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Rexroth
Bosch Group

Servo drives

Compact drives
IndraDrive Cs



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Servo drives

Compact drives ■ IndraDrive Cs

Documentation



Highly versatile, extremely compact drives

- Power range 100 W to 3.5 kW
- Ethernet-based communications, multi-protocol support
- Innovative multi-encoder interface
- Extremely compact design

The IndraDrive Cs offers new communications hardware with multi-protocol support which addresses today's increased needs for open, seamless design.

SERCOS III, PROFINET IO, EtherNet/IP and EtherCat are available. Connectivity via these Ethernet-based interfaces is provided by universal, software-configurable communications hardware. Alternatively, IndraDrive Cs can also be equipped with a conventional communications interface such as PROFIBUS. The Rexroth solution gives users maximum communications flexibility with minimum engineering effort.

These impressive features, plus the new multi-encoder interface which supports all standard encoder types, plus an additional option slot make the IndraDrive Cs the ideal choice for highly specialized drive applications. IEC-compliant motion logic and industry-specific technology modules predestine the IndraDrive Cs for a very wide range of applications.

Technical data

		HCS01.1E-W0003	HCS01.1E-W0006	HCS01.1E-W0009	HCS01.1E-W0013
Performance data					
Continuous current	[A]	1.39	2.34	3	4.4
Maximum current	[A]	3.3	6	9	13
Input voltage	[V]	3 x AC 110...230 V			
Tolerance	[%]	± 10 %			
Frequency		50...60 Hz			
Frequency tolerance	[Hz]	± 2 Hz			
Continuous current mains input	[A]	0.6	1.2	2.3	4.5
Power dependency from the supply voltage	U_{LN} < 400 V	1% power reduction per 4 V			
	U_{LN} > 400 V	No power increase			
Intermediate circuit					
Continuous power without choke	[kW]	0.15	0.25	0.46	0.8
Max. power without choke	[kW]	0.45	0.75	1.38	2.4
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			

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Output voltage	[V]	3 x AC 0...230 V			
Intermediate circuit capacity	[mF]	0.44		0.78	
Intermediate circuit voltage	[V] DC	Mains connection voltage x 1.41			
Brake chopper / resistor					
Braking energy consumption	[kWs]	0.4			
Continuous braking power	[kW]	0.02		0.03	
Maximum braking power	[kW]	1.68			
Control voltage					
Control voltage	External	24V ± 5 %			
Power consumption without control section and motor holding brake	[W]	27		28	
Protection					
Degree of protection whole		IP20	IP20	IP20	IP20
Degree of pollution		2	2	2	2
Cooling type		Not ventilated	Not ventilated	Not ventilated	Air cooling
Weight					
Mass	[kg]	0.72	0.72	0.72	0.72

		HCS01.1E-W0005	HCS01.1E-W0008	HCS01.1E-W0018	HCS01.1E-W0028
Performance data					
Continuous current	[A]	2	2.7	7.6	11.52
Maximum current	[A]	5	8	18	28
Input voltage	[V]	3 x AC 200...500 V			
Tolerance	[%]	± 10 %			
Frequency		50...60 Hz			
Frequency tolerance	[Hz]	± 2 Hz			
Continuous current mains input	[A]	1.5	2.5	5	10
Power dependency from the supply voltage	U_{LN} < 400 V	1% power reduction per 4 V			
	U_{LN} > 400 V	No power increase			
Intermediate circuit					
Continuous power with choke	[kW]	0			4
Max. power with choke	[kW]	0			9.7
Continuous power without choke	[kW]	0.46	0.86	1.7	2.6
Max. power without choke	[kW]	1.38	2.58	5.1	6.2

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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...500 V			
Intermediate circuit capacity	[mF]	0.11		0.33	
Intermediate circuit voltage	[V] DC	Mains connection voltage x 1.41			
Brake chopper / resistor					
Braking energy consumption	[kWs]	0.8		2.25	3
Continuous braking power	[kW]	0.02	0.03	0.05	0.15
Maximum braking power	[kW]	4		7.2	10.6
Control voltage					
Control voltage	External	24V ± 5 %			
Power consumption without control section and motor holding brake	[W]	27	28	34	
Protection					
Degree of protection whole		IP20	IP20	IP20	IP20
Degree of pollution		2	2	2	2
Cooling type		Air cooling	Air cooling	Air cooling	Air cooling
Weight					
Mass	[kg]	0.72	0.72	1.7	1.7

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

Dimensions

		HCS01.1E-W0003	HCS01.1E-W0006	HCS01.1E-W0009	HCS01.1E-W0013
Dimensions					
Height H	[mm]	215	215	215	215
Width B	[mm]	50	50	50	50
Depth T	[mm]	196	196	196	196

		HCS01.1E-W0005	HCS01.1E-W0008	HCS01.1E-W0018	HCS01.1E-W0028
Dimensions					
Height H	[mm]	215	215	268	268
Width B	[mm]	50	50	70	70
Depth T	[mm]	196	196	196	196

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