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Converters

IndraDrive C
HCS02



Converters

IndraDrive C ■ HCS02



- Continuous output from 1.5 kW to 11 kW
- Overload capacity 2.5x
- Maximum current from 12 A to 70 A
- Can be connected to inverters for cost-effective solutions
- Direct mains connection from 200 V to 500 V

Documentation
- Application description
- Project planning manual
- Firmware

The HCS02 converter from the IndraDrive C series integrates inverter and power supply in one unit. The compact construction contains additional mains connection components, making it particularly suitable for single-axis applications.

Technical data

		HCS02.1E-W0012	HCS02.1E-W0028	HCS02.1E-W0054	HCS02.1E-W0070
Performance data					
Continuous current	[A]	4.5	12	20.6	28
Maximum current	[A]	11.5	28.3	54	70.8
Motor rated capacity, typical	[kW]	1.5	4	7.5	11
Mains connection voltage	1 AC	200...250 V			
	3 AC	200...500 V			
Tolerance	[%]	± 10 %			
Frequency		50...60 Hz			
Frequency tolerance	[Hz]	± 2 Hz			
Continuous current mains input	[A]	6	13	20	30
Power dependency from the supply voltage	U_{LN} < 400 V	1% power reduction per 4 V			
	U_{LN} > 400 V	1% power gain per 5 V			
Mains contactor		External			
Intermediate circuit					
Continuous power with choke	[kW]	2.1	5.1	10	14
Max. power with choke	[kW]	5	10	16	19
Continuous power without choke	[kW]	2.1	5.1	7	9
Max. power without choke	[kW]	5	8	12	14

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Switching frequency/max. output frequency	4 kHz	0 ... 400 Hz			
	8 kHz	0...800 Hz			
	12 kHz	0...1200 Hz			
	16 kHz	0...1600 Hz			
Output voltage	[V]	3 x AC 0 V to mains connection voltage			
Intermediate circuit capacity	[mF]	0.135	0.27	0.54	0.675
Intermediate circuit voltage	[V] DC	Mains connection voltage x 1.41			
Ability to combine converter/inverter				●	
Brake chopper / resistor					
Braking resistance		Internal		Internal/external	
Brake chopper		Internal			
Braking energy consumption	[kWs]	1	5	9	13
Continuous braking power	[kW]	0.05	0.15	0.35	0.5
Maximum braking power	[kW]	4	10	18	25
Control voltage					
Control voltage	External	24V ± 20%			
	Internal	24V ± 10%			
Power consumption without control section and motor holding brake	[W]	12	14	23	
Protection					
Degree of protection whole		IP20	IP20	IP20	IP20
Degree of pollution		2 (EN50178)	2 (EN50178)	2 (EN50178)	2 (EN50178)
EMC		EN 61800-3	EN 61800-3	EN 61800-3	EN 61800-3
Cooling type		Air cooling	Air cooling	Air cooling	Air cooling
Norms and standards					
Certification		EN 61800-3, EN 61800-5-1, UL 508 C, C22.2 No. 14-05	EN 61800-3, EN 61800-5-1, UL 508 C, C22.2 No. 14-05	EN 61800-3, EN 61800-5-1, UL 508 C, C22.2 No. 14-05	EN 61800-3, EN 61800-5-1, UL 508 C, C22.2 No. 14-05

All data for nominal rating at 3 AC 400 V mains voltage and 4 kHz switching frequency

Dimensions

		HCS02.1E-W0012	HCS02.1E-W0028	HCS02.1E-W0054	HCS02.1E-W0070
Dimensions					
Height H	[mm]	290	352	352	352
Width B	[mm]	65	65	105	105
Depth T	[mm]	252	252	252	252

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Components

Control units

Description	Page	Details
Control units	Single-axis	ADVANCED
Control units	Single-axis	BASIC ANALOG
Control units	Single-axis	BASIC OPEN LOOP
Control units	Single-axis	BASIC PROFIBUS
Control units	Single-axis	BASIC SERCOS
Control units	Single-axis	BASIC UNIVERSAL

Accessories

Auxiliary components

Description		
Accessories	Brake units	HLB
Accessories	Brake resistors	HLR
Accessories	Motor filters	HMF
Accessories	Mains chokes	HNL
Accessories	Mains filter	HNF
Accessories	Capacity module	HLC

All data for nominal rating at 3 AC 400 V mains voltage and 4 kHz switching frequency

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