

Product Catalog Electric Drives and Controls

Frequency converter IndraDrive Fc



Frequency converter ■ IndraDrive Fc

Documentation



Benefits:

- Sensorless vector control
- Linear V/f curve
- Output frequency from 0 Hz to 400 Hz
- Overload capacity: 200% for 5 s and 150% for 60 s
- Continuously adjustable pulse frequency from 3 kHz to 16 kHz

Rexroth IndraDrive Fc is the new, high-performance range of converters for open-loop applications. Housed in an ultra-compact book-sized format, four standard frequency converters cover the entire drive range from 0.25 kW to 7.5 kW. IndraDrive Fc is setting new standards in its class with its extensive functions including simple installation, start-up and operation.

Technical data

Performance data									
Rated output	[kW]	0.25	0.37	0.55	0.75	1.1	1.5	2.2	
Rated continuous current	[A]	1.4	1.9	2.8	3.7	4.6	5.9	8.6	
Mains connection voltage	1 AC	1 AC 200 ... 240 V							
	3 AC	3 AC 200 ... 240 V							
Tolerance	[%]	± 10 %							
Frequency		47 ... 63 Hz							
DC bus									
DC bus connection		●							
DC bus voltage	[V] DC	Mains voltage x 1.41							
Brake chopper/resistor									
Brake resistor		External							
Permanent braking power	[kW]	0.1							
Maximum braking power	[kW]	0.7				2.2			
Control voltage									
Control voltage	External	Internal							
Continuous current	[A]	1.7	2.2	3	4	5.5	7	9	
Maximum current	[A]	3.4	4.4	6	8	11	14	18	
Performance data									
Rated output	[kW]	0.55	0.75	1.1	1.5	2.2	3	4	
Rated continuous current	[A]	1.6	2.1	2.6	3.4	5	6.7	8.8	

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Mains connection voltage	3 AC	3 AC 380 ... 480 V (-15 % / +10 %)						
Tolerance	[%]	± 10 %/± 20 %						
Frequency		47 ... 63 Hz						
DC bus								
DC bus connection		●						
DC bus voltage	[V] DC	Mains voltage x 1.41						
Brake chopper/resistor								
Permanent braking power	[kW]	0.1	0.2	0.4				
Maximum braking power	[kW]	1.3	2.6	5.2				
Control voltage								
Control voltage	External	Internal						
Continuous current	[A]	1.7	2.3	3.1	4	5.5	7.5	9.5
Maximum current	[A]	3.4	4.6	6.2	8	11	15	19
		FCS01.1E-W0025-A-04				FCS01.1E-W0032-A-04		
Performance data								
Rated output	[kW]	5.5				7.5		
Rated continuous current	[A]	11.8				15		
Mains connection voltage	3 AC	3 AC 380 ... 480 V (-15 % / +10 %)						
Tolerance	[%]	± 10 %/± 20 %						
Frequency		47 ... 63 Hz						
DC bus								
DC bus connection		●						
DC bus voltage	[V] DC	Mains voltage x 1.41						
Brake chopper/resistor								
Permanent braking power	[kW]	0.6						
Maximum braking power	[kW]	8.6						
Control voltage								
Control voltage	External	Internal						
Continuous current	[A]	12.5				16		
Maximum current	[A]	25				32		

All data apply to rated operation from 4 Hz rotational frequency. Derating from 6 kHz switching frequency

The maximum braking power of the brake resistors is based on a rated DC link voltage of 400 V at FCS01.1E-Wxxx-A-02 and 720 V at FCS01.1E-Wxxx-A-04

Dimensions

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Type code	Description	Part number:
FCS01.1E-W0015-A-04-NNBV	3 kW, 3 x 380 - 480 V, 50/60 Hz, 7.5/15 A	R911311066
FCS01.1E-W0019-A-04-NNBV	4 kW, 3 x 380 - 480 V, 50/60 Hz, 9.5/19 A	R911311067
FCS01.1E-W0025-A-04-NNBV	5.5 kW, 3 x 380 - 480 V, 50/60 Hz, 12.5/25 A	R911311068
FCS01.1E-W0032-A-04-NNBV	7.5 kW, 3 x 380 - 480 V, 50/60 Hz, 16/32 A	R911311069

Function modules

Type code	Description	Part number:
FCC01.1T-STD-NNNN	Standard operating panel: 4x 7 segments, parameter set	R911311070
FCC01.1T-CMF-NNNN	Comfort operating panel: graphics-based, 5 parameter sets	R911311071
FCC01.1F-PB1-NNNN	Fieldbus module: PROFIBUS DP	R911311072
FCC01.1F-PB2-NNNN	Fieldbus module: PROFIBUS DP 12 Mbaud (ext. 24 V)	R911311073
FCC01.1F-CN1-NNNN	Fieldbus module: CANopen (ext. 24 V)	R911311074
FCC01.1F-DN1-NNNN	Fieldbus module: DeviceNet (ext. 24 V)	R911311075

Accessories

Type code	Description	Part number:
RKB0005/003,0	PC cable IndraDrive Fc, RS232, 3 m	R911311896
SWA-DTOPFC-INB-01VRS-D0-CD650-COPY	Product CD (includes DriveTop Fc, PDF manuals etc.)	R911311774
DOK-INDRV*-FCS01*****-IB01-DE-P	IndraControl VEP** .03 project planning manual in German	R911310782
DOK-INDRV*-FCS01*****-IB01-EN-P	Operating manual English, printed version	R911310845
FAS02.1-001-EMC-NN	EMC Kit for sizes A and B	R911315469
FAS02.1-002-EMC-NN	EMC Kit for sizes C and D	R911315470
FAS01.1-001-TMP-NN	Temperature switch for breaking resistor, based-mounted version FLR01.1U	R911315466
FLR01.1U-0100-N240R-A-004-NNNN	Breaking resistor, based-mounted version for FCS 0.25 and 0.37 kW, 1/3 x 200...240 V	R911315459
FLR01.1U-0100-N150R-A-004-NNNN	Breaking resistor, based-mounted version for FCS 0.55 and 0.75 kW, 1/3 x 200...240 V	R911315460
FLR01.1U-0200-N75R0-A-004-NNNN	Breaking resistor, based-mounted version for FCS 1.1 – 2.2 kW, 1/3 x 200...240 V	R911315461
FLR01.1U-0100-N400R-A-007-NNNN	Breaking resistor, based-mounted version for FCS 0.55 and 0.75 kW, 3 x 380...480 V	R911315462
FLR01.1U-0200-N220R-A-007-NNNN	Breaking resistor, based-mounted version for FCS 1.1 – 2.2 kW, 3 x 380...480 V	R911315463
FLR01.1N-0400-N100R-A-007-NNNN	Breaking resistor, for separate mounting FCS 3,0 and 4.0 kW, 3 x 380...480 V	R911315464
FLR01.1N-0600-N60R0-A-007-NNNN	Breaking resistor, for separate mounting FCS 5.5 and 7.5 kW, 3 x 380...480 V	R911315465

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