real reduction of required space in the cabinet and the best manageability.

Integrated Quality

ADV200 **integrates** the fundamental devices for an absolute quality level, such as the **DC choke** that ensures maximum reliability in any conditions of working and the **input filter** that renders the drive in compliance with the EMC normative EN61800-3.

Fast Access

Structured to offer simple and fast management of the product in any situation of installation and mounting. From the **terminal** access to the rack assembling of the **options**, each operation is quick and easy.



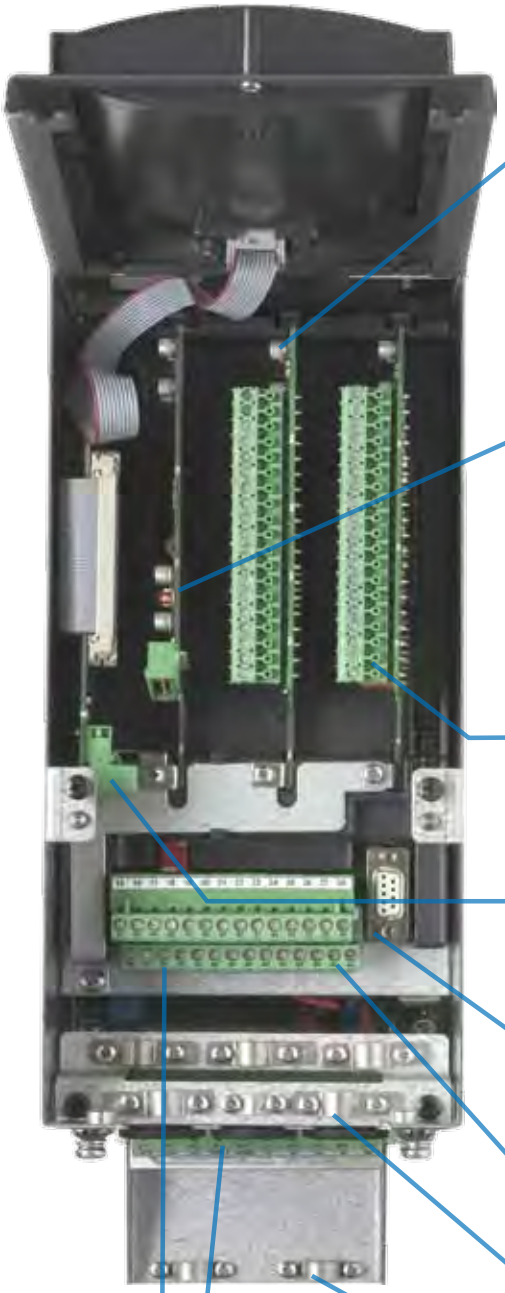
Programming Keypad

Structured with 2 setting modes Easy and Export, to satisfy each level of user's skill and programming needs both for complex or easy installation. A powerful platform but at the same time with a structure of menu/parameters that offers quick understanding, also facilitated by functionality of the keypad and the display.

Intuitive navigation and **easy start-up function** thanks to the "**Wizard**" tool.

ADV200 offers as standard **10 language** programming (English, Italian, French, German, Spanish, Polish, Romanian, Russian, Turkish and Portuguese).

- 4 lines display for 21 characters
- Clear alphanumeric text
- Full information of any parameters
- Fast Navigating Keys
- Key for displaying the last 10 parameters that have been changed
- DISP key for rapid display of operating parameters
- Upload - Download and storage of 5 complete sets of drive parameters
- Remotable up to 10 meters.



Options

ADV200 manages up to 3 option cards:

> Encoder interface

Option	Code	Description
EXP-DE-I1R1F2-ADV	S5L30	TTL/HTL digital incremental encoder expansion card 1 encoder input - 1 encoder output - 2 freeze channels
EXP-DE-I2R1F2-ADV	S5L35	TTL/HTL digital incremental encoder expansion card 2 encoder inputs - 1 encoder output - 2 freeze channels
EXP-SE-I1R1F2-ADV	S5L31	Sinusoidal incremental encoder expansion card 1 encoder input - 1 encoder output - 2 freeze channels
EXP-SESC-I1R1F2-ADV	S5L32	Sincos incremental encoder expansion card 1 encoder input - 1 encoder output - 2 freeze channels
EXP-EN/SSI-I1R1F2-ADV	S5L33	Absolute EnDat/SSI encoder expansion card 1 encoder input - 1 encoder output - 2 freeze channels
EXP-HIP-I1R1F2-ADV	S5L34	Absolute Hiperface encoder expansion card 1 encoder input - 1 encoder output - 2 freeze channels

> Fieldbus interface

EXP-CAN-ADV	S527L	Expansion card for CANopen ® and DeviceNet interface
EXP-PDP-ADV	S530L	Expansion card for Profibus_DP interface
EXP-ETH-GD-ADV200	S5L29	Ethernet GD-net interface expansion card
EXP-ETH-CAT-ADV200	S5L09	EtherCAT interface expansion card
EXP-ETH-IP-ADV200	S5L19	Ethernet IP interface expansion card

> I/O expansions

EXP-IO-D6A4R1-ADV	S526L	4 digital inputs / 2 digital outputs / 2 analog inputs / 2 analog outputs / 2 double contact relays
EXP-FL-XCAN-ADV	S5L41	Master CAN controller and Fast Link interface

Safety Card

Integrated on board the drive as the 4th option, the **EXP- SFTy** card allows the motor to be disabled without the use of a safety contactor on the drive output. It guarantees compliance with the machine safety directive and meets the following standards:

- PL=d under EN ISO 13849-1
- SIL 3 under IEC 61508
- EN 954-1 Cat. 3.

Modbus

Serial Line

Integrated standard RS485 serial line with **Modbus RTU** protocol, for peer-to-peer or multidrop connections (with **OPT-485-ADV** card).

Back-Up Supply

ADV200 can be supplied through an external +24Vdc supply in order to be kept active in case of mains input loss, ensuring in this situation the operation of all monitoring functions, programming and any connected fieldbus network.

Smart Connections

Dedicated accessories and fully removable terminals, ensure simple and fast installation and start-up in compliance with the EMC normative.

Cables shield

OMEGA clamp to grounding 360° of shielded cables.

ADV200-4 • CHOOSING THE INVERTER - INPUT AND OUTPUT DATA

The combinations of motor power ratings and inverters listed in the table envisage the use of motors in which the voltage rating is equal to that of the mains power.
For motors with different voltage ratings the inverter must be chosen according to the current rating of the motor.
The combinations listed in the table thus show the current that can be delivered by the drive during continuous operation and overload conditions, according to the mains voltage.

The same engineering criteria apply for operations with additional derating factors (see drive instrucion manual).

Input and Output Data ADV200-4								
Sizes ADV200-4	AC input current for continuous operation I_N		Inverter Output		Pn mot (Recommended asynchronous motor rating, fsw = default)			
	Heavy Duty (150% overload)	Light Duty (110%overload)	Heavy Duty	Light Duty	Heavy Duty (150% overload)		Light Duty (110%overload)	
	@ 400 Vac [Arms]	@ 400 Vac [Arms]	[kVA]	[kVA]	@400 Vac [kW]	@460 Vac [Hp]	@400 Vac [kW]	@460 Vac [Hp]
1007	2.1	3.7	1.7	3	0.75	1	1.5	2
1015	3.7	4.9	3	4	1.5	2	2.2	3
1022	4.9	6.5	4	5.3	2.2	3	3	5
1030	6.5	8.1	5.3	6.6	3	5	4	5
1040	8.1	11.1	6.6	9	4	5	5.5	7.5
2055	11.1	14	9	11.4	5.5	7.5	7.5	10
2075	14	19.6	11.4	15.9	7.5	10	11	15
2110	19.6	26.4	15.9	21.5	11	15	15	20
3150	26.4	32.3	21.5	26.3	15	20	18.5	25
3185	32.3	39	26.3	32	18.5	25	22	30
3220	39	53	32	43	22	30	30	40
4300	53	64	43	52	30	40	37	50
4370	64	74	52	60	37	50	45	60
4450	74	100	60	73	45	60	55	75
5550	100	143	73	104	55	75	75	100
5750	143	171	104	125	75	100	90	125
5900	171	200	125	145	90	125	110	150
61100	200	238	145	173	110	150	132	175
61320	238	285	173	208	132	175	160	200
71600	300	350	208	267	160	200	200	250
72000	350	420	267	319	200	250	250	300
72500	420	580	319	409	250	300	315	400
73150	580	640	409	450	315	400	355	450
73550	640	710	450	506	355	450	400	500
400 kW	665	800	506	603	400	500	500	650
500 kW	800	1100	603	776	500	650	630	850
630 kW	1100	1215	776	852	630	850	710	950
710 kW	1215	1350	852	956	710	950	800	1100
900 kW	1650	1800	1108	1247	900	1200	1000	1300
1000 kW	1800	2020	1247	1420	1000	1300	1200	1600

Rated output current In (fsw = default)								Switching frequency fsw	
Heavy Duty				Light Duty					
For Asynchronous motors (150% overload)		For Synchronous motors (160% overload)		For Asynchronous motors (110% overload)		For Synchronous motors (110% overload)			
@400 Vac [A]	@460 Vac [A]	@400 Vac [A]	@460 Vac [A]	@400 Vac [A]	@460 Vac [A]	@400 Vac [A]	@460 Vac [A]	Default	Higher
2.5	2.3	2.3	2.1	4.3	3.9	3.9	3.5	8	10, 12
4.3	3.9	3.9	3.5	5.8	5.2	5.2	4.7	8	10, 12
5.8	5.2	5.2	4.7	7.6	6.8	6.8	6.1	4	6, 8, 10, 12
7.6	6.8	6.8	6.1	9.5	8.6	8.6	7.7	4	6, 8, 10, 12
9.5	8.6	8.6	7.7	13	11.7	11.7	10.5	4	6, 8, 10, 12
13	11.7	11.7	10.5	16.5	14.9	15	13.5	4	6, 8, 10, 12
16.5	14.9	15	13.5	23	20.7	21	18.9	4	6, 8, 10, 12
23	20.7	21	18.9	31	27.9	28	25.2	4	6, 8, 10, 12
31	27.9	28	25.2	38	34.2	34	30.6	4	6, 8, 10, 12
38	34.2	34	30.6	46	41.4	41	36.9	4	6, 8, 10, 12
46	41.4	41	36.9	62	55.8	56	50.4	4	6, 8, 10, 12
62	55.8	56	50.4	75	67.5	68	61.2	4	6, 8, 10, 12
75	67.5	68	61.2	87	78.3	78	70.2	4	6, 8, 10, 12
87	78	78	70.2	105	94.5	95	85.5	4	6, 8
105	94.5	95	85.5	150	135	135	121.5	4	6, 8
150	135	135	122	180	162	162	146	4	6, 8
180	162	162	146	210	189	189	170	4	6, 8
210	189	189	170	250	225	225	203	4	6, 8
250	225	225	203	300	270	270	243	4	6, 8
300	270	270	243	385	347	347	312	4	-
385	347	347	312	460	414	414	373	4	-
460	414	414	373	590	531	521	469	2	-
590	531	521	469	650	585	585	527	2	-
650	585	585	527	730	657	657	591	2	-
730	657	657	591	870	783	783	705	2	-
870	783	783	705	1120	1008	1008	907	2	-
1120	1008	1008	907	1230	1107	1107	996	2	-
1230	1107	1107	996	1380	1242	1242	1118	2	-
1600	1440	1440	1296	1800	1620	1620	1458	2	-
1800	1620	1620	1458	2050	1845	1845	1661	2	-

ADV200-DC • CHOOSING THE INVERTER - INPUT AND OUTPUT DATA

The combinations of motor power ratings and inverters listed in the table envisage the use of motors in which the voltage rating is equal to that of the mains power.
For motors with different voltage ratings the inverter must be chosen according to the current rating of the motor.
The combinations listed in the table thus show the current that can be delivered by the drive during continuous operation and overload conditions, according to the mains voltage.

The same engineering criteria apply for operations with additional derating factors (see drive instrucion manual).

Input and Output Data ADV200-DC										
Sizes ADV200-DC	DC input current for continuous operation I_N				Inverter Output		Pn mot (Recommended asynchronous motor rating, fsw = default)			
	Heavy Duty (150% overload)		Light Duty (110%overload)		Heavy Duty	Light Duty	Heavy Duty (150% overload)		Light Duty (110%overload)	
	-4/4A @ 540 Vdc [Arms]	-6/6A @ 930 Vdc [Arms]	-4/4A @ 540 Vdc [Arms]	-6/6A @ 930 Vdc [Arms]	[kVA]	[kVA]	(1) [kW]	(2) [Hp]	(1) [kW]	(2) [Hp]
3185	39	-	48	-	26.3	32	18.5	25	22	30
3220	48	-	65	-	32	43	22	30	30	40
4300	65	-	80	-	43	52	30	40	37	50
4370	80	-	90	-	52	60	37	50	45	60
4450	90	-	125	-	60	73	45	60	55	75
5550	125	-	175	-	73	104	55	75	75	100
5750	175	-	210	-	104	125	75	100	90	125
5900	210	-	240	-	125	145	90	125	110	150
61100	240	-	290	-	145	173	110	150	132	175
61320	290	-	350	-	173	208	132	175	160	200
71600	370	190	430	235	208	267	160	200	200	250
72000	430	235	510	300	267	319	200	250	250	300
72500	510	300	710	370	319	409	250	300	315	400
73150	710	370	780	420	409	450	315	400	355	450
73550	780	420	850	470	450	506	355	450	400	500
400 kW	860	514	1020	637	506	603	400	500	500	650
500 kW	1020	653	1420	797	603	776	500	650	630	850
630 kW	1420	814	1560	925	776	852	630	850	710	950
710 kW	1560	926	1700	1032	852	956	710	950	800	1100
900 kW	2130	1236	2610	1445	1108	1247	900	1200	1000	1300
1000 kW	2340	1445	2550	1542	1247	1420	1000	1300	1200	1600

(1) ADV200-...-4/4A-DC = @400 Vac; ADV200-...-6/6A-DC = @690 Vac;
(2) ADV200-...-4/4A-DC = @460 Vac; ADV200-...-6/6A-DC = @575 Vac.

Rated output current In (fsw = default)												
Light Duty (110%overload) (For Asynchronous motors)			Heavy Duty (160% overload) (For Synchronous motors)			Light Duty (110%overload) (For Asynchronous motors)			Light Duty (110%overload) (For Synchronous motors)		
@540 Vdc [A]	@650 Vdc [A]	@930 Vdc [A]	@540 Vdc [A]	@650 Vdc [A]	@930 Vdc [A]	@540 Vdc [A]	@650 Vdc [A]	@930 Vdc [A]	@540 Vdc [A]	@650 Vdc [A]	@930 Vdc [A]
38	34.2	-	34	30.6	-	46	41.4	-	41	36.9	-
46	41.4	-	41	36.9	-	62	55.8	-	56	50.4	-
62	55.8	-	56	50.4	-	75	67.5	-	68	61.2	-
75	67.5	-	68	61.2	-	87	78.3	-	78	70.2	-
87	78	-	78	70.2	-	105	94.5	-	95	85.5	-
105	94.5	-	95	85.5	-	150	135	-	135	121.5	-
150	135	-	135	122	-	180	162	-	162	146	-
180	162	-	162	146	-	210	189	-	189	170	-
210	189	-	189	170	-	250	225	-	225	203	-
250	225	-	225	203	-	300	270	-	270	243	-
300	270	170	270	243	210	385	347	153	347	312	189
385	347	210	347	312	265	460	414	189	414	373	238
460	414	265	414	373	330	590	531	238	521	469	297
590	531	330	521	469	375	650	585	297	585	527	337
650	585	375 (3)	585	527	415 (3)	730	657	337	657	591	373
730	657	400	657	591	500	870	783	360	783	705	450
870	783	500	783	705	630	1120	1008	450	1008	907	567
1120	1008	630	1008	907	710	1230	1107	567	1107	996	639
1230	1107	710 (3)	1107	996	790 (3)	1380	1242	639	1242	1118	711
1600	1440	900	1440	1296	1000	1800	1620	810	1620	1458	900
1800	1620	1000 (3)	1620	1458	1150 (3)	2050	1845	900	1845	1661	1035

Sizes ADV200-DC-4/4A	Switching frequency fsw	
	Default	Higher
3185 ... 4370	4 kHz	6, 8, 10, 12 kHz
4450 ... 61320	4 kHz	6, 8 kHz
71600 ... 73550	4 kHz	-
400 kW ... 1000 kW	2 kHz	-

Sizes ADV200-DC-6/6A	Switching frequency fsw	
	Maximum (default)	Minimum
71600	2 kHz / 4 kHz (4)	2 kHz
72000	2 kHz / 4 kHz (4)	2 kHz
72500 ... 73550	2 kHz	2 kHz
400 kW	2 kHz	2 kHz
500 kW ... 1000 kW	2 kHz	2 kHz

(3) Current values with an ambient temperature of 35°C.

(4) 4 kHz in "variable frequency" mode (PAR 658 Switch freq. mode =1).

ADV200-6 • CHOOSING THE INVERTER - INPUT AND OUTPUT DATA

The combinations of motor power ratings and inverters listed in the table envisage the use of motors in which the voltage rating is equal to that of the mains power.
For motors with different voltage ratings the inverter must be chosen according to the current rating of the motor.
The combinations listed in the table thus show the current that can be delivered by the drive during continuous operation and overload conditions, according to the mains voltage.

The same engineering criteria apply for operations with additional derating factors (see drive instrucion manual).

Input and Output Data ADV200-6												
Sizes ADV200-6	AC input current		Pn mot (Recommended asyncronous motor rating, fsw = default)				Rated output current In (for Asyncronous motor) (fsw = default)		Rated output current In (For Synchronous motors) (fsw = default)		Switching frequency "Fixed frequency" mode (PAR 658 Switch freq. mode =O, default)	
	Heavy Duty	Light Duty	Heavy Duty		Light Duty		Heavy Duty	Light Duty	Heavy Duty	Light Duty	Maximum (default)	Minimum
	@ 690 Vac [Arms]	@ 690 Vac [Arms]	@690 Vac [kW]	@575 Vac [kW]	@690 Vac [kW]	@575 Vac [kW]	[A]	[A]	[A]	[A]	(kHz)	(kHz)
5750	90	-	75	-	-	-	92	-	75	-	4	2
6900	109	-	90	-	-	-	110	-	90	-	4	2
61100	129	-	110	-	-	-	133	-	110	-	2	2
61320	157	-	132	-	-	-	159	-	130	-	2	2
71600	172	210	160	150	200	200	170	210	153	189	4	2
72000	214	263	200	200	250	250	210	265	189	238	2	2
72500	263	336	250	250	315	350	265	330	238	297	2	2
73150	336	382	315	350	355	400	330	375	297	337	2	2
73550	382	420	355	400	400	450	375 (1)	415	337 (1)	373	2	2
400 kW	420	520	400	450	500	500	400	500	360	450	2	2
500 kW	533	651	500	550	630	700	500	630	450	567	2	2
630 kW	665	755	630	700	710	800	630	710	567	639	2	2
710 kW	756	843	710	800	800	900	710 (1)	790	639 (1)	711	2	2
900 kW	1009	1180	900	1000	1000	1100	900	1000	810	900	2	2
1000 kW	1180	1259	1000	1100	1150	1300	1000 (1)	1150	900 (1)	1035	2	2

(1) Current values with an ambient temperature of 35°C.

WEIGHTS AND DIMENSIONS

Sizes ADV200-4	Dimensions: Width x Height x Depth		Weight	
	mm	inches	kg	lbs
1007...1040	118 x 322 x 235	4.65 x 12.7 x 9.25	5.8	12.8
2055 ... 2110	150 x 392 x 250	5.91 x 15.43 x 9.84	10.2	22.5
3150...3185	180 x 517 x 250	7.09 x 20.35 x 9.84	16.4	36.2
3220			22	48.5
4300...4450	268 x 616 x 270	10.55 x 24.25 x 10.63	32	70.6
5550...5900	311 x 767 x 325	12.24 x 40.2 x 12.8	60	132.3
61100 ... 61320	422 x 878 x 360	16.61 x 34.6 x 14.2	90	198.4
71600...72000	417 x 1407 x 485	16.42 x 55.4 x 19.1	130	286.6
72500			140	308.7
73150 ... 73550			150	330.7
400kW	837 x 1407 x 485	33.0 x 55.4 x 19.1	260	573.2
500kW			280	617.4
630 - 710kW			450	992.1
900 - 1000kW	1257 x 1407 x 485	49.5 x 55.4 x 19.1	450	992.1

Sizes ADV200-DC	Dimensions: Width x Height x Depth		Weight			
	mm	inches	kg	lbs		
3185	180 x 517 x 250	7.09 x 20.35 x 9.84	12	26.5		
3220			18	39.7		
4300...4450	268 x 616 x 270	10.55 x 24.25 x 10.63	24	52.9		
5550 ... 5900	311 x 730.4 x 325	12.24 x 30.55 x 12.8	40	88.2		
61100	421 x 924.5 x 360	16.57 x 36.4 x 14.17	68	149.9		
61320	421 x 924.5 x 360	16.57 x 36.4 x 14.17	68	149.9		
			(ADV200-...-4-DC)		(ADV200-...-6-DC)	
	mm	inches	kg	lbs	kg	lbs
71600...72000	417 x 1407 x 485	16.42 x 55.4 x 19.1	120	267	135	288
72500			130	287	145	320
73150 ... 73550			140	307	155	342
400kW	837 x 1407 x 485	33.0 x 55.4 x 19.1	240	529	270	595
500kW			260	573	290	639
630 - 710kW			420	926	310	683
900 - 1000kW	1257 x 1407 x 485	49.5 x 55.4 x 19.1	420	926	465	1025

Sizes ADV200-6	Dimensions: Width x Height x Depth		Weight	
	mm	inches	kg	lbs
5750	520 x 942 x 318	20.5 x 37.1 x 12.5		
6900 - 61100 - 61320	520 x 1134 x 319	20.5 x 44.6 x 12.6		
71600...72000	417 x 1407 x 485	16.42 x 55.4 x 19.1	135	298
72500			145	320
73150 ... 73550			155	342
400kW	837 x 1407 x 485	33.0 x 55.4 x 19.1	270	595
500kW			290	639
630 - 710kW			310	683
900 - 1000kW	1257 x 1407 x 485	49.5 x 55.4 x 19.1	465	1025