

Product information

Identification of the products



Product code

		I	5	5	A	E	□□□	□	1	□	□	□	□□□□
Product type	Inverter	I											
Product family	i500		5										
Product	i550			5									
Product generation	Generation 1				A								
	Generation 2				B								
Mounting type	Control cabinet mounting					E							
Rated power (Examples)	0.25 kW						125						
	0.55 kW						155						
	2.2 kW						222						
	3.0 kW						230						
	15 kW						315						
	30 kW						330						
Mains voltage and connection type	1/N/PE AC 120 V									A			
	1/N/PE AC 230/240 V									B			
	3/PE AC 230/240 V									C			
	1/N/PE AC 230/240 V 3/PE AC 230/240 V									D			
	3/PE AC 400 V									F			
	3/PE AC 480 V												
Motor connections	Single axis									1			
Integrated functional safety	Without safety function									0			
	Basic Safety STO									A			
Degree of protection	IP20, coated										V		
Interference suppression	Without											0	
	Integrated RFI filter											1	
Application	Default parameter setting: Region EU (50-Hz networks)												0
	Default parameter setting: Region US (60-Hz networks)												1
Design types	Standard I/O without network												000S
	Application I/O without network												001S
	Standard I/O with CANopen												002S
	Standard I/O with Modbus RTU												003S
	Standard I/O with PROFIBUS												004S
	Standard I/O with POWERLINK												012S
	Standard I/O with EtherCAT												00KS
	Standard I/O with PROFINET												00LS
	Standard I/O with EtherNet/IP												00MS
	Standard I/O with Modbus TCP												00WS
	Standard I/O with IO-Link												016S

Example:

Product code	Meaning
I55AE311F1AV100KS	Inverter i550 Cabinet, 11 kW, 3-phase, 400 V/480 V STO safety function, IP20, varnished, integrated RFI filter; 50 Hz variant Standard I/O with EtherCAT network



Rated data

The output currents apply to these operating conditions:

- At a switching frequency of 2 kHz or 4 kHz: Max. ambient temperature 45°C.
- At a switching frequency of 8 kHz or 16 kHz: Max. ambient temperature 40 °C.

Inverters		i550-C0.25/120-1	i550-C0.37/120-1	i550-C0.75/120-1	i550-C1.1/120-1
Rated power	kW	0.25	0.37	0.75	1.1
Rated power	hp	0.33	0.5	1	1.5
Mains voltage range		1/PE AC 90 V ... 132 V, 45 Hz ... 65 Hz			
Output voltage		3 AC 0-230/240 V			
Rated mains current					
without mains choke	A	6.8	9.6	16.8	22.9
with mains choke	A	6	8.5	14.7	17.1
Apparent output power	kVA	0.6	0.9	1.6	2.2
Rated output current					
2 kHz	A	1.7	2.4	4.2	6
4 kHz	A	1.7	2.4	4.2	6
8 kHz	A	1.7	2.4	4.2	6
16 kHz	A	1.1	1.6	2.8	4
Power loss					
2 kHz	W	15	19	29	39
4 kHz	W	16	21	29	40
8 kHz	W	18	23	35	47
16 kHz	W	20	24	36	45
at inverter disable	W	6	6	6	6
Overcurrent cycle 180 s					
Max. output current	A	2.6	3.6	6.3	9
Overload time	s	60	60	60	60
Recovery time	s	120	120	120	120
Max. output current during the recovery time	A	1.3	1.8	3.2	4.5
Overcurrent cycle 15 s					
Max. output current	A	3.4	4.8	8.4	12
Overload time	s	3	3	3	3
Recovery time	s	12	12	12	12
Max. output current during the recovery time	A	1.3	1.8	3.2	4.5
Cyclic mains switching		3 times per minute			
Brake chopper					
Max. output current	A	2.2	2.2	8.3	8.3
Min. brake resistance	Ω	180	180	47	47
Max. motor cable length shielded					
without EMC category	m	50	50	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Weight	kg	1	1	1.35	1.35
Weight	lb	2.2	2.2	3	3

Technical data

1-phase mains connection 120 V
Mains chokes



Fusing data

EN 60204-1

Inverters	Fuse		Circuit breaker		Earth-leakage circuit breaker
	Characteristics	Max. rated current	Characteristics	Max. rated current	
i550-C0.25/120-1	gG/gL or gRL	16	B	16	≥ 30 mA, type A or B
i550-C0.37/120-1	gG/gL or gRL	16	B	16	≥ 30 mA, type A or B
i550-C0.75/120-1	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B
i550-C1.1/120-1	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B

The connection data according to UL can be found under: [▶ Connection according to UL 50](#)

Terminal data

Inverters	kW	i550-Cxxxx/120-1			
		0.25 ... 0.37	0.75 ... 1.1	0.25 ... 1.1	0.25 ... 1.1
Connection		X100 mains connection		PE connection	X105 motor connection
Connection type		Pluggable screw terminal		PE screw	Pluggable screw terminal
Max. cable cross-section	mm ²	2.5	6	6	2.5
Stripping length	mm	8	8	10	8
Tightening torque	Nm	0.5	0.7	2	0.5
Required tool		0.5 x 3.0	0.6 x 3.5	Torx 20	0.5 x 3.0

The terminal data for the terminal X1 can be found under: [▶ Terminal data 76](#)

Brake resistors

Inverters	Order code	Brake resistor				
		Rated resistance	Rated power	Thermal capacity	Dimensions (h x b x d)	Weight
		Ω	W	kWs	mm	kg
i550-C0.25/120-1	ERBM180R050W	180	50	7.5	175 x 21 x 40	0.28
i550-C0.37/120-1						
i550-C0.75/120-1	ERBP047R200W	47	200	30	320 x 41 x 122	1
i550-C1.1/120-1						

Mains chokes

Inverters	Order code	Mains choke				
		Number of phases	Output current	Inductance	Dimensions (h x b x d)	Weight
			A	mH	mm	kg
i550-C0.25/120-1	ELN1-0500H009	1	9	5	75 x 66 x 82	1.1
i550-C0.37/120-1						
i550-C0.75/120-1	ELN1-0250H018	1	18	2.5	96 x 96 x 90	2.1
i550-C1.1/120-1						



1-phase mains connection 230/240 V



When selecting the inverters, please note: **EMC filters** are integrated in the i550-Cxxx/230-1 inverters. **EMC filters** are not integrated in the inverters i550-Cxxx/230-2.

Technical data

1-phase mains connection 230/240 V

Rated data



Rated data

The output currents apply to these operating conditions:

- At a switching frequency of 2 kHz or 4 kHz: Max. ambient temperature 45°C.
- At a switching frequency of 8 kHz or 16 kHz: Max. ambient temperature 40 °C.

Inverters		i550-C0.25/230-1	i550-C0.25/230-2	i550-C0.37/230-1	i550-C0.37/230-2
Rated power	kW	0.25	0.25	0.37	0.37
Rated power	hp	0.33	0.33	0.5	0.5
Mains voltage range		1/PE AC 170 V ... 264 V, 45 Hz ... 65 Hz			
Output voltage		3 AC 0-230/240 V			
Rated mains current					
without mains choke	A	4	4	5.7	5.7
with mains choke	A	3.6	3.6	4.8	4.8
Apparent output power	kVA	0.6	0.6	0.9	0.9
Rated output current					
2 kHz	A	-	-	-	-
4 kHz	A	1.7	1.7	2.4	2.4
8 kHz	A	1.7	1.7	2.4	2.4
16 kHz	A	1.1	1.1	1.6	1.6
Power loss					
2 kHz	W	-	-	-	-
4 kHz	W	15	15	18	18
8 kHz	W	15	15	20	20
16 kHz	W	19	19	24	24
at inverter disable	W	6	6	6	6
Overcurrent cycle 180 s					
Max. output current	A	2.6	2.6	3.6	3.6
Overload time	s	60	60	60	60
Recovery time	s	120	120	120	120
Max. output current during the recovery time	A	1.3	1.3	1.8	1.8
Overcurrent cycle 15 s					
Max. output current	A	3.4	3.4	4.8	4.8
Overload time	s	3	3	3	3
Recovery time	s	12	12	12	12
Max. output current during the recovery time	A	1.3	1.3	1.8	1.8
Cyclic mains switching		3 times per minute			
Brake chopper					
Max. output current	A	2.2	2.2	2.2	2.2
Min. brake resistance	Ω	180	180	180	180
Max. motor cable length shielded					
without EMC category	m	50	50	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	3	-	3	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	15	-	15	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	15	-	15	-
Weight	kg	0.8	0.8	0.8	0.8
Weight	lb	1.8	1.8	1.8	1.8



Technical data

1-phase mains connection 230/240 V
Rated data

Inverters		i550-C0.55/230-1	i550-C0.55/230-2	i550-C0.75/230-1	i550-C0.75/230-2
Rated power	kW	0.55	0.55	0.75	0.75
Rated power	hp	0.75	0.75	1	1
Mains voltage range		1/PE AC 170 V ... 264 V, 45 Hz ... 65 Hz			
Output voltage		3 AC 0-230/240 V			
Rated mains current					
without mains choke	A	7.6	7.6	10	10
with mains choke	A	7.1	7.1	8.8	8.8
Apparent output power	kVA	1.2	1.2	1.6	1.6
Rated output current					
2 kHz	A	3.2	3.2	4.2	4.2
4 kHz	A	3.2	3.2	4.2	4.2
8 kHz	A	3.2	3.2	4.2	4.2
16 kHz	A	2.1	2.1	2.8	2.8
Power loss					
2 kHz	W	22	22	27	27
4 kHz	W	23	23	29	29
8 kHz	W	25	25	33	33
16 kHz	W	30	30	38	38
at inverter disable	W	6	6	6	6
Overcurrent cycle 180 s					
Max. output current	A	4.8	4.8	6.3	6.3
Overload time	s	60	60	60	60
Recovery time	s	120	120	120	120
Max. output current during the recovery time	A	2.4	2.4	3.2	3.2
Overcurrent cycle 15 s					
Max. output current	A	6.4	6.4	8.4	8.4
Overload time	s	3	3	3	3
Recovery time	s	12	12	12	12
Max. output current during the recovery time	A	2.4	2.4	3.2	3.2
Cyclic mains switching		3 times per minute			
Brake chopper					
Max. output current	A	3.9	3.9	3.9	3.9
Min. brake resistance	Ω	100	100	100	100
Max. motor cable length shielded					
without EMC category	m	50	50	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	3	-	3	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	20	-	20	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	50	-	50	-
Weight	kg	1	1	1	1
Weight	lb	2.2	2.2	2.2	2.2

Technical data

1-phase mains connection 230/240 V
Rated data



Inverters		i550-C1.1/230-1	i550-C1.1/230-2	i550-C1.5/230-1	i550-C1.5/230-2
Rated power	kW	1.1	1.1	1.5	1.5
Rated power	hp	1.5	1.5	2	2
Mains voltage range		1/PE AC 170 V ... 264 V, 45 Hz ... 65 Hz			
Output voltage		3 AC 0-230/240 V			
Rated mains current					
without mains choke	A	14.3	14.3	16.7	16.7
with mains choke	A	11.9	11.9	13.9	13.9
Apparent output power	kVA	2.2	2.2	2.6	2.6
Rated output current					
2 kHz	A	6	6	7	7
4 kHz	A	6	6	7	7
8 kHz	A	6	6	7	7
16 kHz	A	4	4	4.7	4.7
Power loss					
2 kHz	W	36	36	41	41
4 kHz	W	37	37	43	43
8 kHz	W	42	42	50	50
16 kHz	W	51	51	59	59
at inverter disable	W	6	6	6	6
Overcurrent cycle 180 s					
Max. output current	A	9	9	10.5	10.5
Overload time	s	60	60	60	60
Recovery time	s	120	120	120	120
Max. output current during the recovery time	A	4.5	4.5	5.3	5.3
Overcurrent cycle 15 s					
Max. output current	A	12	12	14	14
Overload time	s	3	3	3	3
Recovery time	s	12	12	12	12
Max. output current during the recovery time	A	4.5	4.5	5.3	5.3
Cyclic mains switching		3 times per minute			
Brake chopper					
Max. output current	A	12	12	12	12
Min. brake resistance	Ω	33	33	33	33
Max. motor cable length shielded					
without EMC category	m	50	50	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	3	-	3	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	20	-	20	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	35	-	35	-
Weight	kg	1.35	1.35	1.35	1.35
Weight	lb	3	3	3	3



Technical data

1-phase mains connection 230/240 V
Rated data

Inverters		i550-C2.2/230-1	i550-C2.2/230-2
Rated power	kW	2.2	2.2
Rated power	hp	3	3
Mains voltage range		1/PE AC 170 V ... 264 V, 45 Hz ... 65 Hz	
Output voltage		3 AC 0-230/240 V	
Rated mains current			
without mains choke	A	22.5	22.5
with mains choke	A	16.9	16.9
Apparent output power	kVA	3.6	3.6
Rated output current			
2 kHz	A	9.6	9.6
4 kHz	A	9.6	9.6
8 kHz	A	9.6	9.6
16 kHz	A	6.4	6.4
Power loss			
2 kHz	W	54	54
4 kHz	W	60	60
8 kHz	W	70	70
16 kHz	W	78	78
at inverter disable	W	6	6
Overcurrent cycle 180 s			
Max. output current	A	14.4	14.4
Overload time	s	60	60
Recovery time	s	120	120
Max. output current during the recovery time	A	7.2	7.2
Overcurrent cycle 15 s			
Max. output current	A	19.2	19.2
Overload time	s	3	3
Recovery time	s	12	12
Max. output current during the recovery time	A	7.2	7.2
Cyclic mains switching		3 times per minute	
Brake chopper			
Max. output current	A	12	12
Min. brake resistance	Ω	33	33
Max. motor cable length shielded			
without EMC category	m	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	3	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	20	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	35	-
Weight	kg	1.35	1.35
Weight	lb	3	3

Technical data

1-phase mains connection 230/240 V
Terminal data



Fusing data

EN 60204-1

Inverters	Fuse		Circuit breaker		Earth-leakage circuit breaker
	Characteristics	Max. rated current	Characteristics	Max. rated current	
i550-C0.25/230-1	gG/gL or gRL	10	B	10	≥ 30 mA, type A or B
i550-C0.25/230-2	gG/gL or gRL	10	B	10	≥ 30 mA, type A or B
i550-C0.37/230-1	gG/gL or gRL	10	B	10	≥ 30 mA, type A or B
i550-C0.37/230-2	gG/gL or gRL	10	B	10	≥ 30 mA, type A or B
i550-C0.55/230-1	gG/gL or gRL	16	B	16	≥ 30 mA, type A or B
i550-C0.55/230-2	gG/gL or gRL	16	B	16	≥ 30 mA, type A or B
i550-C0.75/230-1	gG/gL or gRL	16	B	16	≥ 30 mA, type A or B
i550-C0.75/230-2	gG/gL or gRL	16	B	16	≥ 30 mA, type A or B
i550-C1.1/230-1	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B
i550-C1.1/230-2	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B
i550-C1.5/230-1	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B
i550-C1.5/230-2	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B
i550-C2.2/230-1	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B
i550-C2.2/230-2	gG/gL or gRL	25	B	25	≥ 30 mA, type A or B

The connection data according to UL can be found under: [▶ Connection according to UL 50](#)

Terminal data

Inverters	kW	i550-Cxxxx/230-x			
		0.25 ... 0.75	1.1 ... 2.2	0.25 ... 2.2	0.25 ... 2.2
Connection		X100 mains connection		PE connection	X105 motor connection
Connection type		Pluggable screw terminal		PE screw	Pluggable screw terminal
Max. cable cross-section	mm ²	2.5	6	6	2.5
Stripping length	mm	8	8	10	8
Tightening torque	Nm	0.5	0.7	2	0.5
Required tool		0.5 x 3.0	0.6 x 3.5	Torx 20	0.5 x 3.0

The terminal data for the terminal X1 can be found under: [▶ Terminal data 76](#)



Technical data

1-phase mains connection 230/240 V
Mains chokes

Brake resistors

Inverters	Brake resistor					
	Order code	Rated resistance	Rated power	Thermal capacity	Dimensions (h x b x d)	Weight
		Ω	W	kWs	mm	kg
i550-C0.25/230-1	ERBM180R050W	180	50	7.5	175 x 21 x 40	0.28
i550-C0.25/230-2						
i550-C0.37/230-1						
i550-C0.37/230-2						
i550-C0.55/230-1	ERBM100R100W	100	100	15	240 x 80 x 95	0.37
i550-C0.55/230-2						
i550-C0.75/230-1						
i550-C0.75/230-2						
i550-C1.1/230-1	ERBP033R200W	33	200	30	240 x 41 x 122	1
	ERBP033R300W		300	45	320 x 41 x 122	1.4
i550-C1.1/230-2	ERBP033R200W		200	30	240 x 41 x 122	1
	ERBP033R300W		300	45	320 x 41 x 122	1.4
i550-C1.5/230-1	ERBP033R200W		200	30	240 x 41 x 122	1
	ERBP033R300W		300	45	320 x 41 x 122	1.4
i550-C1.5/230-2	ERBP033R200W		200	30	240 x 41 x 122	1
	ERBP033R300W		300	45	320 x 41 x 122	1.4
i550-C2.2/230-1	ERBP033R300W		300	45	320 x 41 x 122	1.4
	ERBP033R200W		200	30	240 x 41 x 122	1
i550-C2.2/230-2	ERBP033R300W		300	45	320 x 41 x 122	1.4
	ERBP033R200W		200	30	240 x 41 x 122	1

Mains chokes

Inverters	Mains choke					
	Order code	Number of phases	Output current	Inductance	Dimensions (h x b x d)	Weight
			A	mH	mm	kg
i550-C0.25/230-1	ELN1-0900H005	1	5	9	75 x 66 x 82	1.1
i550-C0.25/230-2						
i550-C0.37/230-1						
i550-C0.37/230-2						
i550-C0.55/230-1	ELN1-0500H009		9	5	75 x 66 x 82	1.1
i550-C0.55/230-2						
i550-C0.75/230-1						
i550-C0.75/230-2						
i550-C1.1/230-1	ELN1-0250H018	18	2.5	96 x 96 x 90	2.1	
i550-C1.1/230-2						
i550-C1.5/230-1						
i550-C1.5/230-2						
i550-C2.2/230-1						
i550-C2.2/230-2						

Technical data

1-phase mains connection 230/240 V
RFI filters / Mains filters



RFI filters / Mains filters

Basic information on RFI filters, mains filters and EMC: from [192](#)



EMC filters can be used both in the side structure and in the substructure.

Maximum motor cable lengths and FI operation

Mains connection			1-phase, 230 V		
Inverter			i550-C0.25/230-1 i550-C0.37/230-1	i550-C0.55/230-1 i550-C0.75/230-1	i550-C1.1/230-1 i550-C1.5/230-1 i550-C2.2/230-1
Without RFI filter					
without EMC category Thermal limitation	Max. motor cable length shielded	m	50	50	50
	Max. motor cable length unshielded	m	100	100	200
With integrated RFI filter					
Category C1	Max. motor cable length shielded	m	3	3	3
Category C2		m	15	20	20
	Earth-leakage circuit breaker	mA	30	30	30
RFI filter Low Leakage					
Category C1	Max. motor cable length shielded	m	5	5	5
	Earth-leakage circuit breaker	mA	10	10	10
RFI filter Short Distance					
Category C1	Max. motor cable length shielded	m	25	25	25
Category C2		m	50	50	50
	Earth-leakage circuit breaker	mA	30	30	30
RFI filter Long Distance					
Category C1	Max. motor cable length shielded	m	50	50	50
Category C2		m	50	50	50
	Earth-leakage circuit breaker	mA	300	300	300

Low Leakage

Inverters	RFI filter			
	Order code	Output current	Dimensions (h x b x d)	Weight
		A	mm	kg
i550-C0.25/230-1 i550-C0.37/230-1	I0FAE137B100L0000S	6	226 x 60 x 50	0.85
i550-C0.55/230-1 i550-C0.75/230-1				
i550-C1.1/230-1 i550-C1.5/230-1 i550-C2.2/230-1	I0FAE222B100L0000S	22.5	346 x 60 x 50	1.4



Technical data

1-phase mains connection 230/240 V
RFI filters / Mains filters

Short Distance

Inverters	RFI filter			
	Order code	Output current	Dimensions (h x b x d)	Weight
		A	mm	kg
i550-C0.25/230-1	IOFAE175B100S0000S	10	276 x 60 x 50	0.85
i550-C0.37/230-1				
i550-C0.55/230-1				
i550-C0.75/230-1				
i550-C1.1/230-1	IOFAE222B100S0000S	22.5	346 x 60 x 50	1.2
i550-C1.5/230-1				
i550-C2.2/230-1				

Long Distance

Inverters	RFI filter			
	Order code	Output current	Dimensions (h x b x d)	Weight
		A	mm	kg
i550-C0.25/230-1	IOFAE175B100D0000S	10	276 x 60 x 50	0.85
i550-C0.37/230-1				
i550-C0.55/230-1				
i550-C0.75/230-1				
i550-C1.1/230-1	IOFAE222B100D0000S	22.5	346 x 60 x 50	1.2
i550-C1.5/230-1				
i550-C2.2/230-1				

Technical data

3-phase mains connection 230/240 V



3-phase mains connection 230/240 V



EMC filters are not integrated in inverters for this mains connection.



Rated data

The output currents apply to these operating conditions:

- At a switching frequency of 2 kHz or 4 kHz: Max. ambient temperature 45°C.
- At a switching frequency of 8 kHz or 16 kHz: Max. ambient temperature 40 °C.

Inverters		i550-C0.25/230-2	i550-C0.37/230-2	i550-C0.55/230-2	i550-C0.75/230-2
Rated power	kW	0.25	0.37	0.55	0.75
Rated power	hp	0.33	0.5	0.75	1
Mains voltage range		3/PE AC 170 V ... 264 V, 45 Hz ... 65 Hz			
Output voltage		3 AC 0-230/240 V			
Rated mains current					
without mains choke	A	2.6	3.9	4.8	6.4
with mains choke	A	2	3	3.8	5.1
Apparent output power	kVA	0.6	0.9	1.2	1.6
Rated output current					
2 kHz	A	-	-	3.2	4.2
4 kHz	A	1.7	2.4	3.2	4.2
8 kHz	A	1.7	2.4	3.2	4.2
16 kHz	A	1.1	1.6	2.1	2.8
Power loss					
2 kHz	W	-	-	22	27
4 kHz	W	15	18	23	29
8 kHz	W	15	20	25	33
16 kHz	W	19	24	30	38
at inverter disable	W	6	6	6	6
Overcurrent cycle 180 s					
Max. output current	A	2.6	3.6	4.8	6.3
Overload time	s	60	60	60	60
Recovery time	s	120	120	120	120
Max. output current during the recovery time	A	1.3	1.8	2.4	3.2
Overcurrent cycle 15 s					
Max. output current	A	3.4	4.8	6.4	8.4
Overload time	s	3	3	3	3
Recovery time	s	12	12	12	12
Max. output current during the recovery time	A	1.3	1.8	2.4	3.2
Cyclic mains switching		3 times per minute			
Brake chopper					
Max. output current	A	2.2	2.2	3.9	3.9
Min. brake resistance	Ω	180	180	100	100
Max. motor cable length shielded					
without EMC category	m	50	50	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Weight	kg	0.8	0.8	1	1
Weight	lb	1.8	1.8	2.2	2.2

Technical data

3-phase mains connection 230/240 V
Rated data



Inverters		i550-C1.1/230-2	i550-C1.5/230-2	i550-C2.2/230-2	i550-C5.5/230-3
Rated power	kW	1.1	1.5	2.2	5.5
Rated power	hp	1.5	2	3	7.5
Mains voltage range		3/PE AC 170 V ... 264 V, 45 Hz ... 65 Hz			
Output voltage		3 AC 0-230/240 V			
Rated mains current					
without mains choke	A	7.8	9.5	13.6	28.8
with mains choke	A	5.6	6.8	9.8	21.9
Apparent output power	kVA	2.2	2.6	3.6	8.7
Rated output current					
2 kHz	A	6	7	9.6	23
4 kHz	A	6	7	9.6	23
8 kHz	A	6	7	9.6	23
16 kHz	A	4	4.7	6.4	15.3
Power loss					
2 kHz	W	36	41	54	166
4 kHz	W	37	43	60	175
8 kHz	W	42	50	70	195
16 kHz	W	51	59	78	159
at inverter disable	W	6	6	6	6
Overcurrent cycle 180 s					
Max. output current	A	9	10.5	14.4	34.5
Overload time	s	60	60	60	60
Recovery time	s	120	120	120	120
Max. output current during the recovery time	A	4.5	5.3	7.2	17.3
Overcurrent cycle 15 s					
Max. output current	A	12	14	19.2	46
Overload time	s	3	3	3	3
Recovery time	s	12	12	12	12
Max. output current during the recovery time	A	4.5	5.3	7.2	17.3
Cyclic mains switching		3 times per minute			
Brake chopper					
Max. output current	A	12	12	12	26
Min. brake resistance	Ω	33	33	33	15
Max. motor cable length shielded					
without EMC category	m	50	50	50	50
Category C1 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Category C2 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Category C3 (2 kHz, 4 kHz, 8 kHz)	m	-	-	-	-
Weight	kg	1.35	1.35	1.35	2.1
Weight	lb	3	3	3	4.6



Fusing data

EN 60204-1

Inverters	Fuse		Circuit breaker		Earth-leakage circuit breaker
	Characteristics	Max. rated current	Characteristics	Max. rated current	
i550-C0.25/230-2	gG/gL or gRL	10	B	10	≥ 30 mA, type B
i550-C0.37/230-2	gG/gL or gRL	10	B	10	≥ 30 mA, type B
i550-C0.55/230-2	gG/gL or gRL	16	B	16	≥ 30 mA, type B
i550-C0.75/230-2	gG/gL or gRL	16	B	16	≥ 30 mA, type B
i550-C1.1/230-2	gG/gL or gRL	25	B	25	≥ 30 mA, type B
i550-C1.5/230-2	gG/gL or gRL	25	B	25	≥ 30 mA, type B
i550-C2.2/230-2	gG/gL or gRL	25	B	25	≥ 30 mA, type B
i550-C4.0/230-3	gG/gL or gRL	32	B	32	≥ 300 mA, type B
i550-C5.5/230-3	gG/gL or gRL	32	B	32	≥ 300 mA, type B

The connection data according to UL can be found under: [▶ Connection according to UL 50](#)

Terminal data

Inverters	kW	i550-Cxxxx/230-x			
		0.25 ... 0.75	1.1 ... 2.2	4.0 ... 5.5	0.25 ... 5.5
Connection		X100 mains connection			PE connection
Connection type		Pluggable screw terminal		Screw terminal	PE screw
Max. cable cross-section	mm ²	2.5	6	6	6
Stripping length	mm	8	8	9	10
Tightening torque	Nm	0.5	0.7	0.5	2
Required tool		0.5 x 3.0		0.6 x 3.5	Torx 20

Inverters	kW	i550-Cxxxx/230-x	
		0.25 ... 2.2	4.0 ... 5.5
Connection		X105 motor connection	
Connection type		Pluggable screw terminal	Screw terminal
Max. cable cross-section	mm ²	2.5	6
Stripping length	mm	8	9
Tightening torque	Nm	0.5	0.5
Required tool		0.5 x 3.0	0.6 x 3.5

The terminal data for the terminal X1 can be found under: [▶ Terminal data 76](#)



i550 inverters

Complete inverter			
Power		Inverter	Order code
kW	HP		
1-phase mains connection 120 V, EMC filter not integrated			
0.25	0.33	i550-C0.25/120-1	i55AE125A1
0.37	0.5	i550-C0.37/120-1	i55AE137A1
0.75	1	i550-C0.75/120-1	i55AE175A1
1.1	1.5	i550-C1.1/120-1	i55AE211A1
1-phase mains connection 230 V, EMC filter integrated			
0.25	0.33	i550-C0.25/230-1	i55AE125B1
0.37	0.5	i550-C0.37/230-1	i55AE137B1
0.55	0.75	i550-C0.55/230-1	i55AE155B1
0.75	1	i550-C0.75/230-1	i55AE175B1
1.1	1.5	i550-C1.1/230-1	i55AE211B1
1.5	2	i550-C1.5/230-1	i55AE215B1
2.2	3	i550-C2.2/230-1	i55AE222B1
1/3-phase mains connection 230/240 V, EMC filter not integrated			
0.25	0.33	i550-C0.25/230-2	i55AE125D1
0.37	0.5	i550-C0.37/230-2	i55AE137D1
0.55	0.75	i550-C0.55/230-2	i55AE155D1
0.75	1	i550-C0.75/230-2	i55AE175D1
1.1	1.5	i550-C1.1/230-2	i55AE211D1
1.5	2	i550-C1.5/230-2	i55AE215D1
2.2	3	i550-C2.2/230-2	i55AE222D1
3-phase mains connection 230/240 V, EMC filter not integrated			
4.0	5	i550-C4.0/230-3	i55AE240C1
5.5	7.5	i550-C5.5/230-3	i55AE255C1
3-phase mains connection 400/480 V, EMC filter integrated			
0.37	0.5	i550-C0.37/400-3	i55AE137F1
0.55	0.75	i550-C0.55/400-3	i55AE155F1
0.75	1	i550-C0.75/400-3	i55AE175F1
1.1	1.5	i550-C1.1/400-3	i55AE211F1
1.5	2	i550-C1.5/400-3	i55AE215F1
2.2	3	i550-C2.2/400-3	i55AE222F1
3	4	i550-C3.0/400-3	i55AE230F1
4	5	i550-C4.0/400-3	i55AE240F1
5.5	7.5	i550-C5.5/400-3	i55AE255F1
7.5	10	i550-C7.5/400-3	i55AE275F1
11	15	i550-C11/400-3	i55AE311F1
15	20	i550-C15/400-3	i55AE315F1
18.5	25	i550-C18/400-3	i55AE318F1
22	30	i550-C22/400-3	i55AE322F1
30	40	i550-C30/400-3	i55AE330F1
37	50	i550-C37/400-3	i55AE337F1
45	60	i550-C45/400-3	i55AE345F1
55	74	i550-C55/400-3	i55AE355F1
75	100	i550-C75/400-3	i55AE375F1
90	120	i550-C90/400-3	i55AE390F1
110	150	i550-C110/400-3	i55AE411F1
Continuation ...			

Purchase order

Order code



Complete inverter			
Power		Inverter	Order code
kW	HP		
Continuation ...			
Safety engineering			
Without safety engineering		0	
Safety function STO		A	
Not relevant			V
EMC filter			
not integrated	i550-Cxxx/ 120-1 i550-Cxxx/ 230-2 i550-Cxxx/ 230-3	0	
Integrated	i550-Cxxx/ 230-1 i550-Cxxx/ 400-3	1	
Delivery status			
Default parameter setting: Region EU (50-Hz networks)		0	
Default parameter setting: Region US (60-Hz networks)		1	
Control unit			
Standard I/O without network			000S
Application I/O without network			001S
Standard I/O with CANopen			002S
Standard I/O with Modbus RTU			003S
Standard I/O with Modbus TCP			00WS
Standard I/O with PROFIBUS			004S
Standard I/O with EtherCAT			00KS
Standard I/O with PROFINET			00LS
Standard I/O with EtherNet/IP			00MS
Standard I/O with POWERLINK			012S
Standard I/O with IO-Link			016S

Delivery of individual components

If different product versions are required in the machine, the various components can be ordered individually. Depending on the application, the components can be plugged together easily an without any further tools.

Order data: Order codes of the individual components.

Order example

Description of components	Order code
Power unit	
3-phase mains connection 400/480 V	I5DAE222F10V10000S
Power 2.2 kW (i550-C2.2/400-3)	
Safety module	
Safety function STO	I5MASAV000000S
Control unit	
Standard I/O with CANopen	I5CA5C02000VA0000S
Default setting of parameters: EU region (50-Hz systems)	