

Servo drives

Compact Drives IndraDrive Cs



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Documentation



Highly versatile, extremely compact drives

- 100 W – 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 input mains current	[A]	0.6	1.2	2.3	4.5
Dependence of output on mains voltage	U _{LN} < 400 V	1% power reduction per 4 V			
	U _{LN} > 400 V	no power gain			
DC bus					
Continuous output without choke	[kW]	0.15	0.25	0.46	0.8
Max. output 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			

Servo drives

Compact Drives ■ IndraDrive Cs

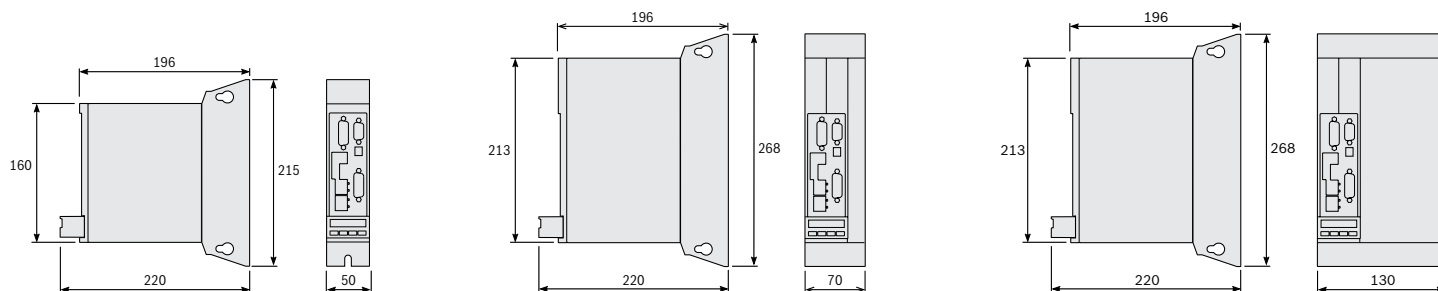
Output voltage	[V]	3 x AC 0...230 V			
DC bus capacity	[mF]	0.44		0.78	
DC bus voltage	[V] DC	Mains voltage x 1.41			
Brake chopper/resistor					
Braking energy consumption	[kWs]	0.4			
Permanent braking power	[kW]	0.02		0.03	
Maximum braking power	[kW]	1.68			
Control voltage					
Control voltage	External	24V ± 5 %			
Power consumption without control unit and motor brake	[W]	27		28	
Protection					
Overall protection category	IP20	IP20	IP20	IP20	
Degree of contamination	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 input mains current	[A]	1.5	2.5	5	10
Dependence of output on mains voltage	U _{LN} < 400 V	1% power reduction per 4 V			
	U _{LN} > 400 V	no power gain			
DC bus					
Continuous output with choke	[kW]	0			4
Max. output with choke	[kW]	0			9.7
Continuous output without choke	[kW]	0.46	0.86	1.7	2.6
Max. output without choke	[kW]	1.38	2.58	5.1	6.2

Servo drives

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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		
DC bus capacity	[mF]	0.11	0.33	
DC bus voltage	[V] DC	Mains voltage x 1.41		
Brake chopper/resistor				
Braking energy consumption	[kWs]	0.8		2.25 3
Permanent 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 unit and motor brake	[W]	27	28	34
Protection				
Overall protection category	IP20	IP20	IP20	IP20
Degree of contamination	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

Servo drives

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		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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It must be remembered that our products are subject to a natural process of wear and aging.